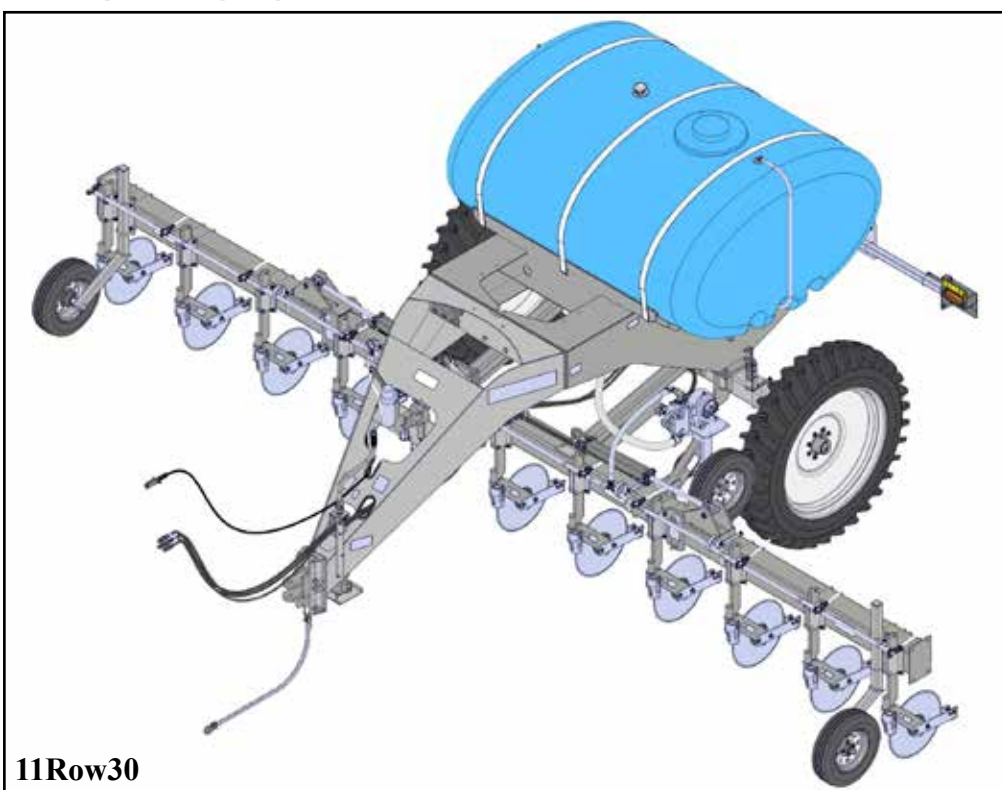


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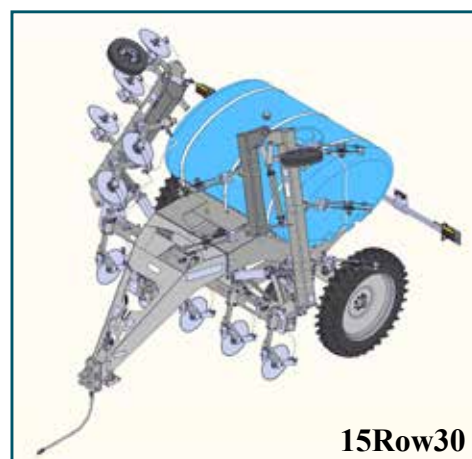
AT3000™

Assembly and Operators Manual



11Row30

All Terrain Liquid Fertilizer Injection Toolbar



15Row30

Manual Number
0603000
Rev. 6-14-16

\$20.00 Net.

ThurstonTM Manufacturing Company



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Welcome to Thurston Manufacturing Company. Our goal is to provide quality products and services to our customers. The company's BLU-JET products have a reputation for quality, excellence in design and proven durability. Energetic, resourceful and continuous improvement goals in Environmental, Safety, Quality, Production and Engineering keep our firm at the cutting edge of technology.

We hope your BLU-JET equipment will give you years of service.

Read this manual carefully. It will instruct you on how to operate and service your machine safely and correctly. Failure to do so could result in personal injury and, or equipment damage.

**SAFETY INFORMATION****DANGER**

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.

The sign will have the color combination of *red* and *white*.

**WARNING**

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.

The sign will have the color combination of *orange* and *black*.

**CAUTION**

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.

The sign will have the color combination of *yellow* and *black*.

NOTE: *Indicates a special point of information.*

Carefully read and follow all safety signs. Reinstall safety signs that are damaged or missing.



Right-hand and left-hand sides of the implement are determined by facing in the direction the implement will travel when going forward.

AT3000**▶ General Information:**

The BLU-JET AT3000 applicator features a 7" x 7", three and five section folding tool bar that can be operated as a 11R30 or 15R30 unit. The Gull wing lift design provides additional crop clearance during turn-around; and high flotation tires reduce the risk of deep compaction within the soil profile. The 1000 gallon elliptical tank provides the capacity needed to run longer between fills. The AT3000 is designed for BLU-JET's JetStream coultter injection or coultter knife injection.

▶ Warranty is provided for customers who operate and maintain their equipment as described in this manual. Warranty registration is accomplished by the dealer completing and forwarding the **WARRANTY REGISTRATION FORM** to Thurston Manufacturing Company. It is in your best interest to insure that this has been done.

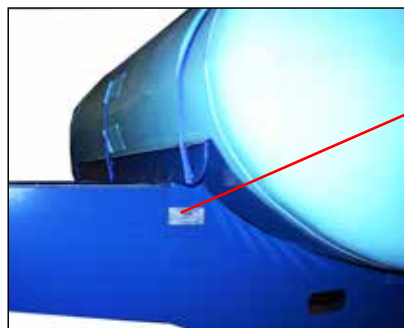
▶ For your convenience we have four easy ways to register your warranty.

- **Call our toll free number and ask for warranty registration. 1-800-658-3127**
- **Fax completed warranty registration form.
Fax: 402-385-3043**
- **Register on-line in warranty page at
www.blu-jet.com**
- **Complete and return registration form.**

Thurston Manufacturing Company Warranty does not cover the following:

- 1) Cleaning, transporting, mailing and service call charges.
- 2) Depreciation or damage caused by normal wear, accidents, improper protection or improper use.

See complete Warranty for details.



The Serial Number is located from the rear of the tool bar on the left-hand side.

▶ Record your implement model and serial number in the space provided below. Your dealer needs this information to give you prompt, efficient service when you order parts.

MODEL NO. _____
SERIAL NO. _____
DATE PURCHASED _____

AT3000



To The Dealer:

Inspect the implement thoroughly after assembly to be certain it is functioning properly before delivering it to the customer. The following checklist is a reminder of points to cover. Check off each item as it is found satisfactory or after proper adjustment is made.



PRE-DELIVERY CHECKLIST

- 1. All hardware properly tightened
- 2. Lubrication of grease fittings
- 3. All decals properly located and readable
- 4. Other adjustments for machine level height, etc.
- 5. Overall condition (touch up any scratches, clean and polish)
- 6. Operator's manual

DATE SET UP _____
SIGNATURE _____



DELIVERY

Review the operator's manual with the customer. Explain the following:

- 1. Safe operation and service
- 2. Correct machine installation and operation
- 3. Daily and periodic lubrication and maintenance
- 4. Daily and periodic inspections
- 5. Troubleshooting
- 6. Storing machine
- 7. Thurston Manufacturing Company parts and service
- 8. Have the customer write the machine model and serial number in space provided in manual introduction.
- 9. Give customer the operator's manual and encourage the customer to read the manual carefully.
- 10. Completion and mailing of warranty registration form.

DATE DELIVERED _____
SIGNATURE _____
MODEL NO. _____
SERIAL NO. _____

AT3000



Thank you for your recent purchase of a new BLU-JET implement. The primary objective of Thurston Manufacturing Company is to build and provide you with a quality product. However, in the event that a problem does occur, it is imperative that your warranty registration is on file in order to accurately respond to your specific service circumstances. For your convenience we have four easy ways to register your warranty:

**Register
Warranty
One of
Four Ways**

- Call our toll free number and ask for warranty registration.
1-800-658-3127
- Fax your completed warranty registration form.
1-402-385-3043
- Register on-line at:
www.blu-jet.com
- Complete and mail the warranty registration form.

This manual has been prepared to assist you in the assembly of your new machine and contains information pertaining to safety, operation and all of its parts. Our personnel in sales and service are always available to assist you when questions arise concerning the assembly or operation of your tool bar.

When ordering parts, please refer to part numbers and descriptions as listed throughout this book. All parts and whole goods will be shipped FOB Thurston, Nebraska or FOB your regional distributor. Always check merchandise immediately upon receipt for damage or shortage. Note any discrepancy on carrier's bill of lading and notify Sender within 10 days. Returned goods will be subject to a 15% restocking charge. Thurston Manufacturing Company reserves the right to make improvements and modifications on equipment without obligation to change previously built equipment. All prices are subject to change without notice.



Limited Warranty

AT3000



Thurston Manufacturing Company warrants each new BLU-JET machine primary framework to be free from defects in material and workmanship for a period of five (5) years, normal wear of wearing parts excepted. Thurston Manufacturing Company further warrants each new BLU-JET product to be free from defects in material and workmanship, normal wear of wearing parts excepted, for a period of one (1) year. All accessories purchased and resold by Thurston Manufacturing Company will be warranted according to their respective manufacturer. Tires on BLU-JET equipment are warranted through their respective tire manufacturers and their network of dealers in your local area.

Warranty begins from date of delivery to the original purchaser and applies to all new BLU-JET products that have not been altered and are being used for the intended purpose. Negligence, abuse or modification of equipment manufactured by or purchased and resold by Thurston Manufacturing Company will void this warranty.

The obligation of Thurston Manufacturing Company to honor this warranty is limited to the repair or replacement of defective merchandise, to the original purchaser, subject to inspection of equipment in question by an authorized Thurston Manufacturing Company sales or service technician. In the USA, freight of warranty replacement parts including main frame centers and wings will be prepaid for a period of one (1) Year by Thurston Manufacturing Company. Shipments of repaired or replaced parts including main frame centers and wings after one year will be paid by the customer.

Return of defective goods must be made within thirty (30) days of failure to Thurston Manufacturing Company, Thurston, Nebraska USA or to the nearest authorized BLU-JET Distributor or Rep Sales and service outlet.

Thurston Manufacturing Company will not be held responsible for any repair charges made by customers without prior written consent and prior equipment inspection by an authorized Thurston Manufacturing Company sales or service technician.

This warranty shall not be interpreted to render liability for injury or damages of any kind, direct, consequential or contingent to person or property. This warranty does not extend to loss of crops, economic and/or commercial loss, loss because of delay in crop production or any expense incurred for labor, supplies, substitute machinery, rental or for any other reason. This warranty is subject to any existing condition of supply, which may directly affect Thurston Manufacturing Company's ability to obtain materials of manufacture and delivery of replacement parts.

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

No one is authorized to alter, modify or enlarge this warranty nor its exclusions, limitations and reservations. Thurston Manufacturing Company makes no representations or warranties, expressed or implied (including implied warranties of merchantability and fitness), except for those set forth in Thurston Manufacturing Company's current applicable published warranty policies and procedures.

Layton W. Jensen, President

022398\mgmt



RECOGNIZE SAFETY INFORMATION

- This is the safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury. Follow recommended precautions and safe operating practices.



FOLLOW SAFETY INSTRUCTIONS

- Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs.
- Learn how to operate the machine and how to use controls properly.
- Do not let anyone operate without instruction.
- Keep your machine in proper working condition.
- Unauthorized modification to the machine may impair the function and, or safety and affect machine life



PROTECT CHILDREN AND BYSTANDERS

- Before you back, LOOK CAREFULLY behind for children.
- Clear area of children, pets and bystanders.



HIGHWAY AND TRANSPORT OPERATIONS

Adopt safe driving practices:

- Keep the brake pedals latched together at all times. **NEVER USE INDEPENDENT BRAKING WITH MACHINE IN TOW AS LOSS OF CONTROL AND/OR UPSET OF UNIT CAN RESULT.**
- Always drive at a safe speed relative to local conditions and ensure that your speed is low enough for an emergency stop to be safe and secure. Keep speed to a minimum.
- Reduce speed prior to turns to avoid the risk of overturning.
- Avoid sudden uphill turns on steep slopes.
- Always keep the tractor or towing vehicle in gear to provide engine braking when going downhill. Do not coast.
- Do not drink and drive.
- Comply with state and local laws governing highway safety and movement of farm machinery on public roads.
- Use approved accessory lighting and necessary warning devices to protect operators of other vehicles on the highway during daylight and nighttime transport.
- The use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all highway lighting and marking requirements.
- When driving the tractor and equipment on the road or highway under (20 m.p.h. max.) (40 k.p.h. max.) at night or during the day, use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem.



AT3000



HIGHWAY AND TRANSPORT OPERATIONS

- Plan your route to avoid heavy traffic.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersection, etc.
- Be observant of bridge loading ratings. Do not cross bridges rated lower than the gross weight at which you are operating.
- Always operate equipment in a position to provide maximum visibility at all times. Make allowances for increased length and weight of the equipment when making turns, stopping the unit, etc.



TRANSPORT SAFETY

- A safety chain will help control drawn equipment should it accidentally separate from the drawbar.
- Attach the chain to the tractor drawbar support or other anchor location. Provide only enough slack in the chain to permit turning.
- Use hydraulic cylinder transport lockup during road transportation.
- **Maximum road speed is 20 m.p.h. with an empty tank.**



Tank Fill Gallons	Maximum Highway	Maximum Application Speed
0	20 m.p.h.	12 m.p.h.
600	20 m.p.h.	12 m.p.h.
750	15 m.p.h.	12 m.p.h.
1000	10 m.p.h.	12 m.p.h.
1400	5 m.p.h.	10 m.p.h.



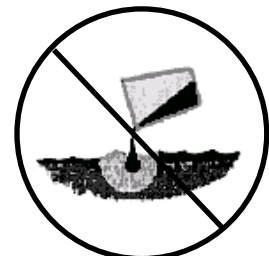
AVOID HIGH PRESSURE FLUIDS

- Escaping fluid under pressure can penetrate the skin causing serious injury.
- Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.
- Search for leaks with a piece of cardboard.
- Protect hands and body from high pressure fluids.
- If an accident occurs, see a doctor immediately.



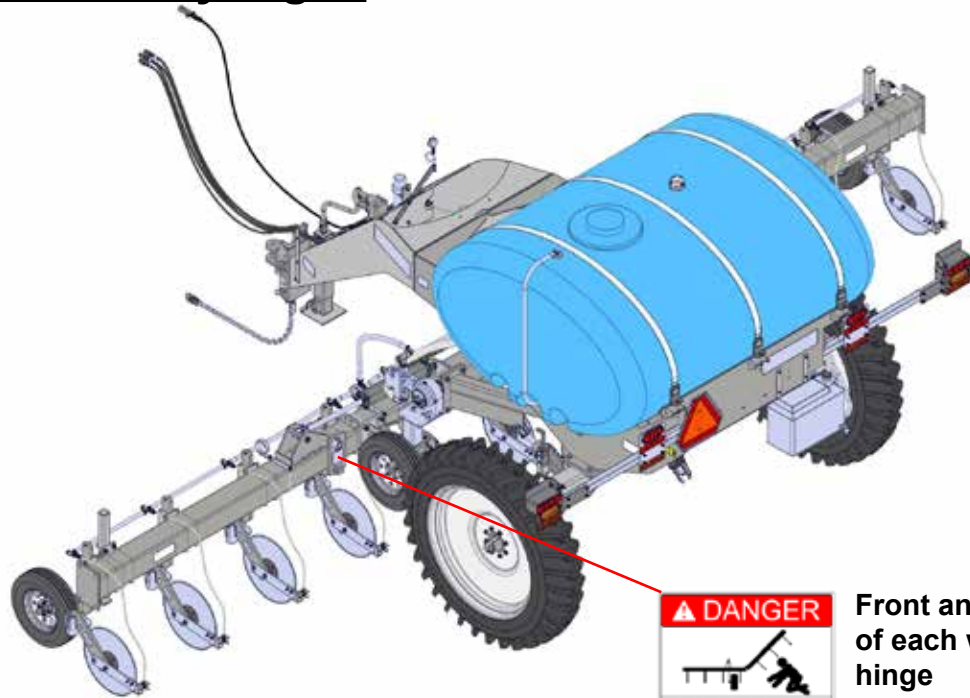
DISPOSE OF FLUIDS PROPERLY

- Improperly disposing of fluids can harm the environment and ecology. Before draining any fluids, contact your local environmental agency for the proper waste disposal methods.
- Use proper container when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.
- **DO NOT** pour oil into the ground, down a drain, or into a stream, pond, or lake. Observe relevant environmental protection regulations when disposing of oil and other harmful waste.



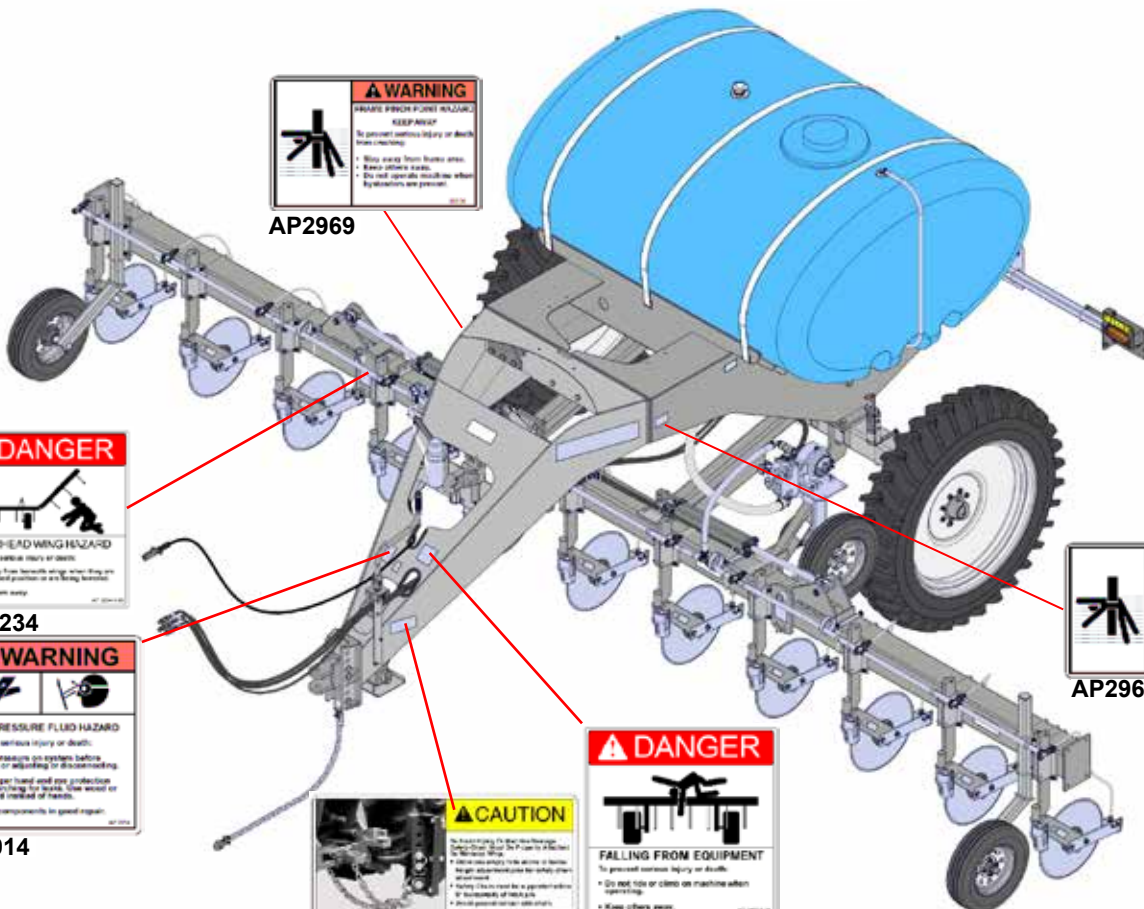
AT3000

Observe Safety Signs



Front and rear of each wing hinge

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AP2969



AP2234



AP2914



AP2469



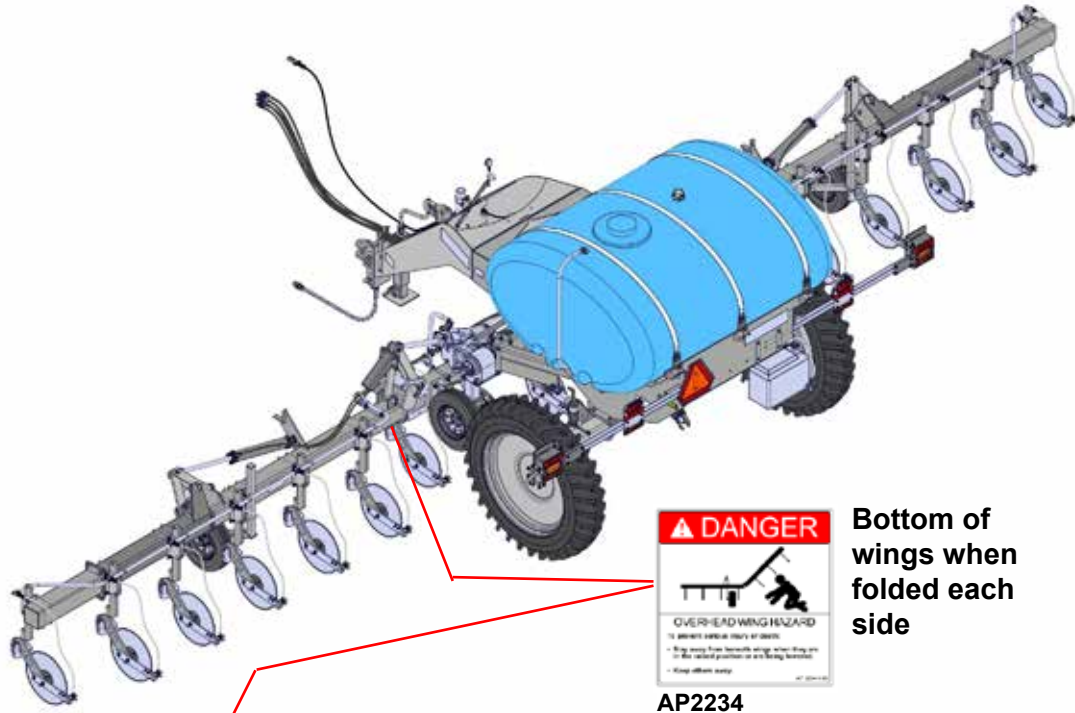
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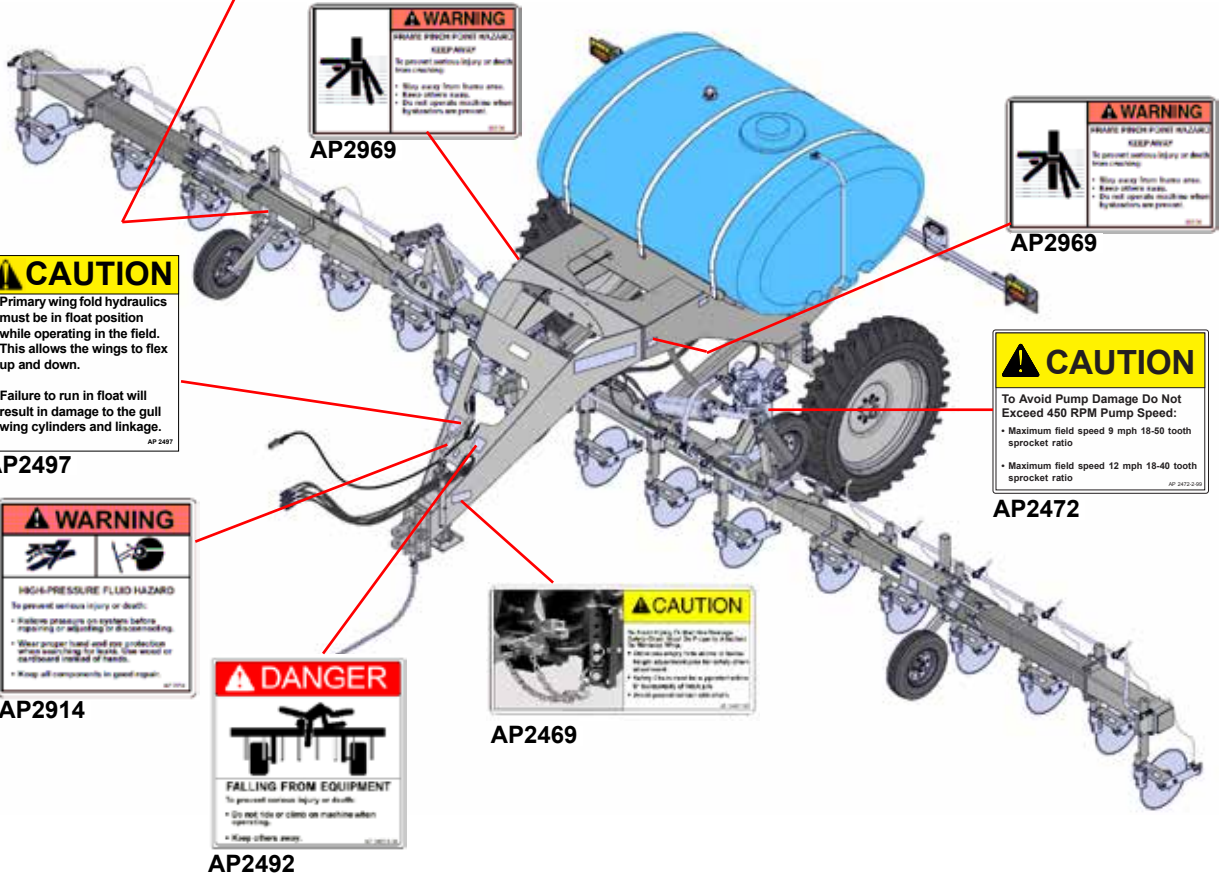
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AT3000

Observe Safety Signs



Bottom of wings when folded each side



AT3000

▶ Hitch

1. The tractor must be equipped with a drawbar and a drawbar safety chain clevis. For rigid frame tractors equipped with swinging drawbar, the drawbar must be located in a fixed position in the center of the tractor. Refer to your tractor operators manual for drawbar adjustment and drawbar operating instructions.



▶ **NOTE:**
Implement hitch weights are designed to match tractor size ranges. Check the following chart to confirm your particular implement specification.

Category	PTO Power (HP)	Maximum Vertical Static Load (lbs)		
		Drawbar Position		
		Short	Regular	Extended
0	≤ 38	1,574	1,124	787
1	≤ 64	2,698	1,798	1,349
2	≤ 154	4,946	3,372	2,473
3	≤ 248	6,070	4,046	2,922
4	≤ 402	7,418	4,946	3,597
5	≤ 671	10,116	6,744	N/A

▶ Tractor to tool bar connection

2. Before connecting the tool bar to the tractor drawbar, raise the tractor three point hitch (if equipped) to prevent interference between the implement and the tractor. Connect the tool bar to tractor drawbar **ONLY**. **DO NOT** connect the tool bar to any other part of the tractor. Connect the tool bar clevis to the tractor drawbar with hitch pin. Install the safety chain through the tractor drawbar support bracket.

▶ Safety hitch pin

3. Always use a safety hitch pin of the correct diameter. Make sure that the hitch pin is locked in place with a safety type lock pin or other locking device.

▶ Safety chain

4. Always use a safety chain between the toolbar and the tractor. Install the chain to the tractor drawbar support bracket. Support the center of the chain with a clevis installed to the tractor drawbar.



WARNING In case the tractor hitch pin is lost during transporting. The safety chain must be attached between the implement and tractor to prevent separated implement from running freely and causing damage or injury.



WARNING Do not move articulated tractor steering wheel until everyone is clear of the equipment. Moving the steering wheel can swing or move attached equipment which could cause serious personal injury.



WARNING Tractor drawbar must be in a fixed position before transporting implement. Implement will sway or slam against tractor resulting in equipment damage or injury to personnel.

AT3000

▶ Remote hydraulic

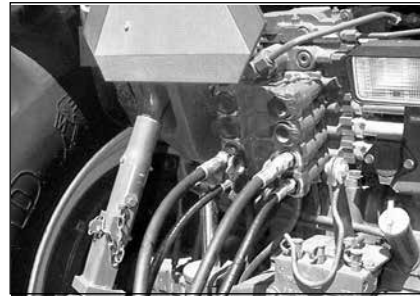
▶ **NOTE:** Always connect the hoses so the toolbar raises when the tractor remote control lever is moved rearward and lowers when the lever is moved forward.

▶ Remote hydraulic

▶ Leveling mainframe

▶ Jack stand

5. Connect the toolbar hydraulic hoses to the tractor remote couplers. The 3/8" hoses supply oil to the toolbar lift cylinders. The 1/4" hoses supply oil to the wing fold cylinders.



WARNING Hydraulic fluid escaping under pressure can have enough force to penetrate the skin. Hydraulic fluid may also infect a minor cut or opening in the skin. If injured by escaping fluid, see doctor at once. Serious infection or reaction can result if medical treatment is not given immediately. Make sure all connections are tight and that hoses and lines are in good condition before applying pressure to the system. Relieve all pressure before disconnecting the lines or performing other work on the hydraulic systems.

6. It may be necessary to tie the hydraulic hoses up to keep them away from the hitch area. A tarp strap around the hoses and between the two point arms works well.



7. Before leveling the machine tire pressure should be checked. Inflate mainframe tires to **56 P.S.I. Max.** Before beginning operation of this machine the mainframe must be level. Place toolbar on level surface. Adjust the hitch up or down in the tongue connector and connect to tractor.



8. Pull ring on drop leg jack plunger to lower or raise sand pad.

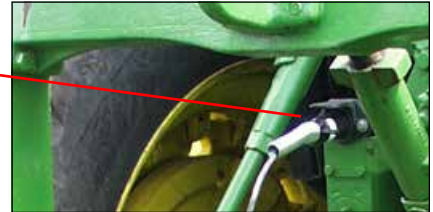


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▶ **Attaching electrical harness**



9. Attach 7 pin electrical harness before road transport.



10. Before road transport install lock collars.

10a. Use 4-1/4" depth collars as starting depth. Adjust as desired.

Depth collar storage



▶ **Starting depth collar depth control**



CAUTION

Primary wing fold cylinders hydraulics must be in float position while operating in the field.

▶ **Coultter shank adjustments**

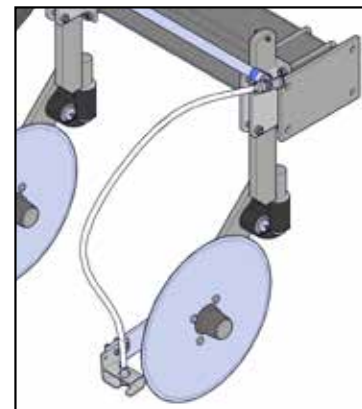
11. Gull wing hydraulic: Read decal located on lift hoses.

CAUTION

- Primary wing fold hydraulics must be in float position while operating in the field. This allows the wings to flex up and down.
- Failure to run in float will result in damage to the gull wing cylinders and linkage.

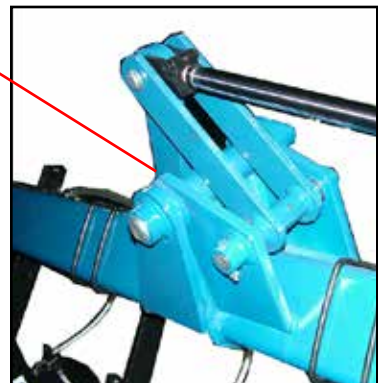
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12. Loosen carriage bolts and adjust coultter shanks in flatback until the blade is running at a depth of 4 to 5 inches.




▶ **Hinge and linkage lubrication**

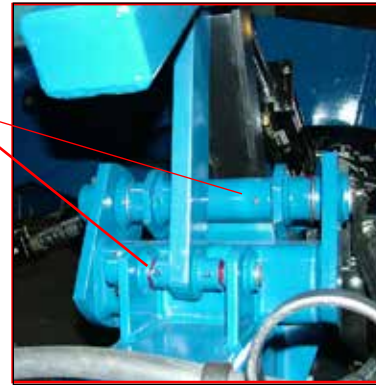
13. Grease all secondary wing linkage zerks on both sides. (Gull wing deluxe fold tool bar)



AT3000


▶  Primary wing lubrication
Gull wing and Standard daily

14. Grease primary wing hinge on both sides.
(Gull wing deluxe fold tool bar)

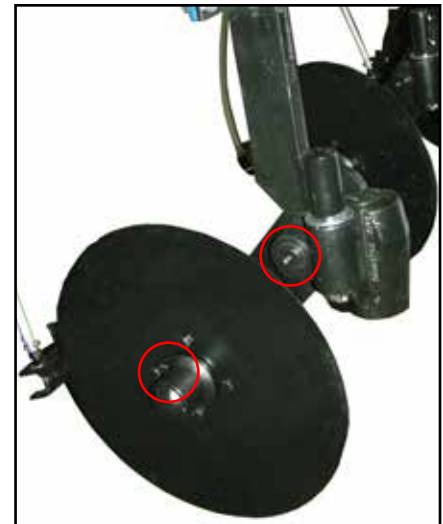


15. Grease the zerk located in the hinge area of the 11R30 Standard toolbar.




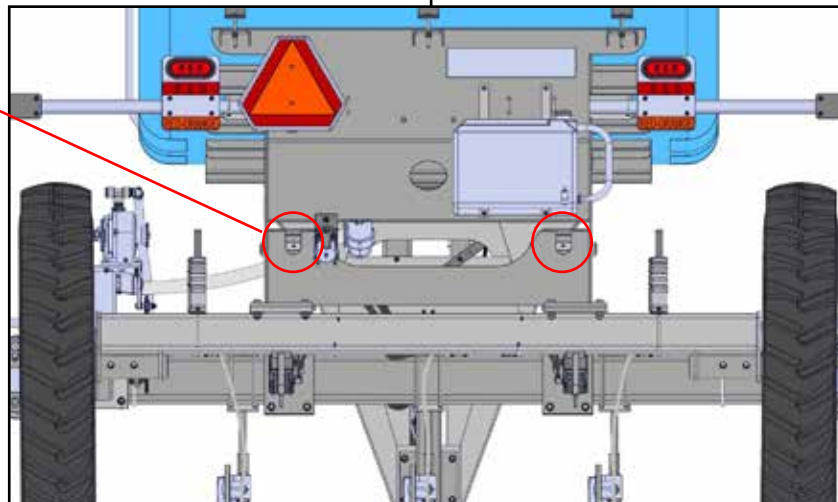
▶  Coultter pivot shaft lubrication

16. Grease all coultter arm pivots
The plug on the coultter hub can be removed. A zerk can be installed.
Hub and spindle assembly should be *greased twice seasonally*




17. Grease lift arm pivots daily.

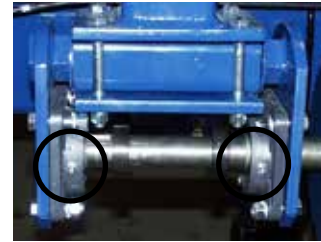
▶  Lift arm pivot lubrication daily
▶ **NOTE:**
Enter from the rear of the tool bar



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▶  Pump wheel lubrication daily

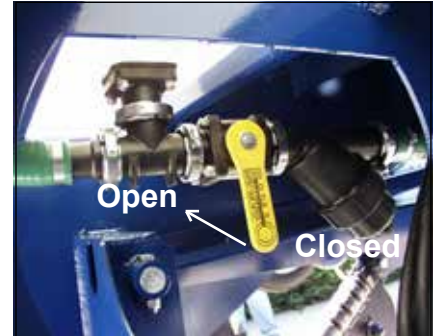
18. Grease the zerks on the pillow block bearing at the bottom of the pump assembly.



▶ Bottom fill valve operation

19. After the tank is filled open valve before engaging pump.

▶ **NOTE:**
Do not engage pump until valve is opened.



▶ Bottom fill plumbing screen

20. Screen should be checked and cleaned periodically.



21. Location of Nine-gallon emergency water tank/toolbox. Change water daily to provide fresh clean water to flush exposed skin or eyes. Drain water daily in cold temperatures to prevent freezing and bursting tank.



▶ Emergency water tank operation and maintenance

22. In case of exposure to fertilizer, open faucet or pull top end of hose loose to flush exposed part of body. Remove contaminated clothes as soon as possible.



AT3000

▶ **Standard center wing lock**

23. Wing lock pin storage.
(11R30 Standard tool bar)



▶ **Tire maintenance**

24. Check tire pressure.
(56 P.S.I. Max.)
Check wheel lugs
(Torque to 150-180 ft. lbs.)



AT3000



Calibration of these systems involves two separate sets of calculations. The first being a procedure of setting rate and the second being a procedure of obtaining system pressure.

FIRST: These systems utilize a positive-displacement, ground-driven, piston pump to establish the GPA (gallon per acre) rate. Because the pump is ground-driven, this rate will be very consistent provided you do not exceed the pumps capacity or pressure ratings (120 PSI Maximum).

SECOND: The injection system nozzles are what determine system operation pressure at a particular flow rate and ground speed. Because the system requires nozzle pressure in the 60 PSI to 120 PSI range to inject fertilizer into the soil properly, it becomes necessary to size the nozzle correctly to maintain this 60-120 PSI optimum operating pressure at various speeds. In effect, the operating speed is limited by the range of pressure necessary for proper injection system operation.

Remember that nozzle size has no affect on rate, only system operating pressure.

High Pressure Injection System Pump Calibration Work sheet

Step 1: Rate Calculation (gallons per acre)

Actual pounds of nitrogen per acre desired ÷ percent of nitrogen in solution equals pounds of solution per acre

Actual N ÷ % of N = lbs. solution per acre

Examples:

100 lbs. of actual N desired ÷ .28 (% of N in solution) = 357 lbs. per acre

100 lbs. of actual N desired ÷ .32 (% of N in solution) = 312 lbs. per acre

Step 2: Pounds per acre of solution ÷ weight per gallon of solution equal GPA (GPA= gallons per acre of solution)

lbs. solution per acre ÷ weight per gallon = GPA

Examples:

357 lbs. of 28% N solution ÷ 10.65 lbs. per gallon = 33.5 GPA

312 lbs. of 32% N solution ÷ 11.4 lbs. per gallon = 27.37 GPA

Step 3: Use the John Blue, pump setting, slide-rule chart. The standard BLU-JET sprocket combination is 18 to 50.

Step 4: Loaded Radius:

We recommend using a loaded radius of 10" for the standard BLU-JET tire drive wheel when used with the John Blue LM 4450 pump.

Add 1/2" to the loaded radius if soil builds up on the small tire in wet conditions.

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- **Step 5:** Swath width is the number of rows being applied (Example: A 15 row 30" machine will cover 16 rows.) times the spacing between the rows.

$$\text{Rows} \times \text{Spacing} = \text{Swath width}$$

$$16 \text{ rows} \times 30" = 480" \text{ (swath width)}$$

Step 6: Example:

1. Using the chart, align loaded radius (10") with 18 to 50 sprocket combination setting.
2. Using the chart, align swath width (480") with arrow under sprocket ratio.
3. Using the chart, GPA rate (LM 4450) pump) from step 2 above will align with correct pump setting.

Once the correct pump setting has been obtained from the pump calibration work sheet it becomes necessary to select a nozzle size that will result in a system operating pressure that falls within the recommended range of 60 PSI to 120 PSI. It is important to remember that GPA rate will not be affected by changing nozzle sizes. The only way the GPA rate will change is if you change pump settings. A gauge is provided to double check calculations and monitor pressure during operation.

To simplify calibration we supplied a chart based on 28% nitrogen solution in 30" row spacings.

Example: Using the 30" spacing chart, with 7 MPH as the target operating speed and 115 lbs. N/acre as the target rate; you can see that nozzle size 4916-95 will produce 80 PSI @ 7 MPH. Also if you look under the 8 MPH column you will see that this nozzle size will produce 100 PSI.

It is recommended that a mid-range pressure of 80 to 100 PSI is used to allow for speed variances in field operation, if possible.

It is recommended that the stream stabilizer nozzle inserts always be used with these nozzles to improve the solid-stream characteristics of the spray pattern and consequently the injection and over spray reduction characteristics of nozzle. These stainless steel nozzle orifices are commercially available almost everywhere and there are several sizes available between those on our chart if needed.

It is recommended that a fine line (80 mesh) stainer be used on extremely low rate applications to prevent plugging nozzles.



