

AG SHIELD



Land Roller (31-60 foot) 3 section

OPERATOR'S HANDBOOK AND PARTS MANUAL

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Warranty Registration Form - Warranty registration must be filled out by the dealer at the time of delivery, and emailed, faxed, or mailed to Ag Shield within 10 days of customer invoice to validate warranty.

Machine type-e.g. Recon, Land Roller	Model - e.g., 400 or 12- 46- 3	Delivery Date
Serial Number e.g. 1815125	Size - e.g. 7 ft or 46 ft	Options
Additional Serial Number e.g. 1415103	Size - e.g. 7 ft or 46 ft	Options

Customer Name	Phone Number
Mailing Address	City
State / Province	Country
Postal Zip code	Email Address for service & updates- required

enter X

Customer agrees that the equipment was complete with all parts in good working order except as noted below, that the customer has received the owner's handbook, and the customer has been thoroughly instructed in the use of it. Customer agrees that they have been instructed in the care, adjustments, the safe operation of the machine, and the applicable warranty policy.

Dealer Name	Phone Number
Mailing Address	City
State / Province	Country
Postal Zip Code	Email Address for service & updates- required

enter X

Dealer agrees to have thoroughly instructed the customer on the above described equipment, including the contents of the Owner's Handbook, equipment care, adjustments, safe operation, and applicable warranty policy.

Dealer Salesperson Name	Cell Phone Number
Mailing Address	City
State / Province	Country
Postal Zip code	Email Address for service & updates- required

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3. SAFETY

SAFETY ALERT SYMBOL

This Safety Alert symbol means:
ATTENTION! BECOME ALERT!
YOUR SAFETY IS INVOLVED!

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



3 Big Reasons

Accidents Disable and Kill
Accidents Cost
Accidents Can Be Avoided

SIGNAL WORDS:

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

- DANGER** - Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components, which for functional purposes, cannot be guarded.
- WARNING** - Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.
- CAUTION** - Indicates a potentially hazardous situation that, if not avoided, could result in minor injury. It may also be used to alert against unsafe practices.

3.1. SAFETY OVERVIEW

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

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

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

3.2. GENERAL SAFETY

1. Read and understand the Operator's Manual and all safety signs before operating, maintaining, adjusting or transporting the LandRoller.
2. Only trained competent persons shall operate the LandRoller. An untrained operator is not qualified to operate the machine.



3. Have a first-aid kit available for use should the need arise and know how to use it.



4. Have a fire extinguisher available for use should the need arise and know how to use it.



5. Do not allow riders.

6. Wear appropriate protective gear. This list includes but is not limited to:



- A hard hat
 - Protective shoes with slip resistant soles
 - Protective glasses or goggles
 - Heavy gloves
 - Hearing protection
7. Stop the engine, place all controls in neutral, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
 8. Review safety related items with all personnel annually.

3.3. MAINTENANCE SAFETY

1. Review the Operators Manual and all safety items before working with, maintaining or operating the LandRoller.
2. Stop the tractor engine, place all controls in neutral, set park brake, remove ignition key, wait for all moving pads to stop before servicing, adjusting, repairing or unplugging.
3. Before applying pressure to a hydraulic system, make sure all components are tight and that steel lines, hoses and couplings are not damaged.
4. Relieve pressure from hydraulic circuit before servicing or disconnecting from tractor.
5. Keep hands, feet, clothing and hair away from all moving and/or rotating pads.
6. Clear the area of bystanders, especially children, when carrying out any maintenance and repairs or making any adjustments.
7. Place stands or blocks under the frame before working beneath the machine.

3.4. THROWN OBJECTS SAFETY

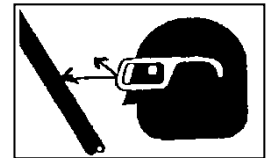
1. Always wear safety goggles when working near or adjusting conditioner.
2. Never stand or run directly behind rollers when machine is rotating, as rollers are capable of throwing obstacles at greater than 30 mph.
3. Shields are provided to reduce thrown debris hazard, leave chain guard in place, be sure the rock guards are in place, and inspect chain guard frequently to ensure protection is in good repair.

3.5. CHAIN DRIVE SAFETY

1. Always keep safety guard in place. You might be the one who trips and falls into a rotating machine.
2. Never adjust the chain tension, roller spacing, roller tension, or other items with the machine running, always stop the machine before opening chain cover.

3.6. HYDRAULIC SAFETY

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



all hoses and fittings are in good condition.

3.7. MECHANICAL GEARBOX DRIVELINE SAFETY

The operator must obey all safety labels and must maintain the proper shielding. A high percentage of driveline injuries occur when safety shielding is missing or not functioning properly.

1. Do not operate the machine without all driveline, tractor, and implement shields in place.
2. Before operating the machine, be sure drivelines are attached securely to the tractor and to the implement.
3. Keep operators and bystanders away from all moving parts.
4. Shut off tractor engine and remove key before coming close to the implement or doing any maintenance

5. Drive shafts shielding must be kept in condition and checked daily to see that it is free spinning on the inner shaft.

3.8. STORAGE SAFETY

1. Store unit in an area away from human activity.
2. Do not permit children to play on or around the stored LandRoller.
3. Store in a lower position so persons cannot be injured, or property cannot be damaged by mechanical failure.

3.9. TRANSPORT SAFETY

1. Read and understand ALL the information in the Operator's Manual regarding procedures and SAFETY when operating the LandRoller in the field and/or on the road.
2. Check with local authorities regarding machinery transport on public roads. Obey all applicable laws and regulations.
3. Always travel at a safe speed. Use caution when making corners or meeting traffic.
4. Make sure the SMV (Slow Moving Vehicle) emblem and all the lights and reflectors that are required by the local highway and transport authorities are in place, are clean and can be seen clearly by all overtaking and oncoming traffic. Daybreak and dusk are particularly dangerous and pilot vehicles are recommended.
5. Ensure that the trailer is hitched positively to the towing vehicle. Always use a safety chain between the machine and the tractor.
6. Keep to the right and yield the right-of-way to allow faster traffic to pass. Drive on the road shoulder, if permitted by law.
7. Always use hazard warning flashers on the Land Roller when transporting unless prohibited by law.

3.10. TIRE SAFETY

1. Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion, which may result in serious injury or death.
2. Do not attempt to mount a tire unless you have the proper equipment and experience to do the job.
3. Have a qualified tire dealer or repair service perform required tire maintenance.

4. Operate the tires at the pressures, loads, and speeds suggested by the manufacturer.

5. Tires rated Farm Highway Service are rated for intermittent service at 50 mph / 80 kilometers per hour.

3.11. OPERATING SAFETY

1. Read and understand the Operator's Manual and all safety signs before using.
2. Stop engine place all controls in neutral, set park brake, remove ignition key, wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
3. Before rolling a field, be familiar with all potential hazards: trees, rocks ditches, gullies, etc. Plan your route to avoid hazards. Keep LandRoller width in mind when maneuvering to avoid obstacles.
4. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
5. Keep all shields and guards in place when operating.
6. Do not allow riders on the LandRoller or tractor during operation or transporting.
7. Clear the area of all bystanders, especially children, before starting.
8. Stay away from machine when folding deflectors. Keep others away.
9. Before applying pressure to the hydraulic system, make sure all components are tight and that steel lines, hoses and couplings are not damaged.
10. Review safety instructions annually

3.12. SAFETY DECALS

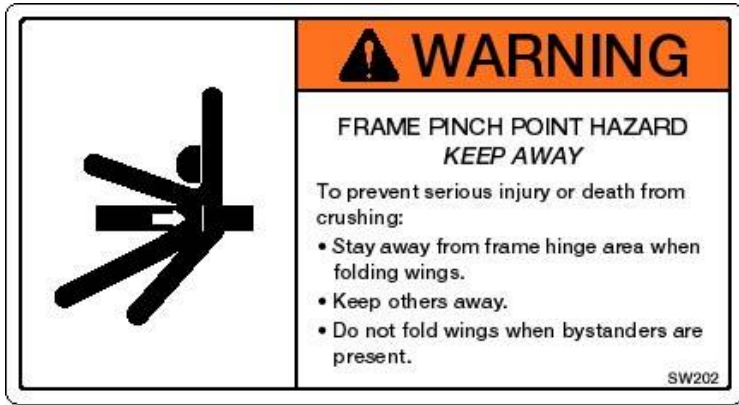
Become familiar with these decals, and the hazards they are marking.



part # 113552



Part # 113523



part number 113555

FIGURE 1 #116140 AG SHIELD STRIPES



FIGURE 2 DECAL AG SHIELD #116141



FIGURE 3 116142 "LANDROLLER" STRIPES



12-52-3

Part # 116149

12-46-3

Part # 116152

12-31-3

Part # 116155

AG SHIELD Mfg.

Made in Benito, Manitoba, Canada 800-561-0132 www.agshield.com

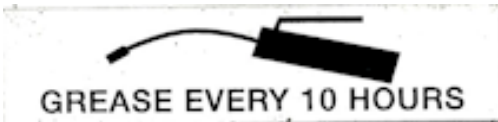
Part # 116107

FIGURE 4 DECAL AGSHIELD MFG SIDE REAR OF HITCH 3X36 #116107



FIGURE 5 STRIPS SIDE DEFLECTOR 3X12 IN #116108

Leveling Blade



Serial plate part number



DANGER



To prevent serious injury or death from pinching:

- Keep all persons and objects clear while any part of this machine is in motion.

205

4. Setup from Shipping Mode

4.1. TRUCK SHIPPING

There are many variations to truck shipping Refer to instructions delivered with your shipment

Items required or preferred for setup

1. Forklift rated 6000 pounds or more.
2. Tractor with hydraulic system to raise and lower the machine, as required.
3. Hand tools
4. Air pressure gauge and possibly a source of air to inflate tires up to 90 psi, and.
5. do a complete grease up.

4.2. EXAMPLES OF THE FOUR (4) POINT HITCH LIFT SETUP



4.3. TOWED OUT SHIPPING

Towed out units should be field ready.

5. OPERATIONS



DANGER

WATCH FOR PEDESTRIAN TRAFFIC- Rollers will always win and pedestrians will lose the battle with a LandRoller.

5.1. EASIFOLD (NOT POWERFOLD) FOLDING FROM ROAD TO FIELD.

EasiFold is the standard Ag Shield configuration where each outer wheel is rotated 25-45 degrees by a hydraulic cylinder, and the operator must then **back up the whole unit** to have the wing move from behind the center section to the field position.

There are 2-3 hydraulic circuits on all Ag Shield LandRollers:

- A. This first circuit hereafter on “Lever 1” that turns the wheels so that a backing up motion will move the LandRoller wings to field position, this is the same circuit that is the used for PowerFold wheel option.
- B. The second circuit (Lever2) that raises or lowers the center and outer wheels for road transport and is tied together with the diagonal arm locking function, the hydraulic hitch locking cylinder.
- C. The third (optional) circuit (Lever3) that raises and lowers the land leveling blade.

Unfolding to field Procedure

1. Chose a reasonably level location with no bystanders or small children in the vicinity.
2. Operate the whole unit in a forward direction until the wings are trailing out behind the center section at an equal and perpendicular angle to the center section.



FIGURE 6 WINGS TRAILING DIRECTLY BEHIND

3. Operate Lever 2 to raise the rollers up ALL the Way to top to allow transport locks to be removed.
4. If so equipped, use lever 3 to raise the leveling blade to the highest position.
5. Set parking brake, place tractor transmission in Neutral, leave the tractor cab tractor,
6. Unlock the front cylinder locks on the hitch.

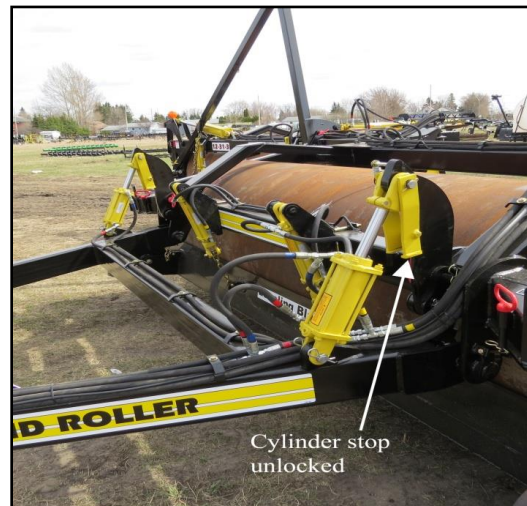


FIGURE 7 FRONT CYLINDER LOCK UNLOCKED

- Remove the pin from the hole A and place into Pin Holder B

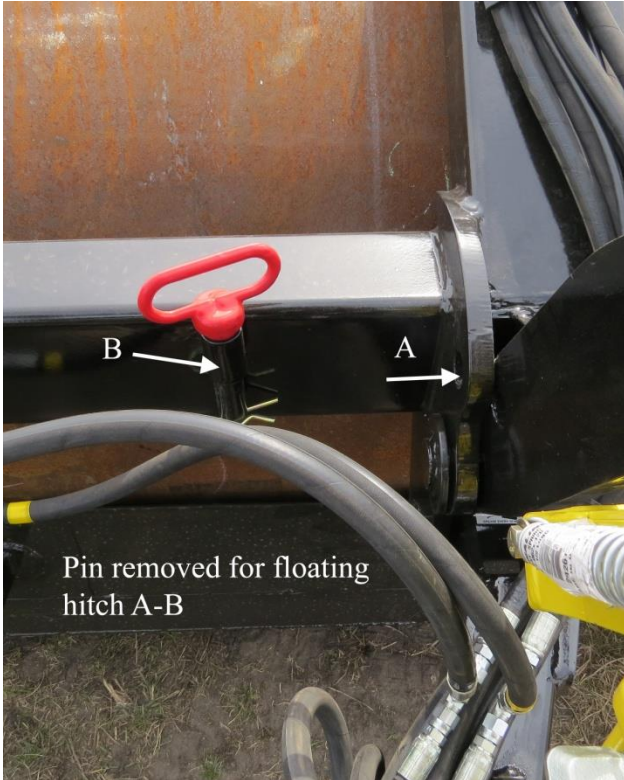


FIGURE 8 FLOATING HITCH UNLOCKED FOR FIELD

- Move the Diagonal arm Hydraulic Lock from closed to Open.

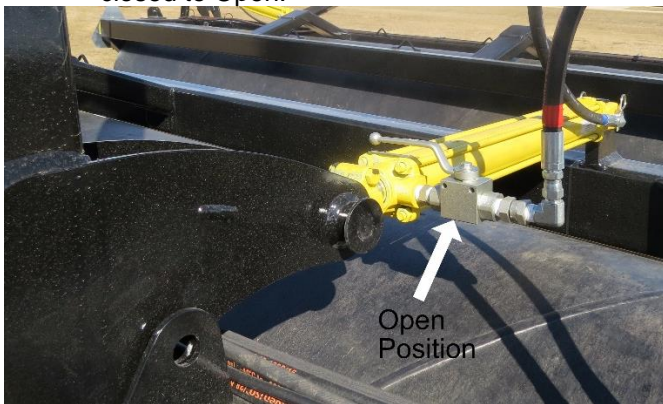


FIGURE 9 DIAGONAL ARM LOCK OPEN POSITION

- Move the height lock on outer wheel from Pin B to Pin A.



FIGURE 10 OUTER WHEEL HEIGHT UNLOCKED POSITION

- Move the Rear Wheel Hydraulic Lock from Closed to Open.



FIGURE 11 OUTER WHEEL UNLOCKED

- Rotate the center wheel lock over center to the rear.



FIGURE 12 CENTER WHEEL UNLOCKED FOR FIELD

12. Repeat steps 6-11 on the opposite side of the machine.
13. Enter tractor cab, operate lever 1 to rotate the outer wheels to angled position stop on the cylinder.
14. Carefully back up the unit until the wings open and are parallel with the center section barrel.
15. Move Lever 1 to rotate the wheels to the road position
16. Move lever 2 to lower the rollers to the ground and raise the wheels completely up into field operation position.
17. Observe that the diagonal pulling arms are fully rotated into the slots on front corner of both ends of the center section.
18. Observe that the front floating hitch cylinder has moved to fully retracted position. The hitch is free to float as the roller follows ground contours.



FIGURE 13 DIAGONAL ARM IN CRADLE AND CYLINDER FULLY RETRACTED

19. Set parking brake, place transmission in neutral, exit the cab.
20. Normally the locking pins that hold diagonal arms into the slots on front of frame are not required. The diagonal pulling arms will stay in the slots during field work. However, if your tractor hydraulics and field conditions combine to have the diagonal pulling arm rise out of the slots while travelling across the field, now is the time to install the retaining pins above the diagonal pulling bar.



FIGURE 14 DIAGONAL PULL ARM LOCKED IN FIELD POSITION

21. Enter the cab, lower the leveling blade if desired, and begin to smooth and firm your field to perfection.
22. **Maximum speed selection** depends upon field conditions. Mellow fields with corn root balls and few 8-inch diameter stones may be rolled at 5-8 mph. When using the leveling blade to move several inches of earth, 3-4 mph is appropriate, even less if there are a lot of larger square cornered stones protruding out of the ground. If there are a lot of 8-inch diameter stones, **speeds above 7 mph may dent the standard .530- .560-inch-thick rollers.** If these are normal conditions and you wish to travel at higher field speeds, consider using the thicker .625-inch wall rollers. Rollers with Leveling blades **MUST** operate slower than rollers without leveling blades.

5.2. FOLDING FROM FIELD TO ROAD PROCEDURE

1. Choose a reasonably level location with no bystanders or children in the vicinity.
2. Move lever 1 to confirm that the outer wheels are rotated to the road position.
3. If so equipped use lever 3 to raise the leveling blade to the highest position.
4. If diagonal pull arm locks were inserted in step 20 above, set parking brake, place tractor transmission in Neutral, leave the tractor cab tractor, remove the diagonal arm lock pins.
5. Enter tractor cab.

6. Operate Lever 2 to raise the rollers up ALL the Way to top to allow transport locks to be engaged.
7. Observe that the diagonal pull arms have risen to road position.
8. Observe that the front floating hitch cylinder has been fully extended.
9. Set parking brake, place tractor transmission in Neutral, leave the tractor cab tractor.
10. Lock the front hydraulic floating hitch cylinder in the extended position, See "A".



FIGURE 15 LOCKED IN ROAD TRANSPORT

11. Insert the 1-inch diameter lock pin "B" to lock the floating hitch leveling rocker into road position. Insert retaining key into end of pin. See Figure above for "B"
12. Move the Diagonal arm lock to the closed position.



FIGURE 16 DIAGONAL ARM CLOSED POSITION

13. Move the height lock on outer wheel from Pin A to Pin B

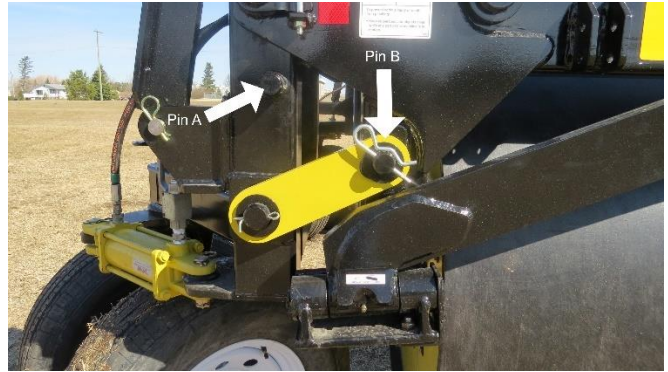


FIGURE 17 REAR WHEEL HEIGHT LOCKED POSITION

14. Move the Rear Wheel Hydraulic Lock to the closed position. (only if the cylinder is fully extended, if it is not fully extended, go back to cab and extend the cylinder on level 1)



FIGURE 18 REAR WHEEL HYDRAULIC LOCK IN THE LOCKED POSITION

15. Lock the Center wheels on the rear of the center section using the over center lock.



FIGURE 19 CENTER SECTION HYDRAULIC LOCK

16. Enter the cab.
17. Drive forward, observing that the wings trail in behind the center section to the normal 12.5-foot-wide transport width. Continue to next location.

5.3. LEVELING BLADE OPERATION

The leveling blade is intended to move occasional or frequent rodent and badger mounds up to 12" high and several feet across. It is **not** designed to replace an earth moving scraper, reshaping the contours of a field, or doing drainage functions. There are 2 hydraulic cylinders to raise the blade when required, check chains to keep the blade from digging too deep, and wheel cam adjustments to operate at different heights.



FIGURE 20 BLADE OPERATING IN PLOUGHED FIELD



FIGURE 21 END GAUGING WHEEL SINKING INTO PLOUGHED GROUND

The blade is designed to operate on steel gauging wheels on each end of the blade, with an average space of 3/4" between the ground and the bottom of the leveling blade. Longer leveling blades have a third wheel at the center of the span to assist in keeping the

blade from digging too deeply into the ground at the center.

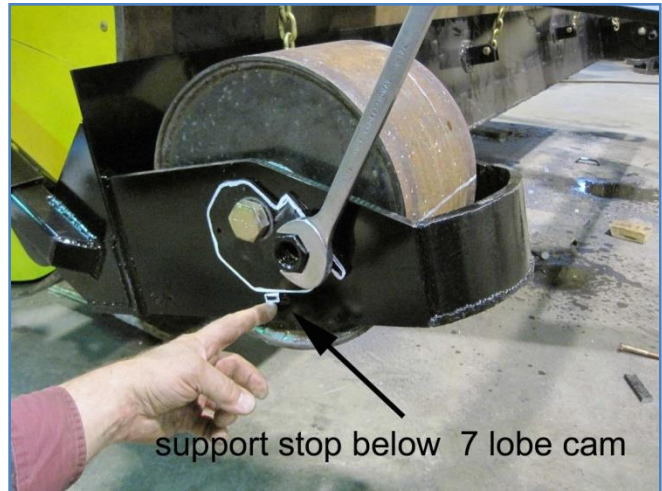


FIGURE 22 SUPPORT STOP AND ADJUST CAM

The wheel projection below the bottom of the cam traced in white in Figure 22 SUPPORT STOP AND ADJUST CAM is determined by rotation of the cam above the support stop.

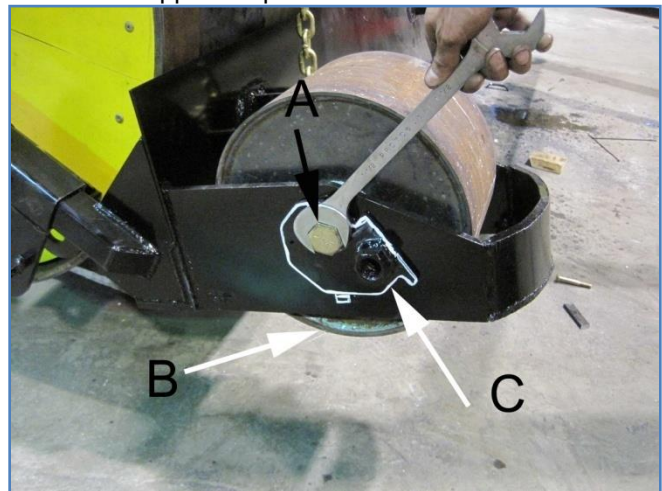


FIGURE 23 WHEEL ADJUST WITH CAM

The wheels have a cam for height setting on both sides of each wheel, when changing the wheel setting, change both sides equally.

