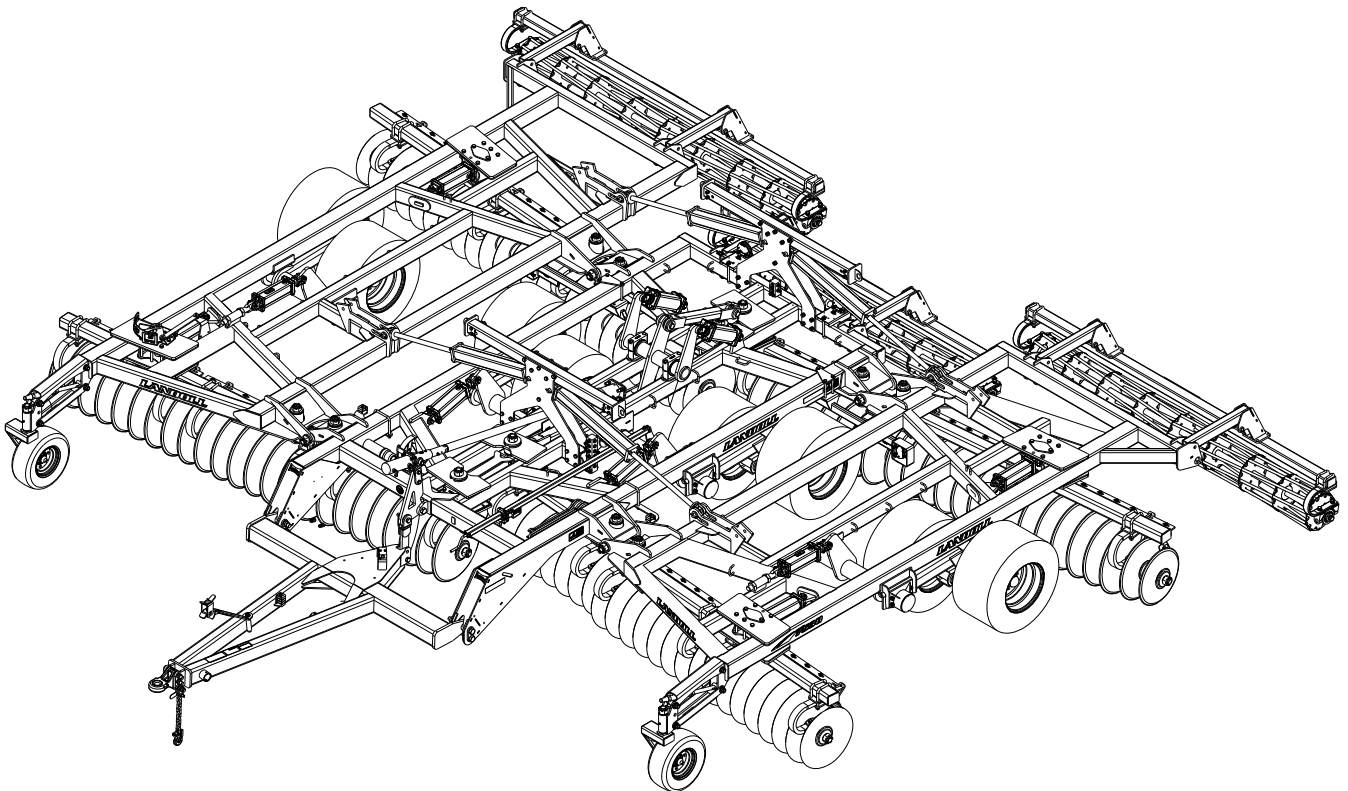




# Model 7530 Adjustable VT Plus Operator's Manual



**LANDOLL COMPANY, LLC**

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## Manuals for the 7530 VT Plus

MANUAL NUMBER	MANUAL NAME
F-941	7530 VT Plus Operator's Manual
F-942	7530 VT Plus Parts Manual

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# Table of Contents

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## 1 Introduction

Introduction	1-1
Understanding Safety Statements	1-2
Decal Safety	1-2
Transporting Safety	1-2
Attaching, Detaching, and Storage	1-3
Maintenance Safety	1-3
High Pressure Fluid Safety	1-3
Protective Equipment	1-3
Chemical Safety	1-3
Prepare for Emergencies	1-3
Tire Safety	1-3
Safety Chain	1-4

## 2 Standard Specifications

Introduction	2-1
Owner Assistance	2-1
Warranty Registration	2-1
Warranty Statement	2-2
Model Specifications	2-4
General Torque Specifications (rev. 4/97)	2-5
Hydraulic Fitting Torque Specifications	2-6

## 3 Assembly Instructions

7530 VT Plus Frame and Hitch Assembly	3-2
Spare Tire Assembly (Optional)	3-2
Leveler Assembly	3-5
Wing Frames	3-7
Hydraulic Installation	3-9
Center Disc Gangs	3-26
Wing Disc Gangs	3-28
LED Light Installation	3-46
Conditioner Reel Spring Installation (Option)	3-50
Hydraulic Conditioner Reel Installation (Option)	3-54
Rear Tow Hitch Installation	3-62
Final Assembly	3-65

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## 4 Operation and Maintenance

Tractor Preparation .....	4-2
VT Plus Preparation .....	4-2
Attaching to the Tractor .....	4-2
Hydraulic Lift System .....	4-3
Hydraulic Fold System .....	4-4
General Operation .....	4-5
Field Operation .....	4-5
Leveling (Side to Side) .....	4-6
Leveling (Front-to-Rear) .....	4-8
Hydraulic Leveler Adjustment .....	4-8
Hitch Adjustment .....	4-10
Scraper Adjustment .....	4-11
Disc Blades .....	4-12
Disc Gang Assembly .....	4-12
Front Gauge Wheels .....	4-13
Depth Stop Adjustment (Manual) .....	4-13
Hydraulic Maintenance .....	4-14
Transport .....	4-14
Rear Hitch Jack Operation .....	4-16
Wheel Bearing Maintenance – Non Triple-Lip .....	4-18
Wheel Bearing Maintenance -- Triple-Lip .....	4-18
Lubrication Maintenance .....	4-19
Lift Cylinder Maintenance .....	4-19
Storage .....	4-21
Conditioner Reels .....	4-22
Hydraulic Conditioner Reels .....	4-22

## 5 Troubleshooting Guide

## Introduction

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### Introduction

The Landoll Model 7530 VT is a quality product designed to give years of trouble free performance. By following each section of this manual, your system will perform as designed for you and your operation.

- CHAPTER 1** Gives basic instructions on the use of this manual and understanding the safety statements.
- CHAPTER 2** Gives product specifications for the equipment. These specifications supply lengths and measures for your equipment. A Standard Bolt Torque Table is provided to give guidelines for bolt torques to be used when servicing this product.
- CHAPTER 3** Contains assembly instructions for your 7530 VT. When these procedures are correctly followed, your equipment should provide you years of trouble-free operation and service.
- CHAPTER 4** Instructs how to operate your equipment before using it, and describes adjustments needed. Gives practical advice for the care and maintenance of your Landoll equipment. Drawings in this section locate adjustment points on the equipment.

**IF YOU HAVE ANY QUESTIONS CONTACT:  
LANDOLL COMPANY, LLC  
1900 NORTH STREET  
MARYSVILLE, KANSAS 66508**

**PHONE # (785) 562-5381 or (800) 428-5655  
OR  
FAX # (888) 527-3909**

- CHAPTER 5** Is a troubleshooting guide to aid in diagnosing and solving problems with the 7530 VT.
- PARTS MANUAL** Is a separate manual showing the various assemblies, sub-assemblies, and systems. Refer to that manual when ordering Landoll replacement parts. Order parts from your Landoll dealer.
- WARRANTY** The Warranty Registration form is included with the product documents. Fill it out and mail it within 15 days of purchase.  
**NOTE: IMPROPER ASSEMBLY, MODIFICATION, OR MAINTENANCE OF YOUR LANDOLL MACHINE CAN VOID YOUR WARRANTY.**
- COMMENTS** Address comments or questions regarding this publication to:

**LANDOLL COMPANY, LLC  
1900 NORTH STREET  
MARYSVILLE, KANSAS 66508  
ATTENTION: PUBLICATIONS - DEPT. 55**

## Understanding Safety Statements

You will find various types of safety information on the following pages and on the machine signs (decals) attached to the vehicle. This section explains their meaning.



The Safety Alert Symbol means ATTENTION! YOUR SAFETY IS INVOLVED!

### NOTE

*Means that failure to follow these instructions could cause damage to the equipment or cause it to operate improperly.*

### NOTICE

Special notice - read and thoroughly understand



### CAUTION

Caution means serious equipment or other property damage can occur if instructions on this label are not properly followed.



### WARNING

Warning means serious injury or death can occur if safety measures or instructions on this label are not properly followed.



### DANGER

Danger means a life-threatening situation exists. Death can occur if safety measures or instructions on this label are not properly followed.

### NOTE

*Make sure you read and understand the information contained in this manual and on the machine signs (decals) before you attempt to operate or maintain this vehicle.*

The safety statements contained in this manual relate to the operation of the Model 7530 VT.

## Decal Safety

1. Examine safety decals and be sure you have the correct safety decals for the implement.
2. Keep these signs clean so they can be observed readily. It is important to keep these decals cleaned more frequently than the implement. Wash with soap and water or a cleaning solution as required.
3. Replace decals that become damaged or lost. Also, be sure that any new implement components installed during repair include decals which are assigned to them by the manufacturer.
4. When applying decals to the implement, be sure to clean the surface to remove any dirt or residue. Where possible, sign placement should protect the sign from abrasion, damage, or obstruction from mud, dirt, oil etc.



### DANGER

- Do not allow anyone to ride on the tractor or implement. Riders could be struck by foreign objects or thrown from the implement.
- Never allow children to operate equipment.
- Keep bystanders away from implement during operation.

## Transporting Safety

### IMPORTANT

**It is the responsibility of the owner/operator to comply with all state and local laws.**

1. When transporting the implement on a road or highway, use adequate warning symbols, reflectors, lights and slow moving vehicle sign as required. Slow moving tractors and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.



2. Do not tow an implement that, when fully loaded, weighs more than 1.5 times the weight of the towing vehicle.
3. Carry reflectors or flags to mark the tractor and implement in case of breakdown on the road.

4. Do not transport at speeds over 20 MPH under good conditions. Never travel at a speed which does not allow adequate control of steering and stopping. Reduce speed if towed load is not equipped with brakes.
5. Avoid sudden stops or turns because the weight of the implement may cause the operator to lose control of the tractor. Use a tractor heavier than the implement.
6. Use caution when towing behind articulated steering tractors; fast or sharp turns may cause the implement to shift sideways.
7. Keep clear of overhead power lines and other obstructions when transporting. Know the transport height and width of your implement.

## Attaching, Detaching, and Storage

1. Do not stand between the tractor and implement when attaching or detaching implement unless both are not moving.
2. Block implement so it will not roll when unhitched from the tractor.
3. Store in an area where children normally do not play.

## Maintenance Safety

1. Understand the procedure before doing the work. Use proper tools and equipment.
2. Make sure all moving parts have stopped.
3. Do not make adjustments or lubricate implement while it is in motion.
4. Block the implement so it will not roll when working on or under it to prevent injury.

## High Pressure Fluid Safety

1. Escaping fluid under pressure can be nearly invisible and have enough force to penetrate the skin causing serious injury. Use a piece of cardboard, rather than hands, to search for suspected leaks.
2. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.
3. Avoid the hazard by relieving pressure before disconnecting hydraulic lines.

## Protective Equipment

1. Wear protective clothing and equipment.
2. Wear clothing and equipment appropriate for the job. Avoid loose fitting clothing.



3. Because prolonged exposure to loud noise can cause hearing impairment or hearing loss, wear suitable hearing protection, such as earmuffs or earplugs.

## Chemical Safety

1. Agricultural chemicals can be dangerous. Improper use can seriously injure persons, animals, plants, soil and property.
2. Read chemical manufacturer's instructions and store or dispose of unused chemicals as specified.
3. Handle chemicals with care and avoid inhaling smoke from any type of chemical fire.
4. Store or dispose of unused chemicals as specified by the chemical manufacturer.

## Prepare for Emergencies

1. Keep a First Aid Kit and Fire Extinguisher handy.
2. Keep emergency numbers for doctor, ambulance, hospital and fire department near the phone.

## Tire Safety

1. Tire changing can be dangerous and should be performed by trained personnel using correct tools and equipment.
2. When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side, not in front of or over the tire assembly. Use a safety cage if available.
3. When removing and installing wheels use wheel-handling equipment adequate for the weight involved.

### Safety Chain

1. Use a chain with a strength rating equal to or greater than the gross weight of towed machinery, which is 10,100 pounds minimum in accordance with ASAE S338.2 specifications. If two or more implements are pulled in tandem, a larger chain may be required. Chain capacity must be greater than the TOTAL weight of all towed implements.
2. A second chain should be used between each implement.
3. Attach the chain to the tractor draw-bar support or specified anchor location. Allow only enough slack in the chain to permit turning. The distance from hitch pin to attachment point or intermediate support point should not exceed 9 inches.
4. Replace the chain if any links or end fittings are broken, stretched or damaged.
5. Do not use a safety chain for towing.



## Standard Specifications

### Introduction

This manual is compiled as a guide for owners and operators of the 7530 adjustable vt plus. Read it carefully so as to be able to follow the suggestions made. Please take time to understand the proper maintenance schedule and SAFE operation of your equipment.

In the event that a new and inexperienced operator is placed in charge of running the equipment, they should read and understand, that part of the manual for proper maintenance and SAFE operation, and to be trained in regard by an experienced operator.

### Owner Assistance

If customer service or repairs are needed, contact your Icon dealer. They have trained personnel, parts and service equipment specially designed for Icon products. Your machine's parts should only be replaced with Icon parts. Have the Serial Number and complete Model Number available when ordering parts from your Icon dealer **See Figure 2-1.**

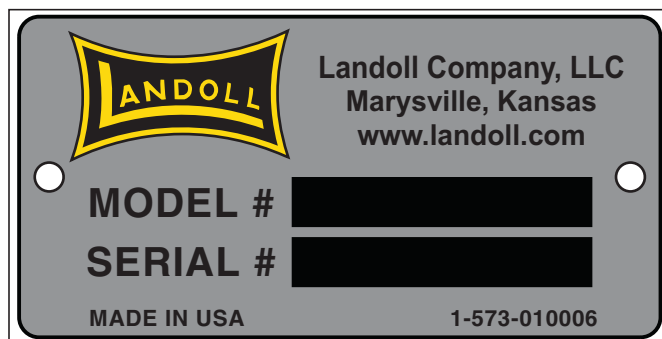


Figure 2-1: ID Plate

### Warranty Registration

Be certain to register the adjustable vt plus Online registration at [www.landoll.com](http://www.landoll.com) within 10 days of purchase or lease, in order to be on file at Landoll and eligible for Warranty.

Take time to read and understand the Warranty for this product, **See Figure 2-2.** and **See Figure 2-3.**

Landoll reserves the right to make changes and/or add improvements to it's products at any time without obligation to previously manufactured equipment.

Please take time to complete the following information for your personal reference, should you need to contact your Dealer with questions or parts needs.

**MODEL** \_\_\_\_\_

**SERIAL #** \_\_\_\_\_

**DATE OF PURCHASE** \_\_\_\_\_

**DEALER NAME** \_\_\_\_\_

We at Landoll wish to thank you for purchasing our product. We have spent considerable time and effort to research, design, test and develop this machine and are confident it will serve you in the use for which it was designed.

## Warranty Statement



### LANDOLL TILLAGE PRODUCT THREE YEAR LIMITED WARRANTY

Landoll Company, LLC warrants each new serial numbered Whole Good Tillage product, when properly assembled, adjusted, serviced, and normally operated, to be free from defects in materials and workmanship for a period of three (3) years, unless otherwise noted, from the date of delivery. Date of delivery shall be the date the Dealer places the product in the possession of the original retail purchaser, and must be confirmed by the Dealer submitting a properly completed Landoll Company, LLC Warranty Registration Form to the Landoll Company, LLC Warranty Department. Warranty starts the day the product is rented or leased. This limited warranty shall be transferable until the expiration date.

Landoll Company, LLC shall repair, or at its option, replace any part(s) of the product determined, by Landoll Company, LLC, to be defective. Landoll Company, LLC may request the return of part(s), freight prepaid via a carrier approved by the Landoll Warranty Staff, to Landoll Company, LLC for further evaluation. If the part is determined to be defective, Landoll Company, LLC will refund the freight charges incurred in returning the defective part(s), and will prepay replacement part(s) freight charges.

This limited warranty requires pre-authorization by the Landoll Company, LLC Warranty Staff of any warranty related utilization of components or labor, and is subject to specific exclusions and does not apply to any product which has been: 1) subjected to or operated in a manner which, at any time, have exceeded the product design limits; 2) repaired or altered outside our factory in any way so as, in the judgment of Landoll Company, LLC, to affect its stability or reliability; 3) subject to misuse, negligence, accident, or has been operated in a manner expressly prohibited in the instructions; or not operated in accordance with practices approved by Landoll Company, LLC. Operating the product in soils containing rocks, stumps or obstructions may void the warranty in its entirety. Excessive acres, consistent with nonseasonal very large farming operations, and, non-agricultural activities, may further limit the terms of this warranty.

The sole obligation of Landoll Company, LLC under this warranty shall be limited to repairing or replacing, at its option, part(s) which shall be identified to Landoll Company, LLC by way of a pre-authorized Landoll Company, LLC e-mail Warranty Claim Form. Warranty, expressed or implied, will be denied on any product not properly registered with the Landoll Company, LLC Warranty Department within ten (10) days of the first retail sale. As stated above, Landoll Company, LLC Warranty Staff will identify components listed on a Warranty Claim required to be returned for further analysis. All parts returned to Landoll Company, LLC must be shipped with a Return Materials Authorization (RMA) provided by the Landoll Company, LLC Warranty Staff. Defective components must be returned by the purchaser to Landoll Company, LLC with transportation and freight charges prepaid within fifteen (15) days after receipt of the RMA. The examination conducted by Landoll Company, LLC of returned parts shall disclose to its satisfaction the extent the component may be defective. All parts and labor warranty MUST be pre-authorized by Landoll Company, LLC Warranty Staff. Failure to do so may result in no warranty payment of any kind. Labor will be reimbursed in accordance with published shop rates pre-approved by the Landoll Company, LLC Warranty Staff. Time authorized for specific work will be limited, where appropriate, to the hours listed in the Landoll Company, LLC authorized Labor Rate Guide.

Figure 2-2: Landoll Tillage Warranty (1 of 2)

**LANDOLL TILLAGE PRODUCT THREE YEAR LIMITED WARRANTY (Continued)****USER'S OBLIGATION:**

1. Read the Operator's Manual
2. Understand the safe and correct operating procedures pertaining to the operation of the product.
3. Lubricate and maintain the product according to the maintenance schedule in the Operator's Manual.
4. Inspect machine and have parts repaired or replaced when continued use of the produce would cause damage or excessive wear to other parts.
5. Contact the Landoll Company, LLC Dealer for repair or replacement of defective parts. Mileage incurred by the Landoll Company, LLC Dealer is the customer's responsibility.

**This 3-Year Limited Warranty SHALL NOT APPLY TO:**

(See Warranty Procedure Manual for details.)

1. Ground Engaging Tools
2. Vendor Warranty Only Parts

**WARRANTY LABOR:**

1. Considered during the first year of warranty only.
2. During the second and third year:
  - Warranty labor is not covered. Customer is responsible for removing, replacing and returning the defective part(s) to the Landoll Dealer

**THIS WARRANTY IS EXPRESSIVELY IN LIEU OF ALL OTHER WARRANTIES OF MATERIAL, WORKMANSHIP, DESIGN, APPLICATION OR OTHERWISE WITH RESPECT TO ANY EQUIPMENT, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND LANDOLL COMPANY, LLC SHALL NOT BE LIABLE FOR SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND ON ACCOUNT OF ANY LANDOLL PRODUCT.**

**NO EMPLOYEE OR REPRESENTATIVE IS AUTHORIZED TO CHANGE THIS WARRANTY, VERBALLY OR IN WRITING, OR GRANT ANY OTHER WARRANTY. LANDOLL COMPANY, LLC, WHOSE POLICY IS ONE OF CONTINUOUS IMPROVEMENT, RESERVES THE RIGHT TO MAKE CHANGES WITHOUT OBLIGATION TO MODIFY PREVIOUSLY PRODUCED EQUIPMENT.**

This warranty does not expand, enlarge upon or alter in any way, the warranties provided by the original manufacturers and suppliers of component parts and accessories. This warranty excludes such parts or accessories which are not defective, but may wear out and have to be replaced during the warranty period, including, but not limited to, light bulbs, paint, and the like. (Tire Warranties are expressly excluded from Landoll Company, LLC warranty herein.) Purchaser is expected to pay all repairs or replacement costs, in connection with this Agreement, including sales and other taxes immediately upon completion of work performed.

**LIMITATION OF LIABILITY:** Landoll Company, LLC shall not be liable to purchaser for any incidental or consequential damages suffered by the purchaser, including, but not limited to, any commercially reasonable charges, expenses or commissions incurred in connection with effecting cover or any other reasonable expense incident to the delay or other breach of warranty by Landoll Company, LLC, loss of anticipated profits, transportation expenses due to repairs, non-operation or increased expense of operation costs of purchased or replaced equipment, claim of customers, cost of money, any loss of use of capital or revenue, equipment rental, service trips, or for any special damage or loss of any nature arising at any time or from any cause whatsoever.

**LIMITATION OF REMEDY:** In the event of Landoll Company, LLC failure to repair the product subject to the warranty contained herein, the purchaser's sole and exclusive remedy against Landoll Company, LLC shall be for the repair or replacement of any defective part or parts of the product subject to work or repair within the time period and manner set forth herein.

This exclusive remedy shall not be deemed to have failed of its essential purpose so long as Landoll Company, LLC is willing and able to repair or replace defective parts in the prescribed manner.

**Figure 2-3: Landoll Tillage Warranty (2 of 2)**



## Model Specifications

7530 VT									
Model Number	Rear Gang cut at 10°	Transport Width	Transport Height	Blade Diameter	No. of Blades	No. of Bearings	Spindle Size	Wheel Bolt Pattern	Estimated Weight
7530-23	23' - 1"	14' - 7"	12' - 6"	24"	78	10/10	3"	8 Bolt	23,750lbs.
7530-26	26' - 6"	14' - 7"	13' - 6"	24"	90	10/10	3"	8 Bolt	26,840lbs.
7530-29	28' - 10"	14' - 7"	14' - 1"	24"	98	12/10	3"	8 Bolt	27,900lbs.
7530-32	32' - 4"	17' - 11"	14' - 1"	24"	110	14/12	3"	8 Bolt	30,940lbs.
7530-35	34' - 8"	17' - 11"	15' - 1"	24"	118	14/14	3"	8 Bolt	31,500 lbs.

**NOTE: Specifications Are Subject To Change Without Prior Notification-Transport Height Can Vary With Reel Placement**

Tire Inflation			
Tire Size	Tire Manufacturer	Ply/Load Rating	Inflation Pressure (Psi) (Max.)
480/45R17 AG	BKT VF	LOAD INDEX 167A8B/8000 LBS. @ 25MPH	78 psi
380/55R X16.5 IMP	Good Year	LOAD INDEX 150AB/8/7400 LBS. @ 30MPH	74 psi
410/50R X 16.5 IMP	BKT	LOAD INDEX 153A8/B/8,050 LBS. @ 30MPH	73psi

Recommended Torque Specification For Lug Bolts and Nuts	
Bolt Size	Torque (FT. LBS.)
5/8-18 (Heavy Duty Disc)	100 - 125 FT. LBS.

# General Torque Specifications (rev. 4/97)

**TORQUE SPECIFIED IN FOOT POUNDS** - This chart provides tightening torques for general purpose applications when special torques are not specified on process or drawing. Assembly torques apply to plated nuts and cap-screws assembled without supplemental lubrication (as received condition). They do not apply if special graphite moly-disulfide or other extreme pressure lubricants are used. When fasteners are dry (solvent cleaned) add 33% to as received condition torque. Bolt head identification marks indicate grade and may vary from manufacturer to manufacturer. Thick nuts must be used on grade 8 cap-screws. Use value in [ ] if using prevailing torque nuts.

UNC SIZE	SAE Grade 2	SAE Grade 5	SAE Grade 8	UNF SIZE	SAE Grade 2	SAE Grade 5	SAE Grade 8
1/4-20	4 [5]	6 [7]	9 [11]	1/4-28	5 [6]	7 [9]	10 [12]
5/16-18	8 [10]	13 [13]	18 [22]	5/16-24	9 [11]	14 [17]	20 [25]
3/8-16	15 [19]	23 [29]	35 [42]	3/8-24	17 [21]	25 [31]	35 [44]
7/16-14	24 [30]	35 [43]	55 [62]	7/16-20	27 [34]	40 [50]	60 [75]
1/2-13	35 [43]	55 [62]	80 [100]	1/2-20	40 [50]	65 [81]	90 [112]
9/16-12	55 [62]	80 [100]	110 [137]	9/16-18	60 [75]	90 [112]	130 [162]
5/8-11	75 [94]	110 [137]	170 [212]	5/8-18	85 [106]	130 [162]	180 [225]
3/4-10	130 [162]	200 [250]	280 [350]	3/4-16	150 [188]	220 [275]	320 [400]
7/8-9	125 [156]	320 [400]	460 [575]	7/8-14	140 [175]	360 [450]	500 [625]
1-8	190 [237]	408 [506]	680 [850]	1-14	210 [263]	540 [675]	760 [950]
1-1/8-7	270 [337]	600 [750]	960 [1200]	1-1/8-12	300 [375]	660 [825]	1080 [1350]
1-1/4-7	380 [475]	840 [1050]	1426 [1782]	1-1/4-12	420 [525]	920 [1150]	1500 [1875]
1-3/8-6	490 [612]	1010 [1375]	1780 [2225]	1-3/8-12	560 [700]	1260 [1575]	2010 [2512]
1-1/2-6	650 [812]	1460 [1825]	2360 [2950]	1-1/2-12	730 [912]	1640 [2050]	2660 [3325]
1-3/4-5	736 [920]	1651 [2063]	2678 [3347]	1-3/4-12	920 [1150]	2063 [2579]	3347 [4183]

**METRIC:**  
Coarse thread metric class 10.9 fasteners and class 10.0 nuts and through hardened flat washers, phosphate coated, Rockwell "C" 38-45. Use value in [ ] if using prevailing torque nuts.

Nominal thread diameter (mm)	Newton Meters (Standard Torque)	Foot Pounds (Standard Torque)	Nominal Thread Diameter (mm)	Newton Meters (Standard Torque)	Foot Pounds (Standard Torque)
6	10 [14]	7 [10]	20	385 [450]	290 [335]
7	16 [22]	12 [16]	24	670 [775]	500 [625]
8	23 [32]	17 [24]	27	980 [1105]	730 [825]
10	46 [60]	34 [47]	30	1330 [1470]	990 [1090]
12	80 [125]	60 [75]	33	1790 [1950]	1340 [1450]
14	125 [155]	90 [115]	36	2325 [2515]	1730 [1870]
16	200 [240]	150 [180]	39	3010 [3210]	2240 [2380]
18	275 [330]	205 [245]	-----	-----	-----

Table 2-1: General Torque Specifications

# Hydraulic Fitting Torque Specifications

## TORQUE IS SPECIFIED IN FOOT POUNDS- 37° JIC, ORS, & ORB (REV. 10/97)

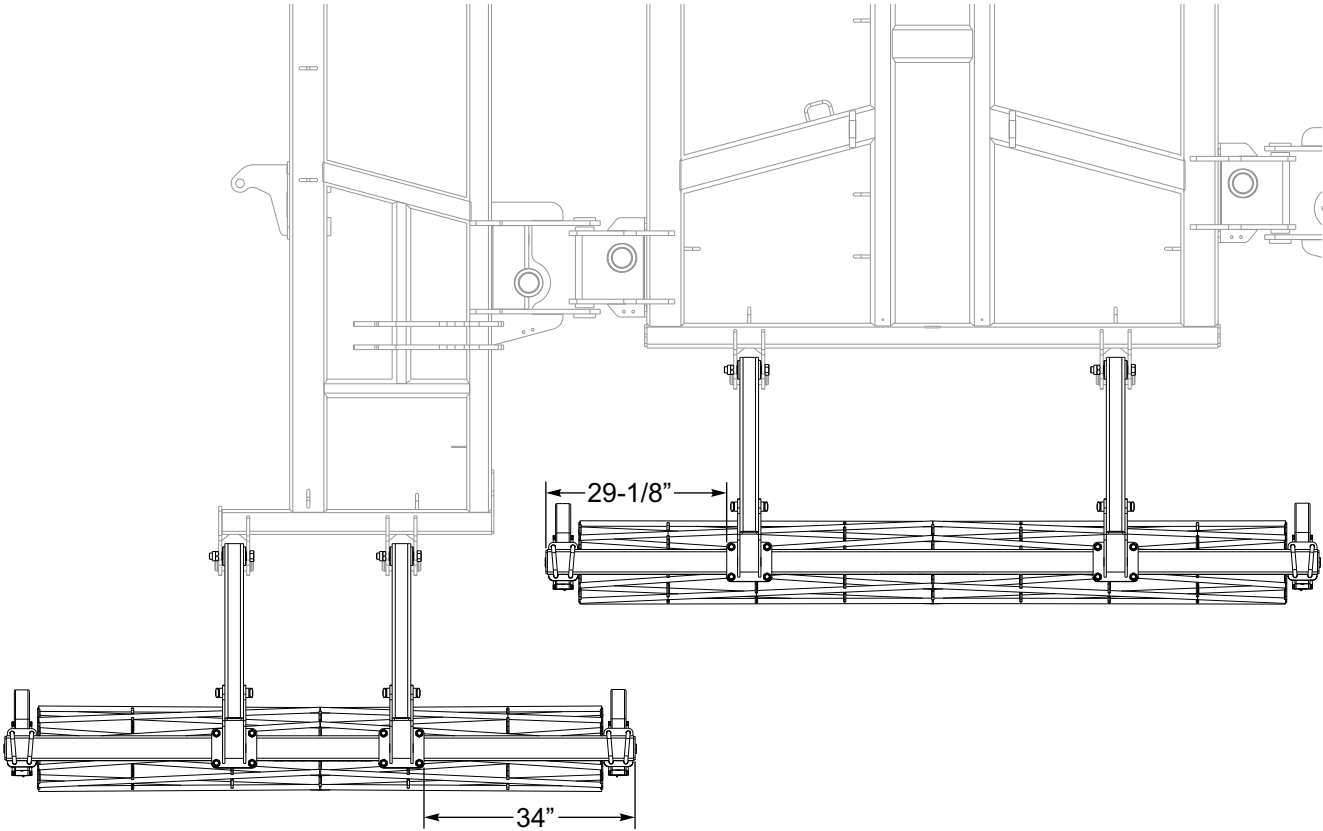
This chart provides tightening torques for general purpose applications when special torques are not specified on process or drawing. Assembly torques apply to plated nuts and capscrews assembled without supplemental lubrication (as received condition). They do not apply if special graphite moly-disulfide or other extreme pressure lubricants are used. When fasteners are dry (solvent cleaned) add 33% to as received condition torque. Bolt head identification marks indicate grade and may vary from manufacturer to manufacturer. Thick nuts must be used on grade 8 capscrews. Use value in [ ] if using prevailing torque nuts.

<b>Parker Brand Fittings</b>			
<b>Dash Size</b>	<b>37 Degree JIC</b>	<b>O-Ring (ORS)</b>	<b>O-Ring Boss (ORB)</b>
-4	11-13	15-17	13-15
-5	14-16	-----	21-23
-6	20-22	34-36	25-29
-8	43-47	58-62	40-44
-10	55-65	100-110	58-62
-12	80-90	134-146	75-85
-16	115-125	202-218	109-121
-20	160-180	248-272	213-237
-24	185-215	303-327	238-262
-32	250-290	-----	310-340
<b>Gates Brand Fittings</b>			
<b>Dash Size</b>	<b>37 Degree JIC</b>	<b>O-Ring (ORS)</b>	<b>O-Ring Boss (ORB)</b>
-4	10-11	10-12	14-16
-5	13-15	-----	-----
-6	17-19	18-20	24-26
-8	34-38	32-40	37-44
-10	50-56	46-56	50-60
-12	70-78	65-80	75-83
-14	-----	65-80	-----
-16	94-104	92-105	111-125
-20	124-138	125-140	133-152
-24	156-173	150-180	156-184
-32	219-243	-----	-----
<b>Aeroquip Brand Fittings</b>			
<b>Dash Size</b>	<b>37 Degree JIC</b>	<b>O-Ring (ORS)</b>	<b>O-Ring Boss (ORB)</b>
-4	11-12	10-12	14-16
-5	15-16	-----	16-20
-6	18-20	18-20	24-26
-8	38-42	32-35	50-60
-10	57-62	46-50	75-80
-12	79-87	65-70	125-135
-14	-----	-----	160-180
-16	108-113	92-100	200-220
-20	127-133	125-140	210-280
-24	158-167	150-165	270-360
-32	245-258	-----	-----

Table 2-2: Hydraulic Fitting Torque Specifications







COND-REEL/GANGBAR  
ASSEMBLY 91"

COND-REEL/GANGBAR  
ASSEMBLY 114"

Figure 2-4: Conditioner Reel Placement 23' (LH)

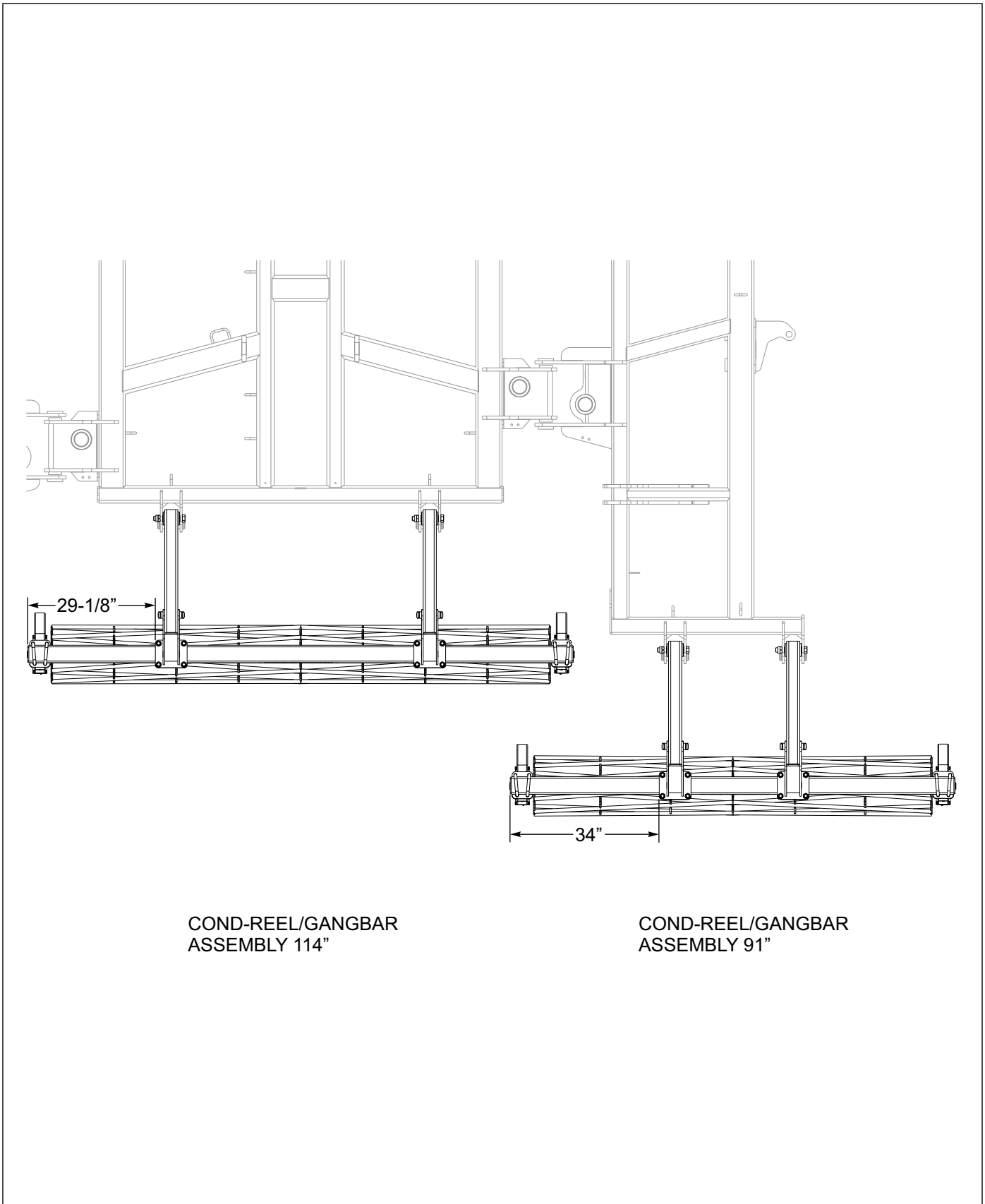
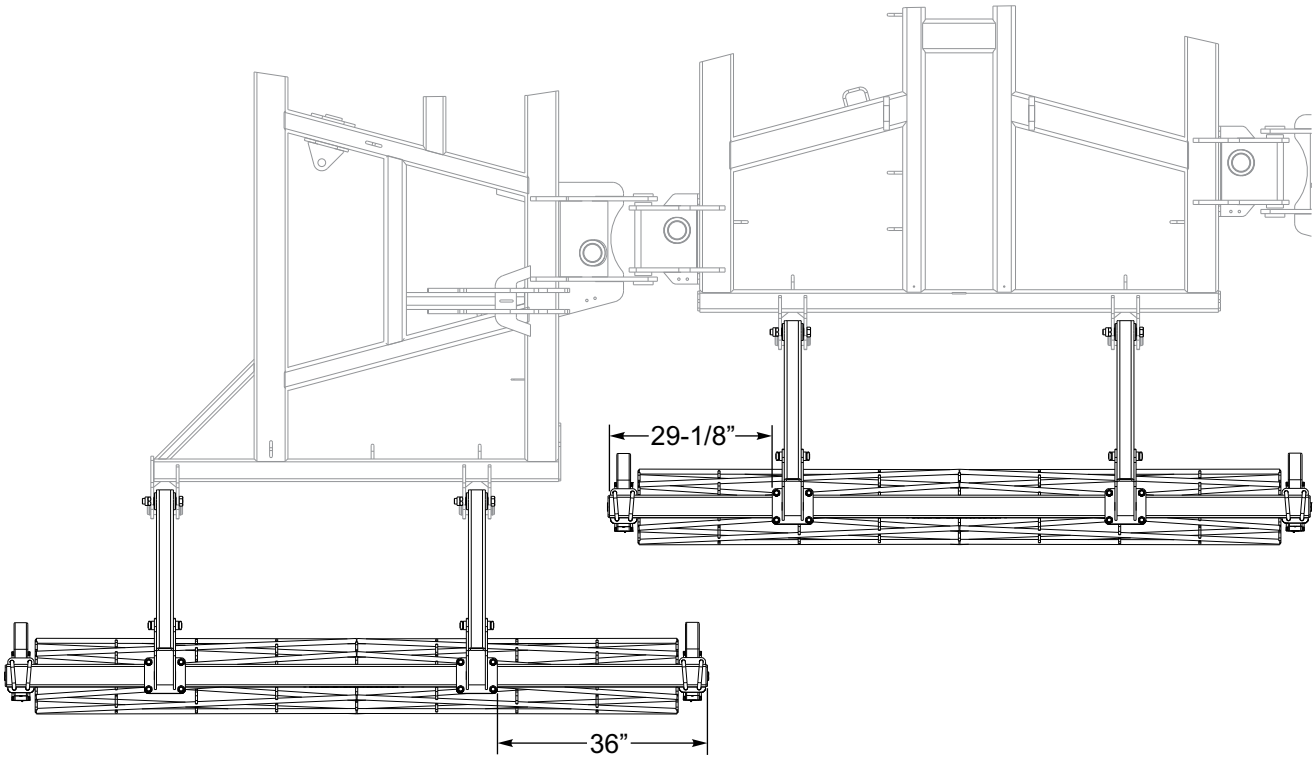


Figure 2-5: Conditioner Reel Placement 23' (RH)



COND-REEL/GANGBAR  
ASSEMBLY 114"

COND-REEL/GANGBAR  
ASSEMBLY 114"

Figure 2-6: Conditioner Reel Placement 26' (LH)

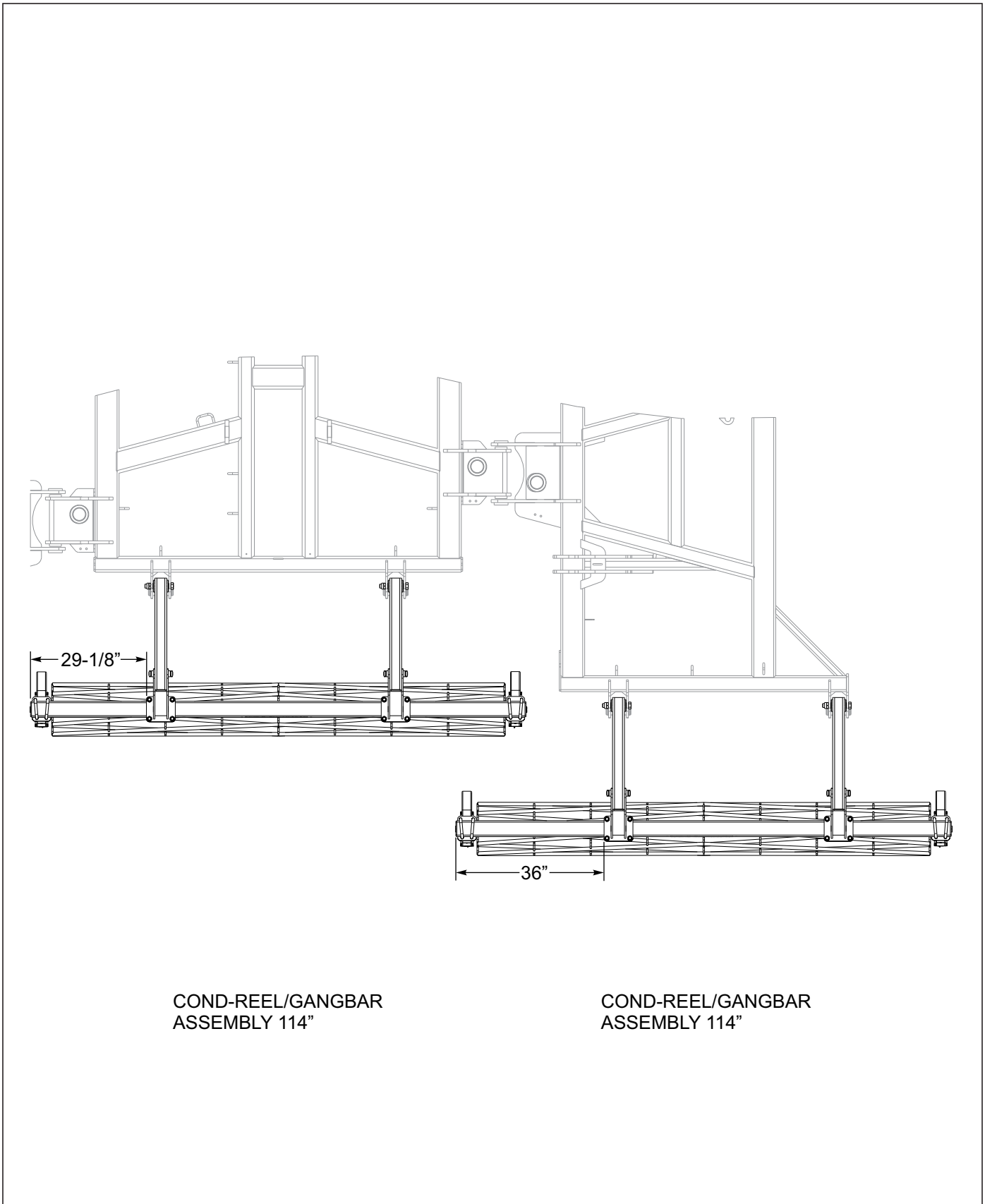
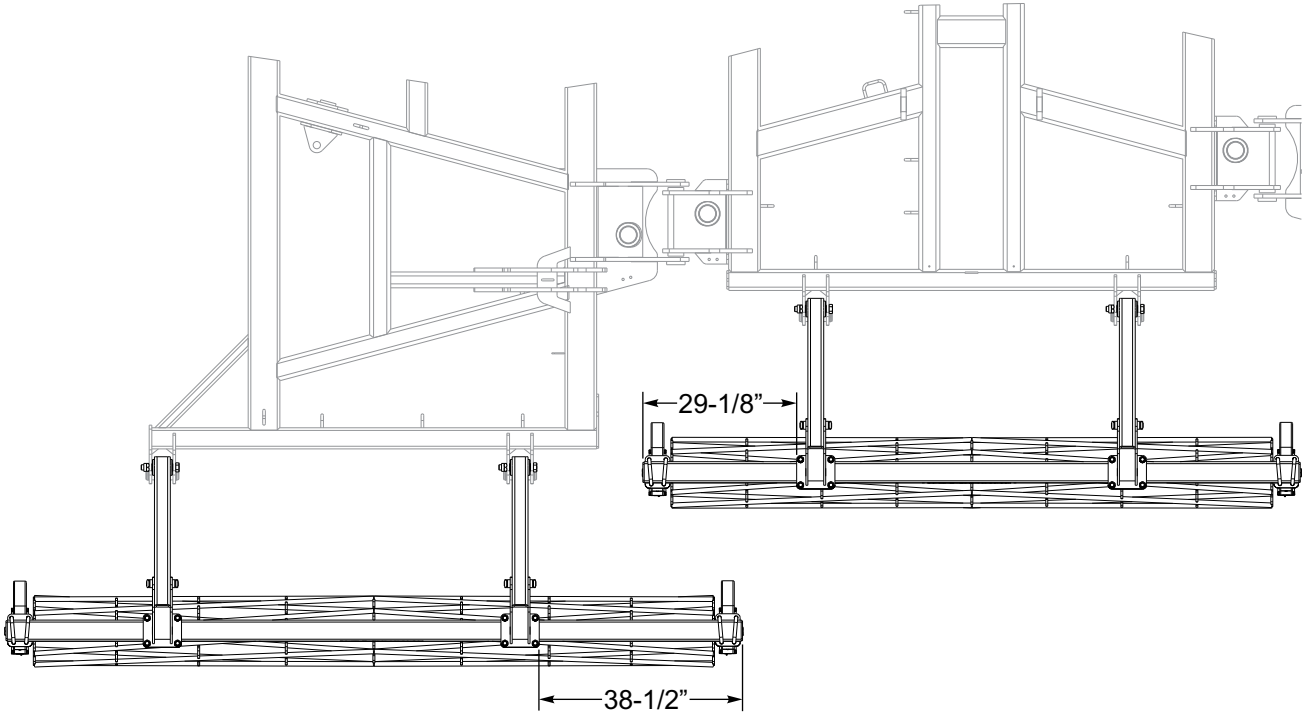


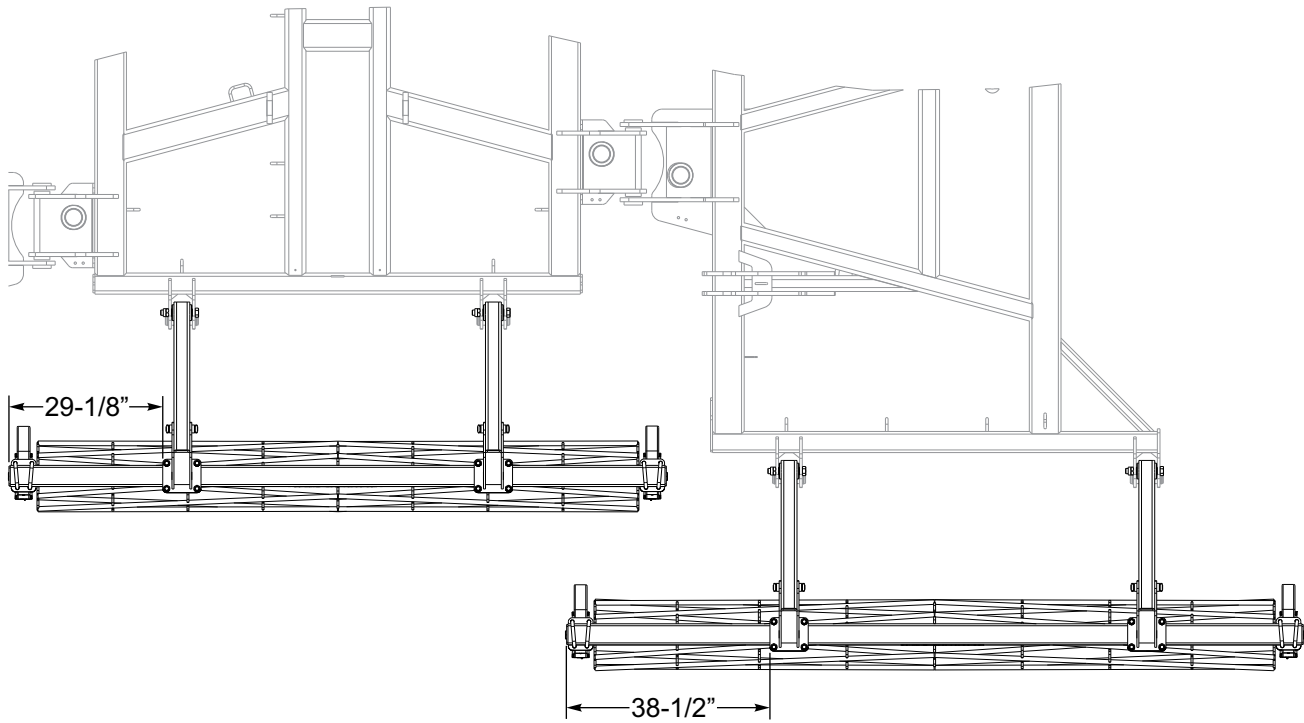
Figure 2-7: Conditioner Reel Placement 26' (RH)



COND-REEL/GANGBAR  
ASSEMBLY 129"

COND-REEL/GANGBAR  
ASSEMBLY 114"