30 Inch Spacing Rate Chart

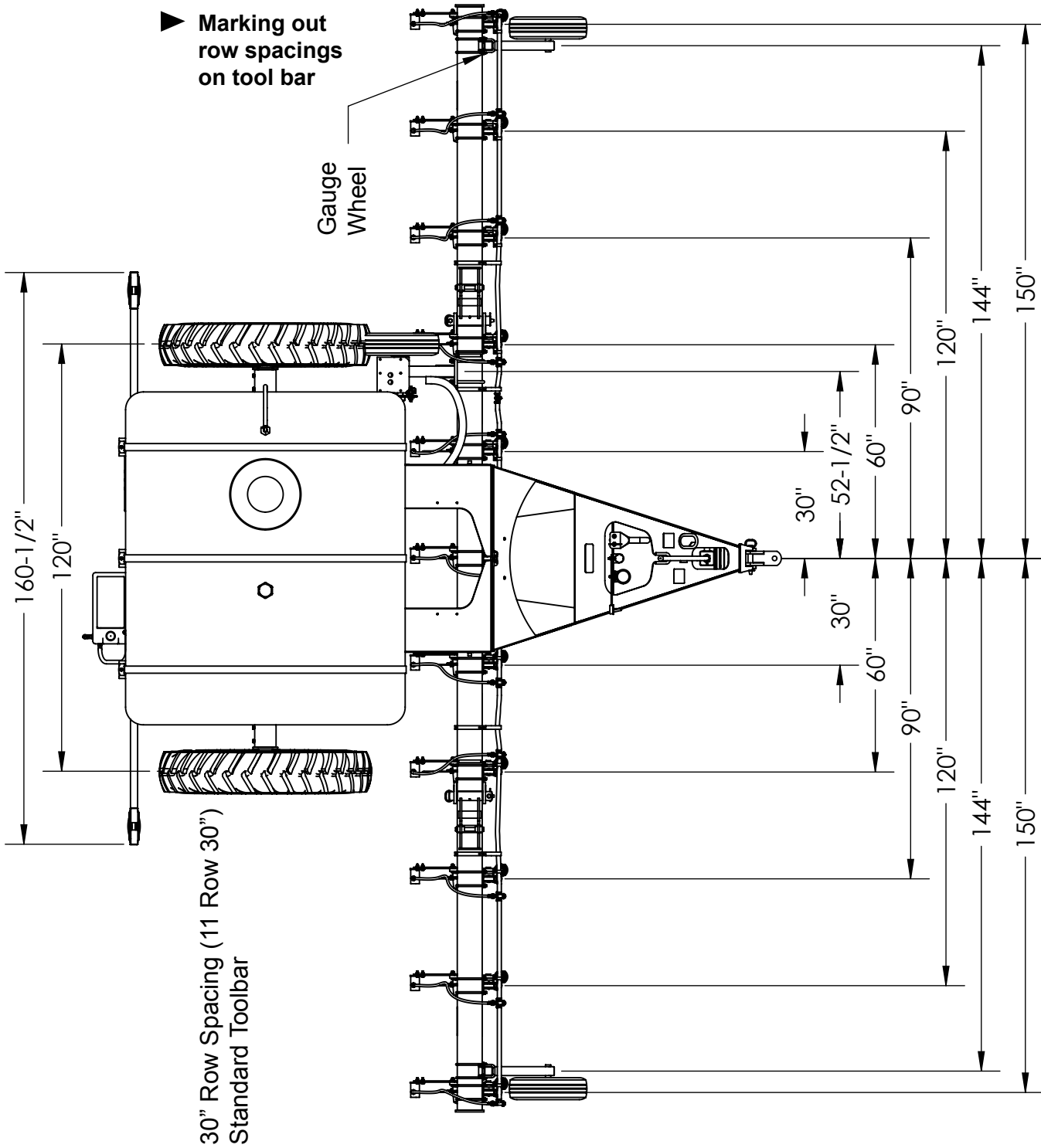
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		GPM 10.65 lb./gal 28%	Gallons per Acre 30 Inch Spacing							
			5 mph	6 mph	7 mph	8 mph	9 mph	10 mph	11 mph	12 mph
Orifice #	PSI									
4916 49	60	0.320	12.7	10.5	9.0	7.9	7.0	6.3	5.8	5.3
	80	0.369	14.6	12.2	10.4	9.1	8.1	7.3	6.6	6.1
	100	0.413	16.3	13.6	11.7	10.2	9.1	8.2	7.4	6.8
	120	0.452	17.9	14.9	12.8	11.2	9.9	8.9	8.1	7.5
4916 57	60	0.432	17.1	14.3	12.2	10.7	9.5	8.6	7.8	7.1
	80	0.499	19.8	16.5	14.1	12.4	11.0	9.9	9.0	8.2
	100	0.558	22.1	18.4	15.8	13.8	12.3	11.1	10.0	9.2
	120	0.612	24.2	20.2	17.3	15.1	13.5	12.1	11.0	10.1
*4916 63	60	0.528	20.9	17.4	14.9	13.1	11.6	10.5	9.5	8.7
	80	0.610	24.2	20.1	17.3	15.1	13.4	12.1	11.0	10.1
	100	0.682	27.0	22.5	19.3	16.9	15.0	13.5	12.3	11.3
	120	0.747	29.6	24.7	21.1	18.5	16.4	14.8	13.4	12.3
*4916 70	60	0.652	25.8	21.5	18.4	16.1	14.3	12.9	11.7	10.8
	80	0.753	29.8	24.9	21.3	18.6	16.6	14.9	13.6	12.4
	100	0.842	33.3	27.8	23.8	20.8	18.5	16.7	15.2	13.9
	120	0.922	36.5	30.4	26.1	22.8	20.3	18.3	16.6	15.2
*4916 78	60	0.810	32.1	26.7	22.9	20.0	17.8	16.0	14.6	13.4
	80	0.935	37.0	30.9	26.4	23.1	20.6	18.5	16.8	15.4
	100	1.045	41.4	34.5	29.6	25.9	23.0	20.7	18.8	17.2
	120	1.145	45.3	37.8	32.4	28.3	25.2	22.7	20.6	18.9
*4916 86	60	0.984	39.0	32.5	27.8	24.4	21.7	19.5	17.7	16.2
	80	1.137	45.0	37.5	32.2	28.1	25.0	22.5	20.5	18.8
	100	1.271	50.3	41.9	35.9	31.5	28.0	25.2	22.9	21.0
	120	1.392	55.1	45.9	39.4	34.5	30.6	27.6	25.1	23.0
*4916 95	60	1.201	47.6	39.6	34.0	29.7	26.4	23.8	21.6	19.8
	80	1.387	54.9	45.8	39.2	34.3	30.5	27.5	25.0	22.9
	100	1.551	61.4	51.2	43.9	38.4	34.1	30.7	27.9	25.6
	120	1.699	67.3	56.1	48.1	42.0	37.4	33.6	30.6	28.0
4916 107	60	1.524	60.3	50.3	43.1	37.7	33.5	30.2	27.4	25.1
	80	1.760	69.7	58.1	49.8	43.5	38.7	34.8	31.7	29.0
	100	1.967	77.9	64.9	55.6	48.7	43.3	39.0	35.4	32.5
	120	2.155	85.3	71.1	61.0	53.3	47.4	42.7	38.8	35.6
4916 120	60	1.917	75.9	63.2	54.2	47.4	42.2	37.9	34.5	31.6
	80	2.213	87.6	73.0	62.6	54.8	48.7	43.8	39.8	36.5
	100	2.474	98.0	81.7	70.0	61.2	54.4	49.0	44.5	40.8
	120	2.710	107.3	89.4	76.7	67.1	59.6	53.7	48.8	44.7

The 4916 series of orifices are available in many sizes falling between those listed on this chart.

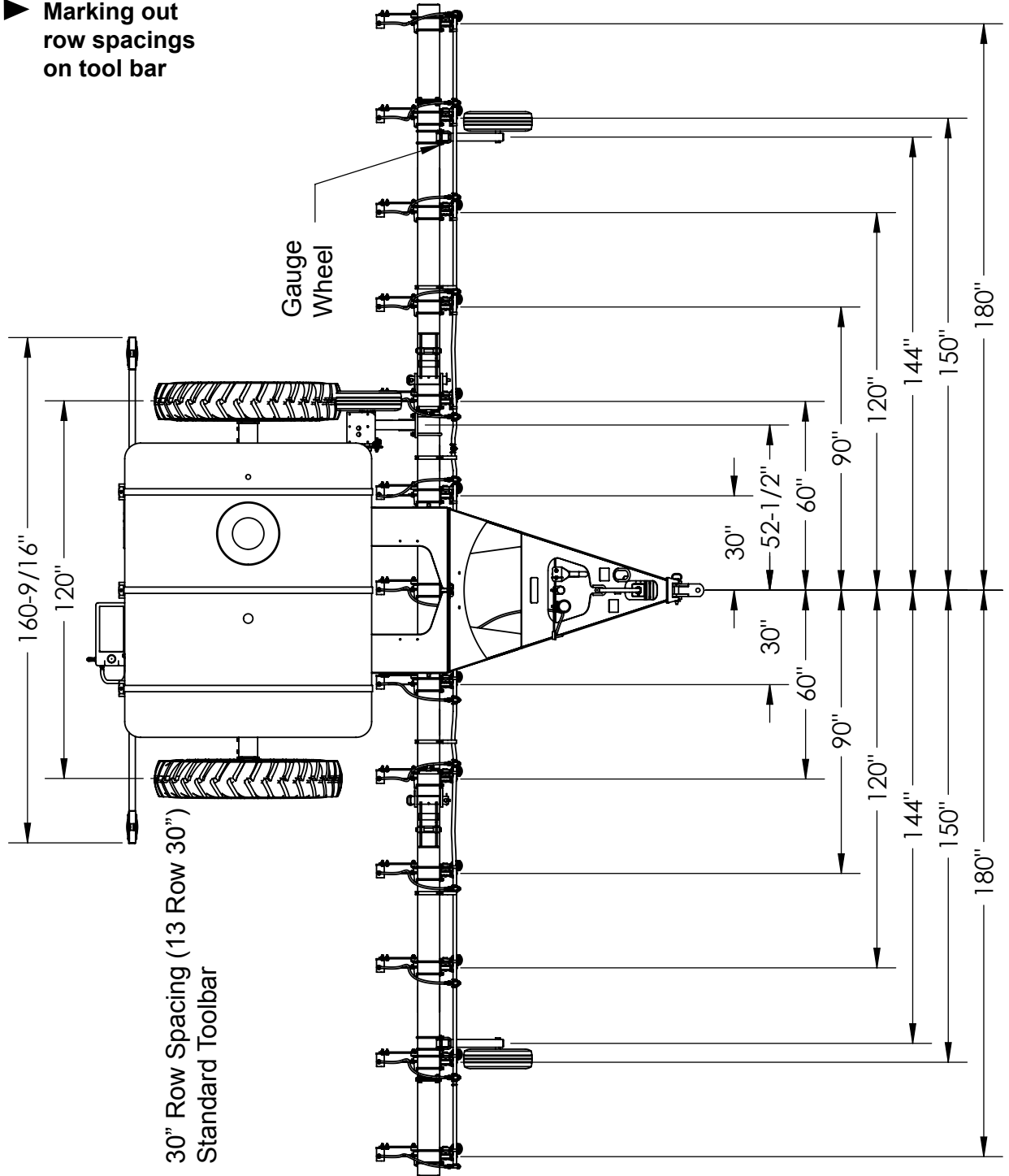
* Standard equipment sizes.

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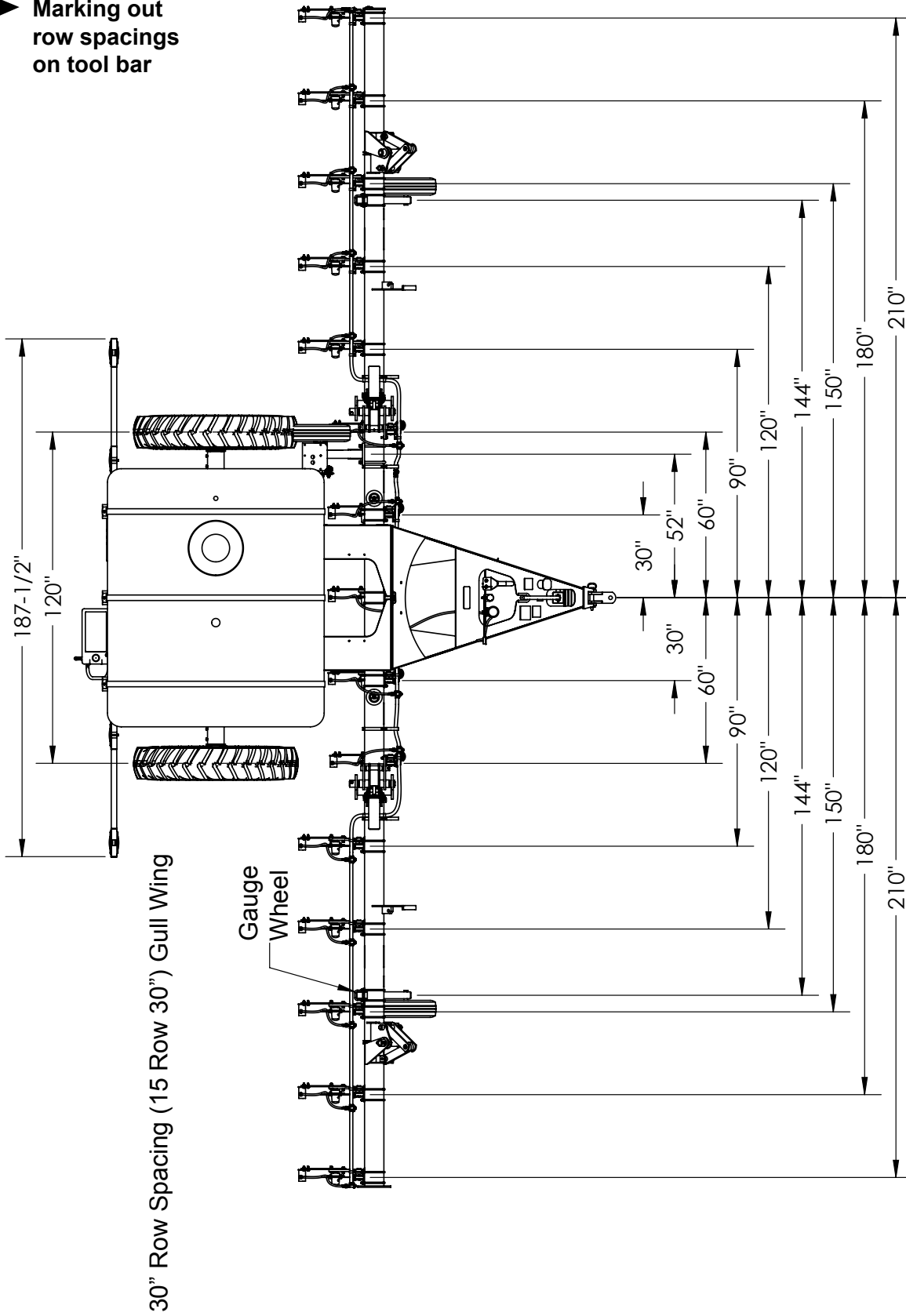
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▶ **Marking out row spacings on tool bar**



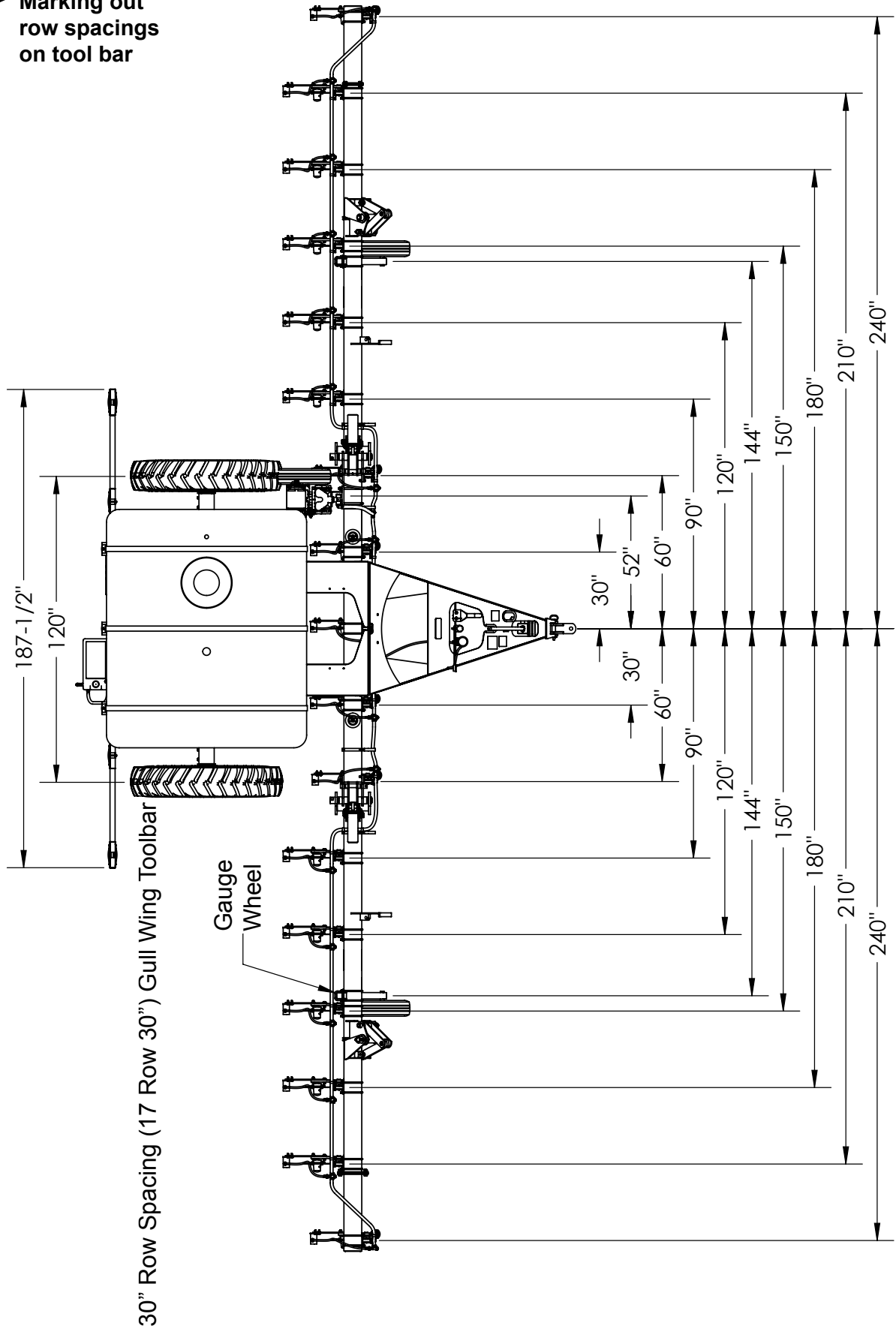
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► **Marking out row spacings on tool bar**



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▶ Marking out row spacings on tool bar





15 Inch Spacing Rate Chart

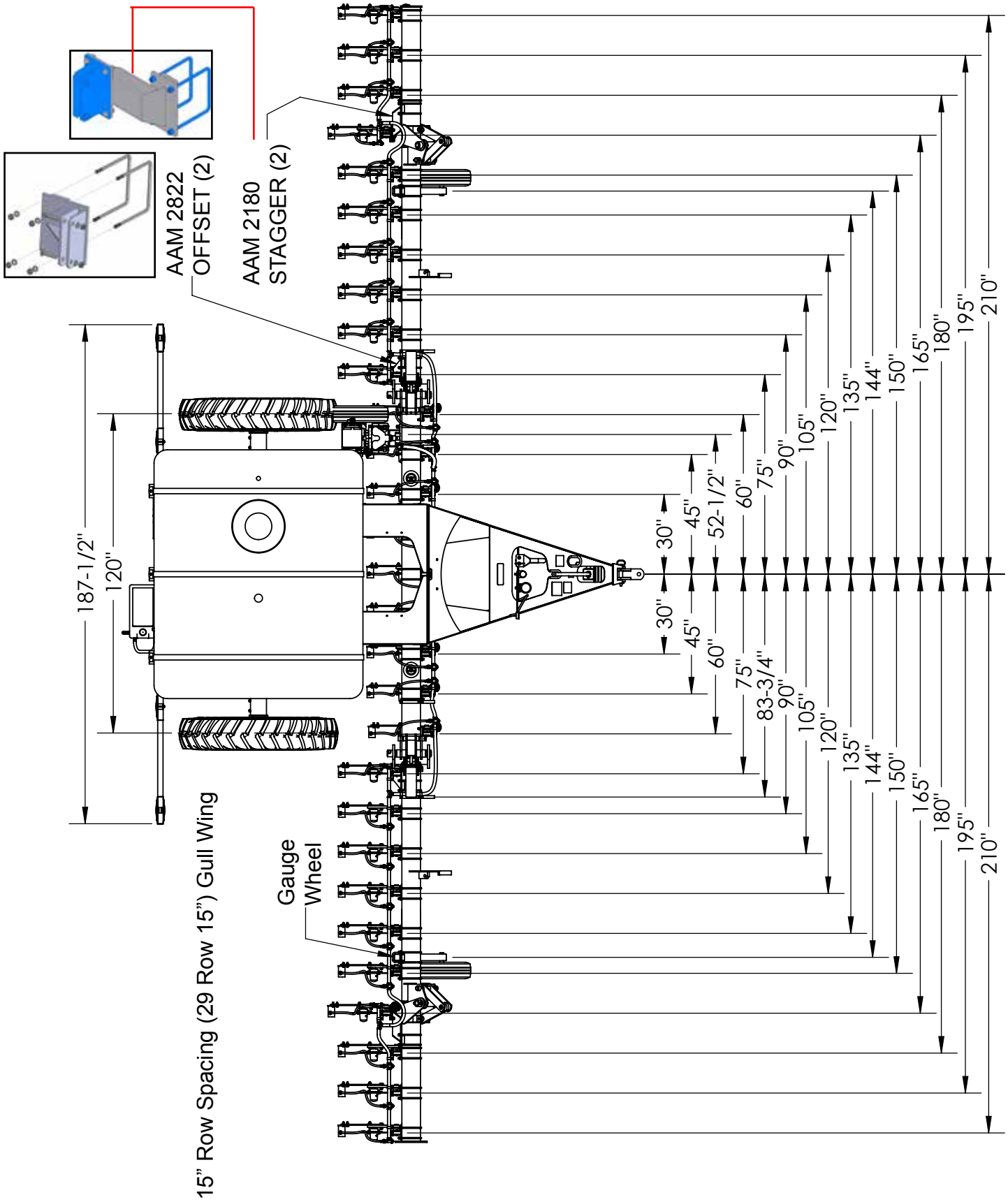
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		GPM 10.65 lb./gal 28%	Gallons per Acre 15 Inch Spacing							
			5	6	7	8	9	10	11	12
Orifice #	PSI		mph	mph	mph	mph	mph	mph	mph	mph
4916 49	60	0.320	25.3	21.1	18.1	15.8	14.1	12.7	11.5	10.5
	80	0.369	29.2	24.4	20.9	18.3	16.2	14.6	13.3	12.2
	100	0.413	32.7	27.2	23.3	20.4	18.2	16.3	14.9	13.6
	120	0.452	35.8	29.8	25.6	22.4	19.9	17.9	16.3	14.9
4916 57	60	0.432	34.2	28.5	24.5	21.4	19.0	17.1	15.6	14.3
	80	0.499	39.5	33.0	28.2	24.7	22.0	19.8	18.0	16.5
	100	0.558	44.2	36.8	31.6	27.6	24.6	22.1	20.1	18.4
	120	0.612	48.4	40.4	34.6	30.3	26.9	24.2	22.0	20.2
*4916 63	60	0.528	41.8	34.9	29.9	26.1	23.2	20.9	19.0	17.4
	80	0.610	48.3	40.3	34.5	30.2	26.8	24.2	22.0	20.1
	100	0.682	54.0	45.0	38.6	33.8	30.0	27.0	24.6	22.5
	120	0.747	59.2	49.3	42.3	37.0	32.9	29.6	26.9	24.7
*4916 70	60	0.652	51.7	43.0	36.9	32.3	28.7	25.8	23.5	21.5
	80	0.753	59.6	49.7	42.6	37.3	33.1	29.8	27.1	24.9
	100	0.842	66.7	55.6	47.6	41.7	37.0	33.3	30.3	27.8
	120	0.922	73.0	60.9	52.2	45.7	40.6	36.5	33.2	30.4
*4916 78	60	0.810	64.1	53.4	45.8	40.1	35.6	32.1	29.2	26.7
	80	0.935	74.1	61.7	52.9	46.3	41.1	37.0	33.7	30.9
	100	1.045	82.8	69.0	59.1	51.7	46.0	41.4	37.6	34.5
	120	1.145	90.7	75.6	64.8	56.7	50.4	45.3	41.2	37.8
*4916 86	60	0.984	78.0	65.0	55.7	48.7	43.3	39.0	35.4	32.5
	80	1.137	90.0	75.0	64.3	56.3	50.0	45.0	40.9	37.5
	100	1.271	100.6	83.9	71.9	62.9	55.9	50.3	45.7	41.9
	120	1.392	110.3	91.9	78.8	68.9	61.3	55.1	50.1	45.9
*4916 95	60	1.201	95.1	79.3	68.0	59.5	52.9	47.6	43.2	39.6
	80	1.387	109.9	91.5	78.5	68.7	61.0	54.9	49.9	45.8
	100	1.551	122.8	102.3	87.7	76.8	68.2	61.4	55.8	51.2
	120	1.699	134.5	112.1	96.1	84.1	74.7	67.3	61.2	56.1
4916 107	60	1.524	120.7	100.6	86.2	75.4	67.0	60.3	54.9	50.3
	80	1.760	139.4	116.1	99.5	87.1	77.4	69.7	63.3	58.1
	100	1.967	155.8	129.8	111.3	97.4	86.6	77.9	70.8	64.9
	120	2.155	170.7	142.2	121.9	106.7	94.8	85.3	77.6	71.1
4916 120	60	1.917	151.8	126.5	108.4	94.9	84.3	75.9	69.0	63.2
	80	2.213	175.3	146.1	125.2	109.5	97.4	87.6	79.7	73.0
	100	2.474	196.0	163.3	140.0	122.5	108.9	98.0	89.1	81.7
	120	2.710	214.7	178.9	153.3	134.2	119.3	107.3	97.6	89.4

The 4916 series of orifices are available in many sizes falling between those listed on this chart.

* Standard equipment sizes.

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45 CM Spacing Rate Chart

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Orifice #	atm	lpm 1.276 kg/l 28%	Liters per Hectare 45 cm Spacing							
			8	9	10	11	12	13	14	15
			kph	kph	kph	kph	kph	kph	kph	kph
	4.1	0.448	74.2	65.9	59.4	54.0	49.5	45.7	42.4	39.6
4916 30	5.4	0.517	85.7	76.2	68.5	62.3	57.1	52.7	49.0	45.7
	6.8	0.578	95.8	85.1	76.6	69.7	63.9	58.9	54.7	51.1
	8.2	0.633	104.9	93.3	83.9	76.3	69.9	64.6	60.0	56.0
	4.1	0.609	101.0	89.8	80.8	73.4	67.3	62.1	57.7	53.9
4916 35	5.4	0.704	116.6	103.7	93.3	84.8	77.7	71.8	66.6	62.2
	6.8	0.787	130.4	115.9	104.3	94.8	86.9	80.2	74.5	69.5
	8.2	0.862	142.8	126.9	114.3	103.9	95.2	87.9	81.6	76.2
	4.1	0.796	131.9	117.2	105.5	95.9	87.9	81.2	75.4	70.3
4916 40	5.4	0.919	152.3	135.4	121.8	110.8	101.5	93.7	87.0	81.2
	6.8	1.028	170.3	151.4	136.2	123.8	113.5	104.8	97.3	90.8
	8.2	1.126	186.5	165.8	149.2	135.7	124.4	114.8	106.6	99.5
	4.1	1.194	197.9	175.9	158.3	143.9	132.0	121.8	113.1	105.6
4916 49	5.4	1.379	228.5	203.2	182.8	166.2	152.4	140.6	130.6	121.9
	6.8	1.542	255.5	227.1	204.4	185.8	170.4	157.2	146.0	136.3
	8.2	1.689	279.9	248.8	223.9	203.6	186.6	172.3	160.0	149.3
	4.1	1.616	267.8	238.1	214.3	194.8	178.6	164.8	153.0	142.8
4916 57	5.4	1.866	309.3	274.9	247.4	224.9	206.2	190.3	176.7	164.9
	6.8	2.087	345.8	307.4	276.6	251.5	230.5	212.8	197.6	184.4
	8.2	2.286	378.8	336.7	303.0	275.5	252.5	233.1	216.4	202.0
	4.1	1.974	327.2	290.8	261.8	238.0	218.1	201.3	187.0	174.5
4916 63	5.4	2.280	377.8	335.8	302.2	274.8	251.9	232.5	215.9	201.5
	6.8	2.549	422.4	375.5	337.9	307.2	281.6	259.9	241.4	225.3
	8.2	2.792	462.7	411.3	370.2	336.5	308.5	284.7	264.4	246.8
	4.1	2.438	403.9	359.1	323.2	293.8	269.3	248.6	230.8	215.4
4916 70	5.4	2.815	466.4	414.6	373.1	339.2	311.0	287.0	266.5	248.8
	6.8	3.147	521.5	463.5	417.2	379.3	347.7	320.9	298.0	278.1
	8.2	3.447	571.3	507.8	457.0	415.5	380.8	351.5	326.4	304.7
	4.1	3.027	501.5	445.8	401.2	364.8	334.4	308.6	286.6	267.5
4916 78	5.4	3.495	579.1	514.8	463.3	421.2	386.1	356.4	330.9	308.9
	6.8	3.907	647.5	575.5	518.0	470.9	431.7	398.5	370.0	345.3
	8.2	4.280	709.3	630.5	567.4	515.8	472.9	436.5	405.3	378.3
	4.1	3.679	609.7	542.0	487.8	443.4	406.5	375.2	348.4	325.2
4916 86	5.4	4.248	704.0	625.8	563.2	512.0	469.3	433.2	402.3	375.5
	6.8	4.750	787.1	699.7	629.7	572.4	524.7	484.4	449.8	419.8
	8.2	5.215	864.2	768.2	691.3	628.5	576.1	531.8	493.8	460.9
	4.1	4.490	744.0	661.3	595.2	541.1	496.0	457.8	425.1	396.8
4916 95	5.4	5.184	859.1	763.6	687.3	624.8	572.7	528.7	490.9	458.2
	6.8	5.796	960.5	853.8	768.4	698.5	640.3	591.1	548.8	512.3
	8.2	6.363	1054.5	937.4	843.6	766.9	703.0	648.9	602.6	562.4

26 The 4916 series of orifices are available in many sizes falling between those listed on this chart. Orifice diameters are in inches divided by 1000.



70 CM Spacing Rate Chart

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Orifice #	atm	lpm 1.276 kg/l 28%	Liters per Hectare 70 cm Spacing							
			8	9	10	11	12	13	14	15
			kph	kph	kph	kph	kph	kph	kph	kph
4916 30	4.1	0.448	47.7	42.4	38.2	34.7	31.8	29.4	27.3	25.4
	5.4	0.517	55.1	49.0	44.1	40.1	36.7	33.9	31.5	29.4
	6.8	0.578	61.6	54.7	49.3	44.8	41.0	37.9	35.2	32.8
	8.2	0.633	67.5	60.0	54.0	49.1	45.0	41.5	38.5	36.0
4916 35	4.1	0.609	64.9	57.7	51.9	47.2	43.3	39.9	37.1	34.6
	5.4	0.704	75.0	66.6	60.0	54.5	50.0	46.1	42.8	40.0
	6.8	0.787	83.8	74.5	67.0	61.0	55.9	51.6	47.9	44.7
	8.2	0.862	91.8	81.6	73.4	66.8	61.2	56.5	52.5	49.0
4916 40	4.1	0.796	84.8	75.4	67.8	61.7	56.5	52.2	48.5	45.2
	5.4	0.919	97.9	87.0	78.3	71.2	65.3	60.3	55.9	52.2
	6.8	1.028	109.5	97.3	87.6	79.6	73.0	67.4	62.6	58.4
	8.2	1.126	119.9	106.6	95.9	87.2	79.9	73.8	68.5	64.0
4916 49	4.1	1.194	127.2	113.1	101.8	92.5	84.8	78.3	72.7	67.9
	5.4	1.379	146.9	130.6	117.5	106.9	97.9	90.4	84.0	78.4
	6.8	1.542	164.3	146.0	131.4	119.5	109.5	101.1	93.9	87.6
	8.2	1.689	179.9	160.0	144.0	130.9	120.0	110.7	102.8	96.0
4916 57	4.1	1.616	172.2	153.0	137.7	125.2	114.8	106.0	98.4	91.8
	5.4	1.866	198.8	176.7	159.1	144.6	132.5	122.3	113.6	106.0
	6.8	2.087	222.3	197.6	177.8	161.7	148.2	136.8	127.0	118.6
	8.2	2.286	243.5	216.4	194.8	177.1	162.3	149.8	139.1	129.9
4916 63	4.1	1.974	210.3	187.0	168.3	153.0	140.2	129.4	120.2	112.2
	5.4	2.280	242.9	215.9	194.3	176.6	161.9	149.5	138.8	129.5
	6.8	2.549	271.5	241.4	217.2	197.5	181.0	167.1	155.2	144.8
	8.2	2.792	297.5	264.4	238.0	216.3	198.3	183.1	170.0	158.6
4916 70	4.1	2.438	259.7	230.8	207.7	188.9	173.1	159.8	148.4	138.5
	5.4	2.815	299.8	266.5	239.9	218.1	199.9	184.5	171.3	159.9
	6.8	3.147	335.2	298.0	268.2	243.8	223.5	206.3	191.6	178.8
	8.2	3.447	367.2	326.4	293.8	267.1	244.8	226.0	209.8	195.9
4916 78	4.1	3.027	322.4	286.6	257.9	234.5	214.9	198.4	184.2	172.0
	5.4	3.495	372.3	330.9	297.8	270.8	248.2	229.1	212.7	198.6
	6.8	3.907	416.2	370.0	333.0	302.7	277.5	256.1	237.9	222.0
	8.2	4.280	456.0	405.3	364.8	331.6	304.0	280.6	260.6	243.2
4916 86	4.1	3.679	391.9	348.4	313.6	285.1	261.3	241.2	224.0	209.0
	5.4	4.248	452.6	402.3	362.1	329.2	301.7	278.5	258.6	241.4
	6.8	4.750	506.0	449.8	404.8	368.0	337.3	311.4	289.1	269.9
	8.2	5.215	555.5	493.8	444.4	404.0	370.4	341.9	317.5	296.3
4916 95	4.1	4.490	478.3	425.1	382.6	347.8	318.9	294.3	273.3	255.1
	5.4	5.184	552.3	490.9	441.8	401.6	368.2	339.9	315.6	294.5
	6.8	5.796	617.5	548.8	494.0	449.1	411.6	380.0	352.8	329.3
	8.2	6.363	677.9	602.6	542.3	493.0	451.9	417.2	387.4	361.6

The 4916 series of orifices are available in many sizes falling between those listed on this chart. Orifice diameters are in inches divided by 1000.



76 CM Spacing Rate Chart

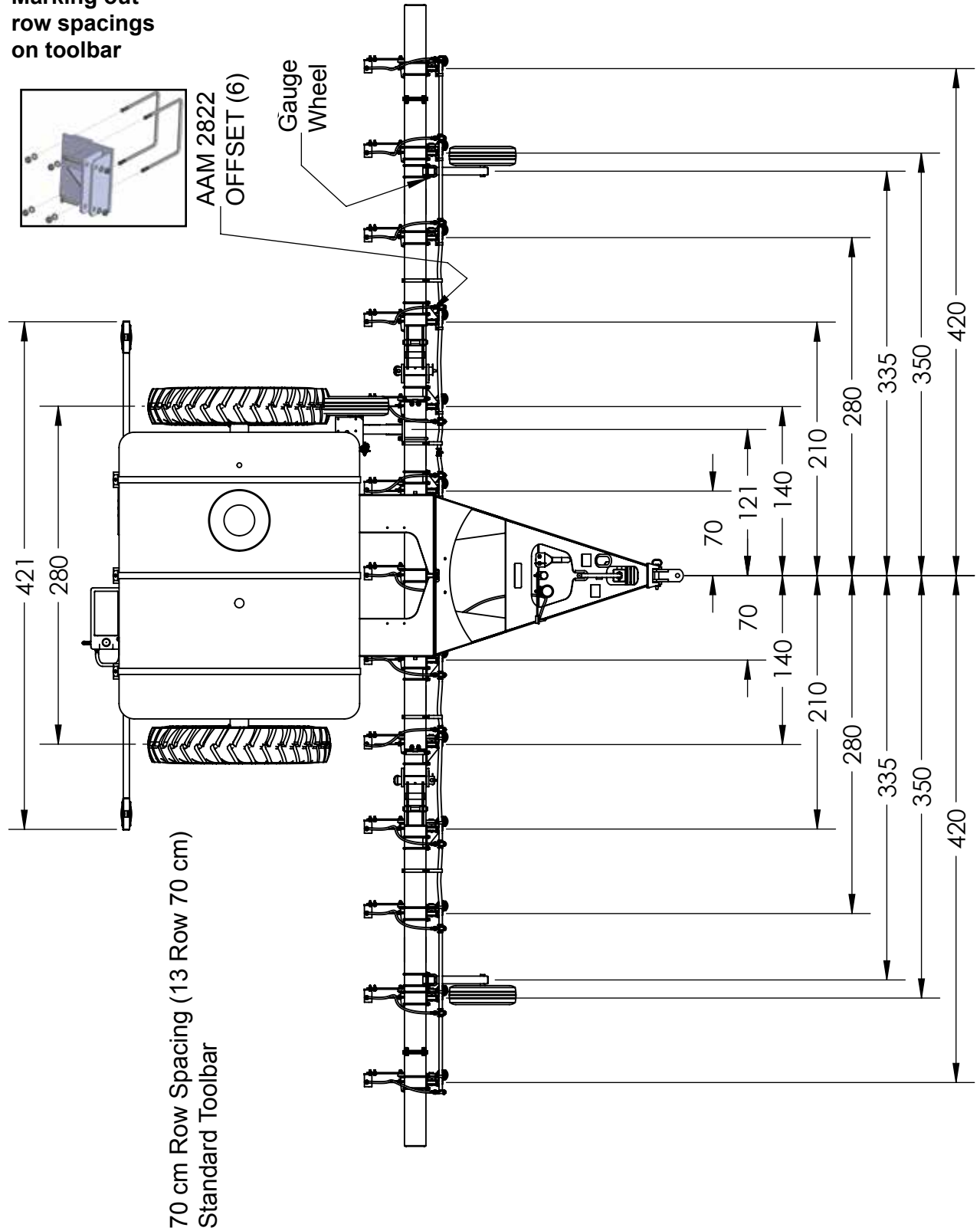
AT3000

Orifice #	atm	lpm 1.276 kg/l 28%	Liters per Hectare 76 cm Spacing							
			8	9	10	11	12	13	14	15
			kph	kph	kph	kph	kph	kph	kph	kph
4916 30	4.1	0.448	43.9	39.0	35.1	31.9	29.3	27.0	25.1	23.4
	5.4	0.517	50.7	45.1	40.6	36.9	33.8	31.2	29.0	27.1
	6.8	0.578	56.7	50.4	45.4	41.2	37.8	34.9	32.4	30.2
	8.2	0.633	62.1	55.2	49.7	45.2	41.4	38.2	35.5	33.1
4916 35	4.1	0.609	59.8	53.1	47.8	43.5	39.9	36.8	34.2	31.9
	5.4	0.704	69.0	61.4	55.2	50.2	46.0	42.5	39.5	36.8
	6.8	0.787	77.2	68.6	61.8	56.1	51.5	47.5	44.1	41.2
	8.2	0.862	84.6	75.2	67.6	61.5	56.4	52.0	48.3	45.1
4916 40	4.1	0.796	78.1	69.4	62.5	56.8	52.1	48.1	44.6	41.7
	5.4	0.919	90.2	80.2	72.1	65.6	60.1	55.5	51.5	48.1
	6.8	1.028	100.8	89.6	80.7	73.3	67.2	62.0	57.6	53.8
	8.2	1.126	110.4	98.2	88.4	80.3	73.6	68.0	63.1	58.9
4916 49	4.1	1.194	117.2	104.2	93.8	85.2	78.1	72.1	67.0	62.5
	5.4	1.379	135.3	120.3	108.3	98.4	90.2	83.3	77.3	72.2
	6.8	1.542	151.3	134.5	121.0	110.0	100.9	93.1	86.5	80.7
	8.2	1.689	165.7	147.3	132.6	120.5	110.5	102.0	94.7	88.4
4916 57	4.1	1.616	158.6	141.0	126.9	115.3	105.7	97.6	90.6	84.6
	5.4	1.866	183.1	162.8	146.5	133.2	122.1	112.7	104.6	97.7
	6.8	2.087	204.7	182.0	163.8	148.9	136.5	126.0	117.0	109.2
	8.2	2.286	224.3	199.4	179.4	163.1	149.5	138.0	128.2	119.6
4916 63	4.1	1.974	193.7	172.2	155.0	140.9	129.2	119.2	110.7	103.3
	5.4	2.280	223.7	198.8	179.0	162.7	149.1	137.7	127.8	119.3
	6.8	2.549	250.1	222.3	200.1	181.9	166.7	153.9	142.9	133.4
	8.2	2.792	274.0	243.5	219.2	199.3	182.7	168.6	156.6	146.1
4916 70	4.1	2.438	239.2	212.6	191.3	173.9	159.4	147.2	136.7	127.6
	5.4	2.815	276.2	245.5	220.9	200.9	184.1	170.0	157.8	147.3
	6.8	3.147	308.8	274.5	247.0	224.6	205.8	190.0	176.4	164.7
	8.2	3.447	338.2	300.7	270.6	246.0	225.5	208.1	193.3	180.4
4916 78	4.1	3.027	297.0	264.0	237.6	216.0	198.0	182.7	169.7	158.4
	5.4	3.495	342.9	304.8	274.3	249.4	228.6	211.0	195.9	182.9
	6.8	3.907	383.4	340.8	306.7	278.8	255.6	235.9	219.1	204.5
	8.2	4.280	420.0	373.3	336.0	305.4	280.0	258.4	240.0	224.0
4916 86	4.1	3.679	361.0	320.9	288.8	262.5	240.7	222.2	206.3	192.5
	5.4	4.248	416.9	370.5	333.5	303.2	277.9	256.5	238.2	222.3
	6.8	4.750	466.1	414.3	372.8	339.0	310.7	286.8	266.3	248.6
	8.2	5.215	511.7	454.8	409.3	372.1	341.1	314.9	292.4	272.9
4916 95	4.1	4.490	440.5	391.6	352.4	320.4	293.7	271.1	251.7	234.9
	5.4	5.184	508.7	452.1	406.9	369.9	339.1	313.0	290.7	271.3
	6.8	5.796	568.7	505.5	455.0	413.6	379.1	350.0	325.0	303.3
	8.2	6.363	624.4	555.0	499.5	454.1	416.3	384.2	356.8	333.0

28 The 4916 series of orifices are available in many sizes falling between those listed on this chart. Orifice diameters are in inches divided by 1000.

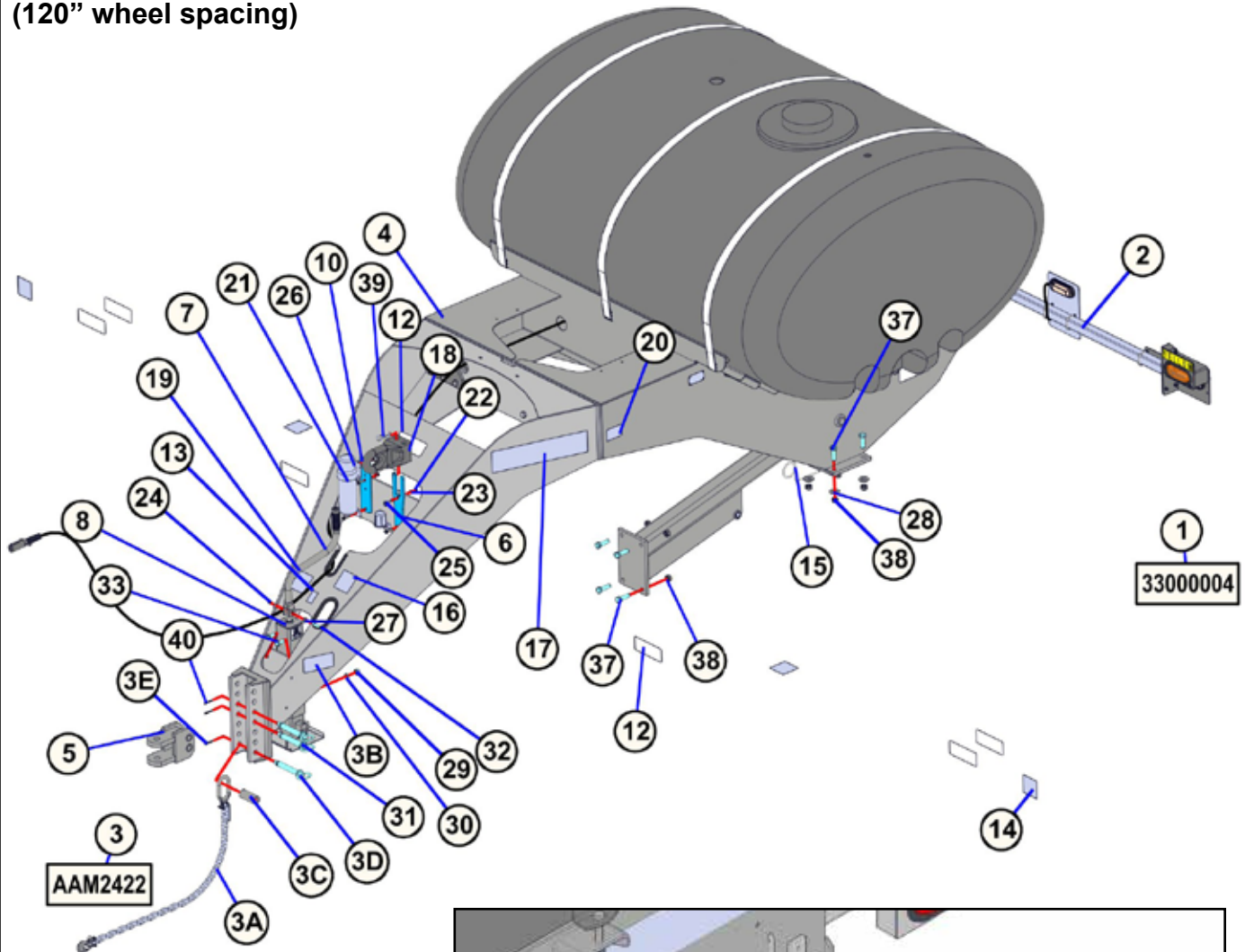
AT3000

▶ **Marking out row spacings on toolbar**

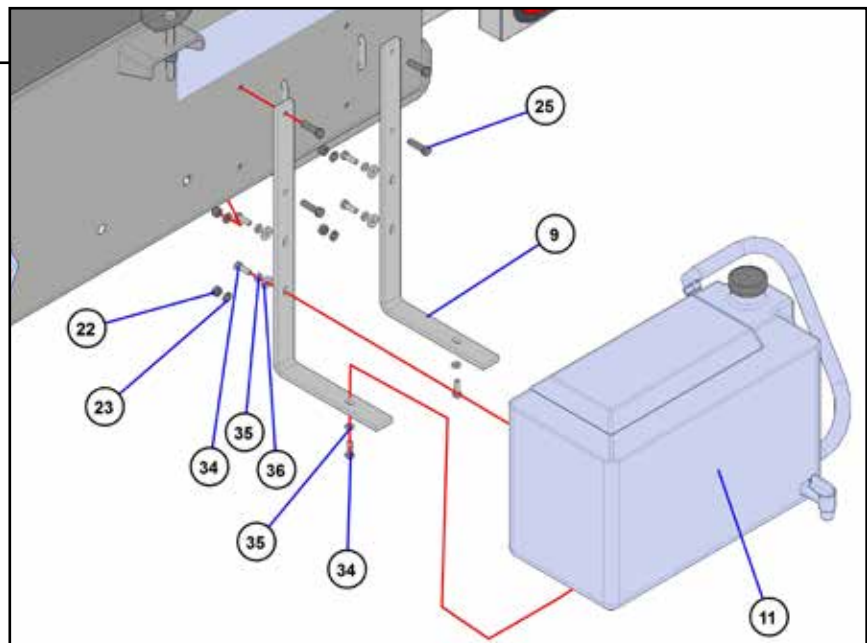


70 cm Row Spacing (13 Row 70 cm) Standard Toolbar

► **Bundle Number**
33000004
 (120" wheel spacing)



NOTE:
 Main Frame (AAM2648)
 assembly instructions
 for export units can
 be found beginnig on
 page 185.