To change the height of the blade for various field conditions:

- 1) Use a 1 1/2 inch wrench to loosen bolt A in Figure 23 WHEEL ADJUST WITH CAM
- 2) Rotate the cam by turning with the wrench to desired setting on both sides as shown in Figure 24 ROTATE CAM WITH WRENCH

below. As the cam rotates the wheel projection B will change.

- 3) Tighten bolt A again as tight as you can, 200-300 lb. ft preferred.

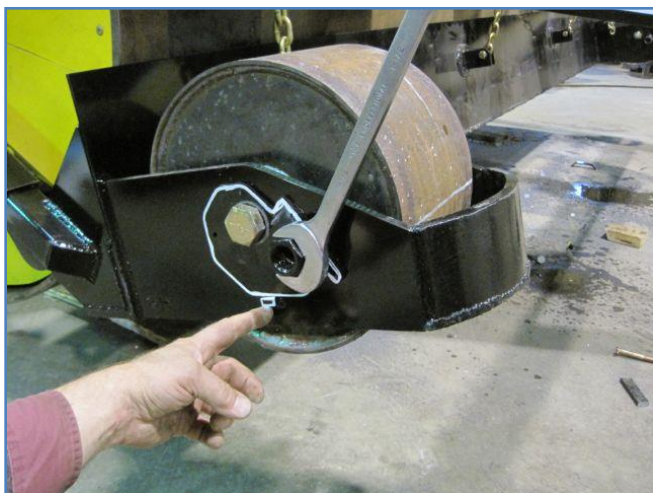


FIGURE 24 ROTATE CAM WITH WRENCH

The optimal wheel projection will change when operating in different field conditions--that is when operating on sod, set the wheel to project $\frac{3}{4}$ of one inch below the cutting blade. When operating in stubble fields consider lowering the wheel farther below the blade to keep the blade $\frac{3}{4}$ " plus above softer ground. When operating in a soft ploughed or summer fallowed field, the wheels may be set to hold the blade at $\frac{3}{4}$ " by sinking into the ground 2 inches or more.

There are several "check" chains attached between the frame and the blade which prevent the blade from rotating under the roller when a large stone is contacted. These chains are factory set to allow the blade to float along on the gauging wheels, having less than 1 inch of slack on a level floor surface.

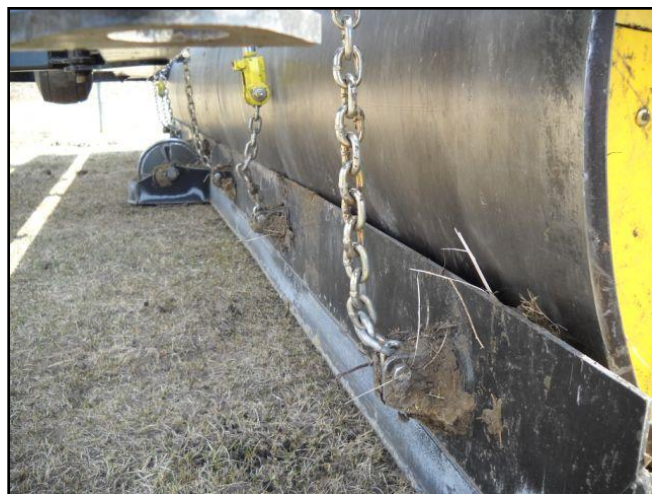


FIGURE 25 CHECK CHAINS LOOSE

The hydraulic lift cylinders are attached to the blade by chains that are factory set to allow blade to travel down about one inch compared to the level floor condition. The cylinder may be used to lift the blade completely up or part way up as may be desired. The cylinders are not synchronized, so uneven lifting may occur if some parts of some sections are more heavily loaded with dirt or sod. To get the blade operating level, raise all the way to the top and lower down to suit the field conditions. The blade may be raised when required to dump sod into lower spots, or to allow stones to pass under and be pushed into the ground.

Obviously, the blade may be raised above stubble in fields where the blade will not be used.

Raise the blade up when road transporting to provide additional clearance for obstacles that may be encountered on approaches or road.



FIGURE 26 BLADE RAISED FOR TRANSPORT, CLEAR STONE, OR DUMP SOD

When operating in sod conditions, a significant buildup of sod in front of the blade is normal. In some conditions it is desirable to raise the blade up to 2 inches above the ground to allow sod to flow evenly out from under the blade, and then lower again when more mounds are spotted to get a complete cut of the mounds to near original ground level.



FIGURE 27 SOD SPREADING FROM MOUNDS

The leveling blade spread all type of manure, horse, cattle, and sheep in the normal course of leveling the rodent mounds.



FIGURE 28 SPREADING MANURE

5.4. WATER FILLING ROLLER TANK

The larger 3 – 5 section LandRollers typically used in grain farming are seldom filled with water. If your conditions require the extra weight, a water fill option may be factory installed, or field installed any time after initial purchase.

The water fill option added about 550 pounds per lineal foot (820 kg/ meter). for example- a nominal 20-foot roller would hold water in about 18 feet of the barrel, and therefore add a maximum of 10350 pounds (4490 kg/ 6 meter).

When planning to fill a 42" roller expect to use 55 Imperial gallons per foot, 66 USG per foot, 250 liters per foot, or 820 liters /meter

Except by special request Ag Shield LandRollers are not designed to be transported while filled. **Damage to machine components will occur if a water filled roller is even attempted to be raised hydraulically to road position.**

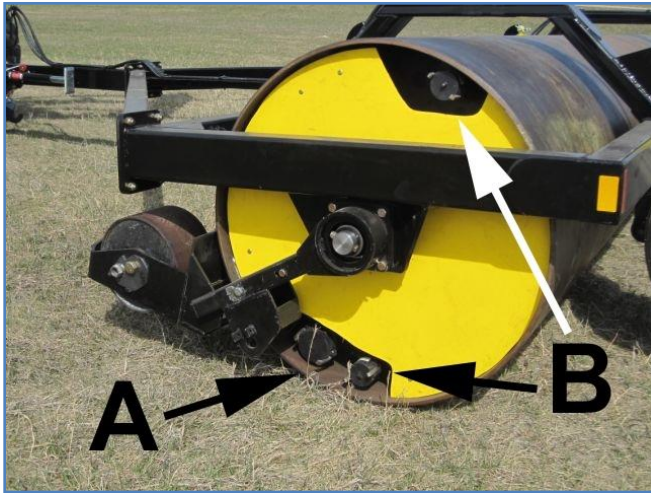


FIGURE 29 WATER FILL PORTS OPTION

There are 3 quick coupler attachments to allow the fastest filling and emptying of the roller. See Figure 29 WATER FILL PORTS OPTION. Port A is a 3" quick coupler, port B are both 2" quick couplers.

The fastest fill is to attach the hose to the 3" connection at the bottom and open a 2" vent at the top. The water may be sucked out with a pump via either a 2 or 3" quick coupler. The tank can be drained the fastest (< 5 minutes per 17-foot barrel) by opening all 3 connections and rolling ahead until the 3 1/2" combination is at the bottom.



FIGURE 30 WATER DRAINING BY GRAVITY

5.5. ACRE METER OPTION

The option electronic hub odometer threads into a ½” fine hole tapped into the end of the right-hand center roller shaft. Install the acre meter with an oil filter wrench to 23 lb. foot of torque with a lock washer to ensure that the unit is not lost. It is protected by a flange welded onto the Veeder-Root electronic acre meter.

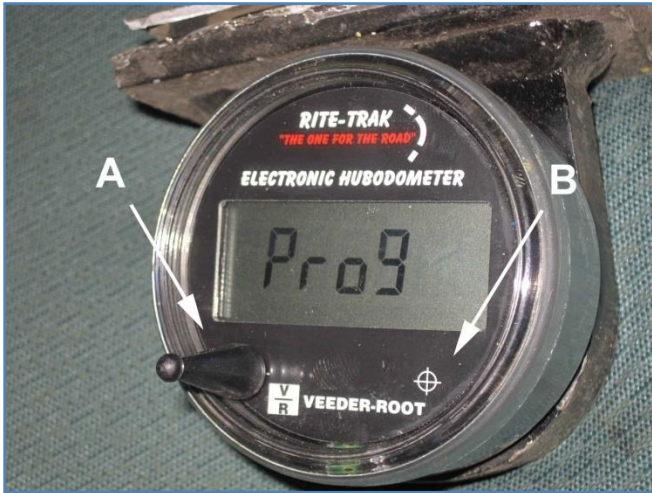


FIGURE 31 ACREMETER TO PROGRAM MODE

See Figure 31 ACREMETER TO PROGRAM MODE above.

The acre meter calibration is done by touching a magnet to the outside of the face of the odometer on a Left spot marked “A” and Right spot marked “B” The simplified instructions to set to 88.0 for a 45-foot LandRoller are:

- 1) Hold magnet on the left position- “A” – in 6 seconds will read serial number, leave on MUCH longer – until PROG shows on screen.
- 2) Lift off left calibration for 1 second, touch magnet down to see units= “acres” set already
- 3) Lift and touch left again advance to revolutions per acre, 0000.0 acres per revolution will how—should be 0088.0 for a 45 foot –



FIGURE 32 CALIBRATING "REVS" FOR 45

- 4) Touch left to advance to second left zero-
- 5) Touch left again to have the third left digit of 0000.0 flashing,
- 6) Touch right “B” eight times to have the 0 advance to first “8” of 0088.0
- 7) Touch left to advance to fourth left digit of 0000.0.
- 8) Touch right “B” 8 times to advance to “8” in the fourth digit.
- 9) Do nothing for 10-20 seconds, and front screen will come up reading 88.0 revs acres in lower left. DO NOT continue to more programming as the counter may become locked and of no value.

Consult the table below for other calibration numbers.

machine width in feet	31	36	42	45	46	52	60
machine width in meters	9.5	11.0	12.8	13.7	14.0	15.9	18.3
acres per 1/2 mile	1.9	2.2	2.5	2.7	2.8	3.1	3.6
rev per one acre	127.8	110.1	94.3	88.1	86.1	76.2	66.0
rev per one hectare	316.0	272.1	233.2	217.7	212.9	188.4	163.2
acres / hour @5 mph	18.8	21.8	25.4	27.3	27.9	31.5	36.4

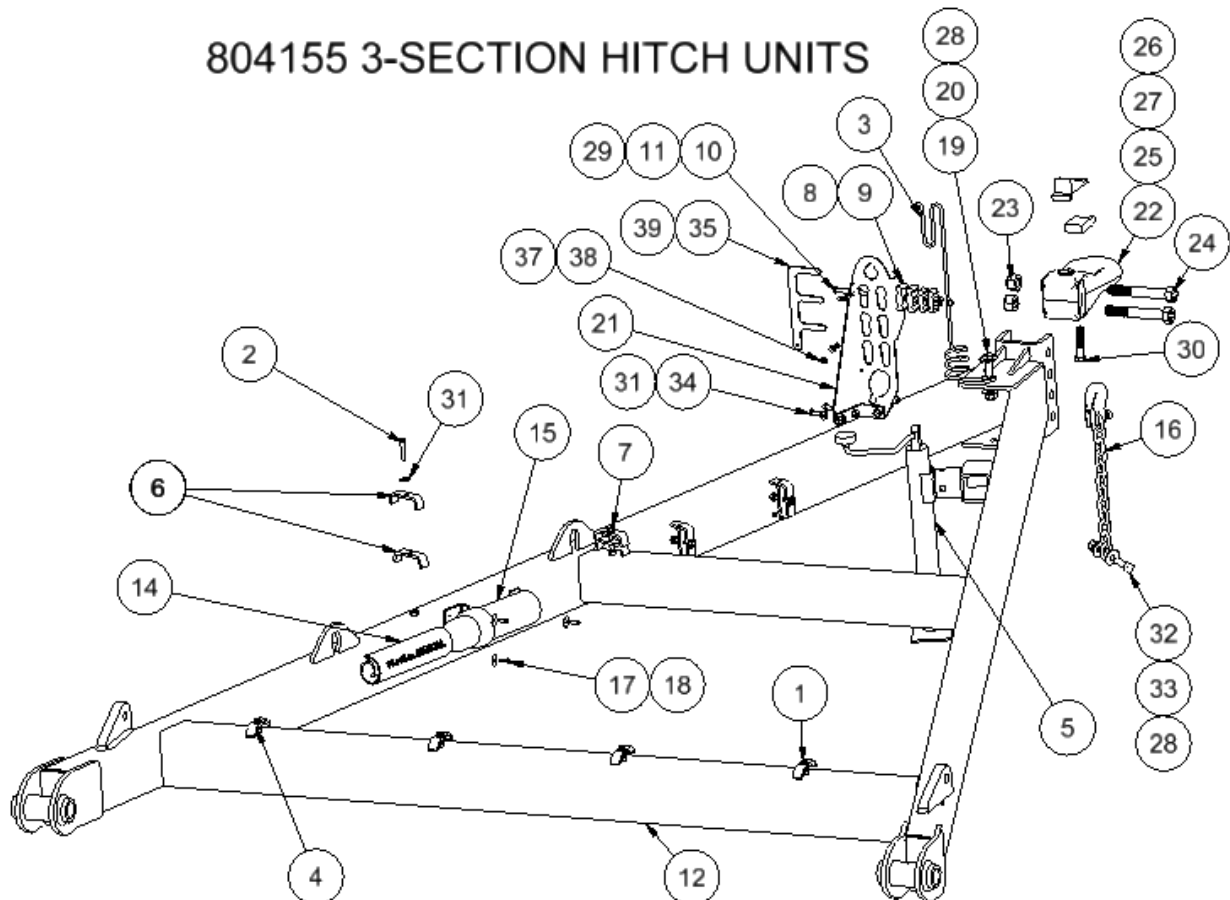
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5.6. LUBRICATION

Grease all pivot points daily, or 8 hours of operation. Grease the bearings on the rollers Annually, No other lubrication is required

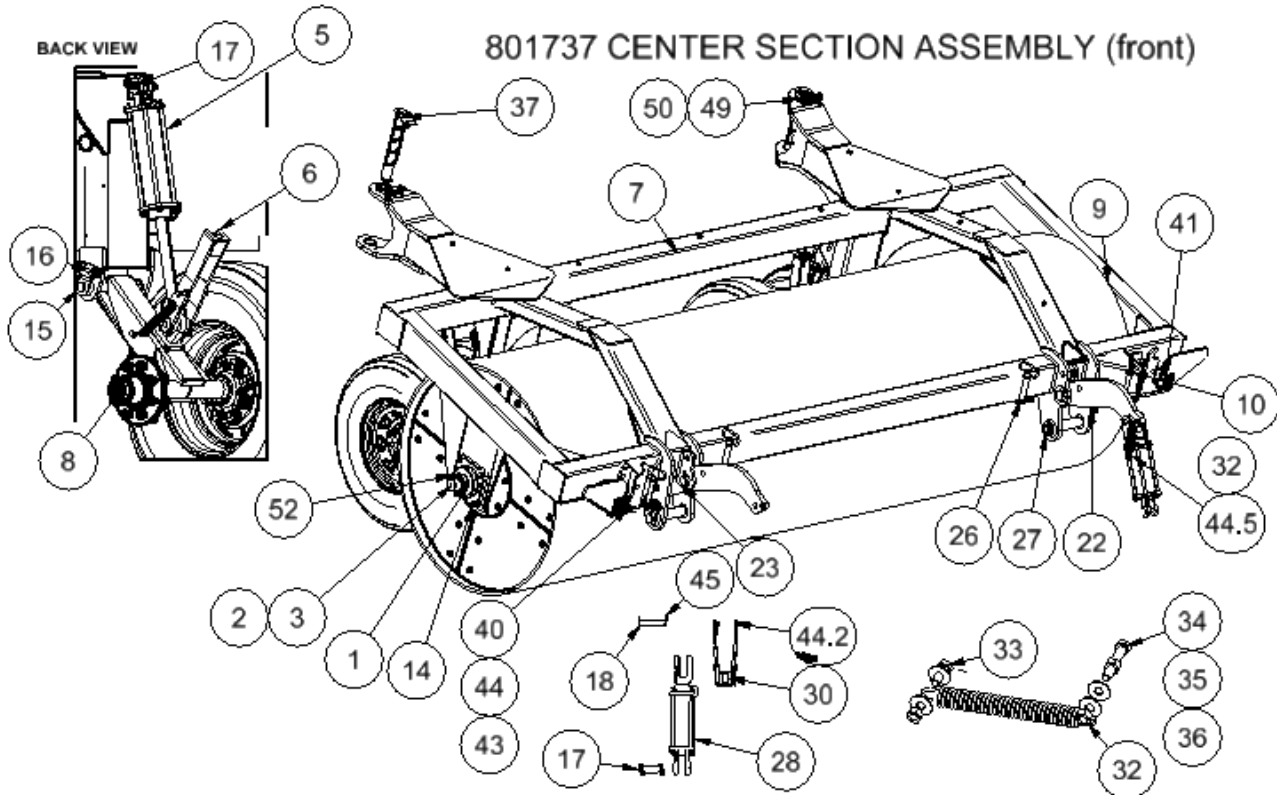
6.Parts

6.1. HITCH 3 SECTION UNITS- 804155



ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	4	100602 bolt 3-8 X 1 gr 8 pltd nc	20	2	101107 flat washer 5/8"
2	1	100606 bolt 3/8" X 2" gr 8 pltd nc	21	1	801884 Hitch Multi Holder 52ft 3S
3	1	128091 Flat Mount Hose Holder	22	1	107100 CTD401V3 Perfect Hitch
4	4	800472 tab hose retainer	23	2	1021485 1 in stover nut NC
5	1	116903 Hitch Jackside Mnt Top Crank	24	2	100932 Bolt Hex 1 x 6 1-2 GR 8
6	8	800479 tab hose retainer 80deg	25	1	107100 302 TOP PLATE
7	3	100608 bolt 3/8" X 2 1/2" gr 8 pltd nc	26	1	107100 203 V-PLATE
8	2	128106 Hose Holder	27	1	107100 205 HITCH CUSHION
9	2	128108 Hose Holder Large	28	2	102117 nut 5 8 nc stover lock
10	1	100614 bolt 3/8" X 4" gr 8 pltd nc	29	1	102123 3 8 NC NUT stover lock GR C
11	1	101105 flat washer 3/8"	30	1	100902 bolt hex head 3 4 nc x 3
12	1	804110 Hitch Wldt 3S 31-46 Dual Cyl	31	11	101105 washer flat 3/8"
13	1	804120 Hitch Wldt 3S- 52ft Dual Cyl	32	1	100803 bolt 5/8nc X 2" gr 8 pltd hex
14	1	800050 3Section Manual	33	2	101107 washer flat 5/8"
15	1	128076 Operators manual cannister	34	3	100602 bolt 3/8"ncC x 1" gr 8 pltd hex
16	1	800109 Safety Chain 3/8" x 72"	35	1	801895 Hose lock
17	3	103212 screw sm DT #14 x 1" lg	36	1	100402 BOLTS 1 4 NC 3 4 GR 8 PLTD
18	3	101101 fender washer 1/4"ID x 1 1/4"OD	37	2	101103 flat washer 1/4"
19	1	100803 bolt 5-8 X 2 gr 8 pltd nc	38	1	102250 1-4 Nut Top Lock
			39	1	104301 hairpin #8 3/16 x 4

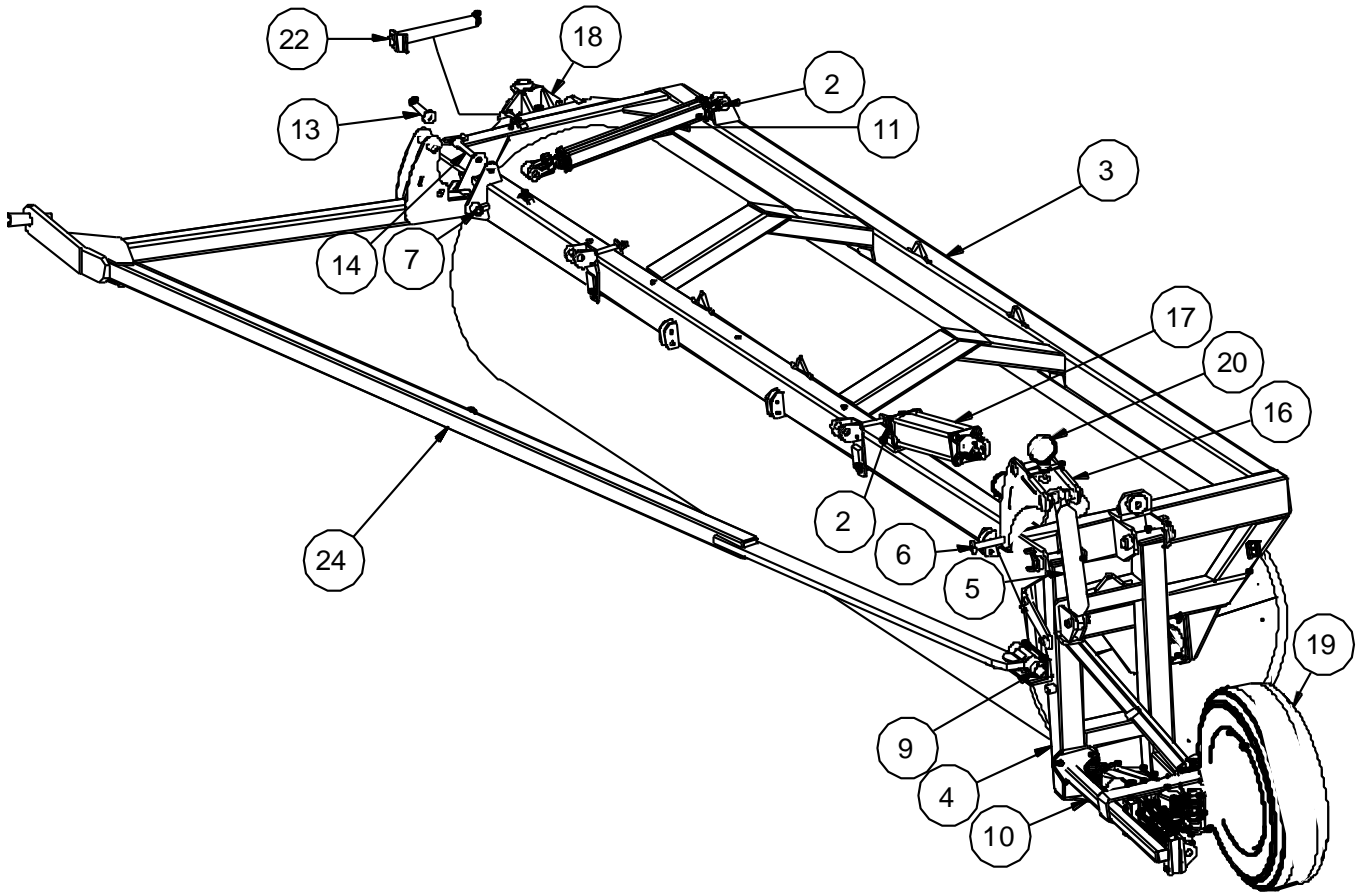
6.2. CENTER FRAME ASSEMBLY



ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	2	800999 Bearing DT 2-1/2" UCF213-40	27	2	800405 pin wldt 1-3_4 x 9-1_8
2	1	800106 Shaft Roller End	28	2	117339 Hyd Cyl AGU 3 x 6
3	1	803248 Shaft Roller End Threaded RH	29	2	800280 wheel lock castor trans
4	2	114438 bushing Q1 2-1/2" bore	30	1	800284 nylon shaft protector
5	2	117342 Hyd Cyl AGU 3 x 10	31	1	113971 cylinder lock spring assy
6	2	800285 wheel lock mid trans	32	1	113952 Extension Spring 5-1_2 LG
7	1	801703 Center Section Frame 5S	33	1	100602 bolt 3/8"nc x 1" gr5 pltd hex
8	2	800540 Wheel Center Arm Wldt HVY	34	1	100629 bolt 3-8 X 2 all thrd nc
9	1	800110 roller wldt center	35	4	101105 flat washer 3/8"
10	2	104516 Hitch Pin 3/4" x 4-1/2"	36	4	102106 nut 3-8 nc pltd
11	6	100604 bolt 3/8" X 1 1/2" gr5 pltd nc	37	2	800403 pin wldt 1-3_4 x 13_MIR
12	2	105639 Grease Zerk 1-1/4" LG 1/8 NPT	38	1	113686 hub assy
13	3	101145 lock washer 3/8"	39	1	808270 landroller end barrel
14	8	100804 bolt 5/8" X 2-1/2" gr5 pltd nc	40	2	804667 catch hook wear plate
15	2	800406 pin wldt 1-1/4 "x 10-1/2"	41	2	804670 catch hook wear plate
16	2	100614 bolt 3/8" X 4" gr5 pltd nc	42	4	101106 washer flat 1/2"
17	4	117324 pin 3-5/8" in two grooves	43	8	102146 nut 1 2 stover lock
18	4	800426 pin wldt 1 x 4	44	4	100947 1_2 x 1-1_2 carriage head bolt
19	2	100707 bolt 1/2 X 4 gr5 pltd nc	45	3	104890 COTTER PIN 5-32 X 2
20	2	101127 Machinery Washer 2-1/2 ID	46	6	104099 hairpin 16 1 8 x 2 5
21	2	101128 Machinery Washer 2-1/2 ID	47	1	104910 COTTER PIN 3 1-2 X 1-4
22	2	804115 Double lock link wldmnt	48	4	104301 hairpin #8 3/16 x 4
23	2	804111 Hitch Lock Pin	49	4	100615 BOLT 3 8NC 4-1_2 GR 8
24	4	113986 tire whl assy 8 bolt	50	4	102123 3 8 NC NUT stover lock GR C
25	3	113686 hub 8 bolt 6 5 bc 4500lb	51	8	102117 nut 5 8 nc stover lock
26	2	104517 Hitch Lock Pin 1 x 4-1/2	52	2	100705 bolt 1/2nc 3 gr 8