Figure 2-8: Conditioner Reel Placement 29' (LH)



COND-REEL/GANGBAR  
ASSEMBLY 114"

COND-REEL/GANGBAR  
ASSEMBLY 129"

Figure 2-9: Conditioner Reel Placement 29' (RH)

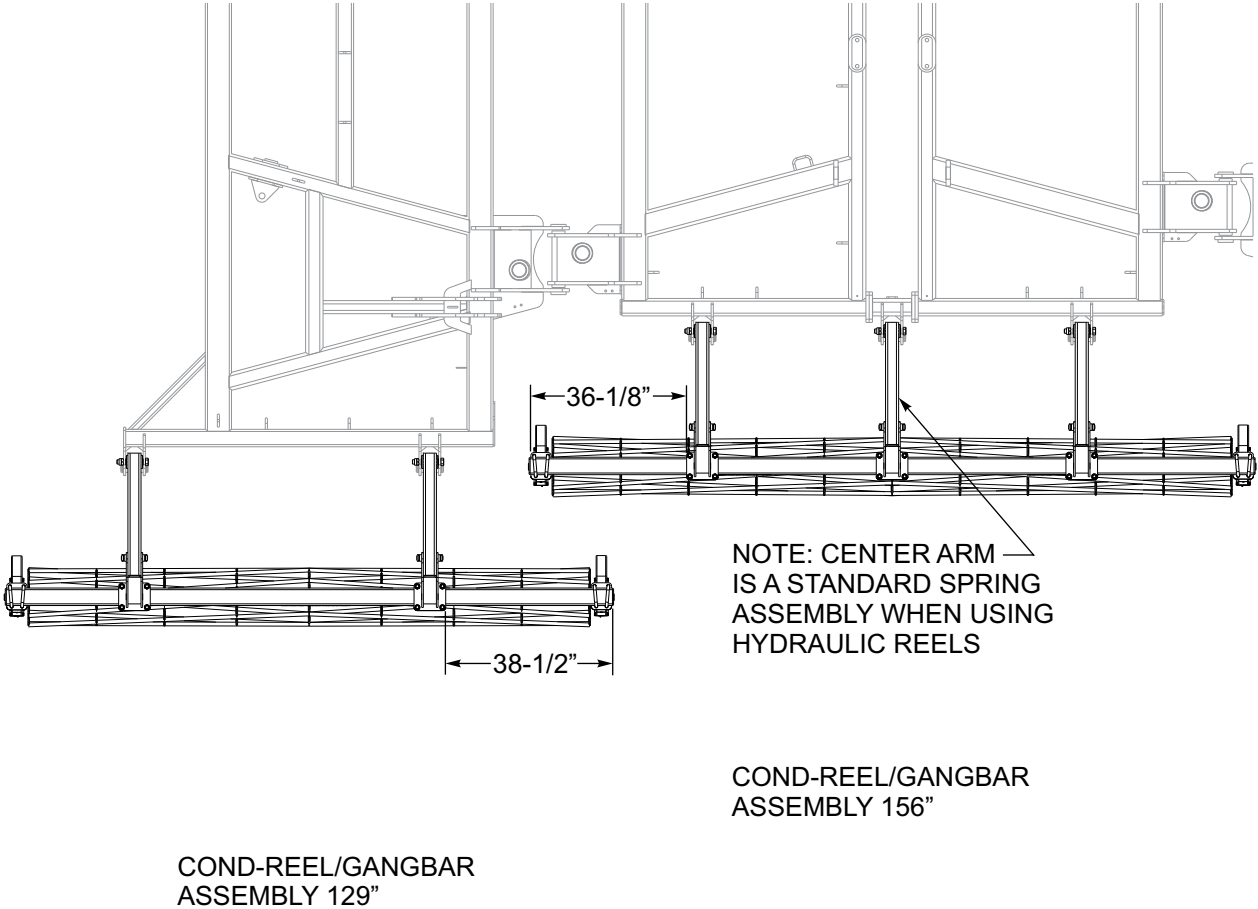


Figure 2-10: Conditioner Reel Placement 32' (LH)

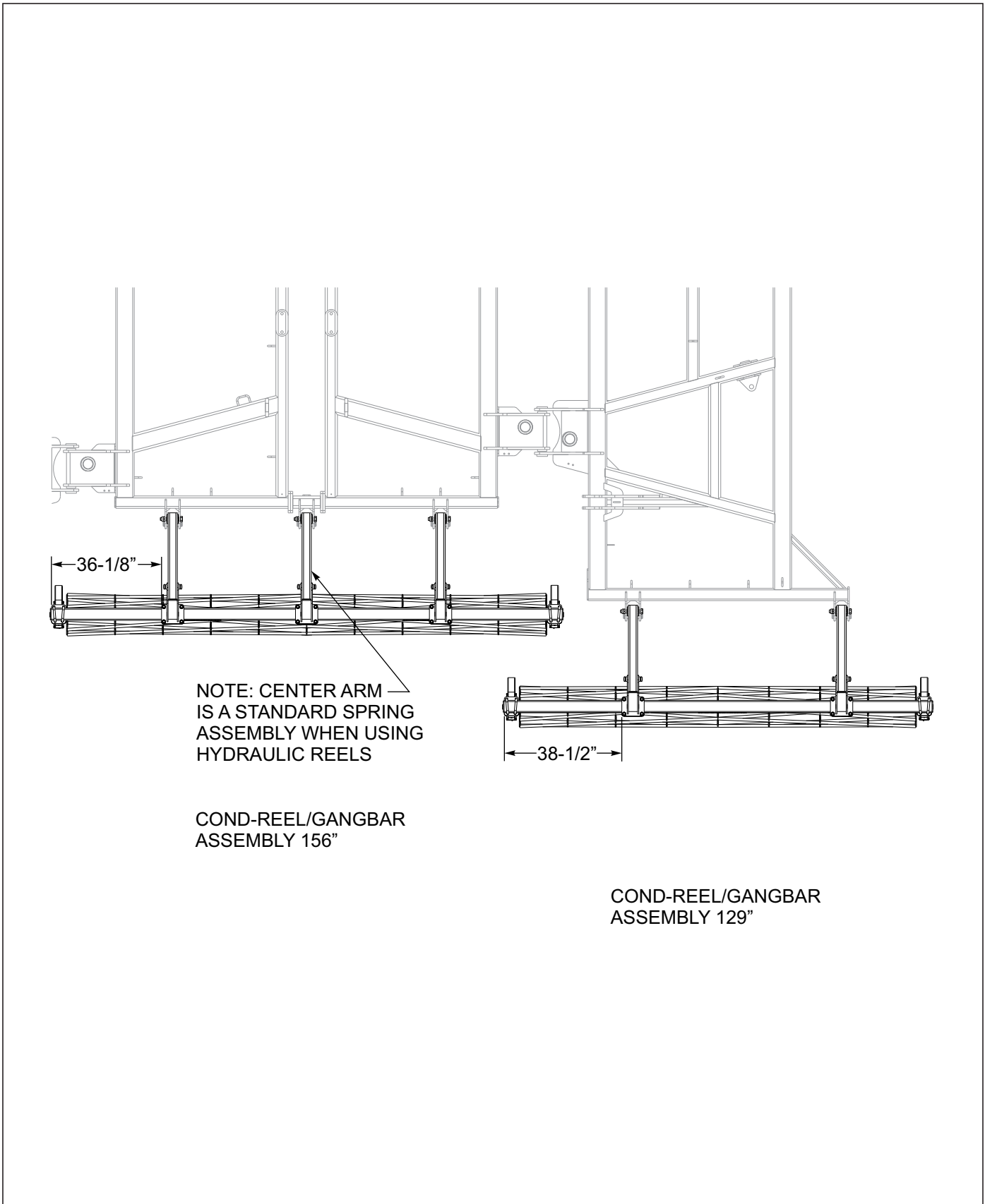


Figure 2-11: Conditioner Reel Placement 32' (RH)



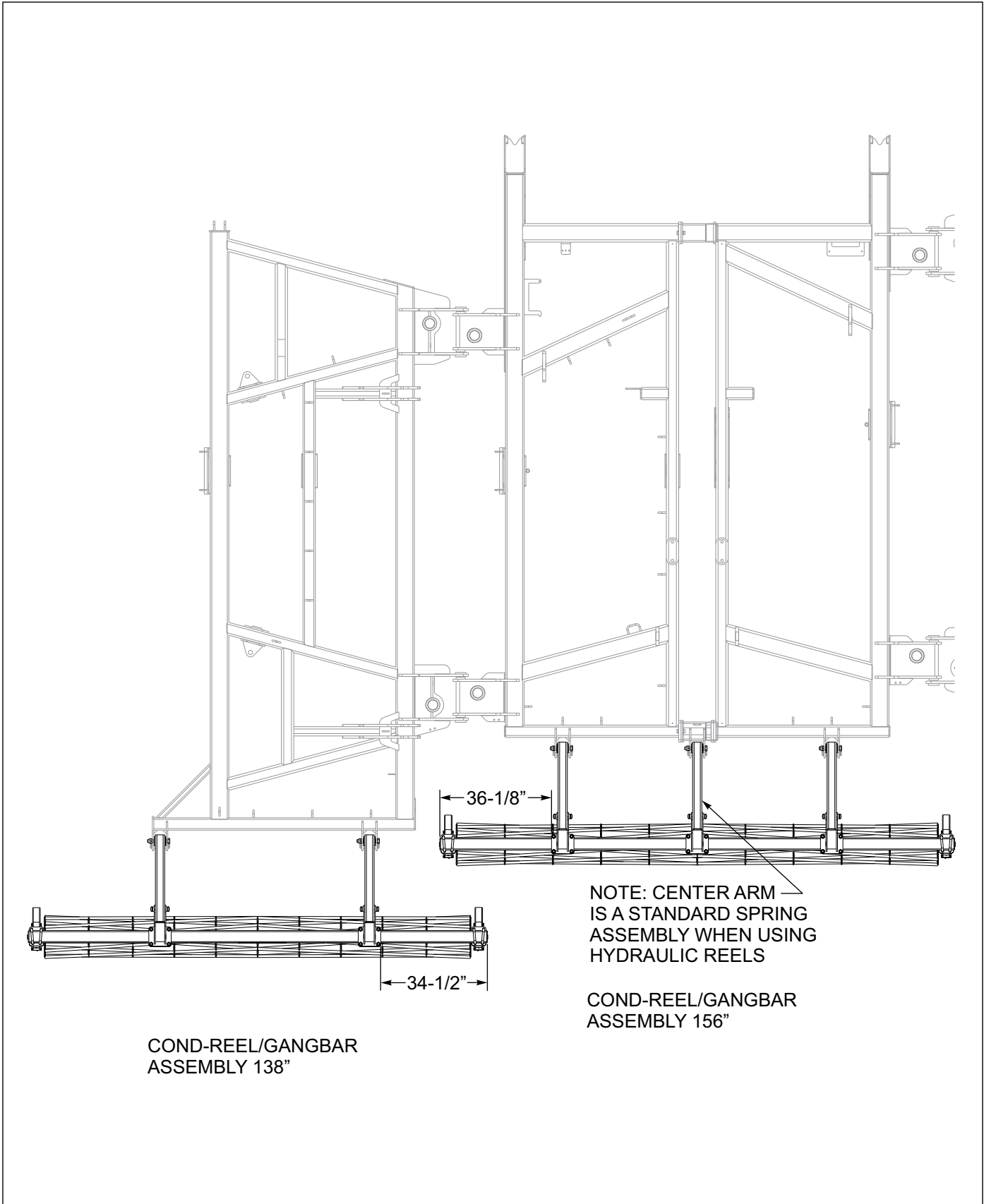


Figure 2-12: Conditioner Reel Placement 35' (LH)

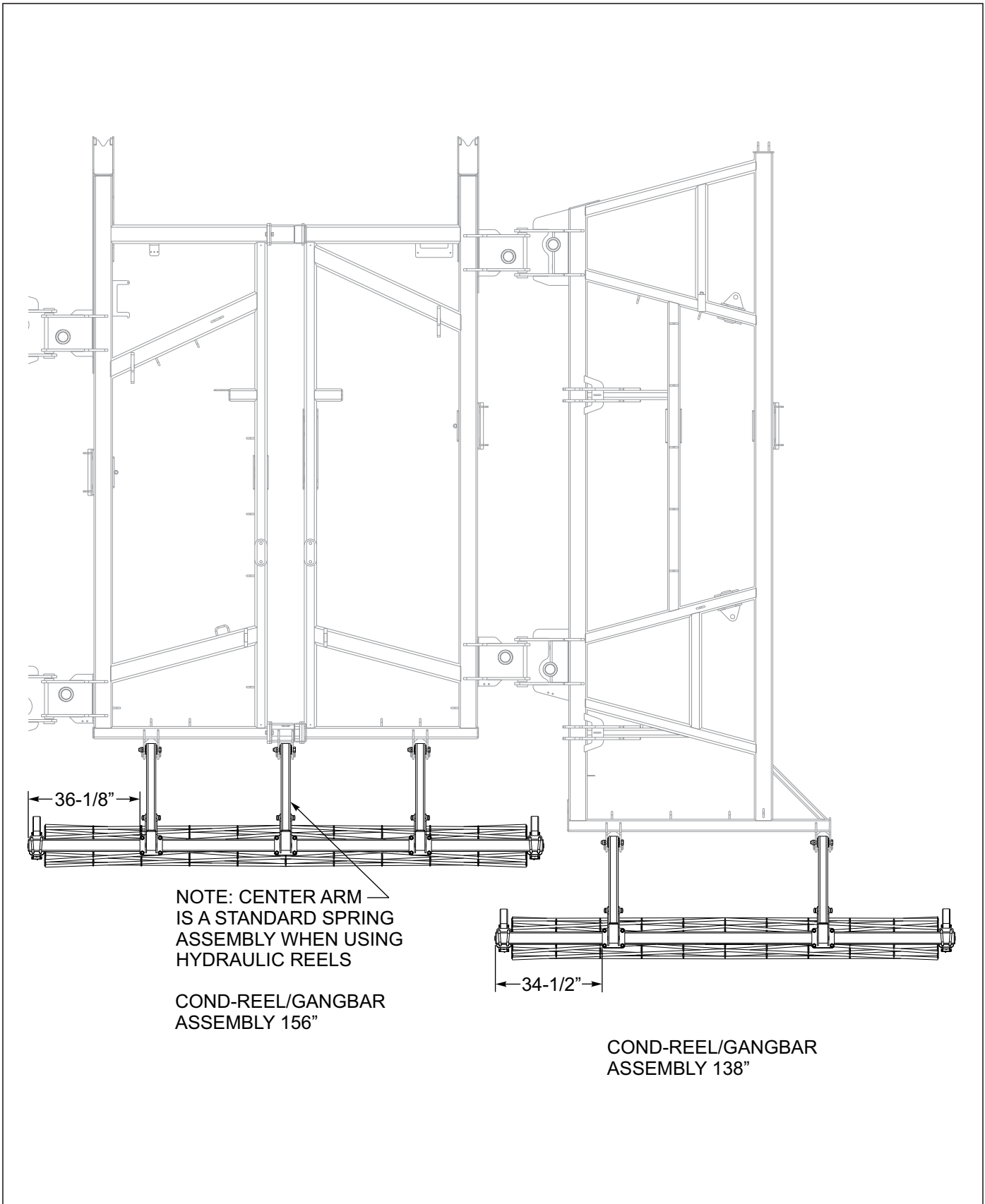
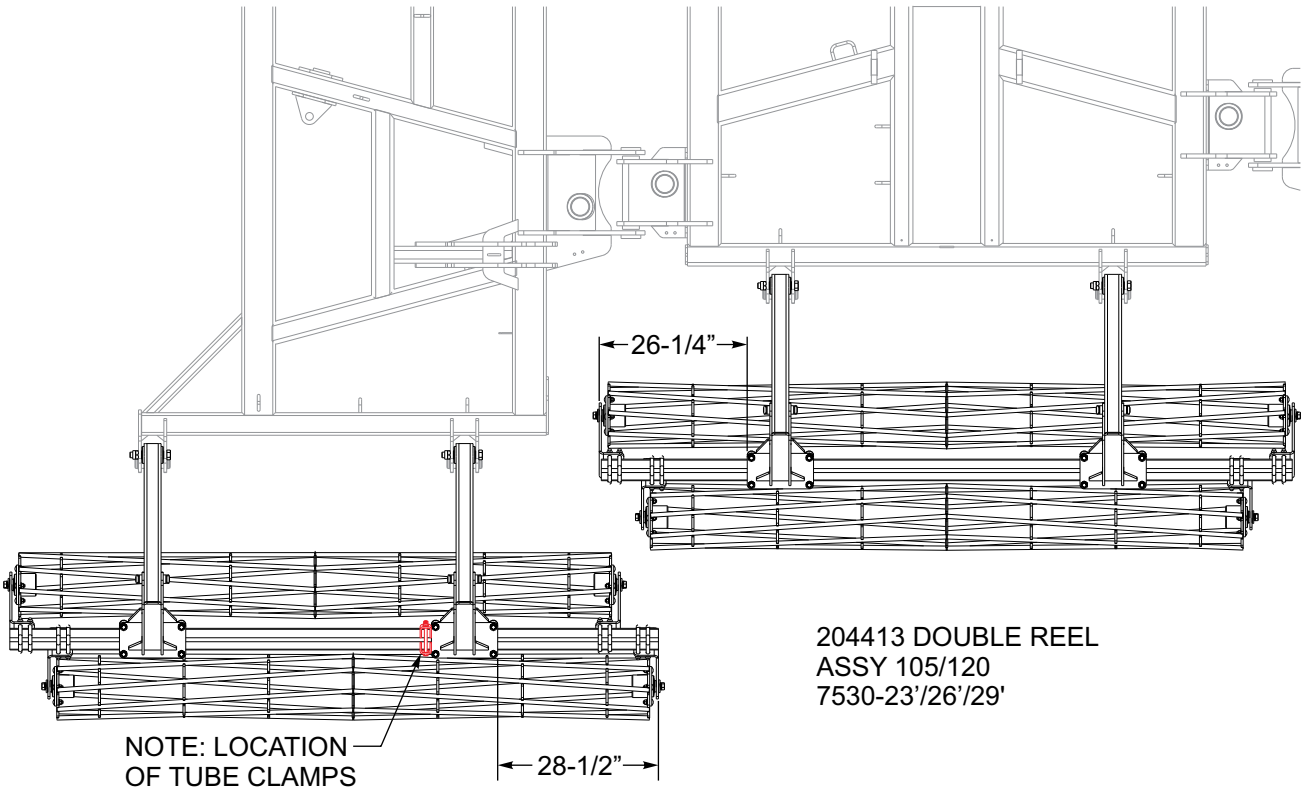


Figure 2-13: Conditioner Reel Placement 35' (RH)



NOTE: LOCATION OF TUBE CLAMPS

← 28-1/2" →

← 26-1/4" →

204413 DOUBLE REEL  
ASSY 105/120  
7530-23'/26'/29'

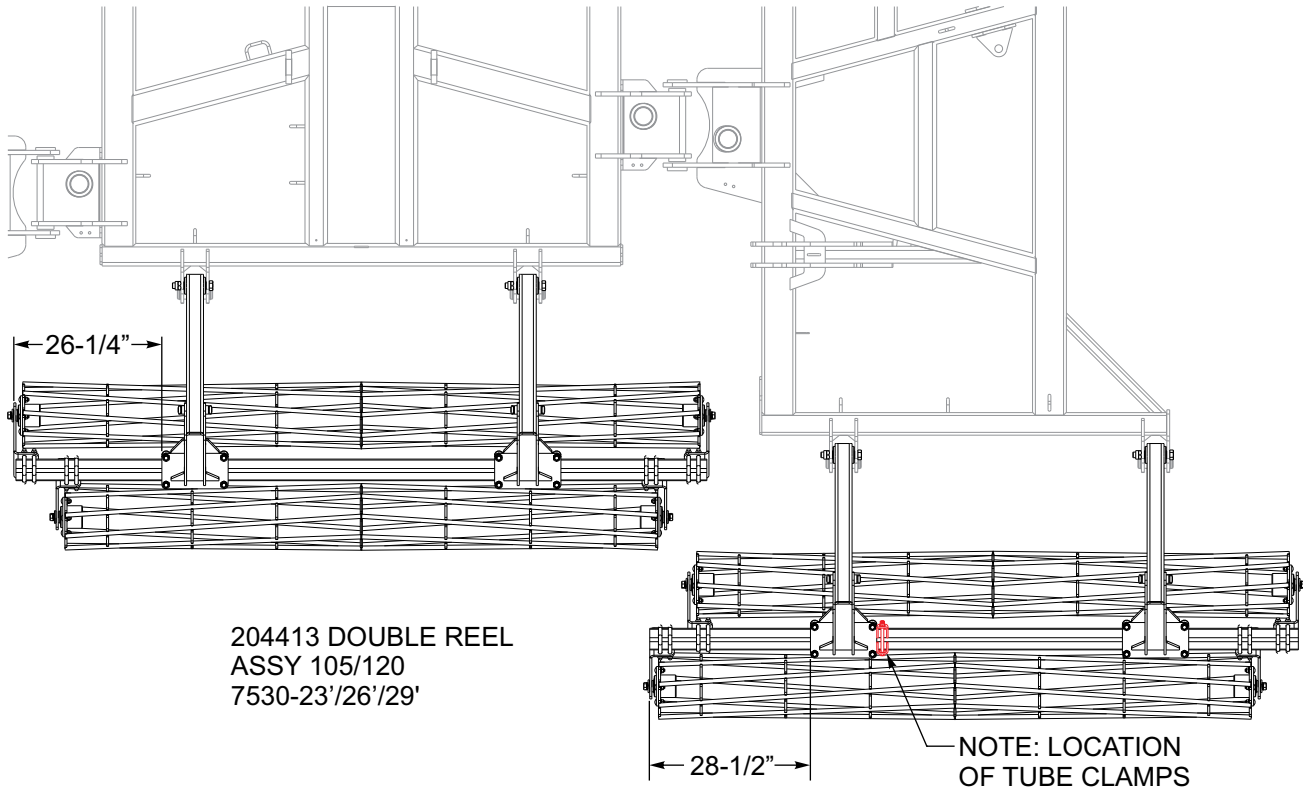
204417 DOUBLE REEL  
ASSEMBLY 90/90  
7530-23'

204418 DOUBLE REEL  
ASSEMBLY 105/120  
7530-26'

204419 DOUBLE REEL  
ASSEMBLY 120/120  
7530-29'

NOTE: REEL ASSEMBLIES  
ARE SAME FOR SPRING OR  
HYDRAULIC ARM ASSEMBLIES.  
SEE REEL INSTALLATION SECTION  
IN ASSEMBLY INSTRUCTIONS SECTION  
FOR ARM ASSEMBLY

Figure 2-14: Double Round Reel Placement 7530-23'/26'/ 29' (LH)



204413 DOUBLE REEL  
 ASSY 105/120  
 7530-23'/26'/29'

NOTE: LOCATION  
 OF TUBE CLAMPS

NOTE: REEL ASSEMBLIES  
 ARE SAME FOR SPRING OR  
 HYDRAULIC ARM ASSEMBLIES.  
 SEE REEL INSTALLATION SECTION  
 IN ASSEMBLY INSTRUCTIONS SECTION  
 FOR ARM ASSEMBLY

204423 DOUBLE REEL  
 ASSEMBLY 90/90  
 7530-23'

204424 DOUBLE REEL  
 ASSEMBLY 105/120  
 7530-26'

204425 DOUBLE REEL  
 ASSEMBLY 120/120  
 7530-29'

Figure 2-15: Double Round Reel Placement 7530-23'/26'/ 29'(RH)

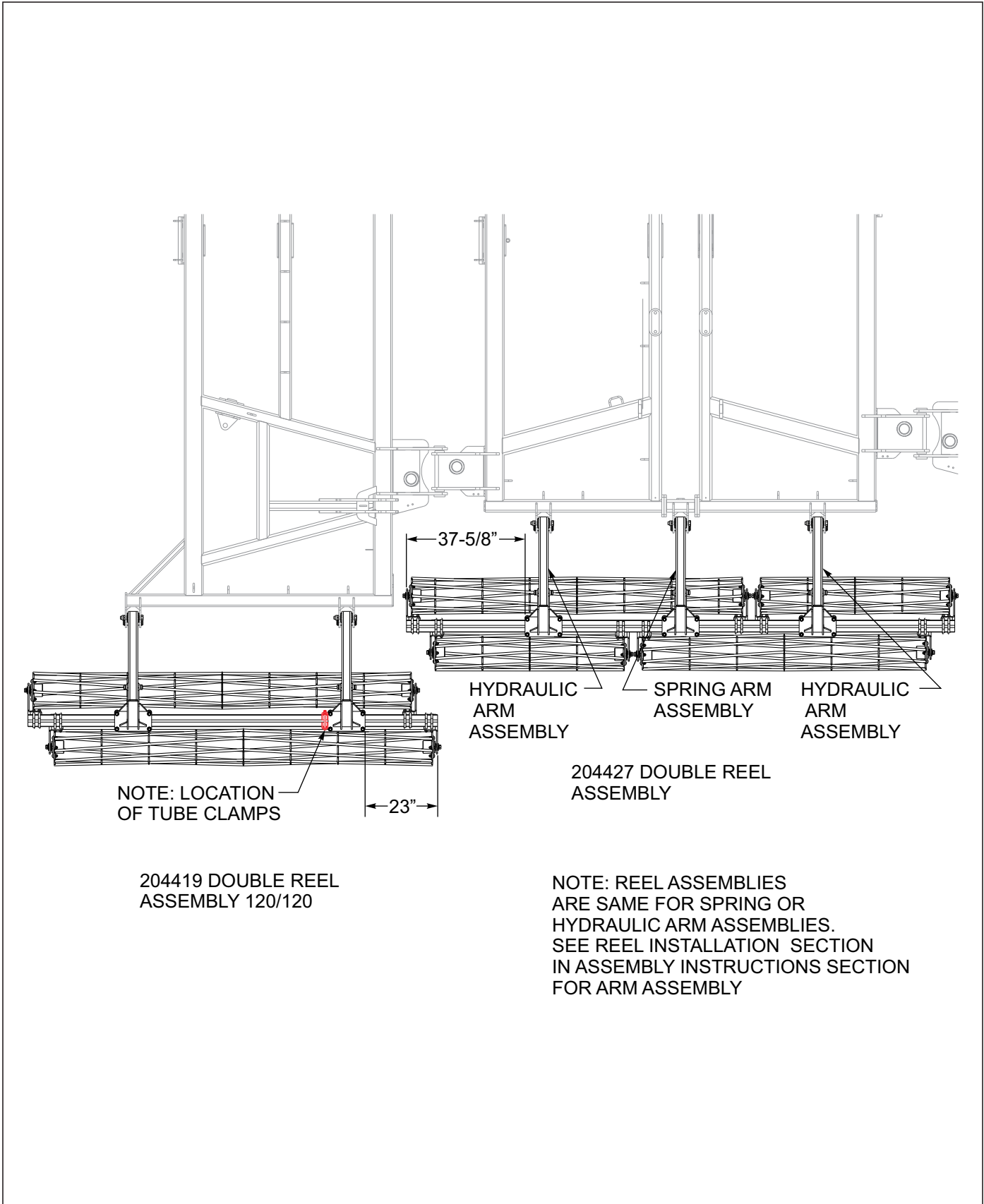


Figure 2-16: Double Round Reel Placement 7530-32' (LH)

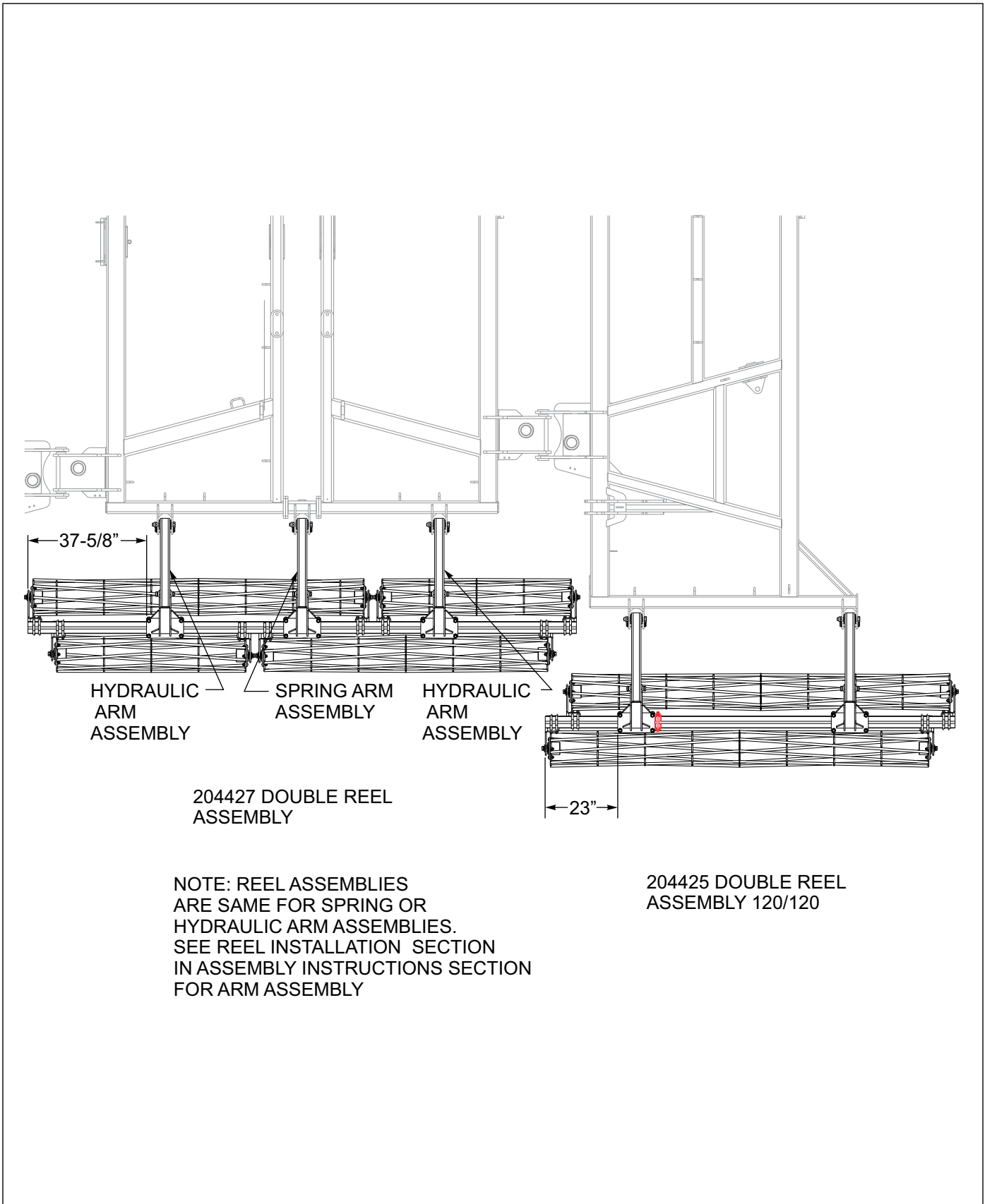


Figure 2-17: Double Round Reel Placement 7530-32' (RH)

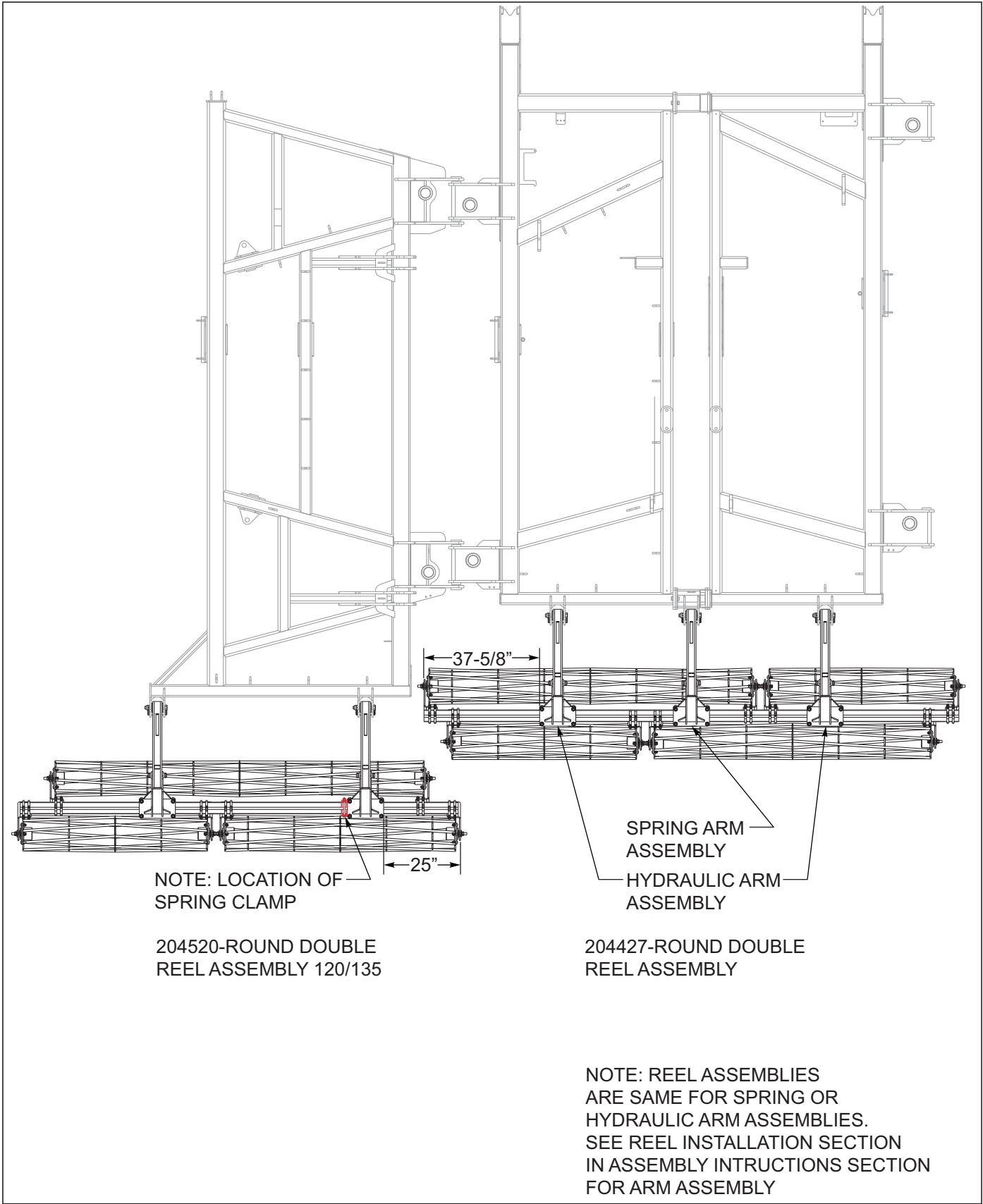


Figure 2-18: Double Round Reel Placement 7530-35' (LH)

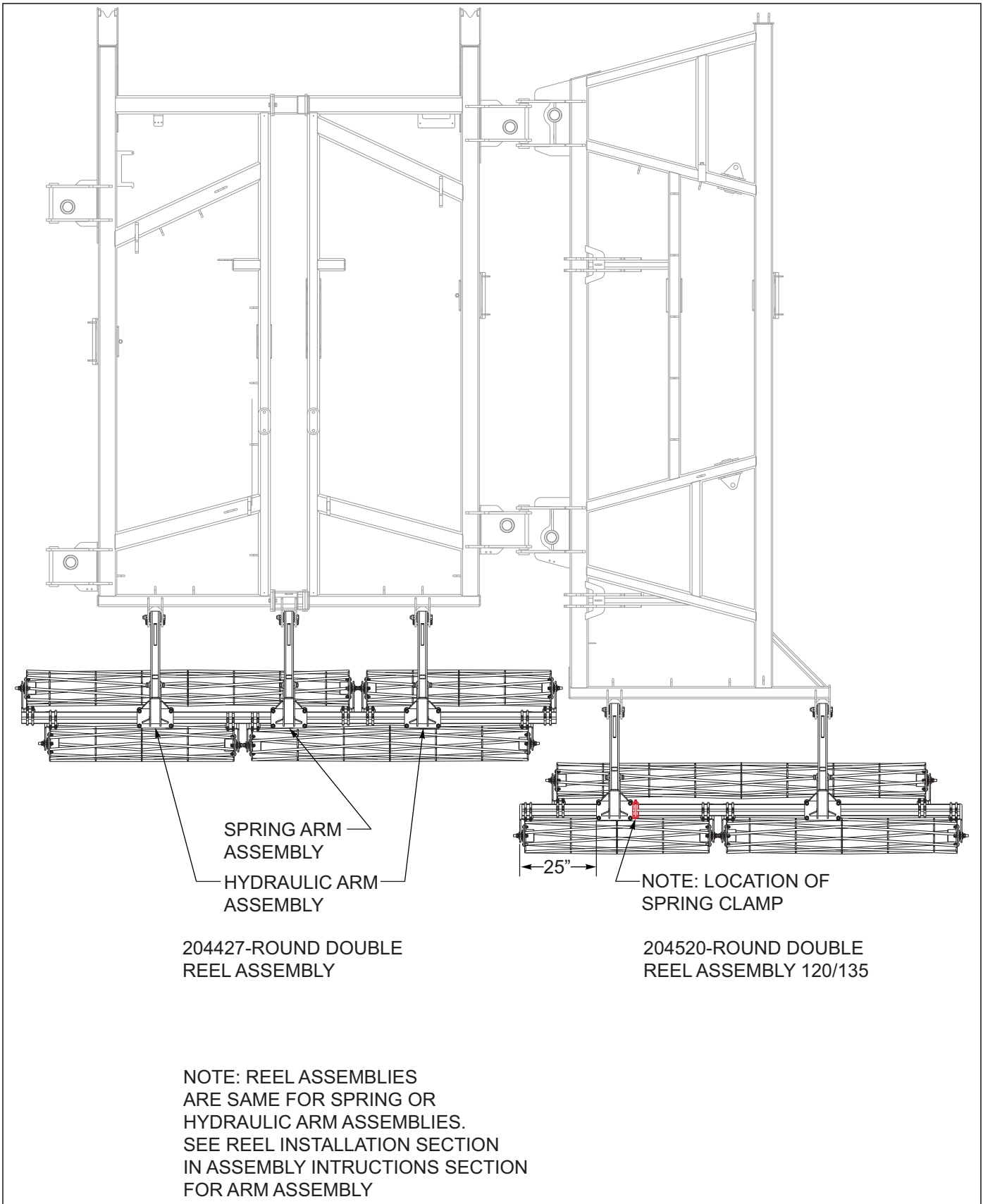
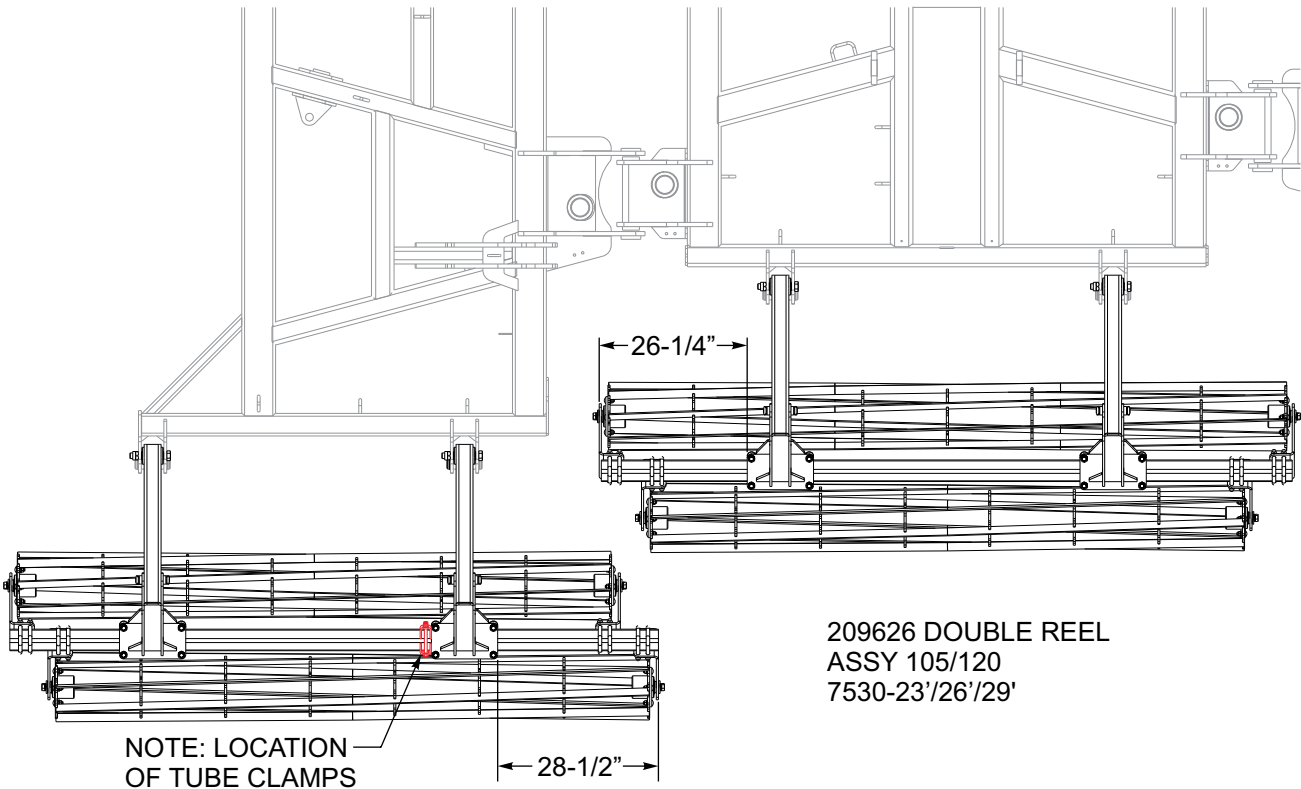


Figure 2-19: Double Round Reel Placement 7530-35' (RH)





209626 DOUBLE REEL  
ASSY 105/120  
7530-23'/26'/29'

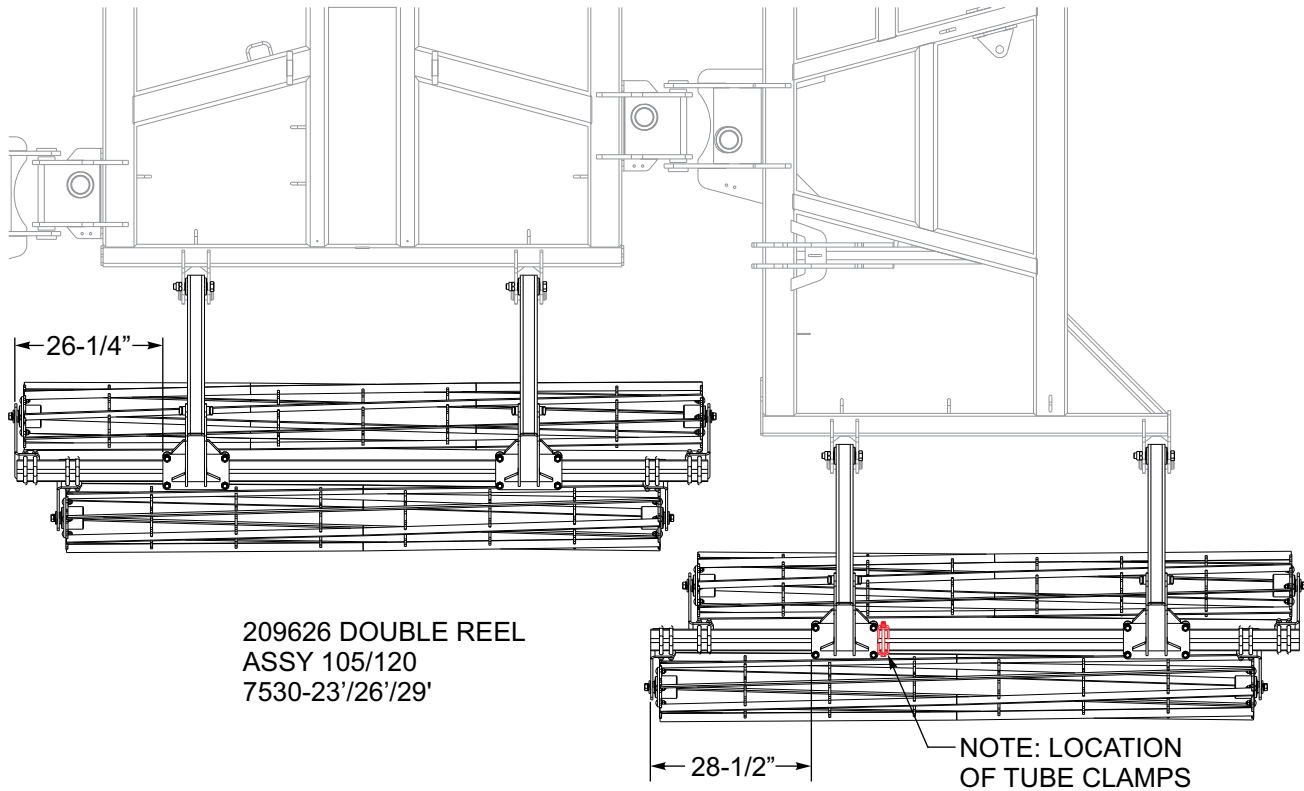
209630 DOUBLE REEL  
ASSEMBLY 90/90  
7530-23'

209631 DOUBLE REEL  
ASSEMBLY 105/105  
7530-26'

20632 DOUBLE REEL  
ASSEMBLY 120/120  
7530-29'

NOTE: REEL ASSEMBLIES  
ARE SAME FOR SPRING OR  
HYDRAULIC ARM ASSEMBLIES.  
SEE REEL INSTALLATION SECTION  
IN ASSEMBLY INSTRUCTIONS SECTION  
FOR ARM ASSEMBLY

Figure 2-20: Double Flat Reel Placement 7530-23'/26'/29' (LH)



209626 DOUBLE REEL  
 ASSY 105/120  
 7530-23'/26'/29'

NOTE: REEL ASSEMBLIES  
 ARE SAME FOR SPRING OR  
 HYDRAULIC ARM ASSEMBLIES.  
 SEE REEL INSTALLATION SECTION  
 IN ASSEMBLY INSTRUCTIONS SECTION  
 FOR ARM ASSEMBLY

209636 DOUBLE REEL  
 ASSEMBLY 90/90  
 7530-23'

209637 DOUBLE REEL  
 ASSEMBLY 105/105  
 7530-26'

209638 DOUBLE REEL  
 ASSEMBLY 120/120  
 7530-29'

Figure 2-21: Double Flat Reel Placement 7530-23'/26'/29' (RH)