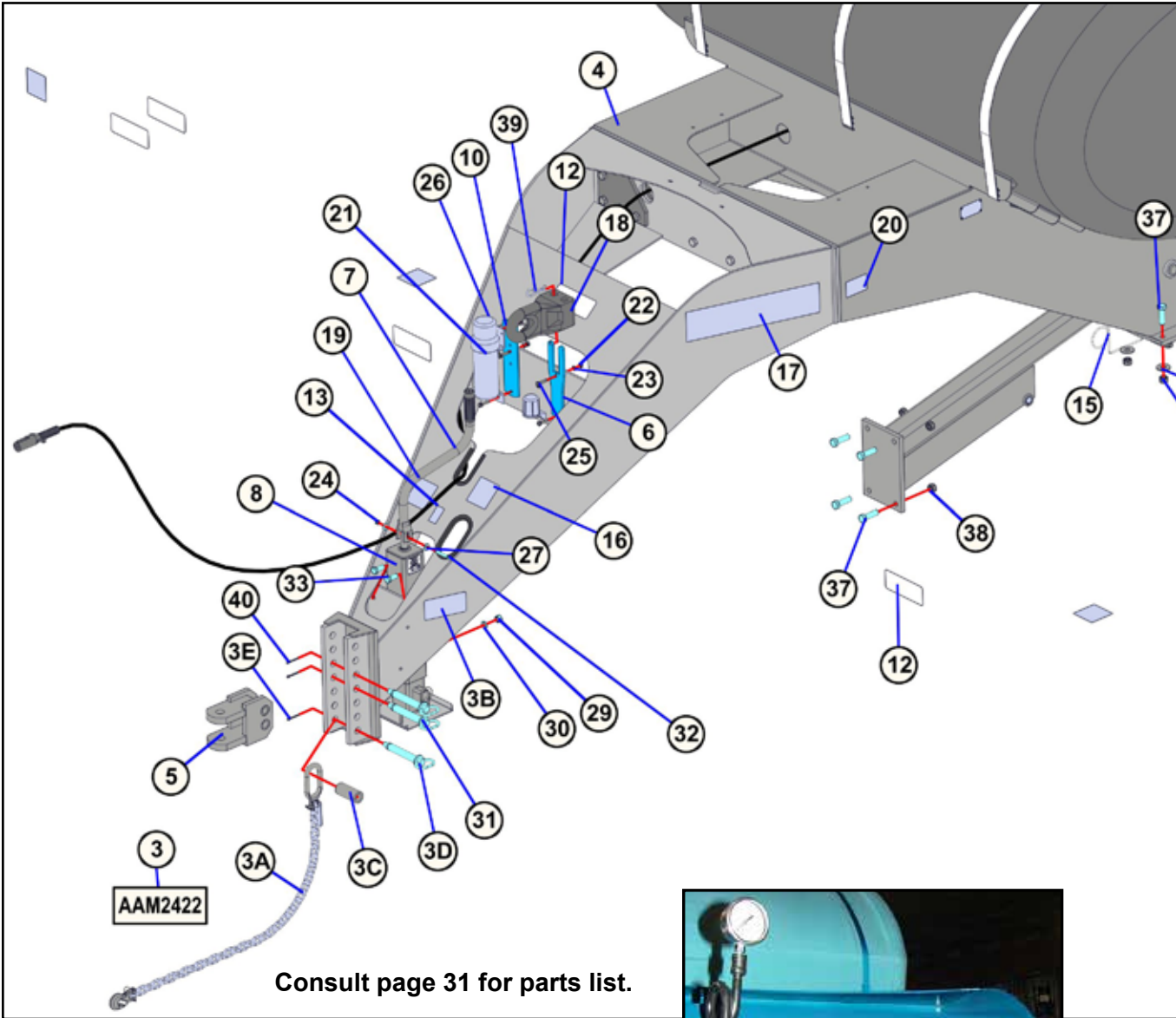




AT3000 Main Frame

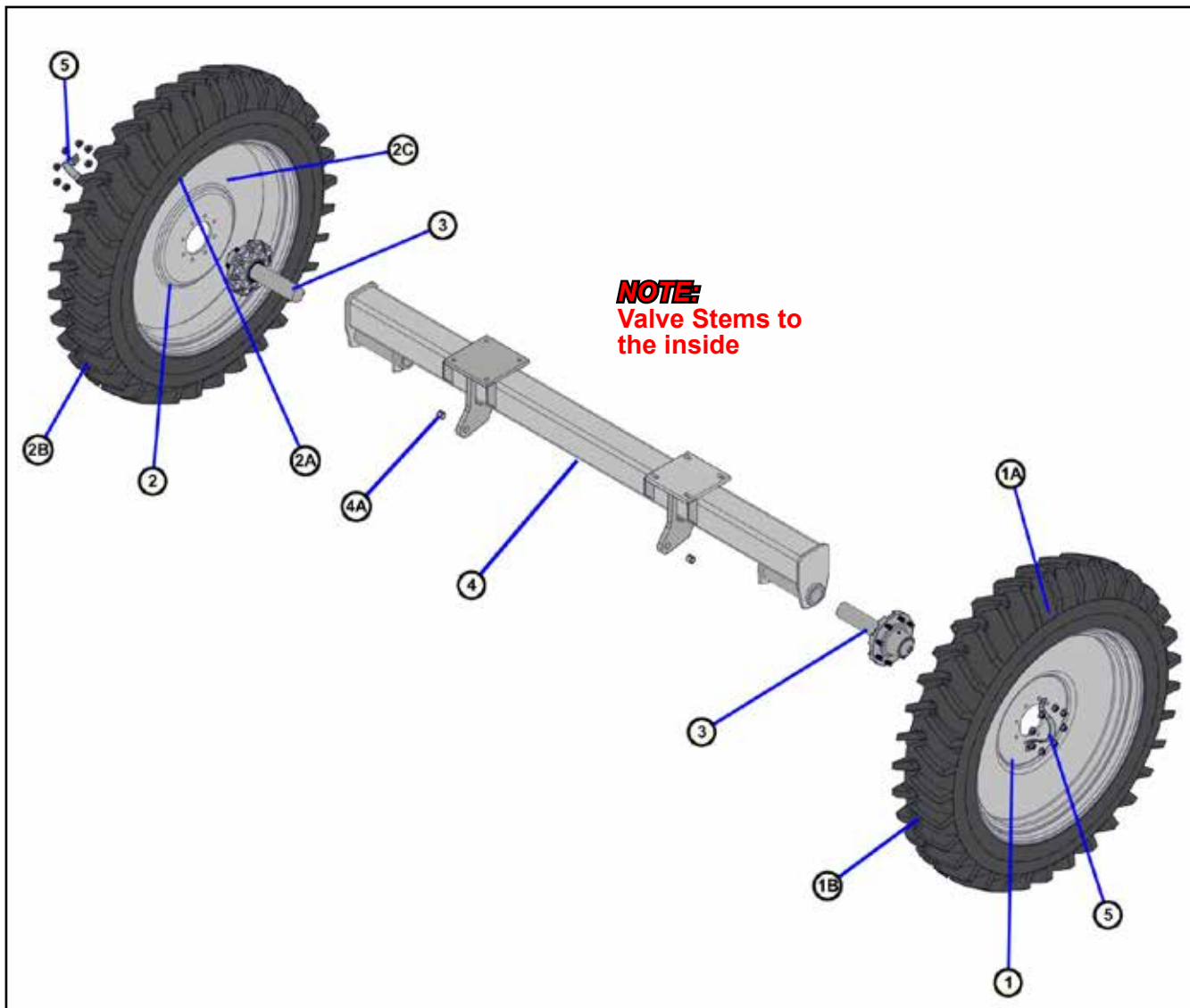
AT3000

BOM ID	Qty	Item No	Description
1	1	33000004	AT3000 MAIN FRAME
2	1	41000011	LIGHTING KIT, AT LIQUID APPLICATOR
3	1	AAM2422	TRANSPORT CHAIN KIT, 20,000#
3A	1	AP2150	TRANSPORT CHAIN, 20,000#, 3/8"
3B	1	AP2469	DECAL, SAFETY CHAIN
3C	1	BM3498	BUSHING, SAFETY CHAIN
3D	1	BP3051	PIN, 1" X 6", PLATED
3E	1	BP3511	PIN, COTTER, 3/16" X 1-3/4"
4	1	AAM2648	ASSEMBLY, AT3000 CART WITH TANK, FOR SHIPPING
5	1	AM2144	HITCH, CLEVIS
6	1	AM2145	BRACKET, HITCH STORAGE, 6" MOUNTING
7	1	AM2570	CRANK WITH GRIP, 80 DEGREE
8	1	AM3527	JACK, 9TWDL, (TOP WIND DROP LEG)
9	2	AM4421	BRACKET, TANK MOUNT, 9 GALLON
10	1	AM7640	BRACKET, MOUNTING, MANUAL HOLDER
11	1	AP2137	SAFETY TANK, 9 GALLON
12	9	AP2215	DECAL, BLU-JET, 3" X 8"
13	1	AP2231	DECAL, FEMA, 2-1/2" X 1-1/2"
14	4	AP2234	DECAL, DANGER STAND CLEAR FALLING WING
15	2	AP2283-1	HOSE RETAINER, 6" X 6", W/PLASTIC CAPS
16	1	AP2483	DECAL, DANGER, FALLING FROM EQUIPMENT
17	3	AP2492	DECAL, AT3000, 4-3/4" X 20-3/4"
18	1	AP2850	PERFECT HITCH, CATEGORY III, BLACK
19	1	AP2914	DECAL, WARNING, HIGH-PRESSURE FLUID
20	2	AP2969	DECAL, WARNING, PINCH POINT, 2-1/2" X 4"
21	1	AP4254	MANUAL HOLDER, BLACK
22	10	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
23	10	BP3002	WASHER, LOCK, 3/8", PLATED
24	1	BP3003	NUT, HEX LOCK, 3/8"-16, GRADE 2, PLATED
25	9	BP3005	HEX CAP SCREW, 3/8"-16 X 1-1/2", GRADE 5, PLATED
26	1	BP3006	HEX CAP SCREW, 3/8"-16 X 1", GRADE 5, PLATED
27	2	BP3015	WASHER, FLAT, 3/8", PLATED
28	4	BP3033	WASHER, FLAT, 3/4", PLATED
29	4	BP3038	NUT, HEX, 5/8"-11, GRADE 2
30	4	BP3039	WASHER, LOCK, 5/8", PLATED
31	2	BP3051	PIN, 1" X 6", PLATED
32	1	BP3096	HEX CAP SCREW, 3/8"-16 X 2-1/2", GRADE 5, PLATED
33	4	BP3097	HEX CAP SCREW, 5/8"-11 X 1-1/2", GRADE 5, PLATED
34	6	BP3108	HEX CAP SCREW, 5/16"-18 X 1", GRADE 5, PLATED
35	6	BP3158	WASHER, LOCK, 5/16, PLATED
36	6	BP3159	WASHER, FLAT, 5/16, PLATED
37	16	BP3197	HEX CAP SCREW, 3/4"-10 X 2-1/2", GRADE 8, PLATED
38	16	BP3442	NUT, HEX LOCK, 3/4"-10, TOP LOCK, GRADE C, PLATED
39	1	BP3500	PIN, HAIR CLIP, 3/16"
40	2	BP3511	PIN, COTTER, 3/16" X 1-3/4"

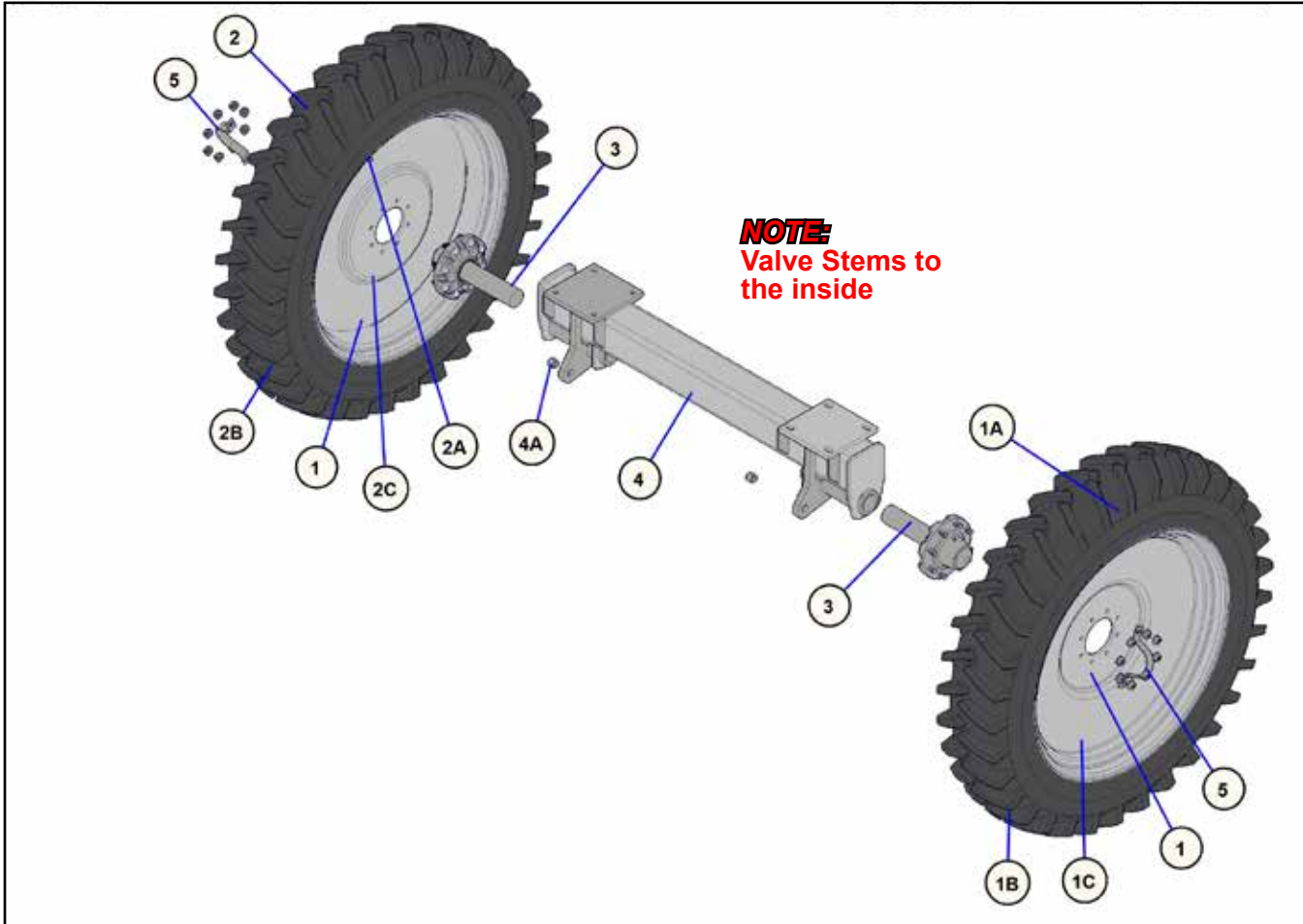


Manual holder mounted with gauge holder mount. Gauge holder part of manifold package.

AT3000



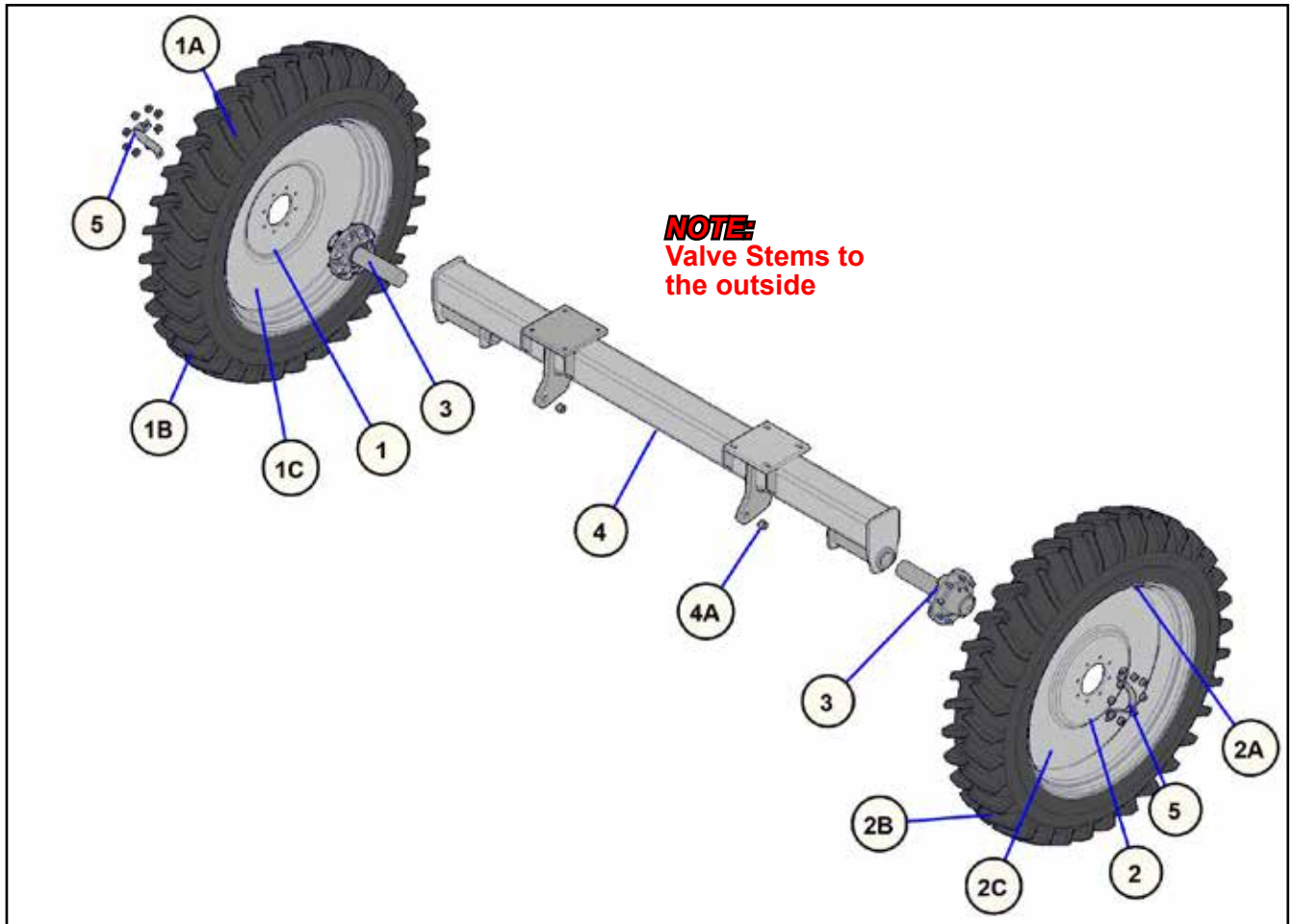
BOM ID	Qty	Item No	Description
1	1	AAM2771	WHEEL, 12.4 X 38, 14 PLY 38 X 10 X 8, LEFT HAND
1A	1	AP2790	VALVE STEM, METAL
1B	1	AP2867	TIRE, 12.4 X 38, 14 PLY, TRACTION GRIP
1C	1	AP4238	RIM, 38 X 10 X 8, WHITE
2	1	AAM2772	WHEEL, 12.4 X 38, 14 PLY 38 X 10 X 8, RIGHT HAND
2A	1	AP2790	VALVE STEM, METAL
2B	1	AP2867	TIRE, 12.4 X 38, 14 PLY, TRACTION GRIP
2C	1	AP4238	RIM, 38 X 10 X 8, WHITE
3	2	AAM2800-1	HUB & SPINDLE, 608 HUB, 2-3/4" X 16" SPINDLE, WITH FLANGE LOCK NUT
4	1	AM3522	AXLE, AT3000, NARROW ROW, 120" WHEEL SPACING
4A	2	BP3516	TENSION BUSHING, 1-1/4" X 1" X 1" OAL
5	2	AM4597	HUB CAP STRAP, FOR AAM2800-1



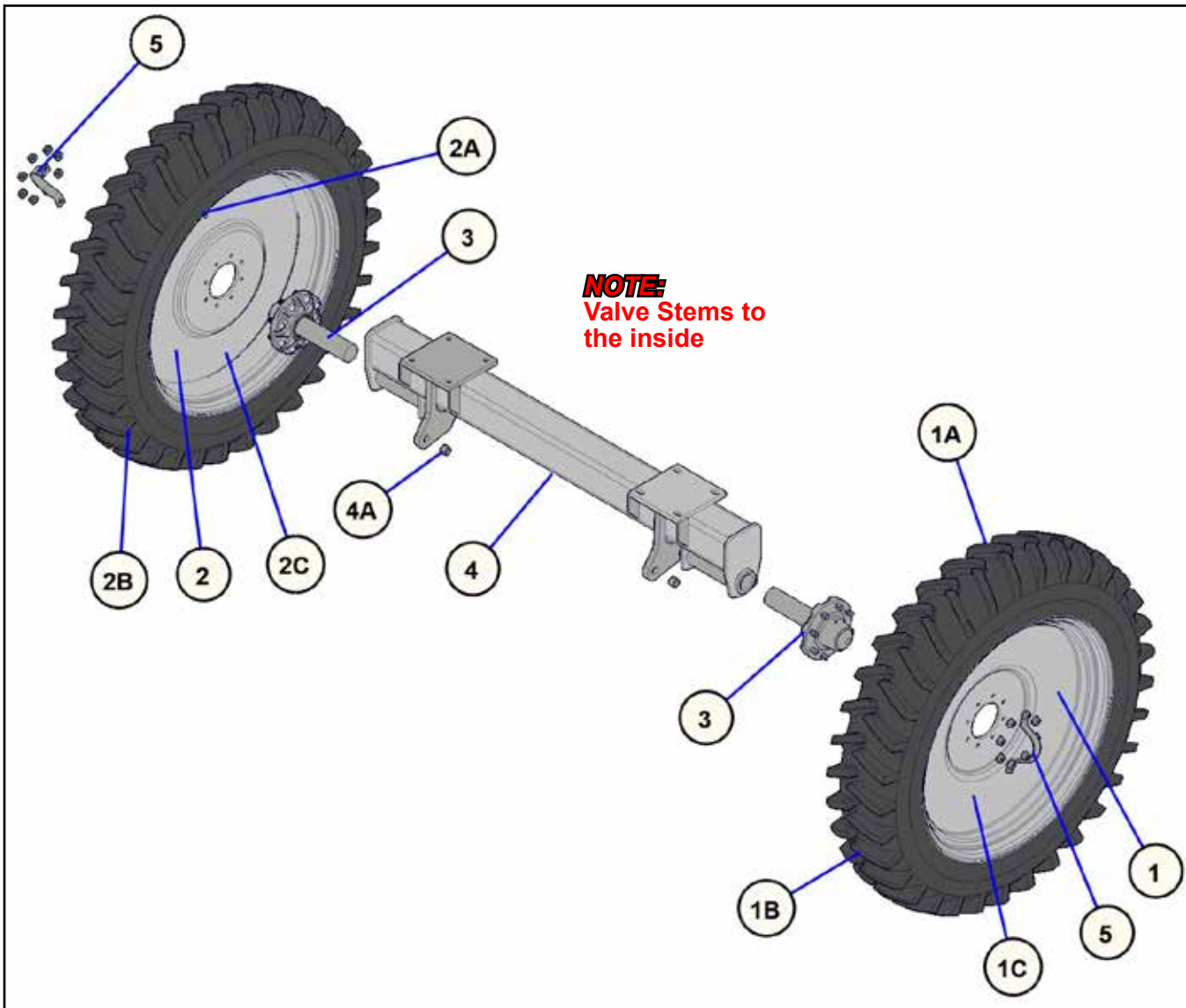
BOM ID	Qty	Item No	Description
1	1	AAM2771	WHEEL, 12.4 X 38, 14 PLY 38 X 10 X 8, LEFT HAND
1A	1	AP2790	VALVE STEM, METAL
1B	1	AP2867	TIRE, 12.4 X 38, 14 PLY, TRACTION GRIP
1C	1	AP4238	RIM, 38 X 10 X 8, WHITE
2	1	AAM2772	WHEEL, 12.4 X 38, 14 PLY 38 X 10 X 8, RIGHT
2A	1	AP2790	VALVE STEM, METAL
2B	1	AP2867	TIRE, 12.4 X 38, 14 PLY, TRACTION GRIP
2C	1	AP4238	RIM, 38 X 10 X 8, WHITE
3	2	AAM2800-1	HUB & SPINDLE, 608 HUB, 2-3/4" X 16" SPINDLE, WITH FLANGE LOCK NUT
4	1	AM3530	AXLE, AT3000, WIDE ROW, 76" WHEEL SPACING
4A	2	BP3516	TENSION BUSHING, 1-1/4" X 1" X 1" OAL
5	2	AM4597	HUB CAP STRAP, FOR AAM2800-1

**33000014, Wheel Axle, 106-5/16" (280 cm)
Wheel Spacing**

AT3000



BOM ID	Qty	Item No	Description
1	1	AAM2771	WHEEL, 12.4 X 38, 14 PLY 38 X 10 X 8, LEFT HAND
1A	1	AP2790	VALVE STEM, METAL
1B	1	AP2867	TIRE, 12.4 X 38, 14 PLY, TRACTION GRIP
1C	1	AP4238	RIM, 38 X 10 X 8, WHITE
2	1	AAM2772	WHEEL, 12.4 X 38, 14 PLY 38 X 10 X 8, RIGHT HAND
2A	1	AP2790	VALVE STEM, METAL
2B	1	AP2867	TIRE, 12.4 X 38, 14 PLY, TRACTION GRIP
2C	1	AP4238	RIM, 38 X 10 X 8, WHITE
3	2	AAM2800-1	HUB & SPINDLE, 608 HUB, 2-3/4" X 16" SPINDLE, WITH FLANGE LOCK NUT
4	1	AM3547	AXLE, AT3000, 106-5/16" WHEEL SPACING
4A	2	BP3516	TENSION BUSHING, 1-1/4" X 1" X 1" OAL
5	2	AM4597	HUB CAP STRAP, FOR AAM2800-1



BOM ID	Qty	Item No	Description
1	1	AAM2771	WHEEL, 12.4 X 38, 14 PLY 38 X 10 X 8, LEFT HAND
1A	1	AP2790	VALVE STEM, METAL
1B	1	AP2867	TIRE, 12.4 X 38, 14 PLY, TRACTION GRIP
1C	1	AP4238	RIM, 38 X 10 X 8, WHITE
2	1	AAM2772	WHEEL, 12.4 X 38, 14 PLY 38 X 10 X 8, RIGHT HAND
2A	1	AP2790	VALVE STEM, METAL
2B	1	AP2867	TIRE, 12.4 X 38, 14 PLY, TRACTION GRIP
2C	1	AP4238	RIM, 38 X 10 X 8, WHITE
3	2	AAM2800-1	HUB & SPINDLE, 608 HUB, 2-3/4" X 16" SPINDLE, WITH FLANGE LOCK NUT
4	1	AM3561	AXLE, AT3000, 88" WHEEL SPACING
4A	2	BP3516	TENSION BUSHING, 1-1/4" X 1" X 1" OAL
5	2	AM4597	HUB CAP STRAP, FOR AAM2800-1



Decals Standard

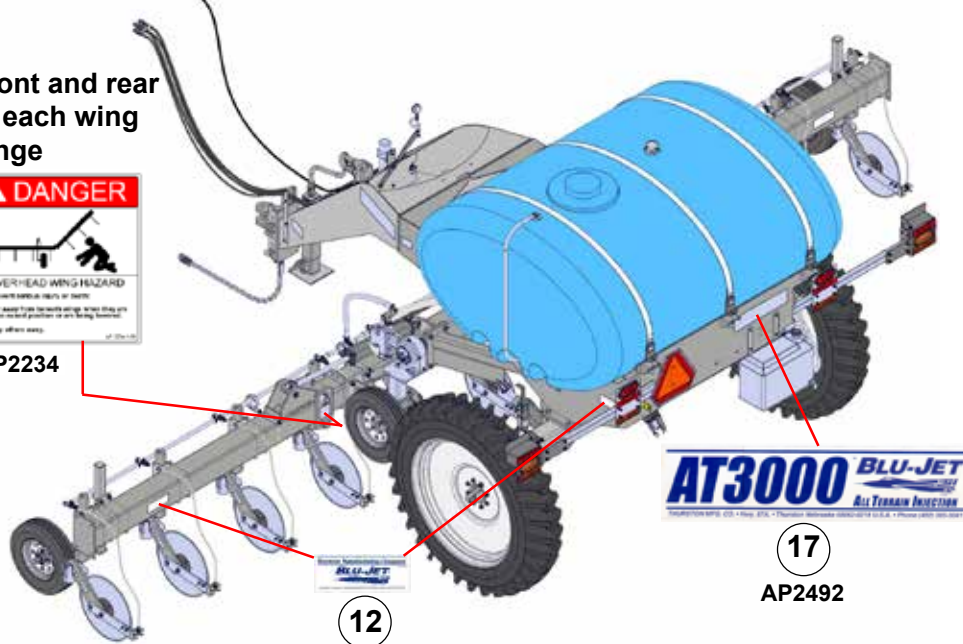
AT3000

Consult page 31 for parts list

Front and rear of each wing hinge



AP2234



12
AP2215



17
AP2492



AP2234

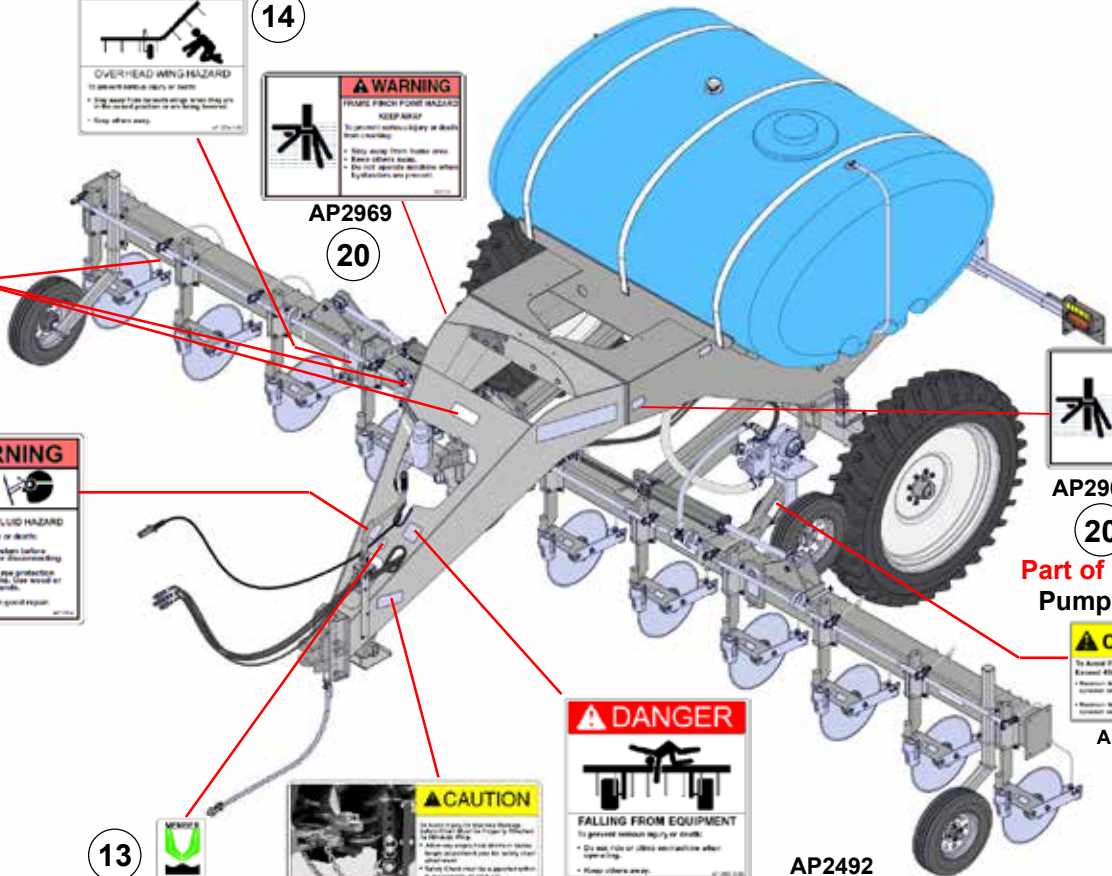
14



AP2969

20

AP2215
12



AP2969

20

Part of PKG00137
Pump package



AP2914

19

13

AP2231



AP2469

3b



AP2483

16



AP2472

AP2492

17



Decals Gull Wing

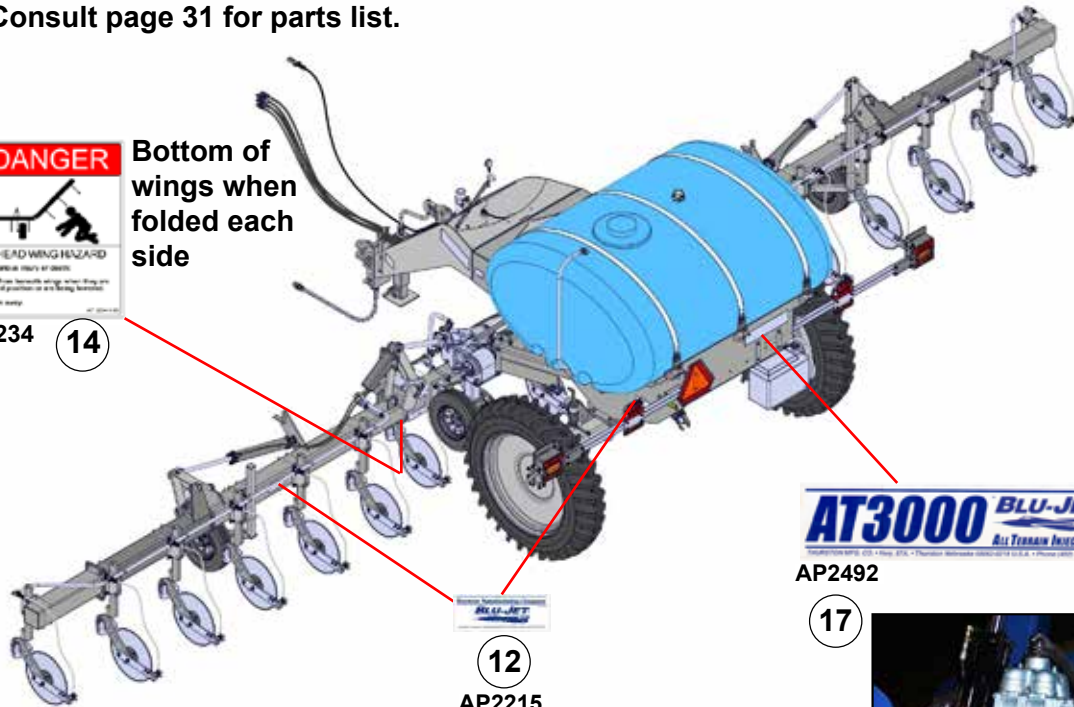
AT3000

Consult page 31 for parts list.



Bottom of wings when folded each side

AP2234 (14)



(12) AP2215



AP2492 (17)



AP2234 (14)

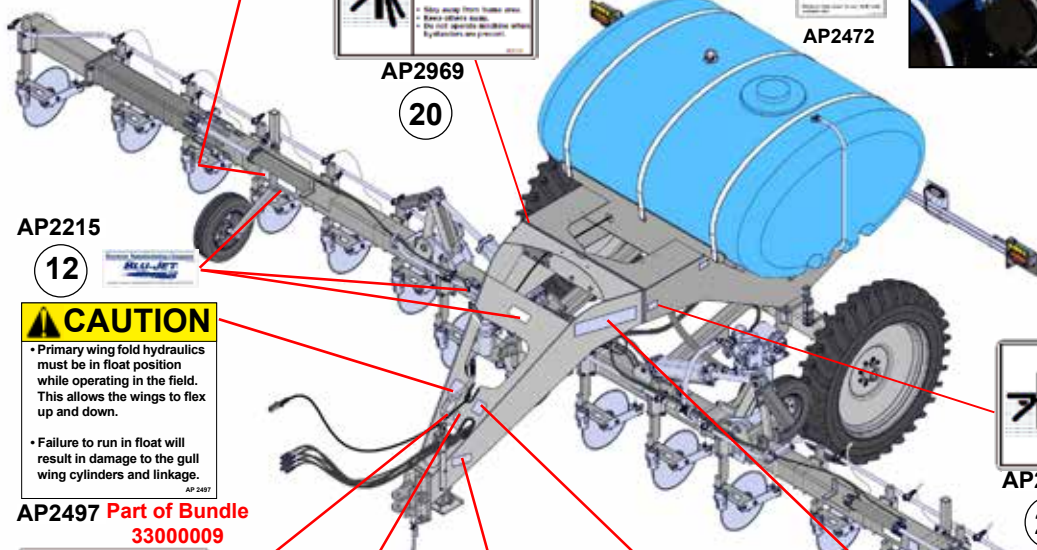


AP2969 (20)

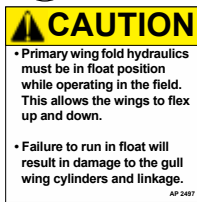
Part of PKG00137 Pump package



AP2472



AP2215 (12)



AP2497 Part of Bundle 33000009



AP2969 (20)



AP2914 (19)



AP2231



AP2469 (3b)



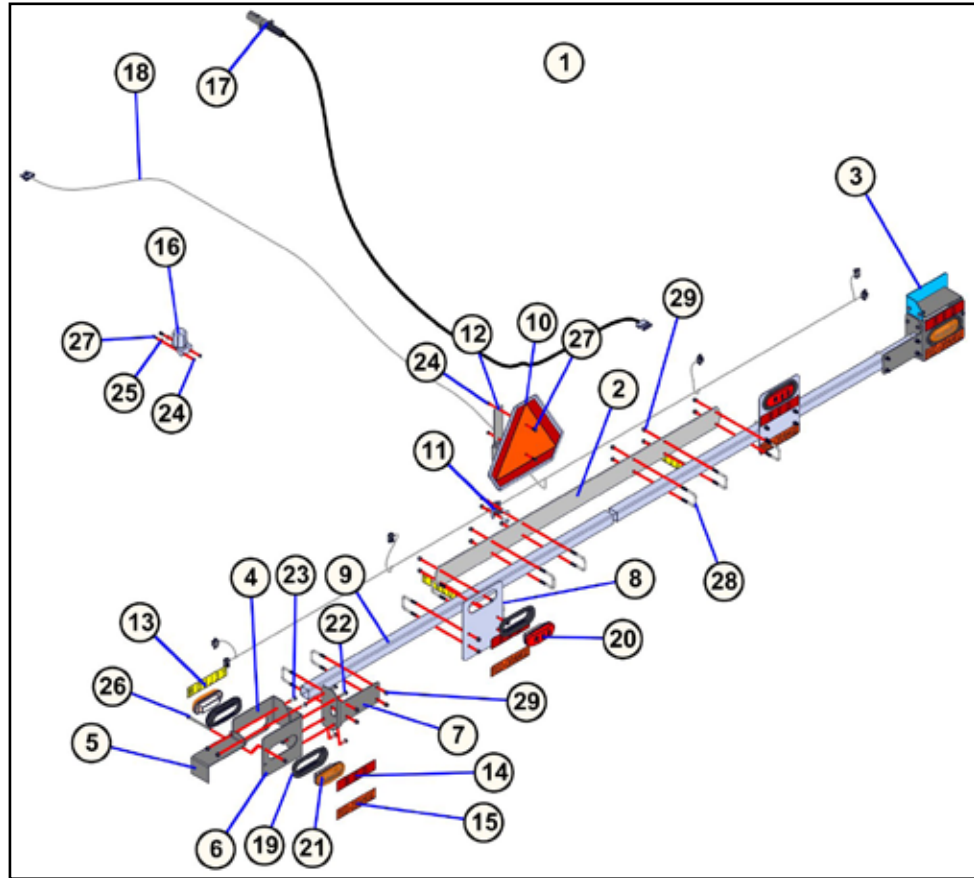
AP2483 (16)

AP2492 (17)