6.3. 800018 WING ASSY LH 46 FOOT LANDROLLER-SER # 1211306-14

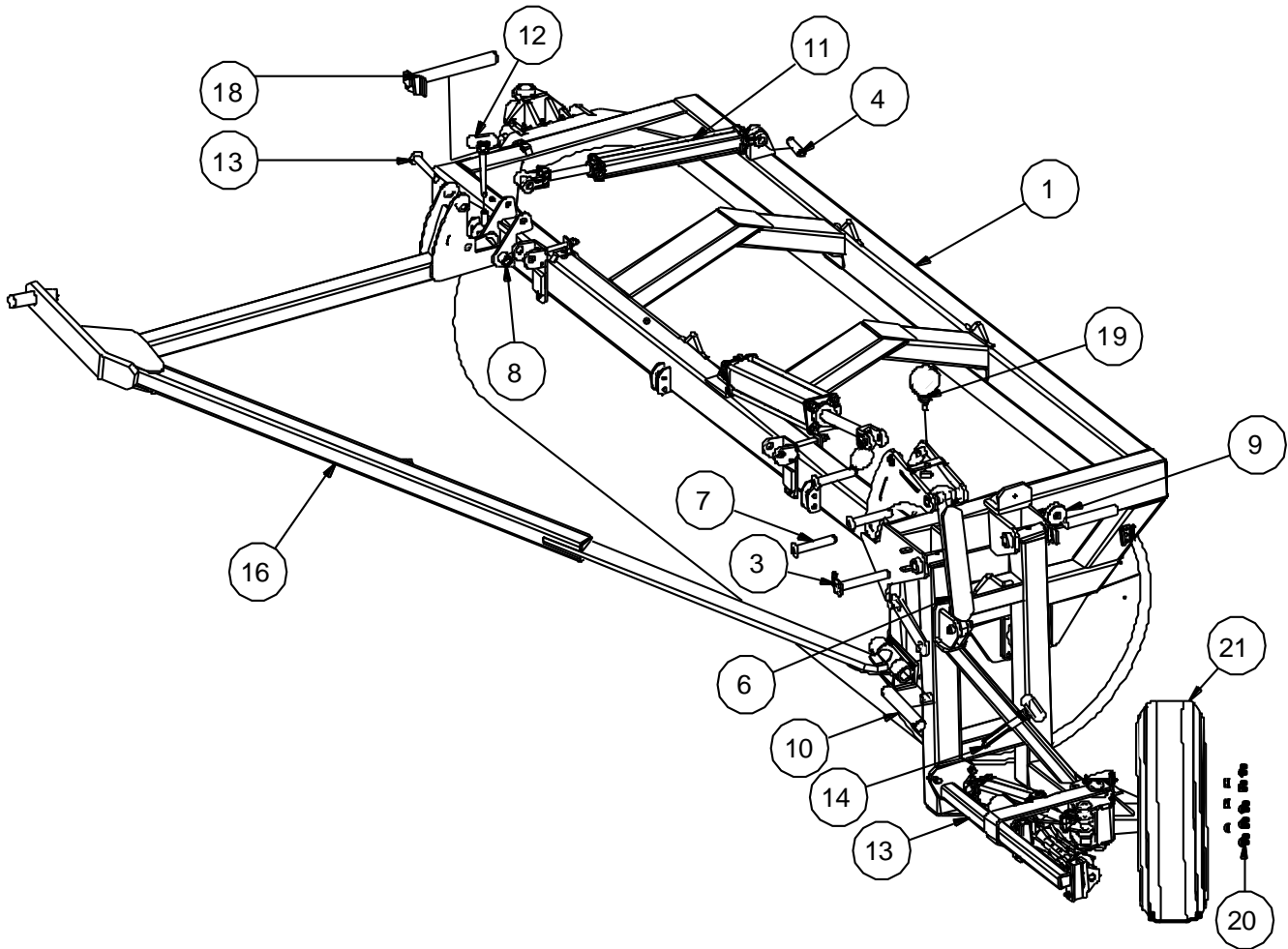
800018 LANDROLLER 46 ft 3-Section LH Wing Assembly with Power Folding Option (shown)
 800018 LANDROLLER 46 foot 3 Section RH Wing Assembly



ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	2	800410 pin wldt 1-1_4 x 7-1_4	11	1	117378 Hyd Cyl AGU 2 x 20
2	3	117324 pin 3-5_8 in two grooves	12	2	805188 Wing Frame Blade Cyl Mount
3	1	801556 Land Roller 46 ft 3S Wing Assy LH	13	1	801605 Diag Arm Cyl Clevis Pin Wldmt
3	1	801557 Land Roller 46 ft 3S Wing Assy RH	14	2	104513 Hitch Pin 3/4" x 6-1/2"
4	1	800601 Wheel Assembly Outer LH Drive	15	1	800359 Lock Bar Rear Wheel Lift 3S
4	1	800600 Wheel Assembly Outer RH Drive	16	1	801600 Rear Wheel T-Link
5	1	800485 Link Rear Wldt	17	1	117337 Hyd Cyl AGU 4 x 20
6	3	800415 pin wldt 1 x 5-1_2	18	1	801749 Extended Knuckle Wldt LH
7	1	801596 Diag Arm Front Pivot Pin	18	1	801750 Extended Knuckle Wldt RH
9	2	800430 pin low pull arm	19	1	113986 tire 235/85/16 c/w 8 bolt rim 3500 lb load rating
10	1	800562 Powerfold Drive Assy 3S LH	20	1	800095 Light Marker Kit
			22	1	800403 pin wldt 1-3_4 x 13
			24	1	804203 Diag Pull Arm Wldmnt LH 46ft
			24	1	804197 Diag Pull Arm Wldmnt RH 46ft

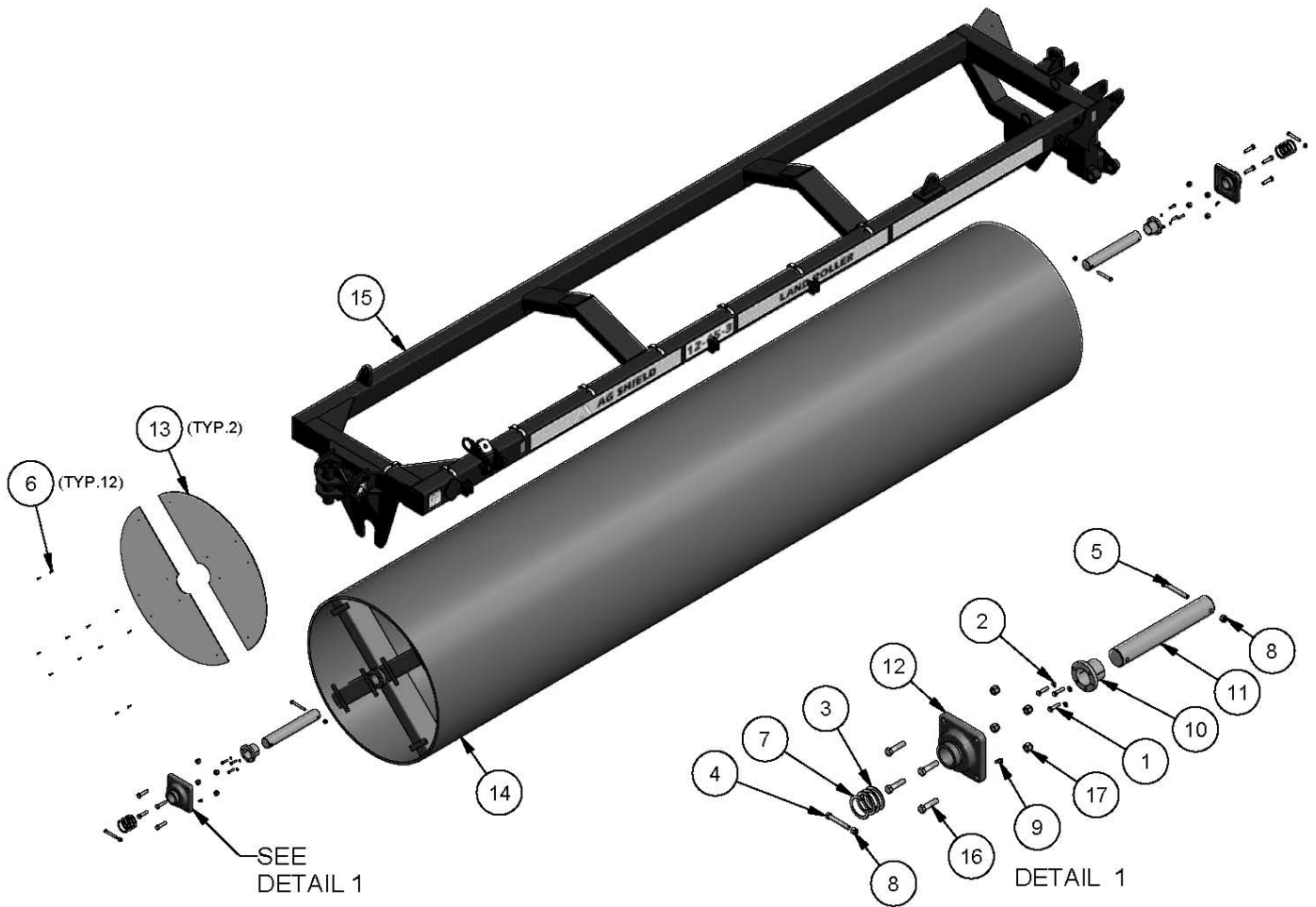
6.4. 800020 WING ASSY LH 31 FOOT LANDROLLERSER 3 1211306-14

800020 31 ft 3 Section LH (shown) and RH with 800508 Power Folding Option



ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	1	801610 Wing Assy 31ft 3S RH	11	2	117378 Hyd Cyl AGU 2 x 20
1	1	801625 Wing Assy 31ft 3S LH	12	1	104518 Hitch Pin 3/4" x 6-1/4"
2	1	800600 Wheel Assy Outer RH Drive	13	2	801605 Diag Arm Cyl Clevis Pin Wldmt
2	1	800601 Wheel Assy Outer LH Drive	14	2	104513 Hitch Pin 3/4" x 6-1/2"
3	4	800410 pin wldt 1-1/4" x 7-1/4"	15	1	800359 Lock Bar Rear Wheel Lift 3S
4	4	117324 pin 3-5/8" in two grooves	16	1	804207 Diag Pull Arm Wldmt 31ft 3S LH
5	1	800564 Powerfold Drive Assy 3S RH	17	1	804208 Diag Pull Arm Wldmt 31ft 3S RH
5	1	800562 Powerfold Drive Assy 3S LH			
6	1	800485 Link Rear Wldt	18	1	800403 pin wldt 1-3/4" x 13"
7	6	800415 pin wldt 1' x 5-1/2"	19	1	800095 Light Marker Kit
8	2	801596 Diag Arm Front Pivot Pin	20	8	113655 wheel nut 9/16" NF WB40
9	1	800153 stop puck 1x3	21	1	113986 tire whl assy 8 bolt 6 x 16 5.15
10	2	800430 pin low pull arm			

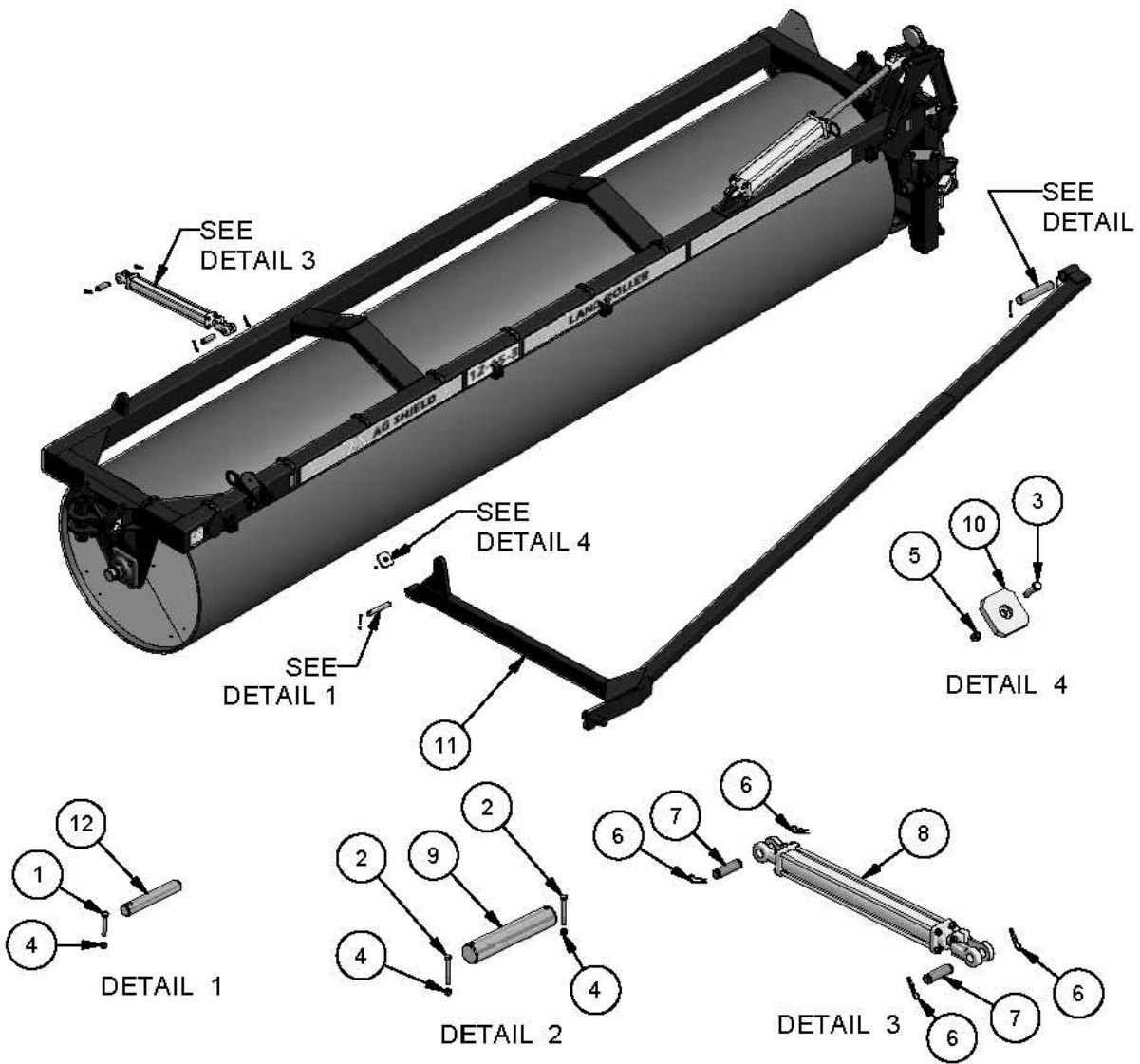
6.5. WING FRAME ASSEMBLY WING ROLLER ASSEMBLY



Parts List		
ITEM	QTY	PART NUMBER
1	6	100604 bolt 3-8 X 1 1-2 gr5 pltd nc
2	6	101145 lock washer 3/8"
3	4	101128 Machinery Washer 2_1-2 ID 10 Gauge
4	2	100706 bolt 1-2 X 3 1-2 gr5 pltd nc
5	2	100707 bolt 1-2 X 4 gr5 pltd nc
6	24	103204 10 X 1 drill tape liner screw
7	1	101127 Machinery Washer 2_1-2 ID 14 Gauge
8	4	102125 nut nylok 1/2" nc gr5 pltd
9	2	105639 Grease Zerk 1_1-4LG 1-8 NPT

Parts List		
ITEM	QTY	PART NUMBER
10	2	114438 bushing Q1 2-1_2 bore
11	2	800106 Shaft Roller End
12	2	800999 Bearing 2-1_2 UCF213-40
13	4	800345 end cover plastic
14	1	800070 roller wldt wing 45 3S
15	1	800072 frame wldt LH 45ft 3S
16	8	100804 bolt 5-8 X 2 1-2 gr5 pltd nc
17	8	102127 nut nylok 5/8" nc gr5 pltd

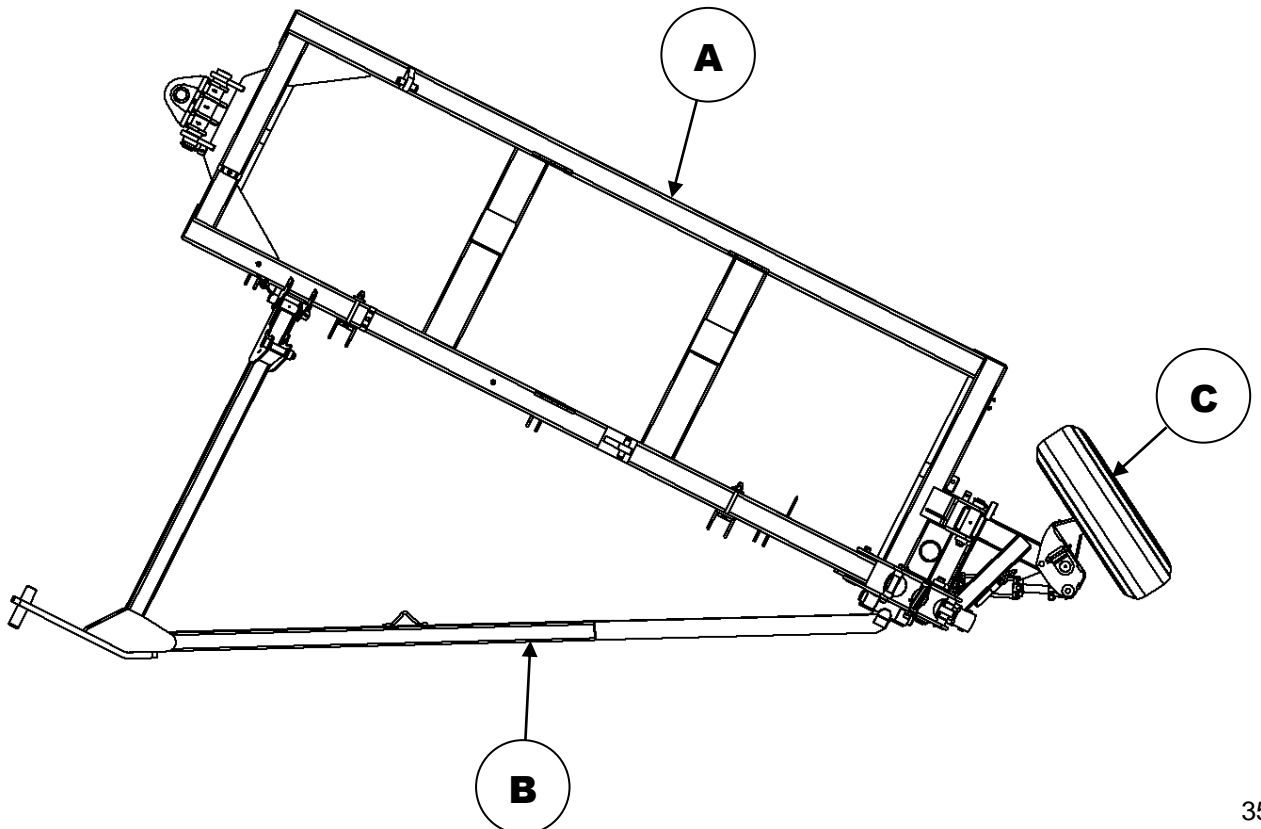
6.6. ROLLERS, FRONT HITCH, TOOLBOX, TOOLS DIAGONAL WING ARM ASSEMBLY



Parts List			Parts List		
ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	1	100508 bolt 5-16 X 2 gr5 pltd nc	7	4	117324 pin 3-5_8 in two grooves
2	2	100509 bolt 5-16 X 2 1-2 gr5 pltd nc	8	1	117378 Hyd Cyl AGU 2 x 20
3	1	100604 bolt 3-8 X 1 1-2 gr5 pltd nc	9	1	800430 pin low pull arm
4	3	102122 nut nylok 5/16" nc gr5 pltd	10	1	800827 Steel Stop Block
5	1	102123 nut nylok 3/8" nc gr5 pltd	11	1	802149 diag arm wldt LH 3S
6	8	104099 hairpin 16 1 8 x 2 5	12	1	802181 pim front pivot diag 45 ft