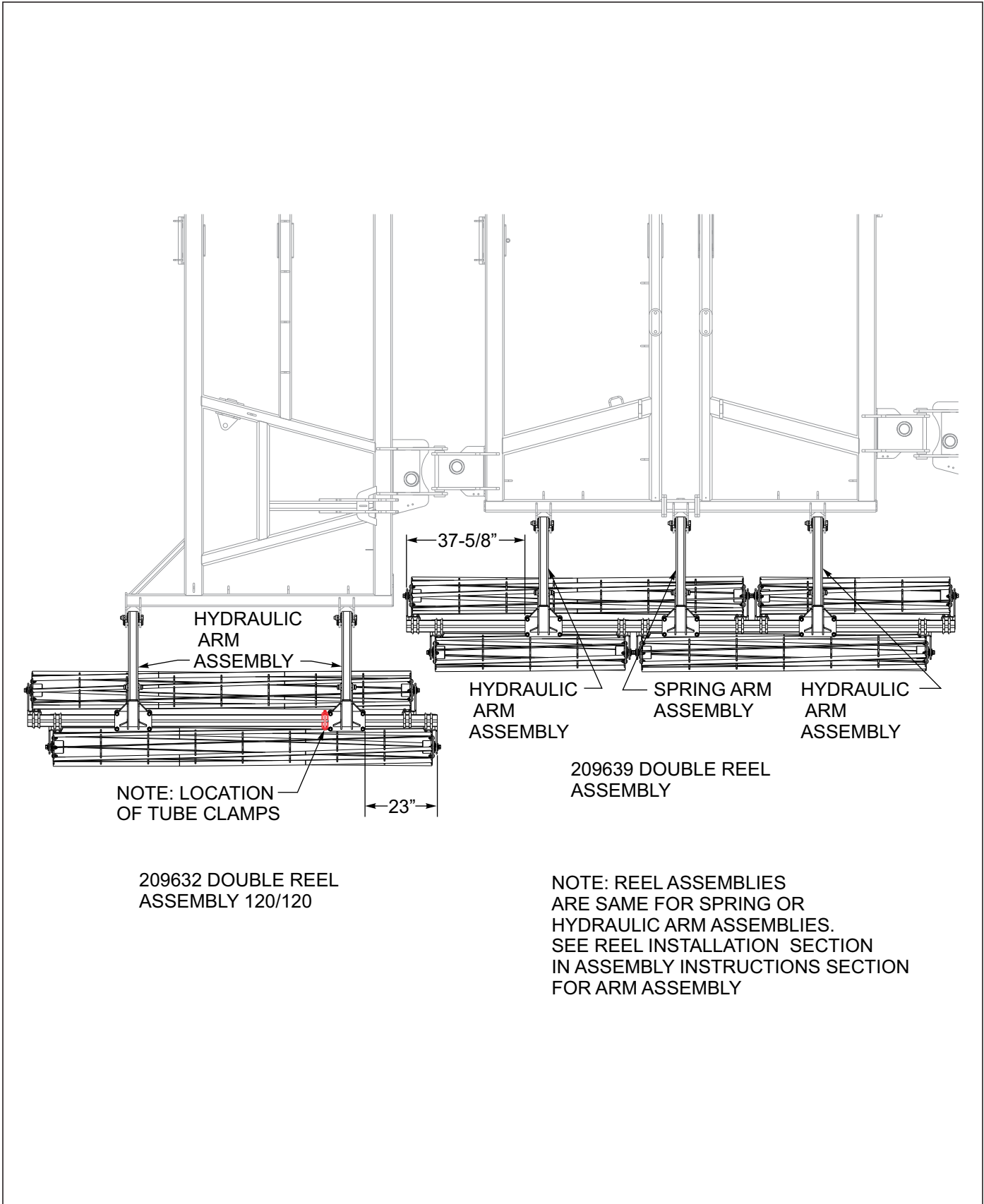
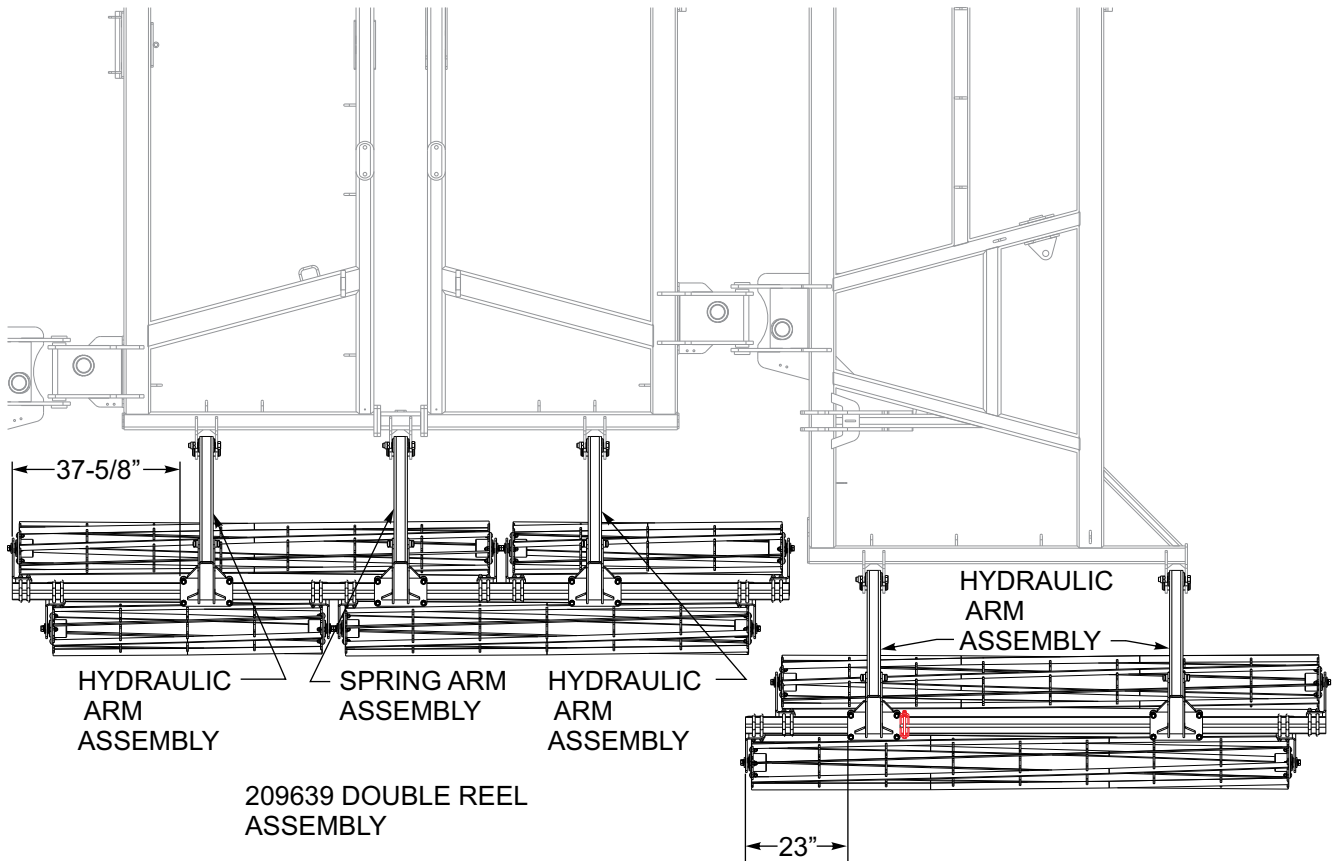


Figure 2-22: Double Flat Reel Placement 7530-32' (LH)



NOTE: REEL ASSEMBLIES ARE SAME FOR SPRING OR HYDRAULIC ARM ASSEMBLIES. SEE REEL INSTALLATION SECTION IN ASSEMBLY INSTRUCTIONS SECTION FOR ARM ASSEMBLY

209638 DOUBLE REEL ASSEMBLY 120/120

Figure 2-23: Double Flat Reel Placement 7530-32' (RH)

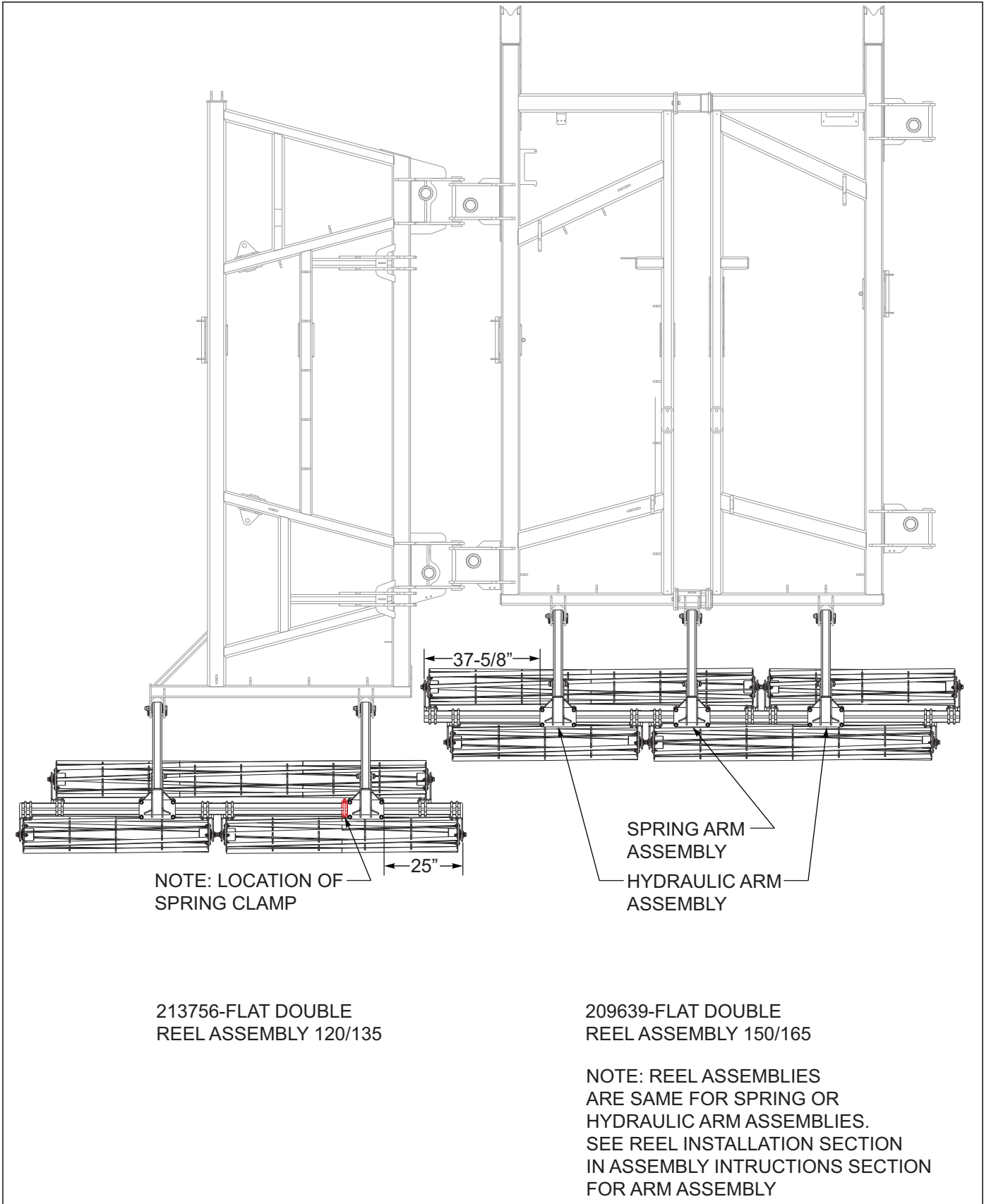


Figure 2-24: Double Flat Reel Placement 7530-35' (LH)

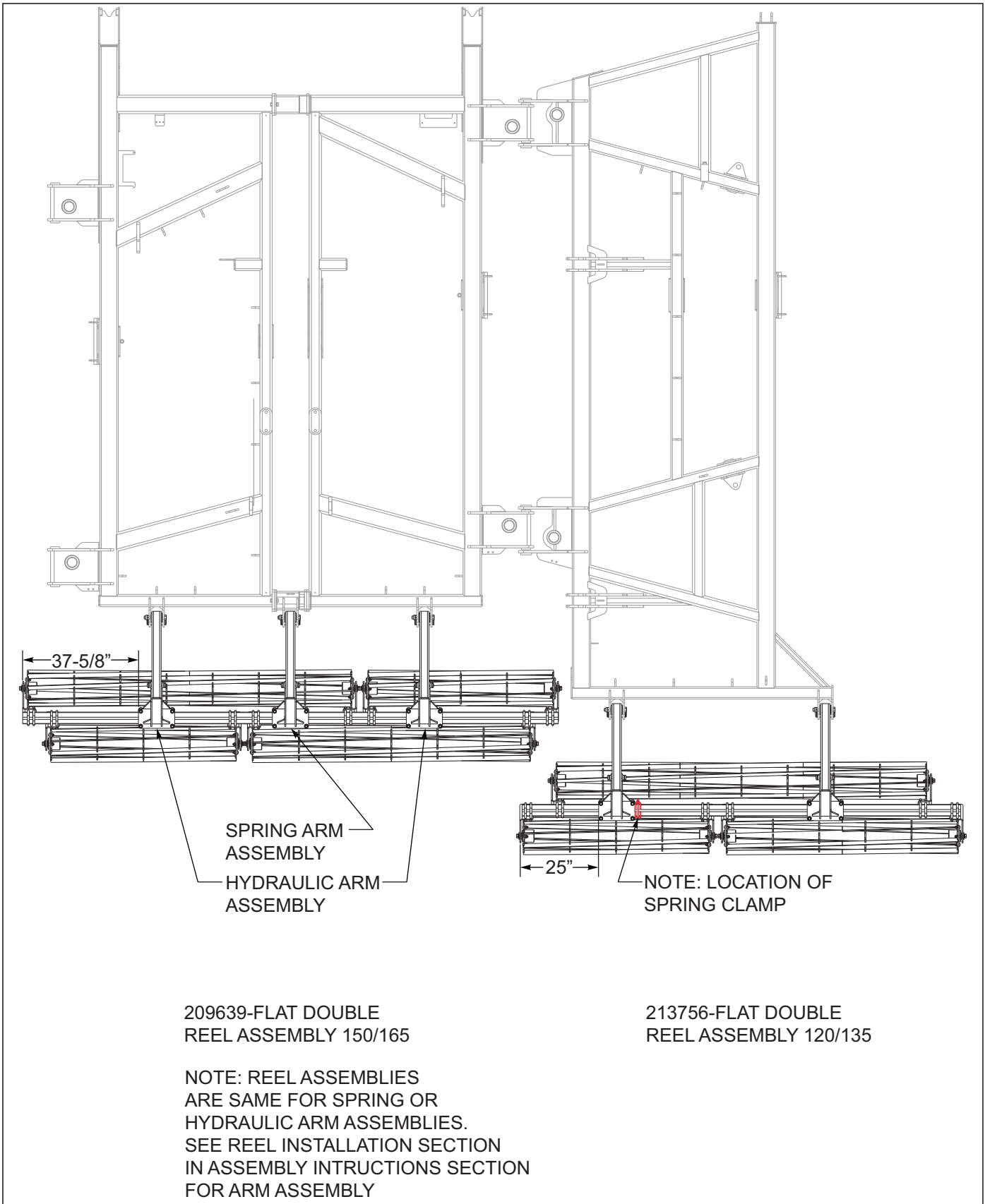


Figure 2-25: Double Flat Reel Placement 7530-35' (RH)







## Assembly Instructions

It is very important that your new 7530 VT Plus be properly assembled, adjusted and lubricated before use. Illustrations to assist with the assembly process are provided in **Section 2, “Standard Specifications”**. They show proper disc gang, wing stabilizer bracket, and light mounting bracket spacing. Illustrations in this section show proper assembly procedures. Remove paint from grease fittings. Replace any grease fittings that are damaged or missing. Be sure to return screws, clips, etc., to their original locations.

To insure alignment of assemblies, **leave the nuts loose until completion** of final assembly. Use lock washers or flat washers as specified. Spread all cotter pins.

**After completion of final assembly, tighten all nuts evenly** to prevent misalignment, distortion or binding. Tighten all screws and nuts to the recommended torques (See “General Torque Specifications” on page 2-5.).



### CAUTION

Be sure to bleed the hydraulic system of all air in lines after installation. Failure to bleed the system of all air can result in improper machine operation.



### DANGER

Disc blades are extremely sharp. Exercise extreme care when working on or near disc blades. Do not allow discs to roll over or fall onto any bodily part. Do not allow wrenches to slip when working near disc blades. Never push wrenches toward disc blades. Do not climb over machine above disc blades. Failure to stay clear of disc blade edges can cause serious personal injury or death.



### WARNING

Do not attempt to lift heavy parts (such as the frame, disc gangs, rock shaft, and pull hitch) manually. Use a hoist or a fork lift to move these parts into position.



### DANGER

To prevent accidental lowering:

1. All hydraulically elevated equipment must be locked out using the cylinder lockouts:
2. Lower equipment to the ground while servicing or when it is idle.

Failure to take measures to prevent accidental lowering may result in serious personal injury or death.

## 7530 VT Plus Frame and Hitch Assembly

### IMPORTANT

Read all safety precautions at the front of the section before attempting any of the following procedures.

### NOTE

The hitch assembly is the same for the center or wide center frame (See Figure 3-3.) for hitch assembly and (See Figure 3-2.) for 7530-32'/35' center frame assembly.

- Place the center frame assembly on stands approximately 36" high, (See Figure 3-2.) for 7530-32'/35' center frame assembly and (See Figure 3-3.) for 7530-23' - 29' center frame. The assembly area should be a large level area of sufficient size to accommodate the disc when fully assembled.



### WARNING

Do not attempt to lift heavy parts (such as the frame assembly, disc gangs and pull hitch) manually. Use a hoist or a fork lift to move these parts into position.

- Attach the 7530-32'/35' center frame rt half to the front and rear mounts that are mounted to the center frame lt half (See Figure 3-2.) with 3/4-16 x 2-1/2 cap screws and 3/4-16 lock nuts.
- Attach the wide center truss to the front center frame tube with 3/4 x 6-13/16 x 7-3/4 u-bolts and 3/4 lock nuts. install the 5/8 x 6-11/16 x 4-1/2 u-bolts and 5/8 lock nuts to the bottom of the frame mount front.
- Align holes in the blue lift cap bearing to the mount on the bottom, left side of the center frame rt half, secure with 3/4-10 x 2 cap screws and 3/4-10 lock nuts.
- Now the radius rod assembly may be attached to the plates on the right and left center lifts with 1-8 x 4 cap screws and 1-8 lock nuts. To adjust the radius rod, lift up on center lift legs to fully retract the center lift cylinders and adjust the radius rod to fit lifts. It does not come at a preset length. Once the radius rod is installed, do not use it to level the center frame, as it is to keep the center frame cylinders in unison throughout their stroke. Tighten jam nuts on each end and set screw on radius rod assembly. (See Figure 4-8.) for more instructions on leveling center frame after machine is fully assembled.

- Attach the hitch weldment, all models (See Figure 3-3.), to the front of the center frame using 1-1/4-7 x 10 cap screws, 1-1/4 flat washers, hitch mount plates and 1-1/4-7 lock nuts. The 1-1/4 flat washers are provided.

### NOTE

The hitch may be assembled in the upper or lower position depending on matching tractor drawbar height. See "Hitch Adjustment" on page 4-10 for proper adjustment.

- Move the 7000/8000 tongue jack to the forward mounting tube and rotate to parking position to support the front of the hitch.
- Insert a 3/4-10 x 7 hex head cap screw into the hose holder tube on the right side of the hitch from the bottom side so the threads point upward. Hold in place with a 3/4 prevailing flange nut with the flange pointing upward as well. Do not tighten this cap screw, so the hose holder bracket may pivot freely in this joint.
- Slide the hose holder bracket over the screw and secure with another 3/4 prevailing flange nut.
- Install a 3/8-16 x 5 all-thread screw in the front of the hose holder bracket and secure with a 3/8-16 hex nut.
- Slide the hose holder clamp over the 3/8-16 X 5 hex screw and loosely start the wing nut on top of the clamp. Hydraulic hoses will be routed through the clamp after assembly.
- Install tire/wheel assembly to all 8 bolt hub/spindle assemblies with 5/8" lug nuts.
- Torque wheels 85 to 100 ft./lbs.

### NOTE

All tire/wheel assemblies are mounted with the valve stem facing outward.

## Spare Tire Assembly (Optional)

- Attach Optional spare tire and mount to rear of hitch as shown (See Figures 3-1)

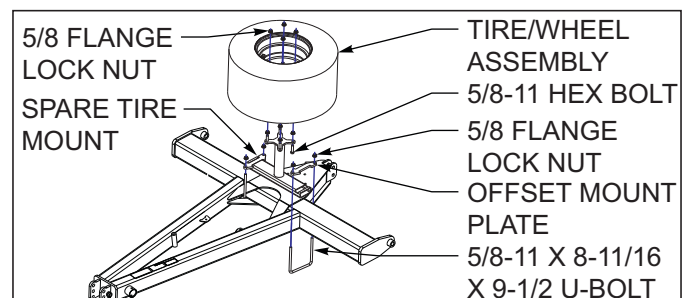


Figure 3-1: Spare Tire Assembly

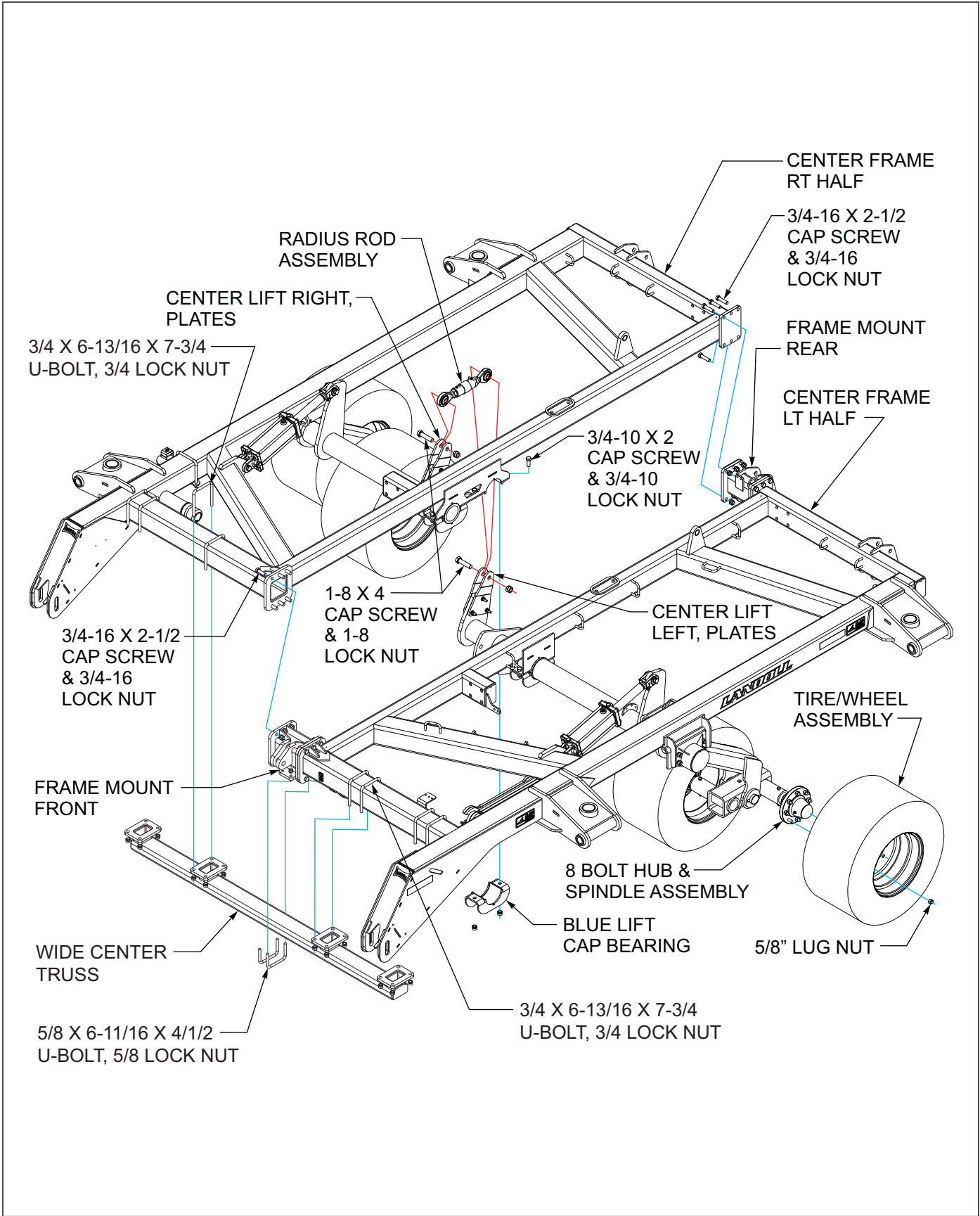


Figure 3-2: 7530-32/35 Center Frame Assembly

# ASSEMBLY INSTRUCTIONS

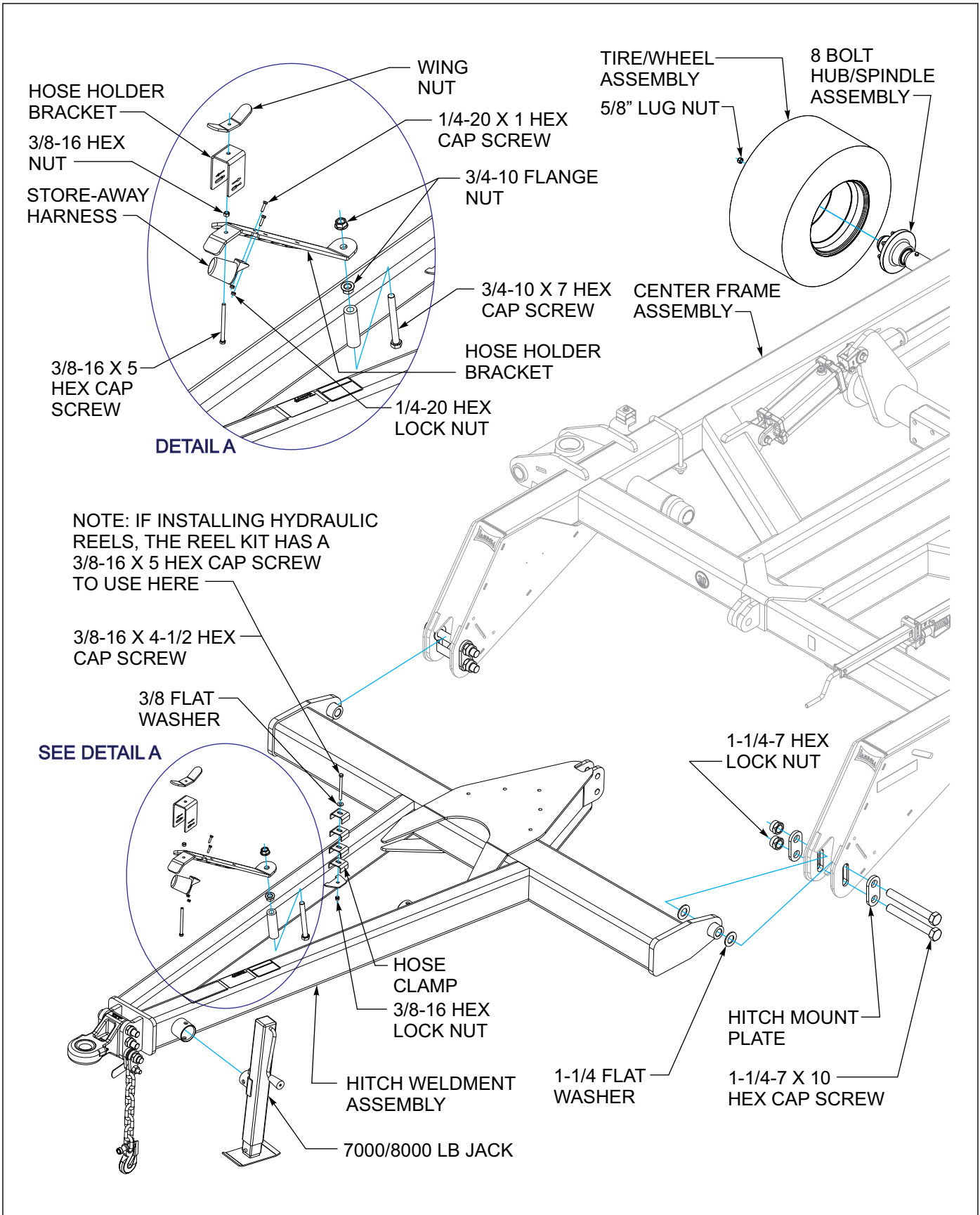


Figure 3-3: 7530-23' - 35' Frame and Hitch Assembly Installation

## Leveler Assembly

1. Be sure bushing is in the leveler L link (**See Figure 3-4.**)
2. Attach the leveler L link to the front mount of the center frame with a 1-1/4-7 x 6 hex head cap screw and 1-1/4-7 hex lock nut.
3. With a 1-8 x 4-1/2 hex head cap screw and 1-8 hex lock nut attach the leveler ball joint link to the leveler link.
4. Connect the bottom end of the leveler link to the rear, lower mounting holes of the hitch using a 1-8 x 4-1/2 hex head cap screw and 1-8 hex lock nut.
5. Slide leveler cross cylinder/w zerk over front end of leveler assembly until 2 holes are through plate (**See Figure 3-4.**) Slide 3-1/2 x 6 cylinder onto front end of leveler assembly until the 2 holes in cylinder are aligned with 2 holes in leveler and slide the leveler pins through aligned holes. Slide leveler cross cylinder assembly back though until plates on two cylinders are aligned and secure with 1/2-13 x 2 hex cap screws and 1/2-13 hex lock nuts.
6. Be sure bearing flanges are in both leveler cross brackets and slide brackets over leveler cross cylinder as shown. Secure with flat washer and 5/16 x 2-1/2 spring pin on both sides.
7. Attach the other end of the leveler cross brackets to top of leveler I with 3/4-10 x 3-1/2 hex cap screws and 3/4-10 lock nut.
8. The grease zerk should be pointing up and the preset distance should at 4" between the two nuts.

### NOTE

*When the hitch is in the upper mounting position, the leveler link is mounted in the lower holes. When the hitch is in the lower position, the link is mounted in the top mounting holes. **See Section 4, "Hitch Adjustment"** for proper adjustment.*

### NOTE

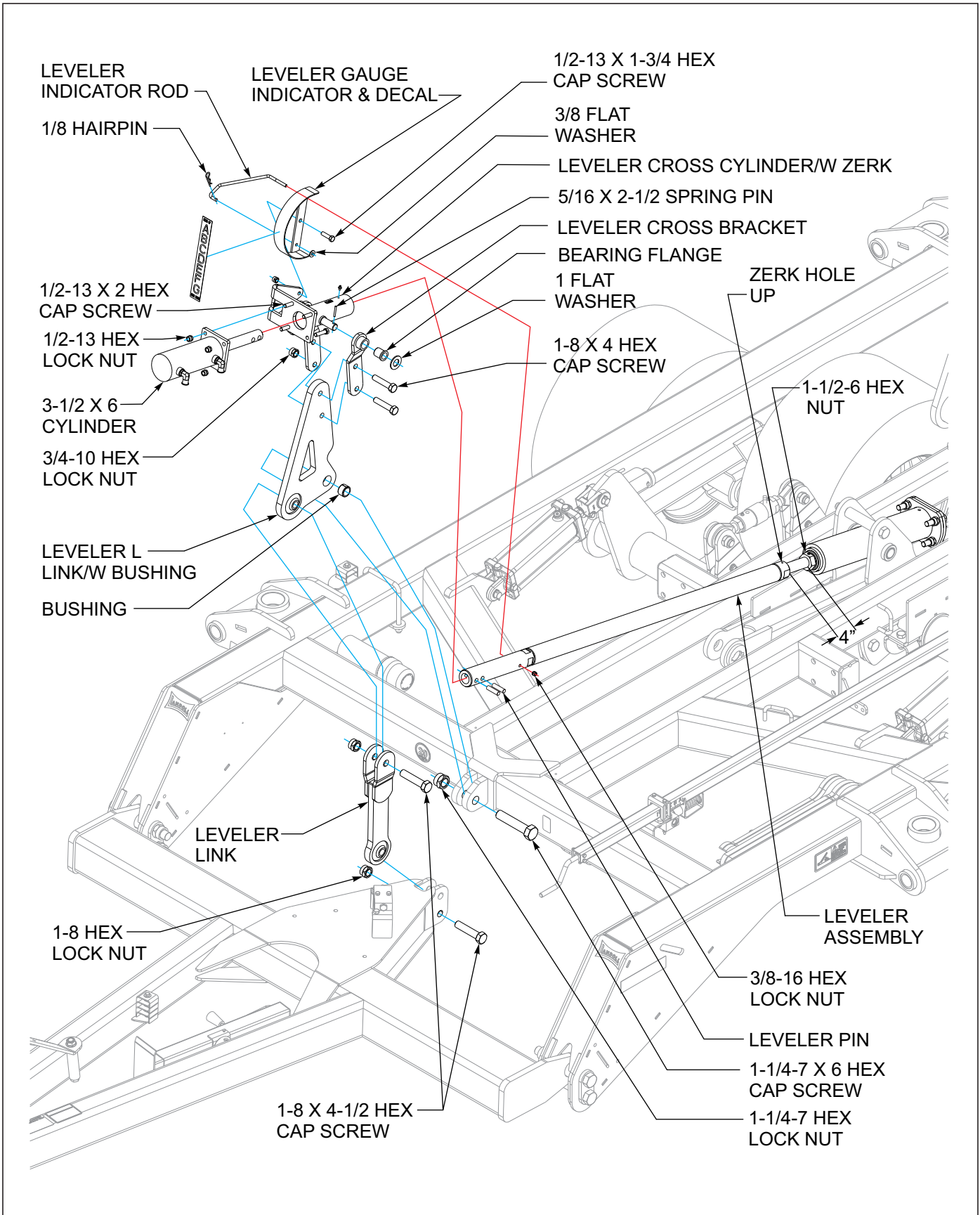
*If the leveler assembly needs adjusted **See Section 4, "Hydraulic Leveler Adjustment"** for proper adjustment.*

9. Attach level indicator as shown (**See Figure 3-4.**)

### NOTE

*For leveler hydraulic installation (**See Figure 3-21.**)*

# ASSEMBLY INSTRUCTIONS



**Figure 3-4: Leveler Assembly Installation**

## Wing Frames

1. Place the left and right wing frame assemblies on stands so the wings are level with the center frame **(See Figure 3-5.)**
2. Be sure the 1-3/4 flange bearings are in center frame and a 1-3/4 thrust washer is installed, one on each side of center frame hinge ear and slide the 1-3/4 hinge pin through aligned holes.
3. Secure the 1-3/4 hinge pin with 5/8" cross pin, 1-3/4-5 hex slotted nut and 3/8 x 2-1/2 slotted spring pin.

### **NOTE**

*An optional thrust washer is supplied and may be used for proper roll pin alignment in 1-3/4-5 slotted nut.*

4. Attach the tire/wheel assembly to all 8 bolt hub & spindle assemblies. Torque to 85 to 100 ft./lbs.

### **NOTE**

***All tire/wheel assemblies are installed with the valve stem facing outward.***

5. Attach the front gauge wheel assemblies to the wing frames using 1-8 x 6 hex head screws, gauge wheel spacers, and lock nuts. Securely tighten the mounting screws to eliminate any slack and unnecessary wear.

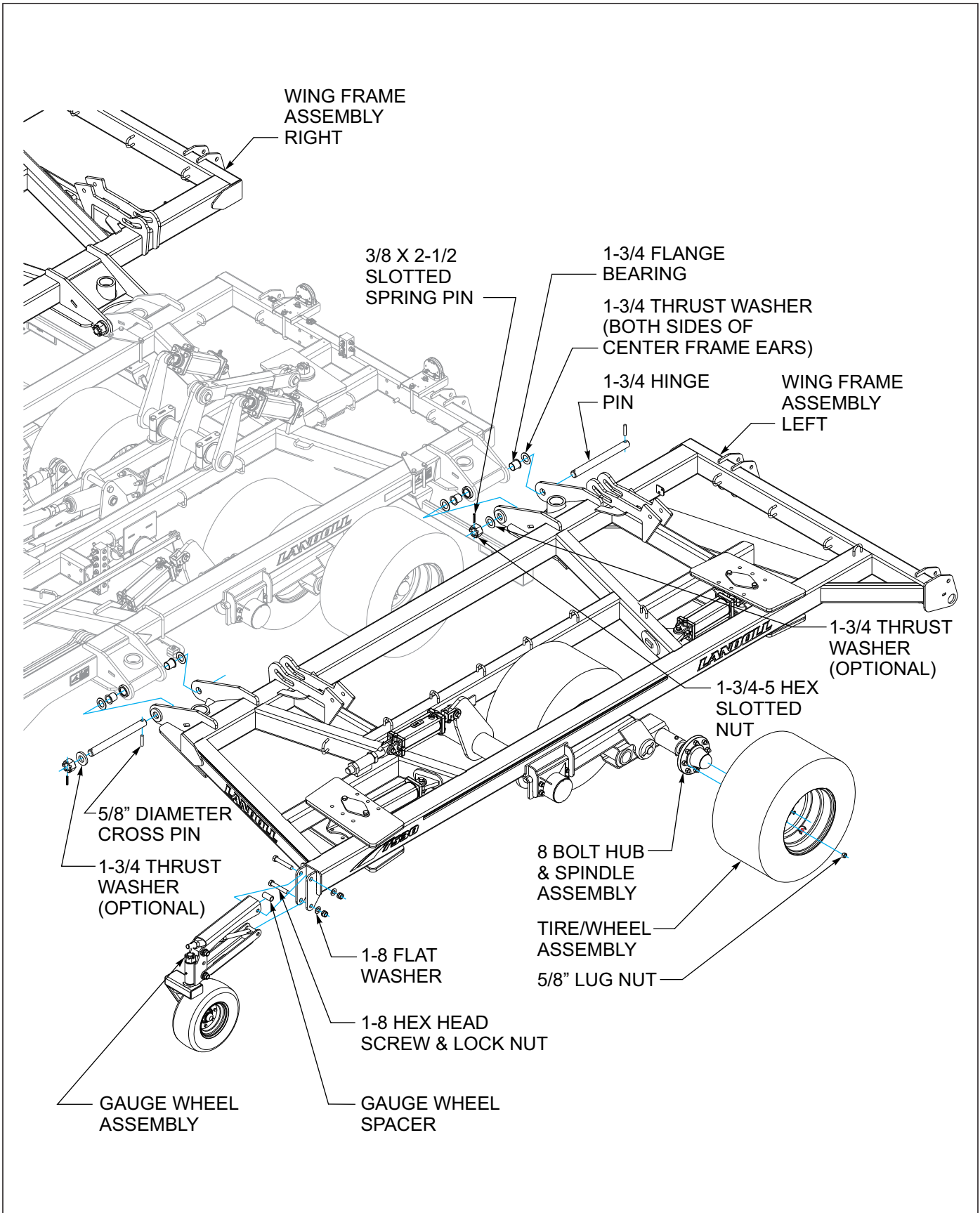


Figure 3-5: Wing Frame Assembly Installation 7530-23' - 35'



## Hydraulic Installation

### NOTE

Refer to Figures 3-9- 3-16 for lift hydraulic diagrams for 7530-26', 7530-29' and 7530-32'/35' models.

Refer to Figures 3-17 - 3-20 for fold hydraulic diagrams for 7530-23'/26'/29' and 7530-32'/35' models.

Refer to Figures 3-26 - 3-37 for gang hydraulic diagrams for 7530-23'/26'/29'/32'/35' models.

Refer to Figures 3-21 for leveler hydraulic diagram for all models.

1. Install the 24 and 8 port hydraulic manifolds at the center and rear of the center frame to the mounts welded to the frames (See Figure 3-17. - 3-20) using 1/2-13 x 3-1/2 hex bolts and 1/2-13 lock nuts. On the front manifold, the top two ports are for the fold system, the middle two are for the lift system, and the bottom two are for the adjustable gangs.

### NOTE

The top port of each set is designated to go to the base ends of the appropriate cylinders.

2. Install 90 degree regular adapter fittings in both rod and base ends of all lift cylinders that are assembled to the frame (See Figure 3-9.7530-23', See Figure 3-10.7530-26', See Figure 3-11. 7530-29', See Figure 3-12. 7530-32'/35').
3. Attach the base end of the 4 x 30 fold cylinders to the fold cylinder mounts on the center frame with the pins and roll pins provided (See Figure 3-17.) There will be two plates inside of the large towers that need to be on each side of the cylinder base. All cylinders are mounted with the hydraulic ports facing the front. The fold cylinders come with the fittings supplied already installed and should have a regular 90 degree fitting on the base end and a black 90 degree restricted fitting on the rod end.

### NOTE

Rod ends of fold cylinders need to be left unassembled and propped up until fold hydraulic system is fully charged with oil to prevent machine damage when folding the first time.

4. The disc gang angle cylinders (See Figure 3-29. 7530-26', See Figure 3-30. 7530-29' and See Figure 3-31. 7530-32'/35') use the following fittings: The left master base end on the center frame requires a tee fitting and the rest of the ports on the center frame cylinders are regular 90 degree fittings. Both front wing gang cylinders require regular 90 degree fittings on both ends. Both rear wing gang cylinders have a 45 degree fitting on the base end and a black 90 degree 1/16 restrictor fitting on the rod end.



### CAUTION

Restrictors are installed to prevent uncontrolled dropping of wings. Removal of these restrictors, or improper installation can result in serious damage to the implement.

5. The leveler cylinder is pre-assembled with 1/32" restricted fittings that are red in color (See Figure 3-21.) They will need to be orientated to face the rear of the machine.
6. At the rear of the hitch (See Figure 3-6.) there will be two identical valves installed (Double Pilot Operated Check Valves) with 3/8 x 3-1/2" bolts and nuts onto the hose clamp. Install these valves with the V1/V2 ports facing the tractor and the C1/C2 Ports facing the rear. Install straight o-ring adapter fittings into each of the 8 outlets. When plumbing the hydraulic disc gangs or the leveler it does not matter which hose goes to C1/C2 or V1/V2, leveler hydraulics (upper valve, See Figure 3-28.) or gang hydraulics (lower valve, See Figure 3-21. 7530-23'/26'/29'/32'/35'), just so they are facing the correct direction and hooked to the cylinder or the tractor correctly.

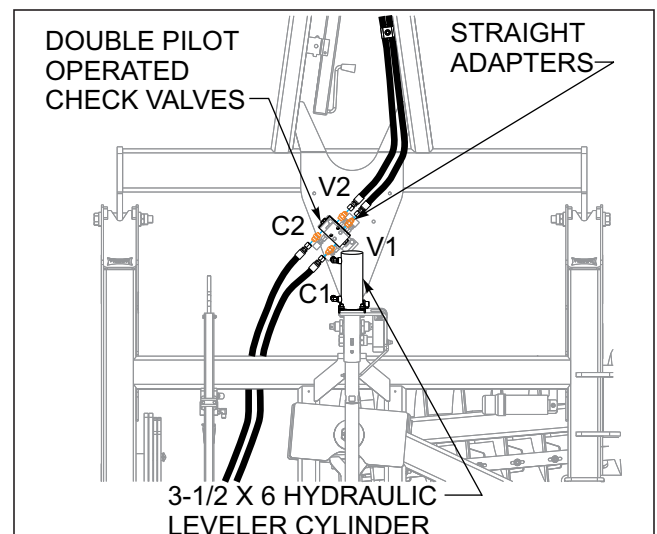
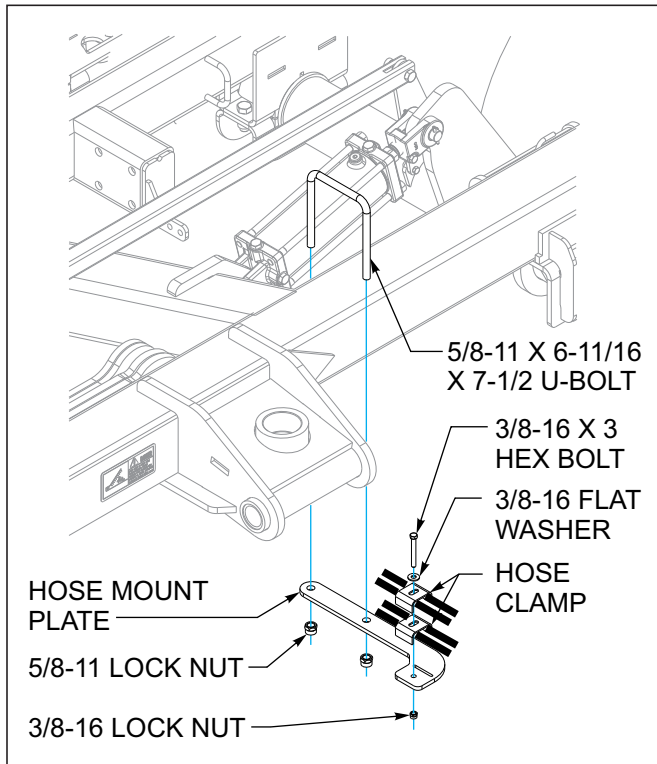


Figure 3-6: Check Valve Placement

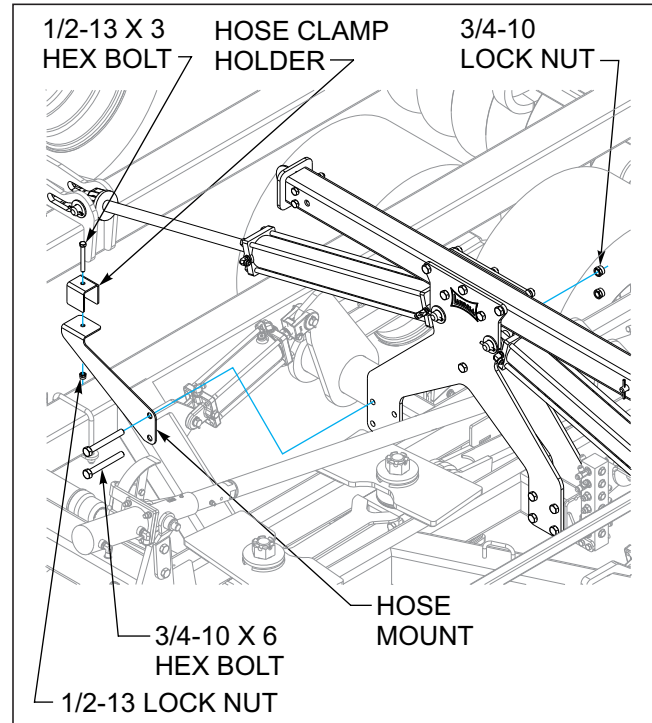
## ASSEMBLY INSTRUCTIONS

7. Install hose mount plates on front of center frame outside tubes (See Figure 3-7.) using 5/8-11 x 6-11/16 x 7-1/2 u-bolts and 5/8-11 lock nuts. Install hose clamps with 3/8-16 x 3 hex bolt, 3/8-16 lock nuts and 3/8-16 flat washer on both sides side. Run lift hydraulic (See Figure 3-13. through See Figure 3-16.) and gang hydraulic hoses (See Figure 3-32. through See Figure 3-37.) through hose clamps).



**Figure 3-7: Hose Mount Installation**

8. Install hose mount on front of front fold cylinder mount plate (See Figure 3-8.) using 3/4-10 x 6 hex bolts and 3/4-10 lock nuts on 7530-32' and 7530-35' models only. Install hose clamp holder with 1/2-13 x 3 hex bolt, 1/2-13 lock nuts. Run lift hydraulic (See Figure 3-13. through See Figure 3-16.) and gang hydraulic hoses (See Figure 3-32. through See Figure 3-37.) through hose clamps).



**Figure 3-8: Hose Mount Installation 32/35'**

9. Install Leveler cylinder hoses and couplers (See Figure 3-21.) Wrap leveler hoses with black hose wrap.
10. Install adjustable disc gang cylinder hoses and couplers, (See Figure 3-29. through See Figure 3-37.) Wrap disc gang cylinders with red hose wrap.
11. Install lift cylinder hoses and couplers, (See Figure 3-10., 7530-26', See Figure 3-11., 7530-29' and See Figure 3-12. 7530-32') Wrap lift hoses with blue hose wrap.
12. Install fold cylinder hoses and couplers (See Figure 3-17. through See Figure 3-20.) Wrap fold cylinder hoses with yellow hose wrap.
13. Attach hoses to tractor or other hydraulic source and purge each system of air and fill cylinders with hydraulic oil. The lift and gang adjustment system are rephrasing so once the cylinders start extending just continue to hold the lever until all of the cylinders are fully extended. The hydraulic leveler and fold cylinders will need to be extended and retracted several times to assure they are purged of air.
14. With the fold cylinders purged of air extend them and rotate the rod so the bolt that goes through the clevis end is on the top side. Attach the clevis to the wing fold pin that is installed on the wing with flat washers and roll pins.
15. Double check all hoses and fittings for any leaks and correct as needed.