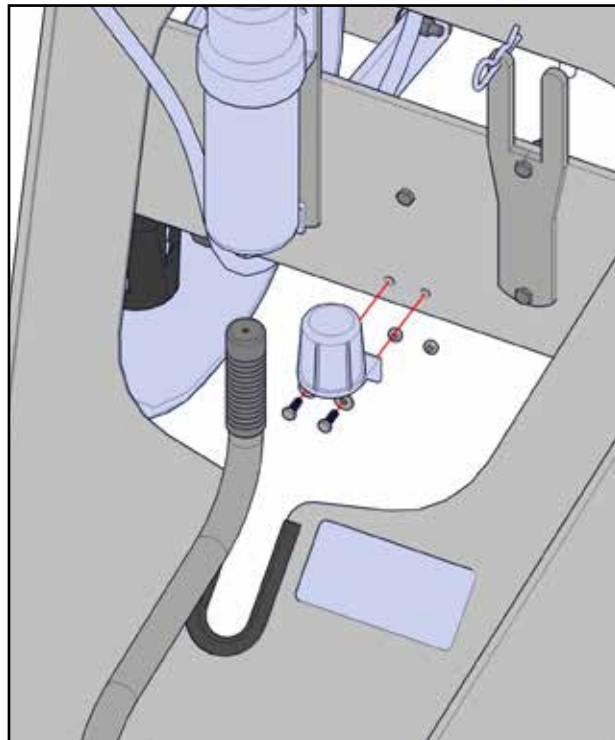
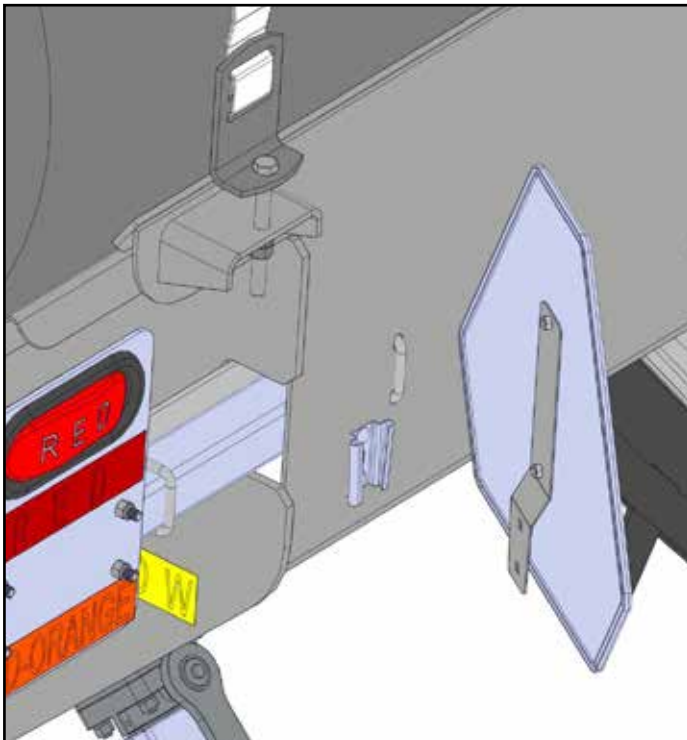
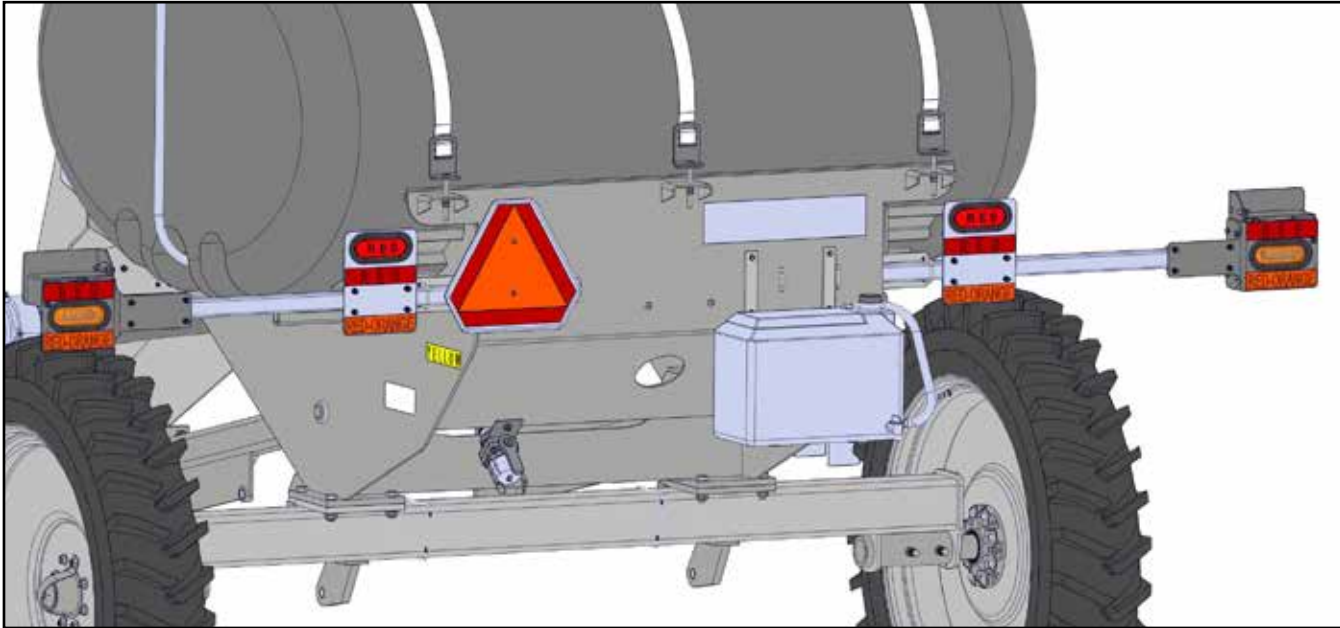


Light Kit Parts (41000011)

AT3000

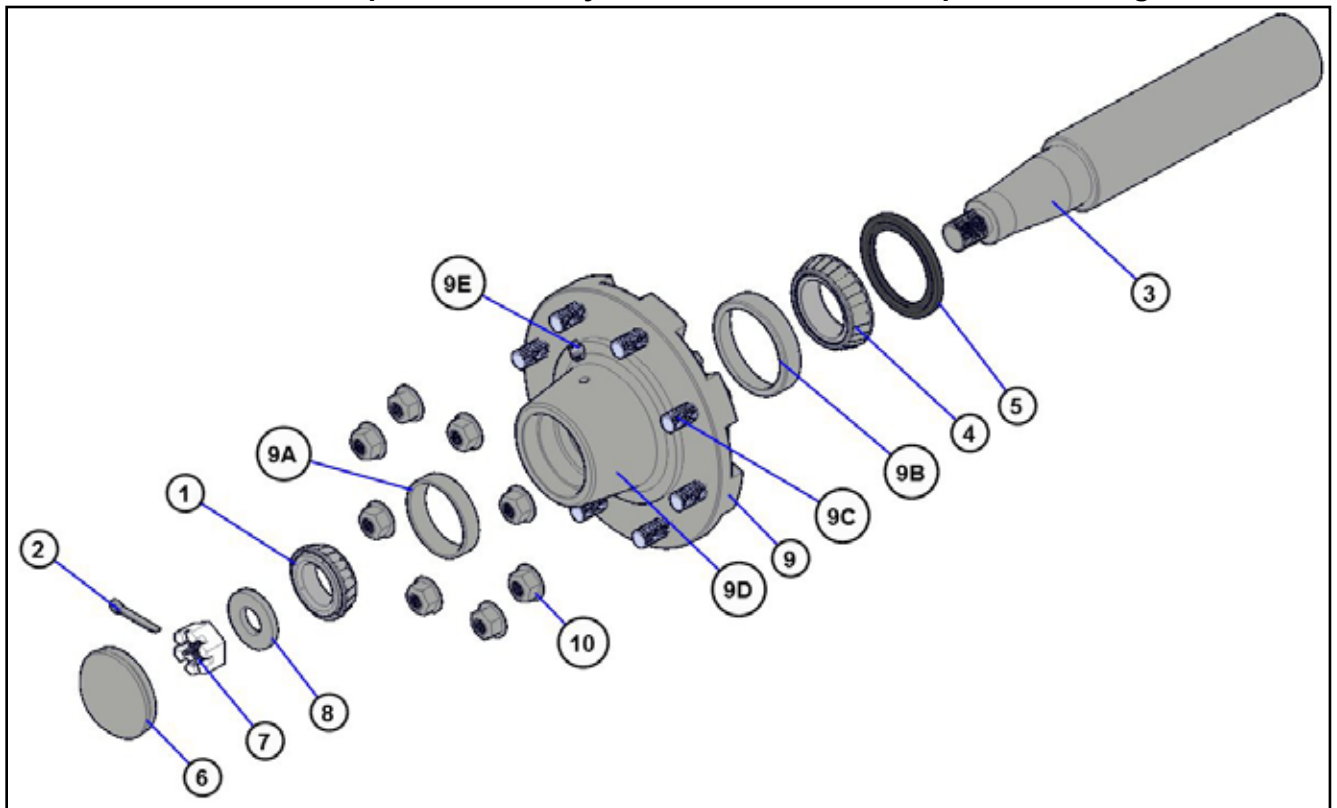


BOM ID	Qty	Item No	Description
1	1	41000011	LIGHTING KIT, AT LIQUID APPLICATOR
2	1	AM3406	BACKING PLATE, LIGHT KIT
3	1	AM3415	LIGHT BRACKET, FRONT, LEFT HAND
4	1	AM3417	LIGHT BRACKET, FRONT, RIGHT HAND
5	2	AM3418	SHIELD, LIGHT BRACKET
6	2	AM3421	LIGHT BRACKET, SIDE MOUNT
7	2	AM3422	LIGHT BRACKET, SIDE MOUNT BAR
8	2	AM3429	LIGHT MOUNT
9	2	AM3430	TUBE, LIGHT BRACKET (5'11-1/4")
10	1	AP2542	SMV (SLOW MOVING VEHICLE) SIGN
11	1	AP2543	SMV (SLOW MOVING VEHICLE) MOUNTING SOCKET
11A	1	AP2543	SMV (SLOW MOVING VEHICLE) MOUNTING SOCKET
11B	2	AP2543-Bolt	Round Head Bolt, 5/16"-18 X 1-1/4"
11C	2	BP3157	NUT, HEX, 5/16"-18, GRADE 2, PLATED
11D	2	BP3158	WASHER, LOCK, 5/16", PLATED
12	1	AP2544	SMV (SLOW MOVING VEHICLE) MOUNTING SPADE
13	4	AP2547	DECAL, REFLECTOR, YELLOW, 2"X 9"
14	4	AP2548	DECAL, REFLECTOR, RED, 2"X 9"
15	4	AP2551	DECAL, FLUORESCENT, RED-ORANGE, 2"X 9", NON-REFLECTIVE
16	1	AP2829	DUST CAP
17	1	AP3142	ELECTRICAL HARNESS, 10' MAIN 5-WIRE, 7 PIN & DUST CAP
18	1	AP3155	ELECTRICAL HARNESS, 17' 2 POST, 5-WIRE
19	6	AP3551	GROMMET, OVAL, MODEL 60
20	2	AP4312	LAMP, LED, OVAL, STOP TURN & TAIL, RED
21	4	AP4415	LAMP, LED, OVAL, TURN SIGNAL, AMBER, LED
22	4	BP3005	HEX CAP SCREW, 3/8"-16 X 1-1/2", GRADE 5, PLATED
23	9	BP3006	HEX CAP SCREW, 3/8"-16 X 1", GRADE 5, PLATED
24	4	BP3053	NUT, HEX, 1/4"-20, GRADE 2
25	2	BP3055	WASHER, FLAT, 1/4", PLATED
26	2	BP3118	HEX CAP SCREW, 3/8"-16 X 5", GRADE 5, PLATED
27	4	BP3233	HEX CAP SCREW, 1/4"-20 X 3/4", GRADE 2, PLATED
28	14	BP3736	U-BOLT, 3/8"-16 X 2"W X 3"L, PLATED
29	43	CP2660	NUT, HEX LOCK, 3/8"-16, NYLOCK



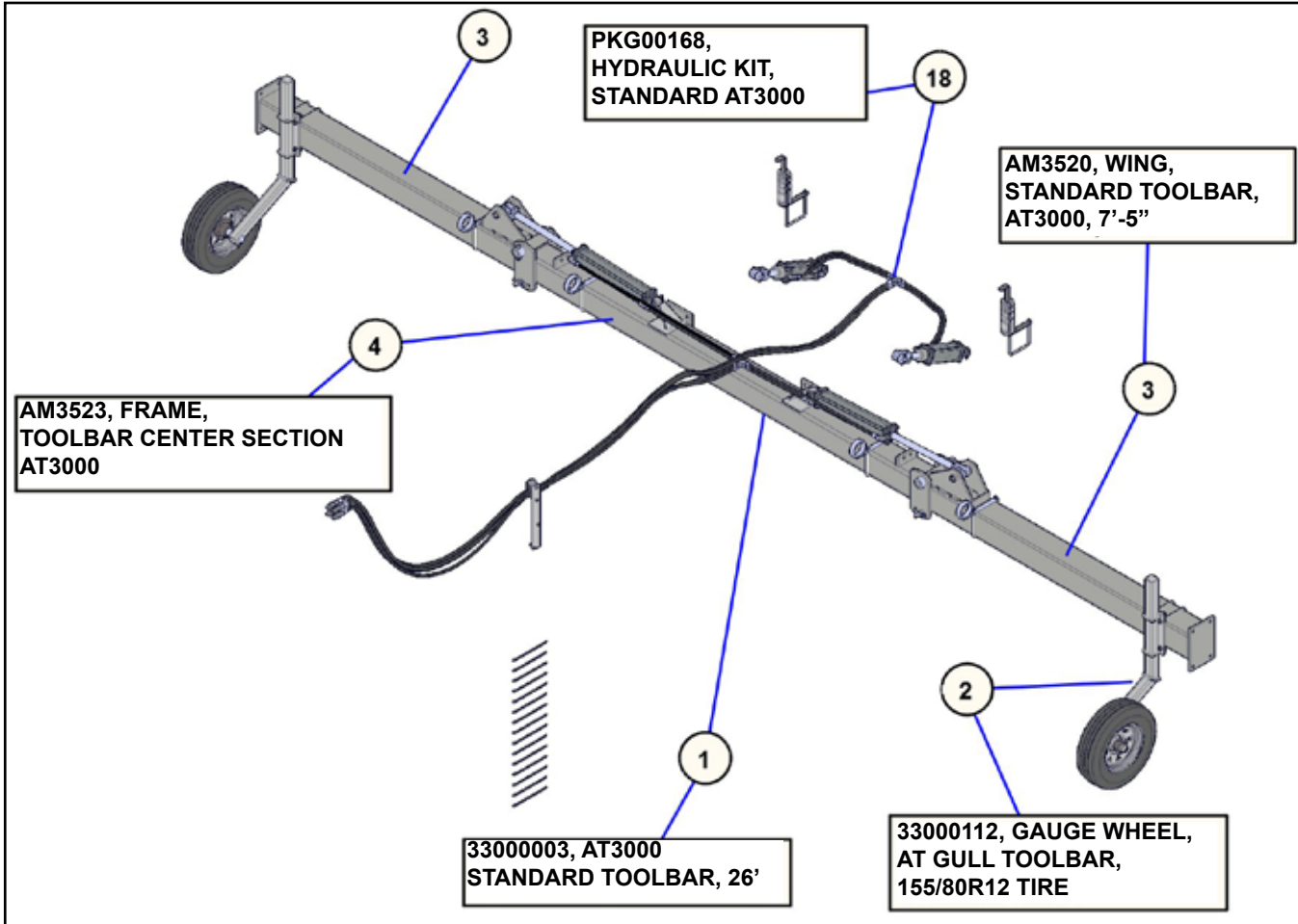
AT3000

► AAM2800-1 Hub and Spindle Assembly, 608 Hub, 2-3/4" x 16" Spindle W/Flange Lock Nut



BOM ID	Qty	Item No	Description
1	1	AP2082	BEARING CONE, LM 501349
2	1	AP2122	PIN, COTTER, 7/32" X 1-3/4"
3	1	AP2171	SPINDLE, 2-3/4" X 16"
4	1	AP2805	BEARING CONE, JLM 506849
5	1	AP2808	GREASE SEAL, CR 27394
6	1	AP2809	HUB CAP, 1609
7	1	AP2811	NUT, SPINDLE, 1"-14
8	1	AP2812	WASHER, SPINDLE, 2-1/8" X 1-1/16" X .250"
9	1	AP2821	HUB WITH CUPS, 8 BOLT, WITH STUDS, 308300-8
9A	1	AP2086	BEARING CUP, LM 501310
9B	1	AP2804	BEARING CUP, JLM 506810
9C	8	AP2814	BOLT, WHEEL STUD, 5/8"-18 X 2-1/4"
9D	1	AP2821-Hub	HUB, 8 BOLT, 608
9E	1	BP3268	GREASE ZERK, 1/8" NPT
10	8	BP3287	NUT, HEX LOCK, 5/8"-18 FLANGE, SPIRALOCK THREAD

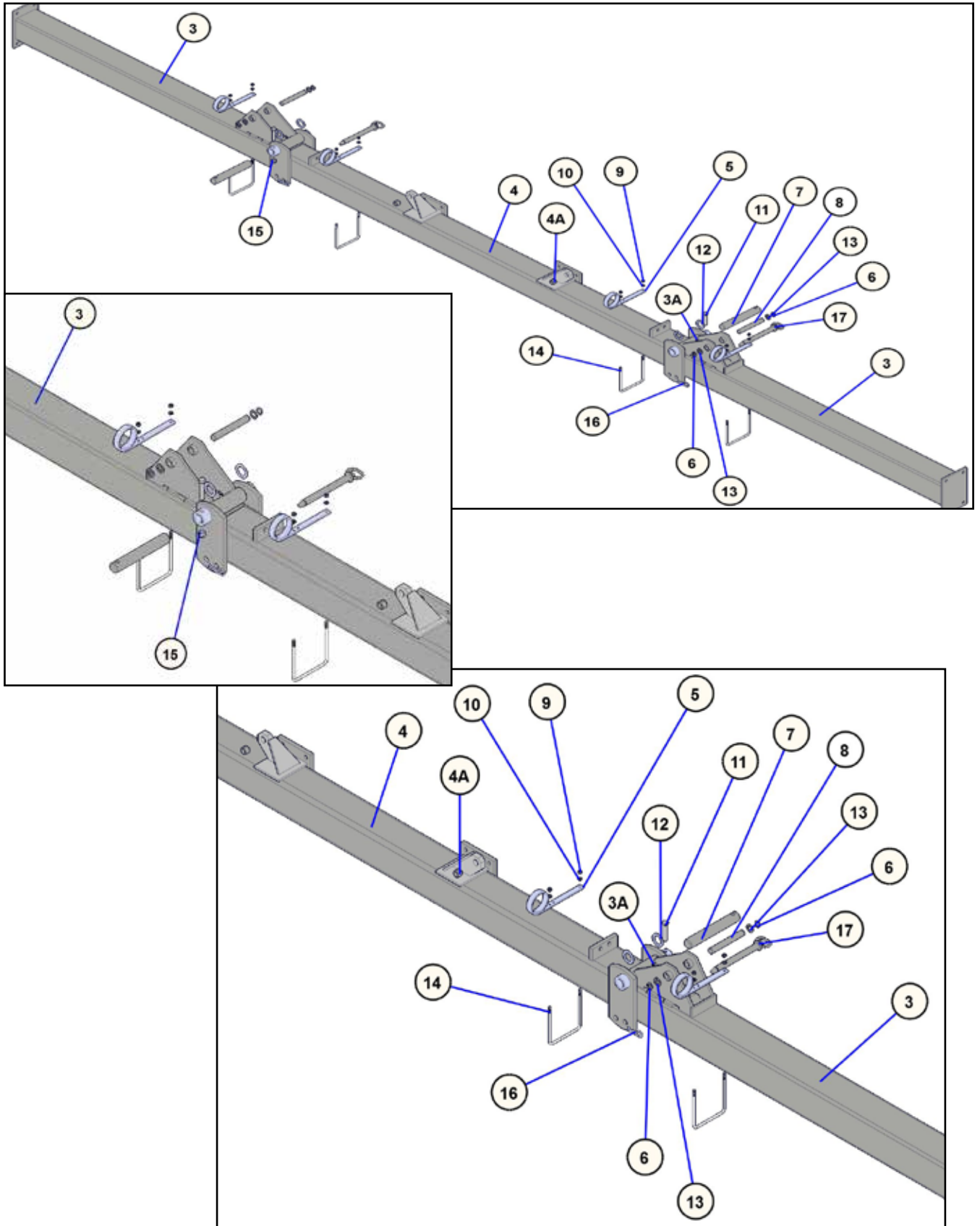
AT3000



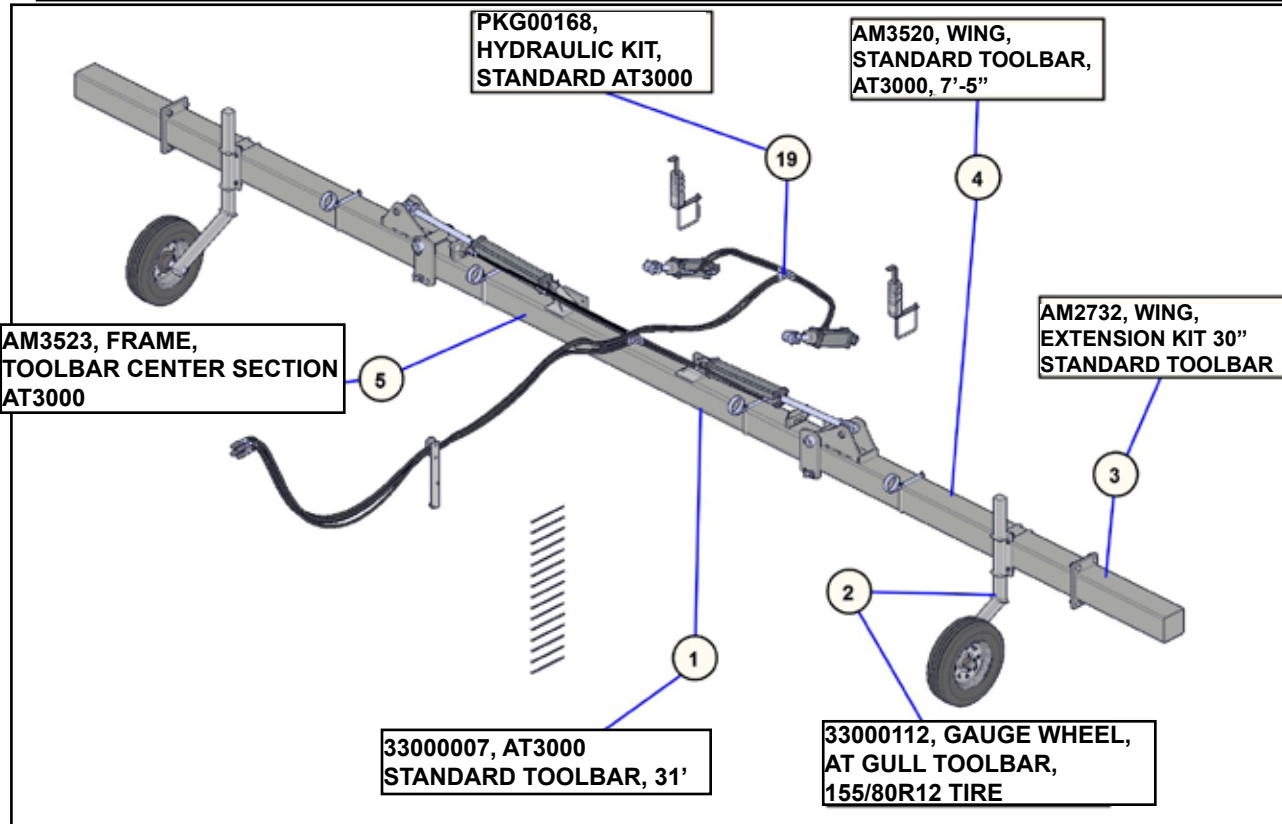
► 33000003 AT3000 Standard Toolbar, 26'

BOM ID	Qty	Item No	Description
1	1	33000003	AT3000 STANDARD TOOLBAR, 26'
2	2	33000112single	GAUGE WHEEL, 155/80R12 TIRE
3	2	AM3520	WING, STANDARD TOOLBAR, AT3000, 7'-5"
3A	2	BP3072	GREASE ZERK, 1/4"-28
4	1	AM3523	FRAME, TOOLBAR CENTER SECTION, AT3000
4A	2	BP3516	TENSION BUSHING, 1-1/4" X 1" X 1" OAL
5	4	AM4015	HOSE RETAINER, CLOSED LOOP, 6" & 7" MOUNTING
6	4	AP2407	SNAP RING, 1" EXTERNAL, HEAVY DUTY
7	2	BM3485	PIN, 1-3/4" X 12-1/8" OAL, WITH 21/32" HOLE, PLATED
8	2	BM3725	PIN, 1" X 7-1/2", DOUBLE GROOVED
9	8	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
10	8	BP3002	WASHER, LOCK, 3/8", PLATED
11	2	BP3135	HEX CAP SCREW, 5/8"-11 X 3-1/2", GRADE 5, PLATED
12	4	BP3205	MACHINERY BUSHING, 2-1/2" OD X 1-3/4" ID, 10 GAUGE, PLATED
13	4	BP3215	MACHINERY BUSHING, 1-1/2" OD X 1" ID, 14 GAUGE, PLATED
14	4	BP3335	U-BOLT, 3/8"-16 X 7"W X 8"L, PLATED
15	2	BP3375	NUT, HEX LOCK, 5/8"-11, NYLOCK
16	2	BP3500	PIN, HAIR CLIP, 3/16"
17	2	BP3510	PIN, 1" X 10", PLATED
18	1	PKG00168	PACKAGE, HYDRAULIC KIT, STANDARD AT3000

AT3000



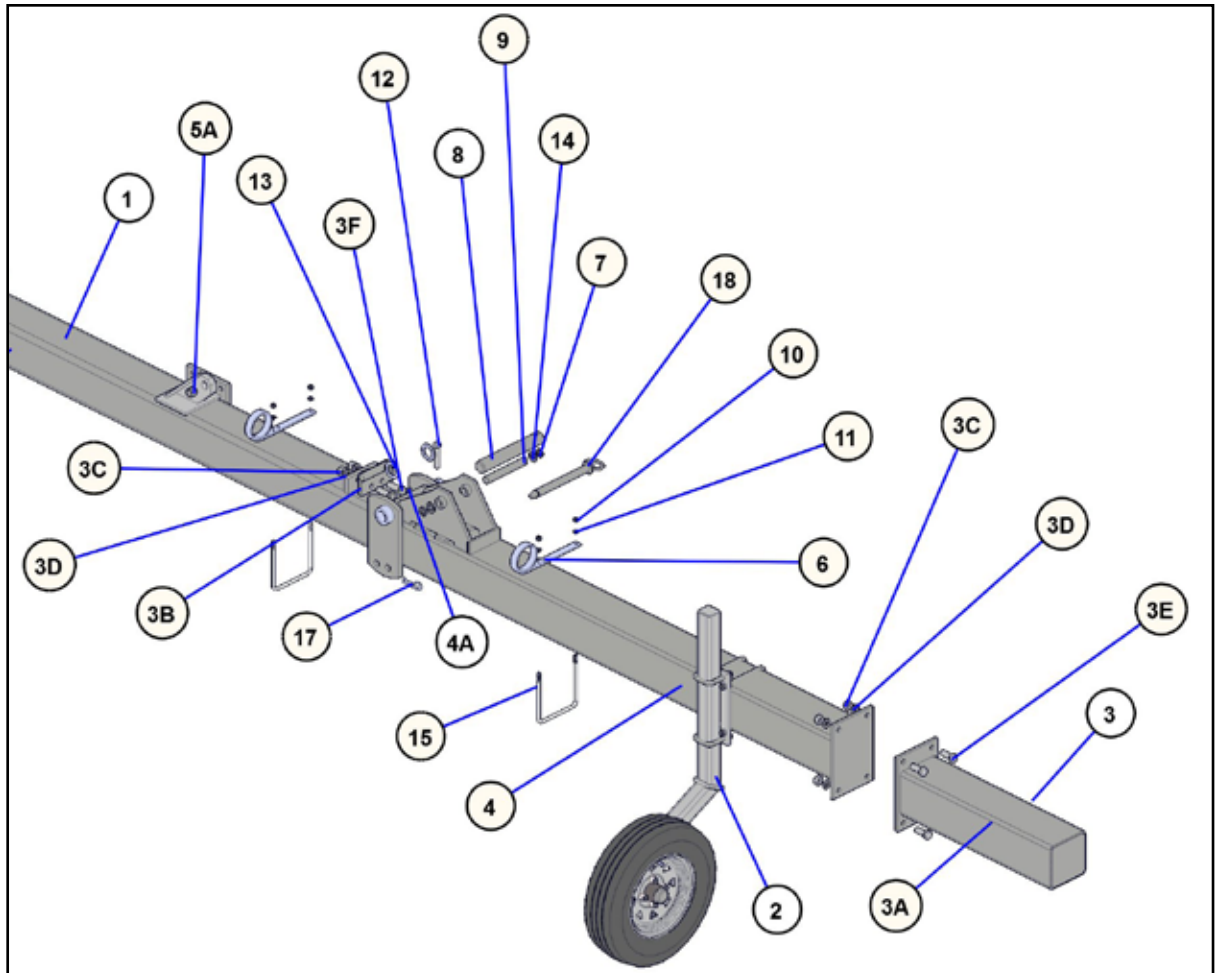
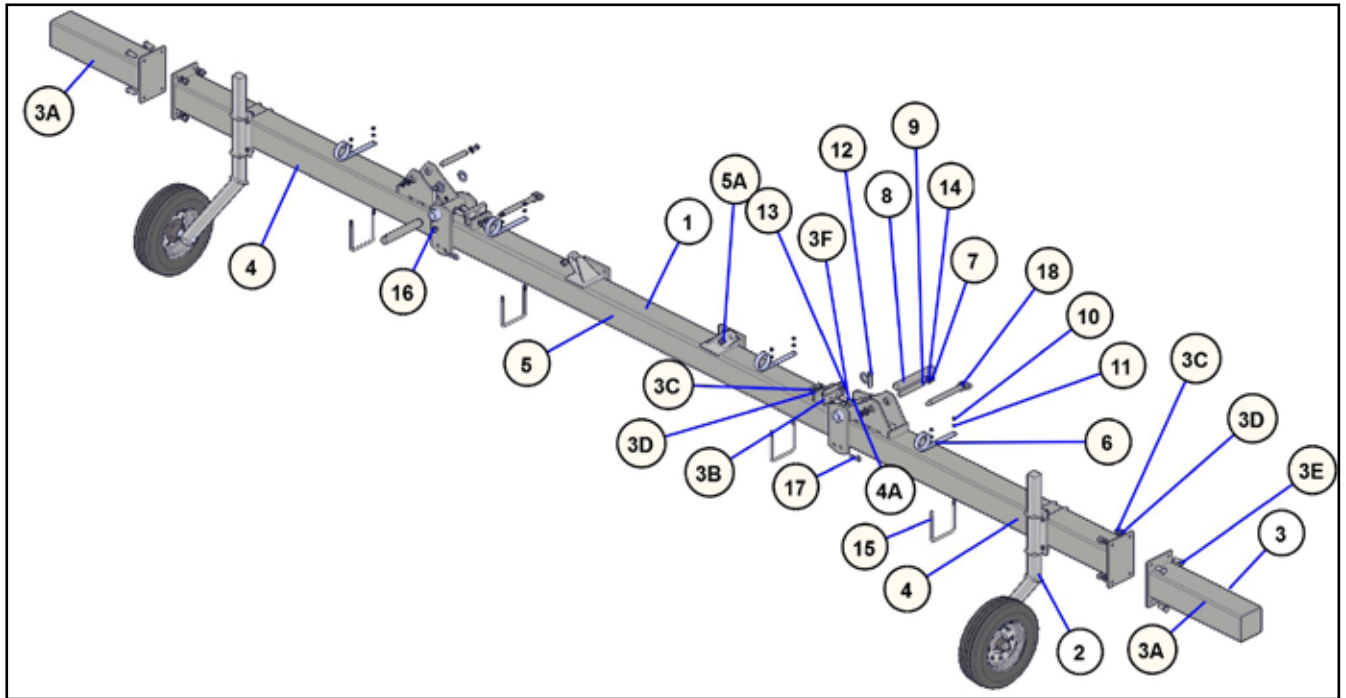
AT3000 Standard Tool Bar, 31' (33000007)



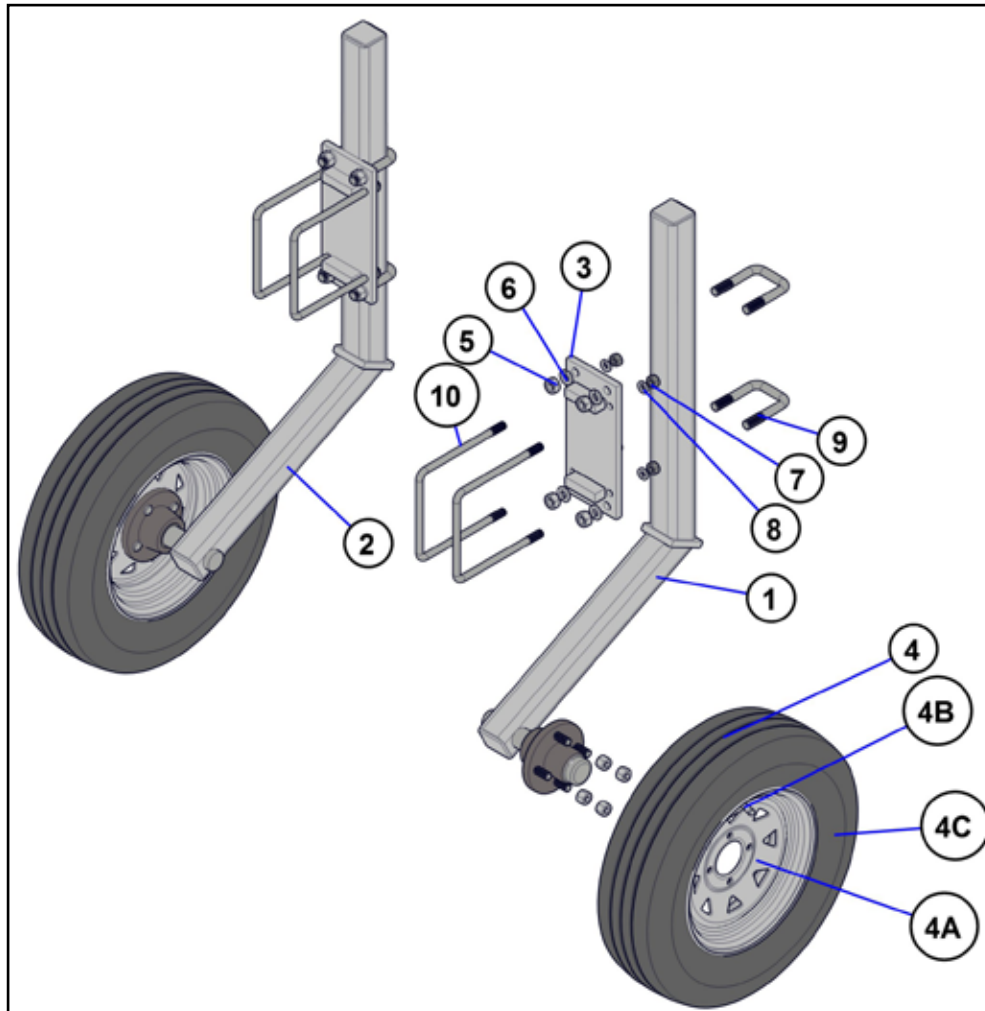
► 33000007, AT3000 STANDARD TOOL BAR, 31'

BOM ID	Qty	Item No	Description
1	1	33000007	AT3000 STANDARD TOOLBAR, 31'
2	2	33000112single	GAUGE WHEEL, AT GULL TOOLBAR, 155/80R12 TIRE
3	1	AAM2732	WING EXTENSION KIT 30", AT3000 STANDARD TOOLBAR
3A	2	AM3533	WING, EXTENSION KIT 30"
3B	2	AM3562	WING STOP EXTENSION
3C	12	BP3034	NUT, HEX, 3/4"-10, GRADE 2, PLATED
3D	12	BP3035	WASHER, LOCK, 3/4", PLATED
3E	8	BP3139	HEX CAP SCREW, 3/4"-10 X 2", GRADE 5, PLATED
3F	4	BP3140	HEX CAP SCREW, 3/4"-10 X 2-1/2", GRADE 5, PLATED
4	2	AM3520	WING, STANDARD TOOLBAR, AT3000, 7'-5"
4A	2	BP3072	GREASE ZERK, 1/4"-28
5	1	AM3523	FRAME, TOOLBAR CENTER SECTION, AT3000
5A	2	BP3516	TENSION BUSHING, 1-1/4" X 1" X 1" OAL
6	4	AM4015	HOSE RETAINER, CLOSED LOOP, 6" & 7" MOUNTING
7	4	AP2407	SNAP RING, 1" EXTERNAL, HEAVY DUTY
8	2	BM3485	PIN, 1-3/4" X 12-1/8" OAL, WITH 21/32" HOLE, PLATED
9	2	BM3725	PIN, 1" X 7-1/2", DOUBLE GROOVED
10	8	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
11	8	BP3002	WASHER, LOCK, 3/8", PLATED
12	2	BP3135	HEX CAP SCREW, 5/8"-11 X 3-1/2", GRADE 5, PLATED
13	4	BP3205	MACHINERY BUSHING, 2-1/2" OD X 1-3/4" ID, 10 GAUGE, PLATED
14	4	BP3215	MACHINERY BUSHING, 1-1/2" OD X 1" ID, 14 GAUGE, PLATED
15	4	BP3335	U-BOLT, 3/8"-16 X 7"W X 8"L, PLATED
16	2	BP3375	NUT, HEX LOCK, 5/8"-11, NYLOCK
17	2	BP3500	PIN, HAIR CLIP, 3/16"
18	2	BP3510	PIN, 1" X 10", PLATED
19	1	PKG00168	PACKAGE, HYDRAULIC KIT, STANDARD AT3000

AT3000



AT3000

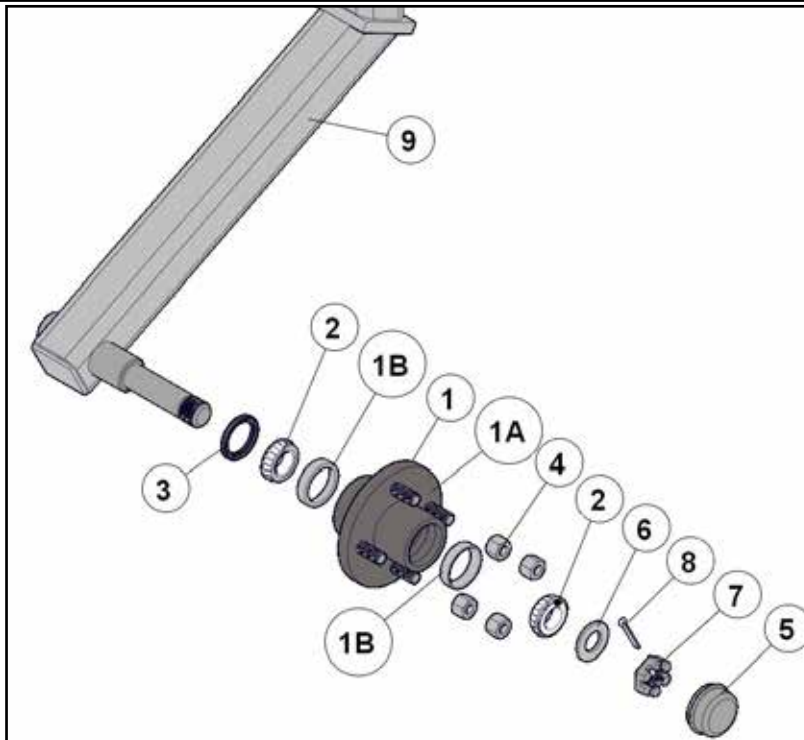


► **33000112 Gauge Wheels, 155/80R12 Tires**

BOM ID	Qty	Item No	Description
1	1	AM3546	ASSEMBLY, GAUGE WHEEL, LEFT HAND
2	1	AM3548	ASSEMBLY, GAUGE WHEEL, RIGHT HAND
3	2	AM3626	GAUGE WHEEL MOUNTING
4	2	AP4240	WHEEL, 155/80R12, 12 X 4 X 4, 4" BOLT CIRCLE
4A	1	AP2374	RIM, 12 X 4 X 4, WHITE, 12440
4B	1	AP2790	VALVE STEM, METAL
4C	1	AP4241	TIRE, P155/80R12
5	8	BP3038	NUT, HEX, 5/8"-11, GRADE 2
6	8	BP3039	WASHER, LOCK, 5/8", PLATED
7	8	BP3042	NUT, HEX, 1/2"-13, GRADE 2, PLATED
8	8	BP3043	WASHER, LOCK, 1/2", PLATED
9	4	BP3300	U-BOLT, 5/8"-11 X 2-1/2"W X 4"L, PLATED
10	4	BP3356	U-BOLT, 1/2"-13 X 7"W X 8-1/4"L, GLOSS BLACK

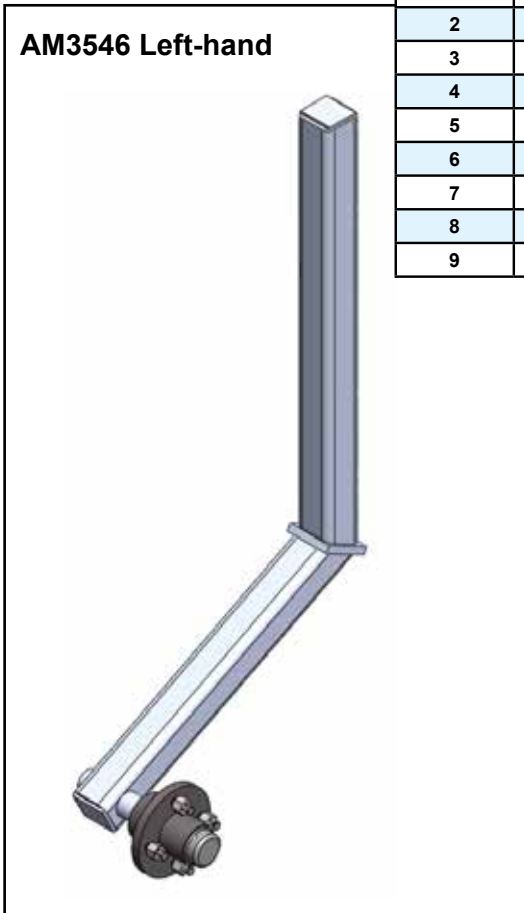
AT3000

- ▶ **AM3546 Left-hand**
- AM3548 Right-hand**

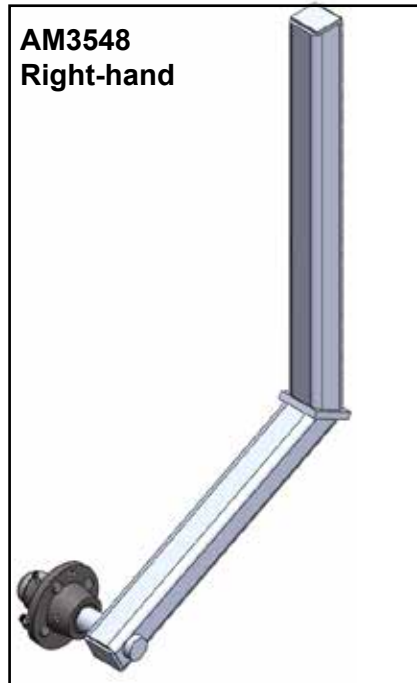


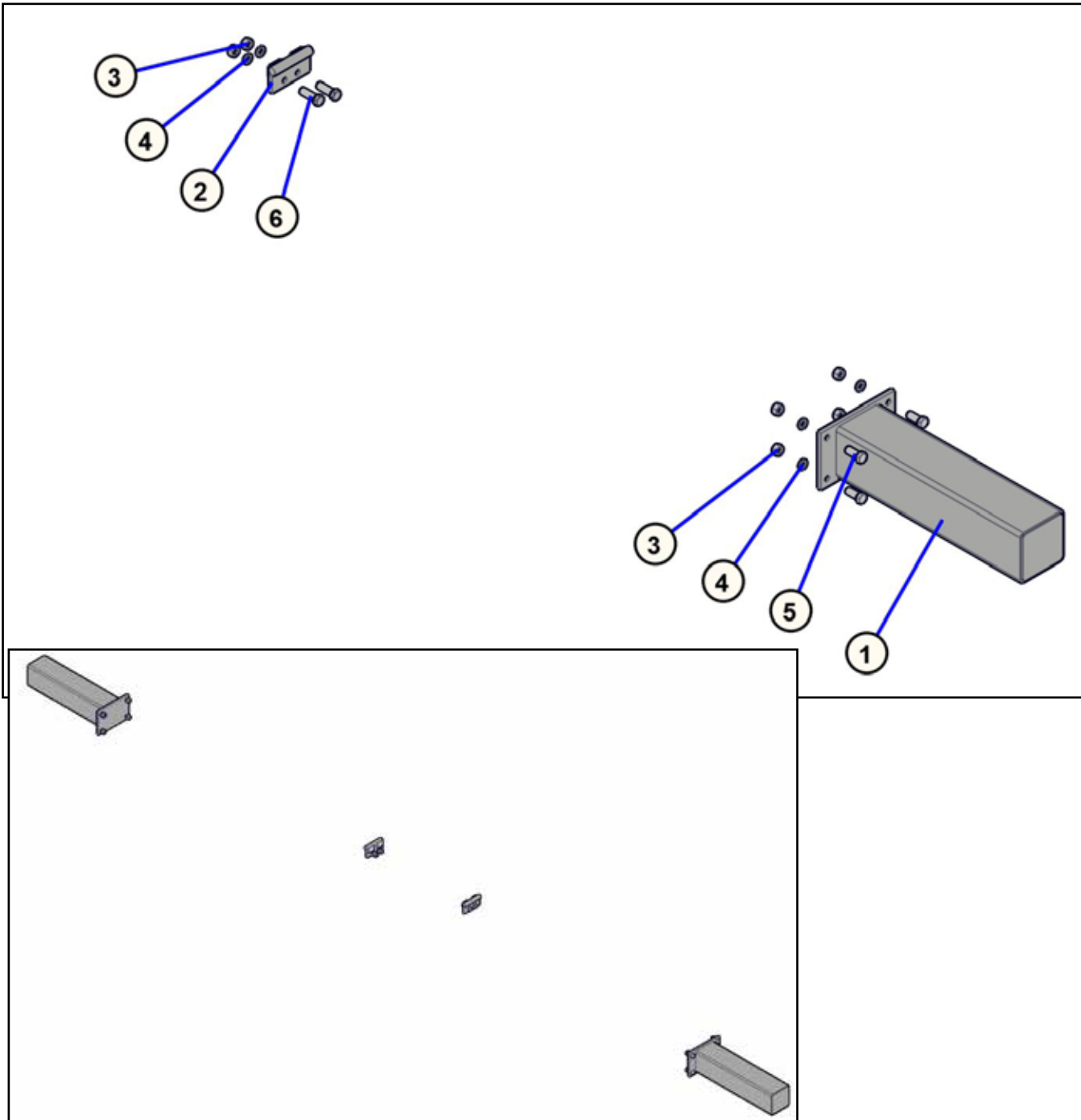
BOM ID	Qty	Item No	Description
1	1	AP2375	HUB, 4 BOLT, 4" BOLT CIRCLE, WITH CUPS & STUDS
1A	1	HUB	HUB, 4 BOLT, 4" BOLT CIRCLE
1B	2	AP2376	BEARING CUP, L44610
2	2	AP2377	BEARING CONE, L44649
3	1	AP2378	GREASE SEAL, 15191VB
4	4	AP2379	WHEEL NUT, 1/2"-20
5	1	AP2380	HUB CAP
6	1	AP2381	WASHER, SPINDLE, 1-3/4" X 1" X .125"
7	1	AP2387	NUT, SPINDLE, 1"-14
8	1	AP2426	PIN, COTTER, 5/32" X 1-3/4"
9	1	EM7215	GAUGE WHEEL, LEFT HAND, AT LIQUID TOOLBAR