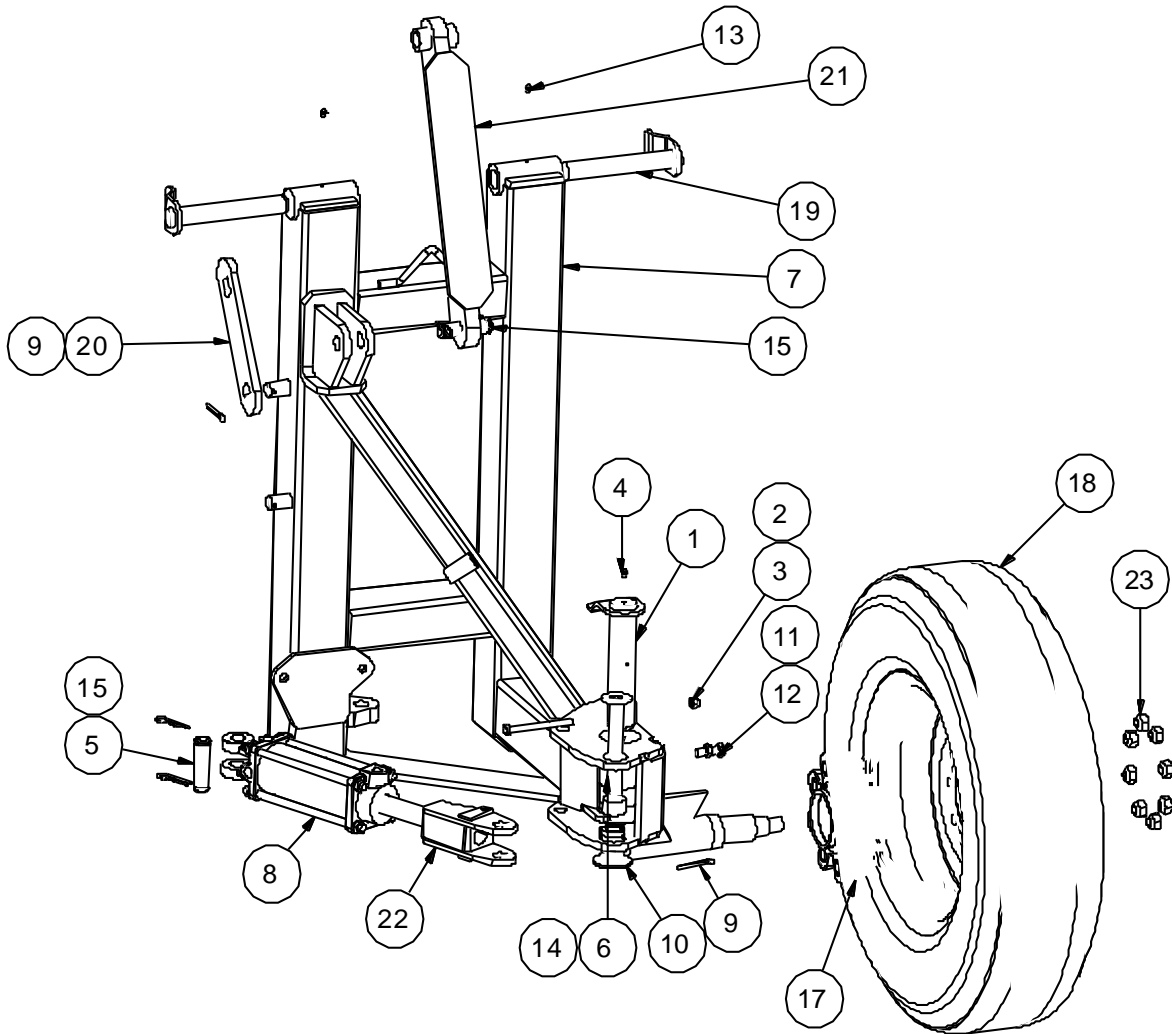
6.7. SUMMARY 3 SECTION LANDROLLER (31-60 FOOT)

Land Roller Part No.	Description (foot)	LH Wing Assembly	RH Wing Assembly	LH Diagonal Arm 2013	RH Diagonal Arm 2013	Outer Wheel Assembly with Tire	Dry (shipping) Weight (pounds)
		A	A	B	B	C	
800020	31	801625	801610	804207	804208	113986 10 ply, 80 psi	12 400
800009	36	802344	802340	802350	802351	113986 10 ply, 80 psi	14 400
800010	42	802307	802300	804251	804250	113986 10 ply, 80 psi	16 800
800018	46	801556	801550	804203	804197	113986 10 ply, 80 psi	18 400
800017	52	801850	801835	804260	804261	113986 10 ply, 80 psi	20 800
800019	60	802374	802370	802380	802381	113987 14 ply, 80 psi	24 000



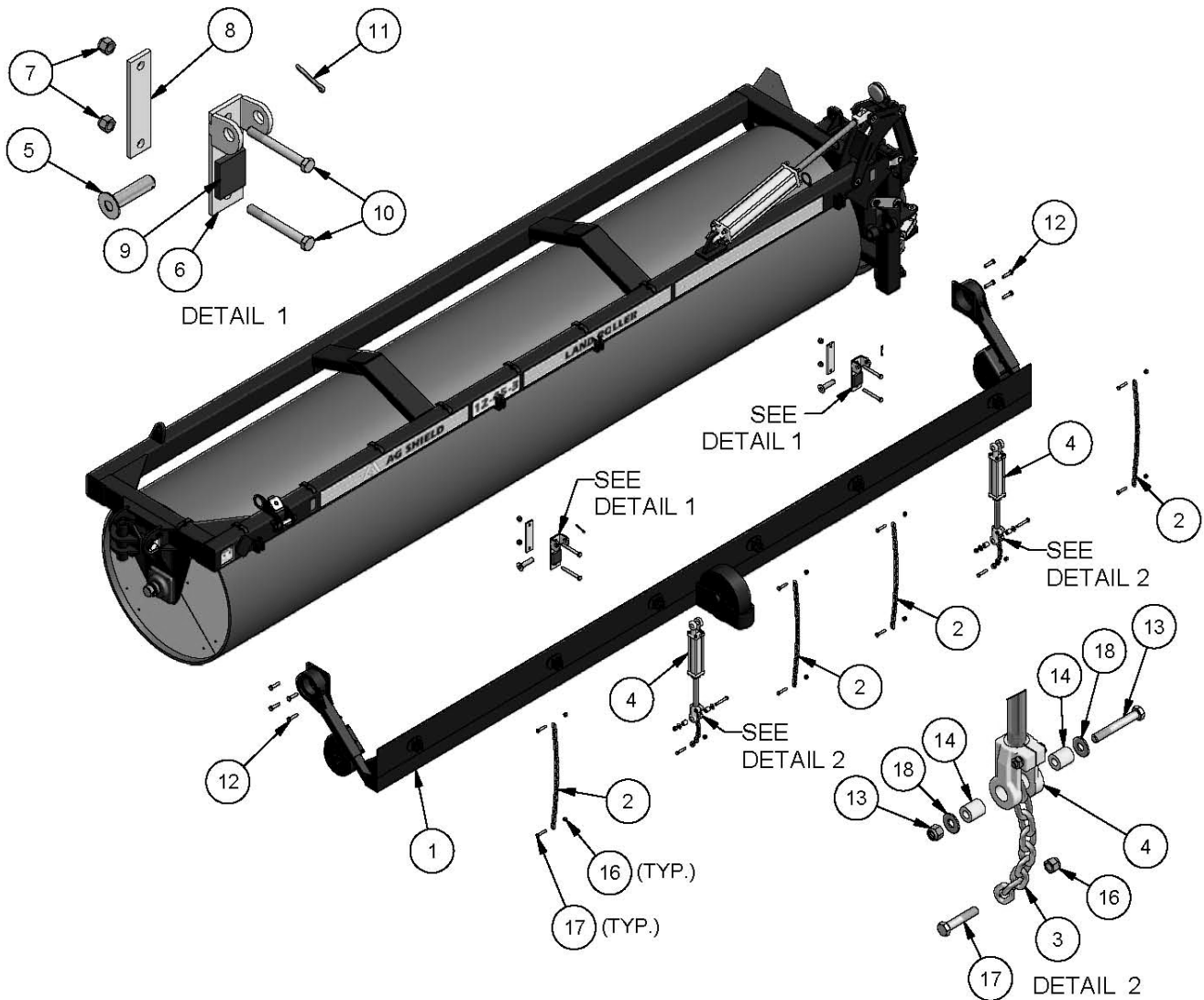
6.8. OUTER WHEEL ASSEMBLY

800601 Wheel Assembly Outer LH Drive (shown)
 800600 Wheel Assembly Outer RH Drive



ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	1	800412 pin wldt 1-3_4 x 7-5_8	12	1	100702 bolt 1-2 X 1 1-2 gr5 pltd nc
2	1	100615 bolt 3-8 X 4 1-2 gr5 pltd nc	13	2	105602 grease nipple 1 4 x28 nf str
3	1	102123 nut nylok 3/8" nc gr5 pltd	14	1	800831 Pivot Cyl Spacer Bushing
4	1	105607 grease zerker	15	4	104099 hairpin 16 1 8 x 2 5
5	2	117324 pin 3-5_8 in two grooves	16	1	800605 spindle wldt LH 90deg 2012+
6	1	800414 pin wldt 1 x 6-1_4	17	1	113686 hub 8 bolt 6 5 bc 4500lb
7	1	800609 wheel pivot outer driven LH	18	1	113986 tire 235/85/16 c/w 8 bolt rim 3500 rating
7	1	800610 wheel pivot outer driven RH	19	2	800410 pin wldt 1-1_4 x 7-1_4
8	1	117339 Hyd Cyl AGU 3 x 6 Stroke Limiter	20	1	800359 Lock Bar Rear Wheel Lift 3S
9	2	104907 cotter pin 1 4 X 2 5	21	1	800485 Link Rear Wldt
10	1	101110 flat washer 1"	22	1	800635 clevis turn cyl 45deg
11	1	102153 nut jam 1-2 nc pltd	23	8	113655 wheel nut 9 16 nf wb40

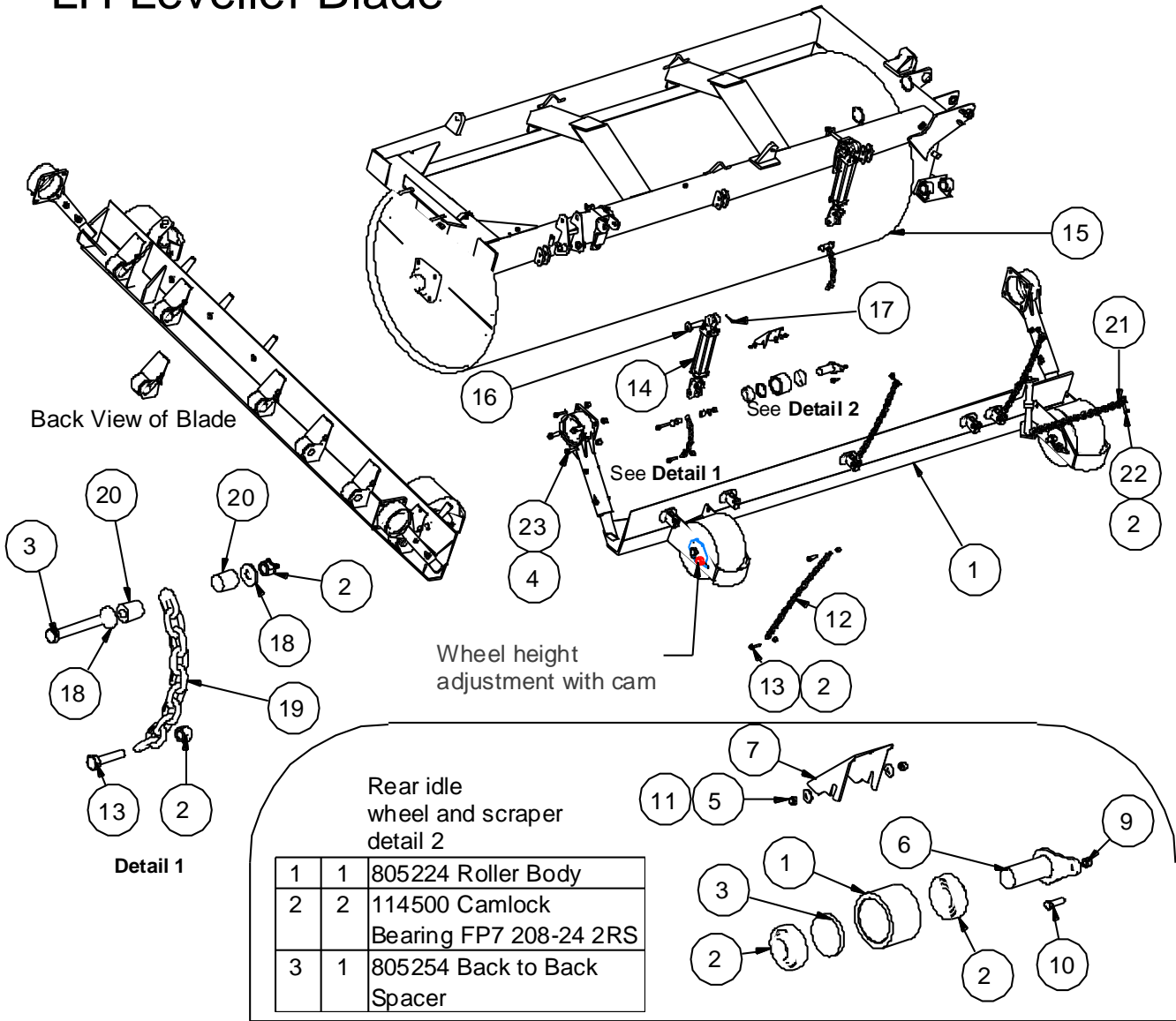
6.9. WING FRAME LEVELING BLADE 3 SECTION 17FOOT WING FRAME LEVELING BLADE MOUNTING



Parts List			Parts List		
ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	1	805186 17ft Land Leveller Blade Assy	10	2	100810 bolt 5-8 X 5 1-2 gr5 pltd nc
2	4	114347b Chain 5/16 Gr 70 9 Link	11	6	104907 cotter pin 1 4 X 2 5
3	2	114347d Chain 5/16 Gr 70 27 Link	12	8	100804 bolt 5-8 X 2 1-2 gr5 pltd nc
4	2	117358Hyd Cyl AGU 2 x 8	13	2	100706 bolt 1-2 X 3 1-2 gr5 pltd nc
5	2	800426 pin wldt 1 x 4	14	4	805116 insert cyl clevis chain pull
6	1	805189 Blade Cyl Mount Wldmt	15	4	100704 bolt 1/2" x 2 1/2" gr5 pltd nc
7	2	102127 nut nylok 5/8" nc gr5 pltd	16	12	102125 nut nylok 1/2" nc gr5 pltd
8	1	805117 backing plate cyl mt 625 hole	17	10	100704 bolt 1/2" x 2 1/2" gr5 pltd nc
9	1	805119 foam cushion	18	4	101106 flat washer 1/2"

6.10. LEVELING BLADE PARTS

LH Leveller Blade



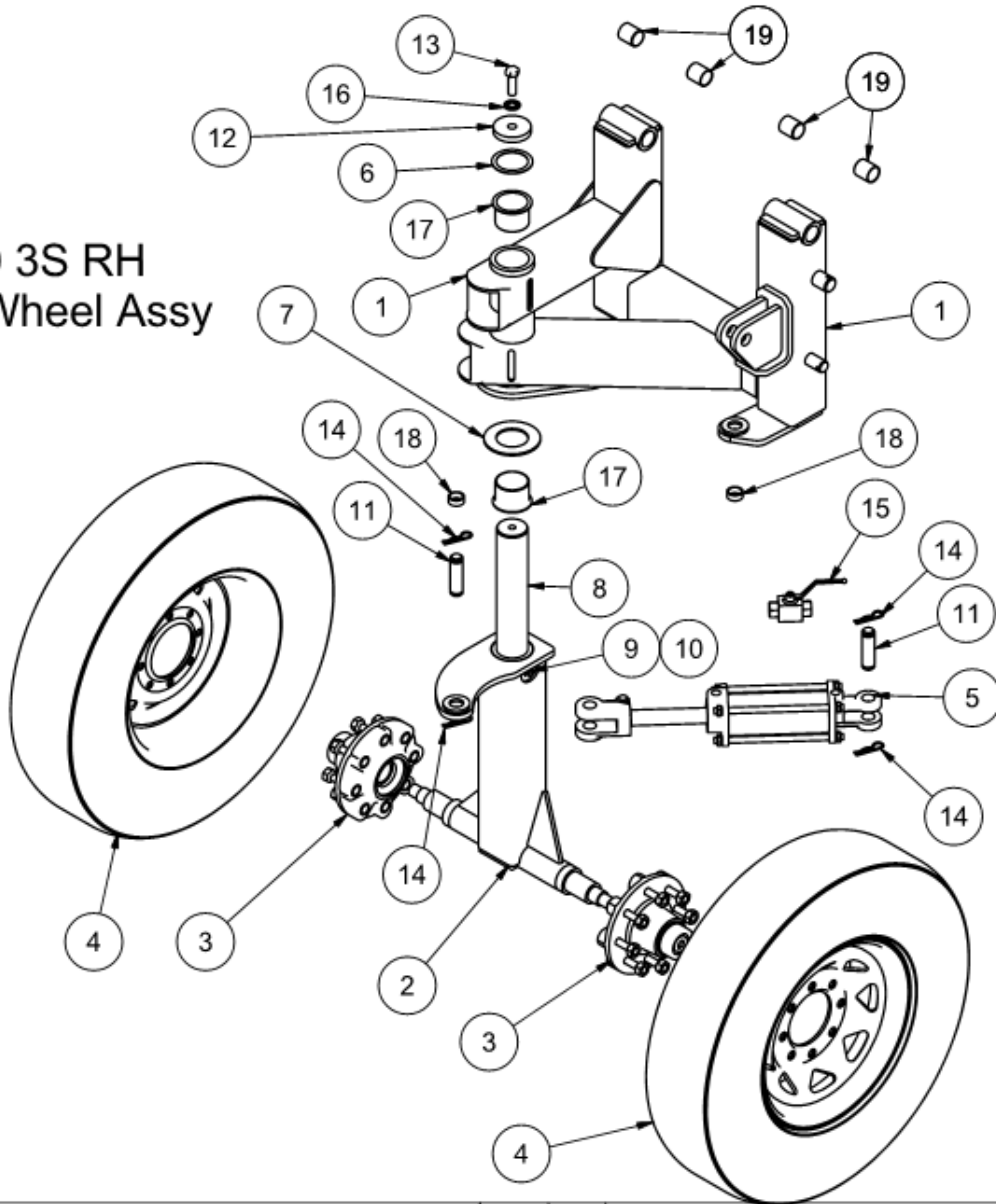
Rear idle wheel and scraper detail 2

1	1	805224 Roller Body
2	2	114500 Camlock Bearing FP7 208-24 2RS
3	1	805254 Back to Back Spacer

ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	1	805281 Wing Blade Wldmt 31ft 3S LH	13	8	100703 bolt 1-2 X 2 gr5 pltd nc
2	13	102125 nut nylok 1/2" nc gr5 pltd	14	2	117358Hyd Cyl AGU 2 x 8 (Clone)
3	4	100706 bolt 1-2 X 3 1-2 gr5 pltd nc	15	1	801625 Wing Assy 31ft 3S LH
4	6	102127 nut nylok 5/8" nc gr5 pltd	16	2	800426 pin wldt 1 x 4
5	14	102122 nut nylok 5/16" nc gr5 pltd	17	2	104907 cotter pin 1 4 X 2 5
6	7	805227 Roller Short Pin Wldmt	18	4	101106 flat washer 1/2"
7	7	805225 Blade Short Roller Shield	19	2	114347d CHAIN 5 16 TRANSPORT 70 Check Chain_MIR
8	7	805223 Roller Assembly No Rubber	20	4	805116 insert cyl clevis chain pull
9	7	102123 nut nylok 3/8" nc gr5 pltd	21	1	114350 CHAIN 3 8 Transport 70 Gold Check chain
10	3	100603 bolt 3-8 X 1 1-4 gr5 pltd nc	22	1	100704 bolt 1-2 X 2 1-2 gr5 pltd nc
11	14	101104 flat washer 5/16"	23	4	100804 bolt 5-8 X 2 1-2 gr5 pltd nc
12	3	114347b CHAIN 5 16 TRANSPORT 70 Check Chain			

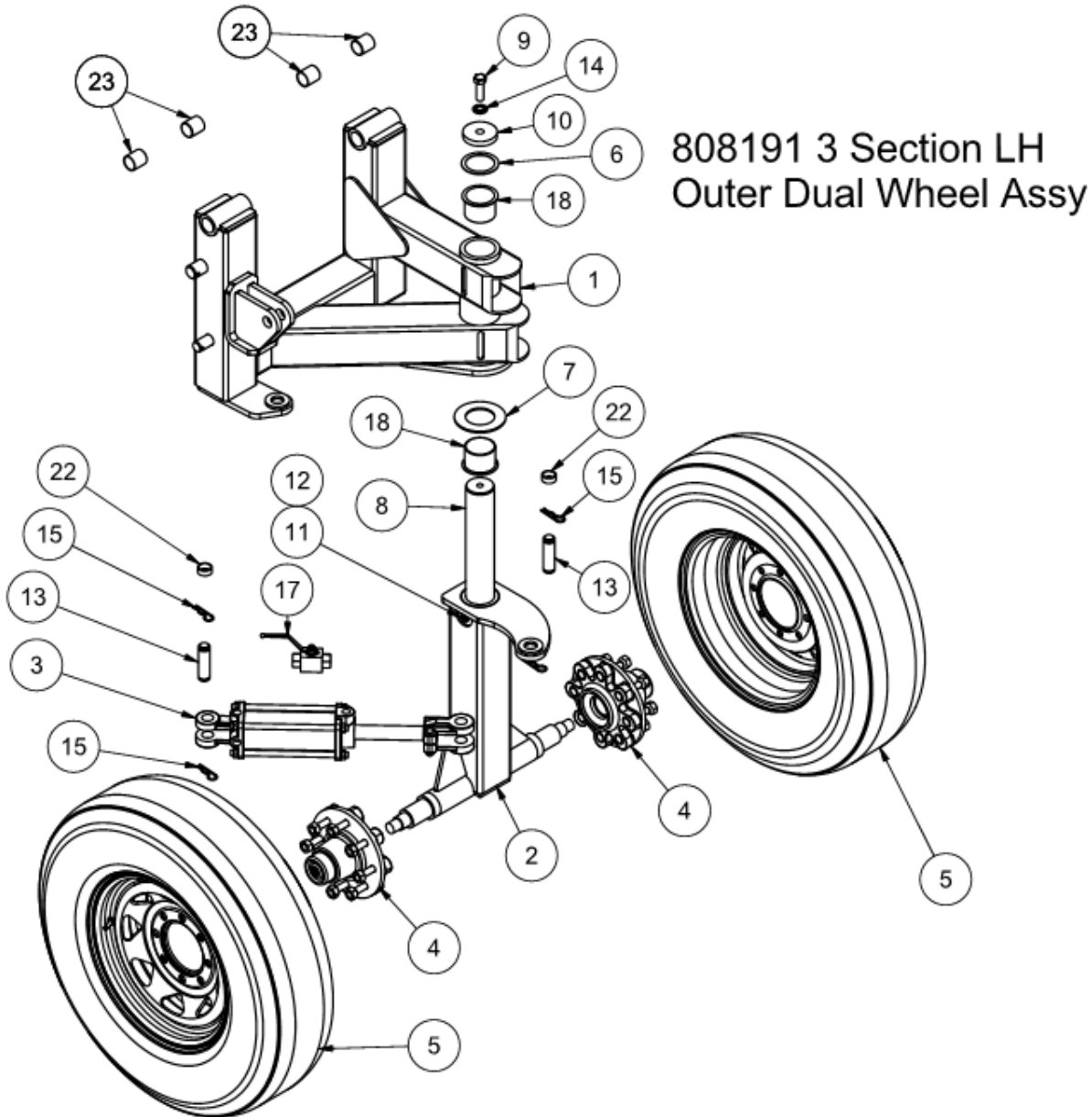
6.11. 3 SECTION OUTER DUAL WHEEL TRANSPORT ASSEMBLY

808190 3S RH
Outer Wheel Assy



ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	1	808200 dual wheel upper pivot 3S RH wldt 2018	9	1	100707 BOLT 1 2NC 4 GR5 PLTD HEX
2	1	808214 3 section RH outer rear dual wheel wldt	10	1	102146 nut 1 2 stover lock
3	2	113686 hub assy w brg nut washer cap 3500 8 bolt not exploded view	11	2	117324 pin 3-5_8 in two grooves
4	2	113986 tire whl assy 8 bolt 6 x 16 5.15 pilot	12	1	808220 3S landroller rear wheel mount top lock plate
5	1	117339 Hyd Cyl AGU 3 x 6	13	1	100803 bolt 5/8nc X 2" gr5 pltd hex
6	1	101127 Machinery Washer 2_1-2 ID 14 Gauge	14	4	104099 hairpin 16 1 8 x 2 5
7	1	Igus thrust washer	15	1	8 MORB HYDRAULIC ON OFF VALVE
8	1	808217 vertical spindle 3 section outer dual wheel	16	1	5-8 contact washer
			17	2	IGUS 2 1-2 ID BEARINGGFI 4043_32_1
			18	2	IGUS TX1 bushing 1 in ID x 1-230 OD
			19	4	Igus 1 1-4 ID x 1 1-2 OD bearing bushingQSI_2022_24_1