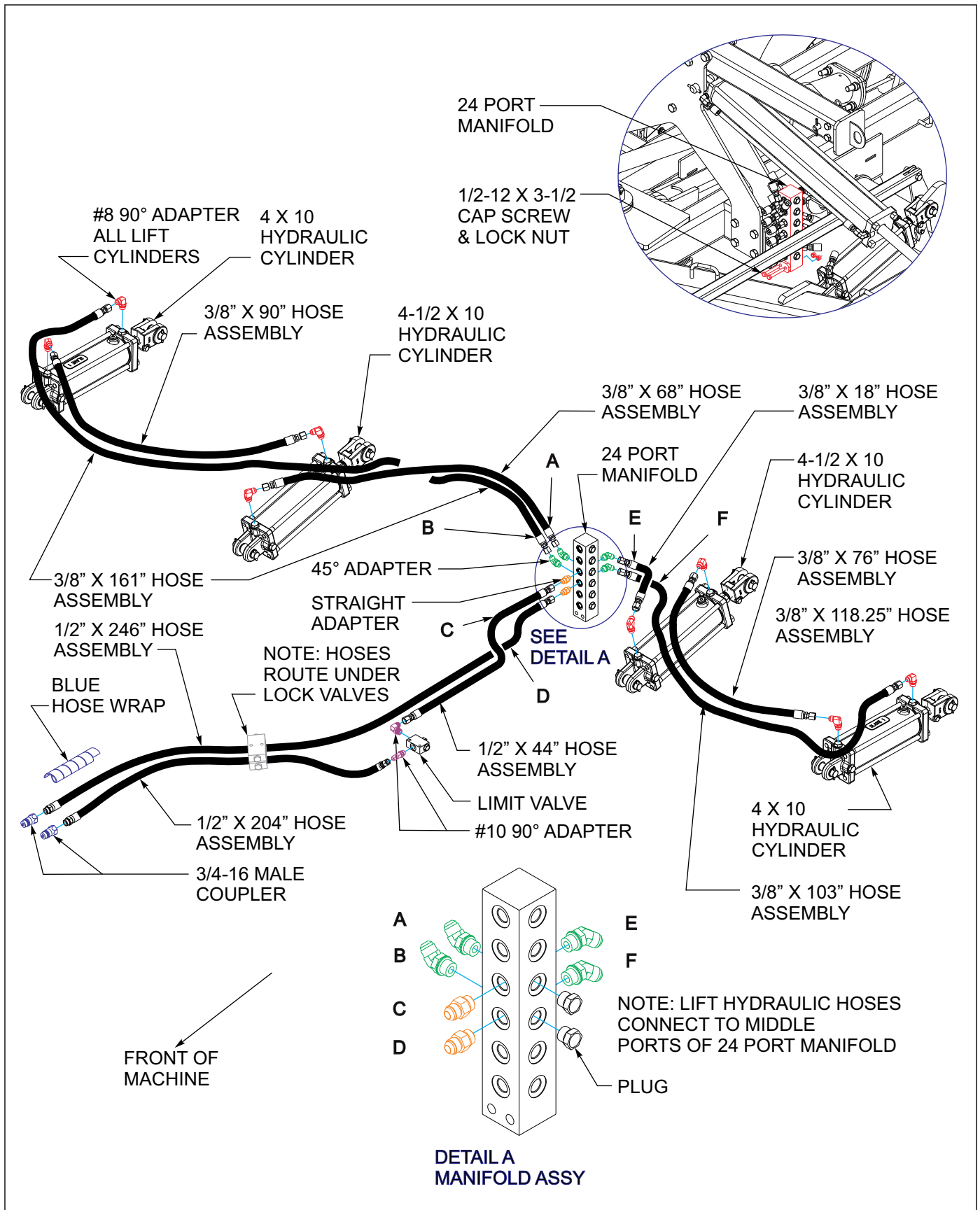


Figure 3-9: Lift Hydraulic Installation 7530-23'

# ASSEMBLY INSTRUCTIONS

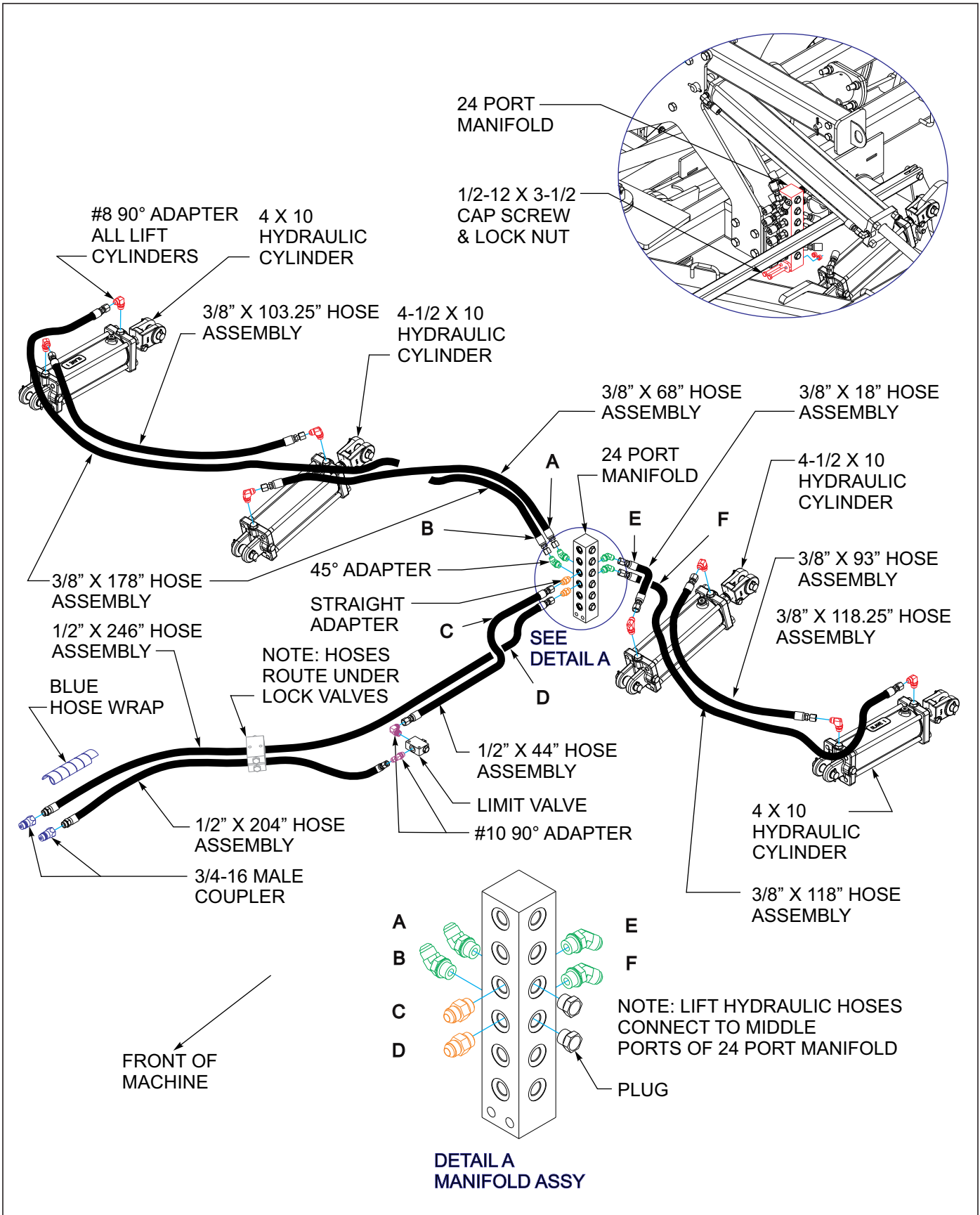


Figure 3-10: Lift Hydraulic Installation 7530-26'

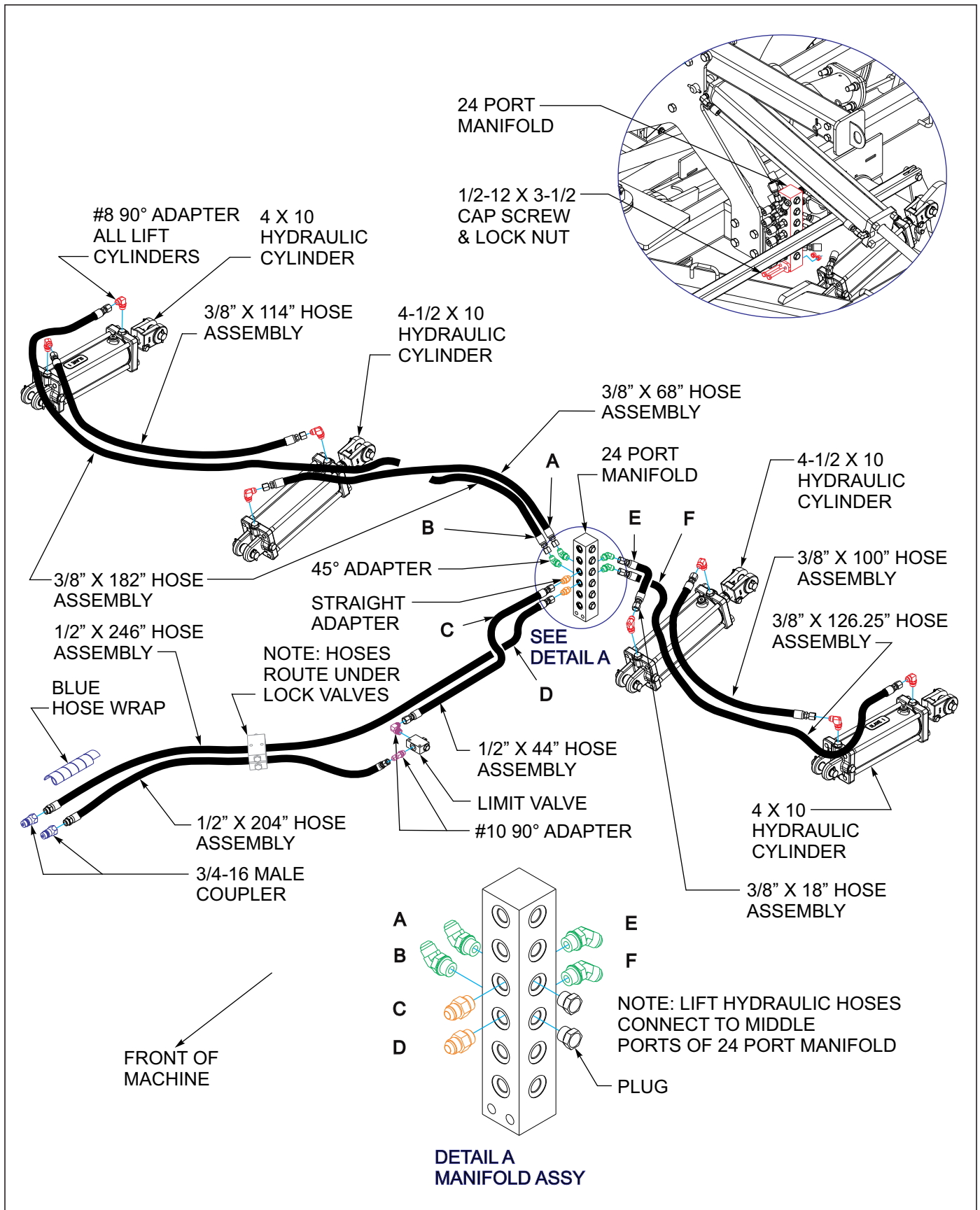


Figure 3-11: Lift Hydraulic Installation 7530-29'

# ASSEMBLY INSTRUCTIONS

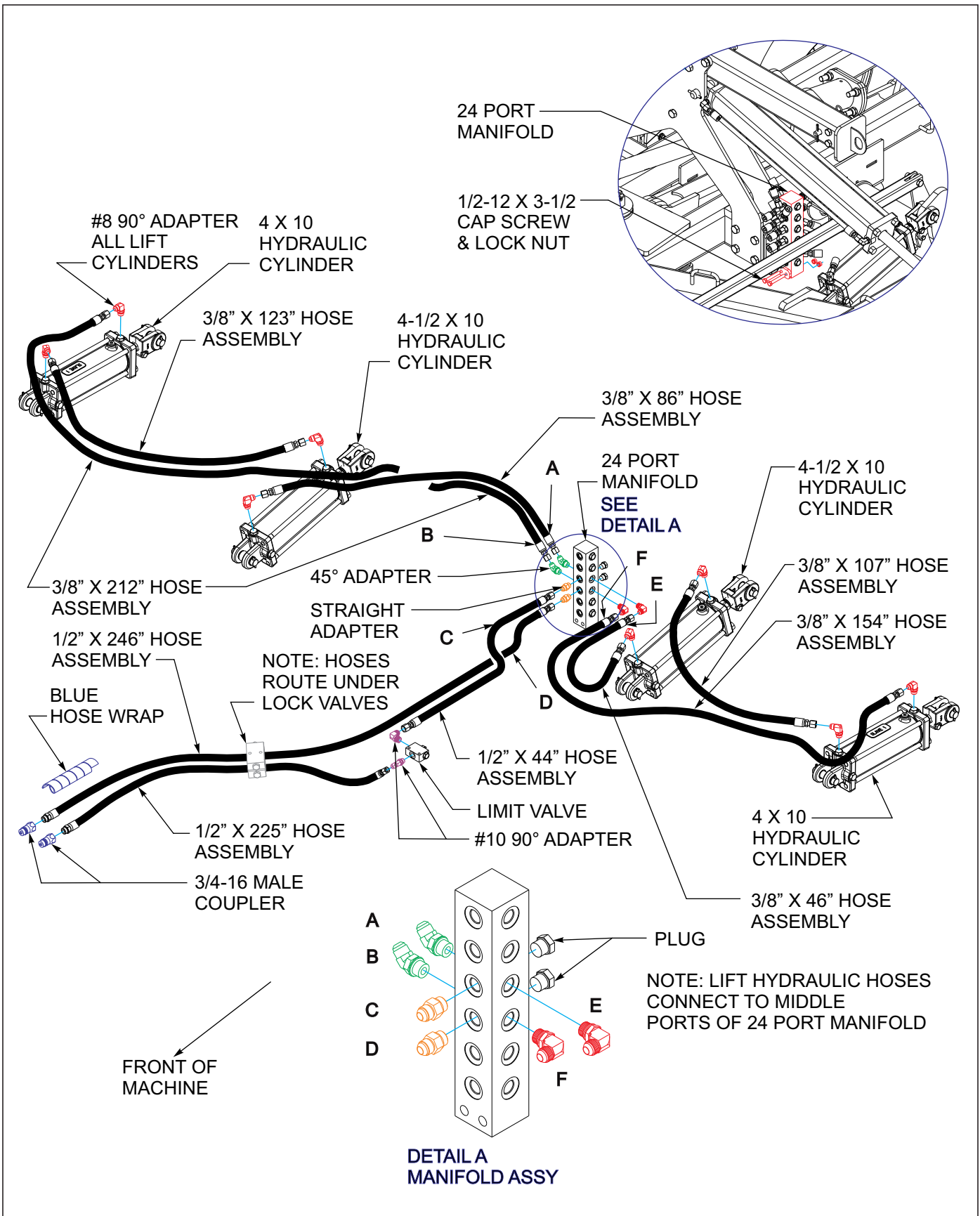


Figure 3-12: Lift Hydraulic Installation 7530-32'/35'



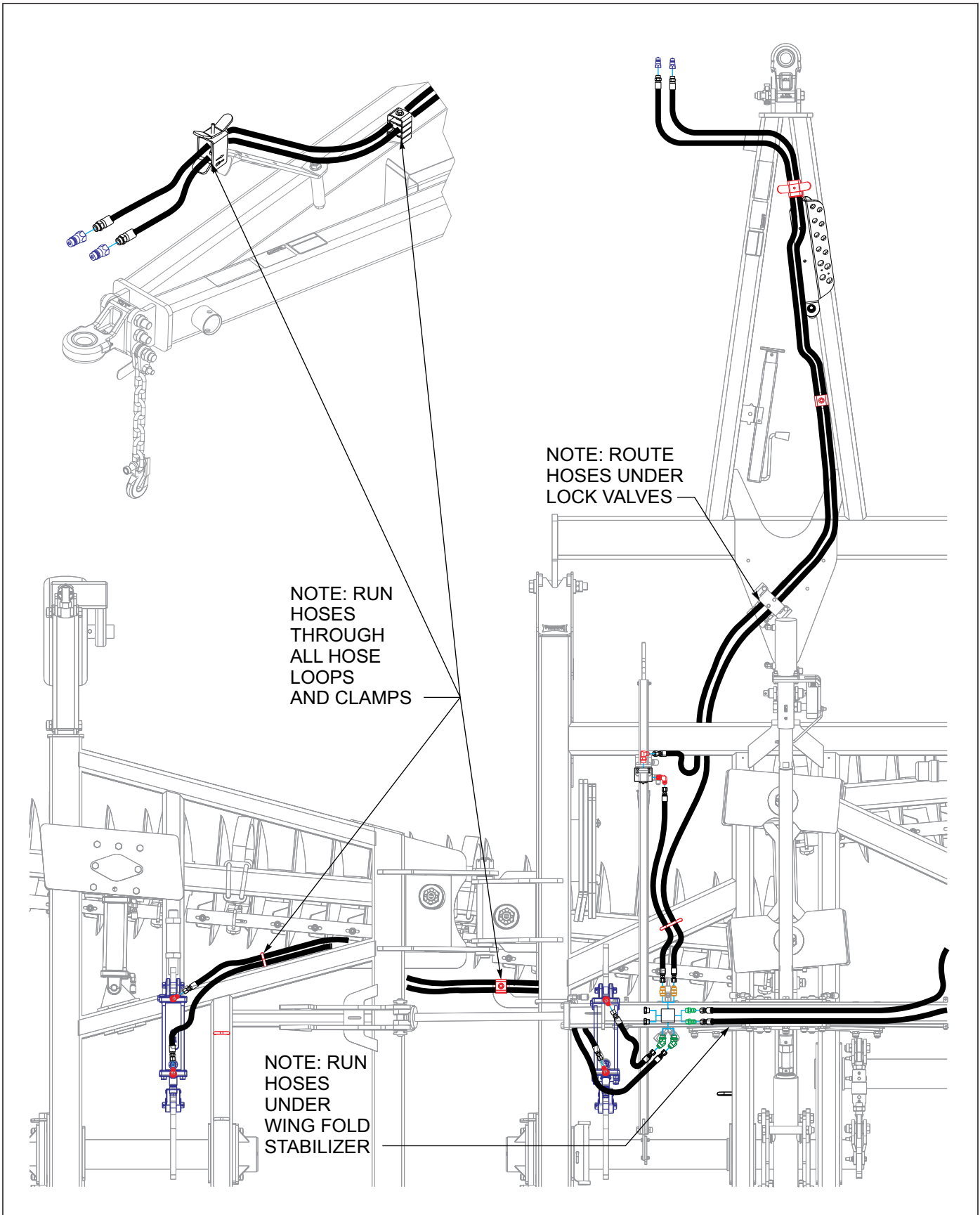


Figure 3-13: Lift Hydraulic Layout 7530-23'/26'/29' LH



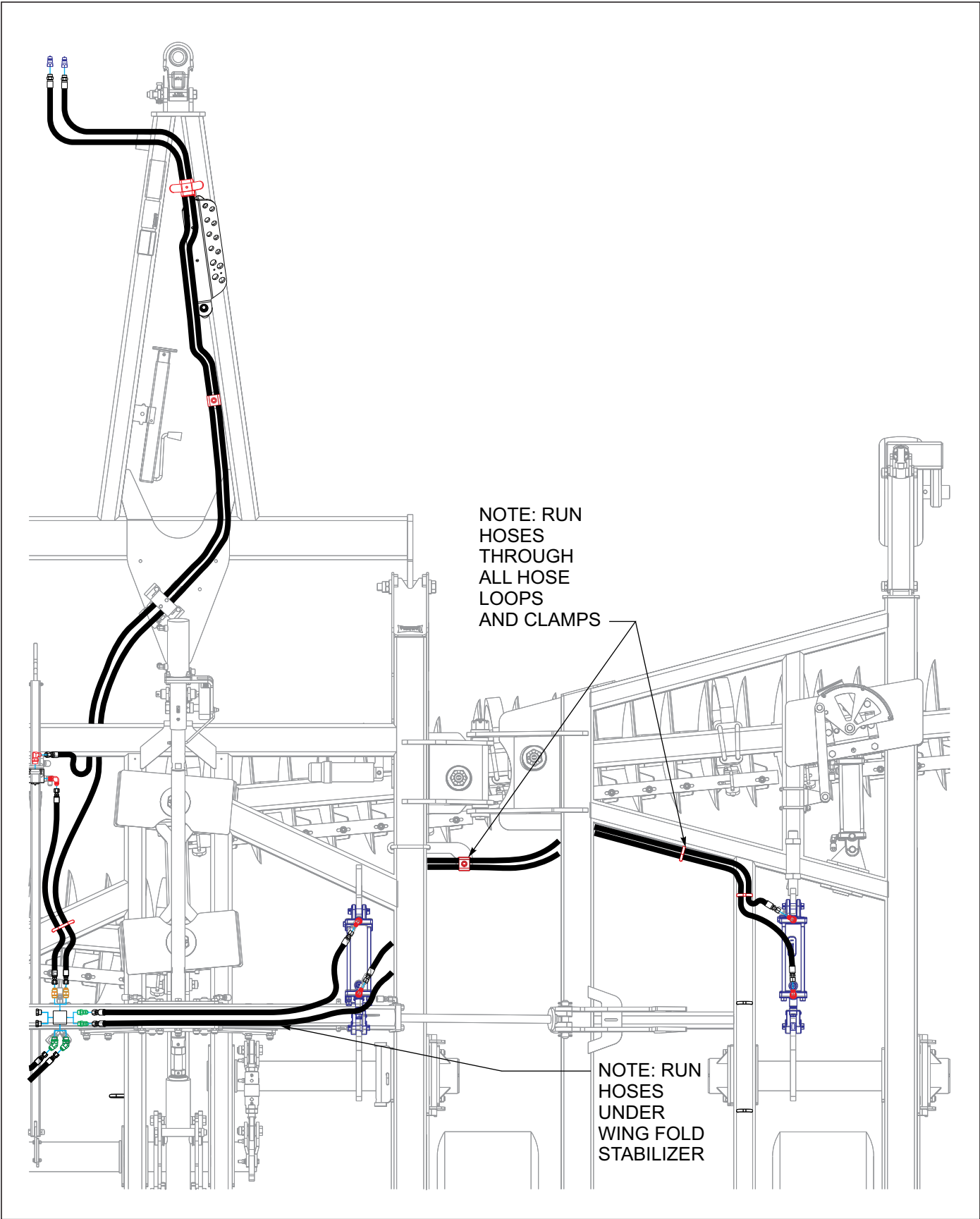


Figure 3-14: Lift Hydraulic Layout 7530-23'/26'/29' RH

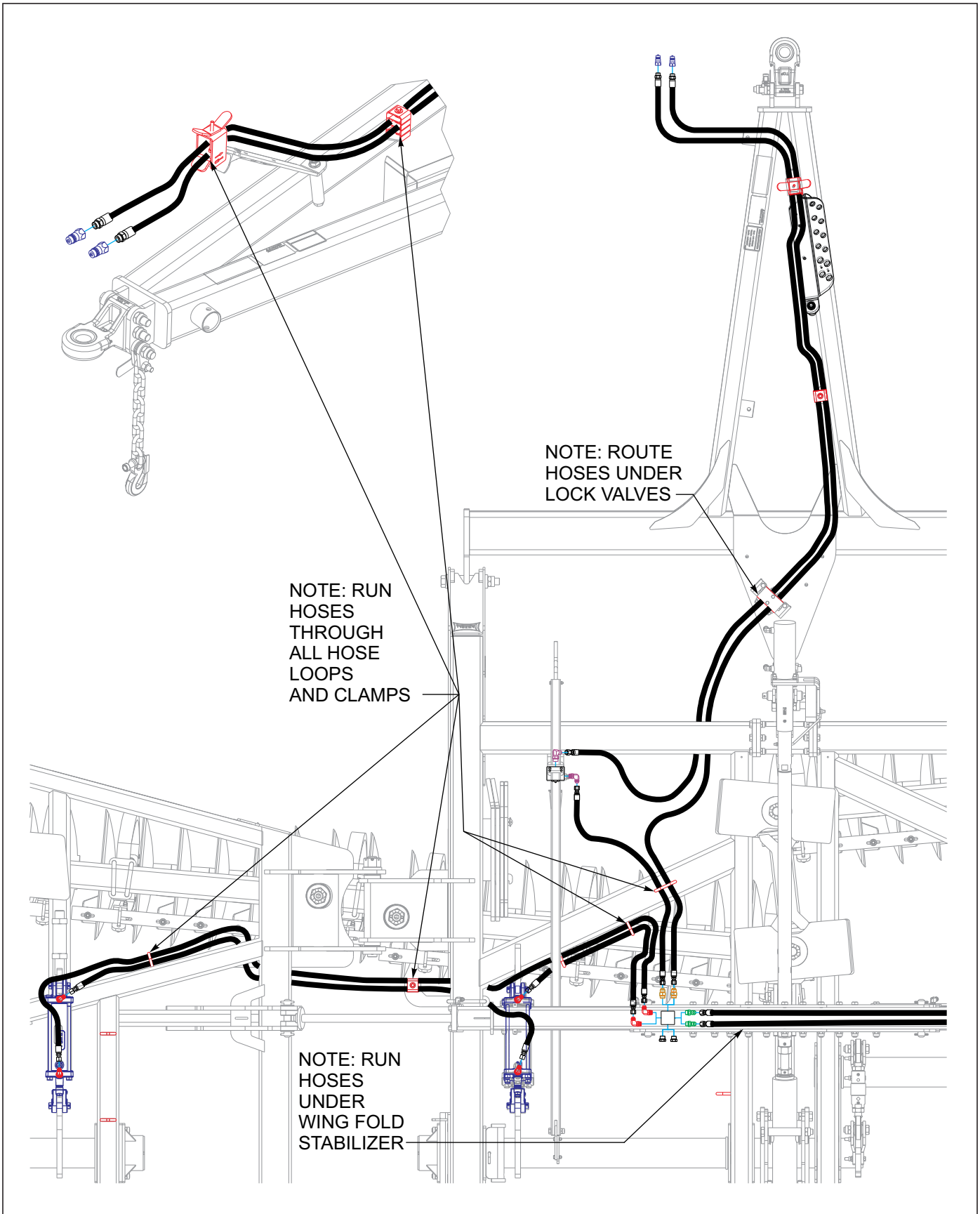


Figure 3-15: Lift Hydraulic Layout 7530-32'/35' LH

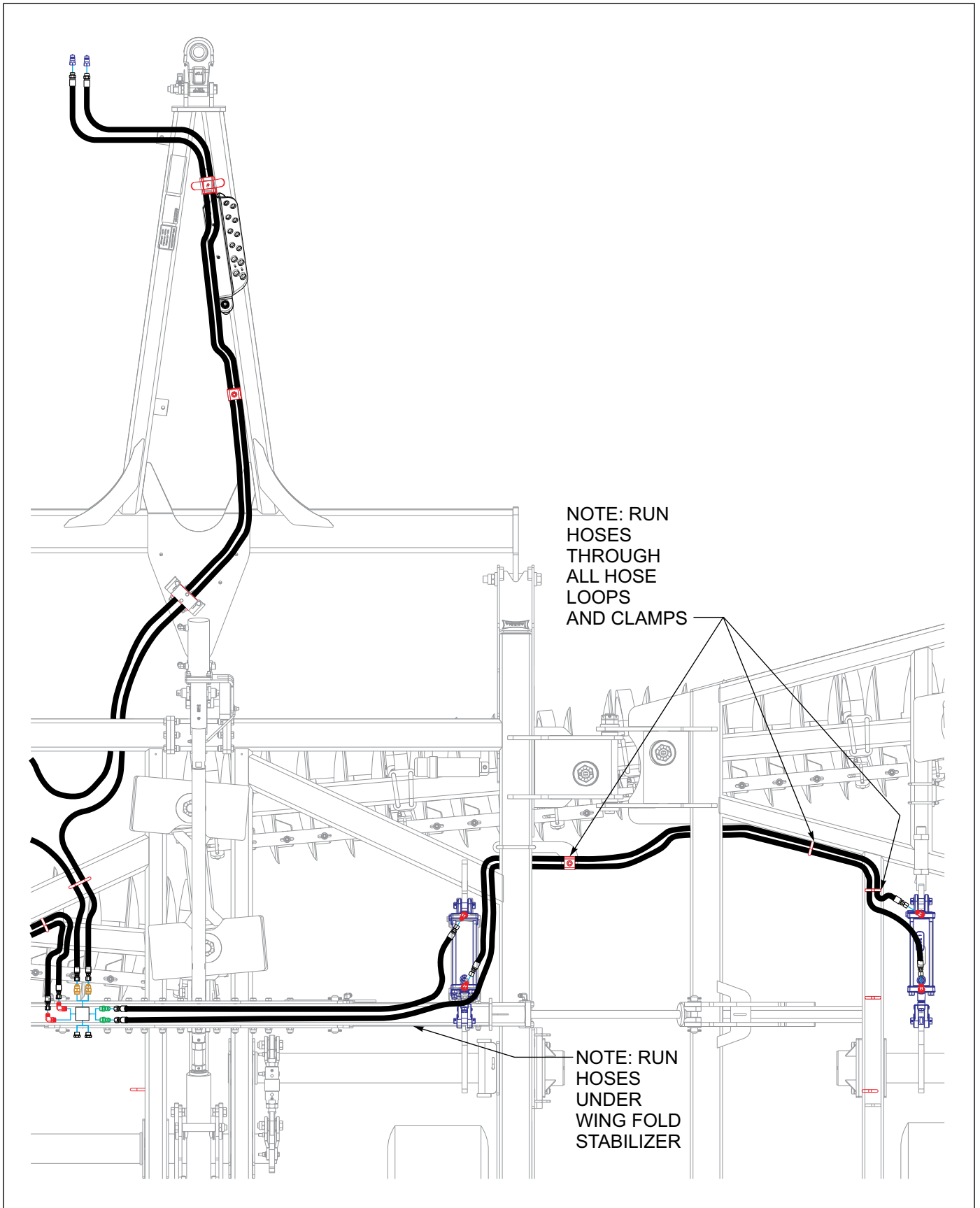


Figure 3-16: Lift Hydraulic Layout 7530-32'/35' RH

# ASSEMBLY INSTRUCTIONS

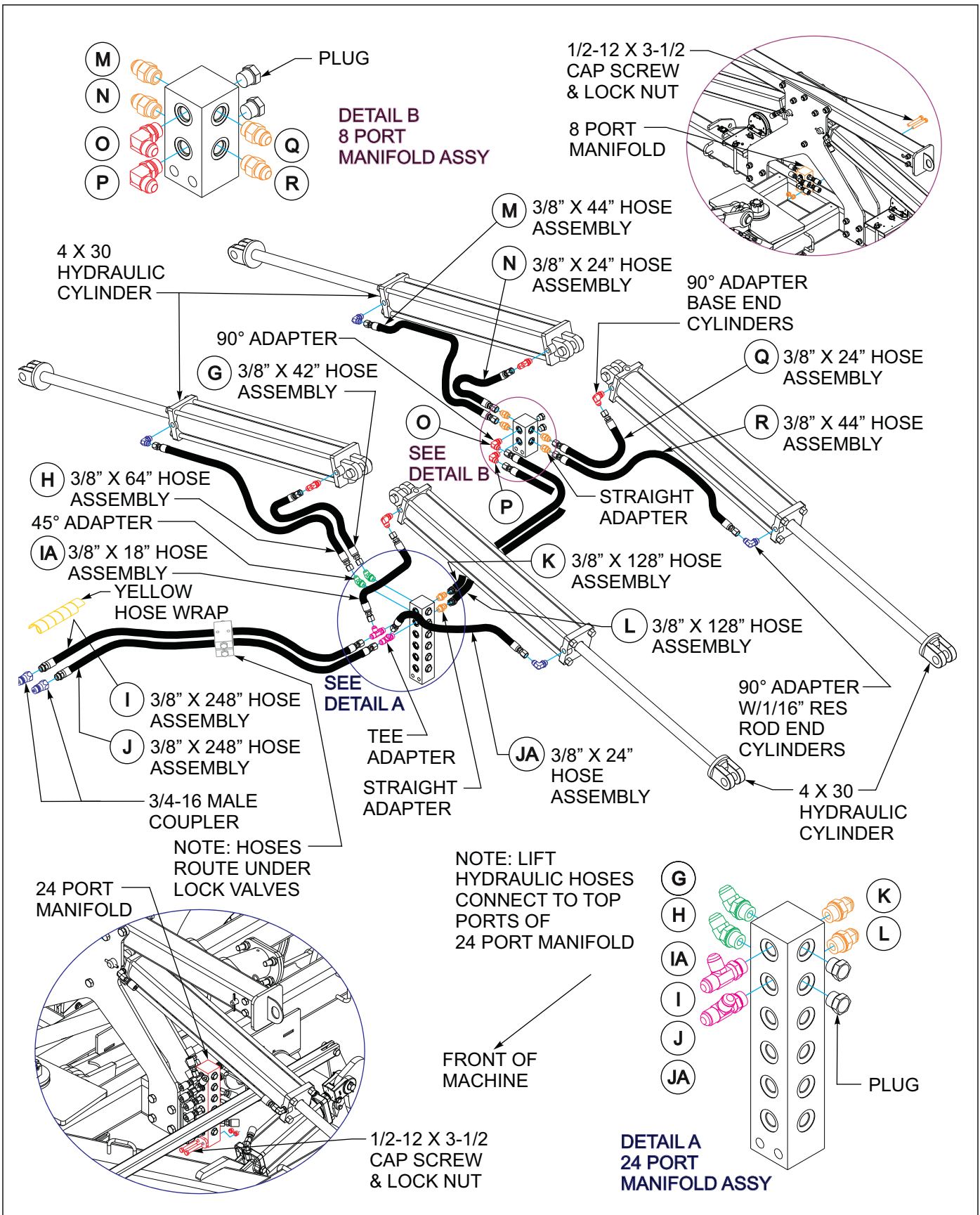


Figure 3-17: Fold Hydraulic Installation 7530-23'/26'/29'

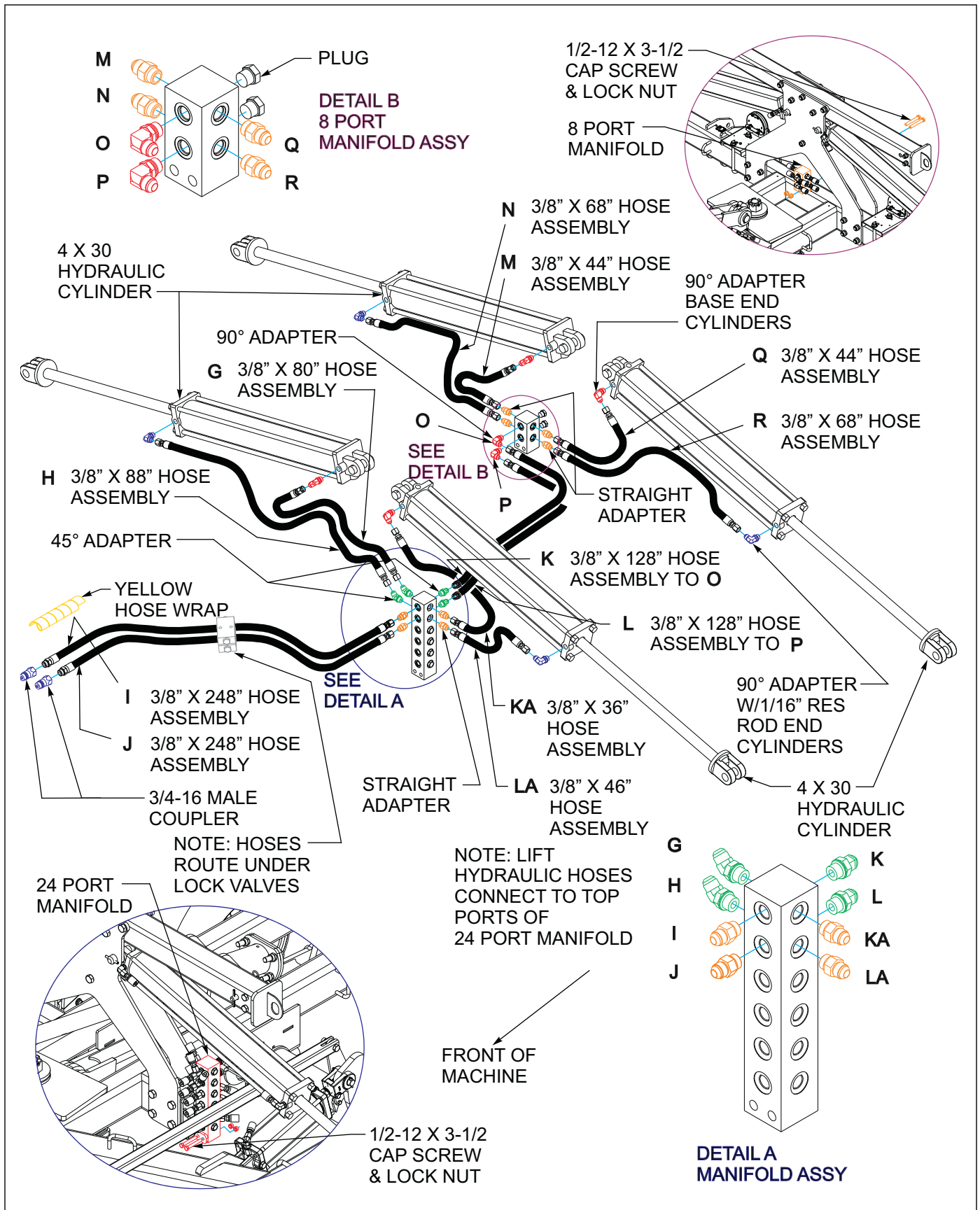


Figure 3-18: Fold Hydraulic Installation 7530-32'/35'

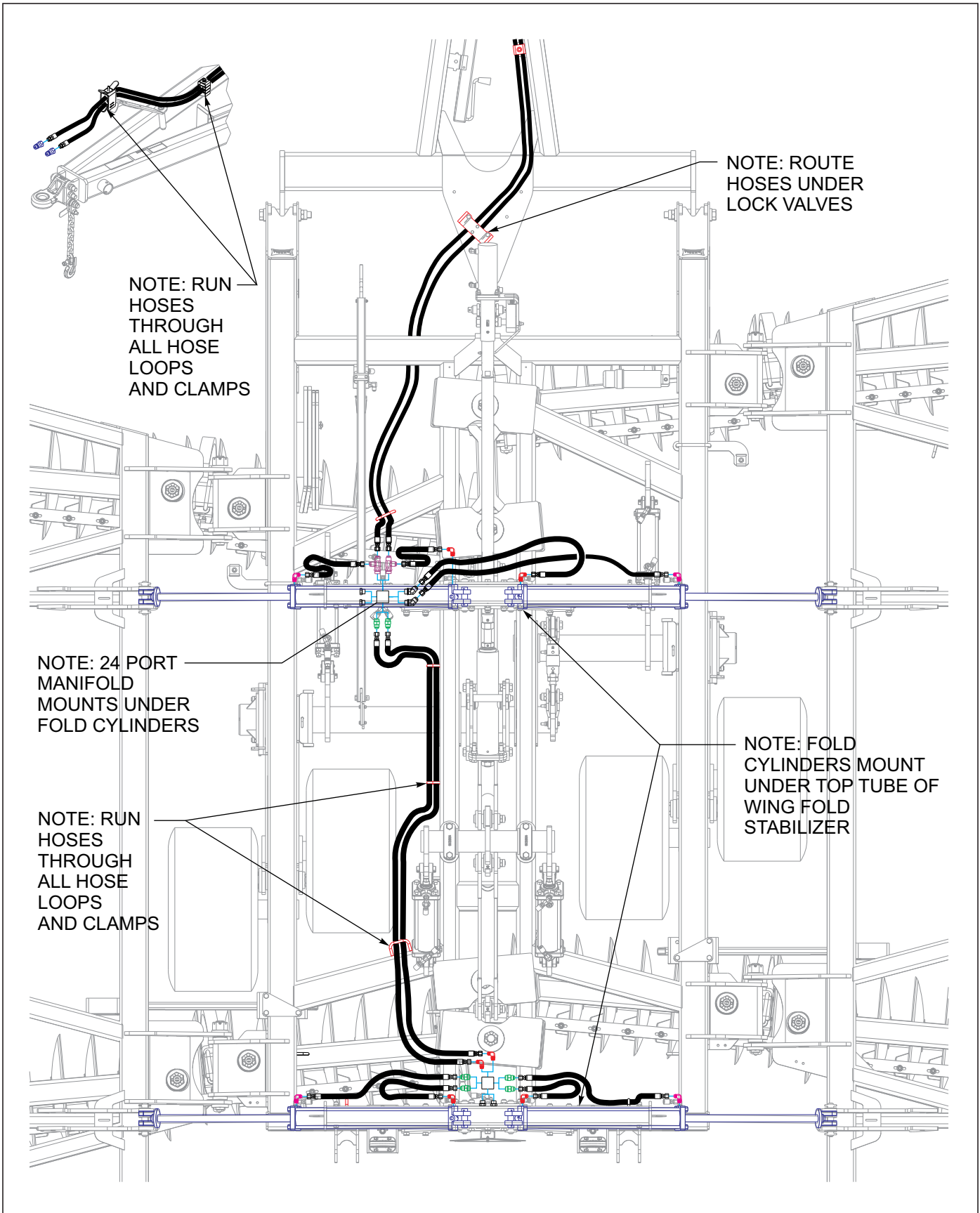


Figure 3-19: Fold Hydraulic Layout 7530-23'/26'/29'

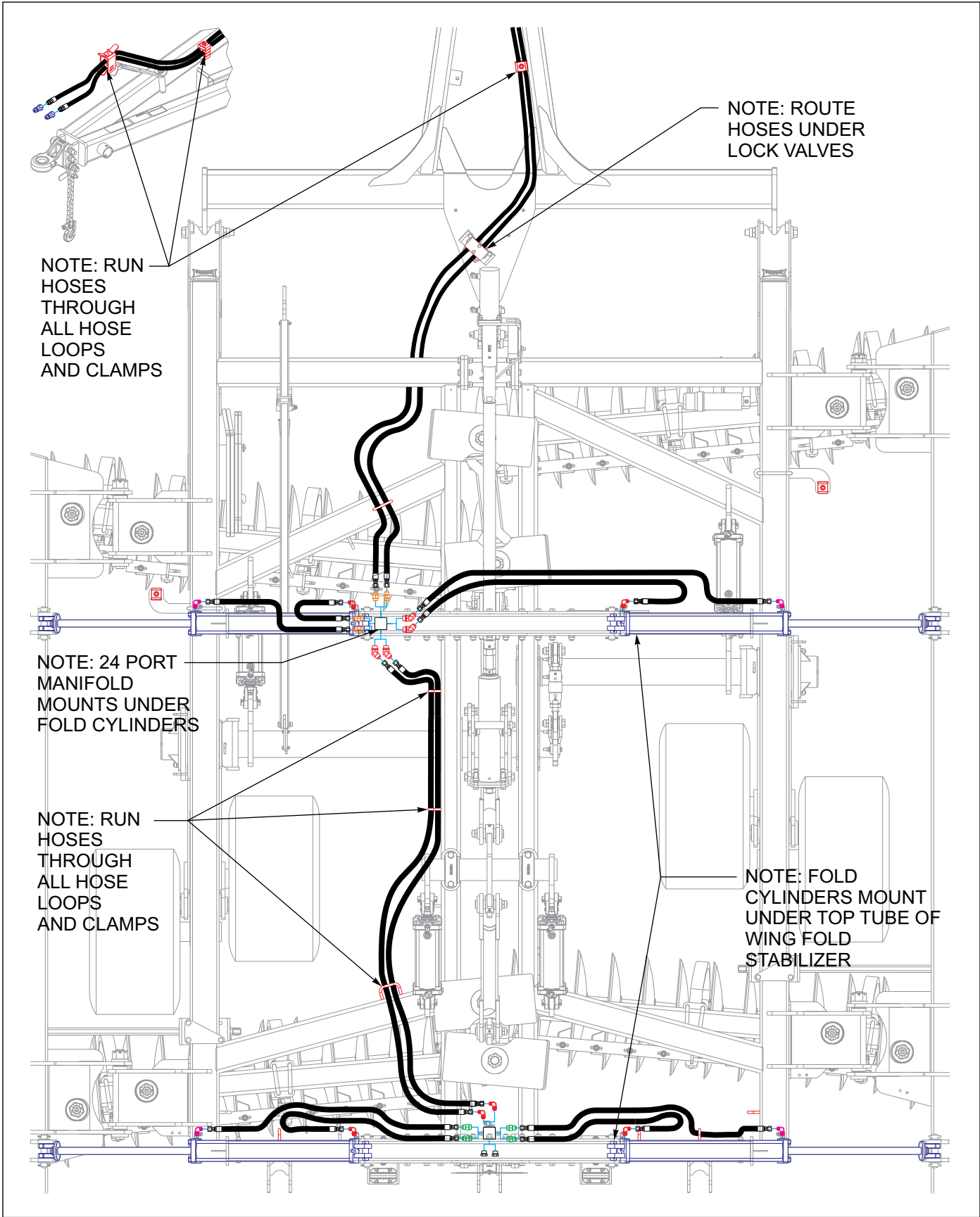


Figure 3-20: 10Fold Hydraulic Layout 32'

# ASSEMBLY INSTRUCTIONS

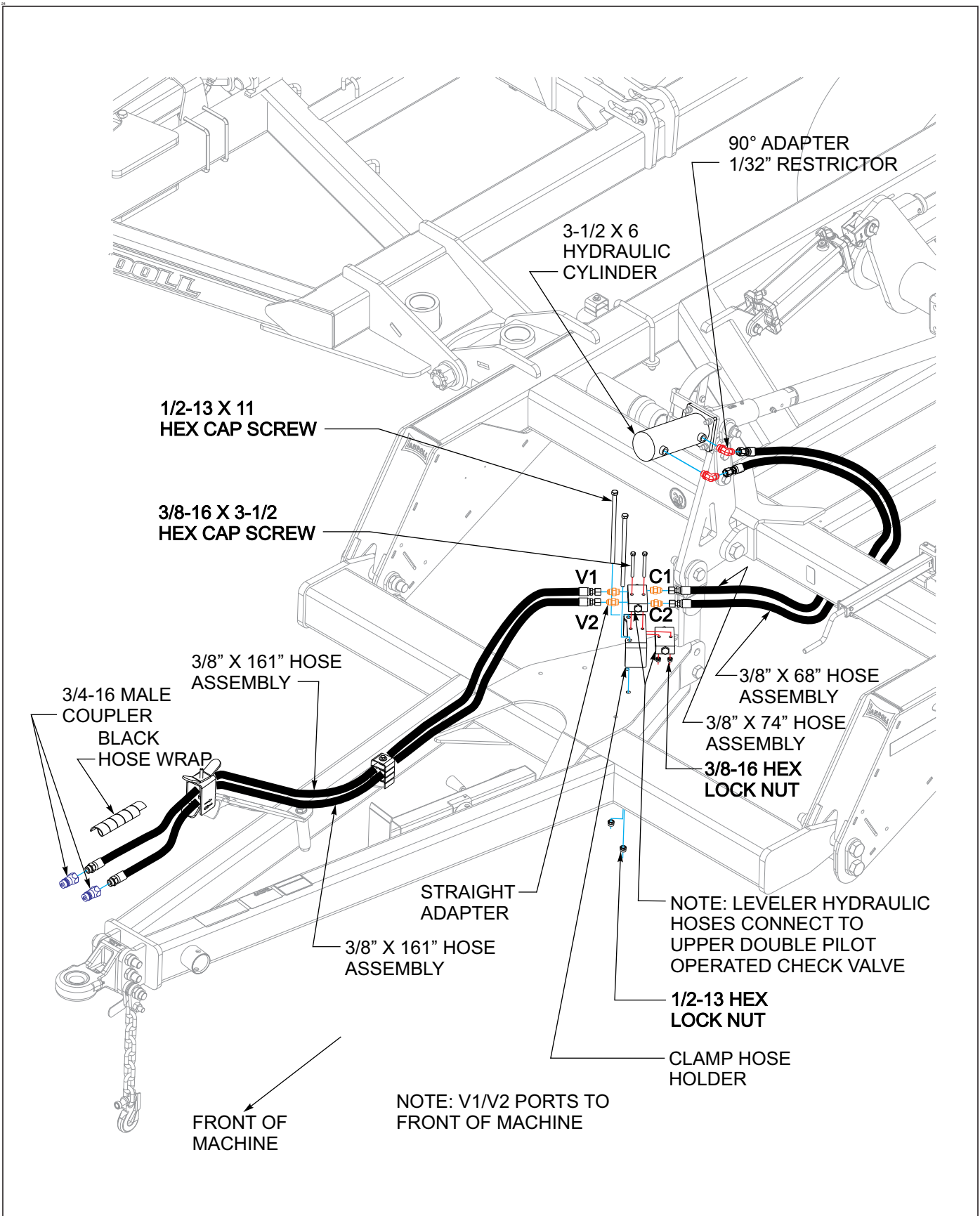


Figure 3-21: Leveler Hydraulic Installation





### Center Disc Gangs

There are several ways to install the gangs on the 7530. It is recommend to install the front gangs first to keep the front end of machine from coming up uncontrolled. If a hoist is available, installing the center frame gangs before installing the wings or the hitch is one way of assembling the disc gangs on the center frame. The more common method is to install the hitch, wings, leveler, and route the hoses for the lift system so the machine can be raised and lowered to allow getting the gangs under the frame. Again with this method install the left front gang first, right front , right rear, and then the left rear center. This will keep the most clearance to allow getting them installed.



#### DANGER

**Disc blades are extremely sharp. Exercise extreme care when working on or near disc blades. Do not allow discs to roll over or fall onto any bodily part. Do not allow wrenches to slip when working near disc blades. Never push wrenches toward disc blades. Do not climb over machine above disc blades. Failure to stay clear of disc blade edges can cause serious personal injury or death.**

1. Install the left front disc gang assembly by moving disc gang assembly to proper frame position (**See Figures 3-22.**) Install gang pivot pin through gang pivot tube of gangbar, there are notches that will need to be aligned so the pin will not rotate in the gang bar. Install the 3" stainless steel thrust washer over the gang pivot pin, and pin will go on through the gang pivot mount welded to the outside of the center frame inside the hinges. Install the 1-13/16 diameter thrust stainless steel washer to the threaded end of the gang pivot pin along with the gang pivot nut. If the top bushing in the center frame pivot comes out a little while the pin is going through, just put the gang pivot nut on and hand tighten down to press it back into place. While gang pivot nut is still loose place both of the center frame slide pads onto the top side of the gang bar inside of the holder at the center of the machine. Next loosely install the gangbar slide and the center frame slide pads along with the blue washer with a 1-13/16" diameter hole and 1-3/4" slotted nut in the middle of the center frame to keep the end of the gang from falling.
2. Proceed to install the remaining three gangs-right front, right rear, and left rear in the same way.

3. With all the center frame gangs installed, set the center frame or the whole machine down so the gangs are setting on the floor. Remove the four gangbar slide that are in the center of the frame so the gang connector links can be installed.
4. The front gangs have a distance of 26" from center to center of the gangbar pivot shafts sticking up, move gangs to where this is close and the gangs are close to the front of the machine as shown in (**See Figures 3-22.**) Assemble the front bearing halves and insert the 3/4-10 x 9" bolts through the front connector. Assemble the rear bearing halves and insert the 3/4-10 x 10" bolts through the connector and into front link weldment that is already on the frame assembly. Tighten these four bolts alternating sides to tighten the cast bearings up evenly. With both bearings tight install a stainless steel washer on top of the bearing inserts and reinstall the gang bar slides, center frame slide pads, blue washers with 1-13/16" diameter hole and slotted nuts.

#### NOTICE

**Gang adjust pin is shown for 7530-23'/26'/29' models. For 7530-32'/35' models pin must be installed the opposite direction.**

5. The rear gangs have a distance of 12" from center to center of the gangbar pivot shafts sticking up, move gangs to where this is close and the gangs are close to the rear mount that is assembled with the frame. Assemble the front and rear bearing halves with clamp plates and insert the 3/4-10 x 9 bolts through the connector with the nuts being on the inside. Tighten these four bolts alternating sides to tighten the cast bearings up evenly. With both bearings tight install a stainless steel washer on top of the bearing inserts and reinstall the gang bar slide weldments, center frame slide pads, blue washer with 1-13/16" diameter hole and slotted nuts.
6. Tighten down all eight of the slotted nuts on the center frame using the disc gang wrench provided on the center frame. Tighten to 200 ft-lbs and then back off to the nearest slot in nut.