AM3546 Left-hand



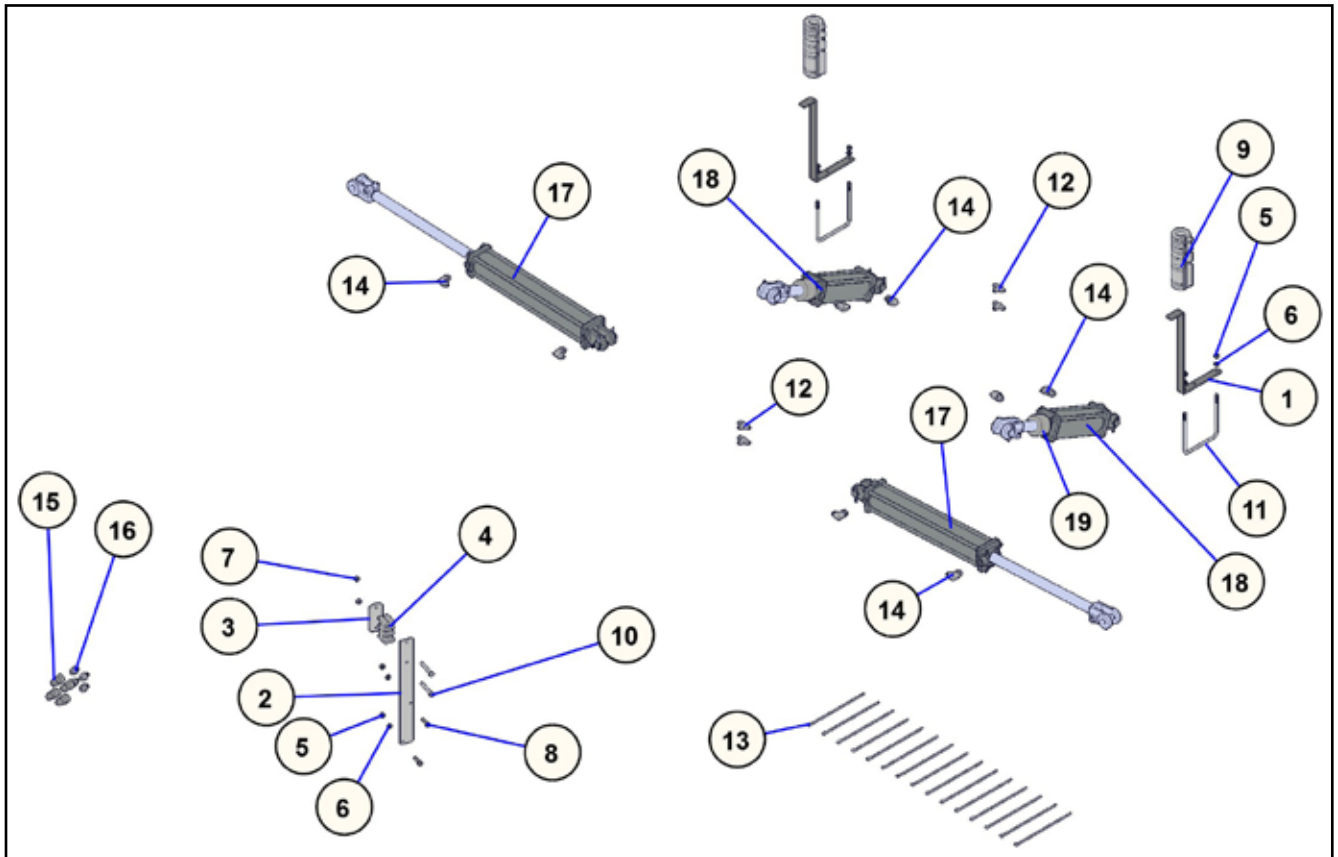
AM3548 Right-hand





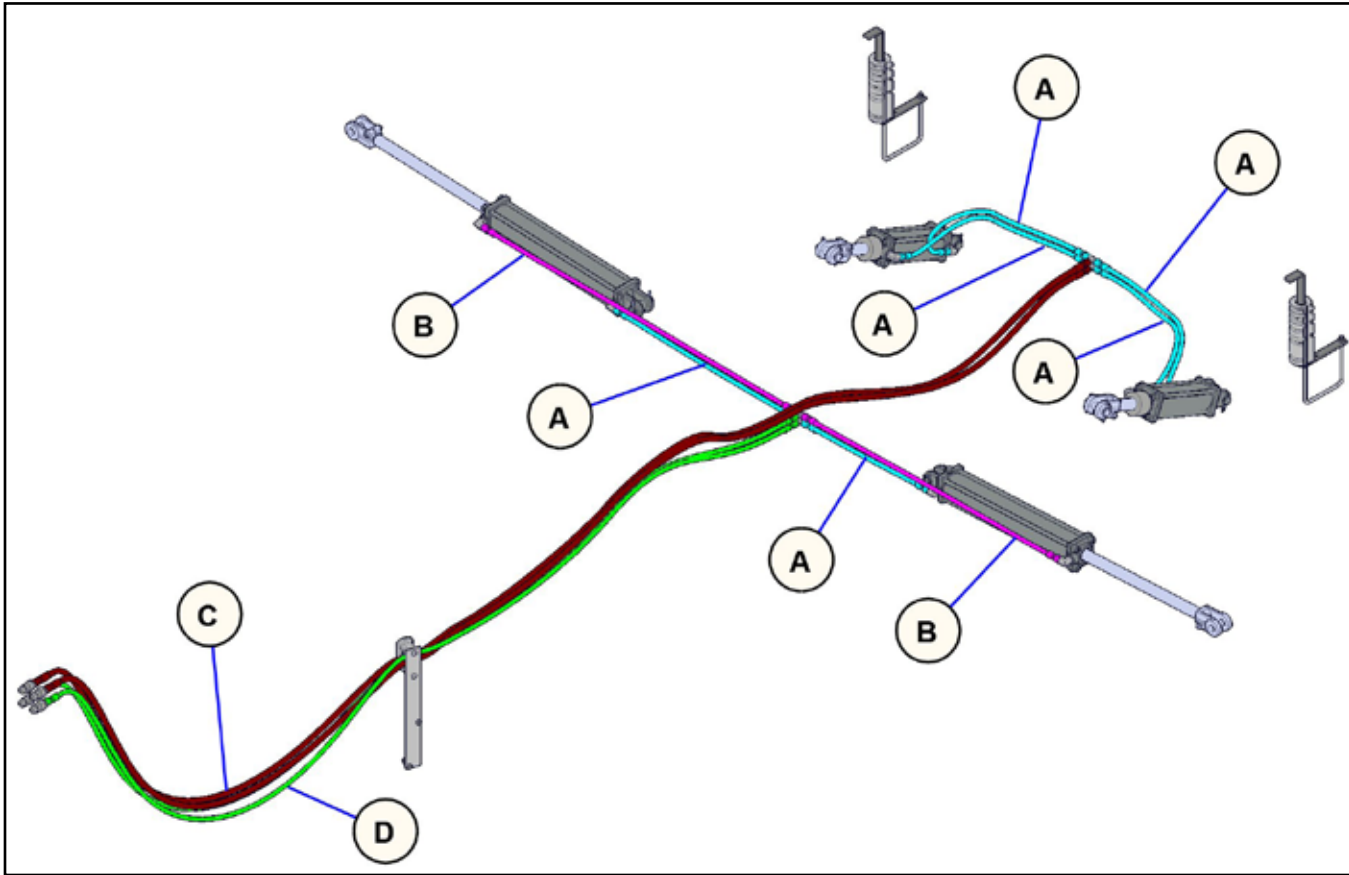
► **AAM2732 Wing Extension Kit 30", AT3000 Standard Toolbar**

BOM ID	Qty	Item No	Description
1	2	AM3533	WING, EXTENSION, 30"
2	2	AM3562	WING STOP EXTENSION
3	12	BP3034	NUT, HEX, 3/4"-10, GRADE 2, PLATED
4	12	BP3035	WASHER, LOCK, 3/4", PLATED
5	8	BP3139	HEX CAP SCREW, 3/4"-10 X 2", GRADE 5, PLATED
6	4	BP3140	HEX CAP SCREW, 3/4"-10 X 2-1/2", GRADE 5, PLATED



► PKG00168 Package, Hydraulic Kit, Standard AT3000

BOM ID	Qty	Item No	Description
1	2	AM2090	BRACKET, DEPTH COLLAR & LOCKUP STORAGE
2	1	AM4423	HOSE HOLDER STRAP
3	1	AM7518	HOSE HOLDER RETAINER
4	1	AP2871	HOSE RETAINER
5	6	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
6	6	BP3002	WASHER, LOCK, 3/8", PLATED
7	2	BP3003	NUT, HEX LOCK, 3/8"-16, GRADE 2, PLATED
8	2	BP3005	HEX CAP SCREW, 3/8"-16 X 1-1/2", GRADE 5, PLATED
9	2	BP3076	DEPTH COLLAR SET, 1-1/4" TO 1-1/2"
10	2	BP3116	HEX CAP SCREW, 3/8"-16 X 3", GRADE 5, PLATED
11	2	BP3351	U-BOLT, 3/8"-16 X 6"W X 7"L, PLATED
12	4	DP4004	TEE, 6MJ-6MJ-6MJ
13	15	DP4086	CABLE TIE 11-3/8"
14	8	DP4301	ADAPTER, 6MJ-8MSAE, 90 DEGREE
15	4	DP4383	COUPLER, PIONEER, 8MQBA-8FSAE
16	4	DP4394	ADAPTER, 8MSAE-6MJIC, 6400-6-8
17	2	DP4492	CYLINDER, HYDRAULIC, 3 X 20, SIDE PORTED, B300200ABAAA03B
18	2	DP4656	CYLINDER, HYDRAULIC, 3 X 8, 3000 PSI, SIDE PORT, A300080BBAAA07A
19	2	EM7236	HYDRAULIC CYLINDER SPACER



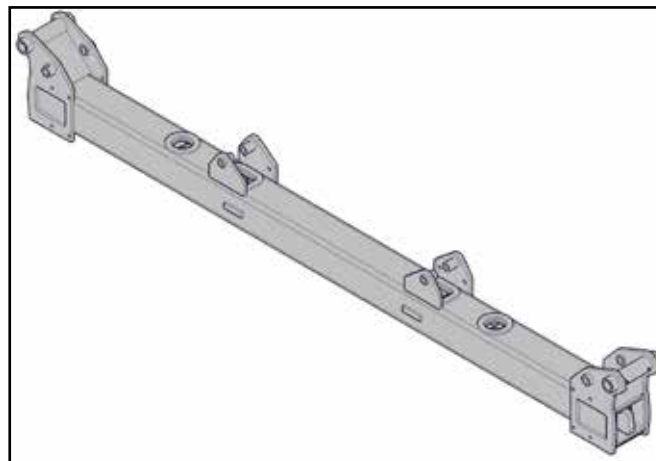
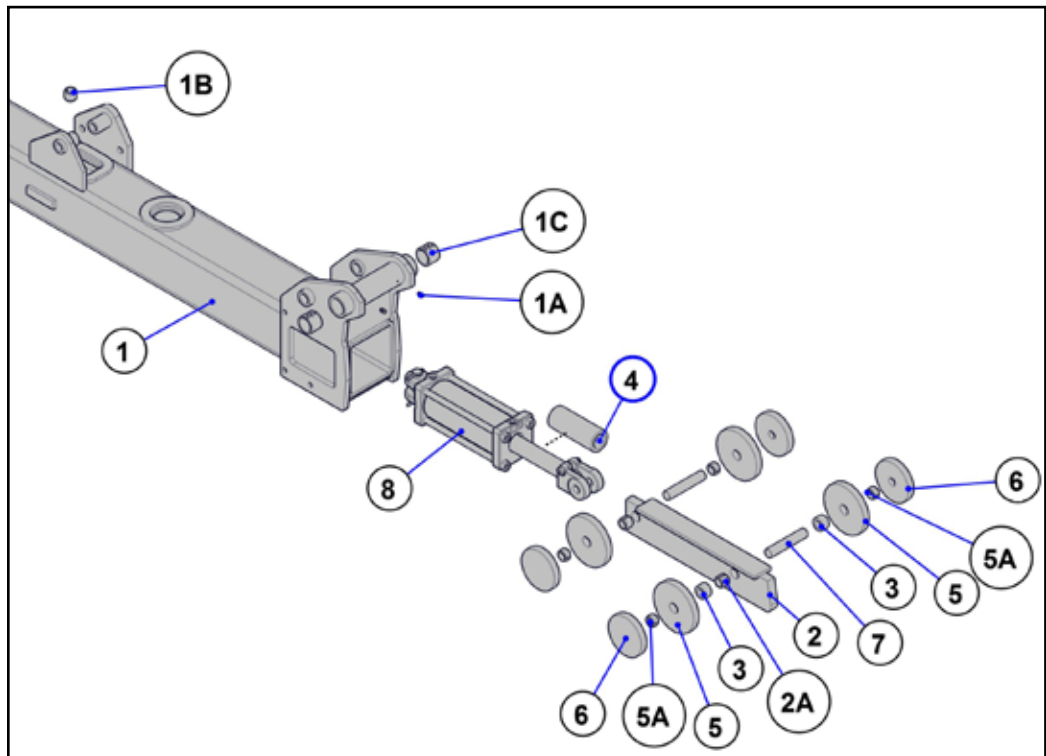
► **DDP1130 Hose Kit, AT3000, Standard Toolbar**

BOM ID	Qty	Item No	Description
A	6	DP5111	HOSE, HYD, 1/4" X 30" (2'6"), 6FJX-6FJX
B	2	DP5122	HOSE, HYD, 1/4" X 56" (4'8"), 6FJX-6FJX
C	2	DP5260	HOSE, HYD, 3/8" X 228" (19'0"), 6FJX-6FJX
D	2	DP5262	HOSE, HYD, 1/4" X 162" (13'6"), 6FJX-6FJX

AT3000

► **AAM2644 Assembly, Gull Wing Center Section Frame, All Terrain Liquid**

BOM ID	Qty	Item No	Description
1	1	AM3536	FRAME, GULL WING CENTER SECTION, AT3000
1A	4	BP3072	GREASE ZERK, 1/4"-28
1B	2	BP3516	TENSION BUSHING, 1-1/4" X 1" X 1" OAL
1C	4	BP3538	TENSION BUSHING, 2" X 1-3/4" X 1-1/2" OAL
2	2	AM3539	LINKAGE, GULL WING, AT LIQUID TOOLBAR
2A	4	BP3516	TENSION BUSHING, 1-1/4" X 1" X 1" OAL
3	4	AM3540	BUSHING
4	2	AM2541	BUSHING
5	8	AM4410	ASSEMBLY, ROLLER
5A	4	BP3572	TENSION BUSHING, 1-1/4" X 1" X 3/4" OAL
6	8	AP2385	ROLLER, 5" DIAMETER
7	4	BM3492	PIN, 1" X 5-1/2" OAL, PLATED
8	2	DP4490	CYLINDER, HYDRAULIC, 4 X 8, SIDE PORTED, A400080BBACB07E

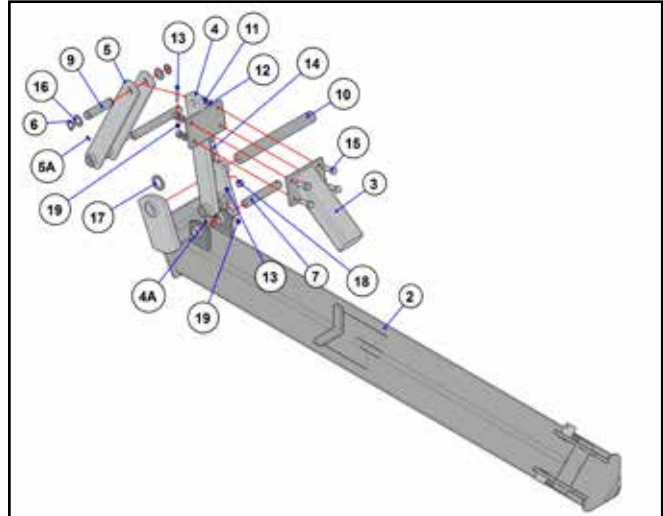
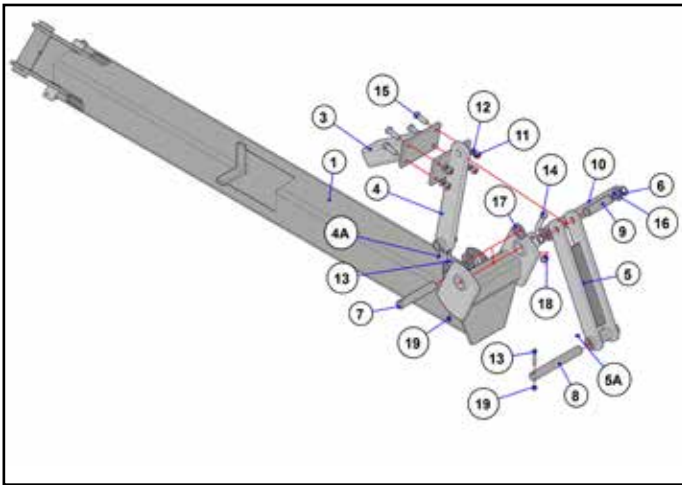




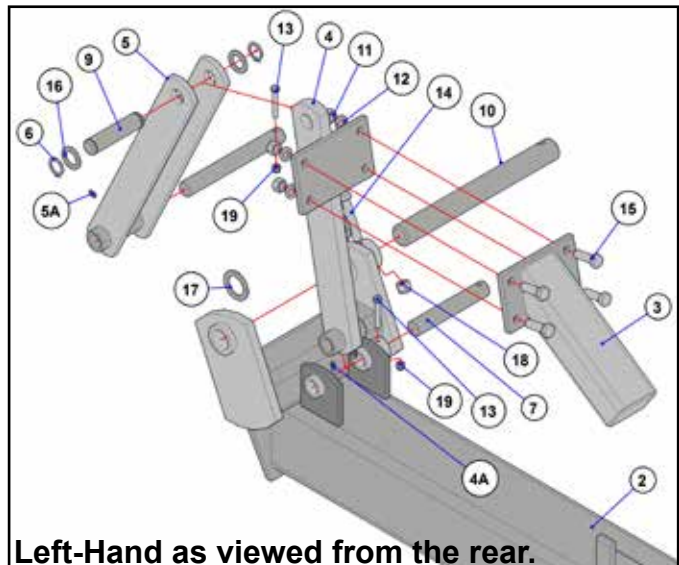
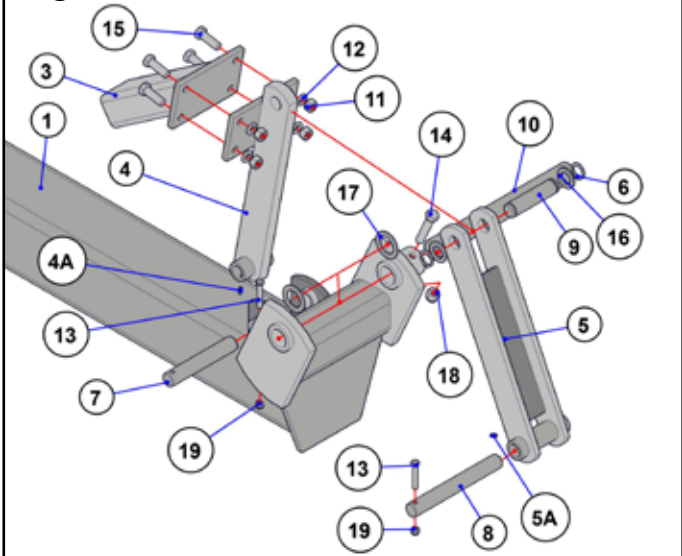
Gull Wing Toolbar (Primary Wings PKG000176)

AT3000

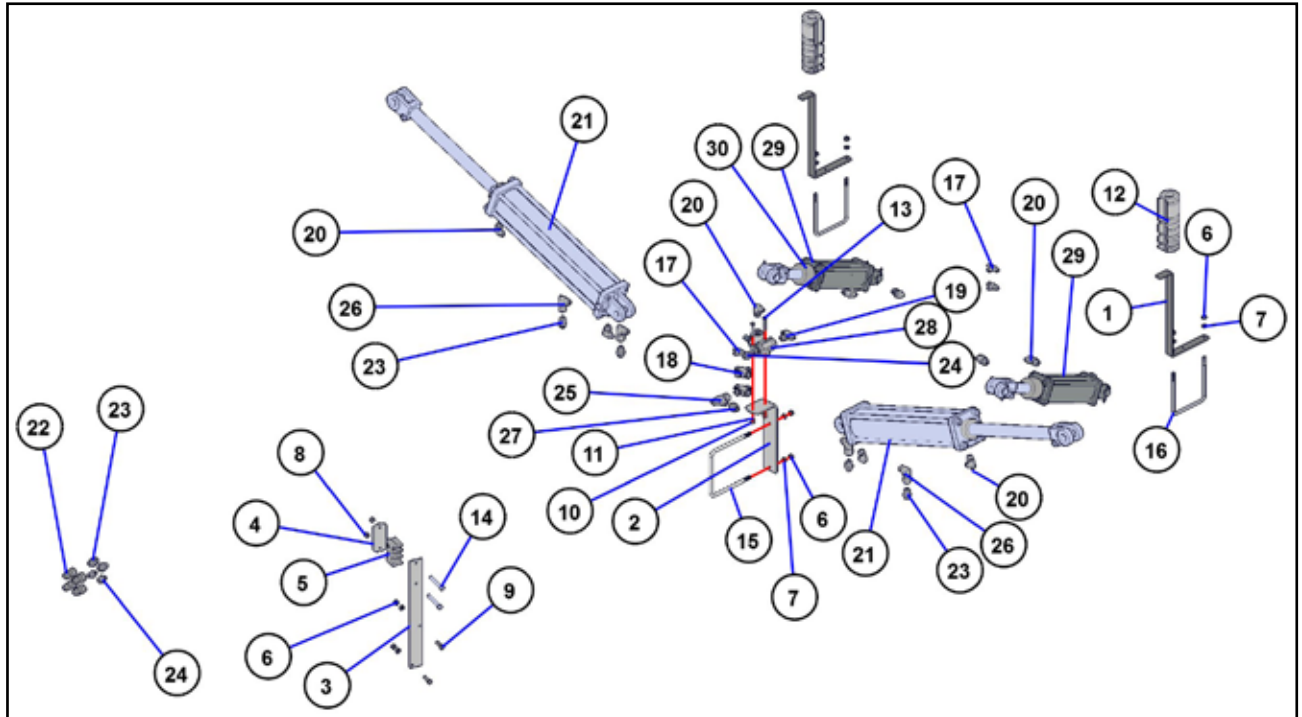
BOM ID	Qty	Item No	Description
1	1	AM3534	WING, PRIMARY, RIGHT HAND, GULL WING TOOLBAR
2	1	AM3535	WING, PRIMARY, LEFT HAND, GULL WING TOOLBAR
3	2	AM3542	WING STOP
4	2	AM3653	LINKAGE, WING FOLD, 19", WITH WING STOP MOUNT
4A	4	BP3072	GREASE ZERK, 1/4"-28
5	2	AM3654	LINKAGE, WING FOLD, DOUBLE 19"
5A	2	BP3072	GREASE ZERK, 1/4"-28
6	4	AP2711	SNAP RING, 1-1/4" EXTERNAL, HEAVY DUTY
7	2	BM3465	PIN, 1-1/4" X 7-3/4" OAL, WITH 13/32" HOLE, PLATED
8	2	BM3486	PIN, 1-1/4" X 10-7/16" OAL, WITH 13/32" HOLE, PLATED
9	2	BM3548	PIN, 1-1/4" X 4-3/4", DOUBLE GROOVED, PLATED
10	2	BM3664	PIN, 1-3/4" X 16-9/16" OAL, WITH 21/32" HOLE
11	8	BP3038	NUT, HEX, 5/8"-11, GRADE 2
12	8	BP3039	WASHER, LOCK, 5/8", PLATED
13	4	BP3096	HEX CAP SCREW, 3/8"-16 X 2-1/2", GRADE 5, PLATED
14	2	BP3135	HEX CAP SCREW, 5/8"-11 X 3-1/2", GRADE 5, PLATED
15	8	BP3171	HEX CAP SCREW, 5/8"-11 X 2", GRADE 5, PLATED
16	4	BP3192	MACHINERY BUSHING, 1-7/8" OD X 1-1/4" ID X 10 GAUGE
17	4	BP3205	MACHINERY BUSHING, 2-1/2" OD X 1-3/4" ID X 10 GAUGE
18	2	BP3375	NUT, HEX LOCK, 5/8"-11, NYLOCK
19	4	CP2660	NUT, HEX LOCK, 3/8"-16, NYLOCK



Right-Hand as viewed from the rear.



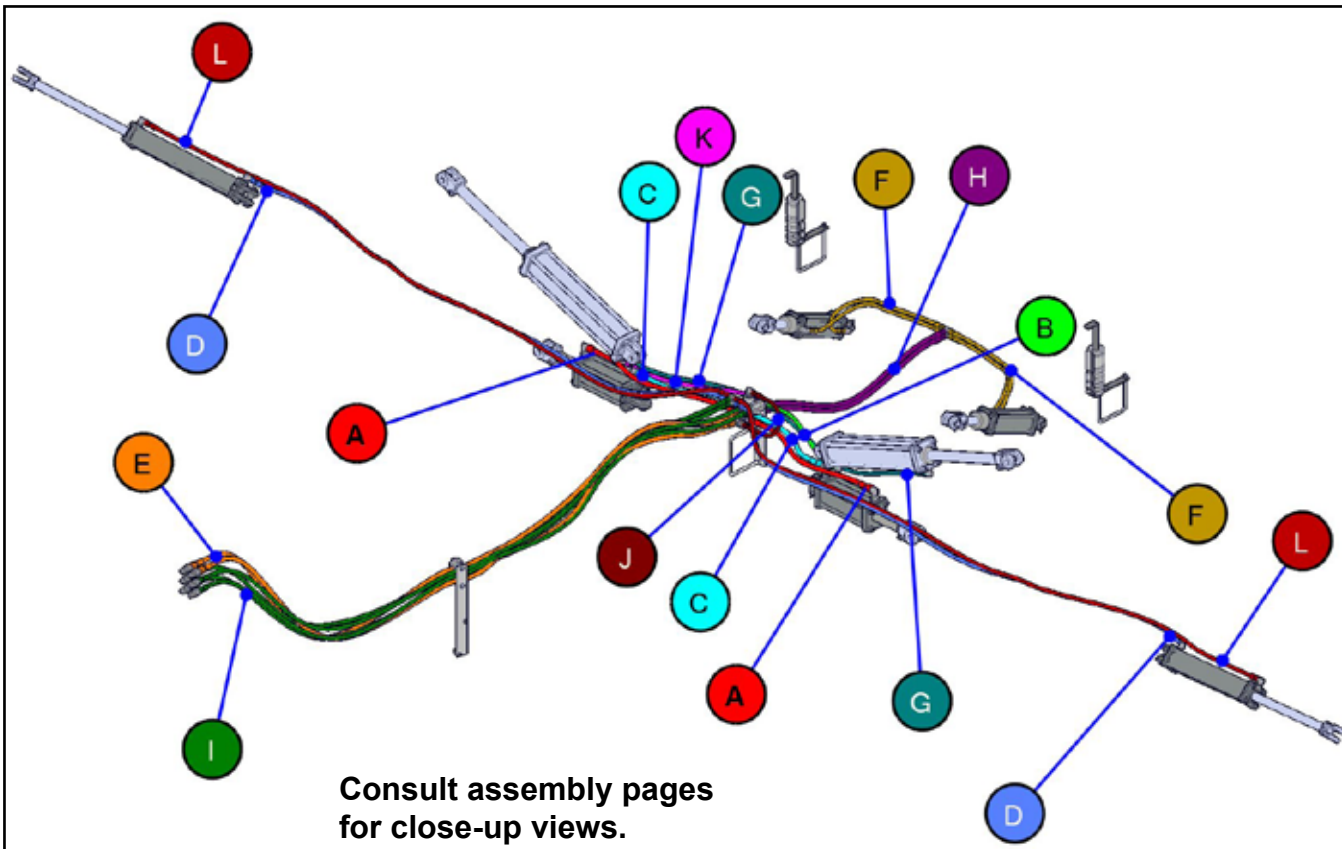
Left-Hand as viewed from the rear.



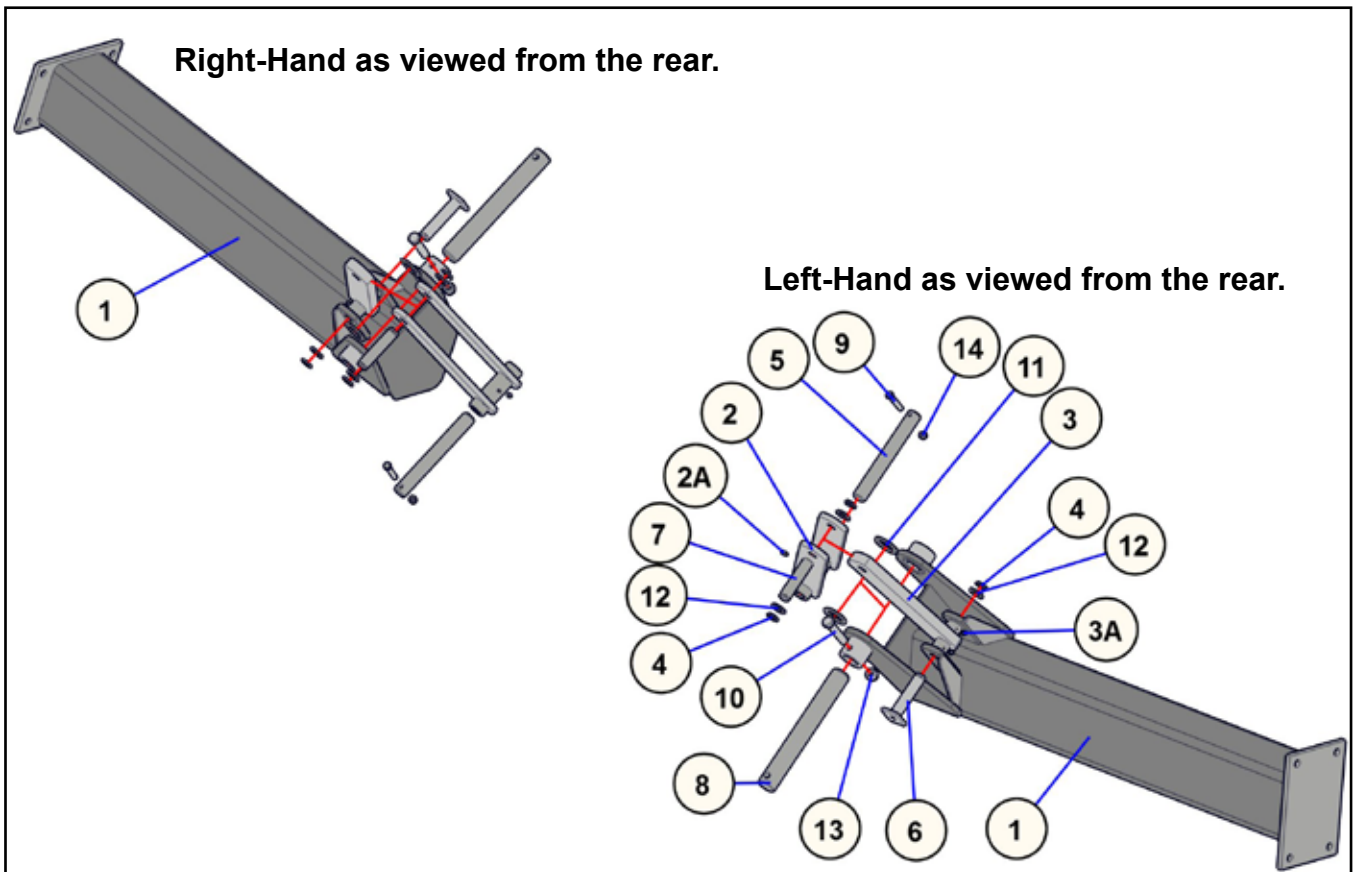
► PKG00177 Package, Hydraulics Kit, AT Liquid Gull Wing Toolbar

BOM ID	Qty	Item No	Description
1	2	AM2090	BRACKET, DEPTH COLLAR & LOCKUP STORAGE
2	1	AM3544	BRACKET, RELIEF VALVE MOUNTING, AT LIQUID
3	1	AM4423	HOSE HOLDER STRAP
4	1	AM7518	HOSE HOLDER RETAINER
5	1	AP2871	HOSE RETAINER
6	8	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
7	8	BP3002	WASHER, LOCK, 3/8", PLATED
8	2	BP3003	NUT, HEX LOCK, 3/8"-16, GRADE 2, PLATED
9	2	BP3005	HEX CAP SCREW, 3/8"-16 X 1-1/2", GRADE 5, PLATED
10	2	BP3053	NUT, HEX, 1/4"-20, GRADE 2
11	2	BP3054	WASHER, LOCK, 1/4", PLATED
12	2	BP3076	DEPTH COLLAR SET, 1-1/4" TO 1-1/2"
13	2	BP3152	HEX CAP SCREW, 1/4"-20 X 2", GRADE 5, PLATED
14	2	BP3189	HEX CAP SCREW, 3/8"-16 X 3-1/2", GRADE 5, PLATED
15	1	BP3335	U-BOLT, 3/8"-16 X 7"W X 8"L, PLATED
16	2	BP3351	U-BOLT, 3/8"-16 X 6"W X 7"L, PLATED
17	3	DP4004	TEE, 6MJ-6MJ-6MJ
18	2	DP4097	CROSS, 10MJ-10MJ-10MJ-10MJ, 2650-10
19	1	DP4181	TEE, 8MSAE X 6MJ-6MJ, 6803-6-6-8
20	9	DP4301	ADAPTER, 6MJ-8MSAE, 90 DEGREE
21	2	DP4375-1	CYLINDER, HYDRAULIC, 4 X 20, WITH 1-1/4" CLEVIS & SPACER
22	4	DP4383	COUPLER, PIONEER, 8MQBA-8FSAE
23	6	DP4392	ADAPTER, 8MSAE-10MJIC, 6400-10-8
24	3	DP4394	ADAPTER, 8MSAE-6MJIC, 6400-6-8
25	1	DP4414	TEE, 10MJIC-10FJX-10MJIC, 6602-10
26	4	DP4418	ELBOW, 90 DEGREE, 10MJIC-10FJX, 6500-10
27	1	DP4422	ADAPTER, 10FJ-6MJ, 2406-10-6
28	1	DP4563	VALVE, RELIEF, RV-5H, PRINCE, 1500-3000 PSI
29	2	DP4656	CYLINDER, HYDRAULIC, 3 X 8, 3000 PSI, SIDE PORT, A300080BBAAA07A
30	2	EM7236	HYDRAULIC CYLINDER SPACER

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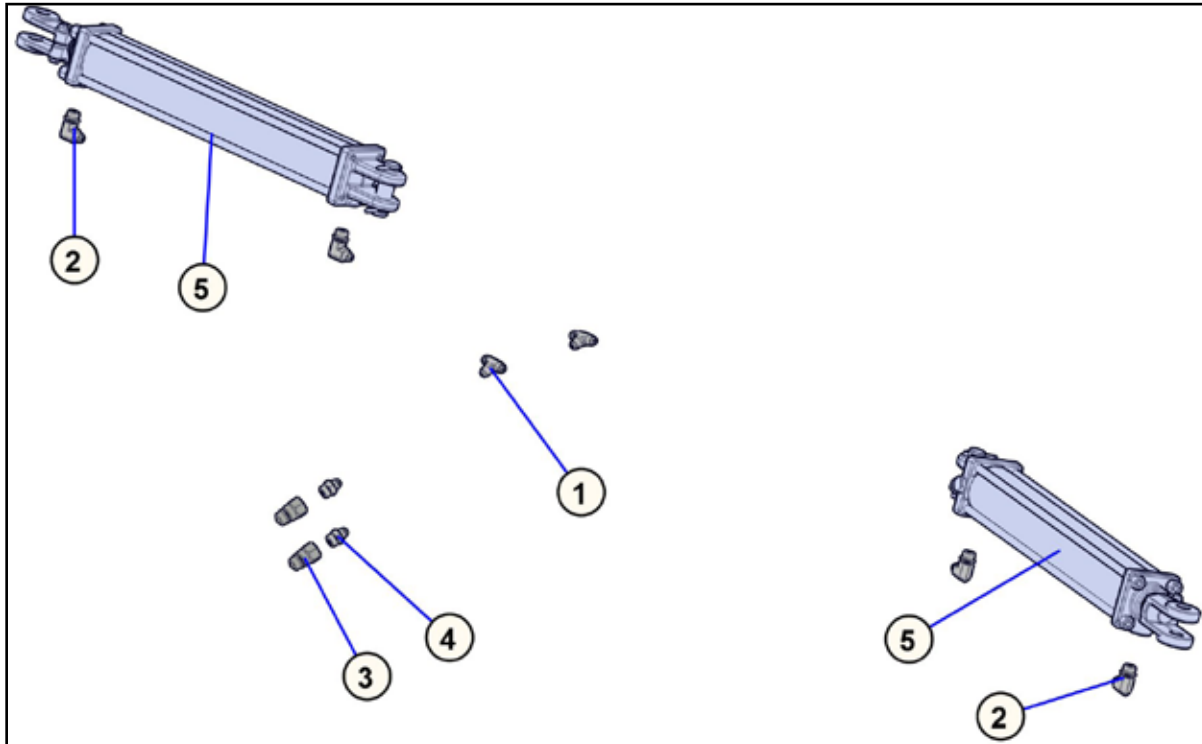
BOM ID	Qty	Item No	Description
A	2	DP5028	HOSE, HYDRAULIC, 3/8" X 36", 10FJX-10FJX
B	1	DP5060	HOSE, HYDRAULIC, 1/4" X 24", 6 FJX-6FJX
C	2	DP5064	HOSE, HYDRAULIC, 3/8" X 24", 10FJX-1
D	2	DP5072	HOSE, HYDRAULIC, 1/4" X 120", 6FJX-6FJX
E	2	DP5074	HOSE, HYD, 3/8" X 162", 10FJX-10FJX
F	4	DP5111	HOSE, HYDRAULIC, 1/4" X 30", 6FJX-6FJX
G	2	DP5241	HOSE, HYDRAULIC, 1/4" X 52", 6FJX-6FJX
H	2	DP5255	HOSE, HYDRAULIC, 3/8" X 56", 10FJX-6FJX
I	4	DP5262	HOSE, HYDRAULIC, 1/4" X 162", 6FJX-6FJX
J	1	DP5266	HOSE, HYDRAULIC, 1/4" X 18", 6FJX-6FJX
K	1	DP5267	HOSE, HYDRAULIC, 1/4" X 32", 6FJX-6FJX
L	2	DP5268	HOSE, HYDRAULIC, 1/4" X 144", 6FJX-6FJX



► PKG00175 Wing, Secondary, AT3000 W/Hardware

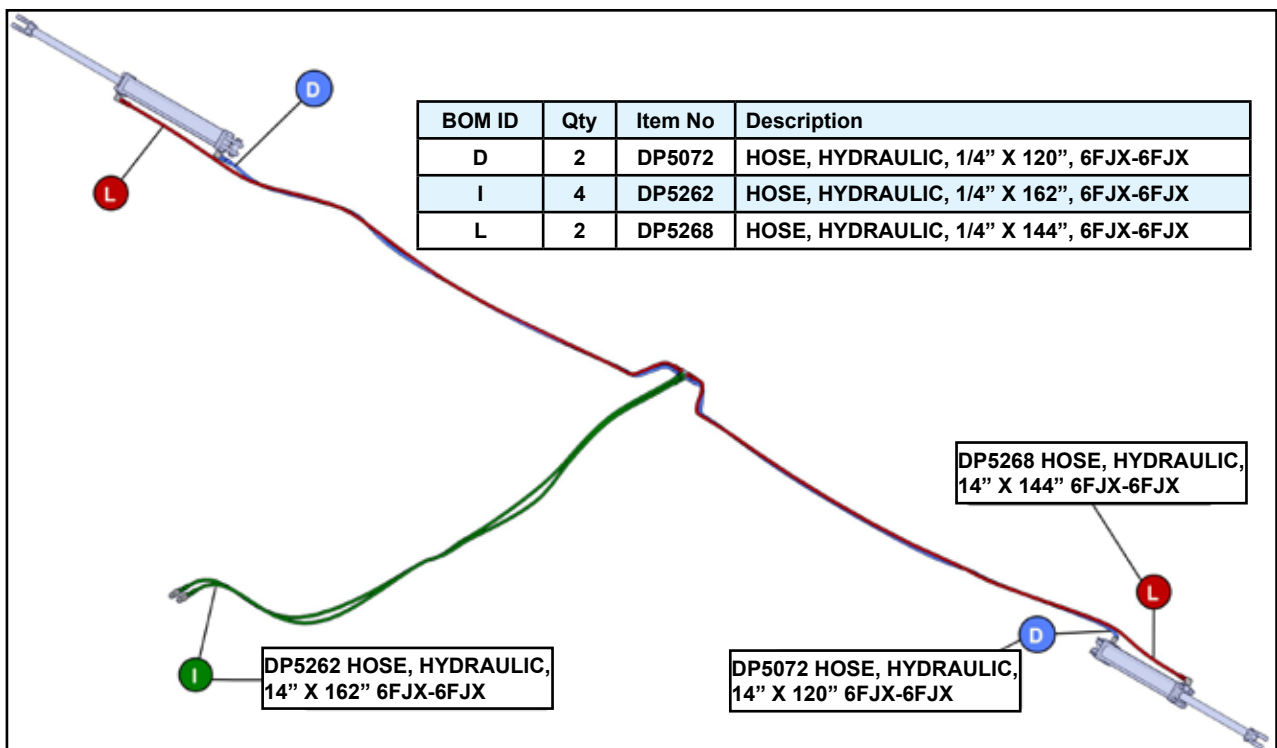
BOM ID	Qty	Item No	Description
1	2	AM3532	WING, SECONDARY, GULL WING TOOLBAR, AT LIQUID
2	2	AM4515	LINKAGE, SECONDARY WING CYLINDER #1
2A	2	BP3072	GREASE ZERK, 1/4"-28
3	2	AM4516	LINKAGE, SECONDARY WING CYLINDER, #2
3A	4	BP3072	GREASE ZERK, 1/4"-28
4	6	AP2407	SNAP RING, 1" EXTERNAL, HEAVY DUTY
5	2	BM3486	PIN, 1-1/4" X 10-7/16" OAL, WITH 13/32" HOLE, PLATED
6	2	BM3542	PIN, 1" X 4-5/8" WITH ANTI-ROTATION HEAD
7	2	BM3543	PIN, 1" X 4-5/16", DOUBLE GROOVED, PLATED
8	2	BM3570	PIN, 1-3/4" X 14" OAL, WITH 21/32" HOLE, PLATED
9	2	BP3096	HEX CAP SCREW, 3/8"-16 X 2-1/2", GRADE 5, PLATED
10	2	BP3135	HEX CAP SCREW, 5/8"-11 X 3-1/2", GRADE 5, PLATED
11	4	BP3205	MACHINERY BUSHING, 2-1/2" OD X 1-3/4" ID, 10 GAUGE
12	6	BP3215	MACHINERY BUSHING, 1-1/2" OD X 1" ID, 14 GAUGE, PLATED
13	2	BP3375	NUT, HEX LOCK, 5/8"-11, NYLOCK
14	2	CP2660	NUT, HEX LOCK, 3/8"-16, NYLOCK