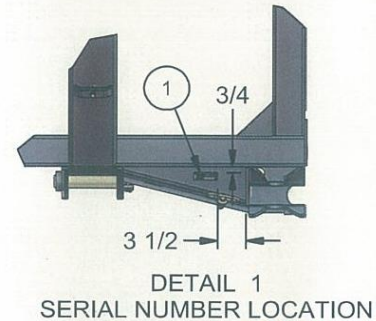
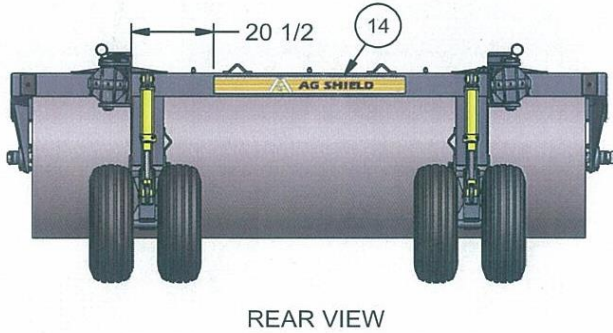
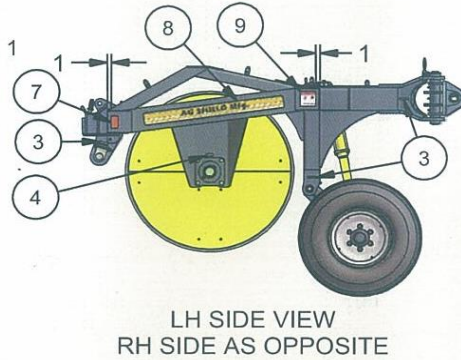
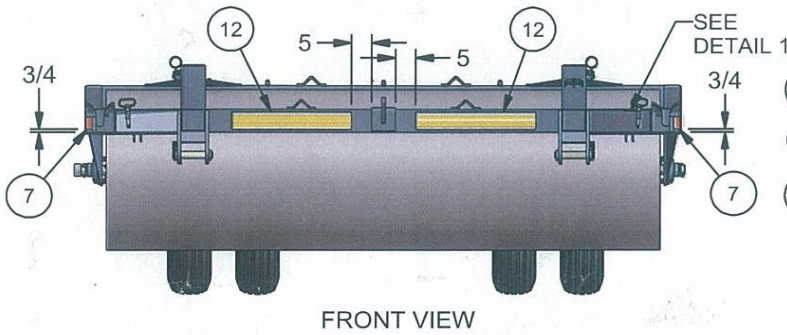
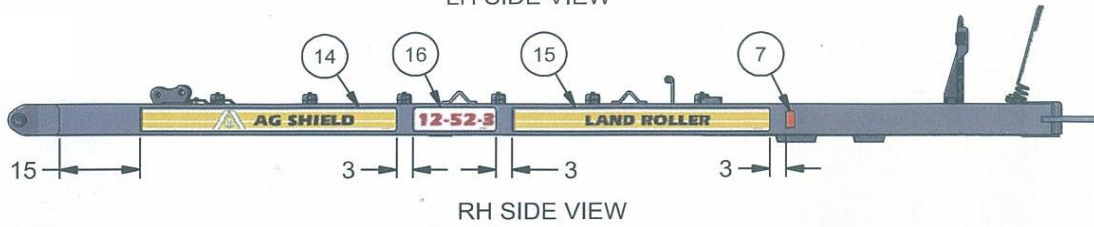
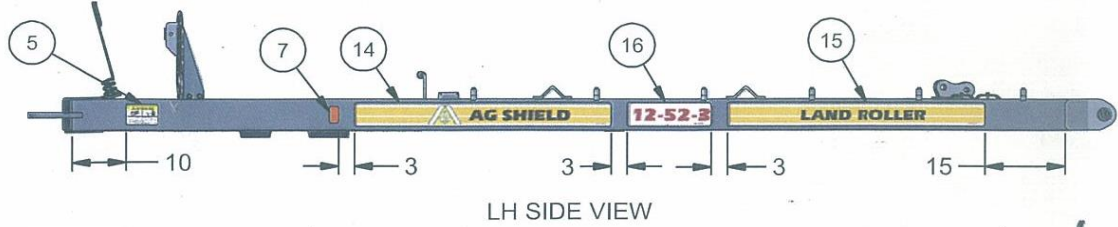
6.12. 3 SECTION OUTER DUAL WHEEL ASSEMBLY



ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	1	808201 dual wheel upper pivot 3S LH wldt 2018	9	1	100803 bolt 5/8nc X 2" gr5 pltd hex
2	1	808213 3 section LH outer rear dual wheel wldt	10	1	808220 3S landroller rear wheel mount top lock plate
3	1	117339 Hyd Cyl AGU 3 x 6	11	1	100707 BOLT 1 2NC 4 GR5 PLTD HEX
4	2	113686 hub assy w brg nut washer cap 3500 8 bolt not exploded view	12	1	102146 nut 1 2 stover lock
5	2	113986 tire whl assy 8 bolt 6 x 16 5.15 pilot	13	2	117324 pin 3-5 8 in two grooves
6	1	101127 Machinery Washer 2_1-2 ID 14 Gauge	14	1	101409 Washer Contact Lock 5-8 in
7	1	Igus thrust washer	15	4	104099 hairpin 16 1 8 x 2 5
8	1	808217 vertical spindle 3 section outer dual wheel	17	1	8 MORB hydraulic on off
			18	2	IGUS 2 1-2 ID BEARINGGGFI_4043_32_1
			22	2	IGUS TX1 bushing 1 in ID x 1-230 OD
			23	4	Igus 1 1-4 ID x 1 1-2 OD bearing bushingQSI_2022_24_1

6.13. DECALS LOCATIONS AND PART NUMBERS

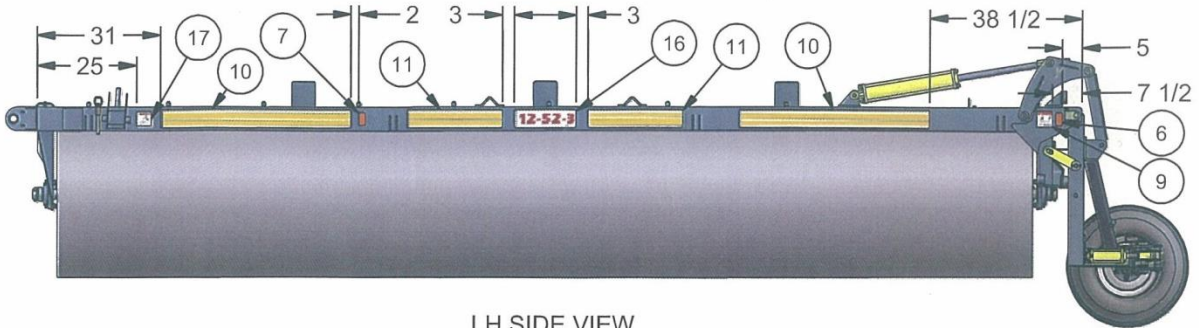
52ft 3 SECTION HITCH AND CENTER SECTION DECAL LOCATIONS



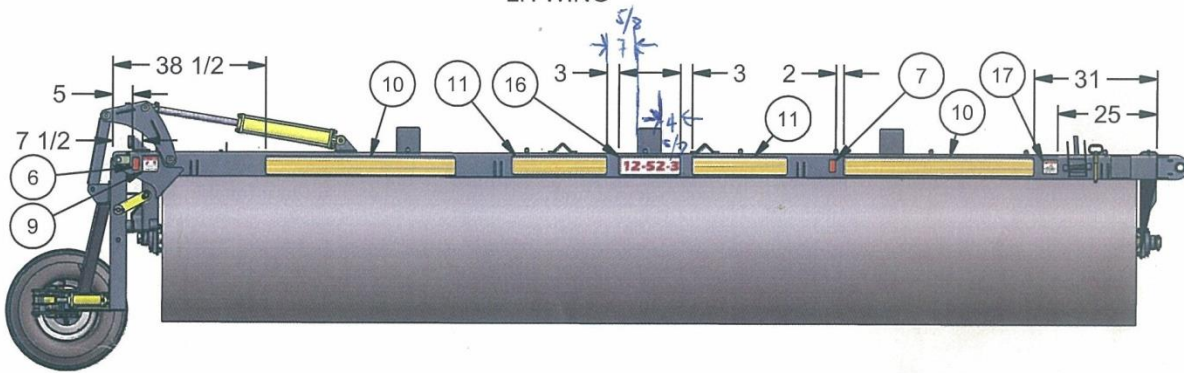
Parts List			Parts List		
ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	1	113510 Serial Tag Plate	10	4	116140 Decal Yellow Stripe
2	2	113519 Safety Tape	11	4	116140B Decal Yellow Stripe 24in
3	9	113520 Grease 10 hours Decal	12	2	116140E Decal Yellow Stripe 30in
4	6	113521 Grease Annually Decal	13	2	116140F Decal Yellow Stripe 18in
5	1	113552 High Pressure Fluid Decal	14	3	116141 Decal Stripe Agshield
6	2	113560 Red Reflector 1 5/8" x 3 1/4"	15	2	116142 Decal Stripe Land Roller
7	8	113561 Amber Reflector 1 5/8" x 3 1/4"	16	4	116149 Decal Unit Number 12-52-3
8	2	116107 Recon 300 Rear Hitch Decal	17	2	116549 Decal Overhead Hazard
9	4	116116 Pinch Point Danger Decal SW205			

52ft 3 SECTION WING DECAL LOCATIONS (CON'T)

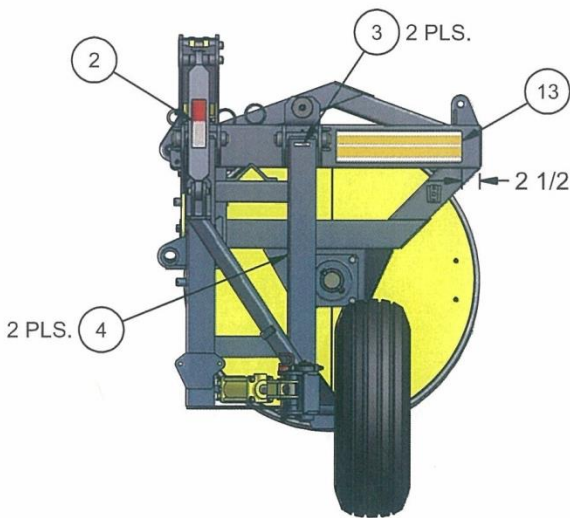
041911 QZ



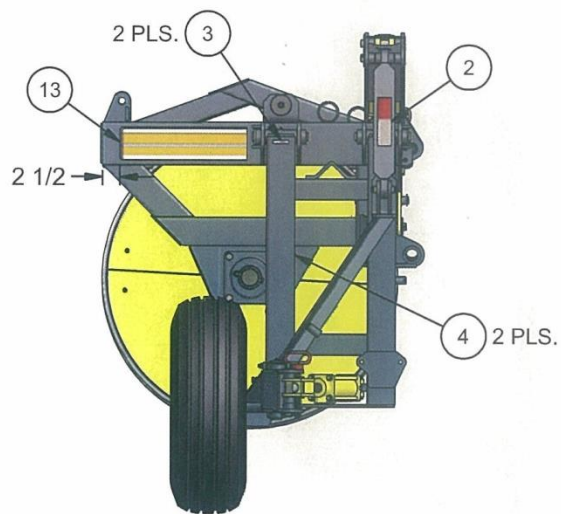
LH SIDE VIEW
LH WING



RH SIDE VIEW
RH WING



LH REAR VIEW

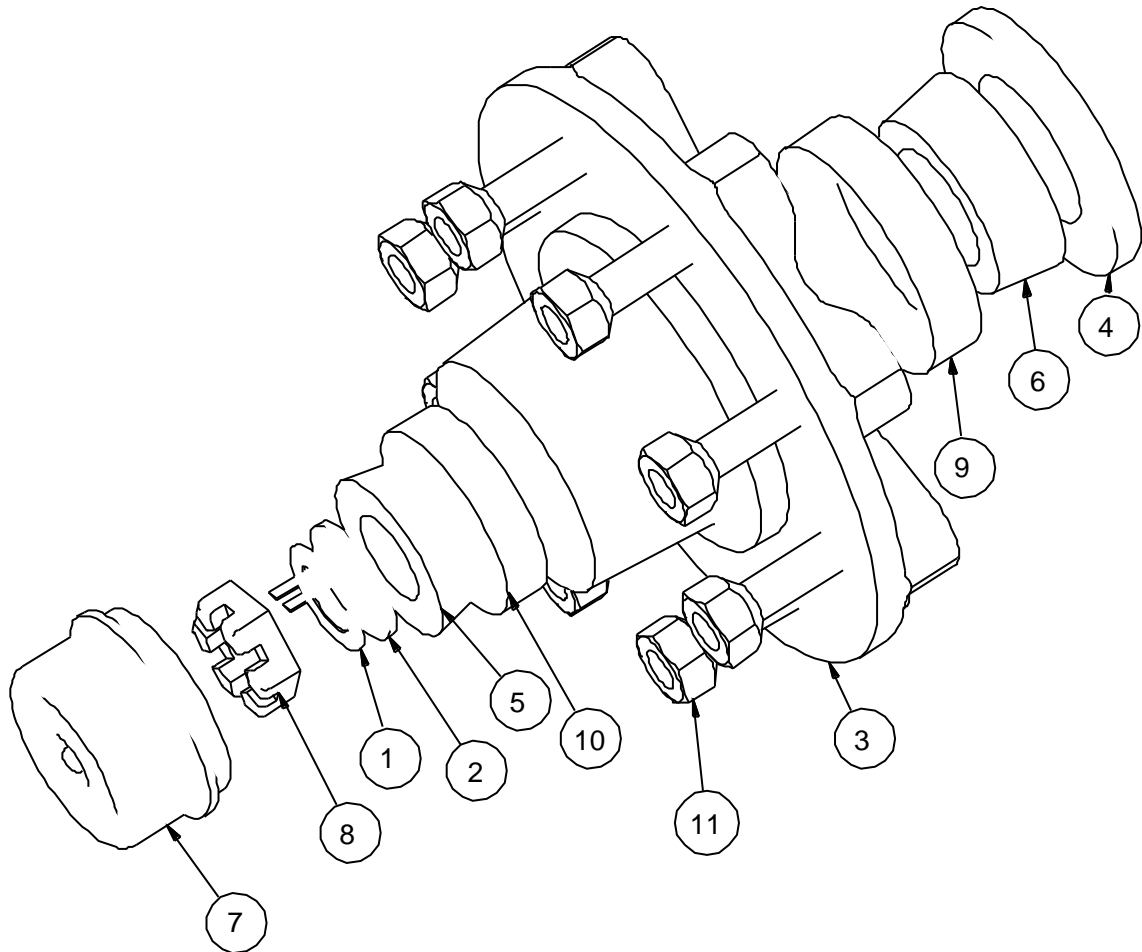


RH REAR VIEW

6.14. BOLT HUB ASSEMBLY 113686

113686 hub assy 8 bolt 3500 pound hwy

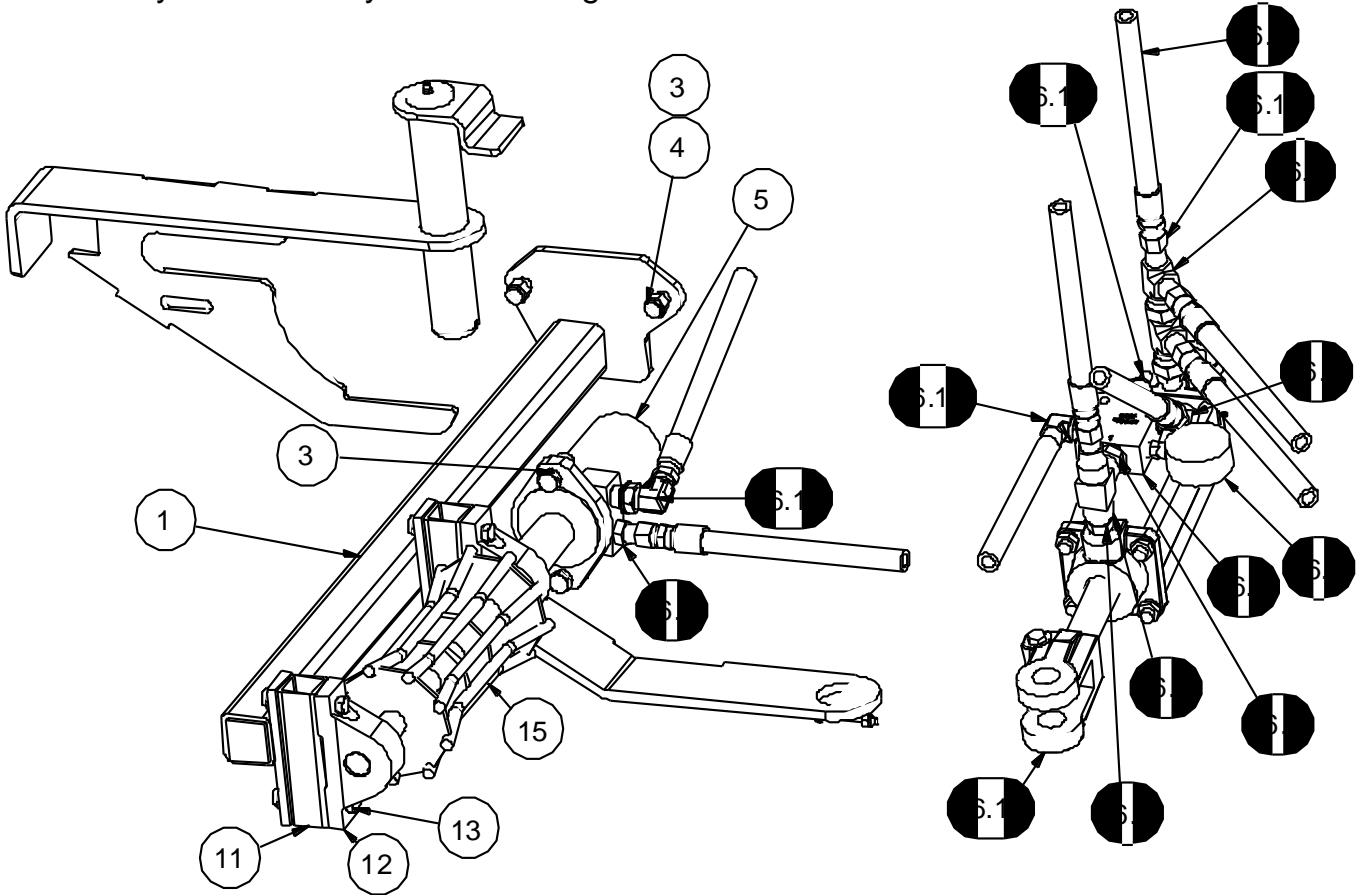
with cup cones caps nut washers



1	1	1136975 washer locking castle nut hub
2	1	1136965 flat washer 1 ID x 1.7OD flat side on hole x .115th
3	1	113686 hub 8 bolt 6 5 bc 3500lb
4	1	113698 plug rubber
5	1	113694 bearing 14125A 3500M 1.25in
6	1	113695 bearing 25580 3500M 1.25in
7	1	113697 grease cap 2.72 OD x 1.53 hg
8	1	1136795 nut castle 1 -14 UNS
9	1	1136955 cup inner 3500M 8 bolt assy 100-2162
10	1	1136945 cup outer 3500M 8 bolt assy 100-2158
11	8	113655 wheel nut 9 16 nf wb40