#### IMPORTANT

**Grease the zerk down inside of four gang pivot pins until grease is purged from the pivot joint.**

7. Install a clevis pin and 1/8 hairpin to prevent gang pivot nut from loosening.

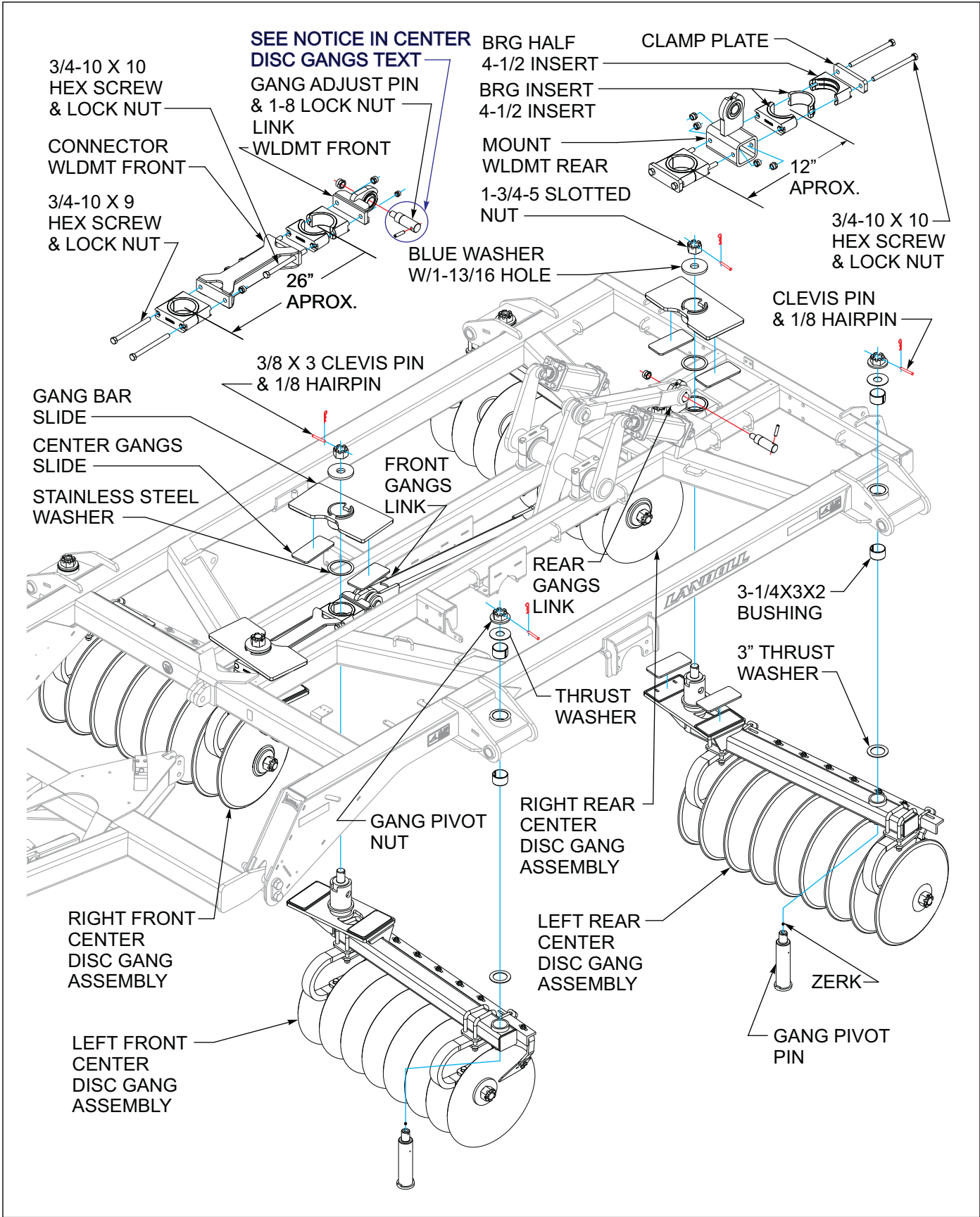


Figure 3-22: Center Disc Gang Installation

## Wing Disc Gangs

1. Like the center frame gangs, install the front gangs first to keep the front end from coming up uncontrolled. Position the gang assemblies under the wing frame (See Figures 3-23, 7530-23', See Figures 3-24, 7530-26' and See Figures 3-25, 7530-29'/32'/35') and insert the gang pivot pin through gang pivot tube of gangbar, there are notches that will need to be aligned so the pin will not rotate in the gang bar. Install the 3" stainless steel thrust washer over the gang pivot pin, and pin will go on through the gang pivot mount welded to the inside of the wing frame hinges. Install the thrust stainless steel washer to the threaded end of the gang pivot pin along with the gang pivot nut. If the top bushing in the wing frame pivot comes out a little while the pin is going through, just put the gang pivot nut on and hand tighten down to press it back into place.



### DANGER

**Disc blades are extremely sharp. Exercise extreme care when working on or near disc blades. Do not allow discs to roll over or fall onto any bodily part. Do not allow wrenches to slip when working near disc blades. Never push wrenches toward disc blades. Do not climb over machine above disc blades. Failure to stay clear of disc blade edges can cause serious personal injury or death.**

2. Align the slide plates on the outer part of the wing up to the gang bar and install five 3/4-10 x 10 bolts into the slide plates and through the angle iron on the gang bar. (See Figures 3-23, 7530-23', See Figures 3-24, 7530-26' and See Figures 3-25, 7530-29'/32'/35') for placement of the bolts. Once the gangs are secure from the 10" bolts, install one 3/4-10 x 2-1/4 bolt, see Detail A, under the clevis of each outer wing gang slide cylinder. This will go through the bottom plates and the angle iron on the gang bar.
3. Tighten down all four of the slotted nuts on the inner wing frame using the disc gang wrench provided on the center frame. Tighten to 200 ft-lbs and then back off to the nearest slot in nut.

### IMPORTANT

**Grease the zerk down inside of four gang pivot pins until grease is purged from the pivot joint.**

4. Install a clevis pin and 1/8 hairpin and locking nut to prevent gang pivot nut from loosening.
5. Tighten the 3/4-10 x 10 bolts on the outer part of the wings to secure the disc gangs. Do not over tighten to where the plates are bowed. The 3/4-10 x 2-1/4 bolt can be tightened as it is not part of the slide.
6. Install the gang adjust gauge as shown (See Figures 3-26, 7530-23', See Figures 3-27, 7530-26'/29'/32'/35') The gauge link will need to be mounted to the second hole in the gang adjust dial for the 7530-23'/26' VT and the first hole for the 7530-29'/32'/35' VT.

### NOTE

*To calibrate gauge the disc gangs will need to be adjusted to the 15 degree angle with hydraulics. Then manually rotate gang adjust dial to 15 degree setting in indicator gauge. Now the 1/2-13 x 5-1/4 x 6-1/16 u-bolts and lock nuts may be tightened(See Figures 3-26, 7530-23', See Figures 3-27, 7530-26'/29'/32'/35').*

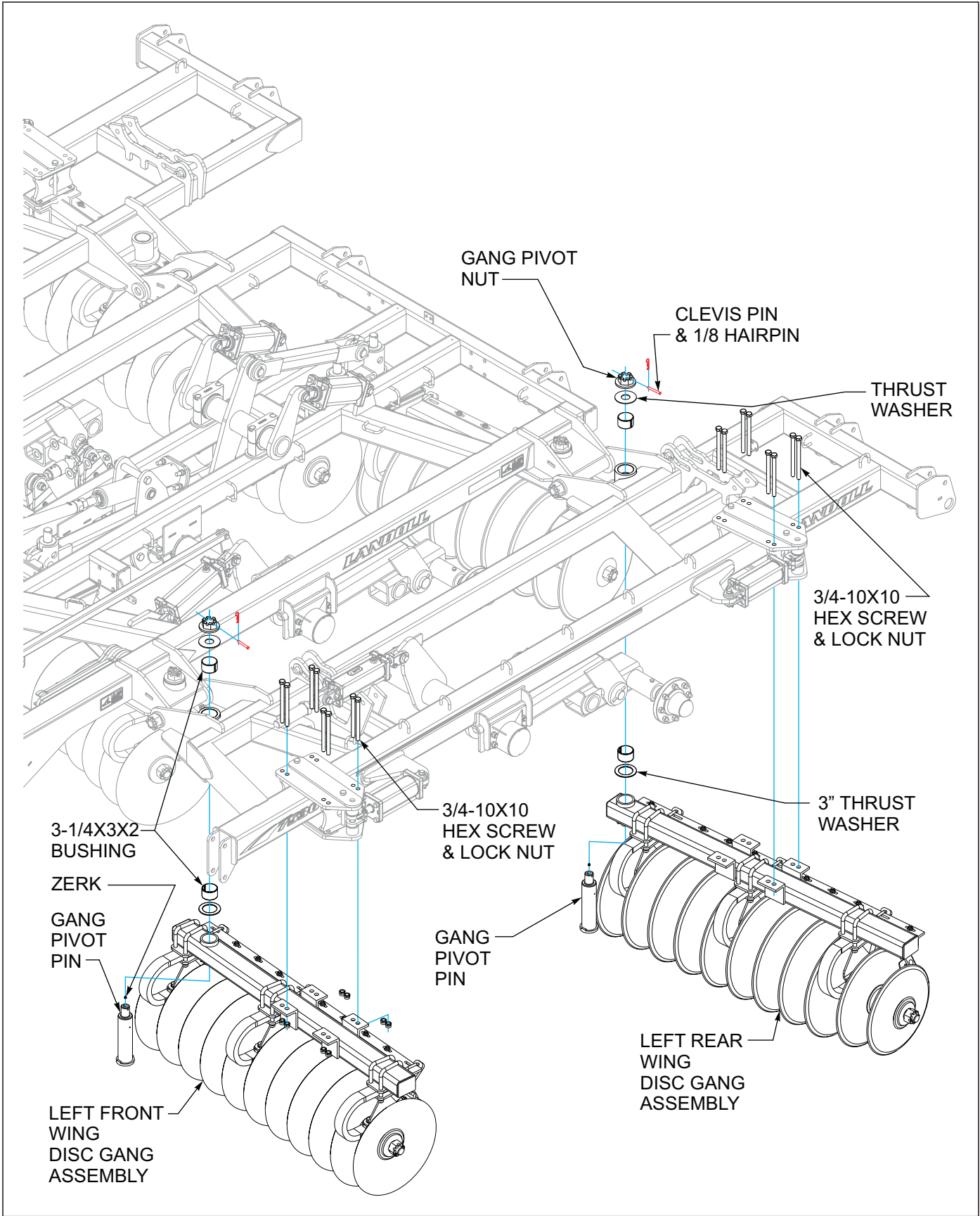


Figure 3-23: Wing Disc Gang Installation 7530-23'

# ASSEMBLY INSTRUCTIONS

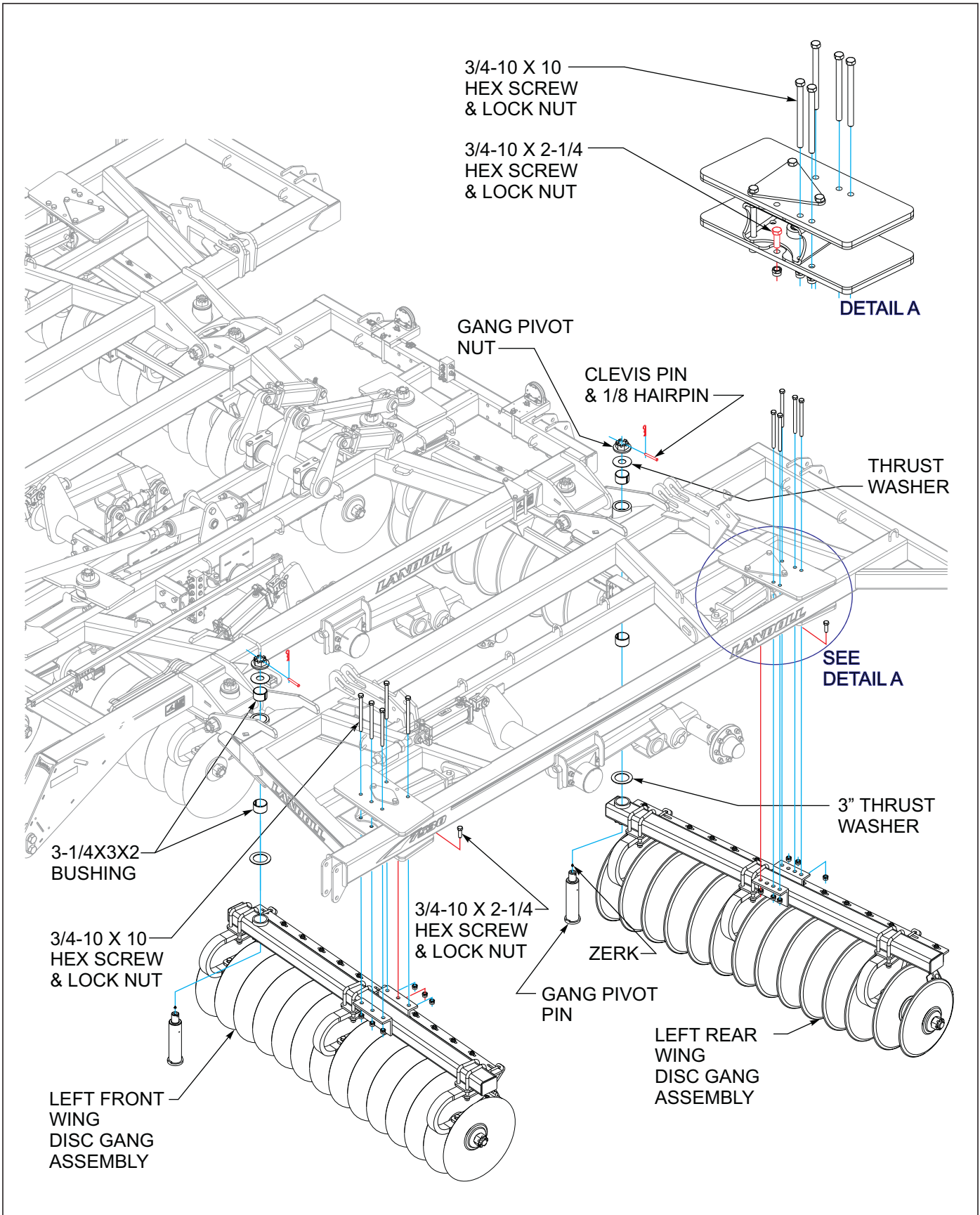


Figure 3-24: Wing Disc Gang Installation 7530-26'

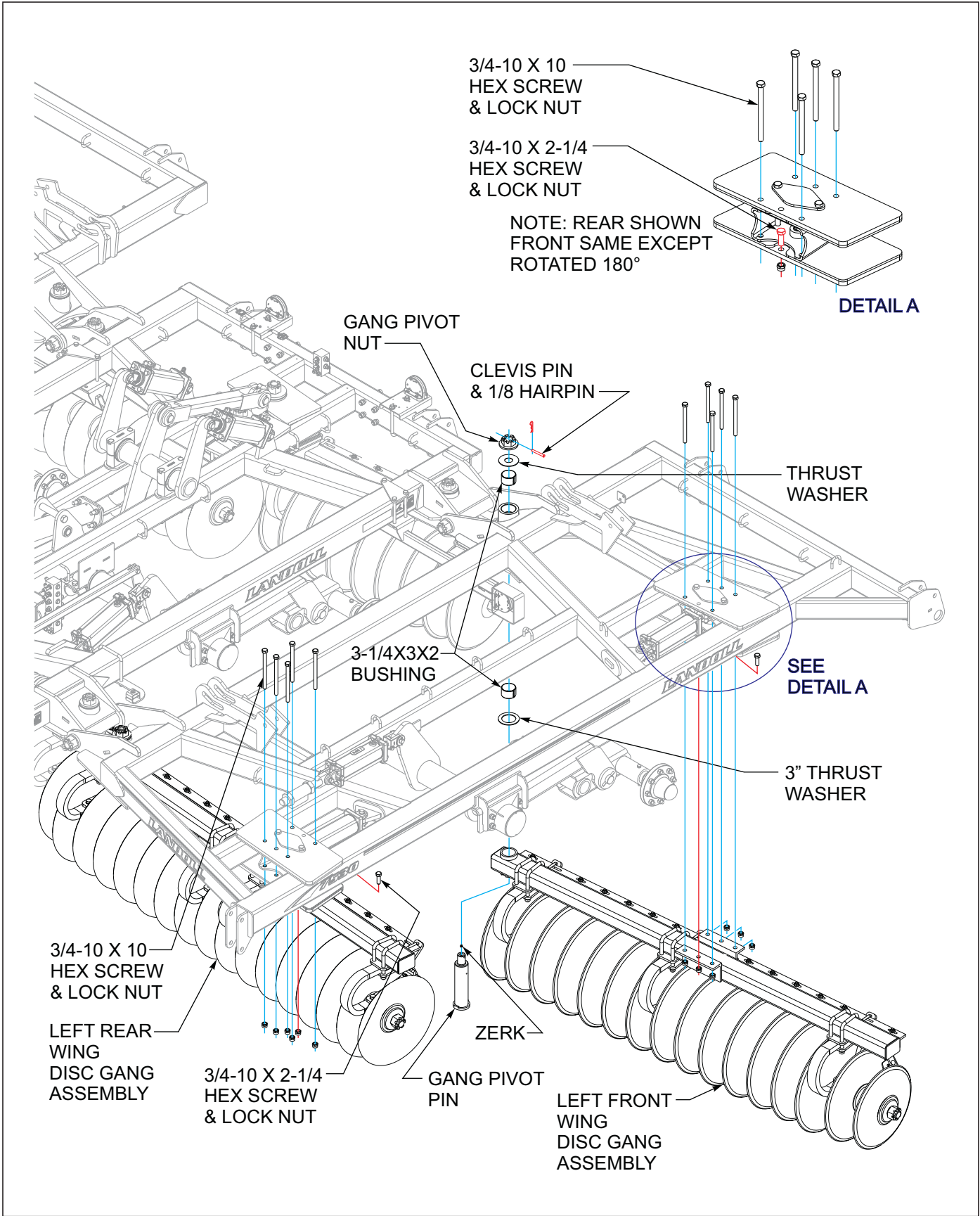


Figure 3-25: Wing Disc Gang Installation 7530-29'/32'/35'

# ASSEMBLY INSTRUCTIONS

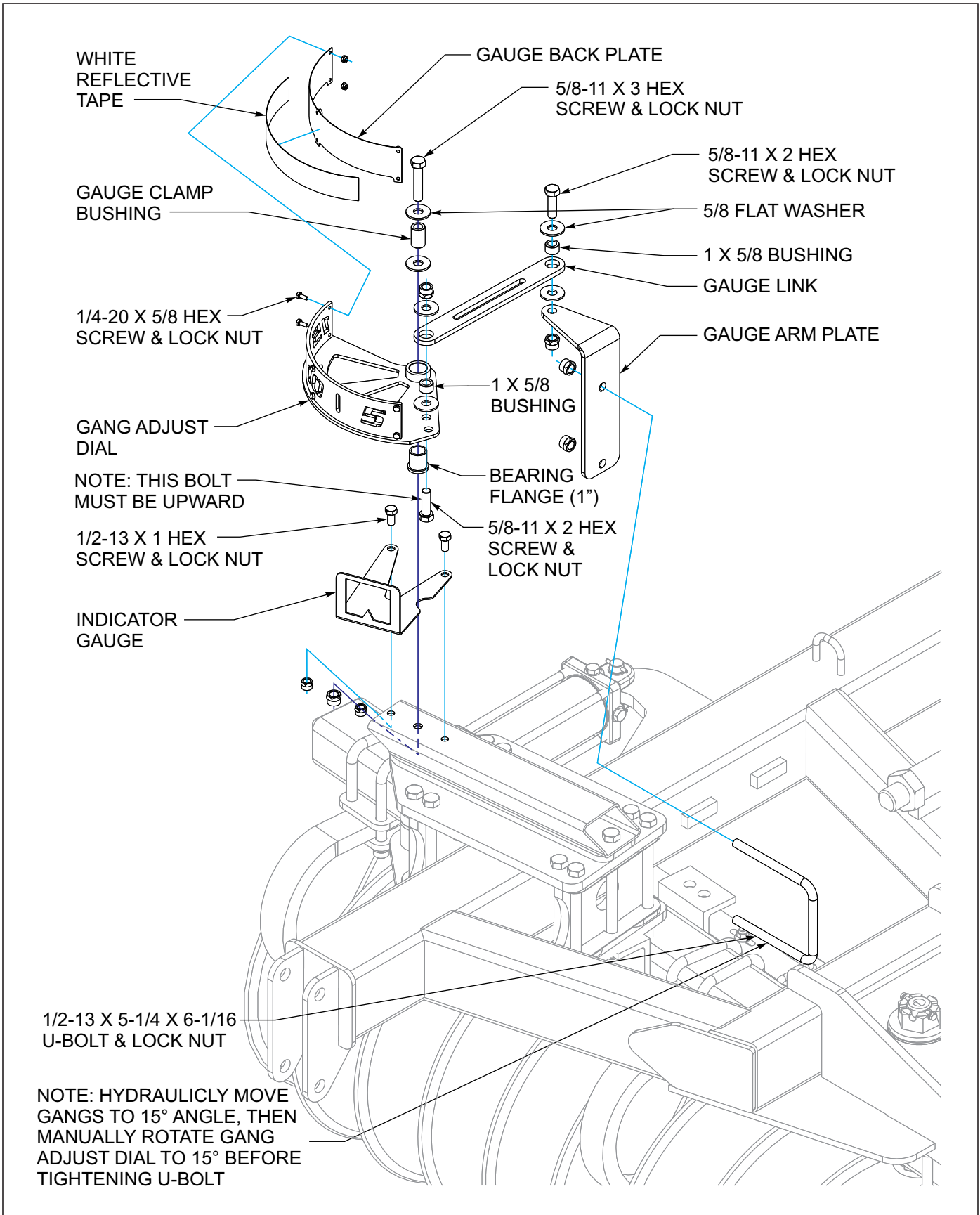


Figure 3-26: Disc Gang Adjust Gauge Installation 7530-23'



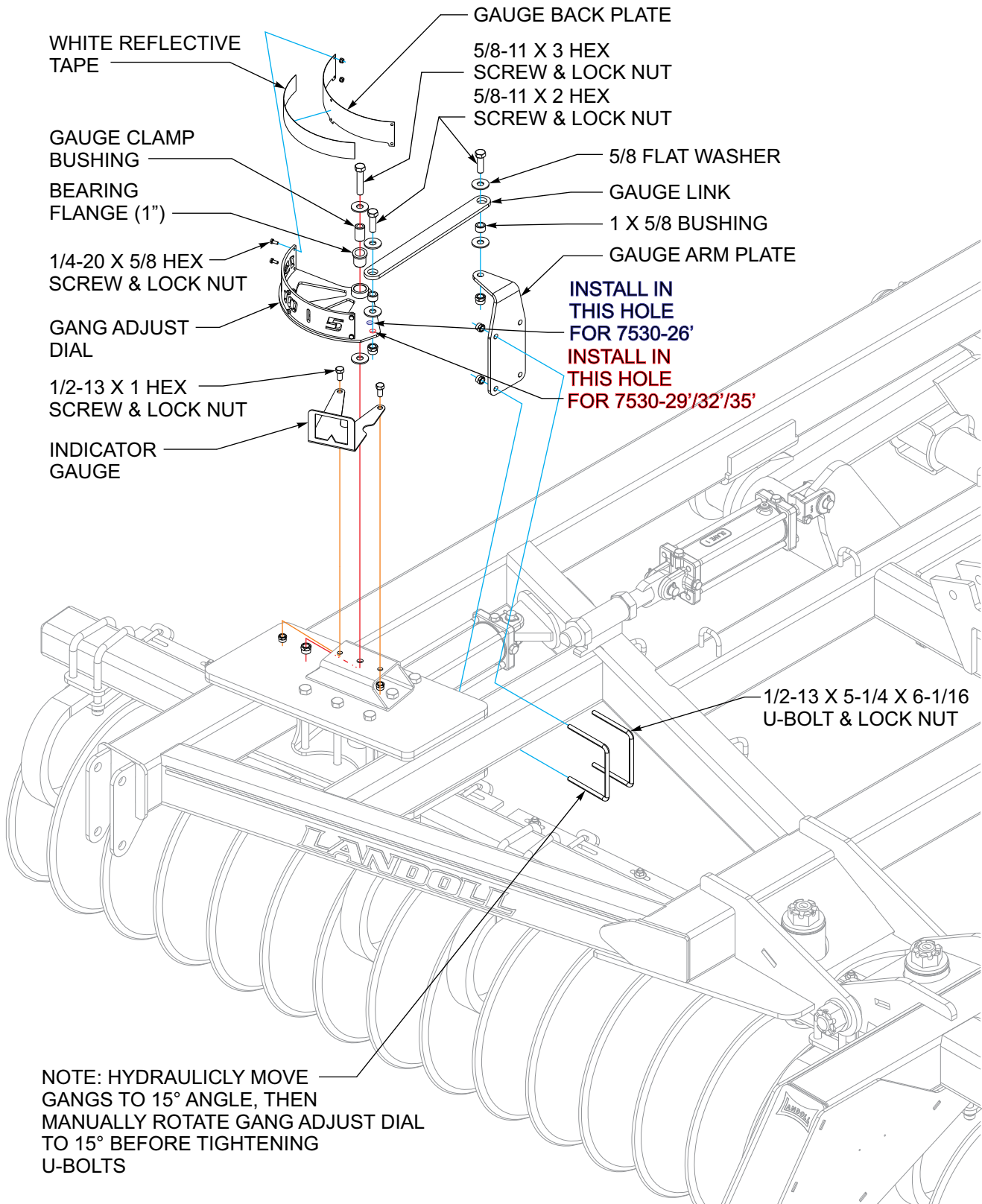


Figure 3-27: Disc Gang Adjust Gauge Installation 7530-26'/29'/32'/35'

# ASSEMBLY INSTRUCTIONS

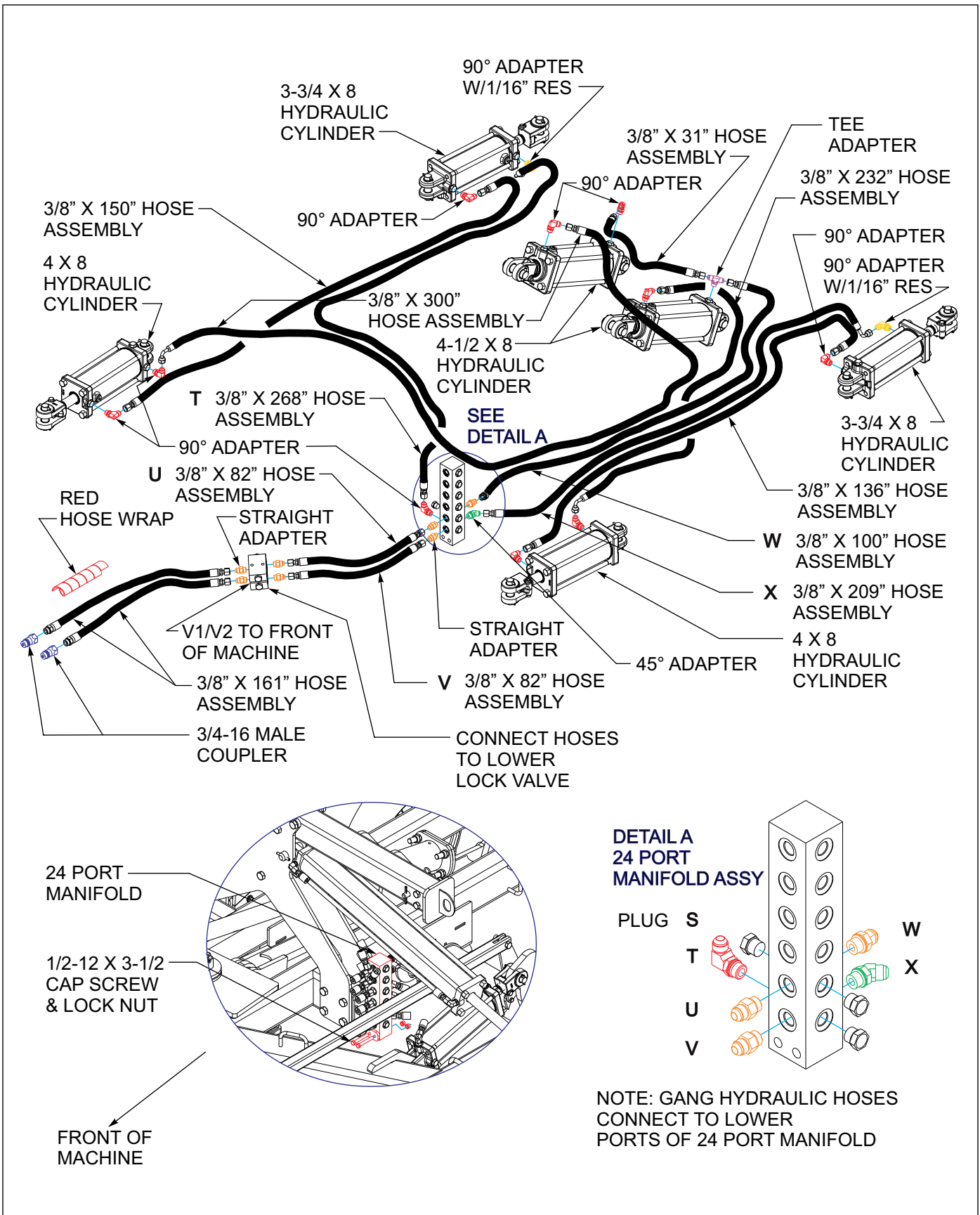


Figure 3-28: Gang Hydraulic Installation 7530-23'

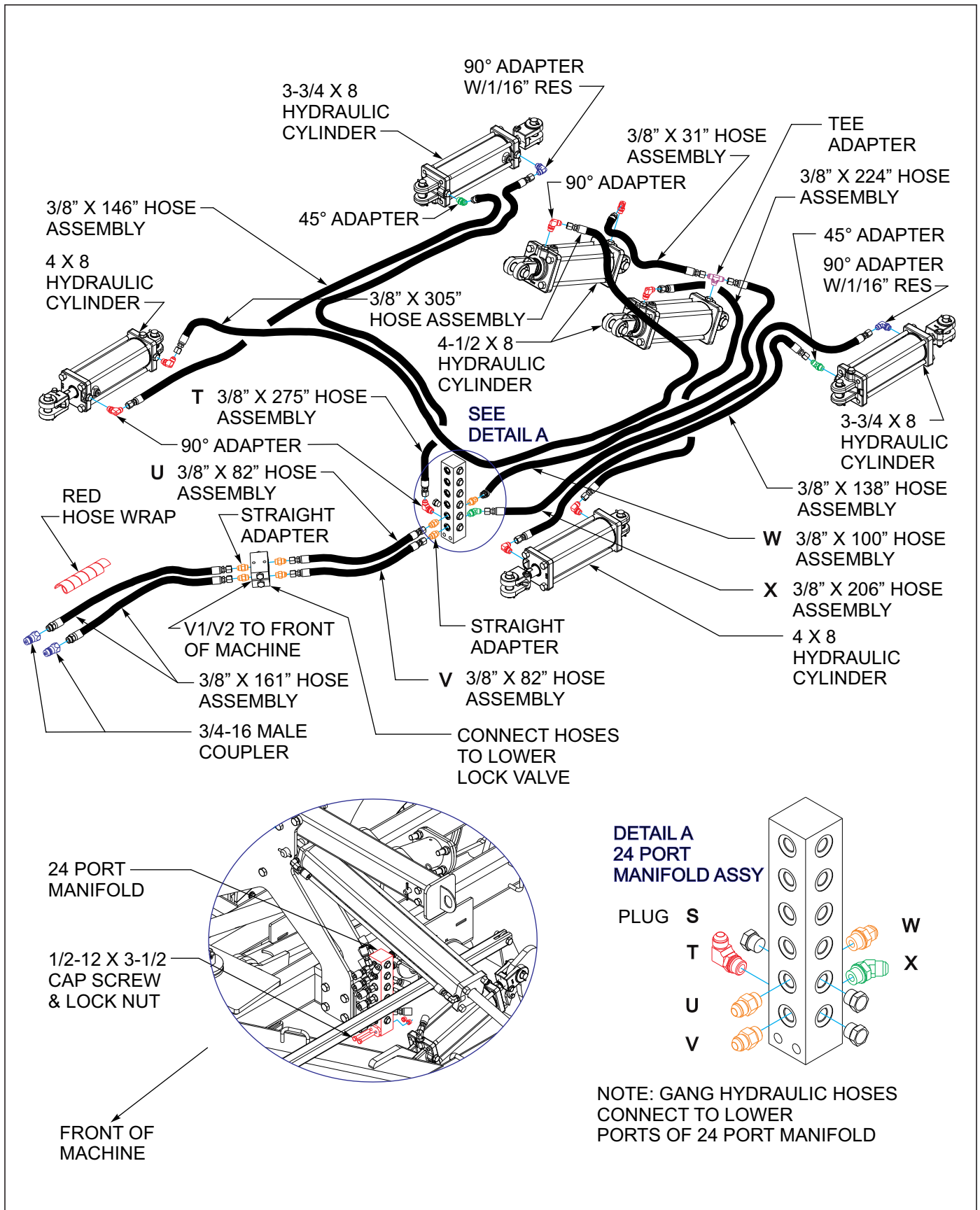


Figure 3-29: Gang Hydraulic Installation 7530-26'

# ASSEMBLY INSTRUCTIONS

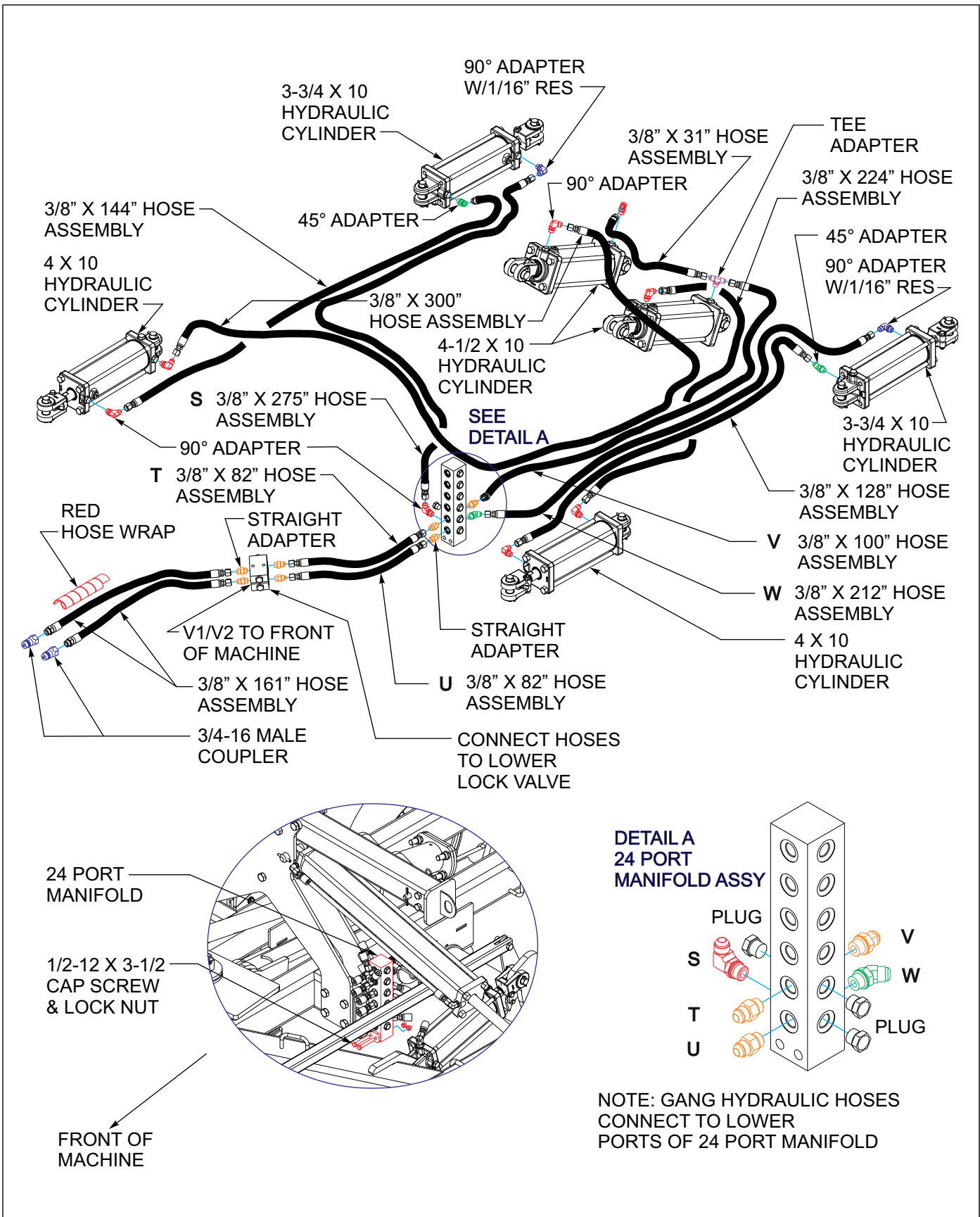


Figure 3-30: Gang Hydraulic Installation 7530-29'

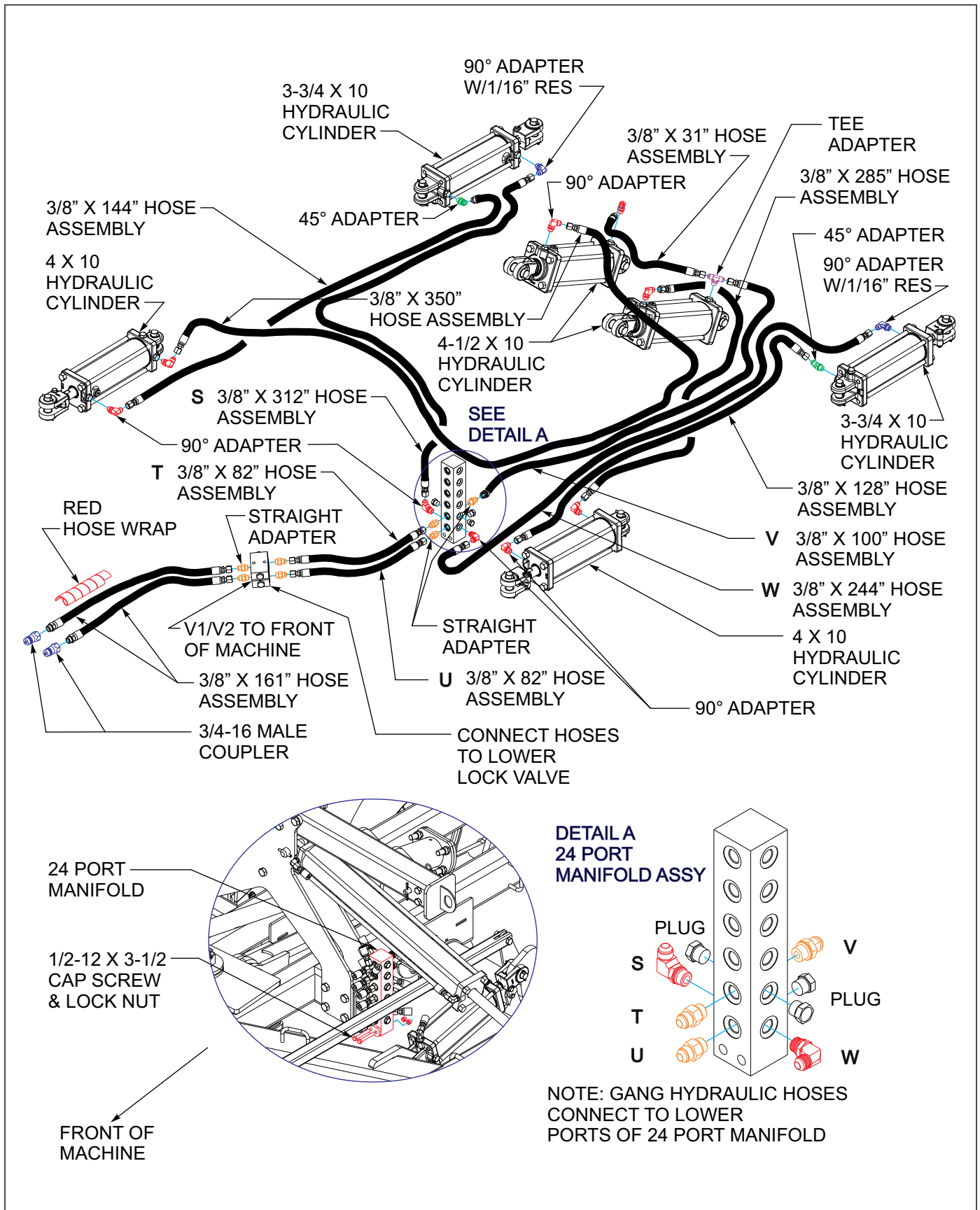


Figure 3-31: Gang Hydraulic Installation 7530-32'/35'