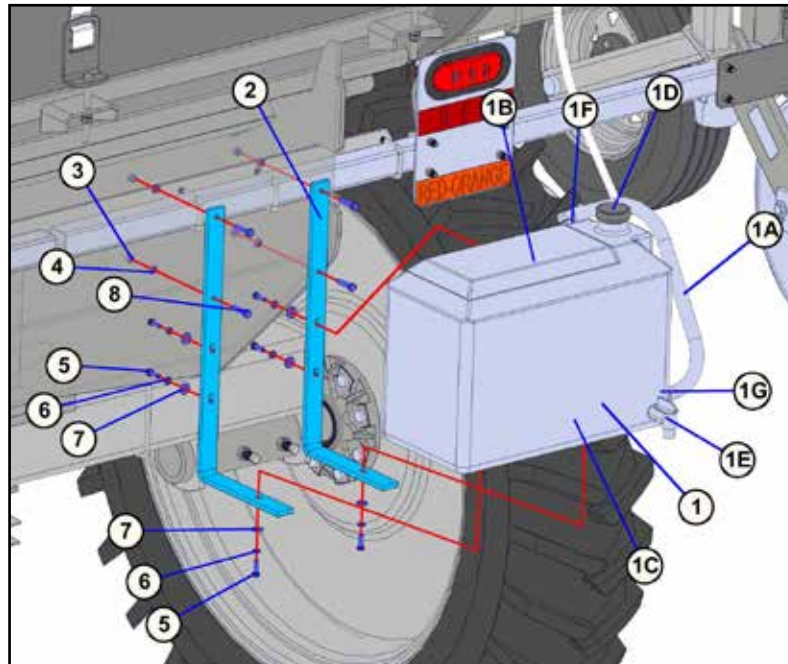
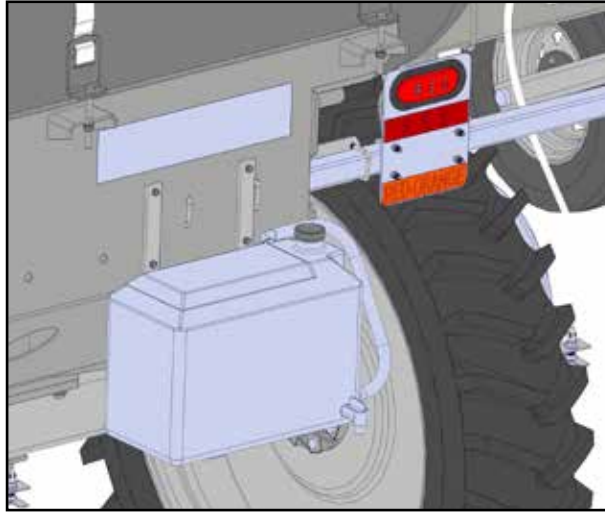
AT3000



► PKG00178 Package, Hydraulics Kit, All Terrain Liquid Secondary Wing Kit

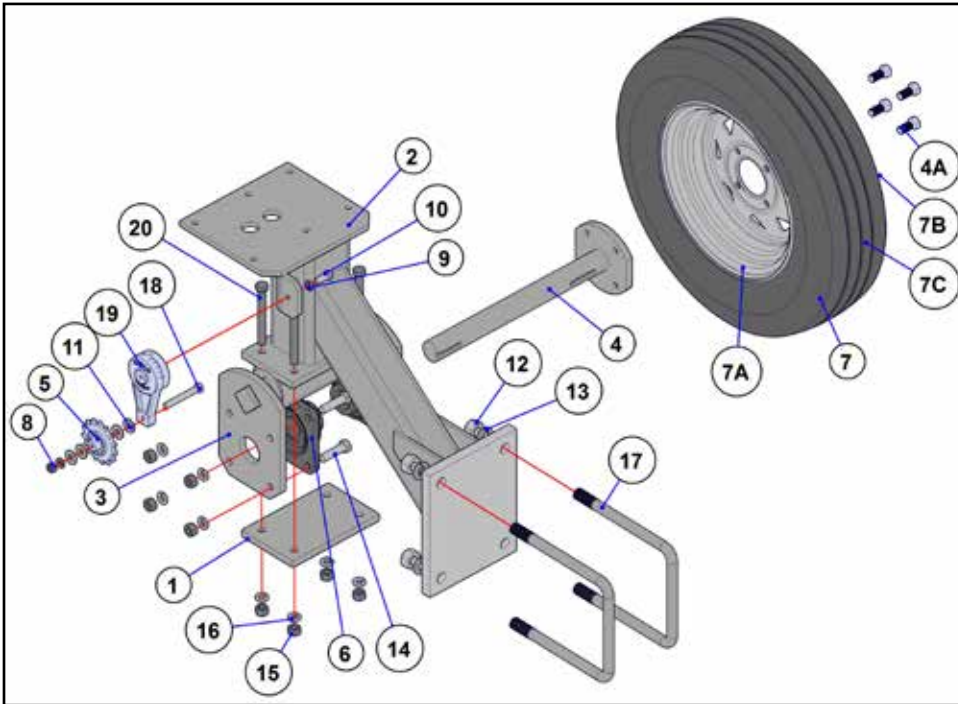
BOM ID	Qty	Item No	Description
1	2	DP4004	TEE, 10MJ-10MJ-10MJ
2	4	DP4301	ADAPTER, 6MJ-8MSAE, 90 DEGREE
3	2	DP4383	COUPLER, PIONEER, 8MQBA-8FSAE
4	2	DP4394	ADAPTER, 8MSAE-6MJIC, 6400-6-8
5	2	DP4492	CYLINDER, HYDRAULIC, 3 X 20, SIDE PORTED, B300200ABAAA03B





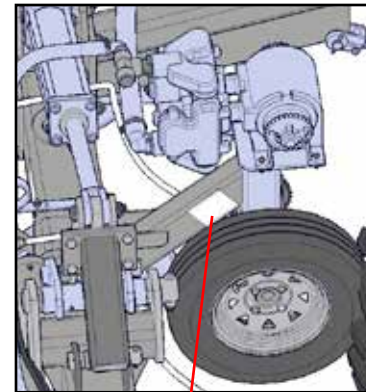
BOM ID	Qty	Item No	Description
1	1	AP2137	SAFETY TANK, 9 GALLON
1A	1	AP2137 HOSE	3/4" CLEAR HOSE - CP2069 - 24" LENGTH
1B	1	AP2137 LID	TOOLBOX LID
1C	1	AP2137 TANK	TANK
1D	1	AP2272	2" FILL CAP
1E	1	AP2329	SPIGOT
1F	1	CP2471	ELBOW, 90 DEGREE, 3/4"MP X 3/4" HOSE BARB POLY
1G	1	CP2577	HOSE BARB, 3/4"MP X 3/4" HOSE BARD, POLY
2	2	AM4421	BRACKET, TANK MOUNT, 9 GALLON
3	4	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
4	4	BP3002	WASHER, LOCK, 3/8", PLATED
5	6	BP3108	HEX CAP SCREW, 5/16"-18 X 1", GRADE 5, PLATED
6	6	BP3158	WASHER, LOCK, 5/16, PLATED
7	6	BP3159	WASHER, FLAT, 5/16, PLATED
8	4	BP3005	HEX CAP SCREW, 3/8"-16 X 1-1/2", GRADE 5, PLATED

AT3000

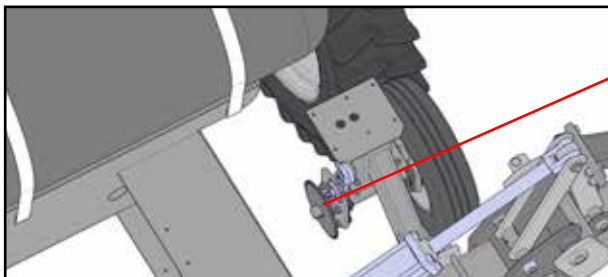


► PKG00137 Package, AT3000, Pump Drive

BOM ID	Qty	Item No	Description
1	1	EM7053	BACKING PLATE, AT3000 PUMP DRIVE
2	1	AM3514	PUMP MOUNTING, AT3000
3	1	AM3515	AXLE MOUNT, AT3000 PUMP DRIVE
4	1	AM3516	PUMP DRIVE WHEEL MOUNT
4A	4	AP2049	WHEEL BOLT, 1/2"-20 X 1"
5	1	AP2382	SPROCKET, IDLER, 15T #50 CHAIN, WITH CLEVIS ADAPTER
6	2	AP2697	BEARING, 1-1/2", SQUARE 4 BOLT FLANGE & LOCK COLLAR
7	1	AP4240	WHEEL, 155/80R12, 12 X 4 X 4, 4" BOLT CIRCLE
7A	1	AP2374	RIM, 12 X 4 X 4, WHITE, 12440
7B	1	AP2790	VALVE STEM, METAL
7C	1	AP4241	TIRE, P155/80R12
8	1	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
9	2	BP3002	WASHER, LOCK, 3/8", PLATED
10	1	BP3006	HEX CAP SCREW, 3/8"-16 X 1", GRADE 5, PLATED
11	4	BP3015	WASHER, FLAT, 3/8"
12	4	BP3034	NUT, HEX, 3/4"-10, GRADE 2, PLATED
13	4	BP3035	WASHER, LOCK, 3/4", PLATED
14	8	BP3041	HEX CAP SCREW, 1/2"-13 X 2", GRADE 5, PLATED
15	12	BP3042	NUT, HEX, 1/2"-13, GRADE 2, PLATED
16	12	BP3043	WASHER, LOCK, 1/2", PLATED
17	2	BP3058	U-BOLT, 3/4"-10 X 7"W X 9"L
18	1	BP3116	HEX CAP SCREW, 3/8"-16 X 3", GRADE 5, PLATED
19	1	BP3239	TENSIONER, RT1002
20	4	BP3693	HEX CAP SCREW, 1/2"-13 X 4-1/2", GRADE 5, PLATED

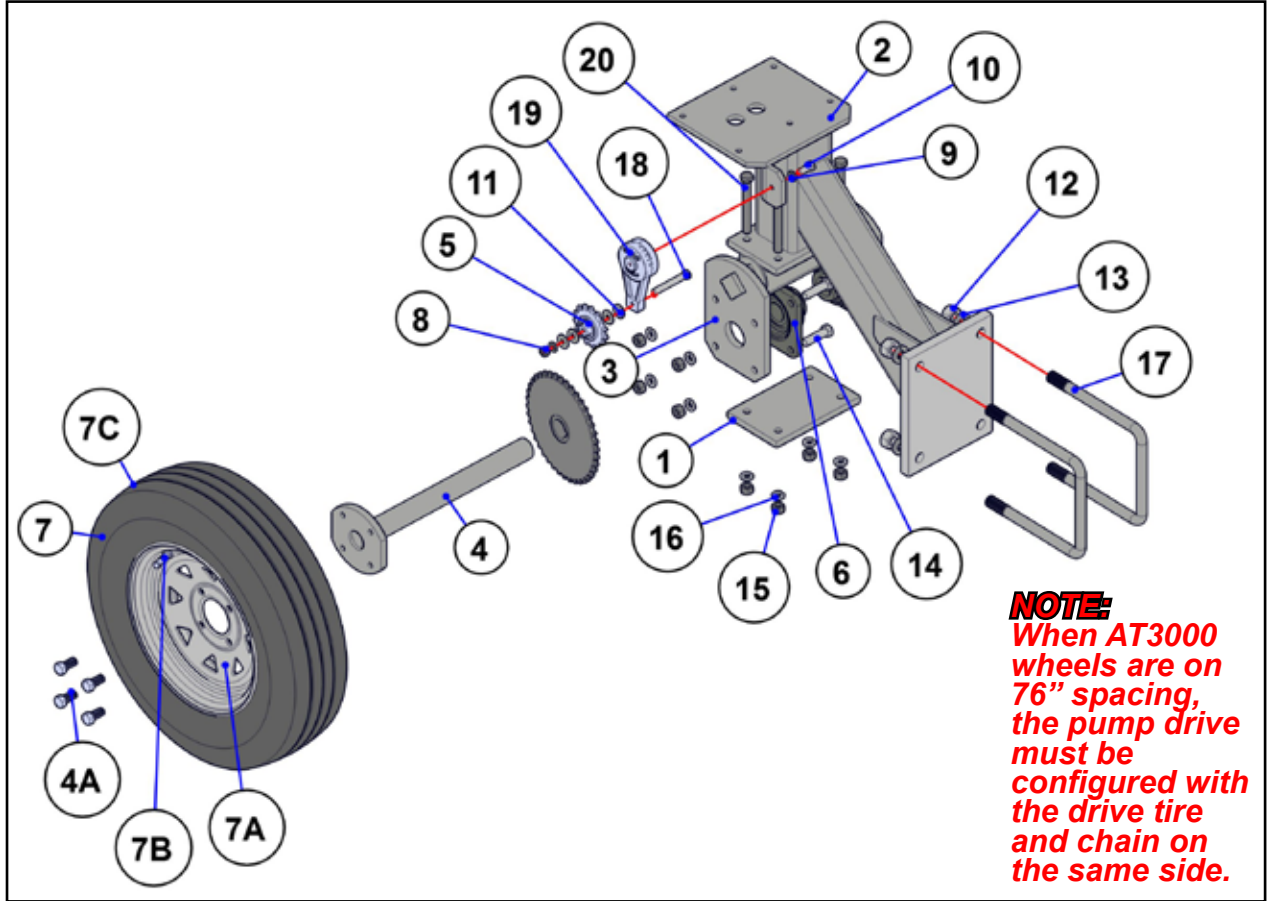


AP2472
**AP2472, Decal,
 CAUTION, Avoid
 Pump Damage**



NOTE:
*Sprocket location
 for standard and
 Gull Wing centers
 section*

AT3000

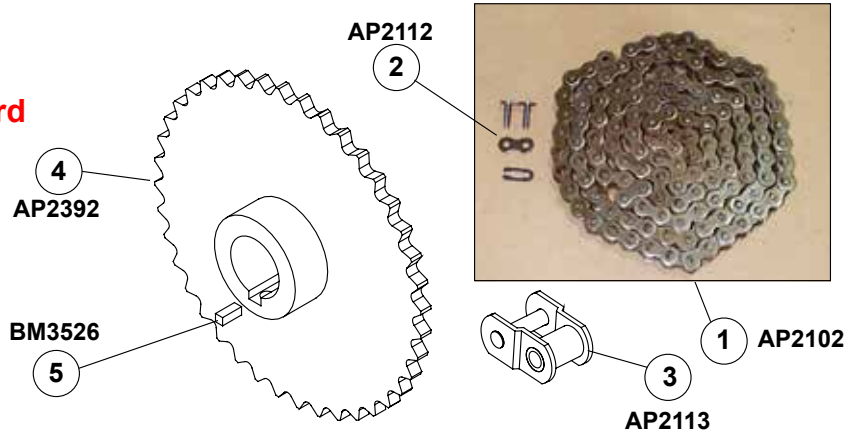


► **PKG00137 Package, AT3000, Pump Drive**

BOM ID	Qty	Item No	Description
1	1	EM7053	BACKING PLATE, AT3000 PUMP DRIVE
2	1	AM3514	PUMP MOUNTING, AT3000
3	1	AM3515	AXLE MOUNT, AT3000 PUMP DRIVE
4	1	AM3516	PUMP DRIVE WHEEL MOUNT
4A	4	AP2049	WHEEL BOLT, 1/2"-20 X 1"
5	1	AP2382	SPROCKET, IDLER, 15T #50 CHAIN, WITH CLEVIS ADAPTER
6	2	AP2697	BEARING, 1-1/2", SQUARE 4 BOLT FLANGE & LOCK COLLAR
7	1	AP4240	WHEEL, 155/80R12, 12 X 4 X 4, 4" BOLT CIRCLE
7A	1	AP2374	RIM, 12 X 4 X 4, WHITE, 12440
7B	1	AP2790	VALVE STEM, METAL
7C	1	AP4241	TIRE, P155/80R12
8	1	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
9	2	BP3002	WASHER, LOCK, 3/8", PLATED
10	1	BP3006	HEX CAP SCREW, 3/8"-16 X 1", GRADE 5, PLATED
11	4	BP3015	WASHER, FLAT, 3/8"
12	4	BP3034	NUT, HEX, 3/4"-10, GRADE 2, PLATED
13	4	BP3035	WASHER, LOCK, 3/4", PLATED
14	8	BP3041	HEX CAP SCREW, 1/2"-13 X 2", GRADE 5, PLATED
15	12	BP3042	NUT, HEX, 1/2"-13, GRADE 2, PLATED
16	12	BP3043	WASHER, LOCK, 1/2", PLATED
17	2	BP3058	U-BOLT, 3/4"-10 X 7"W X 9"L
18	1	BP3116	HEX CAP SCREW, 3/8"-16 X 3", GRADE 5, PLATED
19	1	BP3239	TENSIONER, RT1002
20	4	BP3693	HEX CAP SCREW, 1/2"-13 X 4-1/2", GRADE 5, PLATED

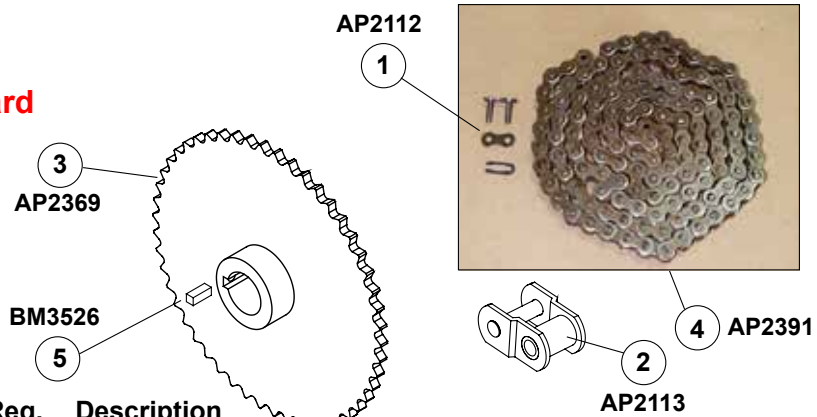
AT3000

- ▶ **Bundle Number**
33000133
40 Tooth Standard Rate



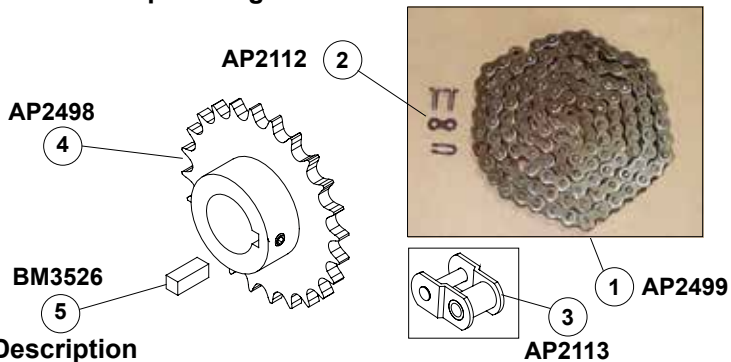
Ref. Part No.	Req.	Description
1. AP2102	1	Chain, roller, stainless steel, #50, 57"
2. AP2112	1	#50 stainless connector link
3. AP2113	1	#50 stainless 1/2" link
4. AP2392	1	Sprocket, 5040 x with/hub, 1-1/2" RND bore, 3/8" key
5. BM3526	1	Key, 3/8" x 3/8" x 1"
6. PKG00137	1	AT3000 Pump Package

- ▶ **Bundle Number**
33000134
50 Tooth Standard Standard Rate



Ref. Part No.	Req.	Description
1. AP2112	1	#50 stainless connector link
2. AP2113	1	#50 stainless 1/2" link
3. AP2369	1	Sprocket, 5050 x with/hub 1-1/2" RND bore, 3/8" key
4. AP2391	1	Chain, roller, stainless steel, #50, x 60"
5. BM3526	1	Key, 3/8" x 3/8" x 1"
6. PKG00137	1	AT3000 Pump Package

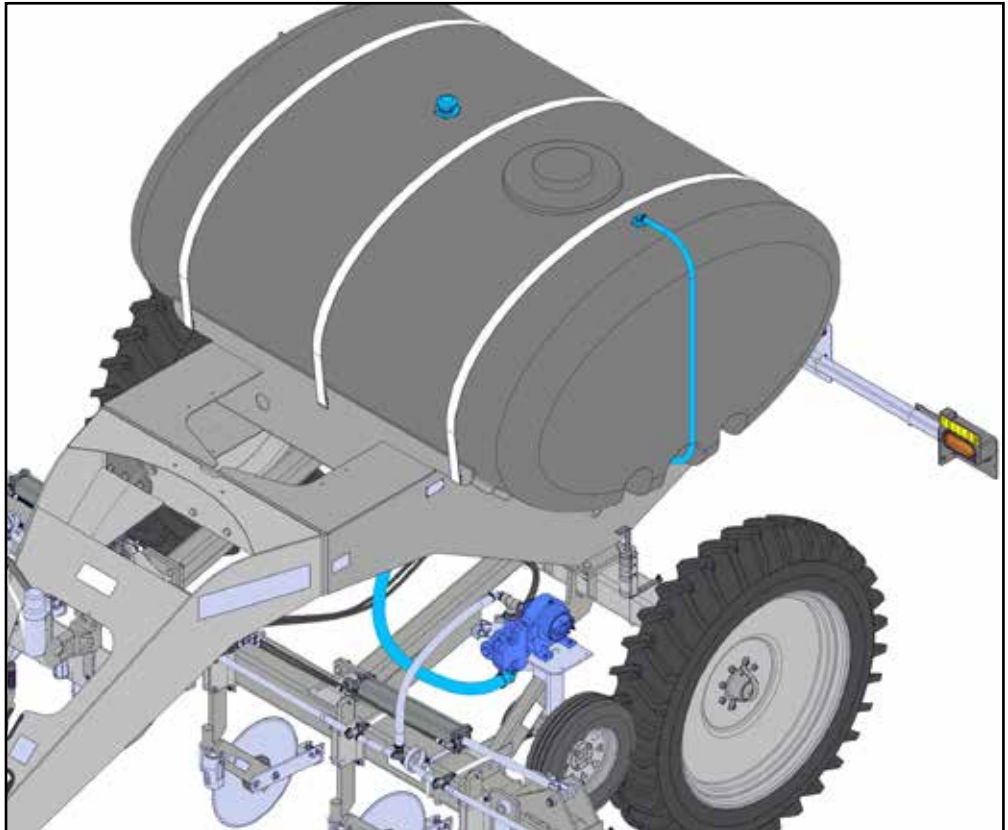
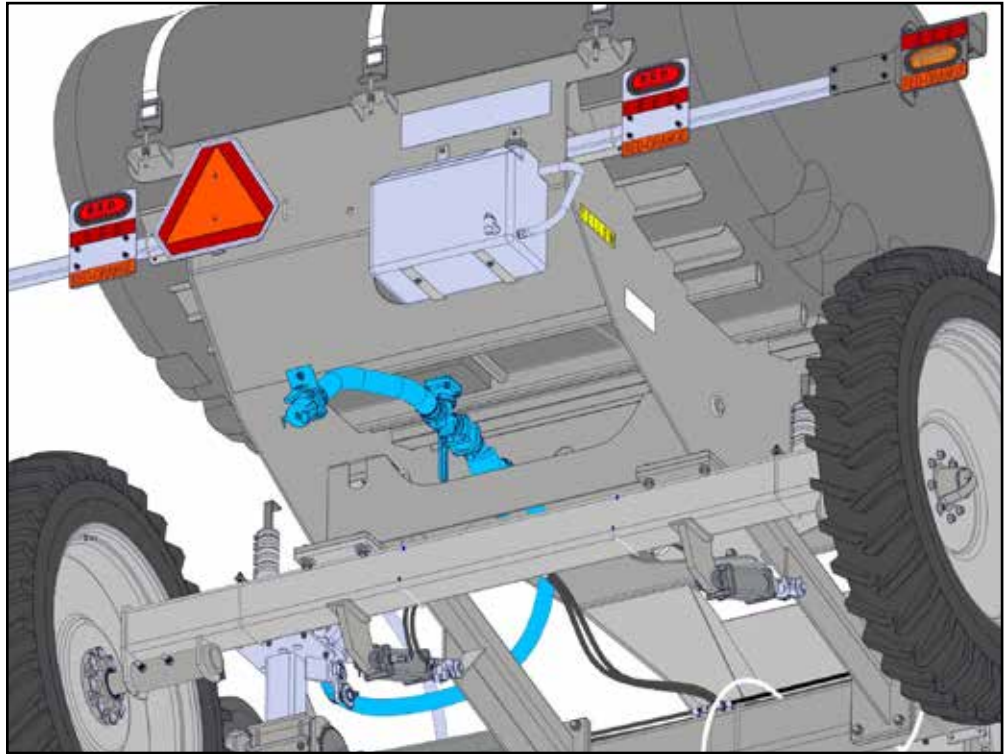
- ▶ **Bundle Number**
33000130
24 Tooth Low Rate Rate



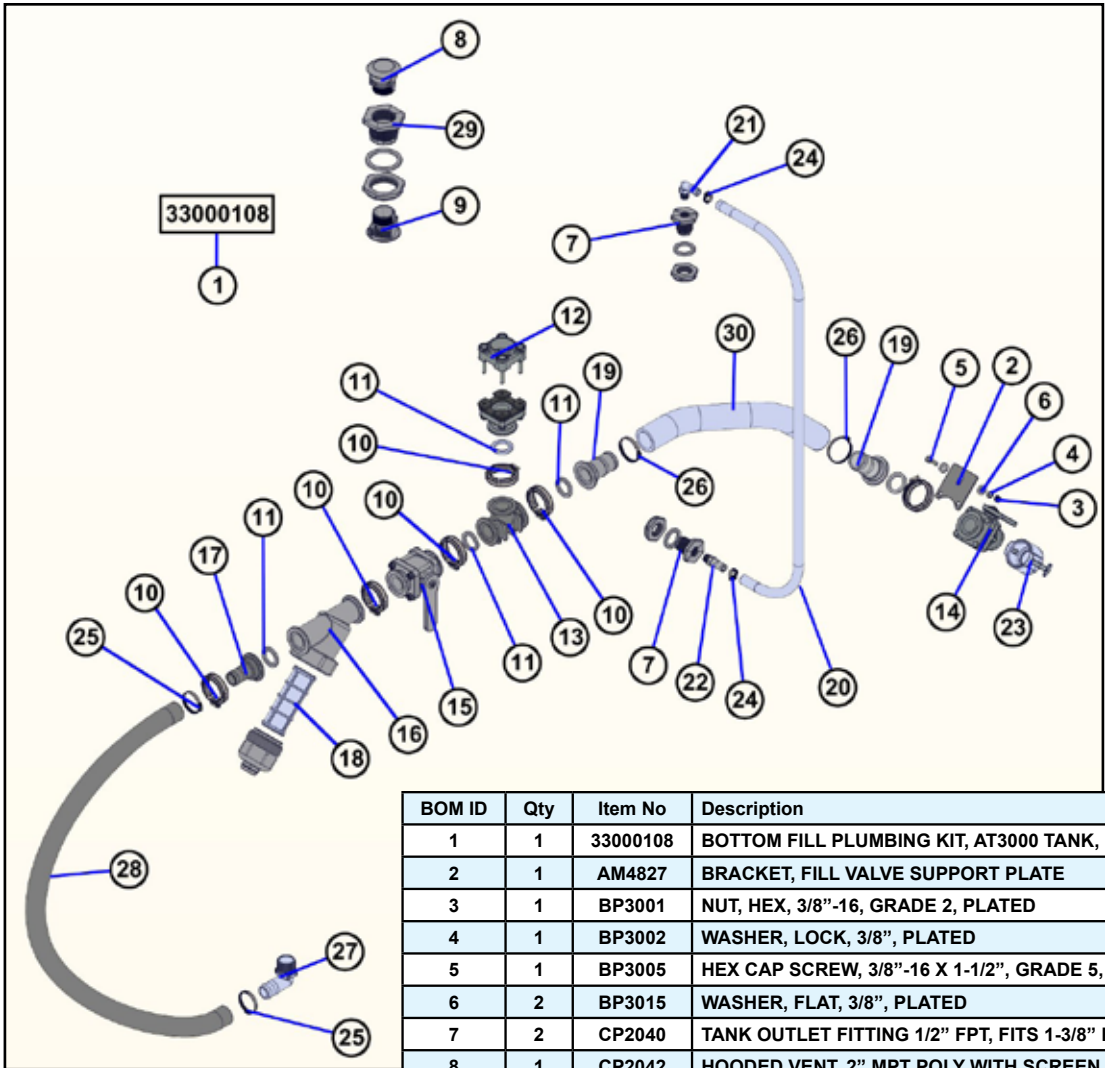
Ref. Part No.	Req.	Description
1. AP2499	1	Chain, roller, stainless steel, #50, 84 Pitch 52-1/2"
2. AP2112	1	#50 stainless connector link
3. AP2113	1	#50 stainless 1/2" link
4. AP2498	1	Sprocket, 5024 x with/hub, 1-1/2" RND bore, 3/8" key
5. BM3526	1	Key, 3/8" x 3/8" x 1"
6. PKG00137	1	AT3000 Pump Package

AT3000

▶ 33000108 Bottom Fill Plumbing Kit, AT3000 Tank

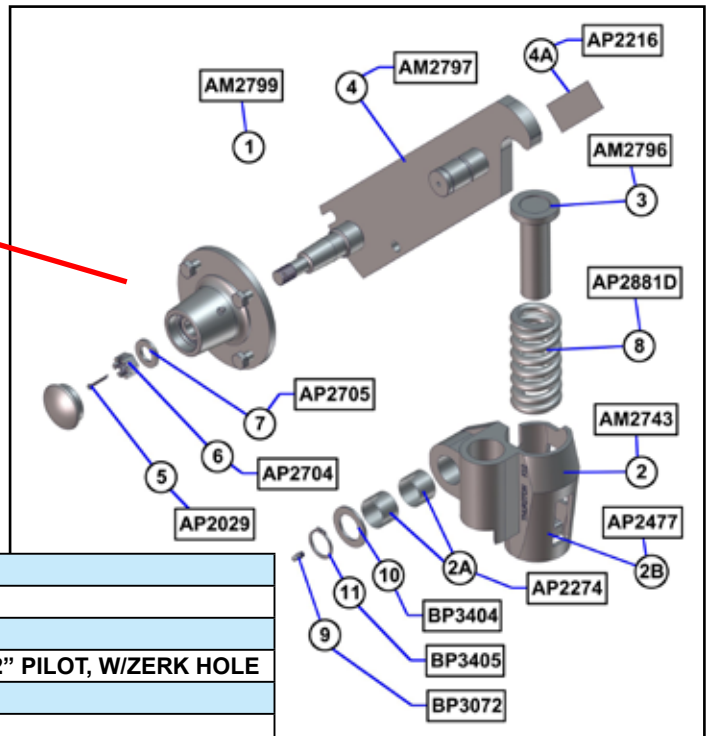
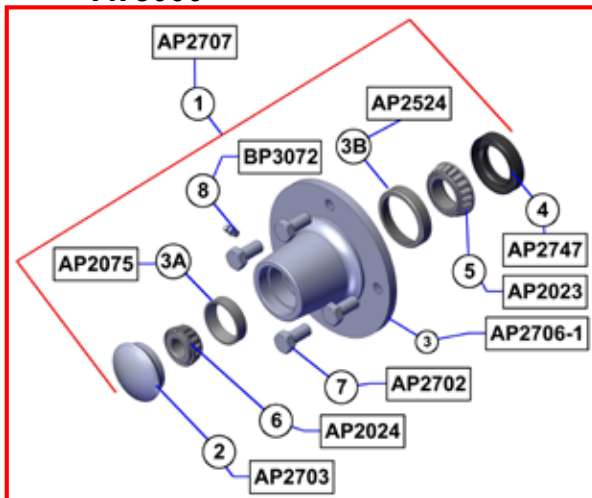


AT3000



BOM ID	Qty	Item No	Description
1	1	33000108	BOTTOM FILL PLUMBING KIT, AT3000 TANK, 1 PUMP, 2" FILL
2	1	AM4827	BRACKET, FILL VALVE SUPPORT PLATE
3	1	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
4	1	BP3002	WASHER, LOCK, 3/8", PLATED
5	1	BP3005	HEX CAP SCREW, 3/8"-16 X 1-1/2", GRADE 5, PLATED
6	2	BP3015	WASHER, FLAT, 3/8", PLATED
7	2	CP2040	TANK OUTLET FITTING 1/2" FPT, FITS 1-3/8" HOLE
8	1	CP2042	HOODED VENT, 2" MPT POLY WITH SCREEN
9	1	CP2043	HOODED VENT, 2" MPT POLY WITHOUT SCREEN
10	6	CP2044	CLAMP, 2" FLANGE
11	6	CP2045	GASKET, EPDM, 2" FLANGE
12	1	CP2046	TANK OUTLET FITTING, 2" FLANGED
13	1	CP2047	TEE, 2" FLANGE
14	1	CP2048	VALVE, BALL, 2"- 1-1/2" PORT- 2" MALE ADAPTER
15	1	CP2049	VALVE, BALL, 2" - 1-1/2" PORT
16	1	CP2050	STRAINER, 2" FLANGE
17	1	CP2051	HOSE BARB, 2" FLANGE X 1-1/2" HOSE
18	1	CP2055	STRAINER SCREEN, 30 MESH, LS230
19	2	CP2056	HOSE BARB, 2" FLANGE X 2" HOSE
20	1	CP2069	HOSE, SITE GAUGE, 3/4"
21	1	CP2070	ELBOW, 90 DEGREE, 1/2" MP X 3/4" HOSE BARB, POLY
22	1	CP2071	HOSE BARB, 1/2" MP X 3/4" HOSE, POLY
23	1	CP2235	CAP, 2"
24	2	CP2314	HOSE CLAMP, 1/2" - 1" TUBING, STAINLESS STEEL
25	2	CP2316	HOSE CLAMP, 1-1/4" - 2" TUBING, STAINLESS STEEL
26	2	CP2408	HOSE CLAMP, 2" - 2-1/2" TUBING, STAINLESS STEEL
27	1	CP2490	ELBOW, 90 DEGREE, 1-1/2" MP X 1-1/2" HOSE BARB, POLY
28	1	CP2532	HOSE, EPDM RUBBER, 1-1/2", 150#
29	1	CP2550	TANK OUTLET FITTING, 2", FITS 3" HOLE
30	1	CP2590	HOSE, EPDM RUBBER, 2", REINFORCED, 100#

AT3000

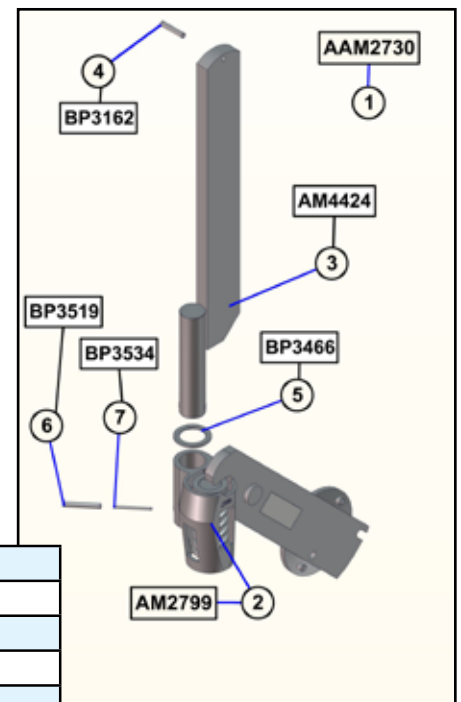


AP2707, HUB ASSEMBLY, 4 BOLT

BOM ID	Qty	Item No	Description
1	1	AP2707	HUB ASSEMBLY, 4 BOLT
2	1	AP2703	HUB CAP, 1610
3	1	AP2706-1	HUB W/ CUPS, 4 BOLT, 5" BC, 3.62" PILOT, W/ZERK HOLE
3A	1	AP2075	BEARING CUP, LM 11910
3B	1	AP2524	BEARING CUP, LM 67010
4	1	AP2747	GREASE SEAL, 15235TB
5	1	AP2023	BEARING CONE, LM 67048
6	1	AP2024	BEARING CONE, LM 11949
7	4	AP2702	HEX CAP SCREW, 1/2"-20 X 1", GRADE 5, PLATED
8	1	BP3072	GREASE ZERK, 1/4"-28

AM2799, ASSEMBLY, COULTER ARM WITH HUB & KNEE CASTING, HD

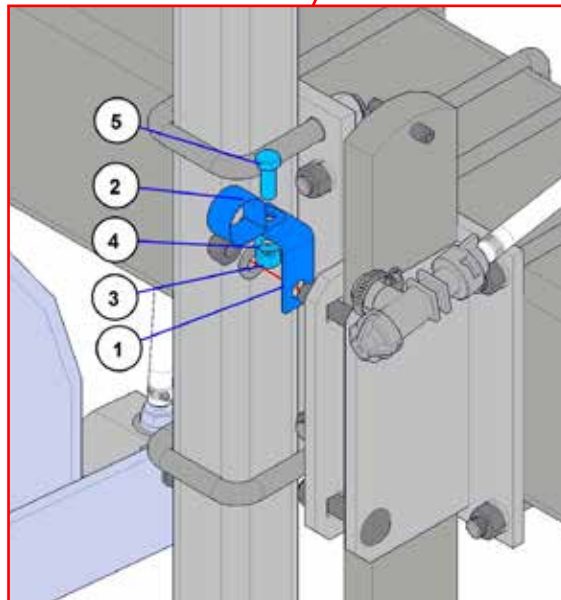
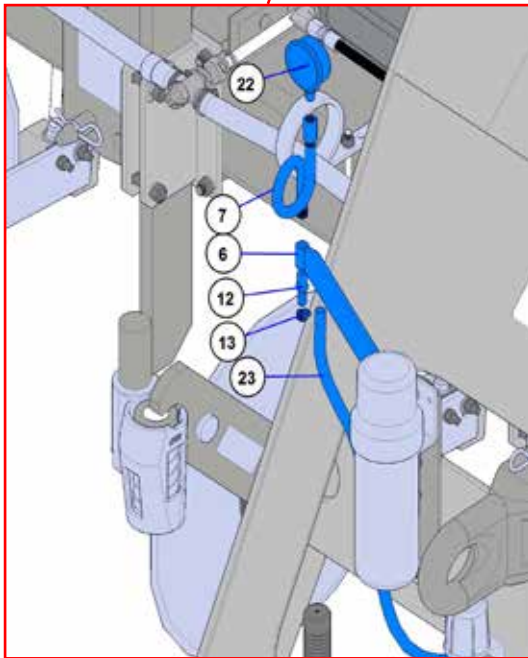
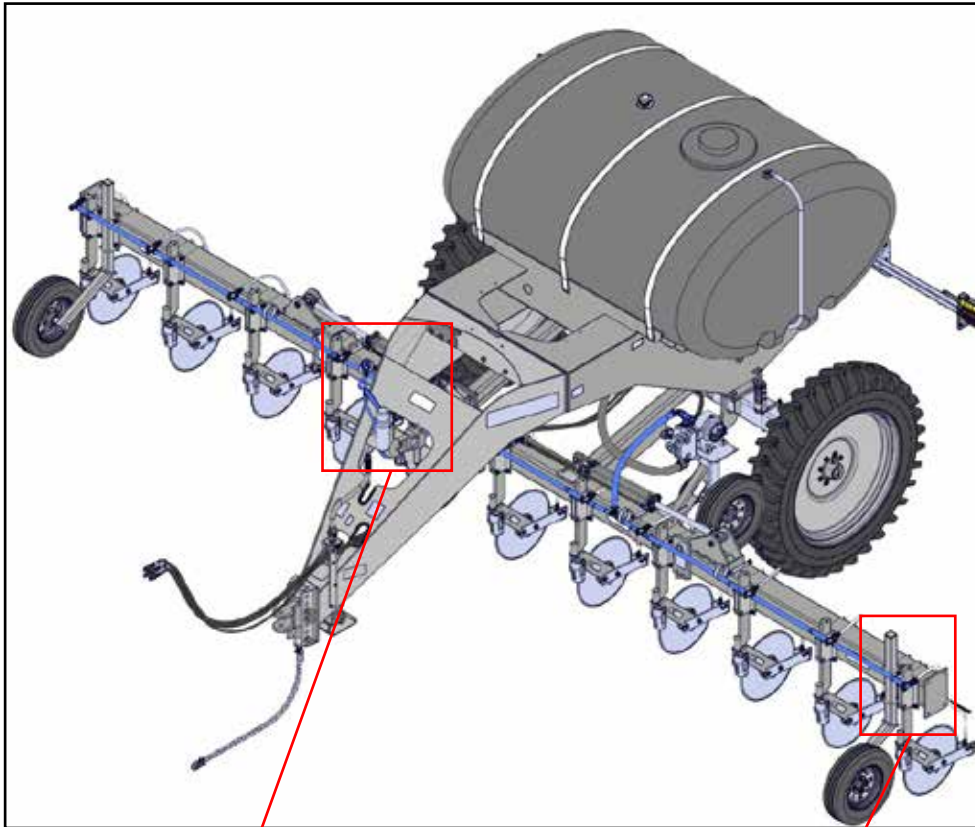
BOM ID	Qty	Item No	Description
1	1	AM2799	ASSEMBLY, COULTER ARM WITH HUB & KNEE CASTING, HD
2	1	AM2743	CASTING, COULTER KNEE, HD, MACHINED WITH BUSHINGS
2A	2	AP2274	BUSHING, 1-17/32" OD X 1-3/8" ID" X 1" OAL
2B	1	AP2477-1	CASTING, COULTER KNEE, MACHINED
3	1	AM2796	SPRING CAP & GUIDE, HD COULTER
4	1	AM2797	COULTER ARM, HD
4A	1	AP2216	DECAL, BLU-JET, SMALL, 1-1/2" X 4"
5	1	AP2029	PIN, COTTER, 5/32" X 1-1/2"
6	1	AP2704	NUT, SPINDLE, 3/4"-16
7	1	AP2705	WASHER, SPINDLE, 1-1/2" X 13/16" X .134"
8	1	AP2881D	SPRING, 2.472" OD X 5.875" OAL, .468 WIRE DIAMETER
9	1	BP3072	GREASE ZERK, 1/4"-28
10	1	BP3404	MACHINERY BUSHING, 2-1/8" OD X 1-3/8" ID X 10 GAUGE, PLATED
11	1	BP3405	SNAP RING, 1-3/8" EXTERNAL, 5160-137



AAM2730 COULTER, SUPER 1200, 23, 1 ROW

BOM ID	Qty	Item No	Description
1	1	AAM2730	COULTER, SUPER 1200, 23" SHANK, 1 ROW
2	1	AM2799	COULTER ARM WITH HUB & KNEE CASTING, HEAVY DUTY
3	1	AM4424	COULTER SHANK, 23"
4	1	BP3162	PIN, ROLL, 3/8" X 2", PLATED
5	1	BP3466	MACHINERY BUSHING, 2-1/2" X 1-3/4" X 10 GAUGE, STAINLESS STEEL
6	1	BP3519	PIN, ROLL, 3/8" X 2-1/2"
7	1	BP3534	PIN, ROLL, 7/32" X 2-1/2"