6.15. POWERFOLD OPTION

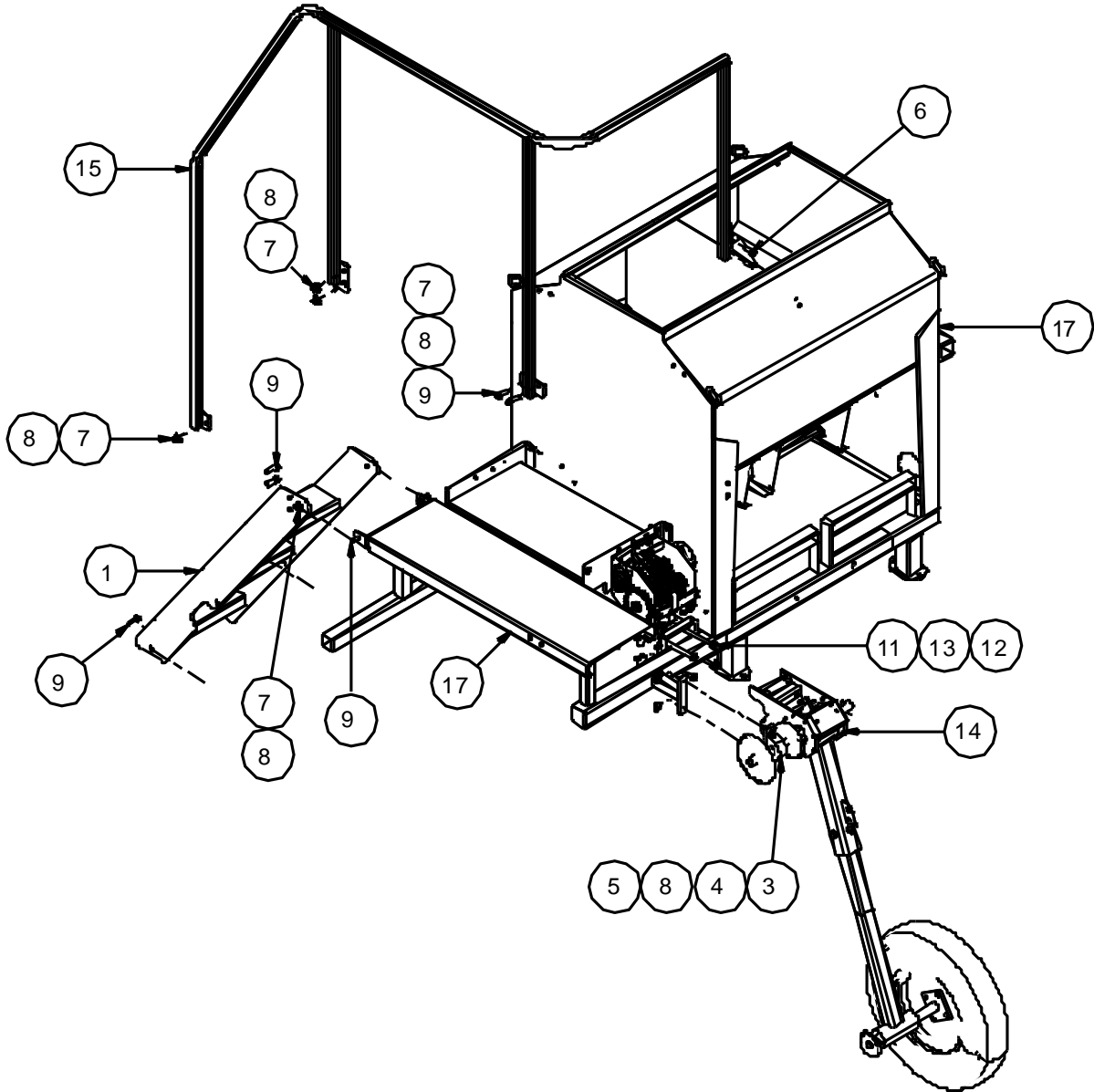
800562 Powerfold Drive Assembly 3S for LH (shown) and 800564 RH with Cylinder and Hydraulic Arrangement



ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	1	800560 Powerfold Drive Wldmt 3S LH	16.2	1	117977 adapter elbow 06 ORBM X 08 JICM
2	1	800563 Powerfold Drvie Wldmt 3S RH	16.3	2	117950 run T08 mjic X 08 fjic X 08 mjic
3	4	100702 bolt 1-2 X 1 1-2 gr5 pltd nc	16.4	1	118043 TEE C3709 X 8 X FPT IE 25VJ08
4	4	102125 nut nylok 1/2" nc gr5 pltd	16.5	2	118175 adapter str 08 mpt x 08 mjic
5	1	117173 HYD MOTOR 17.9 CID 2 bolt	16.6	1	118008 NIPPLE 08MPT X 08MPT
6	1	800417 pin wldt wheel pivot rear	16.7	1	112300 gauge 3000 psi 1 4 mpt btm mt
7	1	100408 bolt 1-4 X 2 1-4 nc	16.8	1	118151 adapter str 10morb x 08mpt
8	1	102121 nut nylok 1/4" nc gr5 pltd	16.9	8	117707 08 hyd hose 19-34 in lg
9	1	805019 key drive roller	16.10	8	117940 HU08 x 08 JIC F S
10	1	800531 coupler wheel driver	16.11	1	117985 Adapter 10MORB x 08MJIC 90
11	2	800533 spacer block 1-1_2	16.12	1	100408 bolt 1-4 X 2 1-4 nc
12	2	114475 PILLOW BLOCK P205 1in 2 BOLT	16.13	1	117350 Clevis 1-1_4 NF FEM x 1 Pin
13	4	100665 bolt 7-16 X 3 gr5 pltd nc	16.14	1	118408 Cartidge seq Powerfold Motor
14	4	102124 nut nylok 7/16" nc gr5 pltd	16.16	1	1177485 Adapter 08MORB x 08MJIC 90
15	1	804305 Roller Drive Wheel Wldt			
16		Power Fold Hydraulic Kit Parts			
16.1	1	800509 Sun PRV 10-10-06 Driller			

6.16. 805480 VALMAR UNIT ON CENTER SECTION

805480 VALMAR ON CENTER SECTION



ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	1	805493 3S Center Mnt Valmar Upper Step Wldt	10	1	805433 Valmar wheel drive mount plate
2	1	14-196	11	4	100713 bolt 1-2 X 6 gr5 all thrd
3	1	114475 PILLOW BLOCK P205 1 in 2 BOLT	12	4	102125 nut nylok 1/2" nc gr5 pltd
4	2	100605 bolt 3-8 X 1 3-4 gr5 pltd nc	13	4	101106 washer flat 1/2"
5	2	102123 nut nylok 3/8" nc gr5 pltd	14	1	805486 3S Center Mnt Valmar Wheel Drive Assy
6	3	100659 bolt 7-16 X 1 1-4 gr5 pltd nc	15	1	805496 3S Center Mnt Vmar Handrail wldmt
7	9	102124 nut nylok 7/16" nc gr5 pltd	16	1	805484 3S Center Valmar Horz Mnt tube
8	12	101114 flat washer 7/16"	17	1	805511 1655_1665 Valmar Center Mount Wldt
9	6	100661 bolt 7-16 X 1 1-2 gr5 pltd nc			

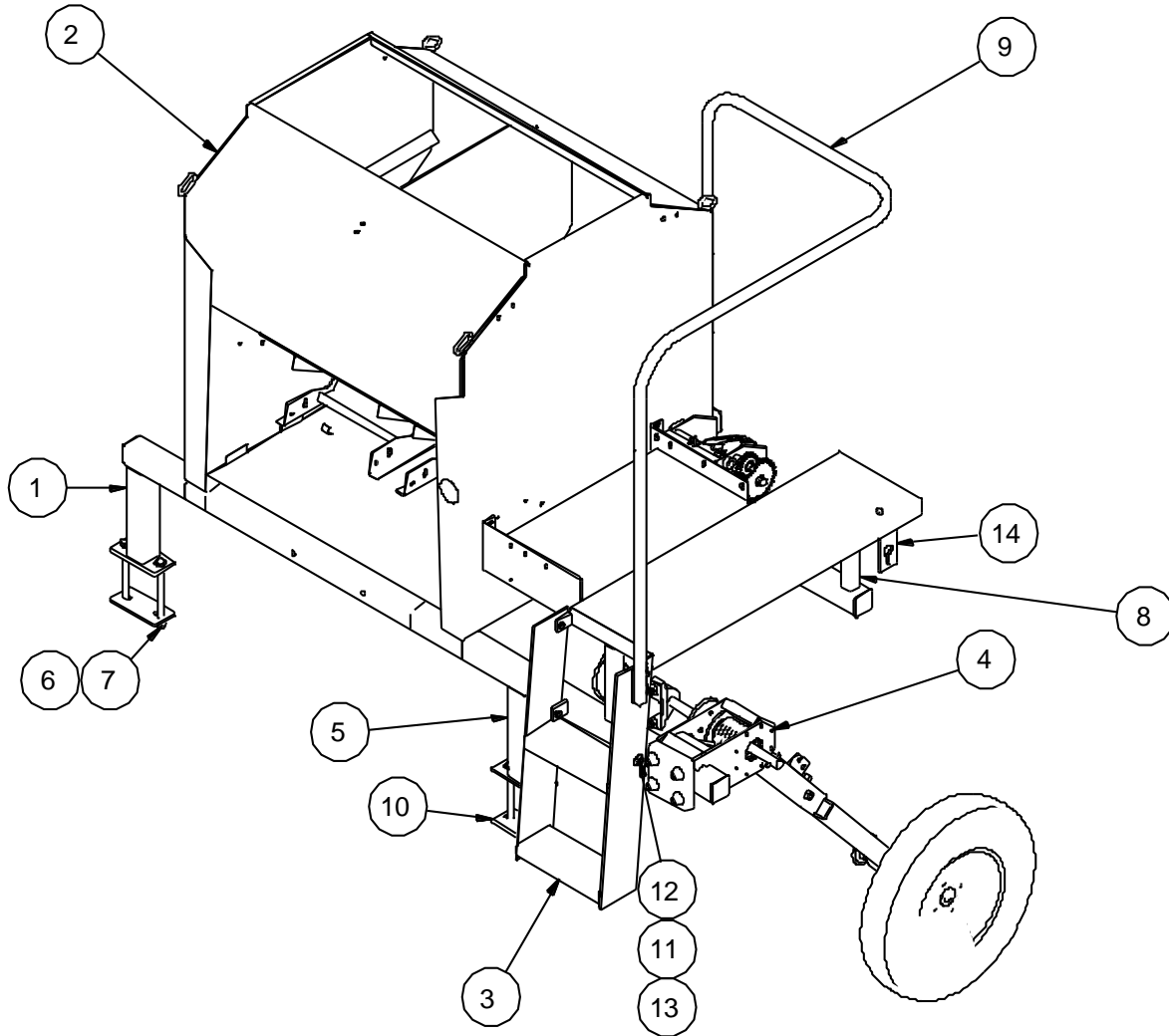
6.17. ACRE METER ON VALMAR



The acre meter is installed on the Valmar shaft and is only engaged when the clutch is turned on for the Valmar.

6.18. VALMAR UNIT WITH HITCH MOUNT

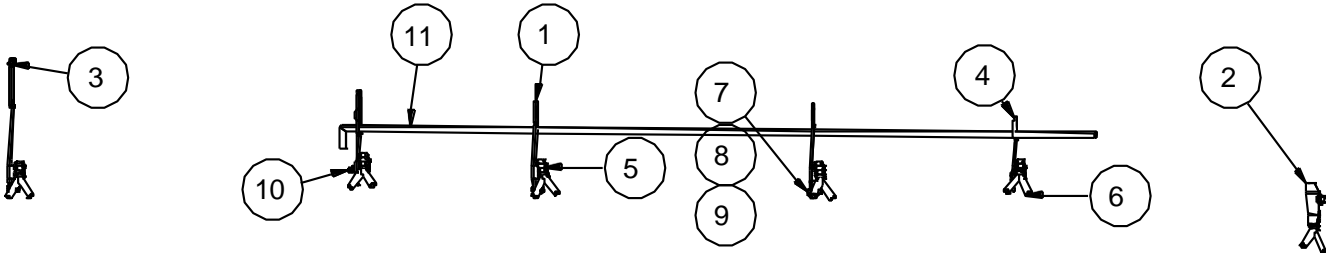
805360 Valmar unit with hitch mount



Parts List			Parts List		
ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	1	805375 Left hand tube mount	8	1	805362 Valmar Rear Right Assy
2	1	1655 SPECIAL 8 OUTLET	9	1	805365 Valmar Handrail Wldt on 3 section hitch
3	1	805385 Step Weldt 3 Section Valmar Hitch	10	2	805374 U bolt Plate
4	1	Valmar Wheel Drive Assy	11	6	100659 bolt 7-16 X 1 1-4 gr5 pltd nc
5	1	805361 Valmar Front Right Assy	12	7	102124 nut nylok 7/16" nc gr5 pltd
6	8	100812 bolt 5-8 X 7 gr5 pltd nc	13	10	101114 flat washer 7/16"
7	8	102127 nut nylok 5/8" nc gr5 pltd	14	1	805434 wheel drive chain lock mount

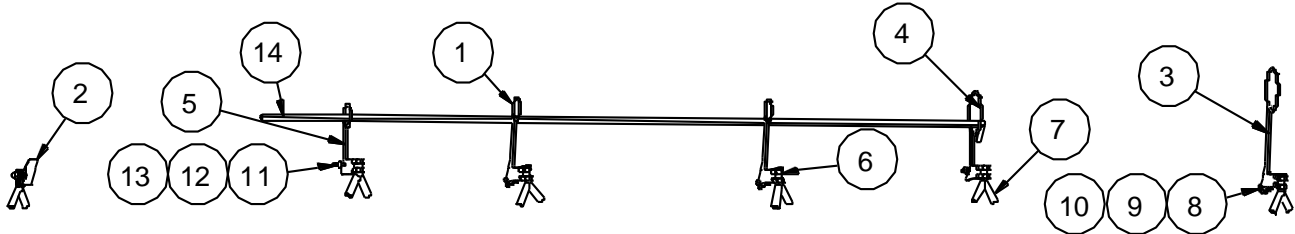
6.19. VALMAR WING FRAME PARTS

805422 Airflor hose assy 46 ft Left side



Parts List			Parts List		
ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	4	805397 Mount for hoses Valmar	7	8	100702 bolt 1/2nc 1 1/2 gr5 pltd hex
2	1	805416 Valmar Airflo LH under frame mount	8	8	102125 nut nylok 1/2" nc gr5 pltd
3	2	805409 Valmar air hose mount 6 inch ring	9	8	101105 washer flat 3/8"
4	2	805414 Valmar hose mount 3 in	10	4	100604 bolt 3-8 X 1 1-2 gr5 pltd nc
5	32	113323 Hose clamp 1 in nom 1 ID	11	2	805432 hose support bar assy
6	16	110983 1 in Poly Y			

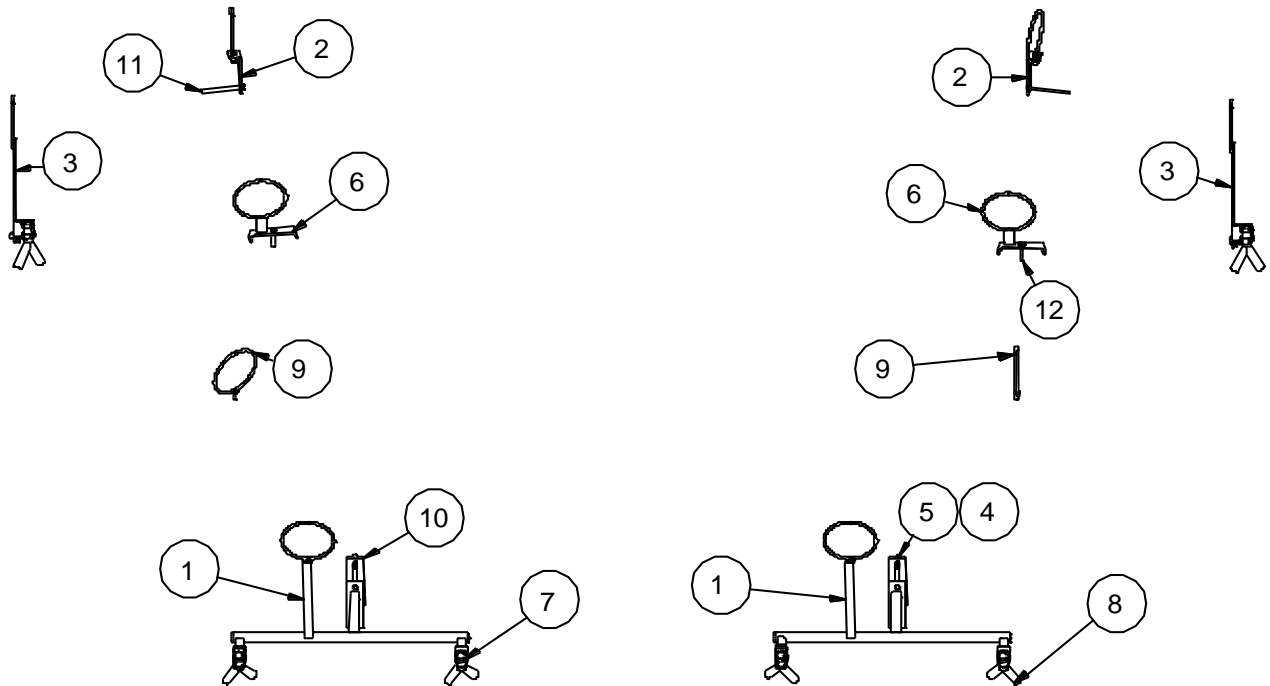
805422 airflow hose assy right side



Parts List			Parts List		
ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	4	805397 Mount for hoses Valmar	8	8	100702 bolt 1/2nc 1 1/2 gr5 pltd hex
2	1	805399 mounting plate for y splitters far left end	9	8	101106 washer flat 1/2"
3	2	805409 Valmar air hose mount 6 inch ring	10	8	102125 nut nylok 1/2" nc gr5 pltd
4	2	805412 Valmar Airflo Hose mount on Hydr mount 6 inch	11	4	102123 nut nylok 3/8" nc gr5 pltd
5	2	805414 Valmar hose mount 3 in	12	8	101105 washer flat 3/8"
6	32	113323 Hose clamp 1 in nom 1 ID	13	4	100604 bolt 3-8 X 1 1-2 gr5 pltd nc
7	16	110983 1 in Poly Y	14	2	805432 hose support bar assy

6.20. VALMAR CENTER FRAME PARTS

805422 airflow hose assy front view



Parts List			Parts List		
ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	2	805415 Valmar Y splitter Bar mount right side	7	32	113323 Hose clamp 1 in nom 1 ID
2	2	805407 Valmar airflo hose mount assy	8	16	110983 1 in Poly Y
3	2	805409 Valmar air hose mount 6 inch ring	9	2	805424 Valmar hose mount 6 in ring with 3 8 bolt
4	4	100618 BOLT 3 8NC 5 1 2 GR5 PLTD HEX_CPY1	10	2	805392 Backing plate for Y splitters
5	6	102123 NUT 3 8 NYLOC NC_CPY1	11	2	100616 bolt 3-8 X 5 gr5 pltd nc
6	2	805418 Valmar Aiflo hose mount 2 5 in with 6 in ring	12	2	100608 bolt 3-8 X 2 1-2 gr5 pltd nc

7. Hydraulic schematics, hose specifications

800020 - 31 FOOT

Hydraulic Lift

Hydraulic Hose

Part No.	Hose Size	Length	End Crimps	Quantity
118732	3/8"	26"	06JICF x 06JICF	2
118733	3/8"	42"	06JICF x 06JICF	2
118739	3/8"	58"	06JICF x 06JICF	2
118738	3/8"	66"	06JICF x 06JICF	2
118846	3/8"	78"	06JICF x 06JICF	2
118729	3/8"	90"	06JICF x 06JICF	2
118779	3/8"	100"	06JICF x 06JICF	3
118730	3/8"	112"	06JICF x 06JICF	3
118725	3/8"	190"	06JICF x 08MPT	2

Hydraulic Pivot

Hydraulic Hose

Part No.	Hose Size	Length	End Crimps	Quantity
118734	1/2"	288"	08JICF x 08MPT	2
118847	1/2"	255"	08JICF x 08JICF	2
118848	1/2"	334"	08JICF x 08JICF	2

Hydraulic Cylinders

Part No.	Bore	Stroke	Quantity
117337	4"	20"	2
117339	3"	6"	1
117378	2"	20"	2
117342	3"	10"	2

Hydraulic Cylinders

Part No.	Bore	Stroke	Quantity
117339	3"	6"	2

800009 - 36 FOOT

Hydraulic Lift

Hydraulic Hose

Part No.	Hose Size	Length	End Crimps	Quantity
118776	3/8"	20"	06JICF x 06JICF	1
118732	3/8"	26"	06JICF x 06JICF	2
118777	3/8"	35"	06JICF x 06JICF	2
118733	3/8"	42"	06JICF x 06JICF	2
118739	3/8"	58"	06JICF x 06JICF	2
118738	3/8"	66"	06JICF x 06JICF	2
118729	3/8"	90"	06JICF x 06JICF	2
118779	3/8"	100"	06JICF x 06JICF	1
118730	3/8"	112"	06JICF x 06JICF	3
118860	3/8"	142"	06JICF x 06JICF	4
118725	3/8"	190"	06JICF x 08MPT	2

Hydraulic Pivot

Hydraulic Hose

Part No.	Hose Size	Length	End Crimps	Quantity
118734	1/2"	288"	08JICF x 08MPT	2
118857	1/2"	325"	08JICF x 08JICF	2
118856	1/2"	477"	08JICF x 08JICF	2

Hydraulic Cylinders

Part No.	Bore	Stroke	Quantity
117337	4"	20"	2
117339	3"	6"	2
117378	2"	20"	2
117342	3"	10"	2

Hydraulic Cylinders

Part No.	Bore	Stroke	Quantity
117339	3"	6"	2

800010 - 42 FOOT

Hydraulic Lift

Hydraulic Hose

Part No.	Hose Size	Length	End Crimps	Quantity
118732	3/8"	26"	06JICF x 06JICF	2
188733	3/8"	42"	06JICF x 06JICF	2
118739	3/8"	58"	06JICF x 06JICF	2
118738	3/8"	66"	06JICF x 06JICF	2
118729	3/8"	90"	06JICF x 06JICF	2
118779	3/8"	100"	06JICF x 06JICF	1
118730	3/8"	112"	06JICF x 06JICF	3
118728	3/8"	152"	06JICF x 06JICF	2
118840	3/8"	164"	06JICF x 06JICF	2
118725	3/8"	190"	06JICF x 08MPT	2

Hydraulic Pivot

Hydraulic Hose

Part No.	Hose Size	Length	End Crimps	Quantity
118734	1/2"	288"	08JICF x 08MPT	2
118735	1/2"	292"	08JICF x 08JICF	2
118737	1/2"	419"	08JICF x 08JICF	2

Hydraulic Cylinders

Part No.	Bore	Stroke	Quantity
117337	4"	20"	2
117339	3"	6"	2
117378	2"	20"	2
117342	3"	10"	2

Hydraulic Cylinders

Part No.	Bore	Stroke	Quantity
117339	3"	6"	2

800083 - 46 FOOT

Hydraulic Lift

Hydraulic Hose

Part No.	Hose Size	Length	End Crimps	Quantity
118732	3/8"	26"	06JICF x 06JICF	2
188733	3/8"	42"	06JICF x 06JICF	2
118739	3/8"	58"	06JICF x 06JICF	2
118738	3/8"	66"	06JICF x 06JICF	2
118729	3/8"	90"	06JICF x 06JICF	2
118779	3/8"	100"	06JICF x 06JICF	1
118730	3/8"	112"	06JICF x 06JICF	2
118840	3/8"	164"	06JICF x 06JICF	2
118725	3/8"	190"	06JICF x 08MPT	2
118741	3/8"	195"	06JICF x 06JICF	2

Hydraulic Pivot

Hydraulic Hose

Part No.	Hose Size	Length	End Crimps	Quantity
118734	1/2"	288"	08JICF x 08MPT	2
118742	1/2"	304"	08JICF x 08JICF	1
118743	1/2"	311"	08JICF x 08JICF	1
118744	1/2"	431"	08JICF x 08JICF	2

Hydraulic Cylinders

Part No.	Bore	Stroke	Quantity
117337	4"	20"	2
117339	3"	6"	2
117378	2"	20"	2
117342	3"	10"	2