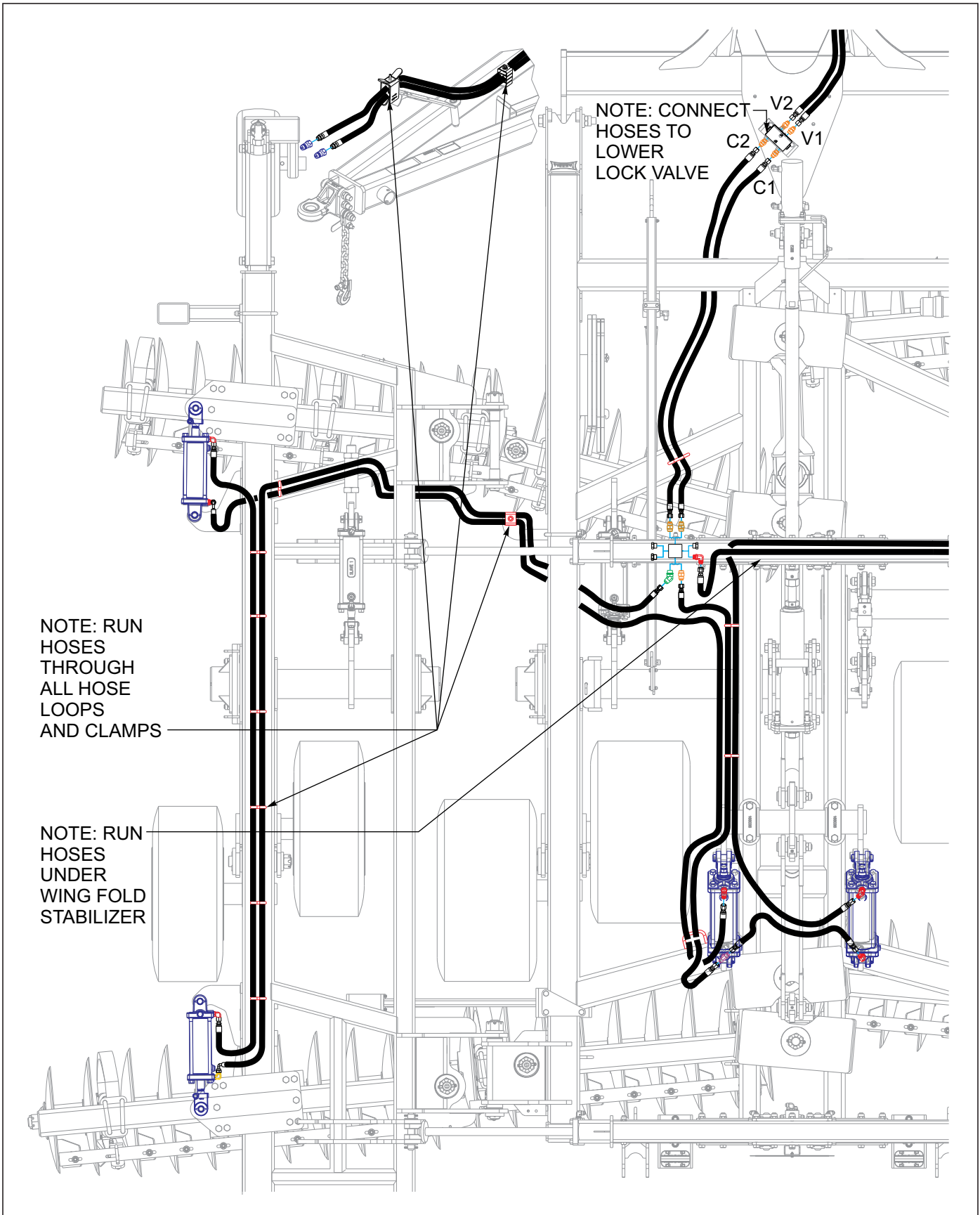


Figure 3-32: Gang Hydraulic Layout 7530-23' LH

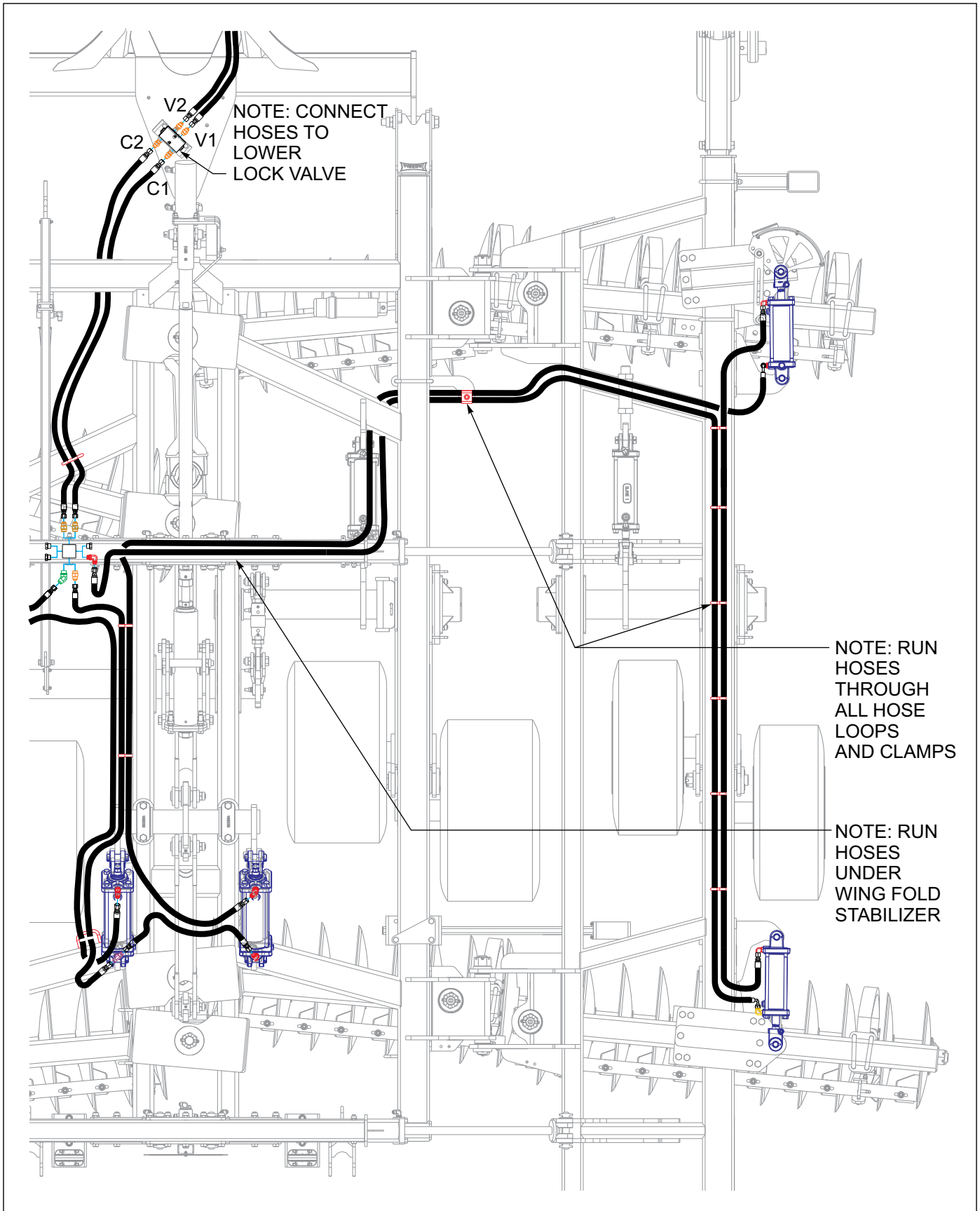


Figure 3-33: Gang Hydraulic Layout 7530-23' RH

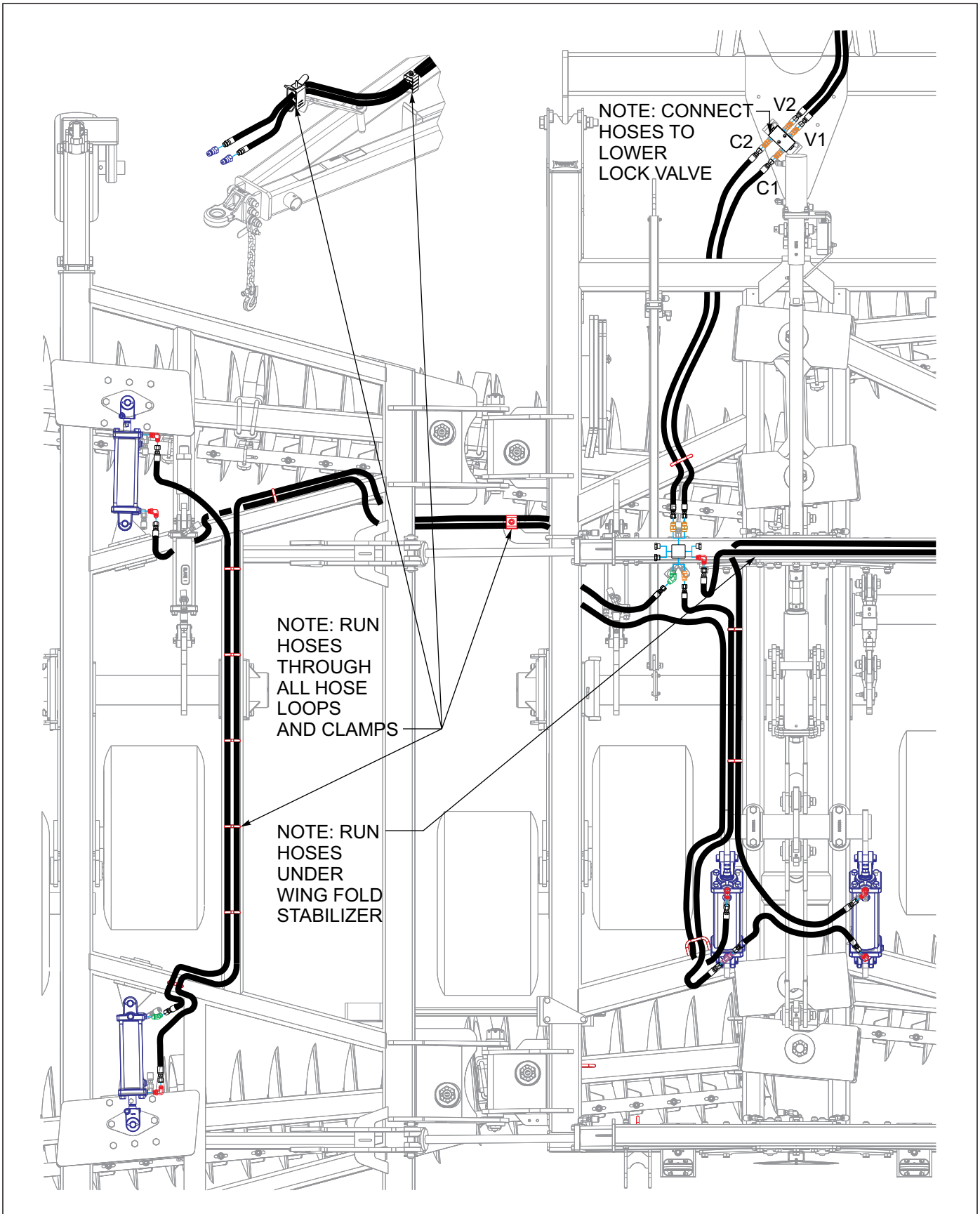


Figure 3-34: Gang Hydraulic Layout 7530-26'/29' LH



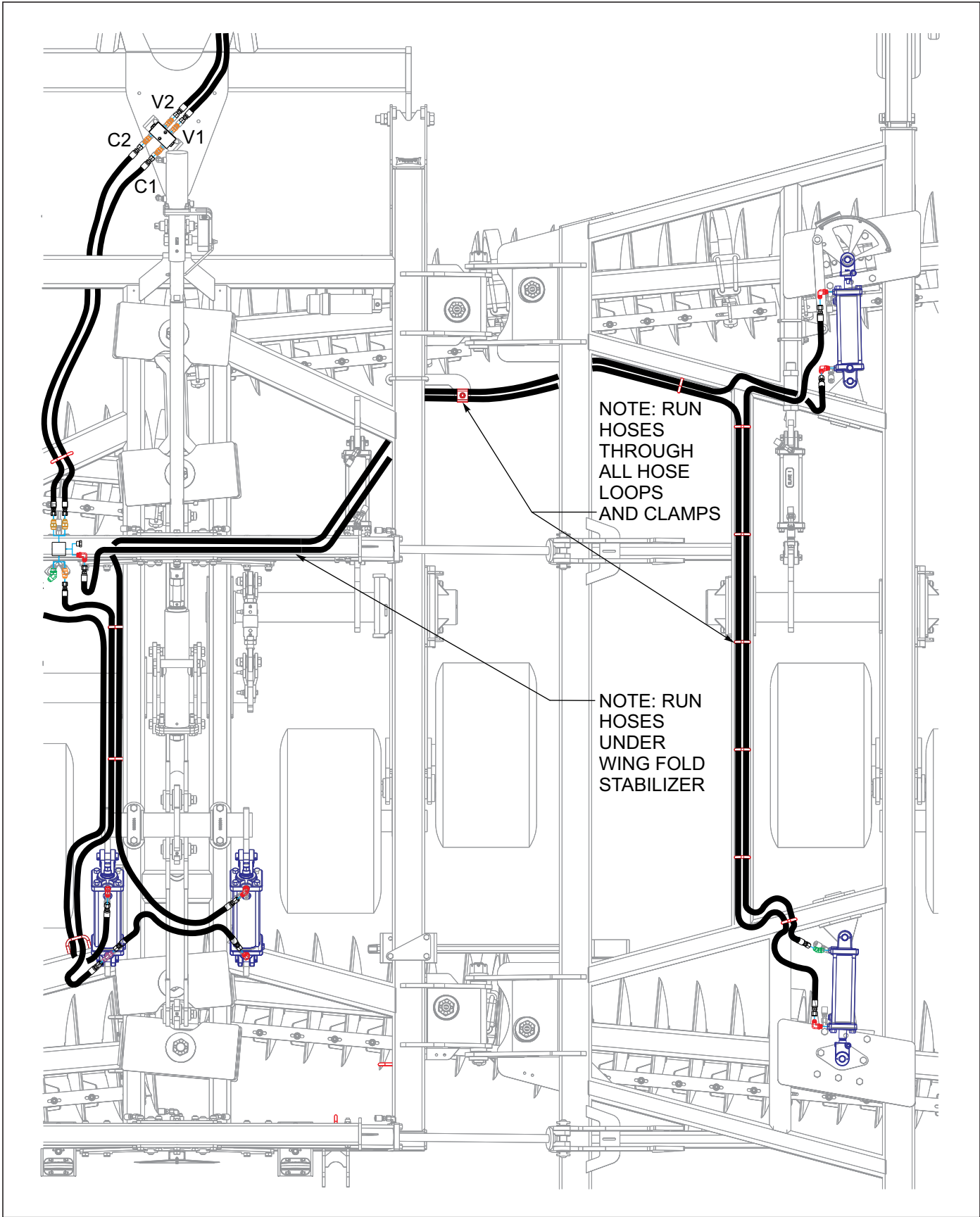


Figure 3-35: Gang Hydraulic Layout 7530-26'/29' RH

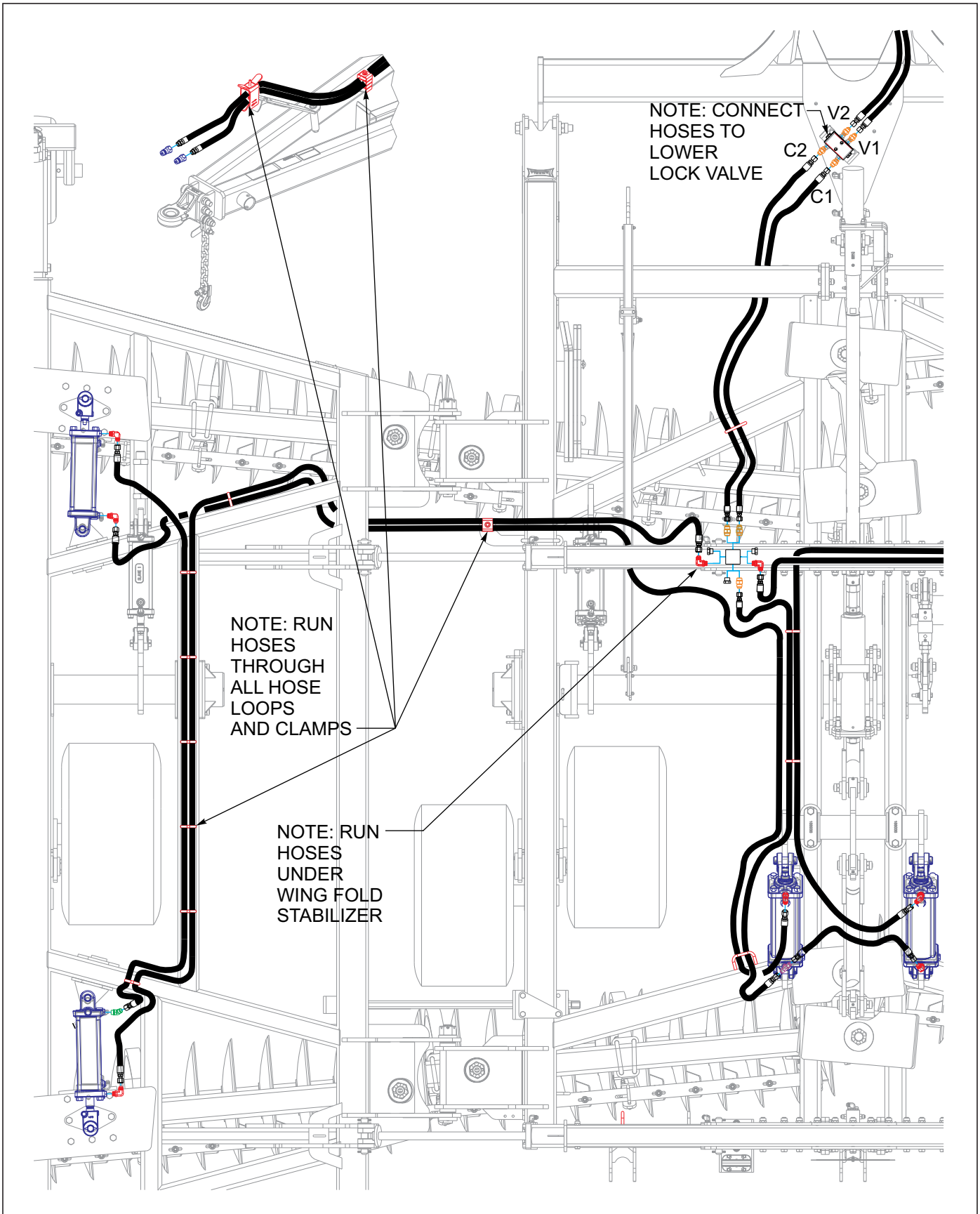


Figure 3-36: Gang Hydraulic Layout 7530-32'/35' LH

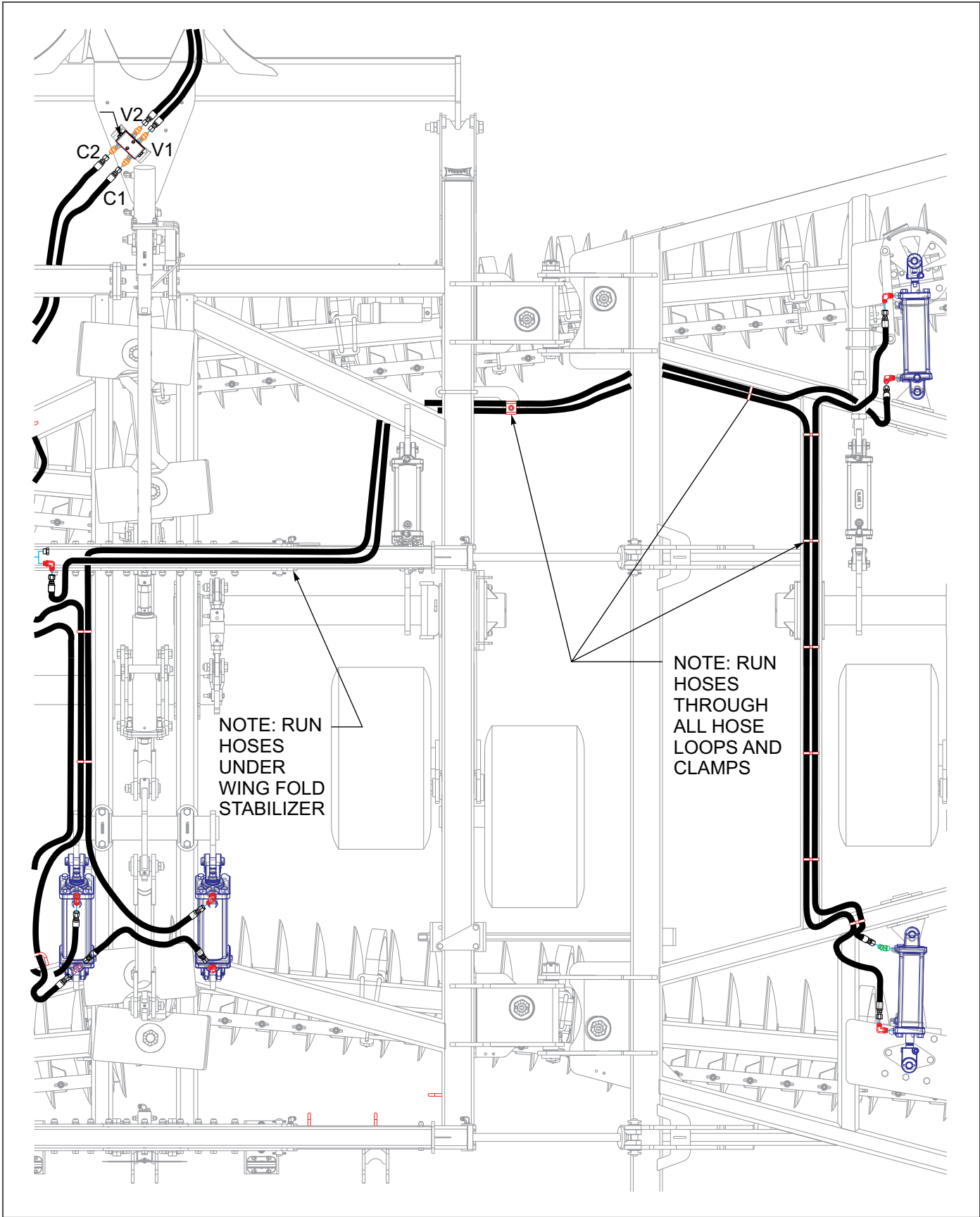



Figure 3-37: Gang Hydraulic Layout 7530-32'/35' RH

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7-PIN CONN.	4-PIN TOWER	CIRCUIT	WIRE COLOR
1	D	GROUND	WHITE 
2	-	WORK LAMPS	BLACK 
3	B	LEFT FLASHING & TURN	YELLOW 
4	-	STOP LAMPS	RED 
5	A	RIGHT FLASHING & TURN	GREEN 
6	C	TAIL LAMPS	BROWN 
7	-	SWITCHED POWER (12 V)	BLUE 

**MAIN WARNING LIGHT HARNESS - WIRING CHART**

	1	2	3	4	5
	2-PIN TOWER	3-PIN TOWER	6-PIN SHROUD	3-PIN TOWER	2-PIN TOWER
 BLACK LEFT TURN			A	C	
 WHITE GROUND	A	A	B	A	A
 BROWN TAIL LIGHT		B	C	B	
 YELLOW LEFT TURN			D		B
 GREEN RIGHT TURN	B		E		
 RED RIGHT TURN		C	F		

**REAR WARNING LIGHT HARNESS - WIRING CHART**

**Figure 3-38: LED Light Harness Wire Designations**

## LED Light Installation

### NOTE

Refer to (See Figure 3-40.) for light bracket placements.

1. Attach left and right light brackets w/ref to center frame using 5/8-11 x 8 hex cap screws, light arm plates rt and lt (Note locations of plates See Figure 3-40.) and lock nuts. The yellow reflectors go to the front side (See Figure 3-40.) and attach left tail light mount to frame assembly using 5/8-11 x 4-11/16 x 8-1/4 u-bolts and 5/8-11 flange lock nuts.
2. Attach ag flasher control module to bottom of right tail light mount with 1/4-20 x 1-1/2 cap screws and lock nuts. Be sure that the control module is set so that the 6 pin connector faces the left side of the machine.
3. Attach right tail light mount and ag flasher control module to frame assembly with 5/8-11 x 4-11/16 x 8-1/4 u-bolts and 5/8-11 flange lock nuts.
4. Attach the ag red single LED lamps to tail light mounts using 1/4-20 x 1-1/4 hex head cap screws and hex lock nuts.

### IMPORTANT

Make sure lights are positioned for maximum visibility from the rear.

5. Install the rear warning light harness to the frame. Connect 2 pin and 3 pin ends to each of the warning lights. Connect 6 pin to the ag flasher control module. **See Figure 3-38 for LED harness wire designations.**
6. Attach ag amber single LED lamps to light brackets using 1/4-20 x 1-1/4 hex head cap screws and hex lock nuts.
7. Attach front warning harness to frame. Connect 4 pin end to the ag flasher control module.
8. Insure that the harnesses are clear of any moving parts and secure the harnesses with tie wraps provided.
9. Install the stor-away holder to hose holder on hitch with 1/4-20 x 3/4 hex head cap screws and hex lock nuts (See Figure 3-3.)
10. Attach smv mount, SIS 20mph mount, SIS decal, smv emblem with 1/4 x 1 hex screws, and 1/4 lock nuts (See Figure 3-39.)

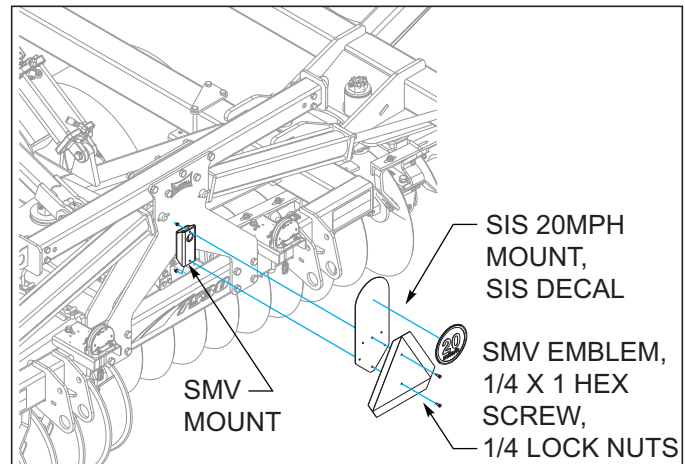


Figure 3-39: SMV/SIS 20mph Instillation

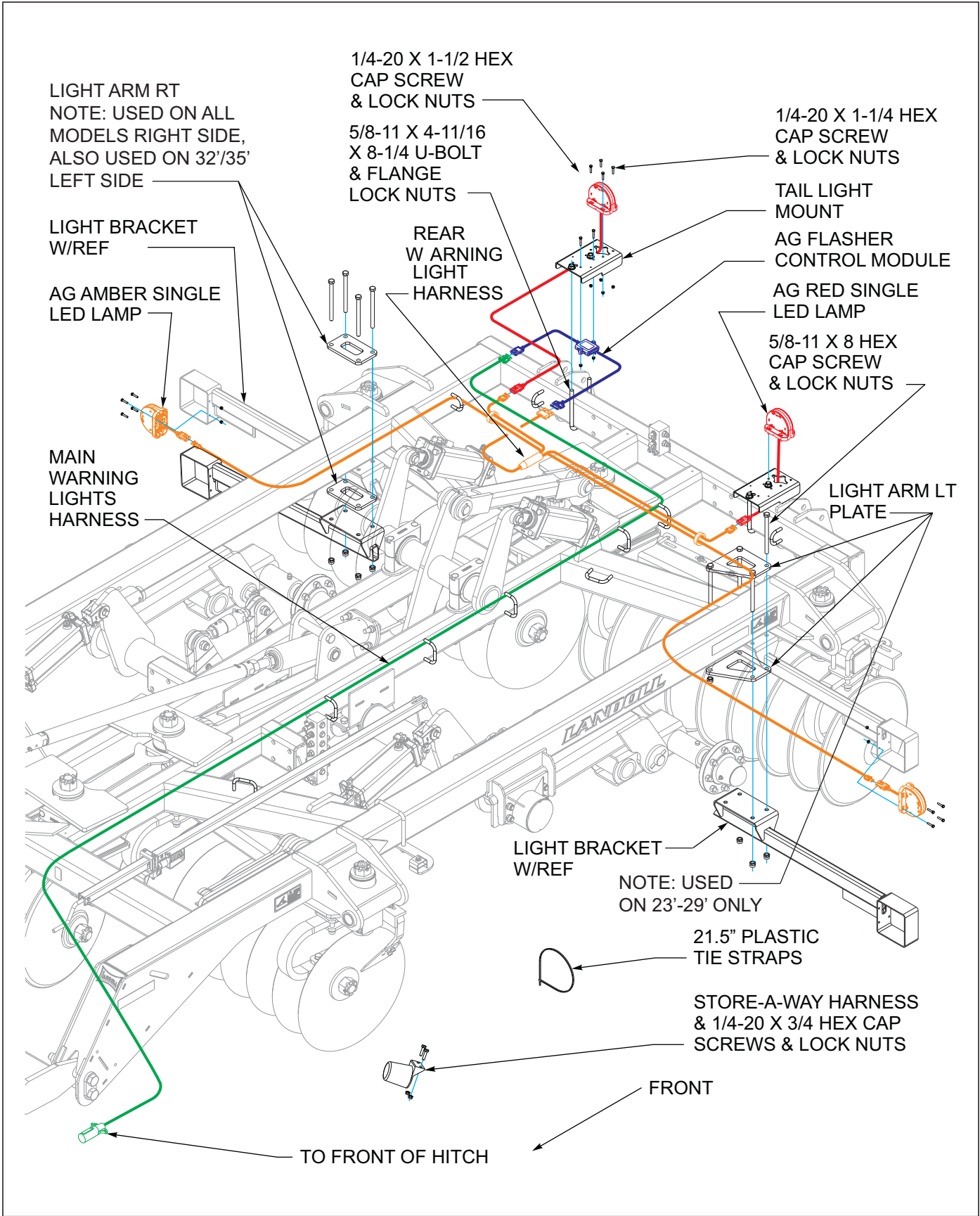


Figure 3-40: LED Light Installation

# ASSEMBLY INSTRUCTIONS

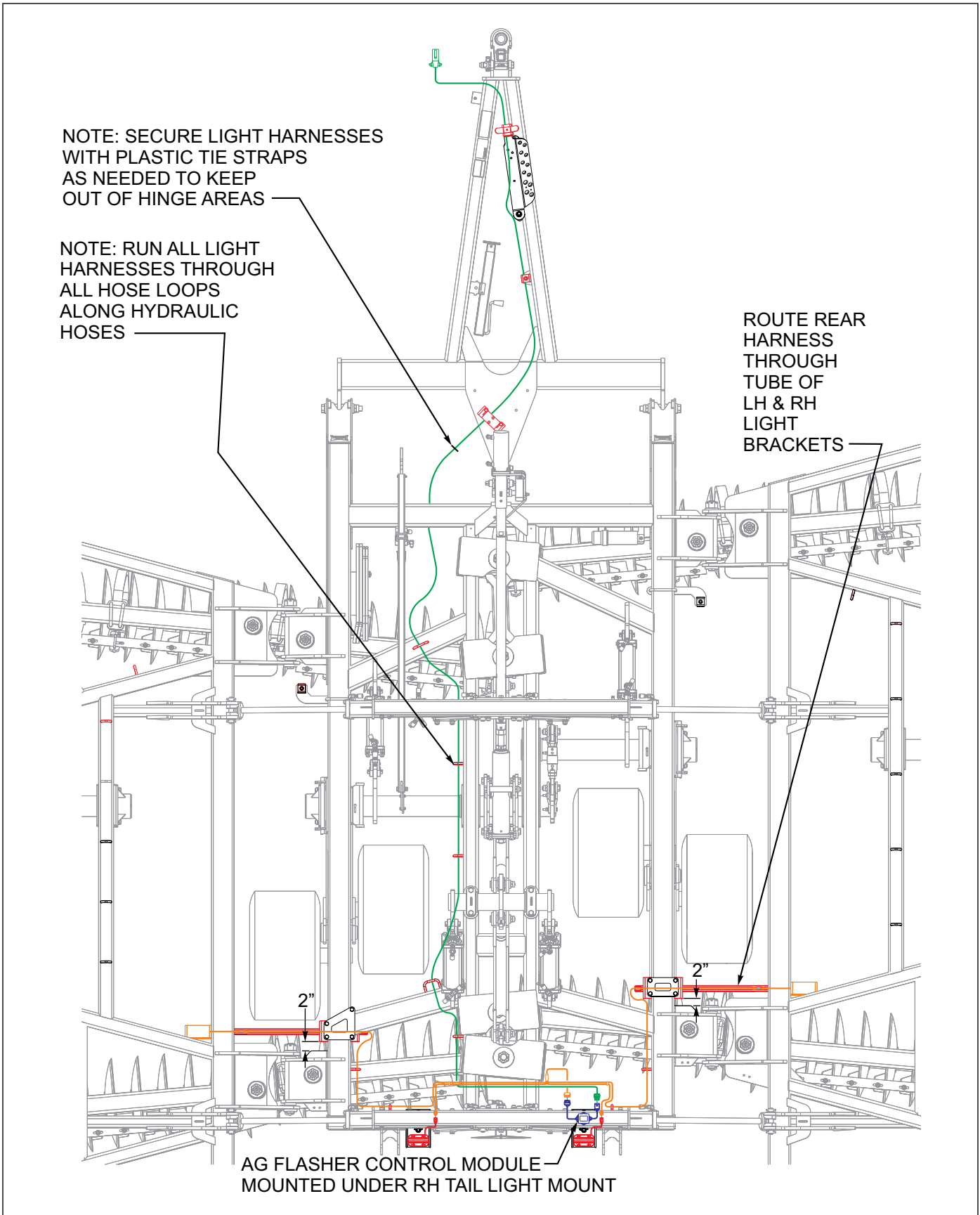


Figure 3-41: LED Light Layout





## Conditioner Reel Spring Installation (Option)

### NOTE

Refer to *Conditioner Single Reel Installation* shown in **Figure 3-43** for single reel installation or *Conditioner Double Reel Installation* shown in **Figure 3-44** for double reel installation.

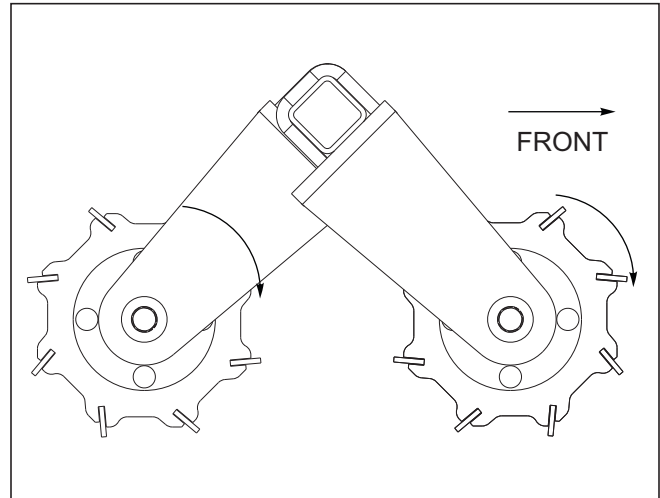
1. Slide the adjustment pin through the rear plates of center and wing frames, secure with (2) 2-1/2" snap rings.
2. Assemble the 1-8 x 9 adj bolt through adjustment pin on frame, 1" lock washer, (2) 1-8 hex nuts, and 17" heavy spring assembly.
3. Install 1-1/2" flange bearing into reel arm. Slide in 1-1/2" pivot bushing.
4. Attach reel arm to upper hole on rear center or wing frame or double mount using 1-8 x 6-1/2 hex head cap screw and hex lock nut.
5. Assemble 17" heavy spring assembly to reel arm using 1" pivot pin, and 5/16 x 1-1/2" spring slotted pins. Set pin centers to 21" dimension as shown in **Figure 3-43**.



### WARNING

**Do not attempt to lift heavy parts (such as the frame, disc gangs, lift, pull hitch, or reel/gang bar assembly) manually. Use a hoist or a forklift to move these parts into position.**

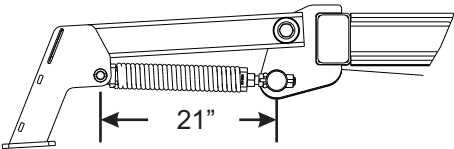
7. Attach double reel/gang bar assembly to reel arms using gang bar mount plate, (2) clamp tubes, (4) spring torsion rubber, secure with 3/4-10 x 8-1/2 hex head cap screws and double hex lock nuts as shown in **Figure 3-44**. Refer to **pages 2-18 thru 2-25** for single reel gang bar placement locations.
8. Attach flat bar reels with angled blades as shown **See Figures 3-42**.



**Figure 3-42: Double Reel Direction**

9. Install (2) clamp tubes on front and back of double gang bar, secure with 1/2-13 x 5-1/2 hex cap screws and 1-2 lock nuts. Refer to **pages 2-18 thru 2-25** for clamp tube locations. Each set (2 total) should be slid against gangbar mount plate on outside of inner wing arm assemblies.

6. Attach single reel/gang bar assembly to reel arms using gang bar mount plate, 3/4-10 x 6 hex head cap screws and double hex lock nuts as shown in **Figure 3-43**. Refer to **pages 2-10 thru 2-13** for single reel gang bar placement locations.



NOTE: SIDE PLATE REMOVED FOR CLARITY

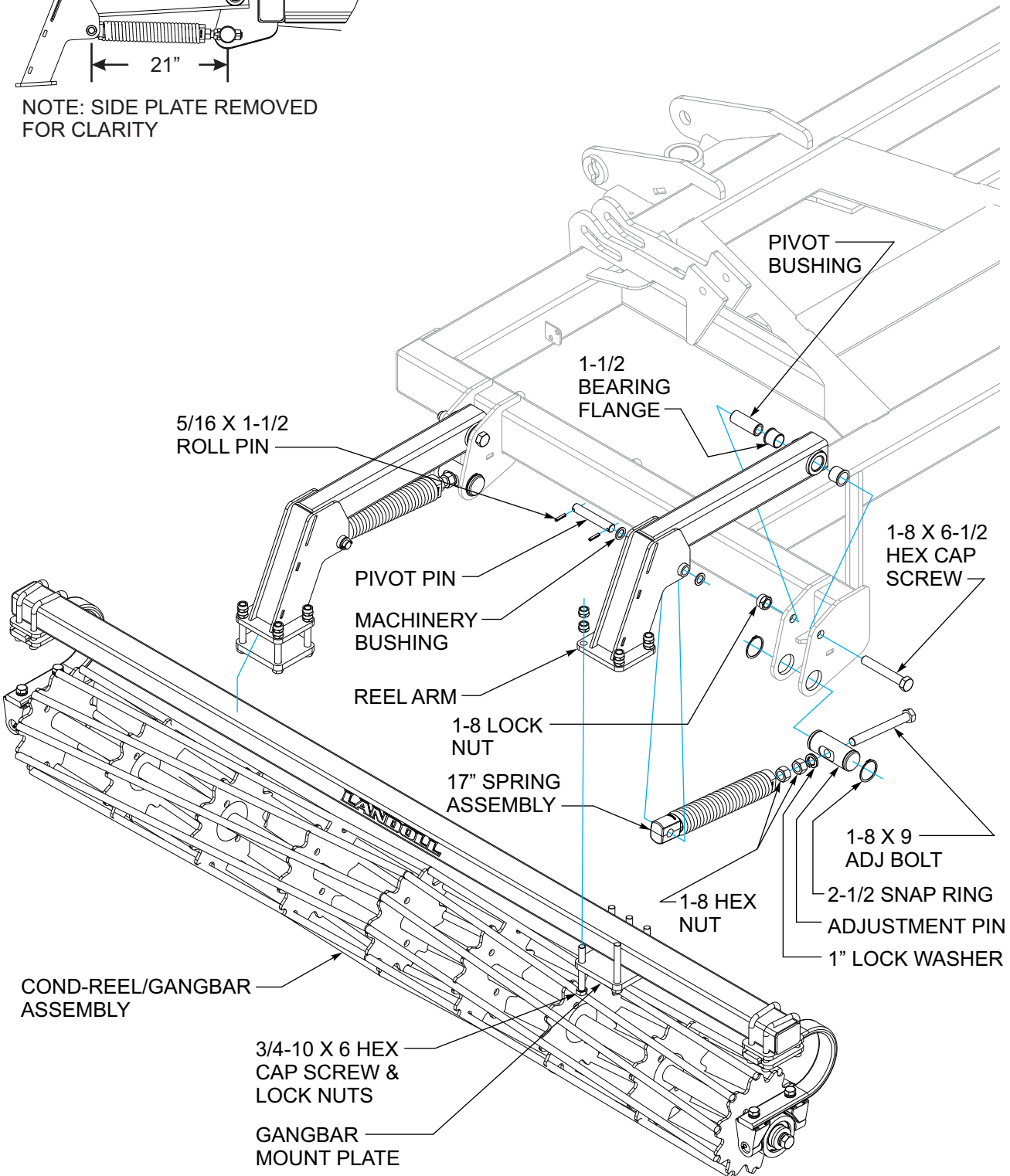


Figure 3-43: Conditioner Single Reel Installation 7530-23'-35'

# ASSEMBLY INSTRUCTIONS

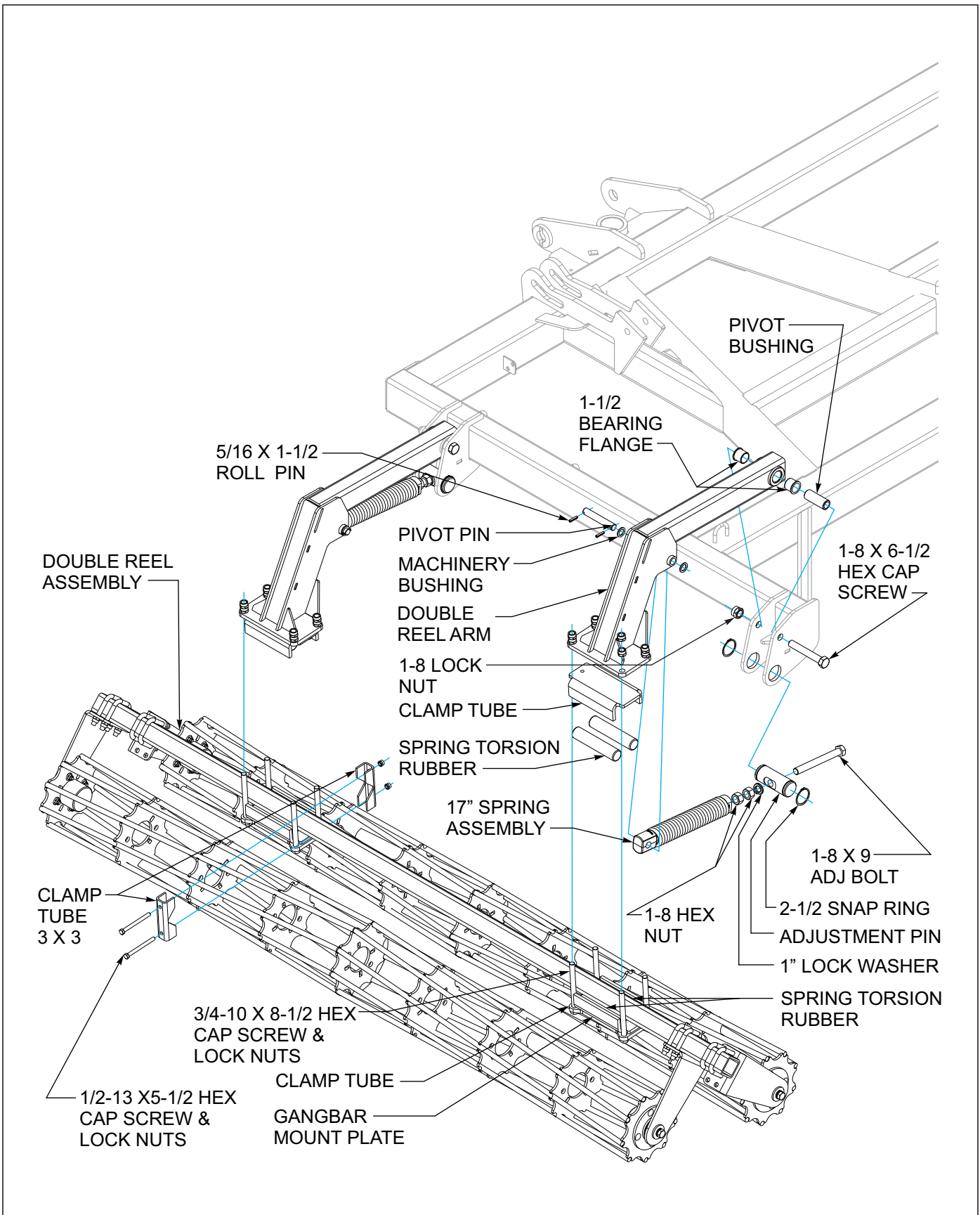


Figure 3-44: Conditioner Double Reel Installation 7530-23'-32'



### Hydraulic Conditioner Reel Installation (Option)

#### NOTE

Refer to *Hydraulic Conditioner Single Reel Installation* shown in **Figure 3-45** for single reel installation or *Hydraulic Conditioner Double Reel Installation* shown in **Figure 3-46** for double reel installation.

#### NOTE

The 209666 (7530-32' hydraulic double round reel), 209676 (7530-32' hydraulic flat reel), 212043 (7530-35' hydraulic double round reel) and 212045 (7530-35' hydraulic flat reel) on center section uses two of the *Hydraulic Conditioner Double Reel Installation arm assemblies*, Refer to **Figure 3-45** and one *Conditioner Double Reel Installation arm assembly in center position*, Refer to **Figure 3-44**. for arm assemblies. Refer to **Figure 2-22** and **2-23** for proper arm placement.

1. Attach reel arm assemblies to rear frame in top hole using 1-8 x 6-1/2 hex head cap screw, pivot bushing, 1-1/2 flange bearings, and 1-8 hex lock nut.
2. Attach 17" 1-1/8 thd spring assembly and hydraulic cylinder to lower hole on rear frame using trunnion mount assembly, 1/2-13 x 2 hex head cap screw, and 1/2 lock washer. Set pin centers to 21" as shown. Tighten 3/8-16 x 3/4 set screw in threaded spring castings.



#### WARNING

Do not attempt to lift heavy parts (such as the frame, disc gangs, lift, pull hitch, or reel/gang bar assembly) manually. Use a hoist or a forklift to move these parts into position.

3. Attach single reel/gang bar assembly to reel arms using gang bar mount plate, 3/4-10 x 6 hex head cap screws and double hex lock nuts as shown in **Figure 3-45**. Refer to **pages 2-10 thru 2-13** for single reel gang bar placement locations.
4. Attach double reel/gang bar assembly to reel arms using gang bar mount plate, (2) clamp tubes, (4) spring torsion rubber, secure with 3/4-10 x 8-1/2 hex head cap screws and double hex lock nuts as shown in **Figure 3-46**. Refer to **pages 2-18 thru 2-25** for single reel gang bar placement locations.
5. Install (2) clamp tubes on front and back of double gang bar, secure with 1/2-13 x 5-1/2 hex cap screws and 1-2 lock nuts. Refer to **pages 2-18 thru 2-25** for clamp tube locations. Each set (2 total) should be slid against gangbar mount plate on outside of inner wing arm assemblies.

#### NOTES

Refer to **Figure 3-51** for hydraulic diagram for the 7530-26 model.

Refer to **Figure 3-52** for hydraulic diagram for the 7530-29 model.

Refer to **Figure 3-53** for hydraulic diagram for the 7530-32 model.

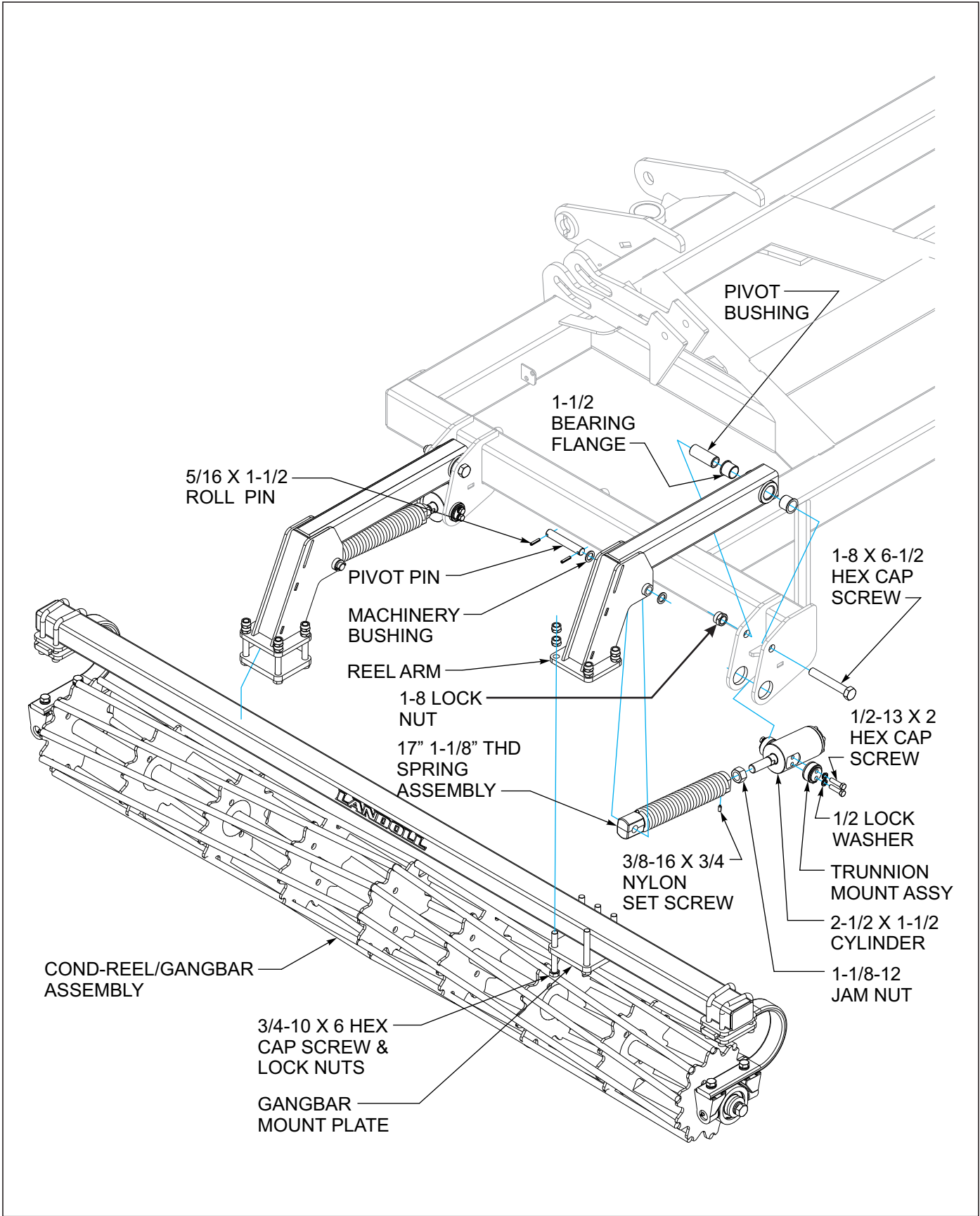


Figure 3-45: Hydraulic Conditioner Reel Single Installation 7530-23' - 35'

# ASSEMBLY INSTRUCTIONS

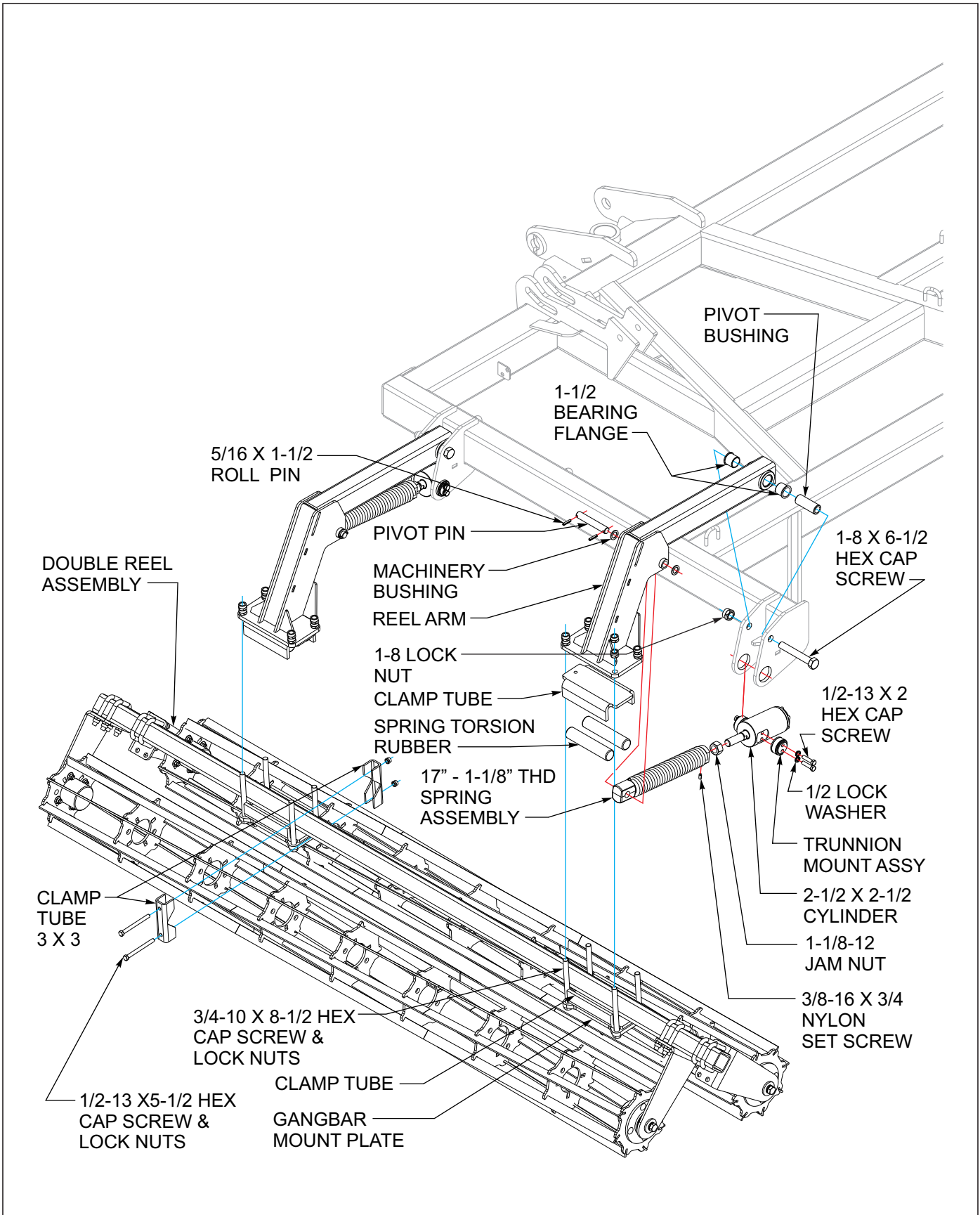
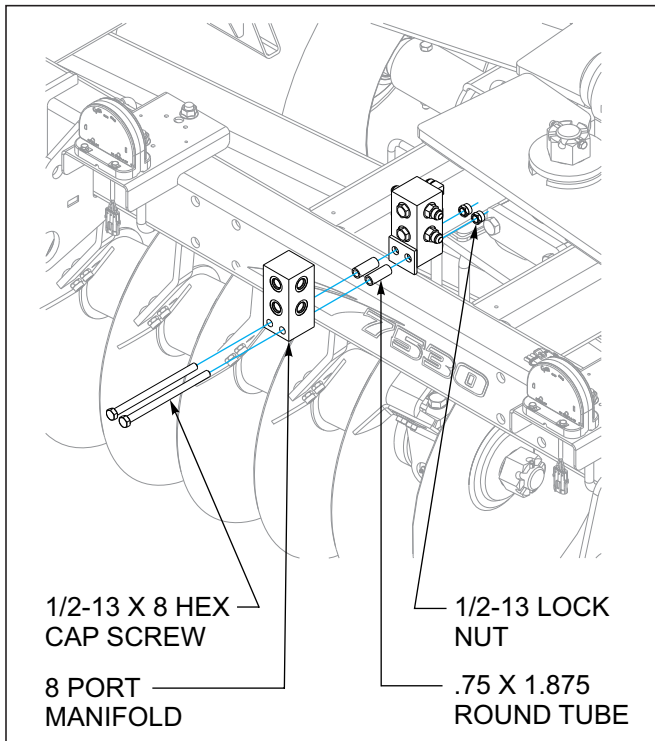


Figure 3-46: Hydraulic Conditioner Double Reel Installation 7530-23' - 35'

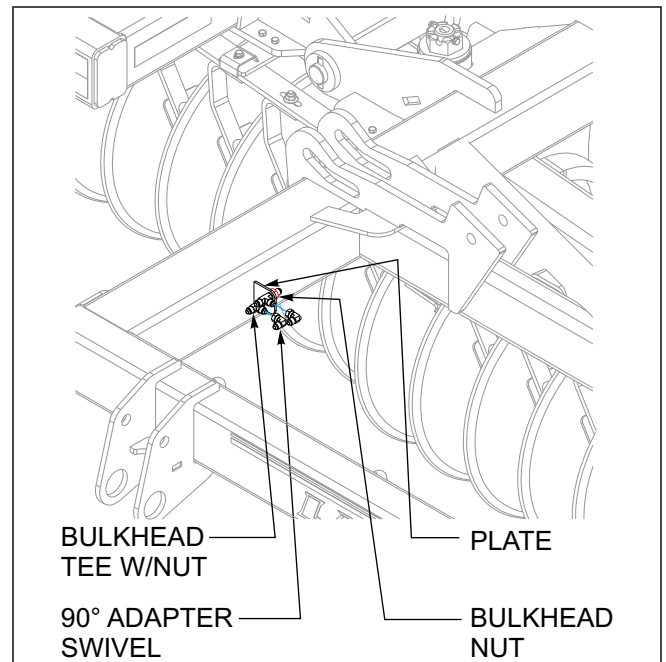


6. Install the 8 port manifold (See Figure 3-47.) to the manifold bracket on the rear of frame by removing the 1/2-13 x 3-1/2 hex cap screws. Attach the .75 x 1.875 round tubes, 8 port manifold, secure with 1/2-13 x 8 hex head cap screws and 1/2-13 lock nuts as shown.



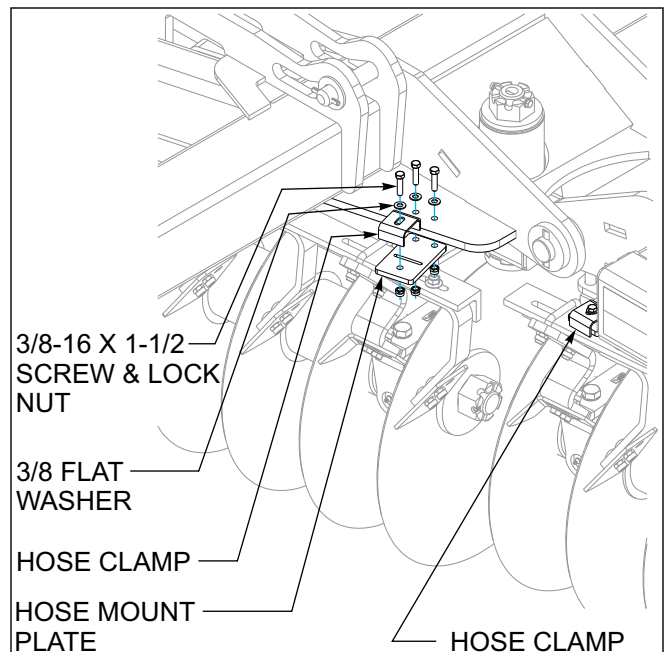
**Figure 3-47: 8 Port Manifold Installation**

7. Install cylinders, fittings and hoses per Figures 3-51 thru 3-52.
8. Install bulkhead tee to plate on rear of wing frame, secure with bulkhead nut provided with tee (See Figures 3-48.) Attach 90 adapter swivel to bulkhead tee and swivel to rear of machine.



**Figure 3-48: Bulkhead Tee Installation**

9. Install hose mount plate on bottom side of rear center and wing frame plates with two, 3/8-16 x 1-1/2 hex cap screw, 3/8 flat washer and 3/8-16 lock nuts, both sides (See Figures 3-49.) Install hose clamp with 3/8-16 x 1-1/2 hex cap screw, 3/8 flat washer and 3/8-16 lock nut.