AT3000





Manifold Liquid Injection Assembly (Standard Toolbar)

AT3000

► 44000159 Manifold Assembly, AT3000 3/4" EPDM Hose, 11 Row

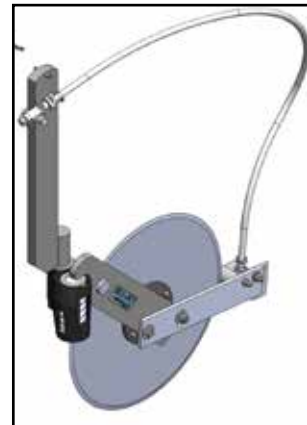
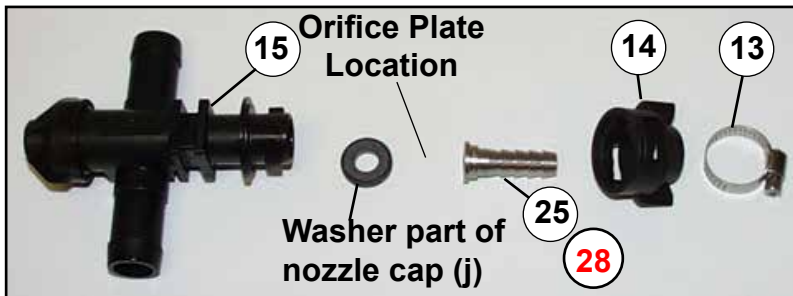
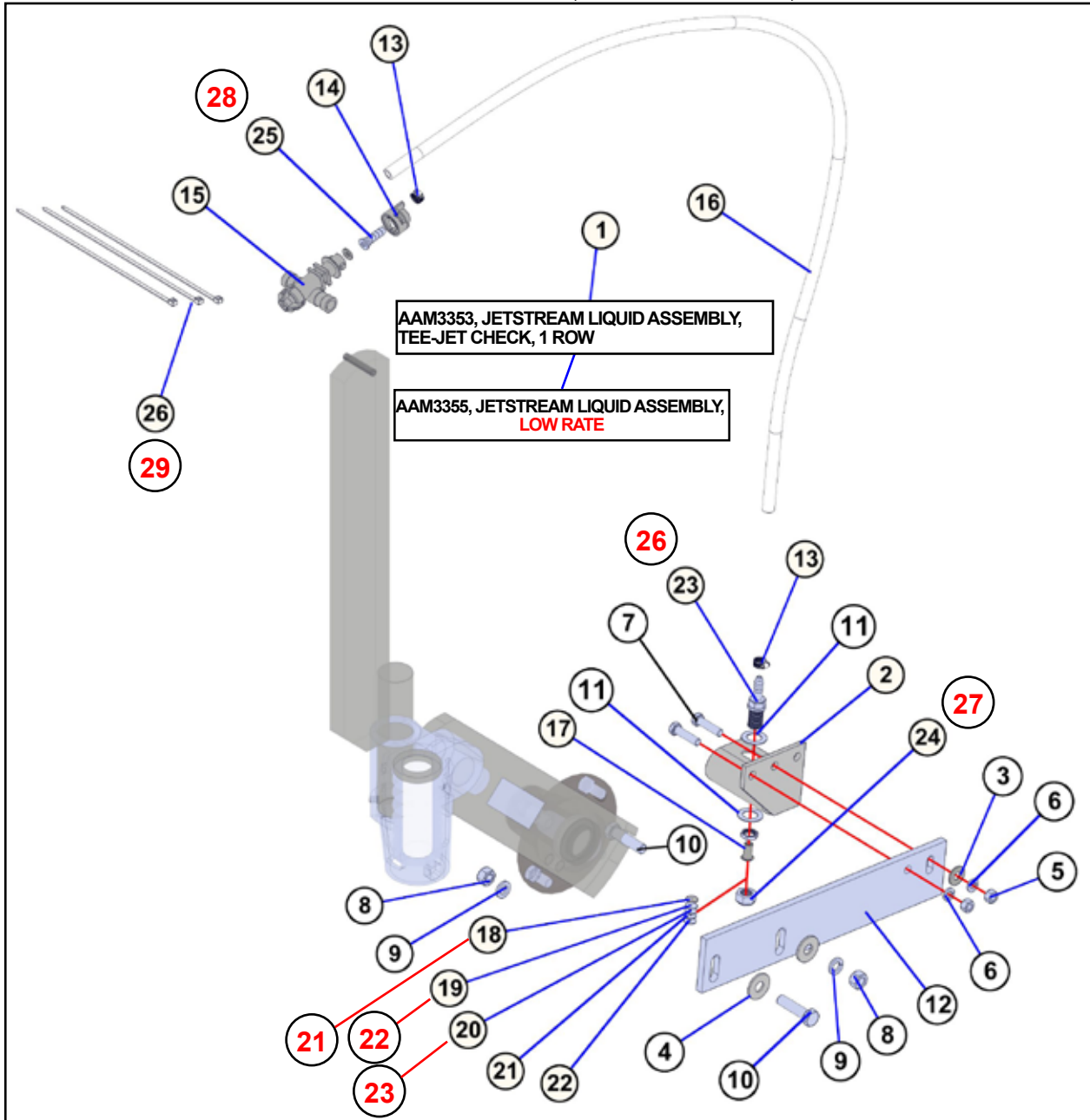
BOM ID	Qty	Item No	Description
1	11	AM3628	BRACKET, MOUNTING, LIQUID TRUNK LINE
2	11	AP3809	1-1/4" HOSE SUPPORT CLAMP, 3/8" BOLT
3	11	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
4	11	BP3002	WASHER, LOCK, 3/8", PLATED
5	11	BP3006	HEX CAP SCREW, 3/8"-16 X 1", GRADE 5, PLATED
6	1	CM2221	NH3 GAUGE HOLDER, TONGUE MOUNT
7	1	CP1999	GAUGE PROTECTOR, PIGTAIL
8	1	CP2190	ELBOW, 90 DEGREE, 1"MP X 1" HOSE BARB, POLY
9	1	CP2249	NIPPLE, 1" POLY
10	1	CP2252	TEE, 1" FP, POLY
11	1	CP2296	PLUG, 1" PIPE, POLY
12	1	CP2308	HOSE BARB
13	2	CP2313	HOSE CLAMP, 1/4"- 5/8" TUBING, STAINLESS STEEL
14	26	CP2314	HOSE CLAMP, 1/2"- 1" TUBING, STAINLESS STEEL
15	1	CP2468	TEE, 3/4"FP X 3/4"HB X 3/4" HB, POLY
16	1	CP2469	HOSE BARB, 3/4"MP X 1"HB, POLY
17	1	CP2470	TEE, 3/8"HB X 3/4"HB X 3/4"HB, POLY
18	12	CP2472	HOSE, EPDM RUBBER, 3/4", 200#
19	2	CP2487	DIAPHRAM CHECK VALVE, SINGLE SHANK, 3/4" HOSE
20	1	CP2489	REDUCER BUSHING 1-1/2"MP X 1"FP, POLY
21	1	CP2519	HOSE, EPDM RUBBER, 1", 200
22	1	CP2524	GAUGE, 0-160 PSI, GLYCERIN FILLED
23	1	CP2534	HOSE, EVA, 3/8" BRAID JET STREAM

ABBREVIATIONS

NH3-	ANNHYDROUS AMMONIA
MP-	MALE PIPE THREAD
FP-	FEMALE PIPE THREAD
HB-	HOSE BARB
SS-	STAINLESS STEEL
POLY-	NON-METALIC
EVA-	ETHYL VINYL ACETATE
EPDM-	ETHYLENE PROPYLENE DIENE MONOMER

AT3000

► AAM3353 JETSTREAM LIQUID ASSEMBLY, TEE-JET CHECK, 1 ROW





JetStream Liquid Assembly (AAM3353) JetStream Liquid Assembly Low Rate (AAM3355)

► AAM3353 JetStream Liquid Assembly, Tee-Jet Check, 1 Row

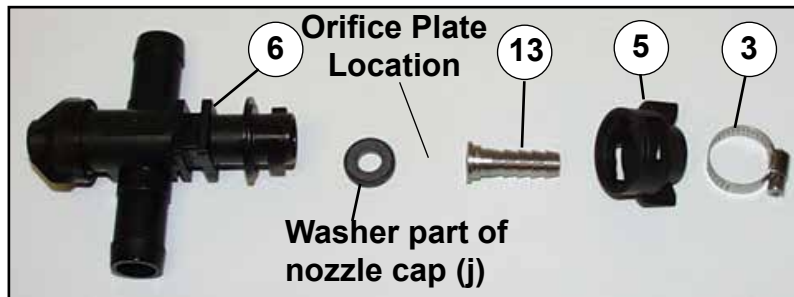
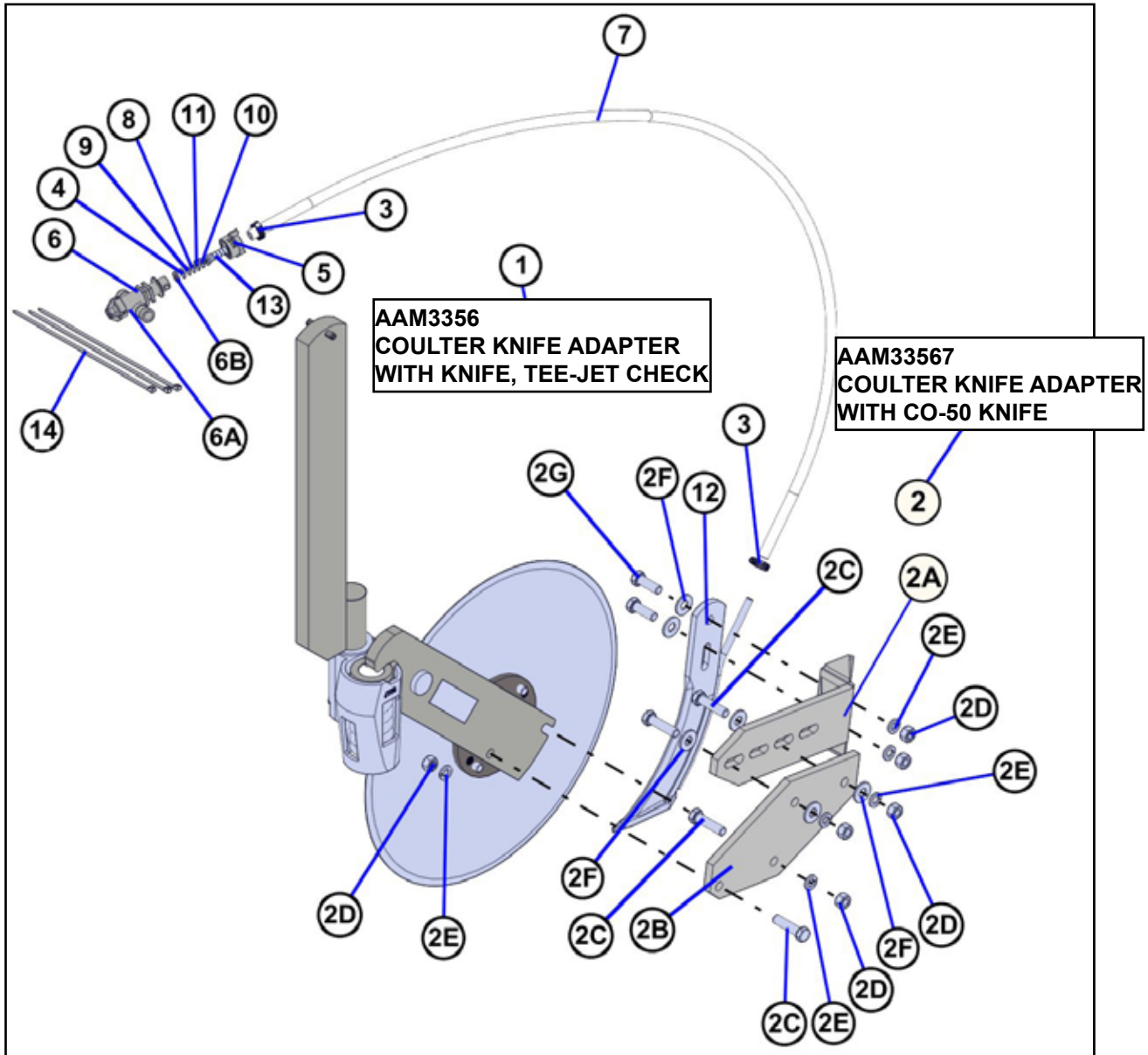
BOM ID	Qty	Item No	Description
1	1	AAM3353	JETSTREAM LIQUID ASSEMBLY TEE-JET CHECK, 1 ROW
2	1	AM3627	NOZZLE MOUNT, JETSTREAM, AT3000/ AT4000/ AT4600
3	1	BP3015	WASHER, FLAT, 3/8", PLATED
4	2	BP3050	WASHER, FLAT, 1/2", PLATED
5	2	BP3450	NUT, HEX, 3/8"-16, F594 GRADE 1
6	2	BP3451	WASHER, LOCK, 3/8", 18-8 STAINLESS STEEL
7	2	BP3454	HEX CAP SCREW, 3/8"-16 X 1-1/2", F593 GRADE 1
8	2	BP3455	NUT, HEX, 1/2"-13, F594 GRADE 1
9	2	BP3456	WASHER, LOCK, 1/2", 18-8 STAINLESS STEEL
10	2	BP3459	HEX CAP SCREW, 1/2"-13 X 2", F593 GRADE 1
11	2	BP3461	WASHER, FLAT, 5/8", 1-1/2" OD, 0.078", 18-8 STAINLESS STEEL
12	1	CM2305	JET STREAM MOUNTING ARM
13	2	CP2313	HOSE CLAMP, WORM GEAR, 1/4" - 5/8" TUBING, STAINLESS STEEL
14	1	CP2467	NOZZLE CAP, 25608-1-NYR
15	1	CP2488	DIAPHRAGM CHECK VALVE, DOUBLE SHANK, 3/4 HOSE
16	1	CP2534	HOSE, EVA, N 3/8" BRAID JET STREAM
17	1	CP2537	STREAM STABILIZER-STAINLESS STEEL JET STREAM
18	1	CP2541	ORIFICE PLATE #4916-63 JET STREAM
19	1	CP2542	ORIFICE PLATE #4916-70 JET STREAM
20	1	CP2543	ORIFICE PLATE #4916-78 JET STREAM
21	1	CP2544	ORIFICE PLATE #4916-86 JET STREAM
22	1	CP2545	ORIFICE PLATE #4916-95 JET STREAM
23	1	CP2578	NOZZLE BODY, STRAIGHT WITH NUT, 3/8" HOSE, STAINLESS STEEL
24	1	CP2589	NOZZLE CAP, STAINLESS STEEL
25	1	CP5046	HOSE BARB INSERT, 3/8", STAINLESS STEEL
26	3	DP4086	CABLE TIE 11-3/8" STANDARD

► AAM3355 JetStream Liquid Assembly, **Low Rate**, 1 Row

BOM ID	Qty	Item No	Description
1	1	AAM3355	JETSTREAM LIQUID ASSEMBLY, LOW RATE
2	1	AM3627	NOZZLE MOUNT, JETSTREAM
3	2	BP3015	WASHER, FLAT, 3/8", PLATED
4	2	BP3050	WASHER, FLAT, 3/8", PLATED
5	2	BP3450	NUT, HEX, 3/8"-16, F594 GRADE 1
6	2	BP3451	WASHER, LOCK, 3/8", 18-8 STAINLESS STEEL
7	2	BP3454	HEX CAP SCREW, 3/8"-16 X 1-1/2", F593 GRADE 1
8	2	BP3455	NUT, HEX, 1/2"-13, F594 GRADE 1
9	2	BP3456	WASHER, LOCK, 1/2", 18-8 STAINLESS STEEL
10	2	BP3459	HEX CAP SCREW, 1/2"-13 X 2", F593 GRADE 1
11	2	BP3461	WASHER, FLAT, 5/8" X 1-1/2" OD X 0.078", 18-8 STAINLESS STEEL
12	1	CM2305	JET STREAM MOUNTING ARM
13	2	CP2313	HOSE CLAMP, 1/4" - 5/8" TUBING, STAINLESS STEEL
14	1	CP2467	NOZZLE CAP, 25608-1-NYR
15	1	CP2488	DIAPHRAGM CHECK VALVE, DOUBLE SHANK, 3/4" HOSE
16	1	CP2534	HOSE, EVA,N 3/8" BRAID JET STREAM
17	1	CP2537	STREAM STABILIZER-STAINLESS STEEL, JET STREAM
18	1	CP2538	ORIFICE PLATE #4916-40 JET STREAM
19	1	CP2539	ORIFICE PLATE #4916-49 JET STREAM
20	1	CP2540	ORIFICE PLATE #4916-57 JET STREAM
21	1	CP2541	ORIFICE PLATE #4916-63 JET STREAM
22	1	CP2542	ORIFICE PLATE #4916-70 JET STREAM
23	1	CP2543	ORIFICE PLATE #4916-78 JET STREAM
24	1	CP2557	ORIFICE PLATE #4916-35 JET STREAM
25	1	CP2559	ORIFICE PLATE #4916-30 JET STREAM
26	1	CP2578	NOZZLE BODY, WITH NUT, 3/8" HOSE, STAINLESS STEEL
27	1	CP2589	NOZZLE CAP, STAINLESS STEEL
28	1	CP5046	HOSE BARB INSERT, 3/8, STAINLESS STEEL
29	3	DP4086	CABLE TIE 11-3/8"

Orifice plates set only change

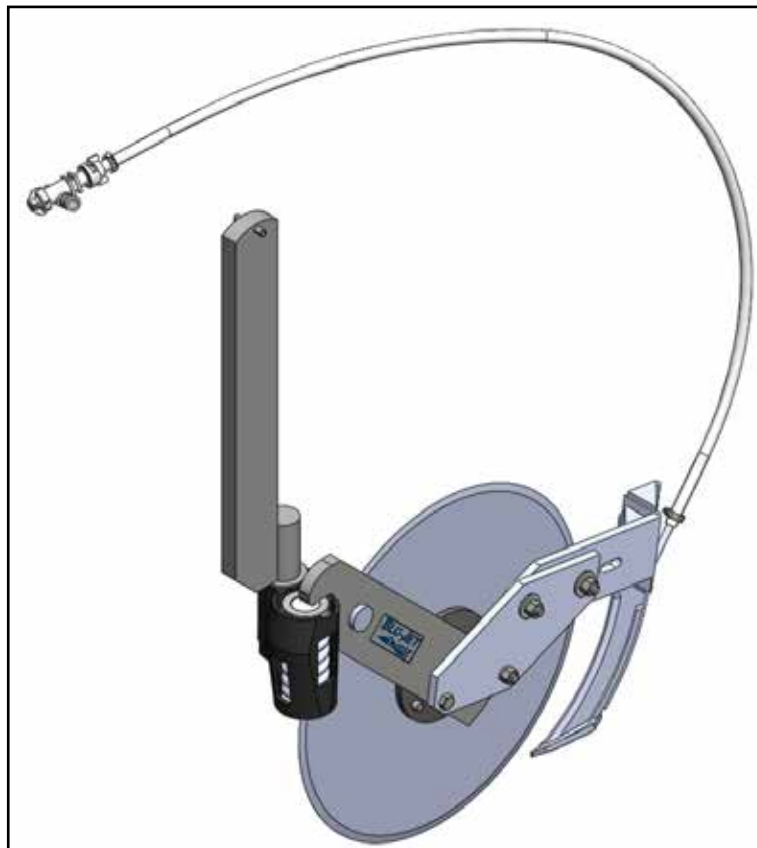
AT3000



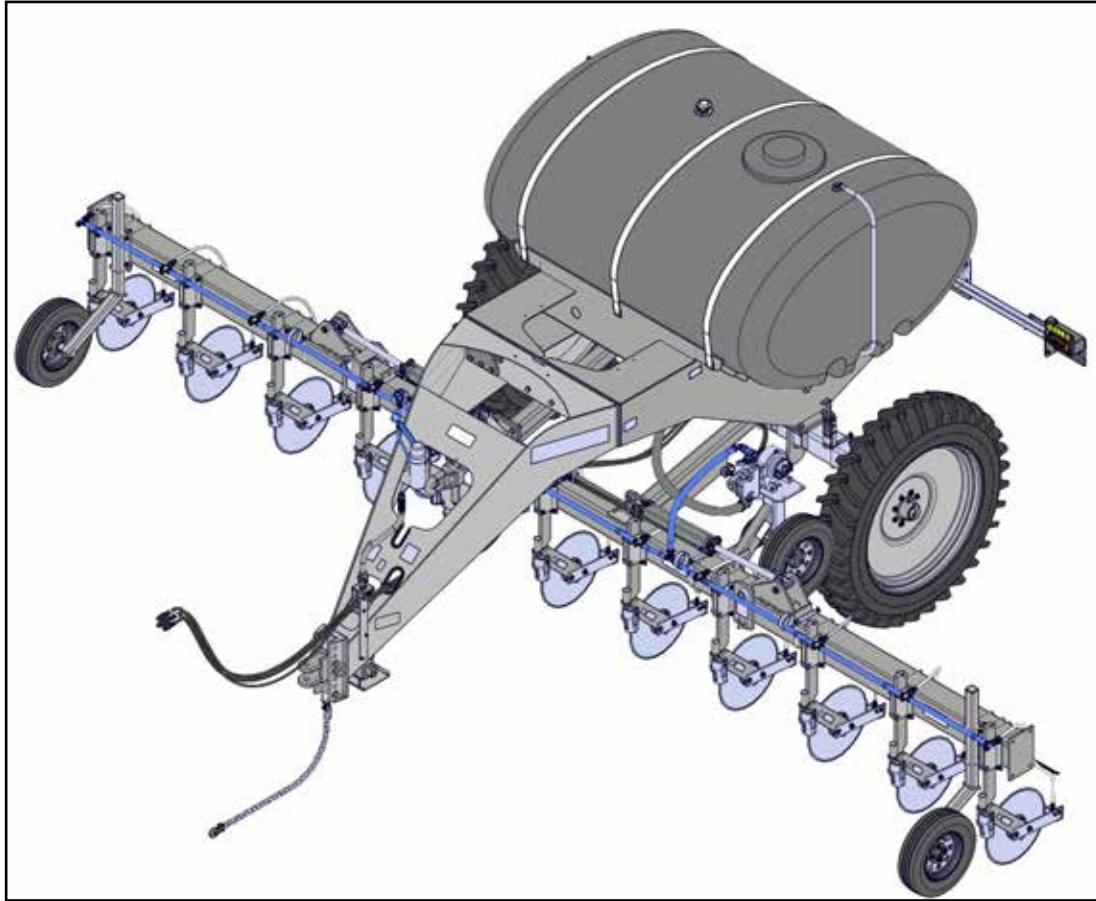
AT3000

► **AAM3356 Coulter Knife Assembly, With Knife, Tee-Jet Check**

BOM ID	Qty	Item No	Description
1	1	AAM3356	COULTER KNIFE ASSEMBLY, WITH KNIFE, CHECK VALVE
2	1	AAM3357	COULTER KNIFE ADAPTER, WITH CO-50 KNIFE
2A	1	AM3313	KNIFE HOLDER/ MOUNTING ARM
2B	1	AM3324	ADAPTER PLATE, COULTER KNIFE
2C	4	BP3041	HEX CAP SCREW, 1/2"-13 X 2", GRADE 5, PLATED
2D	6	BP3042	NUT, HEX, 1/2"-13, GRADE 2, PLATED
2E	6	BP3043	WASHER, LOCK, 1/2", PLATED
2F	6	BP3050	WASHER, FLAT, 1/2", PLATED
2G	2	BP3126	HEX CAP SCREW, 1/2"-13 X 1-1/2", GRADE 5, PLATED
3	2	CP2313	HOSE CLAMP, 1/4" - 5/8" TUBING, STAINLESS STEEL
4	1	CP2325	ORIFICE PLATE #4916-110 JET STREAM
5	1	CP2467	NOZZLE CAP, 25608-1-NYR
6	1	CP2488	DIAPHRAGM CHECK VALVE, DOUBLE SHANK, 3/4" HOSE
6A	1	CP2488-BODY	DIAPHRAGM CHECK VALVE BODY, DOUBLE SHANK, 3/4" HOSE
6B	1	CP2488-WASHER	DIAPHRAGM CHECK VALVE WASHER
7	1	CP2534	HOSE, EVA,N 3/8" BRAID JET STREAM
8	1	CP2544	ORIFICE PLATE #4916-86 JET STREAM
9	1	CP2545	ORIFICE PLATE #4916-95 JET STREAM
10	1	CP2570	ORIFICE PLATE #4916-120 JET STREAM
11	1	CP2571	ORIFICE PLATE #4916-136 JET STREAM
12	1	CP5038	CO-50 3/8" LIQUID KNIFE EXTRA THIN
13	1	CP5046	HOSE BARB INSERT, 3/8", STAINLESS STEEL
14	3	DP4086	CABLE TIE 11-3/8"



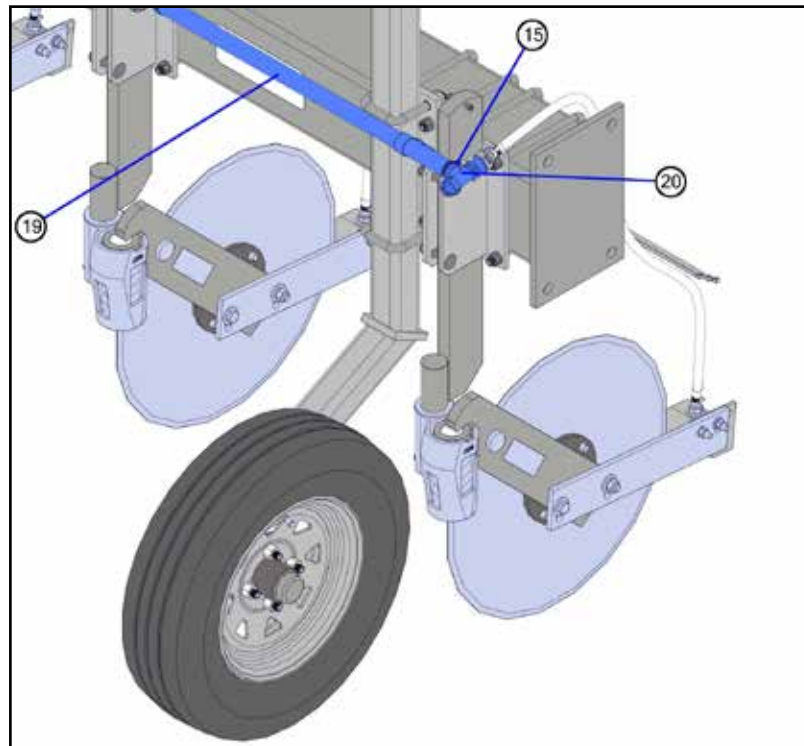
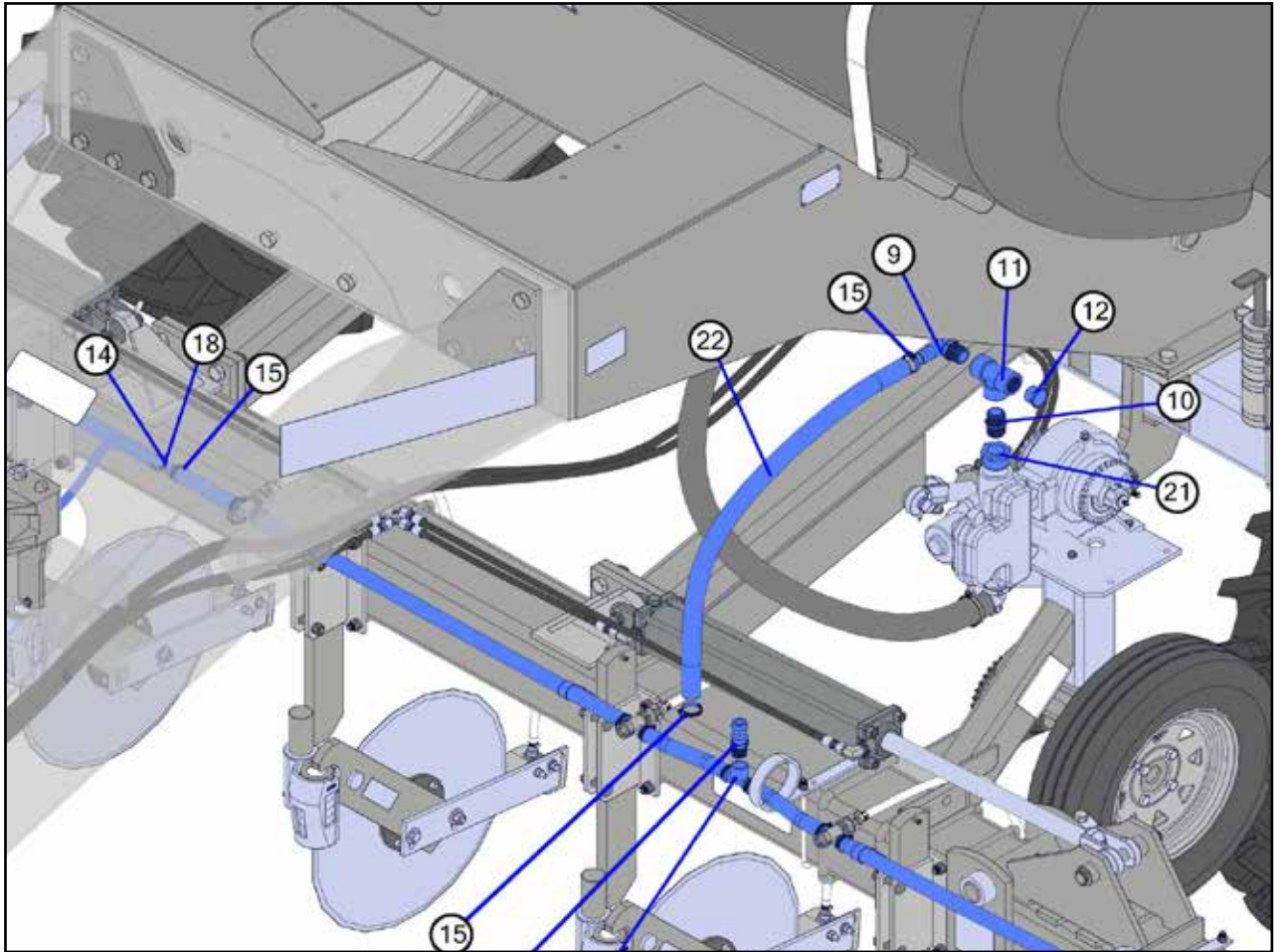
AT3000



► **44000159 Manifold Assembly, AT3000 11 Row**

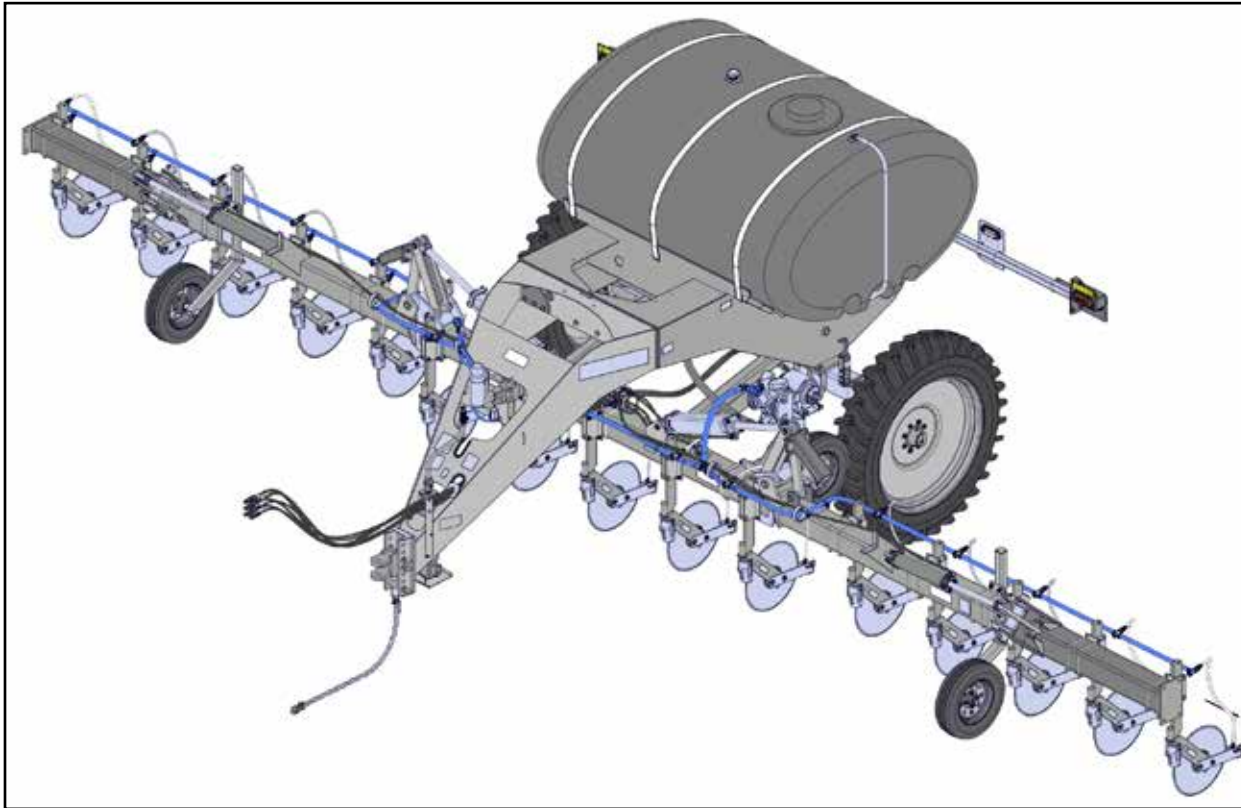
BOM ID	Qty	Item No	Description
1	1	44000159	MANIFOLD ASSEMBLY, 3/4" EPDM HOSE, 11 ROW
2	11	AM3628	BRACKET, MOUNTING, LIQUID TRUNK LINE
3	11	AP3809	1-1/4" HOSE SUPPORT CLAMP, 3/8" BOLT
4	11	BP3450	NUT, HEX, 3/8"-16, F594 GRADE 1
5	11	BP3451	WASHER, LOCK, 3/8", 18-8 STAINLESS STEEL
6	11	BP3453	HEX CAP SCREW, 3/8"-16 X 1", F593 GRADE 1
7	1	CM2221	NH3 GAUGE HOLDER, TONGUE MOUNT
8	1	CP1999	GAUGE PROTECTOR, PIGTAIL
9	1	CP2190	ELBOW, 90 DEGREE, 1"MP X 1" HOSE BARB, POLY
10	1	CP2249	NIPPLE, 1" POLY
11	1	CP2252	TEE, 1" FP, POLY
12	1	CP2296	PLUG, 1" PIPE, POLY
13	1	CP2308	HOSE BARB
14	2	CP2313	HOSE CLAMP, 1/4"- 5/8" TUBING, STAINLESS STEEL
15	26	CP2314	HOSE CLAMP, 1/2"- 1" TUBING, STAINLESS STEEL
16	1	CP2468	TEE, 3/4"FP X 3/4"HB X 3/4"HB, POLY
17	1	CP2469	HOSE BARB, 3/4"MP X 1"HB, POLY
18	1	CP2470	TEE, 3/8"HB X 3/4"HB X 3/4"HB, POLY
19	12	CP2472	HOSE, EPDM RUBBER, 3/4", 200#
20	2	CP2487	DIAPHRAGM CHECK VALVE, SINGLE SHANK, 3/4" HOSE
21	1	CP2489	REDUCER 1-1/2"MP X 1"FP, POLY
22	1	CP2519	HOSE, EPDM RUBBER, 1", 200
23	1	CP2524	GAUGE, 0-160 PSI, GLYCERIN FILLED
24	1	CP2534	HOSE, EVA,N 3/8" BRAID JET STREAM

AT3000



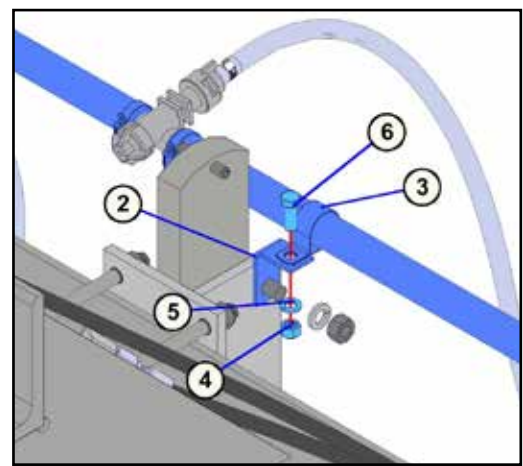
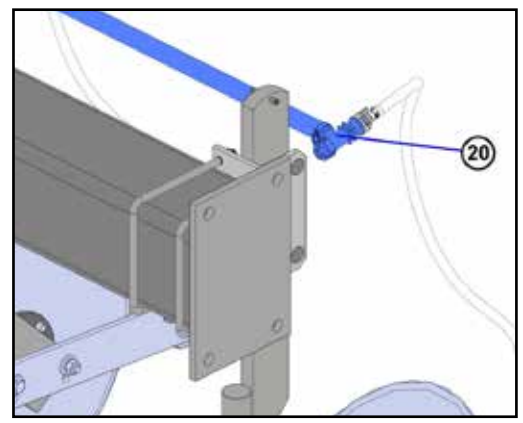
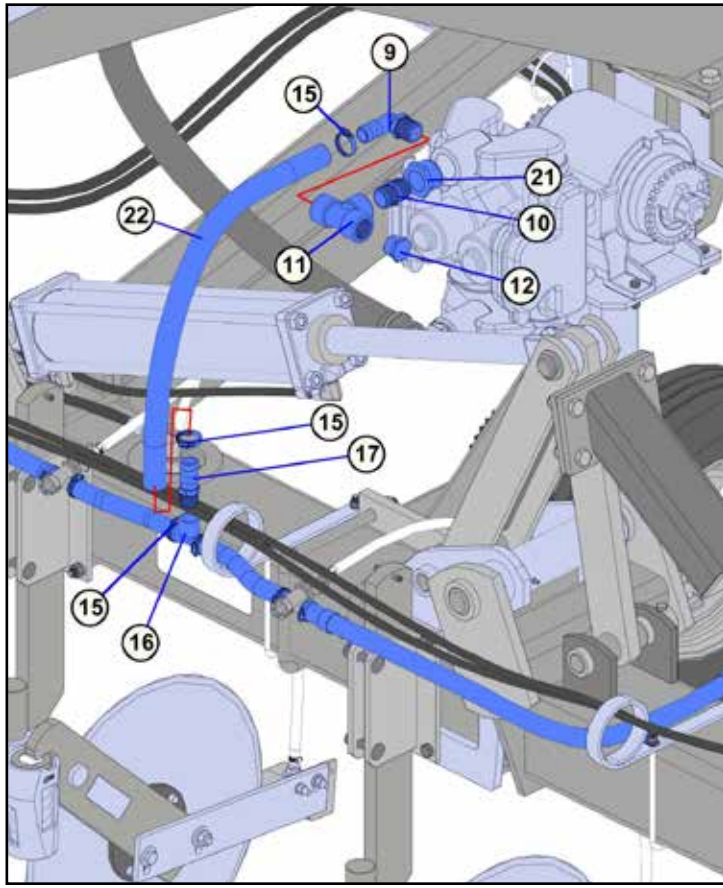
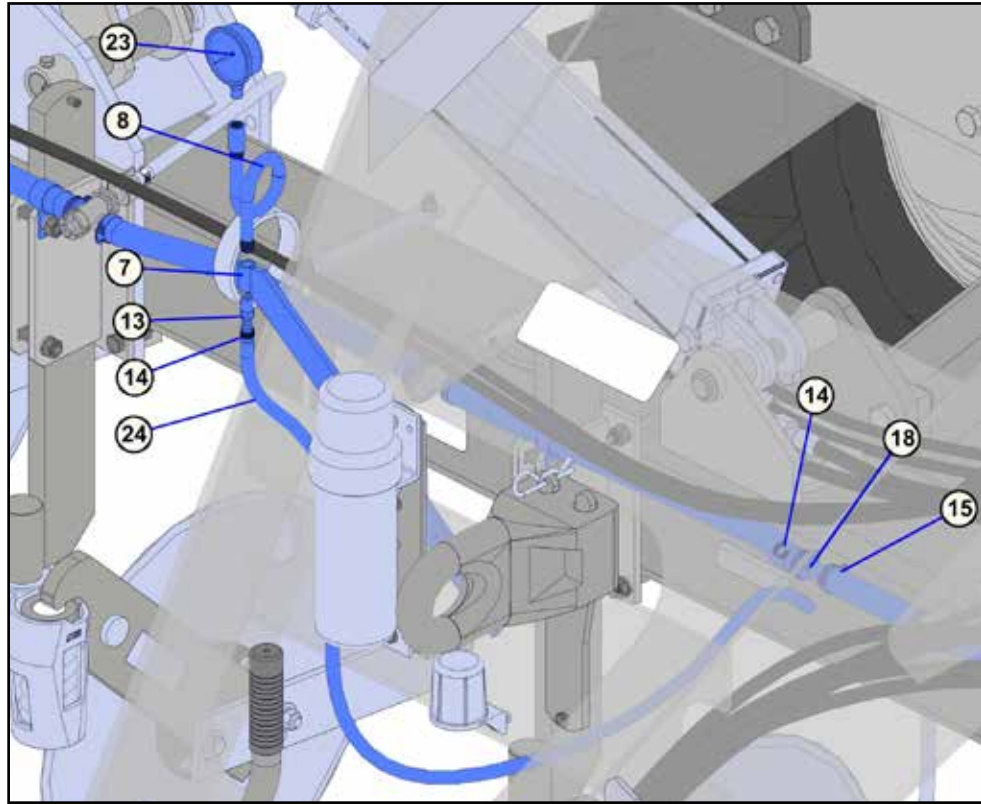
Manifold Liquid Injection Assembly (Gull Wing Toolbar) 15 Row 30"