Hydraulic Cylinders

Part No.	Bore	Stroke	Quantity
117339	3"	6"	2

800017 - 52 FOOT

Hydraulic Lift

Hydraulic Hose

Part No.	Hose Size	Length	End Crimps	Quantity
118732	3/8"	26"	06JICF x 06JICF	2
188733	3/8"	42"	06JICF x 06JICF	2
118739	3/8"	58"	06JICF x 06JICF	3
118738	3/8"	66"	06JICF x 06JICF	3
118729	3/8"	90"	06JICF x 06JICF	2
118779	3/8"	100"	06JICF x 06JICF	1
118730	3/8"	112"	06JICF x 06JICF	2
118864	3/8"	215"	06JICF x 06JICF	2
118770	3/8"	237"	06JICF x 08MPT	2
118765	3/8"	241"	06JICF x 06JICF	2

Hydraulic Pivot

Hydraulic Hose

Part No.	Hose Size	Length	End Crimps	Quantity
118848	1/2"	334"	08JICF x 08MPT	2
118852	1/2"	348"	08JICF x 08JICF	1
118853	1/2"	360"	08JICF x 08JICF	1
118856	1/2"	477"	08JICF x 08JICF	2

Hydraulic Cylinders

Part No.	Bore	Stroke	Quantity
117337	4"	20"	2
117339	3"	6"	2
117378	2"	20"	2
117342	3"	10"	2

Hydraulic Cylinders

Part No.	Bore	Stroke	Quantity
117339	3"	6"	2

800019 - 60 FOOT

Hydraulic Lift

Hydraulic Hose

Part No.	Hose Size	Length	End Crimps	Quantity
118776	3/8"	20"	06JICF x 06JICF	1
118732	3/8"	26"	06JICF x 06JICF	2
118777	3/8"	35"	06JICF x 06JICF	2
118733	3/8"	42"	06JICF x 06JICF	2
118846	3/8"	73"	06JICF x 06JICF	1
118729	3/8"	90"	06JICF x 06JICF	5
118779	3/8"	100"	06JICF x 06JICF	2
118730	3/8"	112"	06JICF x 06JICF	1
118337	3/8"	285"	06JICF x 06JICF	2
118338	3/8"	310"	06JICF x 06JICF	2
188863	3/8"	290"	06JICF x 08MPT	2

Hydraulic Pivot

Hydraulic Hose

Part No.	Hose Size	Length	End Crimps	Quantity
118858	1/2"	410"	08JICF x 08JICF	2
118849	1/2"	512"	08JICF x 08JICF	1
118859	1/2"	522"	08JICF x 08JICF	1
118845	1/2"	368"	08JICF x 08MPT	2

Hydraulic Cylinders

Part No.	Bore	Stroke	Quantity
117378	2"	20"	2
117342	3"	10"	2
117339	3"	6"	2
117364	2"	16"	2

Hydraulic Cylinders

Part No.	Bore	Stroke	Quantity
117339	3"	6"	2

800020 HYD LIFT CIRCUIT - 31FT - 3 SECTION

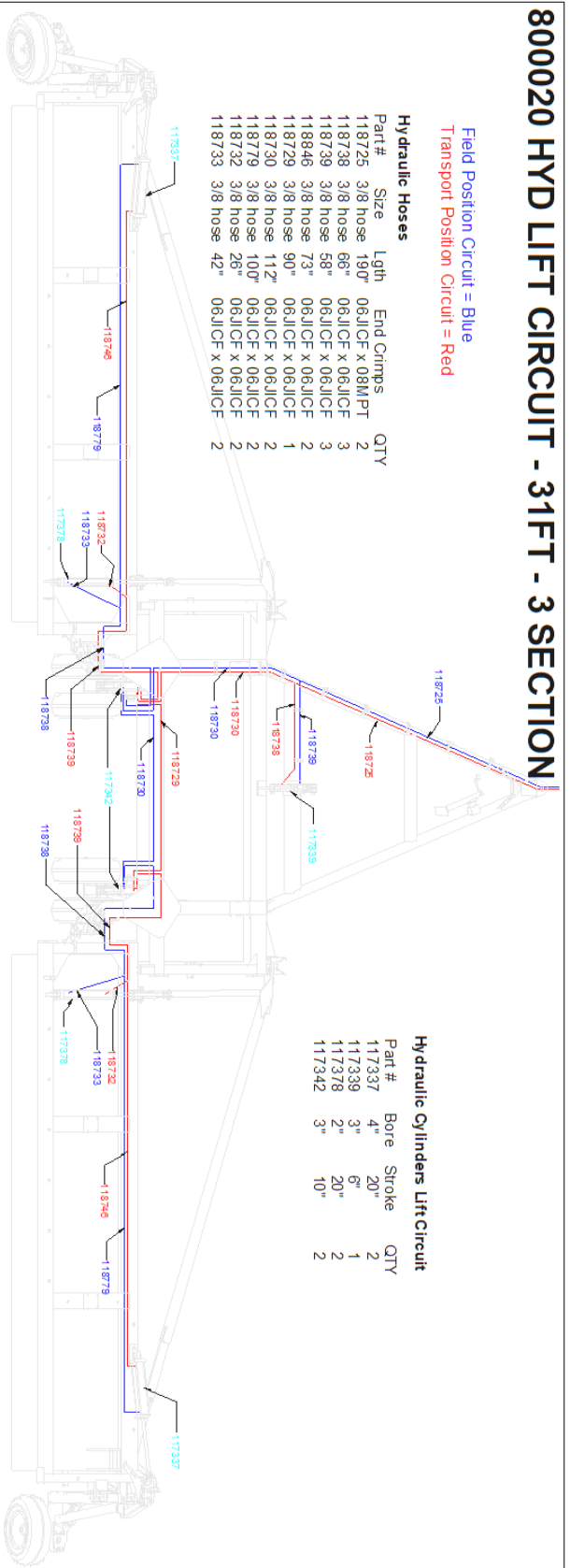
Field Position Circuit = Blue
 Transport Position Circuit = Red

Hydraulic Hoses

Part #	Size	Lgth	End Crimps	QTY
118725	3/8 hose	190"	06JICF x 08MPT	2
118738	3/8 hose	66"	06JICF x 06JICF	3
118739	3/8 hose	58"	06JICF x 06JICF	2
118846	3/8 hose	73"	06JICF x 06JICF	3
118729	3/8 hose	90"	06JICF x 06JICF	1
118730	3/8 hose	112"	06JICF x 06JICF	2
118779	3/8 hose	100"	06JICF x 06JICF	2
118732	3/8 hose	28"	06JICF x 06JICF	2
118733	3/8 hose	42"	06JICF x 06JICF	2

Hydraulic Cylinders Lift Circuit

Part #	Bore	Stroke	QTY
117337	4"	20"	2
117339	3"	6"	1
117378	2"	20"	2
117342	3"	10"	2



800020 HYD WHEEL PIVOT AND LEVELER CIRCUIT - 31FT - 3 S

Pivot to Fold Circuit = Green
 Pivot to Transport Circuit = Pink

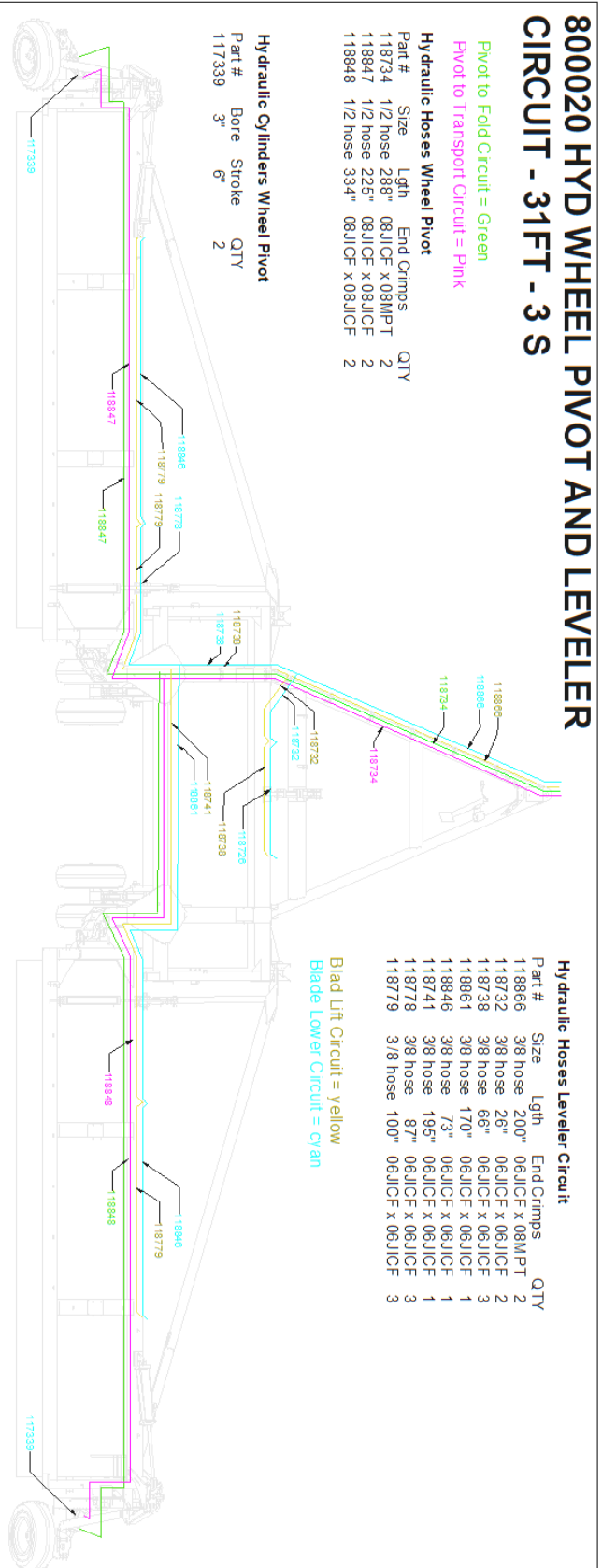
Hydraulic Hoses Wheel Pivot

Part #	Size	Lght	End Crimps	QTY
118734	1/2 hose	288"	08JICF x 08MPT	2
118847	1/2 hose	225"	08JICF x 08JICF	2
118848	1/2 hose	334"	08JICF x 08JICF	2

Hydraulic Hoses Leveler Circuit

Part #	Size	Lgth	End Crimps	QTY
118866	3/8 hose	200"	06JICF x 08MPT	2
118732	3/8 hose	26"	06JICF x 06JICF	2
118738	3/8 hose	66"	06JICF x 06JICF	3
118861	3/8 hose	170"	06JICF x 06JICF	1
118846	3/8 hose	73"	06JICF x 06JICF	1
118741	3/8 hose	195"	06JICF x 06JICF	1
118778	3/8 hose	87"	06JICF x 06JICF	3
118779	3/8 hose	100"	06JICF x 06JICF	3

Blade Lift Circuit = yellow
 Blade Lower Circuit = cyan



800009 Hyd Lift & Fold Circuit - 36ft - 3 Section no Powerfold

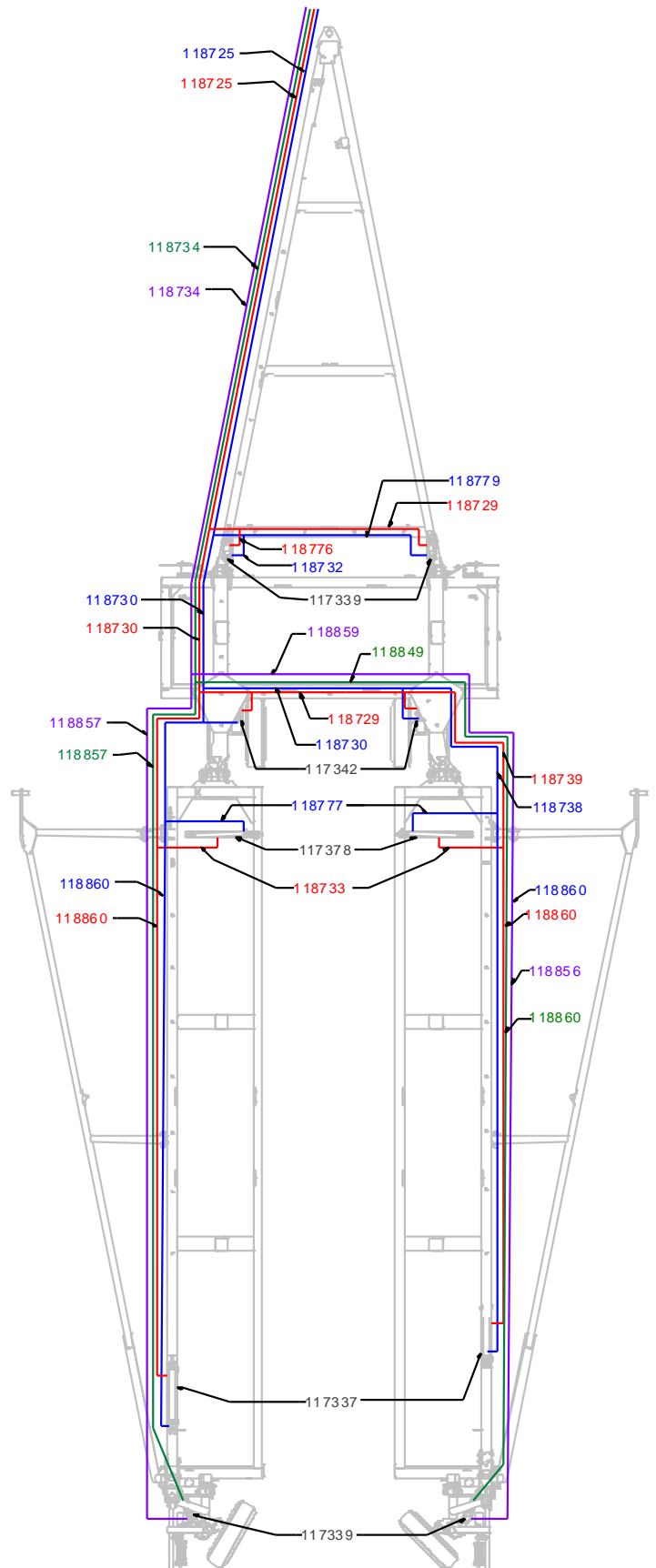
TRANSPORT POSITION = RED
FIELD POSITION = BLUE
PIVOT TO FOLD CIRCUIT = GREEN
PIVOT TO TRANSPORT CIRCUIT = PURPLE

Hydraulic Hoses

Part	Size	Lgth	End Crimps	QTY
118776	3/8 hose	20"	06JICF x 06JICF	1
118732	3/8 hose	26"	06JICF x 06JICF	2
118777	3/8 hose	35"	06JICF x 06JICF	2
118733	3/8 hose	42"	06JICF x 06JICF	2
118739	3/8 hose	58"	06JICF x 06JICF	2
118738	3/8 hose	66"	06JICF x 06JICF	2
118729	3/8 hose	90"	06JICF x 06JICF	2
118779	3/8 hose	100"	06JICF x 06JICF	2
118730	3/8 hose	112"	06JICF x 06JICF	1
118860	3/8 hose	142"	06JICF x 06JICF	4
118725	3/8 hose	190"	06JICF x 08MPT	2
118734	1/2 hose	288"	08JICF x 08MPT	2
118857	1/2 hose	325"	08JICF x 08JICF	2
118856	1/2 hose	477"	08JICF x 08JICF	2

Hydraulic Cylinders

Part #	Bore	Stroke	QTY
117339	3"	6"	4
117378	2"	20"	2
117342	3"	10"	2
117337	4"	20"	2



800010 HYD LIFT CIRCUIT - 42FT - 3 SECTION

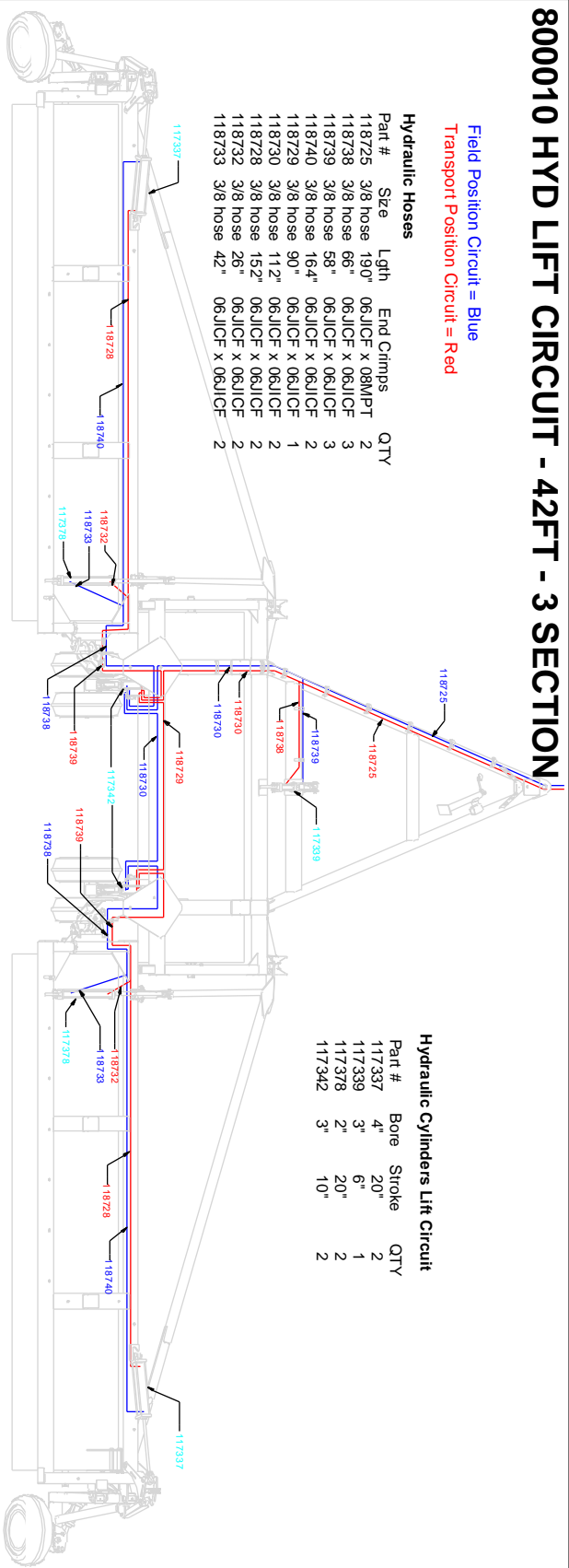
Field Position Circuit = Blue
 Transport Position Circuit = Red

Hydraulic Hoses

Part #	Size	Lgth	End Cimps	QTY
118725	3/8 hose	190"	06JICF x 08MPT	2
118738	3/8 hose	66"	06JICF x 06JICF	3
118739	3/8 hose	58"	06JICF x 06JICF	3
118740	3/8 hose	164"	06JICF x 06JICF	1
118729	3/8 hose	90"	06JICF x 06JICF	2
118730	3/8 hose	112"	06JICF x 06JICF	2
118728	3/8 hose	152"	06JICF x 06JICF	2
118732	3/8 hose	26"	06JICF x 06JICF	2
118733	3/8 hose	42"	06JICF x 06JICF	2

Hydraulic Cylinders Lift Circuit

Part #	Bore	Stroke	QTY
117337	4"	20"	2
117339	3"	6"	1
117378	2"	20"	2
117342	3"	10"	2



800010 HYD WHEEL PIVOT CIRCUIT - 42FT - 3 S

Pivot to Fold Circuit = Green
 Pivot to Transport Circuit = Pink

Hydraulic Hoses Wheel Pivot

Part #	Size	Lgth	End Cimps	QTY
118734	1/2 hose	288"	08JICF x 08MPT	2
118735	1/2 hose	292"	08JICF x 08JICF	2
118737	1/2 hose	419"	08JICF x 08JICF	2

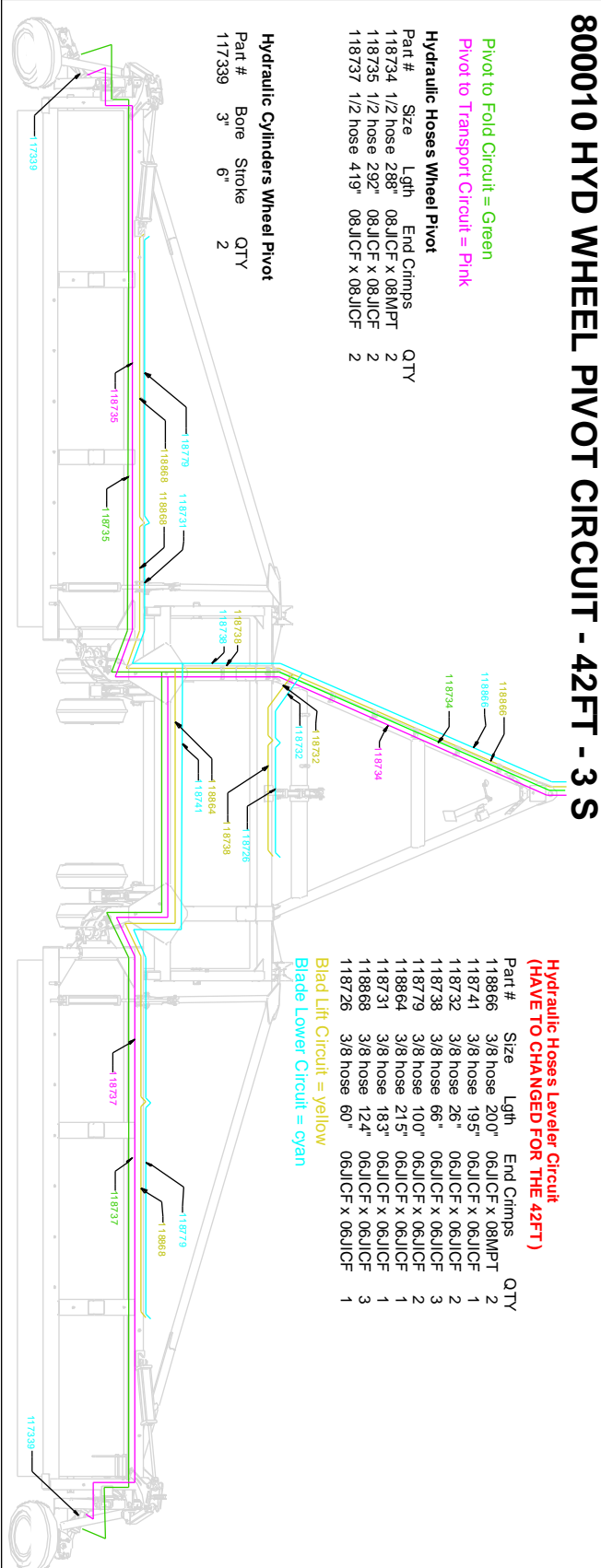
Hydraulic Cylinders Wheel Pivot

Part #	Bore	Stroke	QTY
117339	3"	6"	2

Hydraulic Hoses Leveler Circuit (HAVE TO CHANGED FOR THE 42FT)

Part #	Size	Lgth	End Cimps	QTY
118866	3/8 hose	200"	06JICF x 08MPT	2
118741	3/8 hose	195"	06JICF x 06JICF	1
118732	3/8 hose	26"	06JICF x 06JICF	2
118738	3/8 hose	66"	06JICF x 06JICF	3
118779	3/8 hose	100"	06JICF x 06JICF	3
118864	3/8 hose	215"	06JICF x 06JICF	1
118731	3/8 hose	183"	06JICF x 06JICF	1
118868	3/8 hose	124"	06JICF x 06JICF	3
118726	3/8 hose	60"	06JICF x 06JICF	1