**Figure 3-49: Hydraulic Reel Hose Clamp Installation**

# ASSEMBLY INSTRUCTIONS

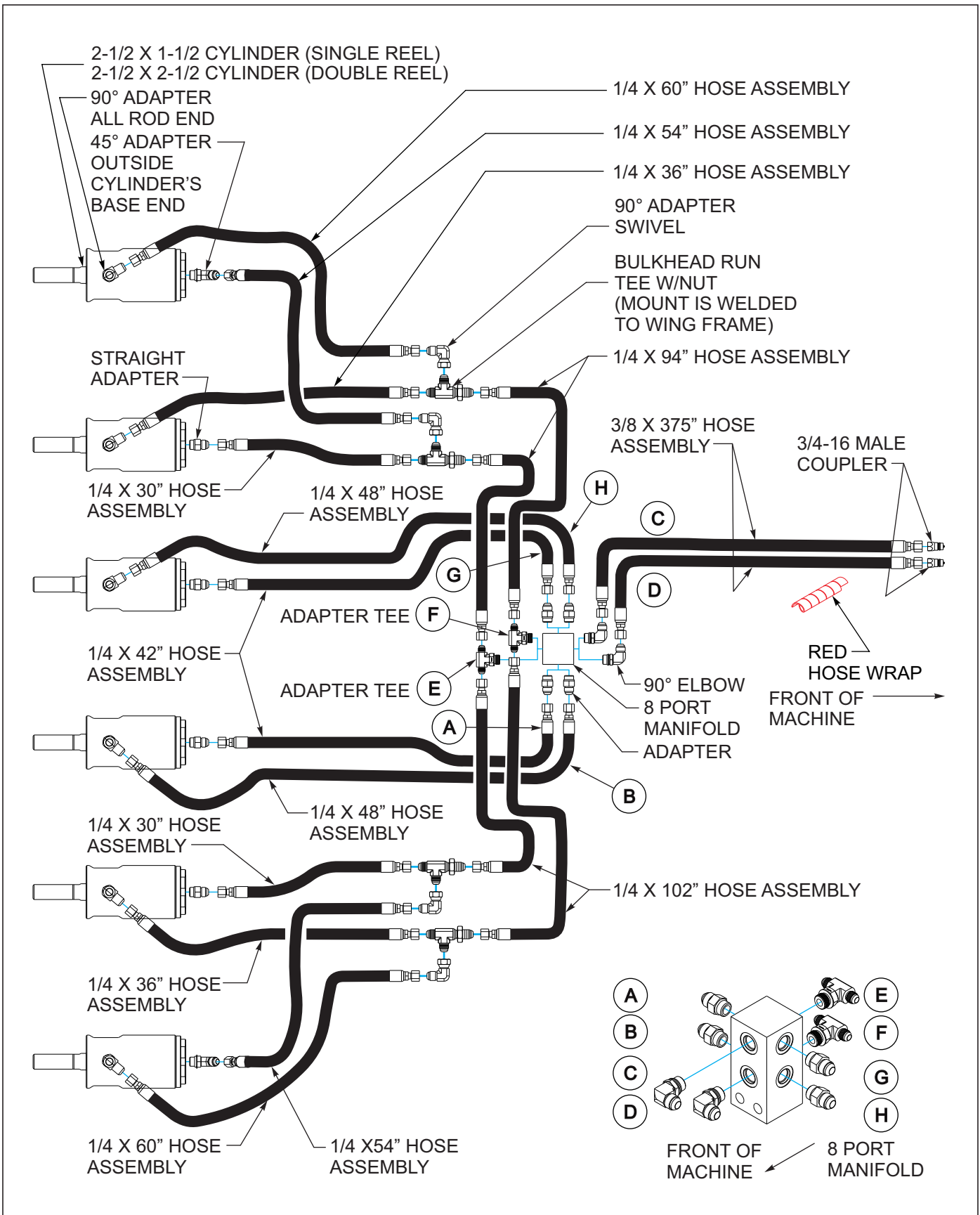


Figure 3-50: Reel Hydraulic Installation 7530-23'

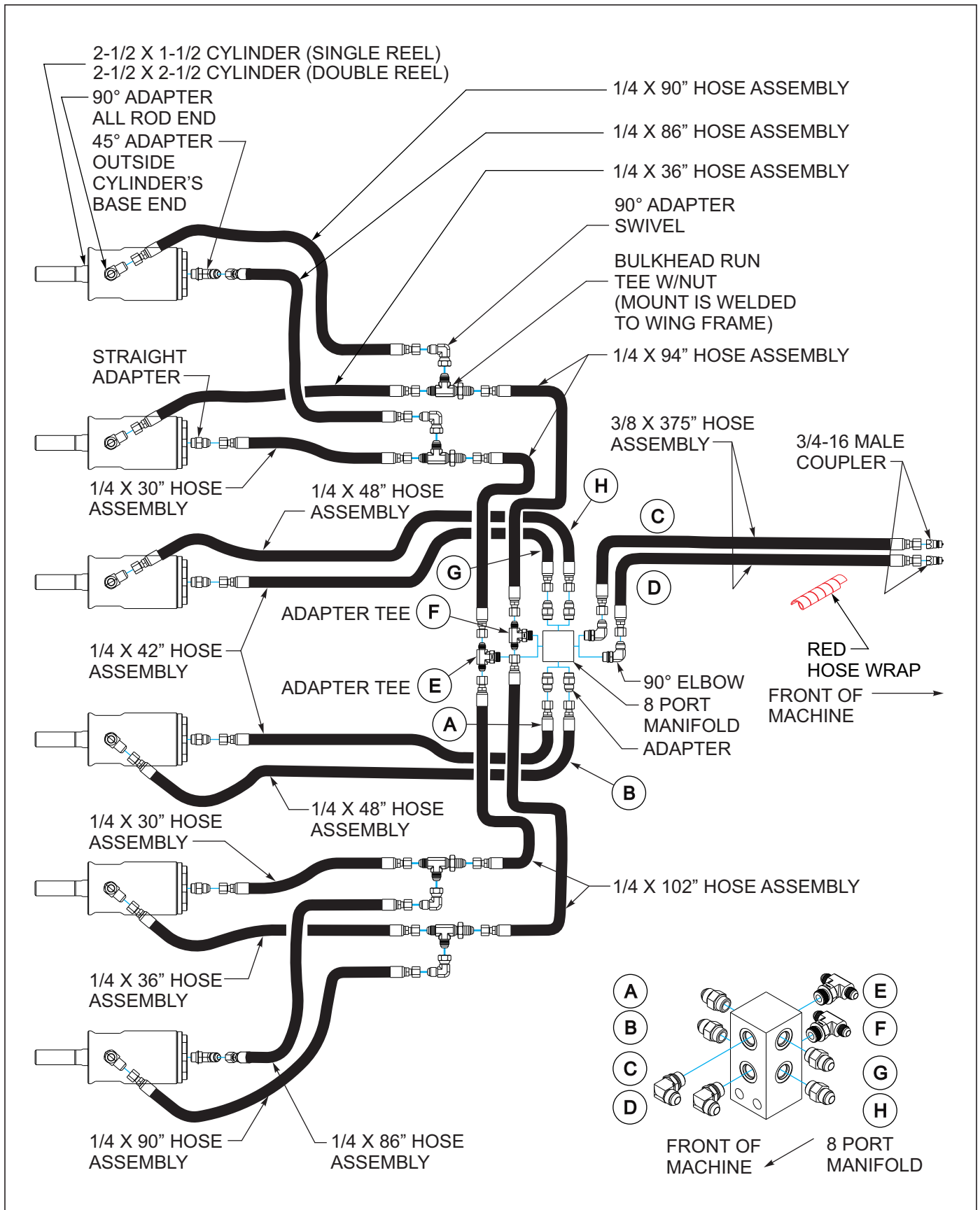


Figure 3-51: Reel Hydraulic Installation 7530-26'

# ASSEMBLY INSTRUCTIONS

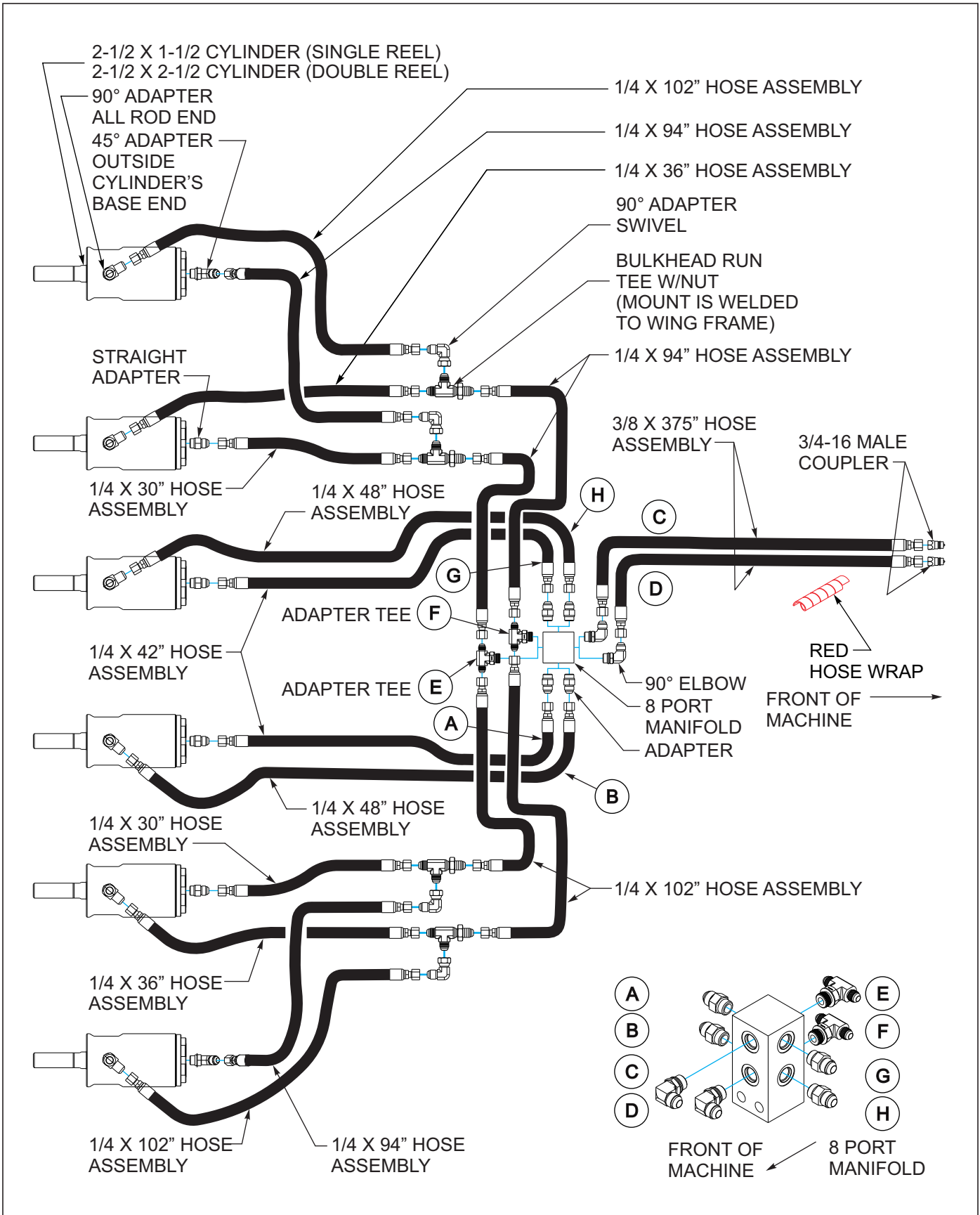


Figure 3-52: Reel Hydraulic Installation 7530-29'

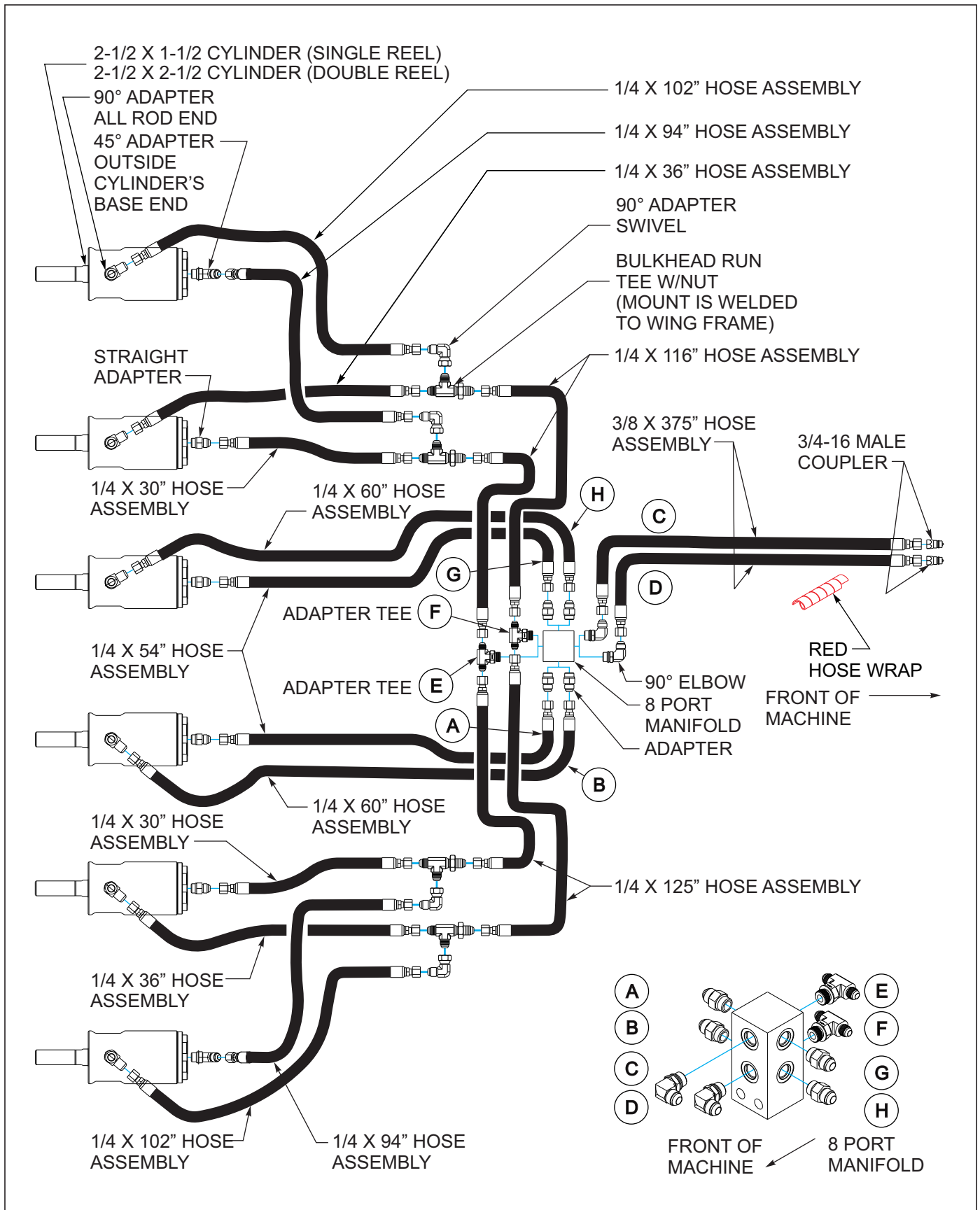


Figure 3-53: Reel Hydraulic Installation 7530-32/35'

### Rear Tow Hitch Installation

A rear tow hitch assembly is available for use on the rear of the VT Plus.

#### **NOTE**

*The red led ag lamps, ag flasher module and tail light mounts will need to be removed from rear tube of center frame. The ag flasher module and red led ag lamps will be re-installed to the new tail light mounts as shown (See Figure 3-54.)*

10. Attach rear tow hitch tubes with plates and secure with 1-8 x 8-1/2 cap screws and lock nuts, on angle tubes of rear of center frame in position shown (See Figure 3-54.).
11. Attach plates, ag flasher module, tail light mount, red led ag lamp to rear tube of center frame in location show with hardware shown (See Figure 3-54.)
12. Remove the 1/2-13 x 3-1/2 cap screws in 16 port manifold. Attach hose mount plate as shown with new 1/2-13 x 4 cap screws and use the 1/2-13 lock nuts that were removed.
13. Leave all hardware loose until rear tow hitch is completely assembled.
14. Attach the hitch hyd mount assembly, hitch mounting plate, hitch mounting plate w/loop and rear tow hitch assembly to rear of rear tow hitch tubes with hardware shown (See Figure 3-55.)
15. Now the hitch jack mount and 4 hole plates may be installed to the rear hitch tubes in position shown (See Figure 3-55.)
16. The rear jack tube may be slid into hitch jack mount and secured with the wing lock pin, 1/4 x 3 roll pin and 3/16 dia hair pin as shown. Attach the jack mount tube to the rear jack tube with a 3/4-10 x 4 cap screw and lock nut.
17. Tighten all hardware once rear tow hitch assembly is adjusted appropriately.
18. Route hydraulic hoses on left side of hitch, through tube and follow hose loops to front as shown (See Figure 3-55.). Connect one end of the 3/8 x 214" hoses to the couplers on the front of the hitch hyd mount assembly and the other end to the 37 flare bulkhead fittings. Connect the 3/4-16 Male Couplers To The 3/8 X 222" Hose Assembly. Attach the other end of the hoses to the 45el x 37 swivel fittings as shown.
19. Route the 3/8 x 222" hoses through all hose loops and clamps along with other hose to front of hitch.
20. Route the tandem adapter harness through right rear tow hitch tube and attach the connector between the ag flasher module and the main warning lights harness.
21. See Figure 4-18. in Operator's Section for proper rear jack tube operation.

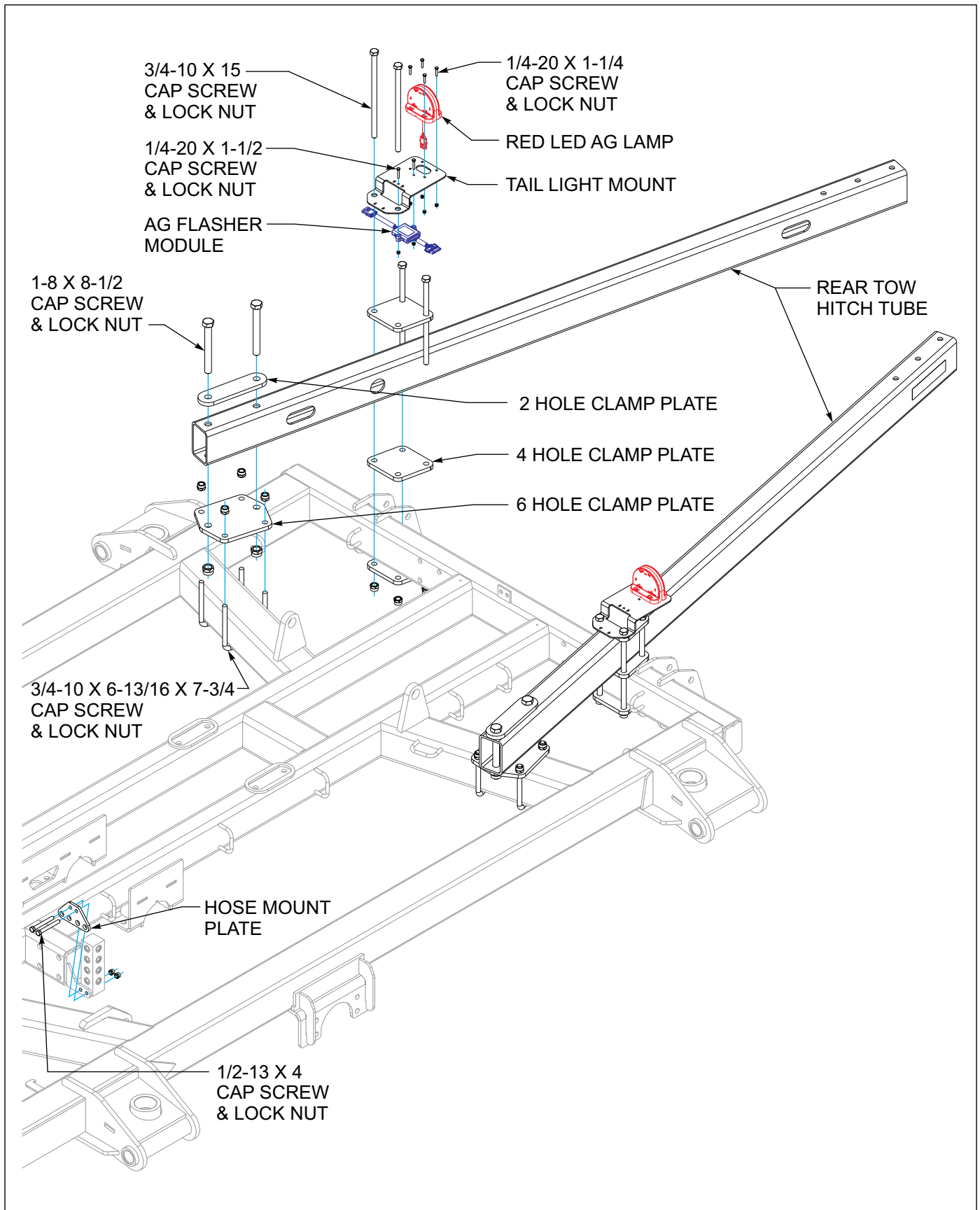
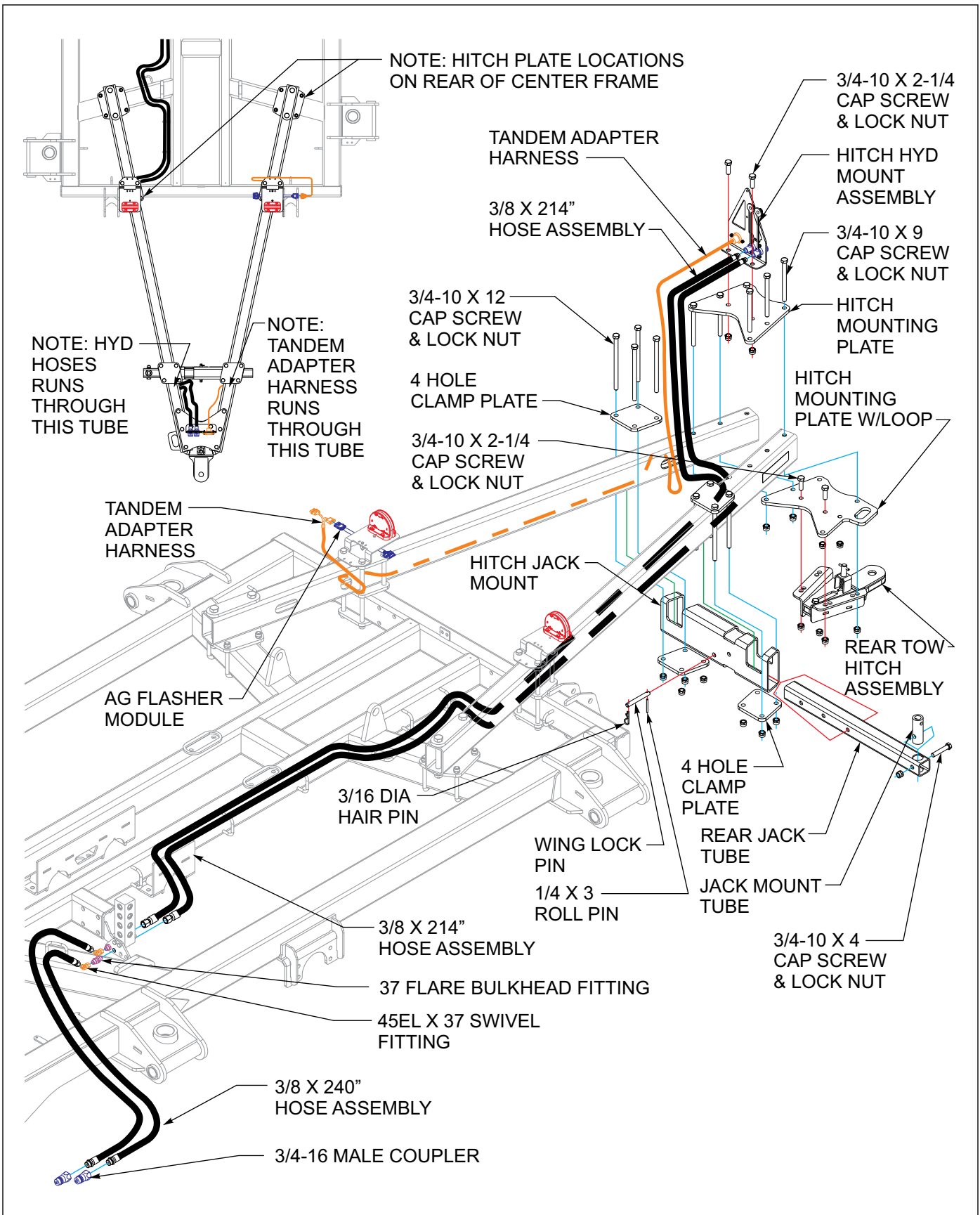


Figure 3-54: Rear Tow Hitch Installation (1 of 2)

# ASSEMBLY INSTRUCTIONS



**Figure 3-55: Rear Tow Hitch Installation (2 of 2)**



## **Final Assembly**

1. Attach a tractor to the implement and charge the lift system hydraulics as described in **“Hydraulic Lift System” on page 4-3.**
2. Install the transport locks on both 4 x 10 master cylinders on the center frame.
3. Connect the hydraulic hoses on the optional hydraulic leveler to the tractor (if equipped). Fully extend and retract the hydraulic leveler several times to remove any air. **See “Hydraulic Leveler Adjustment” on page 4-8** for any further adjustments
4. The fold system must be purged of air and filled with oil **BEFORE** attempting to fold the implement. Air in the system will allow the wings to fall uncontrollably and may result in implement damage. Follow instructions for charging the hydraulic fold system as described in **“Hydraulic Fold System” on page 4-4.**
5. Connect lights to the tractor and verify operation.
6. Check tires for proper inflation
7. Level the disc from side to side as described in **“Leveling (Side to Side)” on page 4-6.**
8. Inspect the final implement assembly, and verify that all bolts have been tightened, cotter pins spread, and that there are no leaking hydraulic connections.
9. Rotate each disc gang to verify that each gang rotates freely. Adjust any scrapers that may have shifted during shipment or assembly.
10. Lubricate the disc at all locations (**See “” on page 4-16.**)
11. Touch up with paint any areas that may have been scratched during moving, handling, or assembly.
12. Thoroughly read and understand the operating section before using the disc.



## Operation and Maintenance

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### DANGER

Never allow anyone to ride on the 7530 VT Plus at any time. Allowing a person to ride on the machine can inflict serious personal injury or death to that person.



### DANGER

Always lock the tractor drawbar in the center position when transporting the unit. Failure to do so can result in serious injury or death and cause damage to the equipment.



### DANGER

Disc blades are extremely sharp. Exercise extreme care when working on or near disc blades. Do not allow discs to roll over or fall onto any bodily part. Do not allow wrenches to slip when working near disc blades. Never push wrenches toward disc blades. Do not climb over machine above disc blades. Failure to stay clear of disc blade edges can cause serious personal injury or death.



### DANGER

When transporting the unit, place cylinder lockouts in the transport lock position after fully extending the cylinders. Insert the lockout pins to secure the cylinder lockouts. Failure to lockout the cylinders can cause the unit to settle during transport, which can result in serious injury or death and cause damage to the equipment.



### WARNING

All hydraulically elevated equipment must have cylinder lockouts installed or be lowered to the ground, when servicing or when equipment is idle. Failure to take preventive measures against accidental lowering can result in serious personal injury.



### CAUTION

When transporting farm implements on public roads, it is the responsibility of the operator to abide by state and local laws concerning wide loads, speed, safety emblems and safety lighting equipment. Drive at safe speeds. Particularly when rounding corners, crossing rough ground or driving on hillsides, to prevent tipping the tractor.

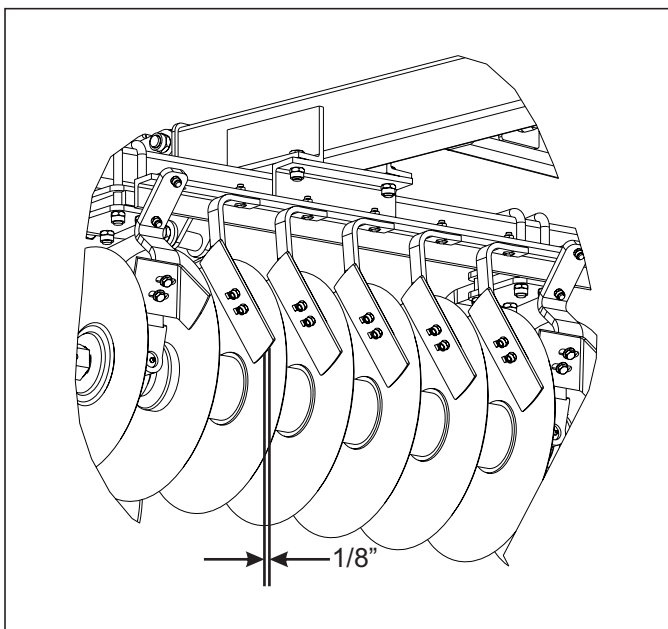
### Tractor Preparation

The 7530 VT Plus is designed to be pulled by tractor equipped with a double lip or clevis type hitch. If your tractor is not equipped as such, you need to purchase the hitch from your local tractor dealer.

Before attaching the VT Plus, prepare the tractor as follows:

1. Inflate the rear tractor tires equally and add ballast according to the tractor operator's manual.
2. Lock the tractor drawbar in the center position.

### VT Plus Preparation



**Figure 4-1: Disc Scraper to Disc Blade**

1. Prior to operating the 7530 VT Plus, inspect it thoroughly for good operating condition.
2. Replace worn or missing parts.
3. When the machine is new, check the bolt tightness after a few hours of operation. Tighten any loose nuts or bolts. Check the lift wheel lug bolts daily.
4. Check the lift wheel tire inflation. Inflate all tires equally to avoid side draft. Follow the tire manufacturer's recommended pressures listed on the sidewall of the tires.
5. Check disc scrapers for proper adjustment to the disc blade **(See Figure 4-1.)**
6. Lubricate the machine as shown **(See Figure 4-23.)**

### Attaching to the Tractor

1. Align the tractor drawbar with the machine. Raise or lower the disc ring hitch, as needed, using the swivel jack. Attach the unit with proper size hitch pin.
2. Always place the swivel jack on the interior mount before setting the machine in motion.
3. Clean all hydraulic couplings and attach to the tractor.
4. Attach safety chain to tractor allowing plenty of movement for turning both directions. The safety chain should latch securely to prevent it coming loose.
5. Plug in the 7-pin connector for the lights.
  - a. The tractor should have a good clean receptacle, free of dirt and corrosion.
  - b. Make sure the 7-pin connector is inserted all the way in, and allows the cover to latch over the keyway to secure it in place.

#### **NOTE**

*The lighting system requires a good ground connection and if the lights do not seem to work right check the installation of the 7-pin connector and the condition of the pins.*

## Hydraulic Lift System

The VT Plus is equipped with a rephasing hydraulic lift system to raise and lower the unit in the field.

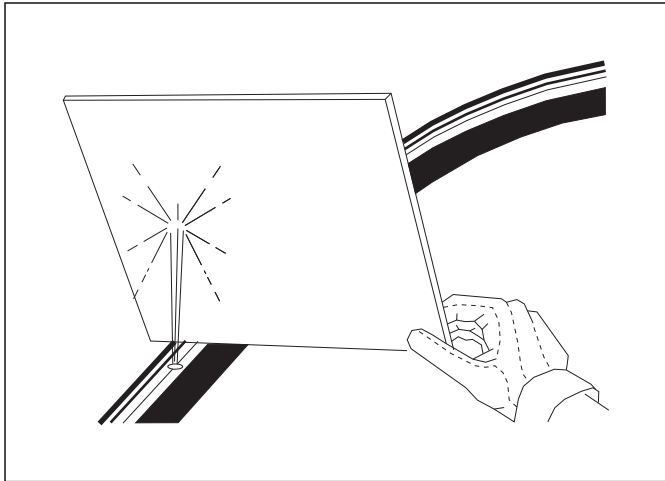


Figure 4-2: Hydraulic Leak Detection



### WARNING

Escaping hydraulic fluid can cause serious personnel injury. Relieve system pressure before repairing, adjusting, or disconnecting. Wear proper hand and eye protection when searching for leaks. Use cardboard instead of hands (See Figure 4-2.) Keep all components (cylinders, hoses, fittings, etc.) in good repair.

1. The rephasing hydraulic lift system contains smaller wing frame cylinders plumbed in series with larger center frame cylinders. It is important that the cylinders be connected in the proper series for the lift system to operate correctly. When the cylinders are fully extended and held in this position, oil is able to flow through the cylinders (or rephase) and allow the cylinders to operate in sync. This also allows the system to purge any air that may enter the hydraulic lines.
2. The hydraulic system is not filled with oil and should be purged of air before transporting and field operations. Carefully hitch the VT Plus to the tractor and connect the hydraulic lift hoses. Check to make sure the tractor hydraulic reservoir is full of the manufacturer's recommended oil. Slowly raise the machine, and continue to hold the hydraulic lever until all lift cylinders are fully extended. Lower and raise the unit to verify that all cylinders are working

simultaneously throughout the stroke. If the cylinders are not working evenly or together, fully extend the lift cylinders and continue to hold the lever to purge any remaining air. Do not loosen any hoses or fittings. Recheck tractor reservoir to make sure it is within operating limits. With all cylinders fully extended, install the 2 X 10 transport lockouts (See Figure 4-3.) Storage location for lockouts (See Figure 4-4.)

3. Always fully extend the cylinders and hold the lever to ensure the cylinders are rephased before starting any field operation. This will keep all cylinders in time and frame sections level when operating.

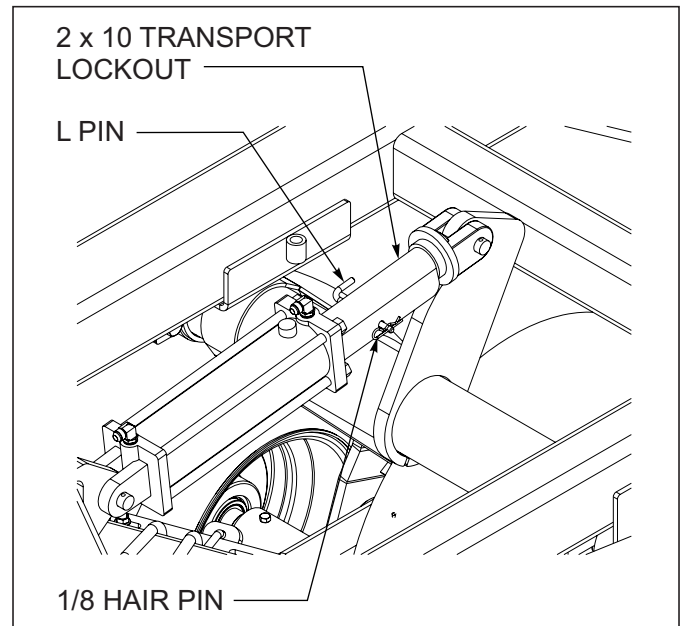


Figure 4-3: Installed Transport Locks

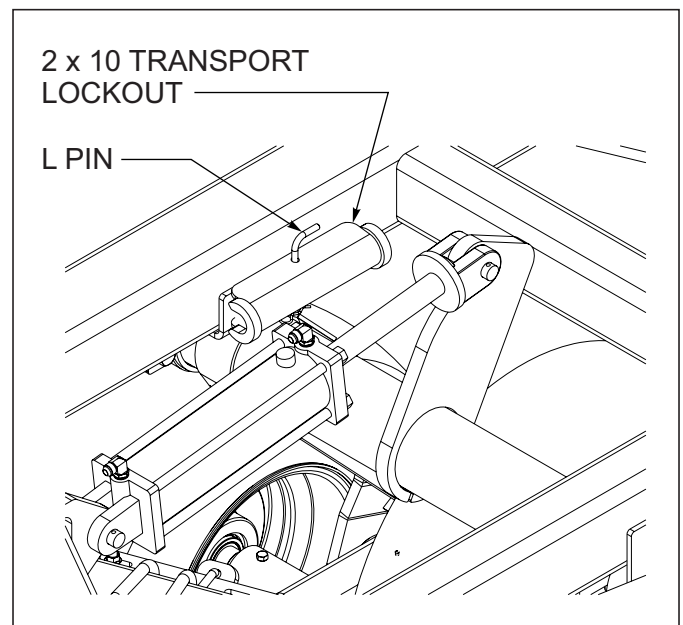


Figure 4-4: Stored Transport Locks

## Hydraulic Fold System

1. The VT Plus is equipped with a hydraulic fold system to raise and lower the wing frames for narrow transport.
2. Be sure the system is fully charged with hydraulic oil before attempting to fold/unfold the unit. Air in the system can allow uncontrolled dropping of the wing frames causing serious personal injury or machine damage. The system needs to be charged with oil initially and any time the system has been opened for repair such as cylinder, hose, or fitting replacement/repair.

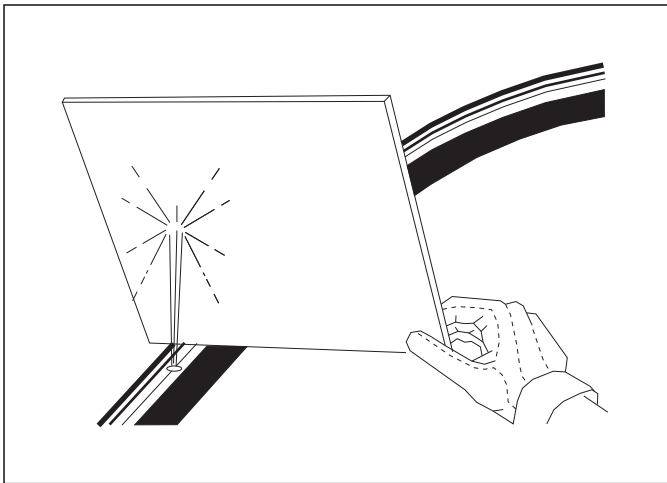


Figure 4-5: Hydraulic Leak Detection

3. To charge the system, carefully hitch the VT Plus to the tractor. Unpin the end(s) of the fold cylinders, and position them so they can extend and retract without contacting any frames or other parts. Check the tractor hydraulic fluid level to make sure it is full of the manufacturer's recommended hydraulic fluid. Connect the cylinder hoses to the tractor and fully extend and retract the cylinders several times. The cylinder rod travel should be smooth and positive when all air has been purged from the system. Due to large amounts of hydraulic oil required, recheck the tractor fluid level to make sure it is within proper operating limits.
4. The hydraulic fold system is equipped with restrictors in the rod end of cylinders to prevent uncontrolled falling of wing frames when unfolding. Removal or improper assembly of these restrictors can cause the machine to fold improperly and result in serious machine damage.



### WARNING

Escaping hydraulic fluid can cause serious personal injury. Relieve system pressure before repairing, adjusting, or disconnecting. Wear proper hand and eye protection when searching for leaks. Use cardboard instead of hands (See Figure 4-5.) Keep all components (cylinders, hoses, fittings, etc.) in good repair.

5. To fold/unfold the VT Plus, find a level area large enough to accommodate the VT Plus when it is fully unfolded. The tractor should be stopped and not moving with the unit fully raised. Remove the wing lock pins from the mounts and install them in the storage locations (See Figures 4-6).

### IMPORTANT

Failure to remove the lock pins when unfolding will result in serious damage to the implement. Be sure other people and pets are a safe distance away.

6. Slowly engage the tractor lever and fold/unfold the wing frames. When the wings are unfolded, continue holding the tractor lever to fully extend all fold cylinders. This will allow the wings to fully flex in the field.
7. When the unit is fully folded, remove the wing lock pins from the storage location and install in the mounts provided on each side of the machine.
8. If wing lock pin or plates are bent or deformed during unfolding procedure, replacement parts may be ordered (wing lock pin p/n 2-557-010409 and wing lock plate p/n 206639).

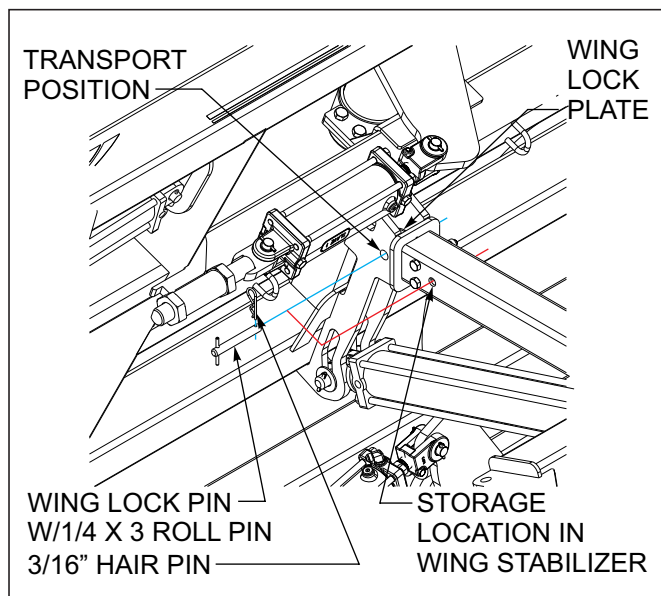


Figure 4-6: Wing Fold Transport Locks

## General Operation

1. The horsepower requirements are typically 8-10 horsepower per foot of cut. This will vary widely due to speed, depth, moisture, residue and types of soils. Local dealers can help in making recommendations for your areas.
2. Operating speed is typically 6 - 9 mph. Excessive speed can cause the unit to bounce, uneven depth, and create a ridge on the outside edges. Too low of speed may not allow the unit to properly fill in the center furrow.
3. Lift wheels must always be be in contact with the ground and carrying some implement weight. Lift wheels are used to gauge the depth of each frame section and to control the leveling feature. Maximum discing depth cannot be achieved by raising the lift wheels off the ground. Little or no weight on the lift wheels will cause the frame sections to gouge, side-draft, and buckle producing inconsistent cutting depth.
4. Do not turn with the VT Plus in the ground, this can put excessive side load on the gangs and hitch. Raise the unit slightly when making turns to prevent gouging and pushing a ridge.
5. The gang angle is intended to be changed while being pulled through the field. The more aggressive the angle, the more horsepower it will take to pull the 7530. The gang angle may be adjusted from 5 to 15 degrees and gang adjust gauge is located on right, front wing and is visible from tractor.

## Field Operation

1. Raise the unit to take the weight off of the transport locks. Remove the transport locks from the lift cylinders (on the main frame only). Store the transport locks on the retainers above the main lift (See Figure 4-6.)
2. Remove the wing lock pins and store in the extra hole in the hinge bracket. Unfold the wings and extend the fold cylinders completely (See Figure 4-6.)



### CAUTION

Failure to remove wing lock pins before unfolding wings will cause permanent equipment damage.

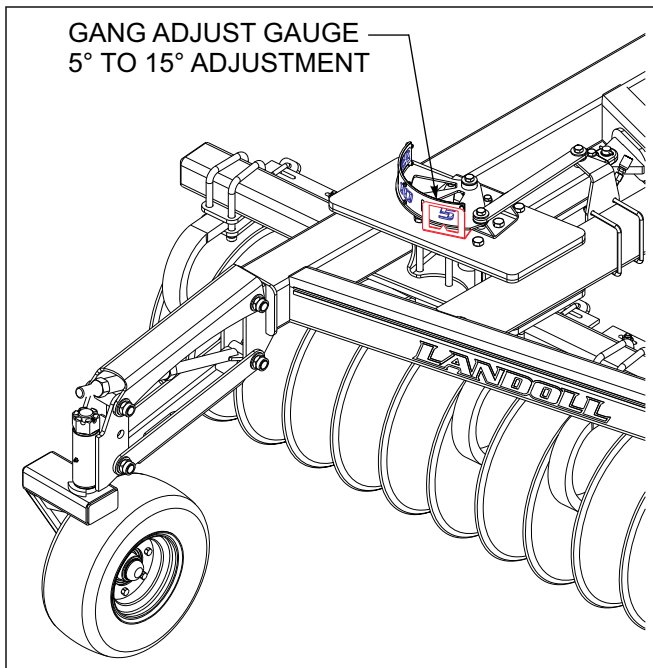
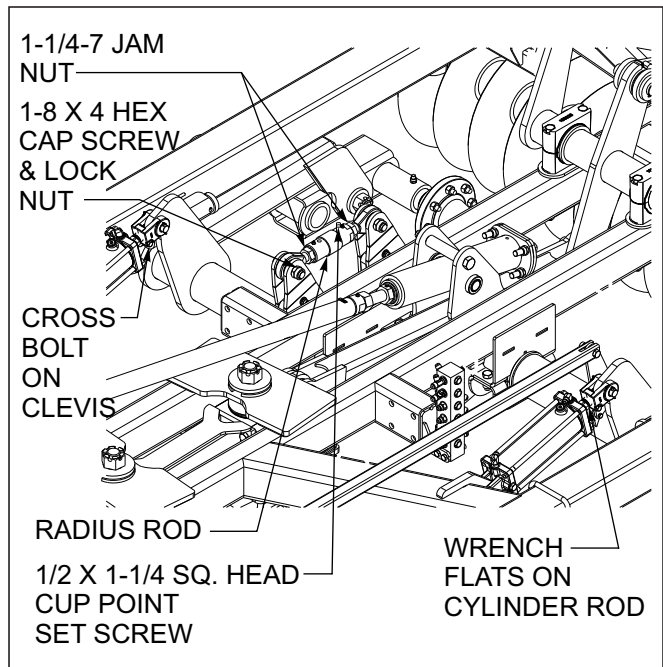


Figure 4-7: Gang Angle Gauge

## Leveling (Side to Side)

1. An adjustable radius rod connects the center frame lifts together to keep them operating in unison. The radius rod does not level the center frame lift. The radius rod length is determined initially by fully retracting the lift cylinders and adjusting the radius rod until it is loose and tightening the jam nuts.
2. To level the center frame:
  - a. Verify that all of the tires are properly inflated.
  - b. With the unit unfolded, raise it to fully extend the lift cylinders and continue holding the tractor lever 30-60 seconds to insure the cylinders are fully extended and the rephrasing lift system has been purged of air.
  - c. Lower the unit so the disc blades are 1" off the ground.
  - d. Measure the distance from the gold cap on the side of the walking beam to the top of the frame on both sides. If there is a difference, it needs to be adjusted by turning the cylinder rods with the wrench flats provided at the clevis end (**See Figure 4-9.**)
  - e. Let the machine down onto the ground to relieve any pressure, but do not fully retract the cylinders. Remove 1-8 x 4 hex head cap screws from the radius rod assembly and remove from frame (**See Figure 4-8.**)
  - f. Loosen the cross bolt on the cylinder clevis. If the difference is 1/4" this requires turning the rod of the short side one full revolution to lengthen the cylinder. If the difference is 1/2" this requires turning the rod of the short side out one full turn and the rod of the tall side in one full revolution. Any differences of less than a 1/8", are acceptable for operating. If the cylinder rod is hard to turn remove cylinder pin and turn clevis.



**Figure 4-8: Center Frame Leveling**

3. After adjusting the cylinder rod or rods, the radius rod needs to be adjusted back to a neutral position. This is accomplished by fully retracting the lift cylinders and adjusting the radius rod until it fits between the lifts. Reinstall 1-8 x 4 hex head cap screw, tighten jam nuts, and 1/2 x 1-1/4 square head cup point set screw to prevent radius rod from turning.
4. Leveling the VT Plus side-to-side involves leveling the wing frame to the center frame. The unit should be level side-to-side when operating in the field.
5. To level the wings:
  - a. Verify that all tires are properly inflated, and that the center radius rod adjustment has been properly set.
  - b. With the implement unfolded, raise the unit to fully extend the lift cylinders. Continue to hold the tractor lever 30-60 seconds to insure that the cylinders are fully extended and the rephrasing lift system has been purged of air.
  - c. Lower the unit until the disc blades are approximately 1" off the ground.
  - d. On the center frame, measure the distance from the gold on walker to the top side of the frame (**See Figure 4-9.**)
  - e. Measure the same distance on the wing frame. The wing frames are generally set to the center frame distance plus 1/4" or slightly higher.
  - f. Adjusting the anchor at the base end of each wing lift cylinder sets wing frame height (**See Figure 4-10.**)



6. An adjusting wrench is provided to make this adjustment. It may be necessary to lower the wing to the ground and relieve weight on the cylinder anchor to make this adjustment. If required, fully raise the implement, lower to just above the ground, and re-verify measurements. Repeat as necessary and securely tighten the cylinder anchor when complete.

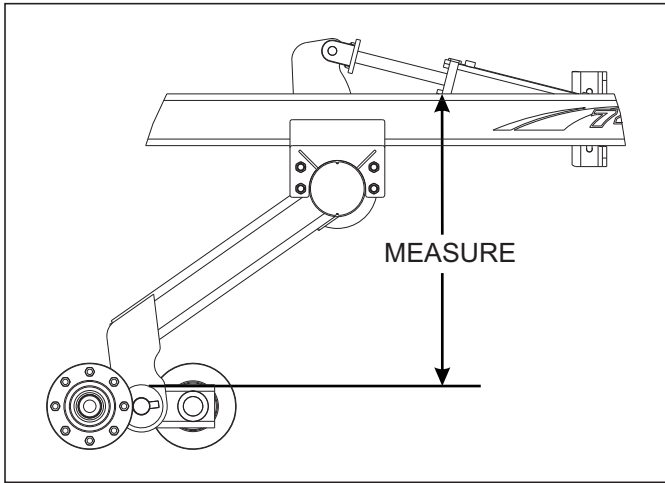


Figure 4-9: Leveling from Side to Side

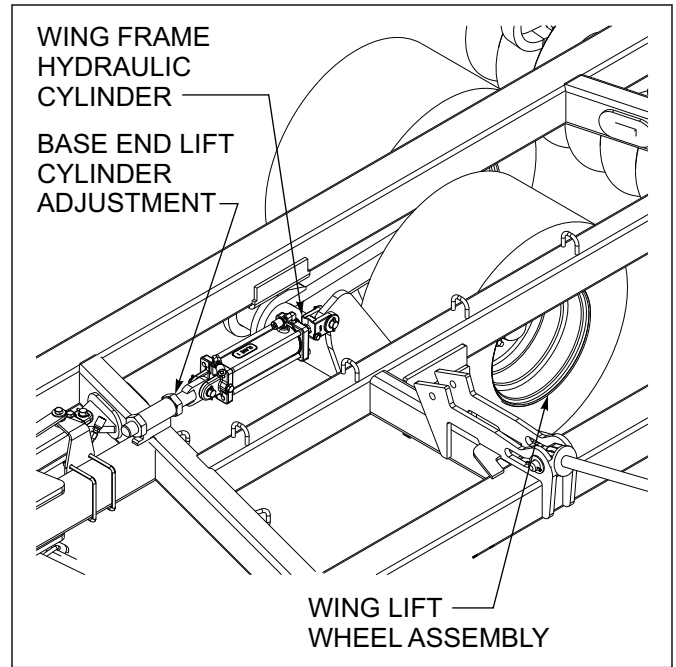


Figure 4-10: Wing Lift Adjustment

### Leveling (Front-to-Rear)

1. The leveling feature on the VT Plus is used to keep the machine level when raising the unit from a working position to a transport position. The leveling feature is also used to level the unit from front-to-rear to perform a level discing operation in the field.
2. The unit should be level from front to rear and the soil behind the disc should be level without furrows or ridges. If there is a presence of a center ridge from the rear gangs, the rear gangs are too deep. If there is a furrow left from the rear gangs the front gangs are too deep.
3. Implements with the hydraulic leveler, can make adjustments on-the-go from the tractor. A reference gauge is provided on the implement for a guide.
4. The 7530 leveler plates can be adjusted upward to allow the rear of the machine to be lower if needed, during transport. It is preset at Landoll in the upper holes refer to "Detail A" in **(See Figure 4-11.)** for details of adjustment.