Blade Lift Circuit = yellow
 Blade Lower Circuit = cyan



800083 HYD LIFT CIRCUIT - 46FT - 3 SECTION

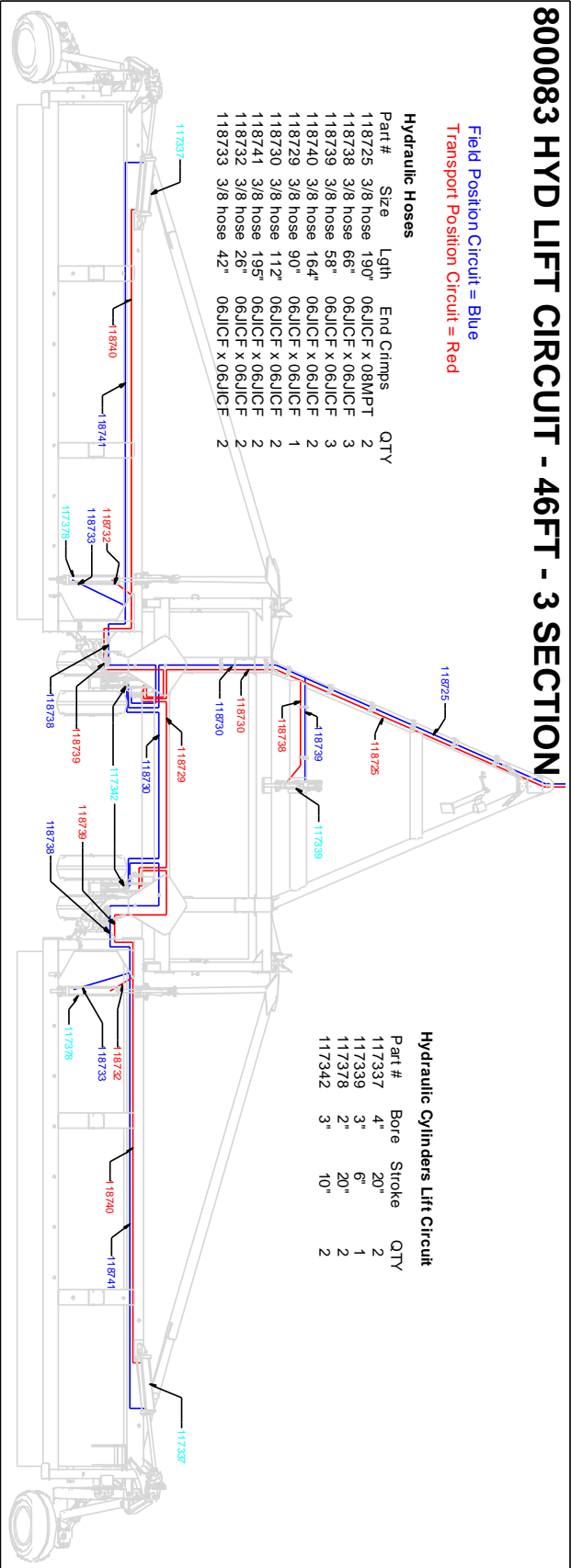
Field Position Circuit = Blue
 Transport Position Circuit = Red

Hydraulic Hoses

Part #	Size	Lgth	End Crimps	QTY
118725	3/8 hose	190"	06JICF x 08MPT	2
118738	3/8 hose	66"	06JICF x 06JICF	3
118739	3/8 hose	58"	06JICF x 06JICF	3
118740	3/8 hose	164"	06JICF x 06JICF	2
118729	3/8 hose	90"	06JICF x 06JICF	1
118730	3/8 hose	112"	06JICF x 06JICF	2
118741	3/8 hose	195"	06JICF x 06JICF	2
118732	3/8 hose	26"	06JICF x 06JICF	2
118733	3/8 hose	42"	06JICF x 06JICF	2

Hydraulic Cylinders Lift Circuit

Part #	Bore	Stroke	QTY
117337	4"	20"	2
117339	3"	6"	1
117378	2"	20"	2
117342	3"	10"	2



800083 HYD WHEEL PIVOT CIRCUIT - 46FT - 3 S

Pivot to Fold Circuit = Green
 Pivot to Transport Circuit = Pink

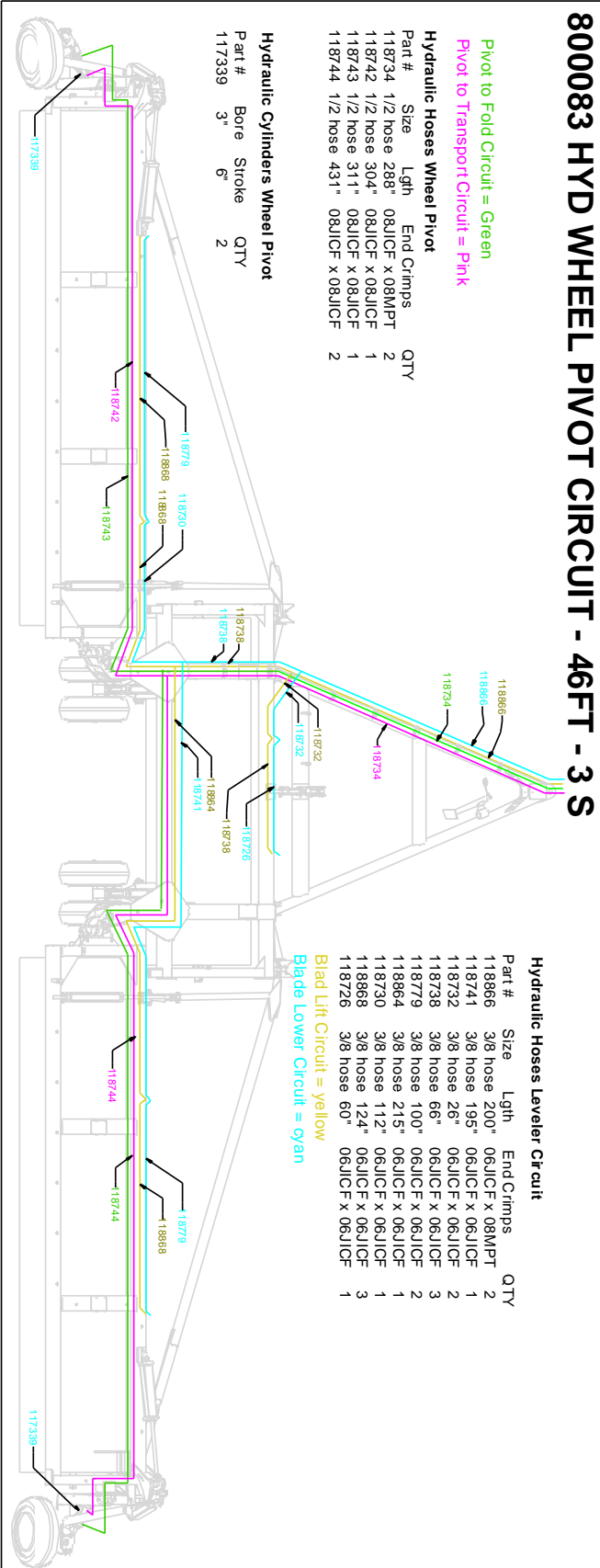
Hydraulic Hoses Wheel Pivot

Part #	Size	Lgth	End Crimps	QTY
118734	1/2 hose	288"	08JICF x 08MPT	2
118742	1/2 hose	304"	08JICF x 08JICF	1
118743	1/2 hose	311"	08JICF x 08JICF	1
118744	1/2 hose	431"	08JICF x 08JICF	2

Blade Lower Circuit = yellow

Hydraulic Cylinders Wheel Pivot

Part #	Bore	Stroke	QTY
117339	3"	6"	2

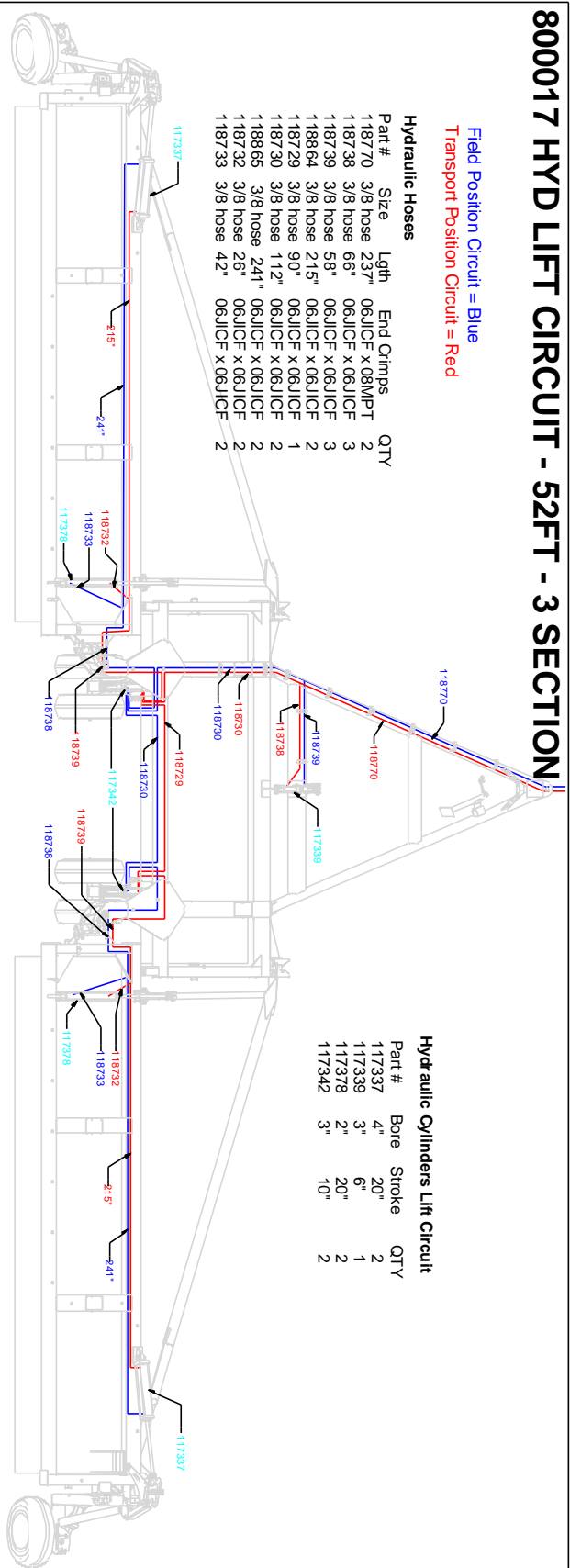


800017 HYD LIFT CIRCUIT - 52FT - 3 SECTION

Field Position Circuit = Blue
 Transport Position Circuit = Red

Hydraulic Hoses

Part #	Size	Lgth	End Crimps	QTY
118770	3/8 hose	237"	06JICF x 08MPT	2
118738	3/8 hose	66"	06JICF x 06JICF	3
118739	3/8 hose	58"	06JICF x 06JICF	3
118864	3/8 hose	215"	06JICF x 06JICF	2
118729	3/8 hose	90"	06JICF x 06JICF	1
118730	3/8 hose	112"	06JICF x 06JICF	2
118865	3/8 hose	241"	06JICF x 06JICF	2
118732	3/8 hose	25"	06JICF x 06JICF	2
118733	3/8 hose	42"	06JICF x 06JICF	2



Hydraulic Cylinders Lift Circuit

Part #	Bore	Stroke	QTY
117337	4"	20"	2
117339	3"	6"	1
117378	2"	20"	2
117342	3"	10"	2

800017 HYD WHEEL PIVOT CIRCUIT - 52FT - 3S

Pivot to Fold Circuit = Green

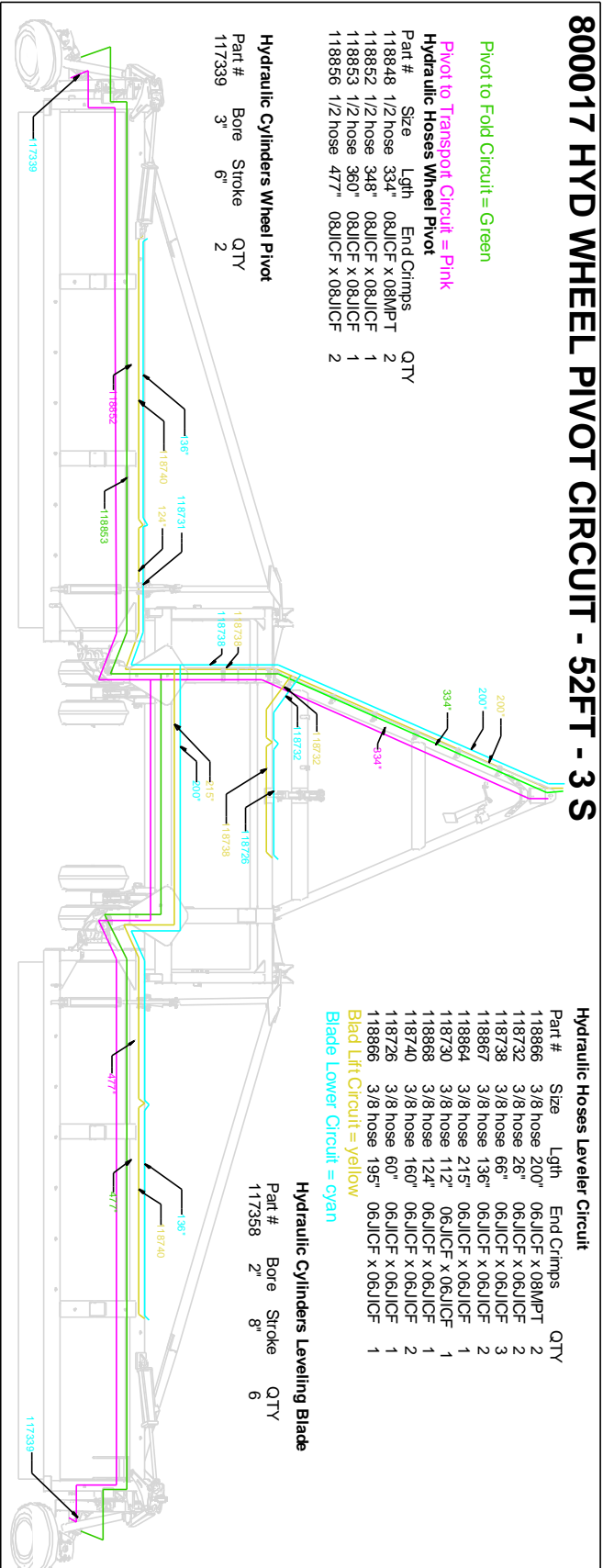
Pivot to Transport Circuit = Pink

Hydraulic Hoses Wheel Pivot

Part #	Size	Lgth	End Crimps	QTY
118848	1/2 hose	334"	08JICF x 08MPT	2
118852	1/2 hose	348"	08JICF x 08JICF	1
118853	1/2 hose	360"	08JICF x 08JICF	1
118856	1/2 hose	477"	08JICF x 08JICF	2

Hydraulic Cylinders Wheel Pivot

Part #	Bore	Stroke	QTY
117339	3"	6"	2



Hydraulic Hoses Leveler Circuit

Part #	Size	Lgth	End Crimps	QTY
118866	3/8 hose	200"	06JICF x 08MPT	2
118732	3/8 hose	26"	06JICF x 06JICF	3
118738	3/8 hose	66"	06JICF x 06JICF	2
118867	3/8 hose	136"	06JICF x 06JICF	2
118864	3/8 hose	215"	06JICF x 06JICF	1
118730	3/8 hose	112"	06JICF x 06JICF	1
118868	3/8 hose	124"	06JICF x 06JICF	1
118740	3/8 hose	160"	06JICF x 06JICF	2
118728	3/8 hose	60"	06JICF x 06JICF	1
118866	3/8 hose	195"	06JICF x 06JICF	1

Blade Lift Circuit = yellow

Blade Lower Circuit = cyan

Hydraulic Cylinders Leveling Blade

Part #	Bore	Stroke	QTY
117358	2"	8"	6

800019 Hyd Lift & Fold Circuit - 60ft - 3 Section no Powerfold

TRANSPORT POSITION = RED

FIELD POSITION = BLUE

PIVOT TO FOLD CIRCUIT = GREEN

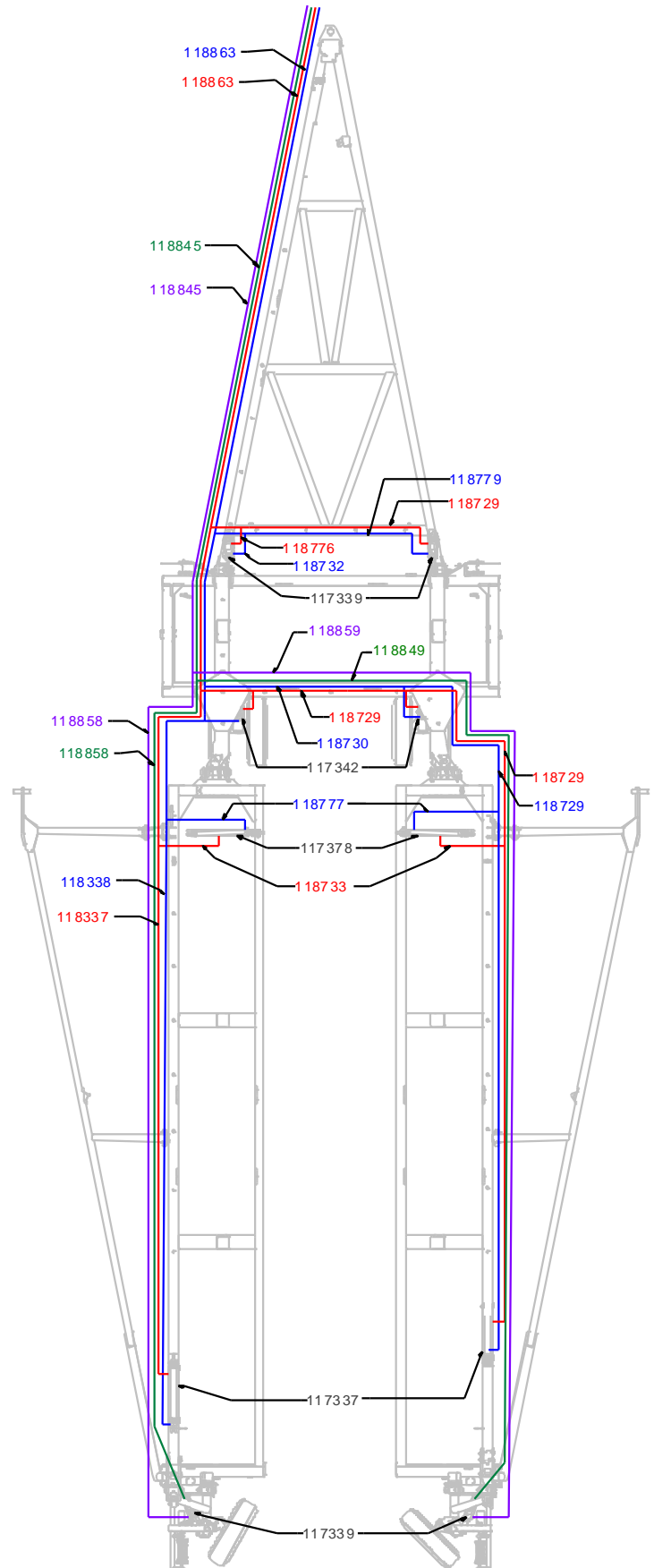
PIVOT TO TRANSPORT CIRCUIT = PURPLE

Hydraulic Hoses

Part	Size	Lgth	End Crimps	QTY
118776	3/8 hose	20"	06JICF x 06JICF	1
118732	3/8 hose	26"	06JICF x 06JICF	2
118777	3/8 hose	35"	06JICF x 06JICF	2
118733	3/8 hose	42"	06JICF x 06JICF	2
118846	3/8 hose	73"	06JICF x 06JICF	1
118729	3/8 hose	90"	06JICF x 06JICF	5
118779	3/8 hose	100"	06JICF x 06JICF	2
118730	3/8 hose	112"	06JICF x 06JICF	1
118337	3/8 hose	285"	06JICF x 06JICF	2
118338	3/8 hose	310"	06JICF x 06JICF	2
118863	3/8 hose	290"	06JICF x 08MPT	2
118858	1/2 hose	410"	08JICF x 08JICF	2
118849	1/2 hose	512"	08JICF x 08JICF	1
118859	1/2 hose	522"	08JICF x 08JICF	1
118845	1/2 hose	368"	08JICF x 08MPT	2

Hydraulic Cylinders

Part #	Bore	Stroke	QTY
117339	3"	6"	4
117378	2"	20"	2
117342	3"	10"	2
117337	4"	20"	2



8. WARRANTY

1. Ag Shield Manufacturing warrants each new Ag Shield LandRoller to be free from factory defects in material and workmanship under normal use and service, when set up and operated in accordance with factory instructions for one year from the date of delivery to the original purchaser.
2. Ag Shield's obligation under this warranty is limited to the supplying of parts to replace those which are defective due to factory workmanship or material.
3. Your Ag Shield Dealer is responsible for providing warranty labor. Credit for required labor is specifically agreed to on an individual case basis.
4. The warranty is void on any unit which has been tampered with or modified in any way not authorized in writing by the factory.
5. This warranty is void on any unit which is subject to misuse, negligence or accident, or which has had the serial number tampered or removed.
6. A "Warranty Claim Form" (sample at end of handbook) must be submitted to Ag Shield with returned parts for parts to be considered for warranty examination.
7. A warranty registration page from the front of this manual must be returned to the factory in order to qualify for warranty examination.
8. All returned parts must be sent to the factory freight prepaid, and warranty parts will be returned to you freight collect.
9. Replacement parts shipped pending receipt of parts for examination will be invoiced and remain on your account until such time as examination indicates that a credit for those parts be issued or that payment is due.
10. Parts not returned for warranty examination within 30 days must be paid for at that time. Ag Shield will immediately reimburse any cash paid for items that are later determined defective.
11. Warranty terms and conditions are subject to provincial and state legislation.
12. There will be No Warranty on the Level Blade, as we do not have direct control over the utilization.



AG SHIELD LTD.

BOX 9, BENITO, MANITOBA CANADA R0L 0C0
 Phone 1-800-561-0132 or 204-539-2000 Fax 204-539-2130

www.agshield.com E-mail: sales@agshield.com

WARRANTY CLAIM FORM

Dealer		End User				
Address		Address				
City	State/Prov.	Zip/Postal	City	State/Prov.	Zip/Postal	
Date of Sale	Date Failed	Repair Date	Acres/Hours	Model	Serial Number	
Labor Hours	Labor Rate	Labor Amount	Parts Must Be Returned to Benito			
Quantity Item	Part #	Description	Price Each	Total Price	Describe the Cause of Failure And Corrective Action Taken	Approve /Reject
I certify that the information is accurate and That the parts were replaced on the machine			PARTS		Date Parts Rec'd	Rec'd By
			LABOUR		Items to Suppliers	
			TOTAL			

SHADED AREAS AG SHIELD USE ONLY – PLEASE ADD DETAILS FOR ITEM NUMBER ON BACK

ITEM _____

ITEM _____