#### **IMPORTANT**

**Improperly set gauge wheels can prevent the leveler from functioning properly. Large adjustments will require adjustment of gauge wheels.**

### Hydraulic Leveler Adjustment

The 7530 VT will be set at the factory at the 4" distance, if the machine needs adjusted either in or out to accommodate for different harrow or tow hitches follow the following steps.

1. Lower the disc to the ground to remove the load on the leveler assembly.
2. Remove the level indicator rod from the leveler tube **(See Figure 4-11.)** and **(See Figure 3-4. in "Assembly Instructions "section.)**
3. Loosen the 1-1/2-6 hex lock nut at the rear of the leveler tube (an adjustment wrench is provided for this).
4. Screw the leveler tube in or out to desired distance.
5. Install the level indicator rod in the leveler tube and level indicator gauge.
6. The check valve is not adjustable. It prevents movement of the leveler assembly unless the tractor remote is activated.

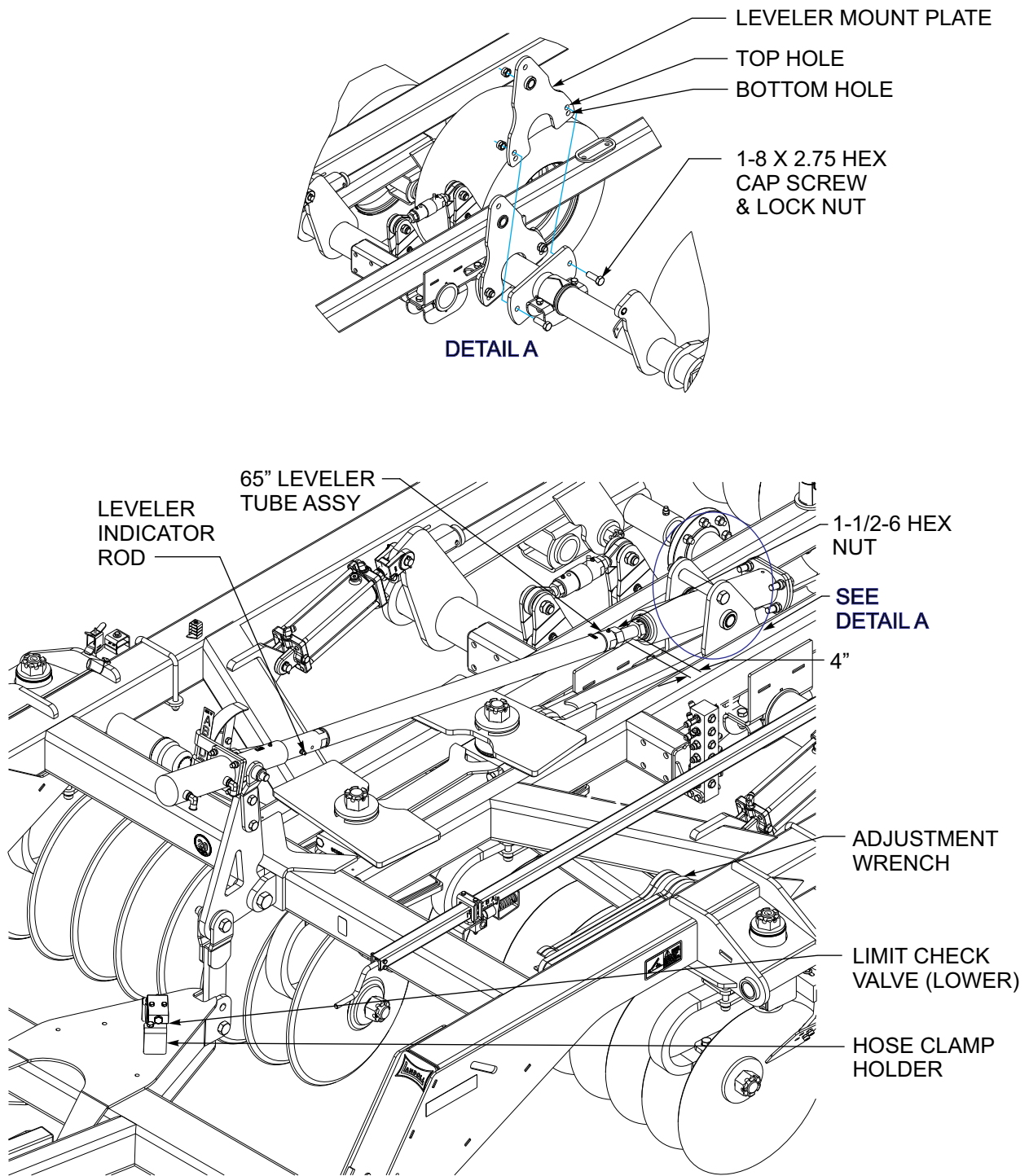


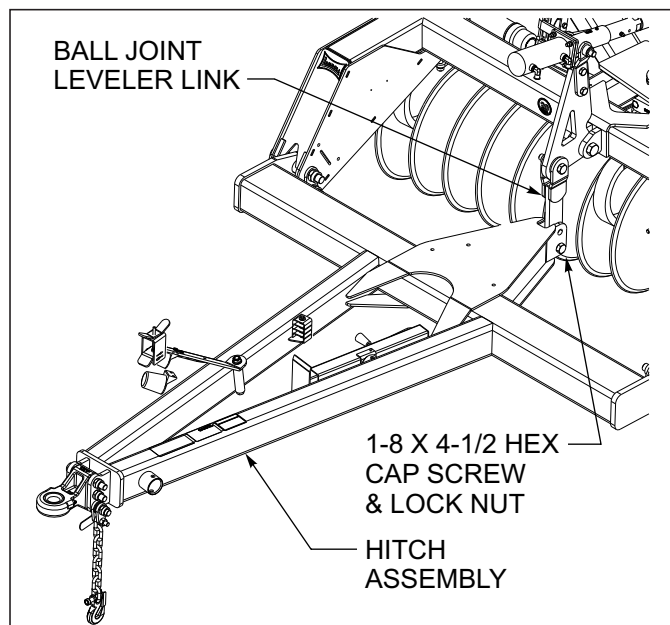
Figure 4-11: Hydraulic Leveler Adjustment

### Hitch Adjustment

1. It is important for the VT Plus to maintain a proper draft line with the tractor to do a level job of discing. The draft line will vary depending on soil conditions and tractor drawbar height. The VT Plus is equipped with an adjustable hitch to help insure a proper draft line with the tractor.
2. Generally tractor draw-bars greater than 17" tall will require the hitch to be in the upper position. 17" draw-bars and below should be in the lower position. Operating conditions may also influence the hitch adjustment. The hitch is most commonly located in the upper position.
3. A hitch adjustment that is too high will leave a center furrow, as the front of the 7530 VT will operate too deep. A low hitch adjustment can cause a center ridge, regardless of leveler setting.

#### **IMPORTANT**

**Excessive down pressure with gauge wheels can also create a center ridge regardless of hitch and leveler settings.**



**Figure 4-12: Hitch Adjustment**

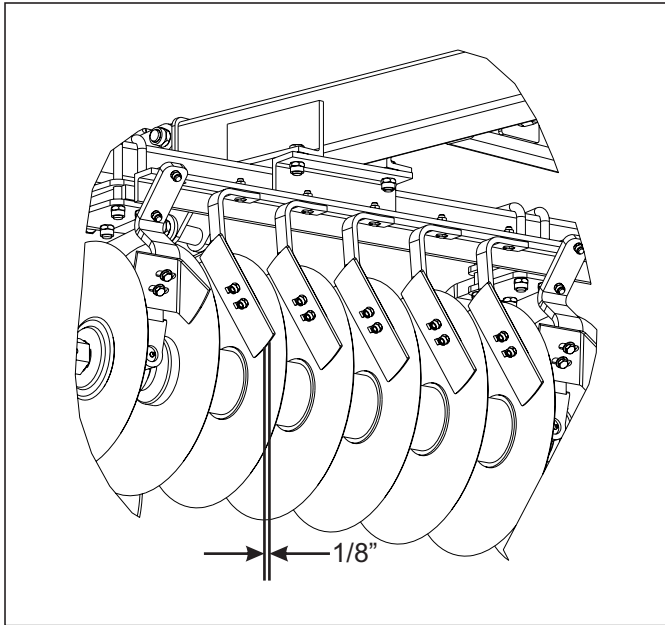
4. To adjust the hitch (See Figure 4-12.):
  - a. Lower the VT Plus to the ground.
  - b. Adjust the leveler screw cylinder in or out until the pressure is relieved on the leveling system (See "Leveling (Side to Side)" on page 4-6 and "Leveling (Front-to-Rear)" on page 4-8).
  - c. Remove the 1-8 X 4 hex head cap screw and hardware from the leveler ball joint link at the center rear of the hitch assembly.
  - d. Loosen, but do not remove the bolts that pass through the ball joint connections at the outer rear connections of the hitch.
  - e. Remove the bolt through the two hole clamp plates (above or below) the rear connections of the hitch ball joint.
  - f. Vertically raise or lower the hitch to the desired operating position.
  - g. Reinstall the bolt through the two-hole clamp plates to secure the hitch in the new position.
  - h. Re-tighten all hitch bolts.
  - i. Install the bolt in the leveler ball joint link in the new position at the rear of the hitch and re-tighten.

#### **IMPORTANT**

**When the hitch is in the lower position, the leveler ball joint link will be in the upper mounting hole at the rear of the tongue. If the hitch is in the raised mounting position, the leveler ball joint link will be in the lower hole at the rear of the tongue.**

## Scraper Adjustment

The VT Plus is equipped with rigid scrapers at regular spools with dual scrapers at the disc bearings.



**Figure 4-13: Scraper Adjustment**

1. Rigid scrapers should be set initially as close to the disc blade as possible without rubbing (approximately 1/8") (See Figure 4-13.) A slotted hole at the top of each scraper is provided for individual adjustment. Adjustments may be made for entire gangs, by loosening the u-bolts around the angle-iron scraper bars and sliding the whole bar. Scraper arms are made of spring steel. In wet conditions, the scraper may be set against the disc blade and will function as a spring-loaded scraper.
2. Scraper blades have two positions. The blades are initially set in the front position to position scraper closer to the spool. This position will perform better in wetter conditions at shallower depths. As the depth is increased, the front gangs may operate better with the scrapers in the rear position, while leaving the rear gang scrapers closer to the spools.
3. Dual scrapers are provided at the bearing locations to scrape the disc blade and to limit the amount of soil and residue carried into the bearing hanger. Scrapers can be individually adjusted in or out from the concave side of the disc blade.

## Disc Blades

1. The 7530 VT Plus is equipped with 22"/24" -4 ga. (.256), or 22"/24" -4 ga. (.256) rollable low concavity disc blades on both front and rear. The use of other concavity blades can give unpredictable results and is not recommended.
2. Sharpening – In some cases there is a desire to sharpen disc blades for improved cutting. There are several people who roll-sharpen disc blades. Most disc blades used today are made of chrome-boron steel. The chrome-boron steel has a higher hardness than traditional carbon-steel blades for increased wear. Higher hardness makes roll sharpening more difficult often with mixed results, and is not covered by warranty. Disc blade manufacturers will not cover any alterations to blades other than the place of manufacture. Results from roll-sharpening damage may not be immediate, and may take more than a season to be noticeable. If you choose to sharpen disc blades, check with local dealers for reputable experienced sharpeners that will stand behind their work.



### DANGER

Disc blades are extremely sharp. Exercise extreme care when working on or near disc blades. Do not allow discs to roll over or fall onto any bodily part. Do not allow wrenches to slip when working near disc blades. Never push wrenches toward disc blades. Do not climb over machine above disc blades. Failure to stay clear of disc blade edges can cause serious personal injury or death.

## Disc Gang Assembly

1. The disc gangs are assembled using 1-3/4" diameter gang shaft. Spring-loaded end collars are used on each end of the disc gangs to maintain clamping force of the gang shaft. Slotted hex nuts are installed at both ends of the disc gangs to allow service from either end.
2. When disassembling a disc gang, note the locations of the bearings and tapered blades. Remove the 3/8 roll pin from the end of the gang shaft and clean any remaining soil or debris from the gang shaft threads. Closed-end gang shaft wrenches are provided on the center frame to fit the gang nuts. An additional extension or cheater pipe may be required to loosen the gang shaft.
3. When reassembling the disc gang, remove any soil or mud from the disc blades and spools to ensure a clean surface when tightening the gang. Clean the gang threads and install the gang nut. Torque the disc gang shaft to a minimum of 1250 ft-lbs (See Figure 4-14.)



### CAUTION

Tighten all 1-3/4" nuts to 1,250 foot-pounds of torque (See Figure 4-14.)

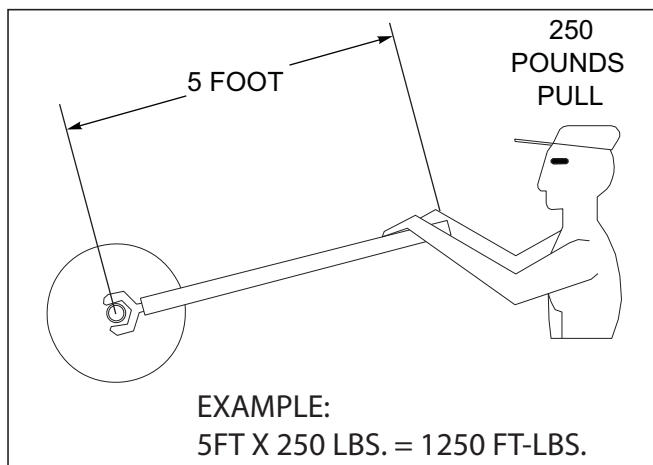


Figure 4-14: 1,250 Foot-Pounds of Torque

## Front Gauge Wheels

1. The 7530 is equipped with castoring gauge wheels at the outer front corners of each wing. These gauge wheels are used to limit depth of the wings, and prevent gouging and buckling of wing frames.
2. Gauge wheels are not intended to carry the wing, but prevent excessive depth. Adjust the wheels to carry some weight, but not enough to hold the wing from reaching operating depth set with the main lift hydraulics.

### IMPORTANT

**Excessive down pressure can cause the implement to throw a center ridge.**

3. To adjust the gauge wheel depth, loosen and adjust the nuts on each side of the gauge wheel cross. A wrench is provided on the implement for this adjustment. All other connections should remain tight. Securely tighten the adjusting nuts when complete. Both gauge wheel assemblies should be set the same. Verify adjustment by measuring the length of the bolt centers of the gauge wheel adjustment rod.

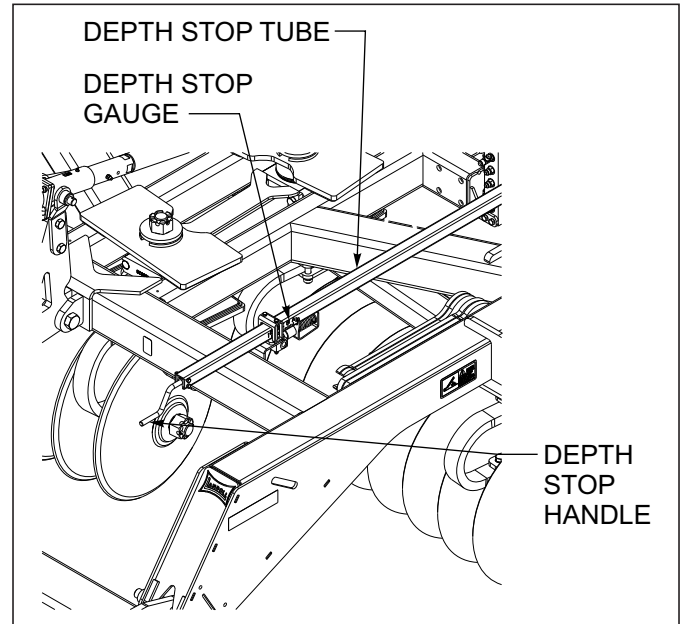
## Depth Stop Adjustment (Manual)

The operating depth of the VT Plus is controlled by a single-point depth stop. The stop is located at the center front of the machine.

1. Adjust the depth stop by turning the handle in (clockwise) to increase operating depth (**See Figure 4-15.**) Turn the handle out (counter-clockwise) to decrease operating depth. One turn will equal approximately 3/16" adjustment in depth.
2. The gauge on the side of the depth stop tube gives a reference for depth setting. The "A" setting refers to maximum operating depth.

### IMPORTANT

**For maximum operating depth, the lift wheels must be in contact with the ground and carry some of the machine weight. Raising the lift wheels off the ground, permits uncontrolled depth of each frame section and does not allow the leveler to function properly.**



**Figure 4-15: Depth Stop Adjustment (Manual)**

### Hydraulic Maintenance

1. Check the tractor hydraulic fluid level per tractor owner's manual and after any leakage. Check fluid level with the cylinders in the retracted position.
2. If a cylinder or valve leaks, disassemble the parts to determine the cause of the leak. Any time a cylinder is opened up, or whenever any seal replacement is necessary, it is advisable to clean all parts and replace all seals. Seal kits are available from your Landoll dealer.
3. Check all hydraulic hoses weekly. Look for binding or cracking. Replace all worn or defective parts immediately.

#### **IMPORTANT**

**Unfold, lower the unit to the ground, and relieve hydraulic pressure before attempting to service any hydraulic component.**

4. Transport locks are provided to hold the implement in a raised position. Do not attempt to perform any service work under the implement without first installing the transport locks. Before servicing any hydraulic component, lower the implement to the ground and relieve all system pressure. If a hydraulic component is disconnected, repaired, or replaced, it will be necessary to purge the system of air before operation. **See “Hydraulic Lift System” on page 4-3 and “Hydraulic Fold System” on page 4-4** on how to purge the hydraulic systems.

### Transport

1. Check and follow all federal, state, and local requirements before transporting the VT Plus.
2. The 7530 should be transported only by tractor required for field operation. The implement weight should not exceed more than 1.5 times the tractor weight. Maximum transport speed for the 7530 is 20 mph for the implement and is designated on the speed identification symbol located on the front of the implement (**See Figure 4-16.**)

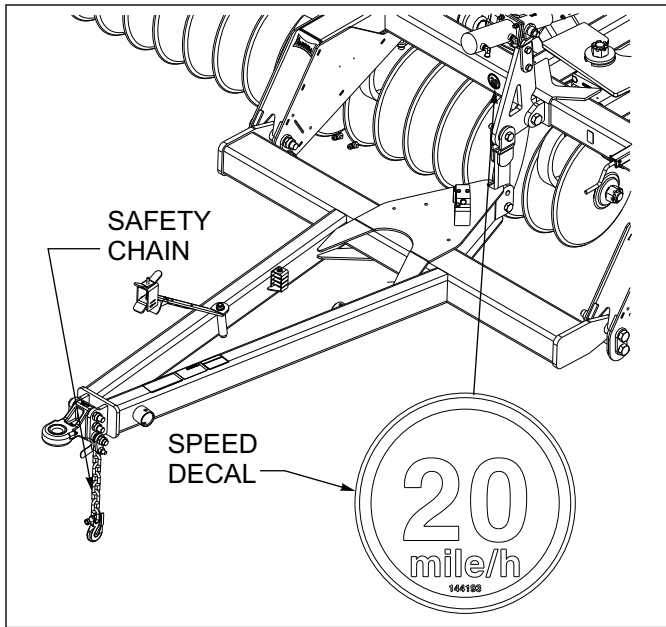


#### **CAUTION**

**Excessive speed may result in loss of control of the tractor and implement, reduced braking ability, or failure of the implement tire or structure. Do not exceed the implement maximum specified ground speed regardless of the capability of the maximum tractor speed.**

3. When towing equipment in combination, the maximum equipment ground speed shall be limited to the lowest specified ground speed of any of the towed implements.
4. Maximum transport speed shall be the lesser of travel speed specified in the operator's manual, speed identification symbol, information sign of towed equipment, or limit of road conditions.
5. Slow down when driving on rough roads. Reduce speed when turning, or on curves and slopes to avoid tipping. Equipment altered other than the place of manufacture may reduce the maximum transport speed. Additional weight, added tanks, harrowing attachments, etc. may reduce implement load carrying capabilities.
6. A safety chain is provided with the implement to insure safe transport.
  - a. The safety chain should have a tensile strength equal to or greater than the gross weight of the implement. The chain is attached to the lower hitch clevis hole with two flat washers between the clamp plates to assure a tight connection. Always use a 1" diameter Grade 8 bolt for this connection.
  - b. Attach the safety chain to the tractor drawbar (**See Figure 4-16.**) Provide only enough slack in the chain for turning. Do not use an intermediate chain support as the attaching point for the chain on the tractor. Do not pull the implement by the safety chain.





**Figure 4-16: Hitch, Speed Identification Symbol, and Safety Chain**

- c. When unhitching from the tractor attach the hook end of the chain to a free link close to the hitch clevis for storage. This will keep the hook off the ground, reducing corrosion and keep the hook functioning properly.
  - d. Regularly inspect the safety chain for worn, stretched, or broken links and ends. Replace the safety chain if it is damaged or deformed in any way.
7. Check that tires are of proper size, load rating, and inflated to manufacture specifications before transporting. Check wheel lug bolts to insure tightness.
  8. Know the transport heights and widths of the unit before transporting. Attachments such as leveling harrows can increase the transport dimensions of the implement. Use caution when transporting near bridges and power lines.



**WARNING**

Electrocution can occur without direct contact.

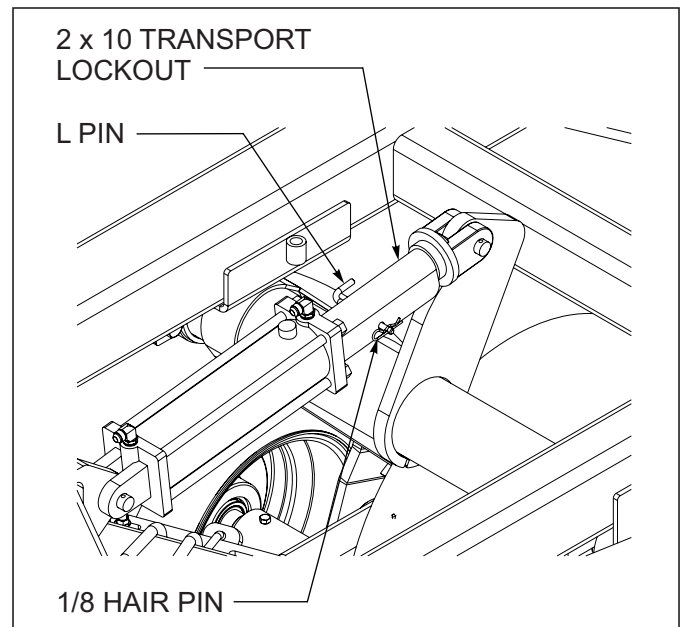
9. Raise the unit to full transport height.
10. Install transport locks on both lift and fold systems. Do not depend solely on implement hydraulics for transport. (See Figure 4-17.)



**WARNING**

Failure to use transport lock pins during transport may result in permanent equipment damage, serious injury, or death.

11. Transport during daylight hours whenever possible. Always use flashing warning lights, except where such use is prohibited by law. Make sure lights, reflectors and SMV emblem are clearly visible and operating. Remove any obstructions such as dirt, mud, stalks or residue that restricts view before transporting.
12. To increase stability and reel clearance on center frame, use hydraulic leveler to roll the unit forward.

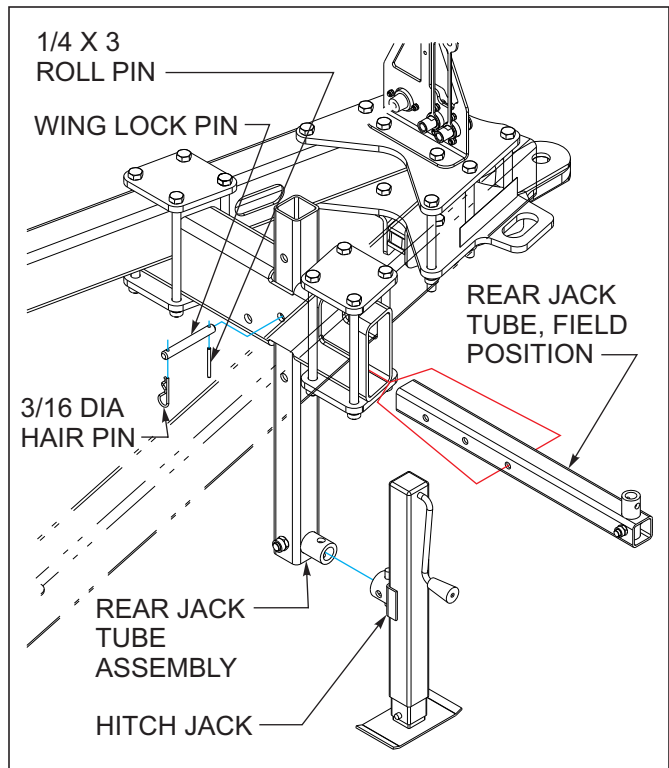


**Figure 4-17: Installed Transport Locks**

### Rear Hitch Jack Operation

Depending upon the rear harrow used in combination with the rear tow hitch it may be necessary to have a rear jack support when unhooking in the raised position or if unhooking the VT with a towed implement and they both need to be in the raised position.

1. Remove the 3/16 dia hair pin from the wing lock pin and slide the rear jack tube assembly out of the hitch jack mount, field position **(See Figure 4-18.)**
2. Slide the rear jack tube assembly in from the bottom of the slotted hole of the hitch jack mount tube as shown. secure with the wing pin through the aligned holes and secure pin with the 3/16 dia hair pin. Remove the hitch jack from the hitch and install it on the rear jack tube assembly. The hitch jack may be adjusted down until it is on the ground.
3. Before pulling the VT Plus be sure and put the rear jack tube assembly back in the field position and install the hitch jack back on the hitch storage tube mount.



**Figure 4-18: Rear Hitch Jack Operation**

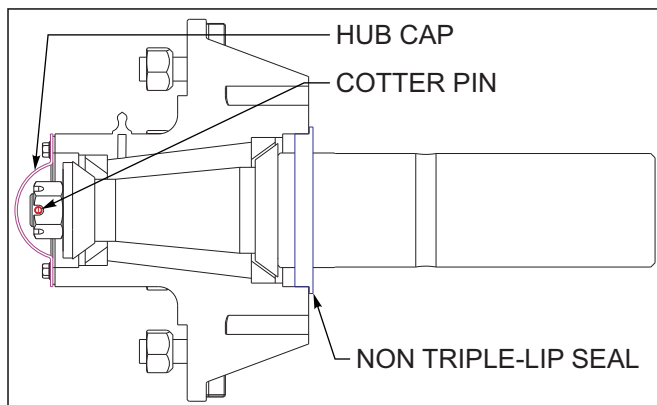


## Wheel Bearing Maintenance – Non Triple-Lip

Transport tires use a self-contained seal with multiple lips. The seal fits tight on both the spindle and wheel hub. The seal when properly installed will rotate internally and freely. This seal is will also allow grease to pass when lubricating the hub.

Wheel bearing maintenance should be performed at the beginning of every season of use. Check the wheel bearings periodically for excessive end play. If needed, adjust or replace them using the following procedure:

1. Place the frame on blocks or stands sufficiently to lift the tire clear of the ground.
2. Remove the tire.
3. Remove the dust cap, gasket, cotter pin, slotted nut, and washer.
4. Remove the hub assembly from the spindle. Clean and inspect the bearings and hub cavity. Replace any worn or defective parts.
5. Repack the bearings using a high-quality wheel bearing grease.
6. Install the inner bearing into the hub and install the grease seal. Use a driver to install the seal, to avoid damaging the outer edge of the seal. Drive the seal squarely into the hub to avoid any seal distortion.
7. Slide the hub, bearing, and seal onto a clean spindle
8. Install the outer bearing, washer, and slotted nut.
9. Tighten the slotted nut while rotating the hub until there is a slight resistance to hub rotation. Then back the slotted nut off one notch, until the hub rotates freely without end play. A new seal will have some resistance, making the hub turn a little harder than usual.
10. Install the cotter pin, dust cap and gasket. Do not over-tighten the dust cap screws causing the gasket to come out **See Figure 4-19.**



**Figure 4-19: Non-Triple Lip-Seal**

## Wheel Bearing Maintenance -- Triple-Lip

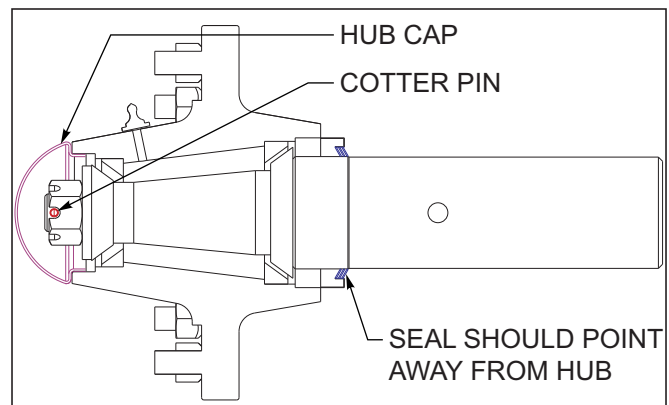
Wheel bearing maintenance should be performed at the beginning of every season of use. Check the wheel bearings periodically for excessive end play. If needed, adjust or replace them using the following procedure:

1. Place the frame on blocks or stands sufficient to lift the tire clear of the ground.
2. Remove the tire.
3. Remove the hub cap, cotter pin, slotted nut and washer.
4. Remove the hub. Clean and inspect the bearings and hub cavity. Replace any worn or defective parts.
5. Repack the bearings using a high-quality wheel bearing grease.
6. Slide the triple-lip seal onto the spindle. Do not install the seal into the hub.
7. Slide the inner bearing cone and hub onto the spindle.
8. Install the outer bearing cone, washer and slotted nut.
9. Tighten the slotted nut while rotating the hub until there is a slight resistance to wheel rotation. Then, back the slotted nut off one notch, until the wheel rotates freely without end play.
10. Slide the triple-lip seal to the hub and install the seal in the hub.

### NOTE

*The triple-lip seals should point away from the hub to keep contaminants out and allow grease to pass See Figure 4-20.*

11. Install a new cotter pin and replace the hub cap. **See Figure 4-20.**



**Figure 4-20: Triple Lip-Seal**

## Lubrication Maintenance

1. A proper maintenance schedule will insure a long operating life and peak performance. Performing the following lubrication will ensure maximum operating life of the 7530 VT (See Table 4-1 and Figure 4-23.)
2. When lubricating the VT Plus, SAE multi-purpose EP grease, or EP grease with 3-5% molybdenum sulfide is recommended. Wipe soil from fittings before greasing. Replace any lost or broken fittings immediately.
3. Disc gang and conditioner reel bearings are equipped with seals that will let grease pass and not harm the seal. Regular lubrication will maintain a full grease cavity and help purge any contaminants. Grease the bearings before long periods of storage to prevent moisture buildup within the bearing cavity.
4. Wheel seals, when properly installed, will allow grease to pass without harm to seals. Regular lubrication will extend service life, particularly in severe operating conditions.
5. The VT Plus is equipped with maintenance-free bearings in the lifts, leveler, wing hinges. These areas require no lubrication.
6. The gang pivot pin will need greased annually (See Figure 4-21.). Remove the clevis pin and 1/8" cotter pin. Check to see if gang pivot castle nut is still tight, if it is real loose remove pin and check for wear on pin or spring bushings. Replace pin or bushings if needed. If nut is still tight grease the zerk in top of pin and re-install the clevis pin and 1/8" cotter pin (See Figure 4-21.)

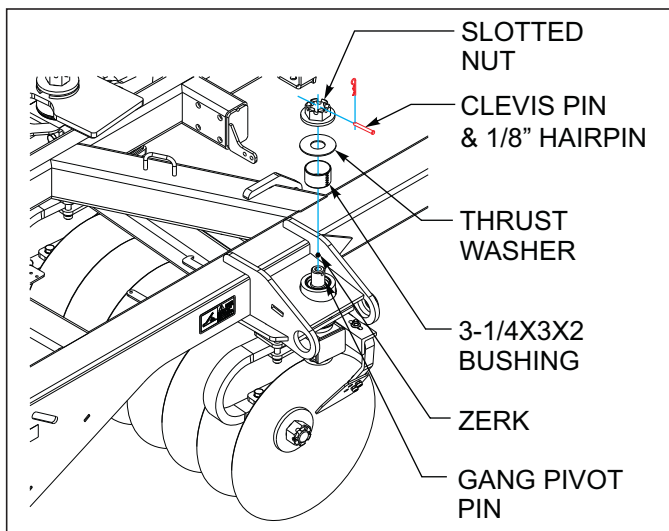


Figure 4-21: Gang Pivot Pin

## Lift Cylinder Maintenance

**NOTE**

*The hard steel bushings and pins in the rod end of the lift cylinders need checked for wear and replaced if needed See Figure 4-22.*

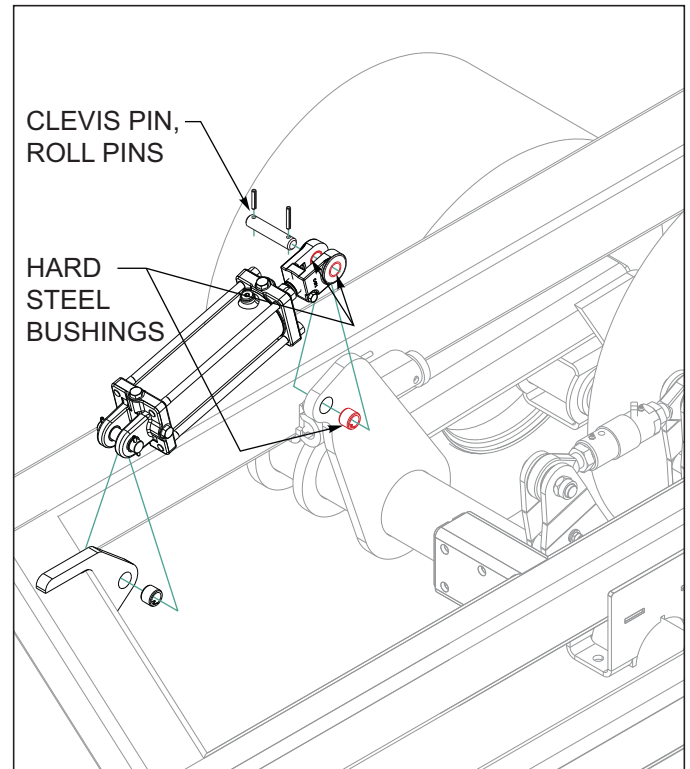


Figure 4-22: Lift Cylinder Pin and Bushings

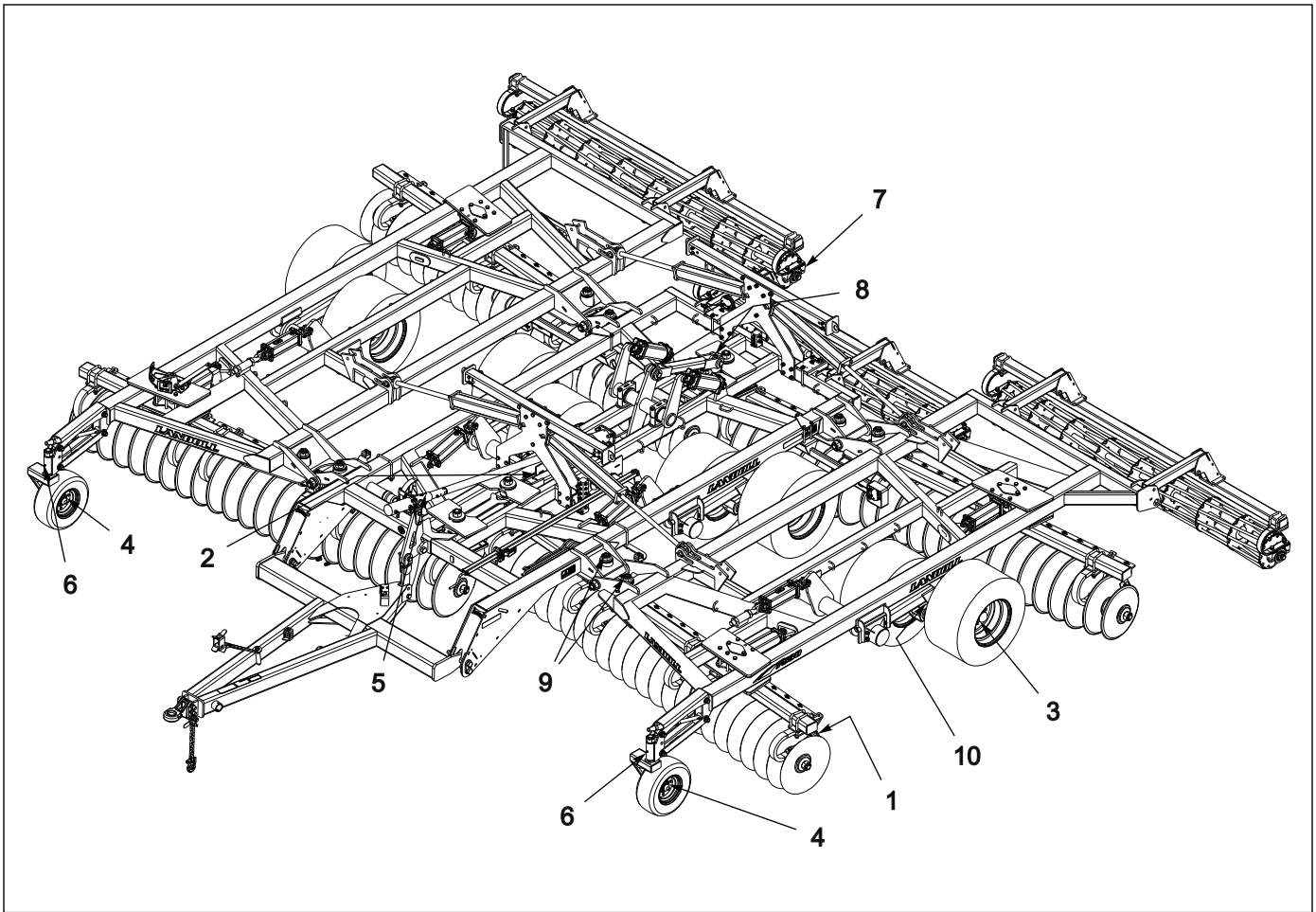


Figure 4-23: Lubrication Schedule

LUBRICATION TABLE			
ITEM	DESCRIPTION	NO. OF LUBE POINTS	INTERVAL (Hours Unless Stated)
1	Disc Gang Bearings	1 each	10
2	Radius Rod	2	50
3	Wheel Hubs	1 each	50
4	Front Gauge 6 Bolt Wheel Hubs	1 each	50
5	Hydraulic Leveler Tube	1	50
6	Front Gauge Wheel Caster Hub	1 each	10
7	Conditioner Reel Bearings	1 each	10
8	Gang Adjust Linkage Bearing	1 each - 4 total	50
9	Gang Pivot Pin	1 each - 8 total	Annually (See Figure 4-21.)
10	Walking Tandem Pivots	1 each - 4 total	50

Table 4-1: Lubrication Table

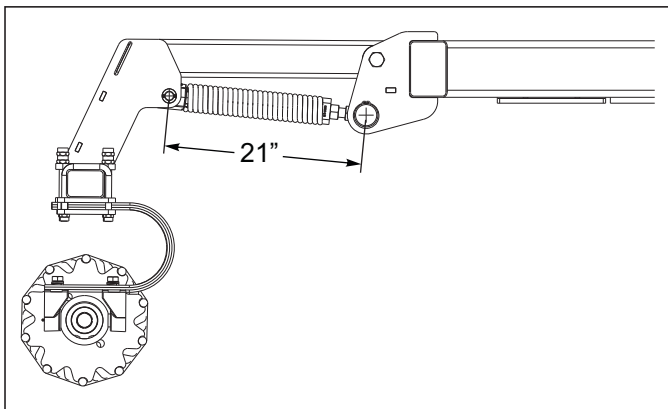
## Storage

1. The service life of the VT Plus will be extended by proper off-season storage practices. Prior to storing the unit, complete the following procedures:
  - a. Completely clean the unit.
  - b. Inspect the machine for worn or defective parts. Replace as needed.
  - c. Repaint all areas where the original paint is worn off.
  - d. Grease all exposed metal surfaces of shanks, points and discs.
  - e. Apply a light coating of oil or grease to exposed cylinder rods to prevent them from rusting.
  - f. Lubricate each point of the machine as stated in **“Lubrication Table” on page 4-20.**
2. Store the unit in a shed or under a tarpaulin to protect it from the weather. The ground tools and tires should rest on boards, or some other object, to keep them out of the soil.
3. If the unit must be stored outside, unfold the VT Plus to prevent moisture buildup in the disc gang and wheel bearings.
4. If the unit is stored in the folded position, make sure the transport lock pins are installed to prevent wing frames settling.

## Conditioner Reels

The 7530 VT may be equipped with optional conditioner/double reel attachment. The conditioner/double reels will help to firm the soil profile, while mixing and breaking up soil clods. It can create excellent seed beds in finishing passes, and help anchor residue in primary operations.

1. Initially set the depth of the conditioner reel with the bottom of the reel approximately 1" above the bottom of the disc gang blades. This will be approximately 21" spring centers (for 24" disc blades) (See **Figure 4-24.**)
2. To adjust the reel height, loosen the locking 1" hex nut at the front of the spring assembly. Also loosen the 1" nut on the back side of the 2-1/2" diameter front spring pin.



**Figure 4-24: Conditioner Reel Setting**

3. Turn the 1 x 9 adjusting bolt in or out to the desired height, then re-tighten both locking nuts. Repeat for each conditioner reel arm, and set all spring lengths the same.
4. Use a shallower depth setting when operating in lighter soils or wetter conditions. This will avoid plugging of the conditioner reel. Raising of the entire disc when working in a wet spot will reduce reel plugging as well. For heavier or dryer soils, an increased reel depth may be used.

### NOTE

**Excessive reel down pressure will try to roll the disc over on the front gangs causing the front to dip.**

5. Level the disc front-to-rear after changes in reel depth or field conditions.



### WARNING

**Know and verify the actual implement height and width before transporting. Attachments may increase the overall transport height and width of the implement. Use caution when operating near power lines. Electrocution can occur without direct contact.**

## Hydraulic Conditioner Reels

An optional hydraulic controlled reel is available for the 7530 VT. The hydraulic reel functions similar to the non-hydraulic reel.

The hydraulic reel operates on a separate hydraulic circuit. The reels may be raised or lowered hydraulically from the operator seat. This can be very useful when working around a wet area to prevent plugging. The reels may be operated all the way up, or all the way down. There is no intermediate working depth.

1. Maximum reel working depth is set by adjusting the spring on each reel arm. To adjust the conditioner reel spring, with the disc raised, lower the hydraulic reels, and relieve any reel system pressure.
2. Loosen the 1" locking hex nut at the front of the spring assembly, and loosen the 3/8 set screw in spring casting.
3. Using the flats on the rod end of the hydraulic cylinder, turn the cylinder shaft in or out to the desired spring setting.
4. Re-tighten the locking hex nut and set screw, repeat for each conditioner reel arm.
5. If operating the conditioner reels in the raised position for extended lengths of time, the VT front-to-rear level may need to be adjusted to account for the extra weight now being carried by the rear of the VT. Likewise excessive reel down pressure will try to roll the disc over on the front disc gangs, requiring the VT to be leveled.



## Troubleshooting Guide

The Troubleshooting Guide, shown below, is included to help you quickly locate problems that can happen using your 7530 VT. Follow all safety precautions stated in the previous when making any adjustments to your machine.

PROBLEM	PROBABLE CAUSE	SOLUTION
UNIT NOT LEVEL, LEAVING CENTER RIDGE	Leveler not adjusted properly	Adjust leveler, lower front gang
	Hitch adjustment too low	Raise implement hitch point
	Gauge wheels carrying too much weight	Raise gauge wheels
UNIT NOT LEVEL, LEAVING CENTER FURROW	Leveler not adjusted properly	Adjust leveler, raise front gang
	Hitch adjustment too high	Lower implement hitch point
UNIT NOT LEVEL, LEAVING RIDGE ON OUTSIDE OF UNIT	Unit not level front to rear, front running too deep	Adjust unit to be level.
	Wings not level with center frame	Adjust side to side level. Wings should typically be set even with or slightly higher than center section
	Operating speed too fast, front gang moving soil past rear gang	Slow down to proper operating speed for field conditions.
	Hitch adjustment too high	Lower implement hitch point.
	Gauge wheels too high, allowing wings to go too deep	Properly reset gauge wheels.
UNEVEN DEPTH	Frame not level side to side	Level center frame side to side.
	Wing frames and center frame not level	Level wing frames to center frame
	Lift cylinders not in phase	Fully extend lift cylinders and hold hydraulic lever until all cylinders are fully extended
	Lift wheels not carrying enough weight	Adjust depth stop and raise implement
	Fold cylinders not fully extended to allow wings to flex	extend fold cylinders fully.
	Tire pressure too low	Check inflation
	Unit not level front to rear	Adjust unit to be level.
UNIT SIDE DRAFTS OR MOVES SIDE TO SIDE	Lift wheels not carrying enough weight	Adjust depth stop and raise implement.
	Unit not level front to rear	Adjust unit to be level.
	Level unit side to side	Level center frame and wing frame to center frame side to side.
	Gauge wheels too high, allowing wings to go too deep	Properly reset gauge wheels.
FRAMES BUCKLING, NOT EVEN	Lift wheels not carrying enough weight	Adjust depth stop and raise implement
	Wing frames and center frame not level to each other	Level wing frames to center frame
	Gauge wheels not set correctly or uneven	Set gauge wheels properly.
WHEEL BEARING FAILURE	Seals not installed correctly	Install seals with the lips pointing outward away from the hub.

## TROUBLESHOOTING GUIDE

PROBLEM	PROBABLE CAUSE	SOLUTION
HYDRAULIC - LIFT CYLINDERS NOT FULLY EXTENDING	Lift cylinders not in phase	Fully extend cylinders and hold hydraulic lever until all cylinders are fully extended.
	Cylinders not installed in proper series	Wing cylinders are smaller diameter than center cylinders. Reinstall cylinders properly.
	Hoses not properly connected:	Check hose routing
HYDRAULIC - ONE SIDE OF CENTER LIFT CYLINDERS NOT FULLY EXTENDING OR CANNOT INSTALL ONE TRANSPORT LOCK	Center lifts not properly timed.	Remove 1" bolt from adjustable radius rod on lifts and fully retract lift cylinders, reinstall radius rod bolt adjusting it to fit the lifts in the position. Check center frame level as described in " <b>Leveling (Side to Side)</b> " on page 4-6. Check 1/2" x 3-1/2" bolts going through plates holding adjustable radius rod on lift. If broken or sheared replace and reinstall radius rod to fit.
HYDRAULIC - ENTIRE UNIT SETTLING	Depth stop valve not working	Repair valve
HYDRAULIC - UNIT SETTLING, ONE WING RAISING	Center frame cylinder leaking internally on side of unit that wing is raising	Repair center master cylinder
HYDRAULIC - WING SETTLING	Wing cylinder leaking:	Repair cylinder
DISC GANG PLUGGING	Scrapers set too far from disc blade	Adjust scrapers to meet disc blade closer and evenly
	Operating depth too deep	Raise unit.
	Conditions too wet	Wait until conditions more favorable.
	In drier conditions, set scraper farther away from disc blade to improve residue flow	
DISC GANG WILL NOT TURN OR PUSHES SOIL	Scrapers set too tight	Readjust scrapers.
	Depth set too deep for loose or wet conditions	Raise implement or wait until conditions are more favorable.
	Gang bearing failure	Replace bearing
DISC GANG BEARING SNAP RING POPS OUT	Gang bearings installed incorrectly	Install bearings with snap ring away from concave side of disc blade.
SCRAPERS BUILD UP WITH EXCESSIVE SOIL/RESIDUE	Scrapers set too far from disc blade	Readjust scrapers.
DISC BLADES LOOSE AND/OR SHEARING ROLL PIN	Gang not tightened properly	Re-tighten gang shafts to 1250-1500 ft-lbs. If gangs have ran loose, gangs may require disassembly to remove soil to properly torque gang shafts. Replace any worn components, shafts/spools, etc.
CONDITIONER REELS PLUGGING	Excessive down pressure	Raise reels w/ adjustment bolt
LIGHTS DO NOT WORK	Harness or lamp connection unplugged	Check all harness/lamp connections to verify that everything is properly connected.

**Document Control Revision Log:**

<b>Date</b>	<b>Form #</b>	<b>New/Updated</b>	<b>Improvement(s): Description and Comments</b>
01/10/2018	F-941-0118	New	Initial Release
11/20/2018	F-941-1118	Update	Walking beam, Hose revisions, Hose, Cylinder
02/08/2019	F-941-0219	Update	Tire/Wheel Revision
04/01/2020	F-941-0420	Update	Added Spare Tire Assembly Revision
12/14/2020	F-941-1220	Update	Added wide center truss to center frame



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# Intertek

Equipment from Landoll Company, LLC is built to exacting standards ensured by ISO 9001 registration at all Landoll manufacturing facilities.

## Model 7530 Adjustable VT Plus Operator's Manual

Re-Order Part Number F-941-1220

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