AT3000



► **33000109 Manifold Assembly AT3000 15 ROW**

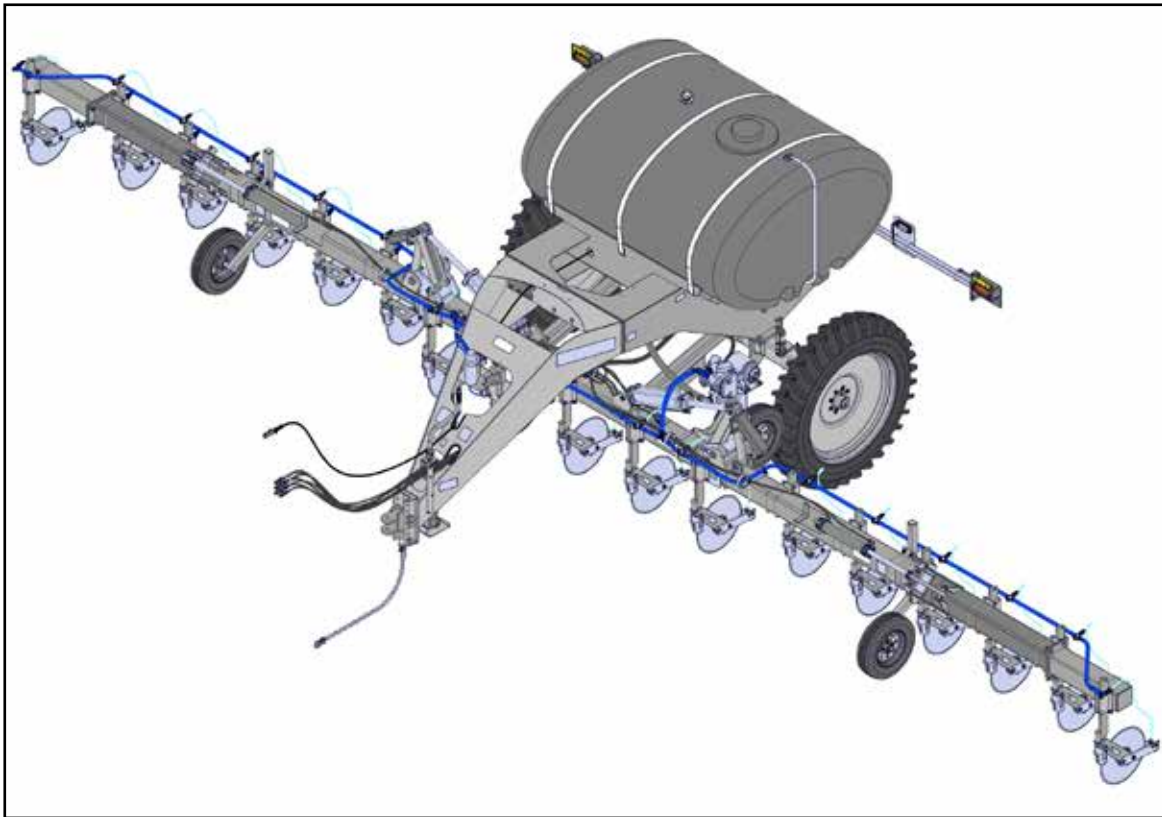
BOM ID	Qty	Item No	Description
1	1	33000109	MANIFOLD ASSEMBLY, AT3000, 15 ROW
2	15	AM3628	BRACKET, MOUNTING, LIQUID TRUNK LINE
3	19	AP3809	1-1/4" HOSE SUPPORT CLAMP, 3/8" BOLT
4	15	BP3450	NUT, HEX, 3/8"-16, F594 GRADE 1
5	15	BP3451	WASHER, LOCK, 3/8", 18-8 STAINLESS STEEL
6	15	BP3453	HEX CAP SCREW, 3/8"-16 X 1", F593 GRADE 1
7	1	CM2221	NH3 GAUGE HOLDER, TONGUE MOUNT
8	1	CP1999	GAUGE PROTECTOR, PIGTAIL
9	1	CP2190	ELBOW, 90 DEGREE, 1"MP X 1" HOSE BARB, POLY
10	1	CP2249	NIPPLE, 1" POLY
11	1	CP2252	TEE, 1" FP, POLY
12	1	CP2296	PLUG, 1" PIPE, POLY
13	1	CP2308	HOSE BARB
14	2	CP2313	HOSE CLAMP, 1/4"- 5/8" TUBING, STAINLESS STEEL
15	34	CP2314	HOSE CLAMP, 1/2"- 1" TUBING, STAINLESS STEEL
16	1	CP2468	TEE, 3/4"FP X 3/4"HB X 3/4"HB, POLY
17	1	CP2469	HOSE BARB, 3/4"MP X 1"HB, POLY
18	1	CP2470	TEE, 3/8"HB X 3/4"HB X 3/4"HB, POLY
19	16	CP2472	HOSE, EPDM RUBBER, 3/4", 200#
20	2	CP2487	DIAPHRAGM CHECK VALVE, SINGLE SHANK, 3/4" HOSE
21	1	CP2489	REDUCER 1-1/2"MP X 1"FP, POLY
22	1	CP2519	HOSE, EPDM RUBBER, 1", 200
23	1	CP2524	GAUGE, 0-160 PSI, GLYCERIN FILLED
24	1	CP2534	HOSE, EVA,N 3/8" BRAID JET STREAM





Manifold Liquid Injection Assembly (Gull Wing Tool Bar) 17 Row 30"

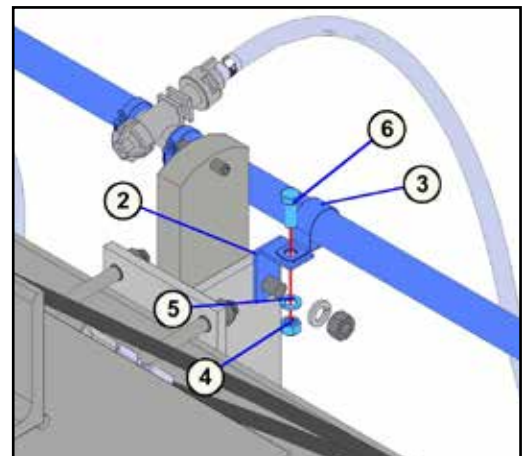
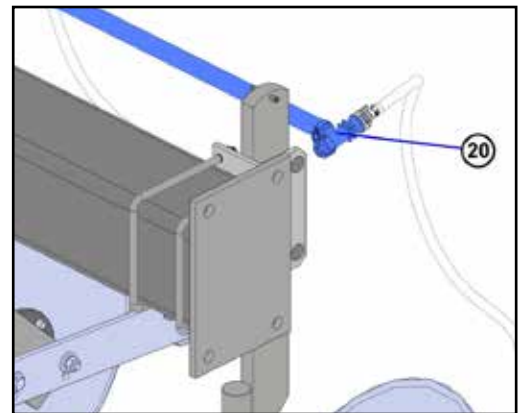
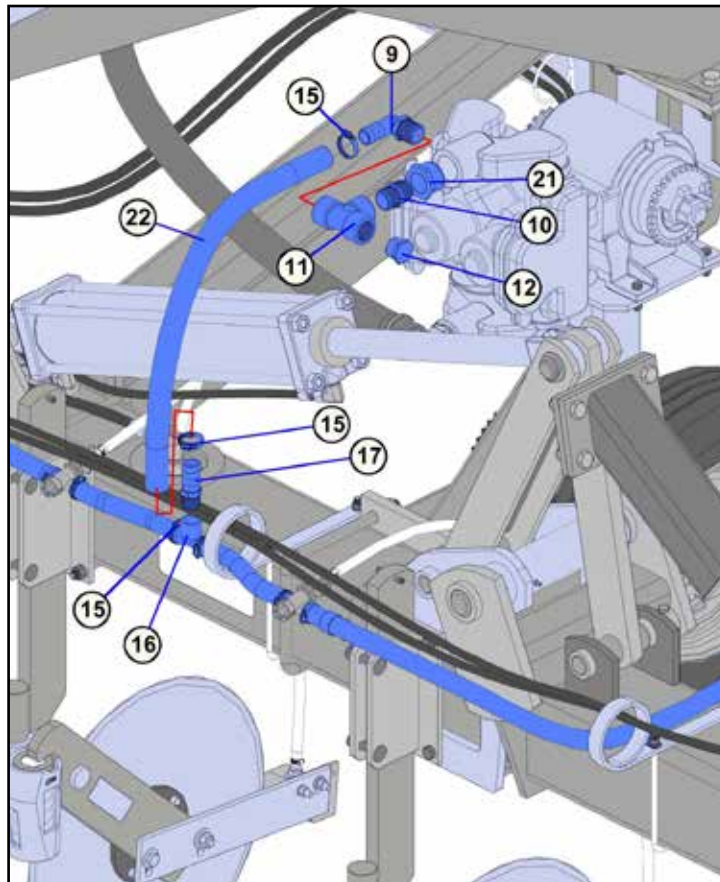
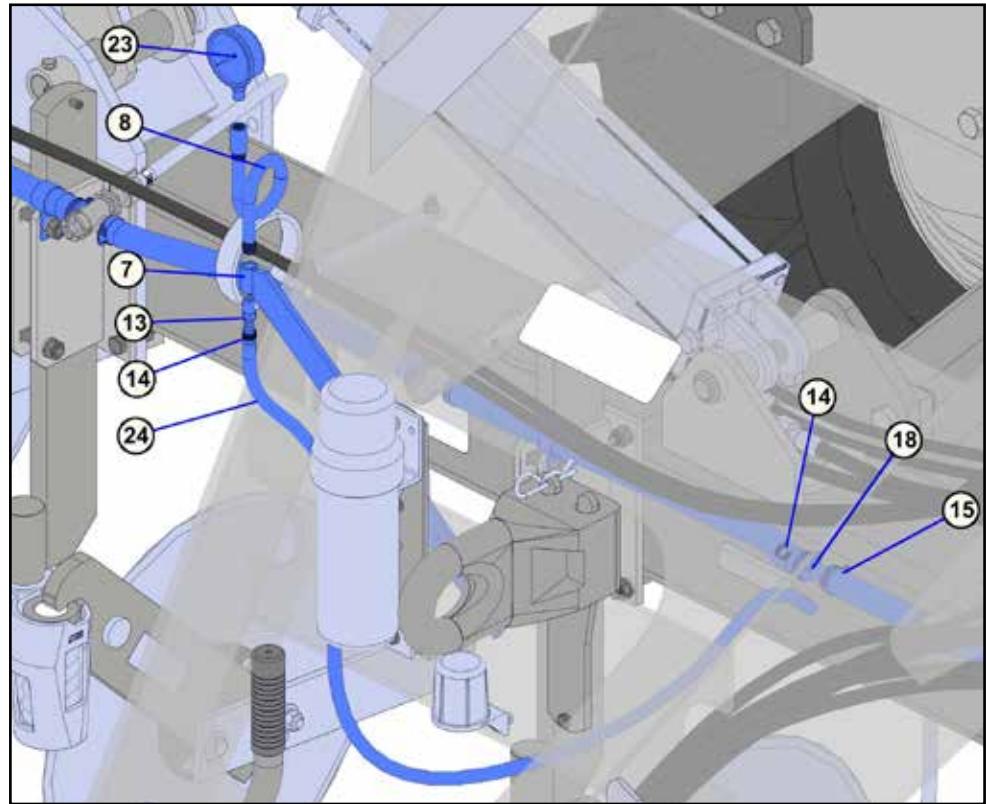
AT3000



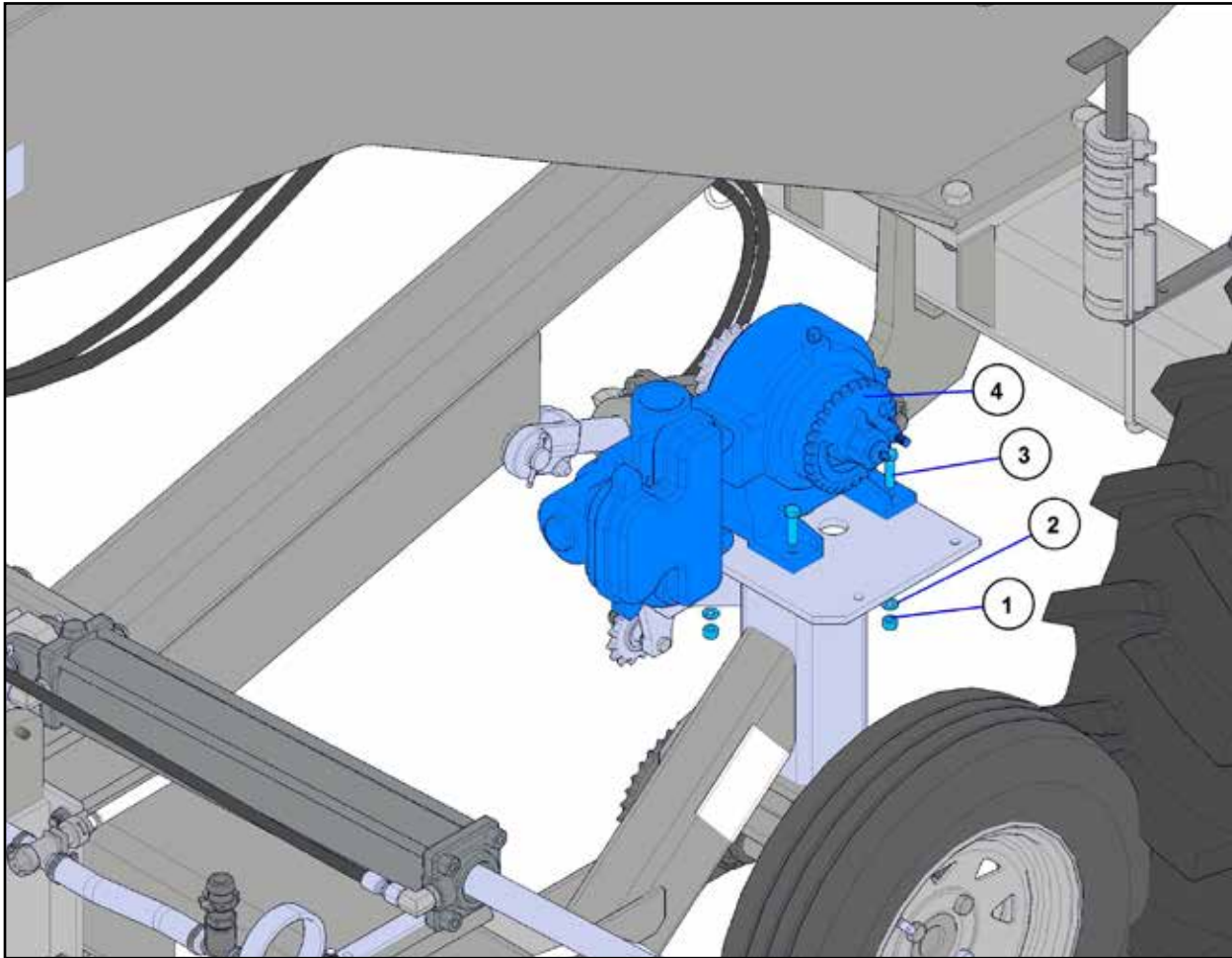
► **33000117 Manifold Assembly AT3000 17 ROW**

BOM ID	Qty	Item No	Description
1	1	33000117	MANIFOLD ASSEMBLY, AT3000, 17 ROWS
2	17	AM3628	BRACKET, MOUNTING, LIQUID TRUNK LINE
3	21	AP3809	1-1/4" HOSE SUPPORT CLAMP, 3/8" BOLT
4	17	BP3450	NUT, HEX, 3/8"-16, F594 GRADE 1
5	17	BP3451	WASHER, LOCK, 3/8", 18-8 STAINLESS STEEL
6	17	BP3453	HEX CAP SCREW, 3/8"-16 X 1", F593 GRADE 1
7	1	CM2221	NH3 GAUGE HOLDER, TONGUE MOUNT
8	1	CP1999	GAUGE PROTECTOR, PIGTAIL
9	1	CP2190	ELBOW, 90 DEGREE, 1"MP X 1" HOSE BARB, POLY
10	1	CP2249	NIPPLE, 1" POLY
11	1	CP2252	TEE, 1" FP, POLY
12	1	CP2296	PLUG, 1" PIPE, POLY
13	1	CP2308	HOSE BARB
14	2	CP2313	HOSE CLAMP, 1/4"- 5/8" TUBING, STAINLESS STEEL
15	38	CP2314	HOSE CLAMP, 1/2"- 1" TUBING, STAINLESS STEEL
16	1	CP2468	TEE, 3/4"FP X 3/4"HB X 3/4"HB, POLY
17	1	CP2469	HOSE BARB, 3/4"MP X 1"HB, POLY
18	1	CP2470	TEE, 3/8"HB X 3/4"HB X 3/4"HB, POLY
19	18	CP2472	HOSE, EPDM RUBBER, 3/4", 200#
20	2	CP2487	DIAPHRAGM CHECK VALVE, SINGLE SHANK, 3/4" HOSE
21	1	CP2489	REDUCER 1-1/2"MP X 1"FP, POLY
22	1	CP2519	HOSE, EPDM RUBBER, 1", 200#
23	1	CP2524	GAUGE, 0-160 PSI, GLYCERIN FILLED
24	1	CP2534	HOSE, EVA, 3/8" BRAID JET STREAM

AT3000

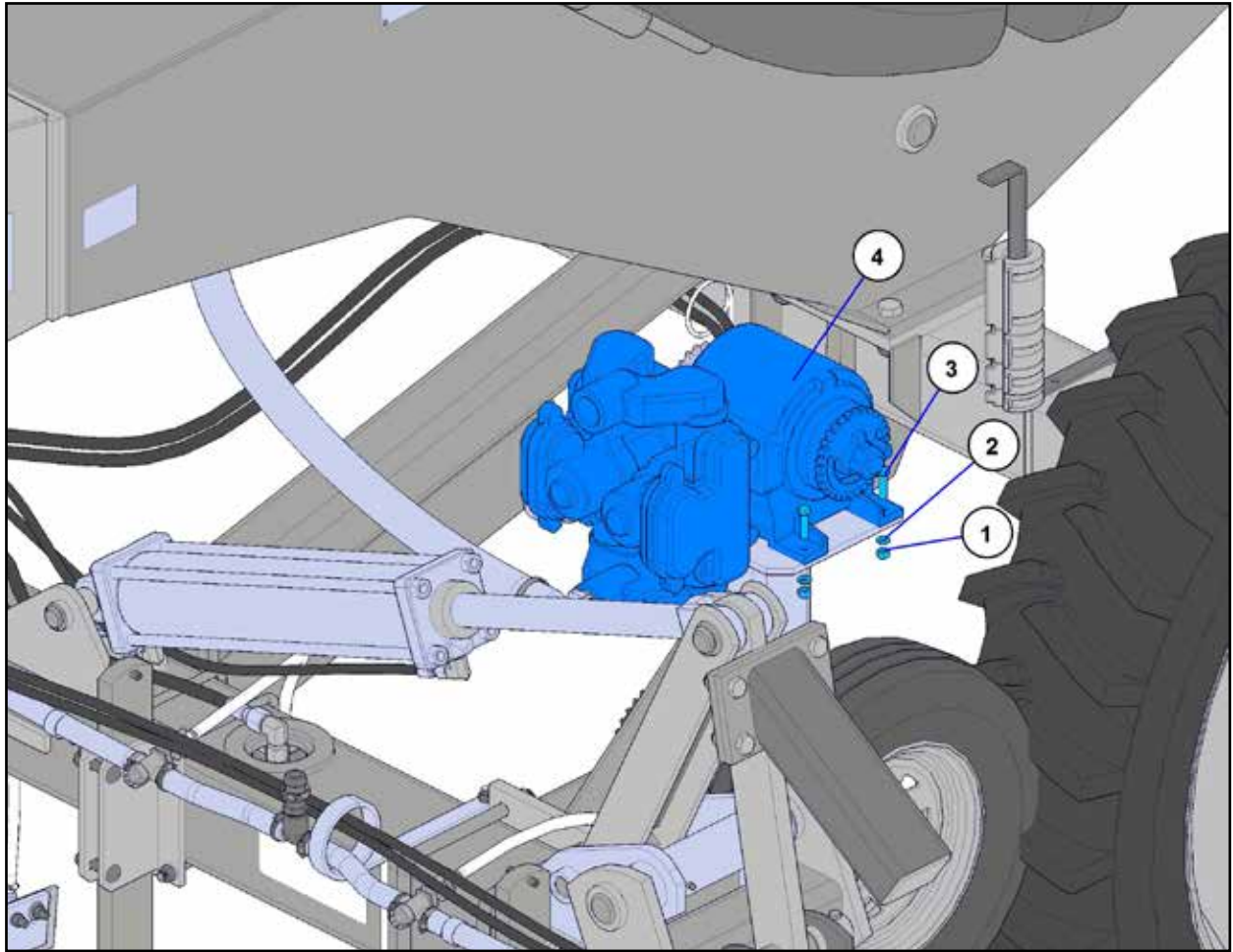


AT3000



► **CP2568 PUMP, SINGLE PISTON, NGP-7055, 34.2 GALLON**

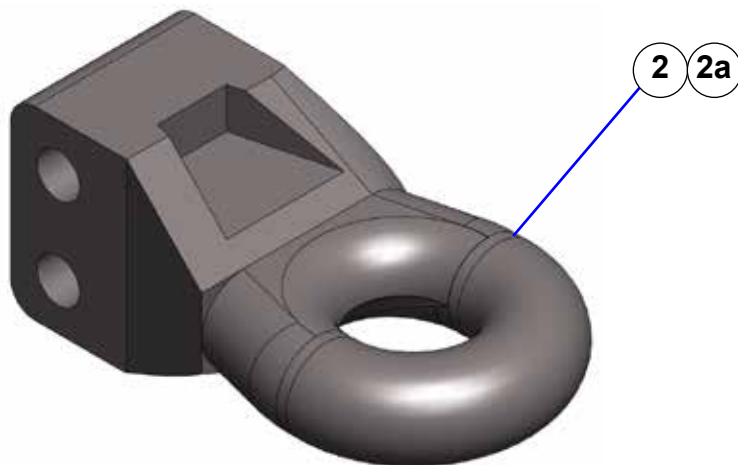
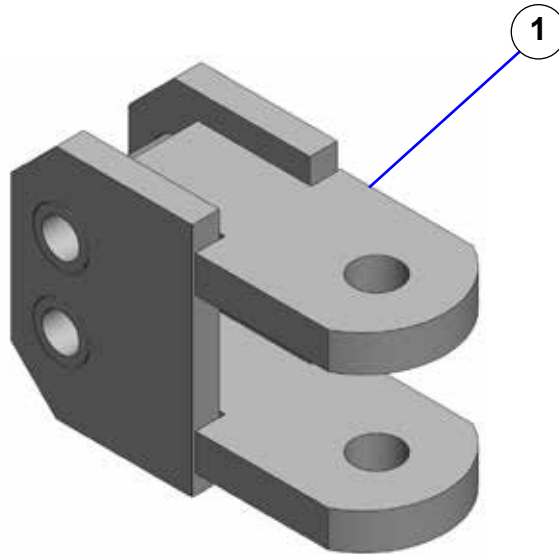
BOM ID	Qty	Item No	Description
1	4	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
2	4	BP3002	WASHER, LOCK, 3/8", PLATED
3	4	BP3005	HEX CAP SCREW, 3/8"-16 X 1-1/2", GRADE 5, PLATED
4	1	CP2568	PUMP, SINGLE PISTON, NGP-7055, 34.2 GALLON



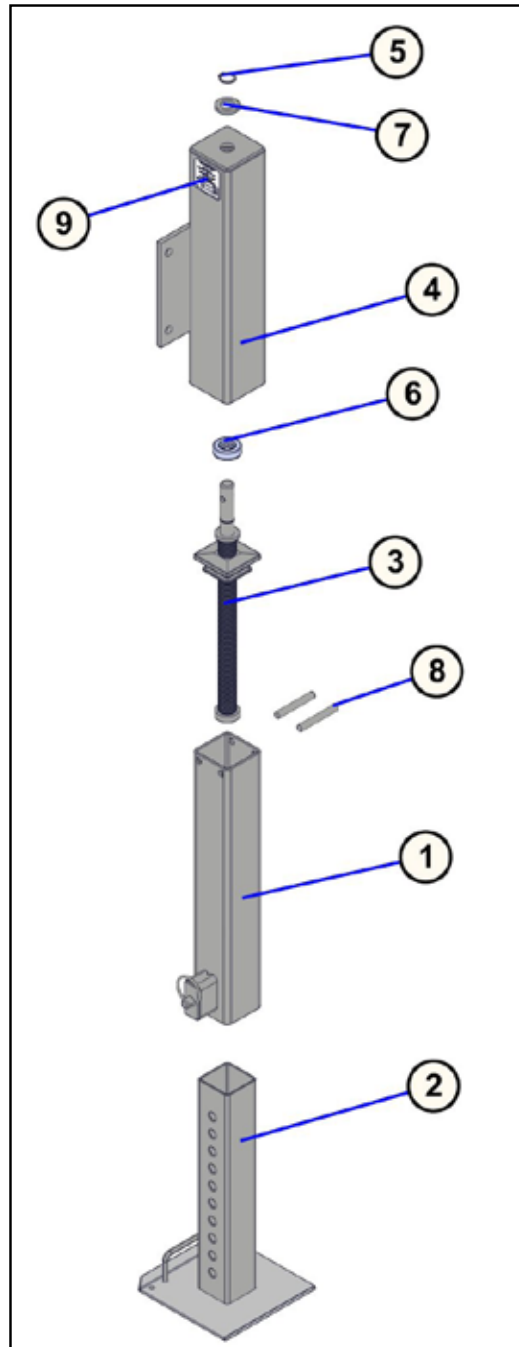
► **CP2569 PUMP, TWIN PISTON, NGP-9055, 68.4 GALLON**

BOM ID	Qty	Item No	Description
1	4	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
2	4	BP3002	WASHER, LOCK, 3/8", PLATED
3	4	BP3005	HEX CAP SCREW, 3/8"-16 X 1-1/2", GRADE 5, PLATED
4	1	CP2569	PUMP, TWIN PISTON, NGP-9055, 68.4 GALLON

AT3000



Ref.	Part No.	Req.	Description
1.	AM2144	1	Fabricated Truck Hitch
2.	AP2864	1	CATEGORY IV Heat Treated Cast Wheatland Hitch 250-400+ HP 2" Pin
2a.	AP2850	1	CATEGORY III Heat Treated Cast Wheatland Hitch 110-250 HP 1-1/2" Pin



► **AM3527 JACK, 9TWDL, (Top Wind Drop Leg)**

BOM ID	Qty	Item No	Description
1	1	AM2524	INTERMEDIATE TUBE WITH PLUNGER ASSEMBLY
2	1	AM2525	DROP LEG WITH PAD & HANDLE
3	1	AM2534	SCREW ASSEMBLY, 4" 9TW13 (TOP WIND)
4	1	AM3531	JACK, TOP TUBE
5	1	AP2407	SNAP RING, 1" EXTERNAL, HEAVY DUTY
6	1	AP2410	THRUST BEARING, NICE 609
7	1	EM1736	BEARING SEAT
8	2	EM1739	ROD
9	1	EM3016	9000# LABEL



36 Inch Spacing Rate Chart

AT3000

Orifice #	PSI	GPM 10.65 lb./gal 28%	Gallons per Acre 36 Inch Spacing							
			5	6	7	8	9	10	11	12
			mph	mph	mph	mph	mph	mph	mph	mph
4916 49	60	0.320	10.5	8.8	7.5	6.6	5.9	5.3	4.8	4.4
	80	0.369	12.2	10.1	8.7	7.6	6.8	6.1	5.5	5.1
	100	0.413	13.6	11.3	9.7	8.5	7.6	6.8	6.2	5.7
	120	0.452	14.9	12.4	10.7	9.3	8.3	7.5	6.8	6.2
4916 57	60	0.432	14.3	11.9	10.2	8.9	7.9	7.1	6.5	5.9
	80	0.499	16.5	13.7	11.8	10.3	9.2	8.2	7.5	6.9
	100	0.558	18.4	15.4	13.2	11.5	10.2	9.2	8.4	7.7
	120	0.612	20.2	16.8	14.4	12.6	11.2	10.1	9.2	8.4
*4916 63	60	0.528	17.4	14.5	12.5	10.9	9.7	8.7	7.9	7.3
	80	0.610	20.1	16.8	14.4	12.6	11.2	10.1	9.1	8.4
	100	0.682	22.5	18.8	16.1	14.1	12.5	11.3	10.2	9.4
	120	0.747	24.7	20.5	17.6	15.4	13.7	12.3	11.2	10.3
*4916 70	60	0.652	21.5	17.9	15.4	13.5	12.0	10.8	9.8	9.0
	80	0.753	24.9	20.7	17.8	15.5	13.8	12.4	11.3	10.4
	100	0.842	27.8	23.2	19.8	17.4	15.4	13.9	12.6	11.6
	120	0.922	30.4	25.4	21.7	19.0	16.9	15.2	13.8	12.7
*4916 78	60	0.810	26.7	22.3	19.1	16.7	14.8	13.4	12.1	11.1
	80	0.935	30.9	25.7	22.0	19.3	17.1	15.4	14.0	12.9
	100	1.045	34.5	28.7	24.6	21.6	19.2	17.2	15.7	14.4
	120	1.145	37.8	31.5	27.0	23.6	21.0	18.9	17.2	15.7
*4916 86	60	0.984	32.5	27.1	23.2	20.3	18.0	16.2	14.8	13.5
	80	1.137	37.5	31.3	26.8	23.4	20.8	18.8	17.0	15.6
	100	1.271	41.9	34.9	30.0	26.2	23.3	21.0	19.1	17.5
	120	1.392	45.9	38.3	32.8	28.7	25.5	23.0	20.9	19.1
*4916 95	60	1.201	39.6	33.0	28.3	24.8	22.0	19.8	18.0	16.5
	80	1.387	45.8	38.1	32.7	28.6	25.4	22.9	20.8	19.1
	100	1.551	51.2	42.6	36.6	32.0	28.4	25.6	23.3	21.3
	120	1.699	56.1	46.7	40.0	35.0	31.1	28.0	25.5	23.4
4916 107	60	1.524	50.3	41.9	35.9	31.4	27.9	25.1	22.9	21.0
	80	1.760	58.1	48.4	41.5	36.3	32.3	29.0	26.4	24.2
	100	1.967	64.9	54.1	46.4	40.6	36.1	32.5	29.5	27.0
	120	2.155	71.1	59.3	50.8	44.4	39.5	35.6	32.3	29.6
4916 120	60	1.917	63.2	52.7	45.2	39.5	35.1	31.6	28.7	26.4
	80	2.213	73.0	60.9	52.2	45.6	40.6	36.5	33.2	30.4
	100	2.474	81.7	68.0	58.3	51.0	45.4	40.8	37.1	34.0
	120	2.710	89.4	74.5	63.9	55.9	49.7	44.7	40.7	37.3

The 4916 series of orifices are available in many sizes falling between those listed on this chart.

* Standard equipment sizes.



38 Inch Spacing Rate Chart

AT3000

Orifice #	PSI	GPM 10.65 lb./gal 28%	Gallons per Acre 38 Inch Spacing							
			5 mph	6 mph	7 mph	8 mph	9 mph	10 mph	11 mph	12 mph
4916 49	60	0.320	10.0	8.3	7.1	6.2	5.6	5.0	4.5	4.2
	80	0.369	11.5	9.6	8.2	7.2	6.4	5.8	5.2	4.8
	100	0.413	12.9	10.7	9.2	8.1	7.2	6.4	5.9	5.4
	120	0.452	14.1	11.8	10.1	8.8	7.8	7.1	6.4	5.9
4916 57	60	0.432	13.5	11.3	9.7	8.4	7.5	6.8	6.1	5.6
	80	0.499	15.6	13.0	11.2	9.8	8.7	7.8	7.1	6.5
	100	0.558	17.5	14.5	12.5	10.9	9.7	8.7	7.9	7.3
	120	0.612	19.1	15.9	13.7	11.9	10.6	9.6	8.7	8.0
*4916 63	60	0.528	16.5	13.8	11.8	10.3	9.2	8.3	7.5	6.9
	80	0.610	19.1	15.9	13.6	11.9	10.6	9.5	8.7	7.9
	100	0.682	21.3	17.8	15.2	13.3	11.8	10.7	9.7	8.9
	120	0.747	23.4	19.5	16.7	14.6	13.0	11.7	10.6	9.7
*4916 70	60	0.652	20.4	17.0	14.6	12.7	11.3	10.2	9.3	8.5
	80	0.753	23.5	19.6	16.8	14.7	13.1	11.8	10.7	9.8
	100	0.842	26.3	21.9	18.8	16.5	14.6	13.2	12.0	11.0
	120	0.922	28.8	24.0	20.6	18.0	16.0	14.4	13.1	12.0
*4916 78	60	0.810	25.3	21.1	18.1	15.8	14.1	12.7	11.5	10.5
	80	0.935	29.2	24.4	20.9	18.3	16.2	14.6	13.3	12.2
	100	1.045	32.7	27.2	23.3	20.4	18.2	16.3	14.9	13.6
	120	1.145	35.8	29.8	25.6	22.4	19.9	17.9	16.3	14.9
*4916 86	60	0.984	30.8	25.6	22.0	19.2	17.1	15.4	14.0	12.8
	80	1.137	35.5	29.6	25.4	22.2	19.7	17.8	16.2	14.8
	100	1.271	39.7	33.1	28.4	24.8	22.1	19.9	18.1	16.6
	120	1.392	43.5	36.3	31.1	27.2	24.2	21.8	19.8	18.1
*4916 95	60	1.201	37.6	31.3	26.8	23.5	20.9	18.8	17.1	15.6
	80	1.387	43.4	36.1	31.0	27.1	24.1	21.7	19.7	18.1
	100	1.551	48.5	40.4	34.6	30.3	26.9	24.2	22.0	20.2
	120	1.699	53.1	44.3	37.9	33.2	29.5	26.6	24.1	22.1
4916 107	60	1.524	47.6	39.7	34.0	29.8	26.5	23.8	21.7	19.8
	80	1.760	55.0	45.8	39.3	34.4	30.6	27.5	25.0	22.9
	100	1.967	61.5	51.3	43.9	38.4	34.2	30.8	28.0	25.6
	120	2.155	67.4	56.1	48.1	42.1	37.4	33.7	30.6	28.1
4916 120	60	1.917	59.9	49.9	42.8	37.4	33.3	30.0	27.2	25.0
	80	2.213	69.2	57.7	49.4	43.2	38.4	34.6	31.4	28.8
	100	2.474	77.4	64.5	55.3	48.3	43.0	38.7	35.2	32.2
	120	2.710	84.7	70.6	60.5	53.0	47.1	42.4	38.5	35.3

The 4916 series of orifices are available in many sizes falling between those listed on this chart.

* Standard equipment sizes.



40 Inch Spacing Rate Chart

AT3000

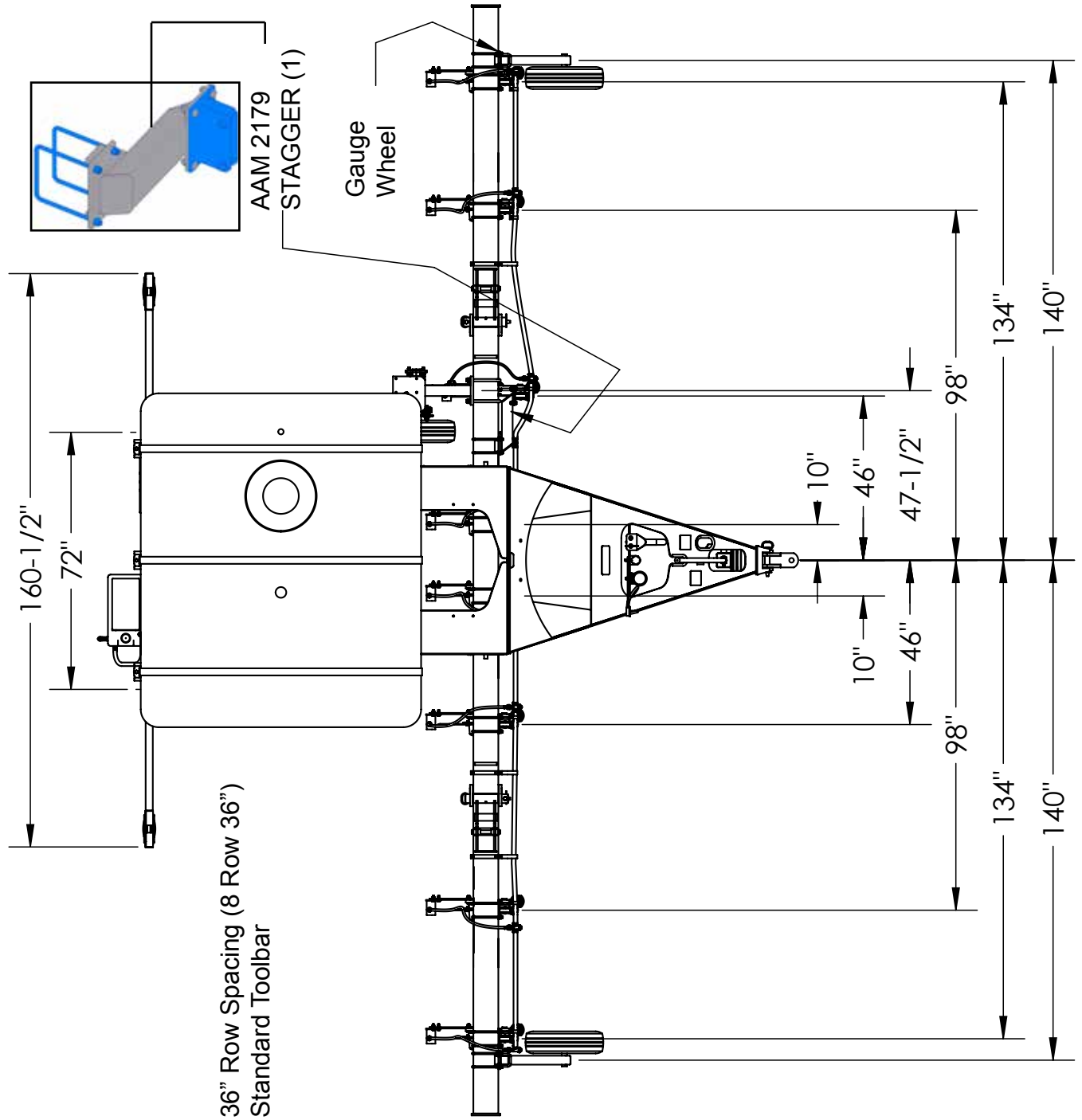
Orifice #	PSI	GPM 10.65 lb./gal 28%	Gallons per Acre 40 Inch Spacing							
			5	6	7	8	9	10	11	12
			mph	mph	mph	mph	mph	mph	mph	mph
4916 49	60	0.320	9.5	7.9	6.8	5.9	5.3	4.7	4.3	4.0
	80	0.369	11.0	9.1	7.8	6.8	6.1	5.5	5.0	4.6
	100	0.413	12.3	10.2	8.8	7.7	6.8	6.1	5.6	5.1
	120	0.452	13.4	11.2	9.6	8.4	7.5	6.7	6.1	5.6
4916 57	60	0.432	12.8	10.7	9.2	8.0	7.1	6.4	5.8	5.4
	80	0.499	14.8	12.4	10.6	9.3	8.2	7.4	6.7	6.2
	100	0.558	16.6	13.8	11.8	10.4	9.2	8.3	7.5	6.9
	120	0.612	18.2	15.1	13.0	11.4	10.1	9.1	8.3	7.6
*4916 63	60	0.528	15.7	13.1	11.2	9.8	8.7	7.8	7.1	6.5
	80	0.610	18.1	15.1	12.9	11.3	10.1	9.1	8.2	7.5
	100	0.682	20.3	16.9	14.5	12.7	11.3	10.1	9.2	8.4
	120	0.747	22.2	18.5	15.8	13.9	12.3	11.1	10.1	9.2
*4916 70	60	0.652	19.4	16.1	13.8	12.1	10.8	9.7	8.8	8.1
	80	0.753	22.4	18.6	16.0	14.0	12.4	11.2	10.2	9.3
	100	0.842	25.0	20.8	17.9	15.6	13.9	12.5	11.4	10.4
	120	0.922	27.4	22.8	19.6	17.1	15.2	13.7	12.5	11.4
*4916 78	60	0.810	24.0	20.0	17.2	15.0	13.4	12.0	10.9	10.0
	80	0.935	27.8	23.1	19.8	17.4	15.4	13.9	12.6	11.6
	100	1.045	31.0	25.9	22.2	19.4	17.2	15.5	14.1	12.9
	120	1.145	34.0	28.3	24.3	21.3	18.9	17.0	15.5	14.2
*4916 86	60	0.984	29.2	24.4	20.9	18.3	16.2	14.6	13.3	12.2
	80	1.137	33.8	28.1	24.1	21.1	18.8	16.9	15.3	14.1
	100	1.271	37.7	31.5	27.0	23.6	21.0	18.9	17.2	15.7
	120	1.392	41.3	34.5	29.5	25.8	23.0	20.7	18.8	17.2
*4916 95	60	1.201	35.7	29.7	25.5	22.3	19.8	17.8	16.2	14.9
	80	1.387	41.2	34.3	29.4	25.7	22.9	20.6	18.7	17.2
	100	1.551	46.1	38.4	32.9	28.8	25.6	23.0	20.9	19.2
	120	1.699	50.5	42.0	36.0	31.5	28.0	25.2	22.9	21.0
4916 107	60	1.524	45.3	37.7	32.3	28.3	25.1	22.6	20.6	18.9
	80	1.760	52.3	43.5	37.3	32.7	29.0	26.1	23.8	21.8
	100	1.967	58.4	48.7	41.7	36.5	32.5	29.2	26.6	24.3
	120	2.155	64.0	53.3	45.7	40.0	35.6	32.0	29.1	26.7
4916 120	60	1.917	56.9	47.4	40.7	35.6	31.6	28.5	25.9	23.7
	80	2.213	65.7	54.8	46.9	41.1	36.5	32.9	29.9	27.4
	100	2.474	73.5	61.2	52.5	45.9	40.8	36.7	33.4	30.6
	120	2.710	80.5	67.1	57.5	50.3	44.7	40.3	36.6	33.5

The 4916 series of orifices are available in many sizes falling between those listed on this chart.

* Standard equipment sizes.

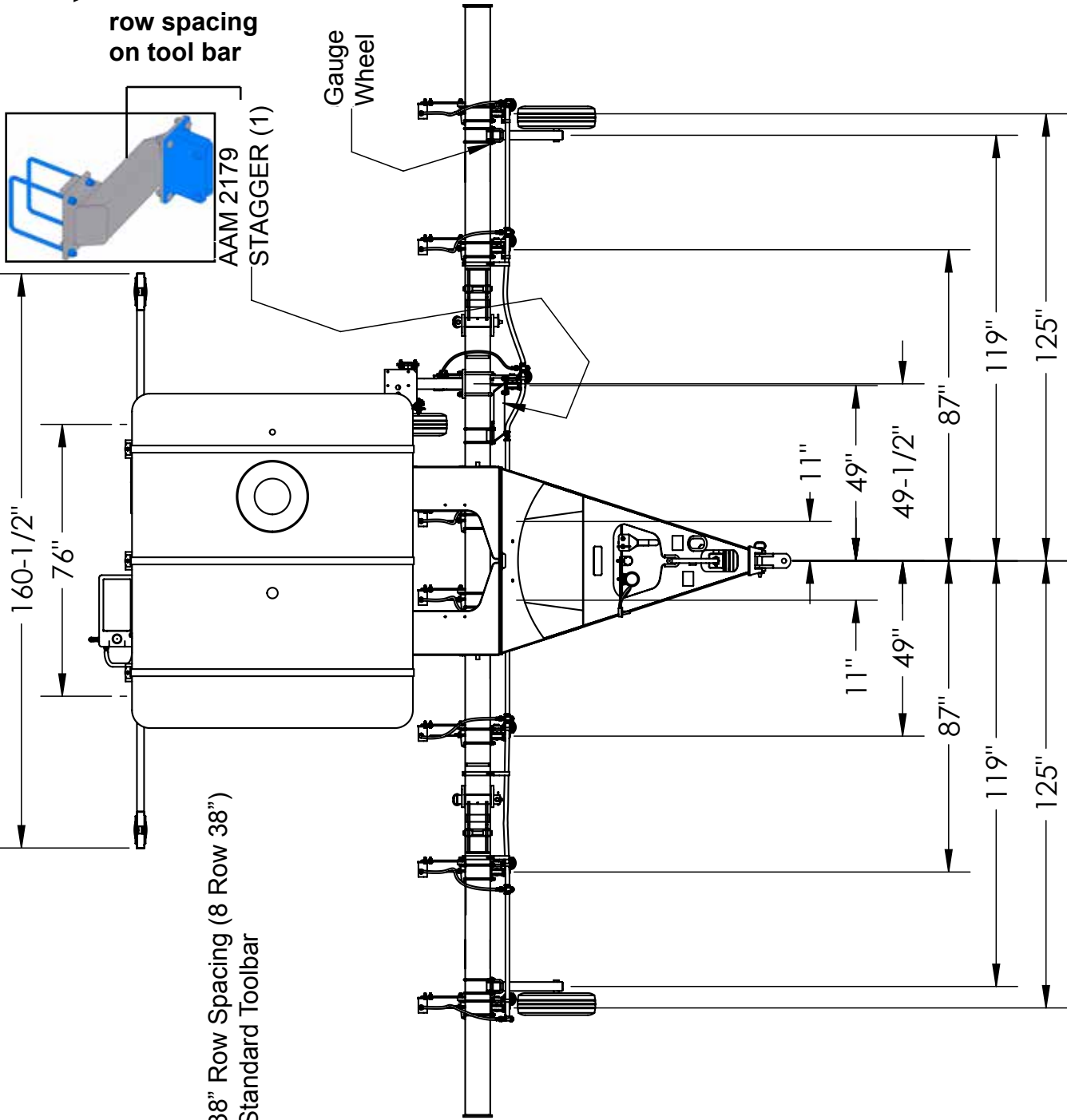
AT3000

▶ **Mark out
row spacing
on tool bar**



AT3000

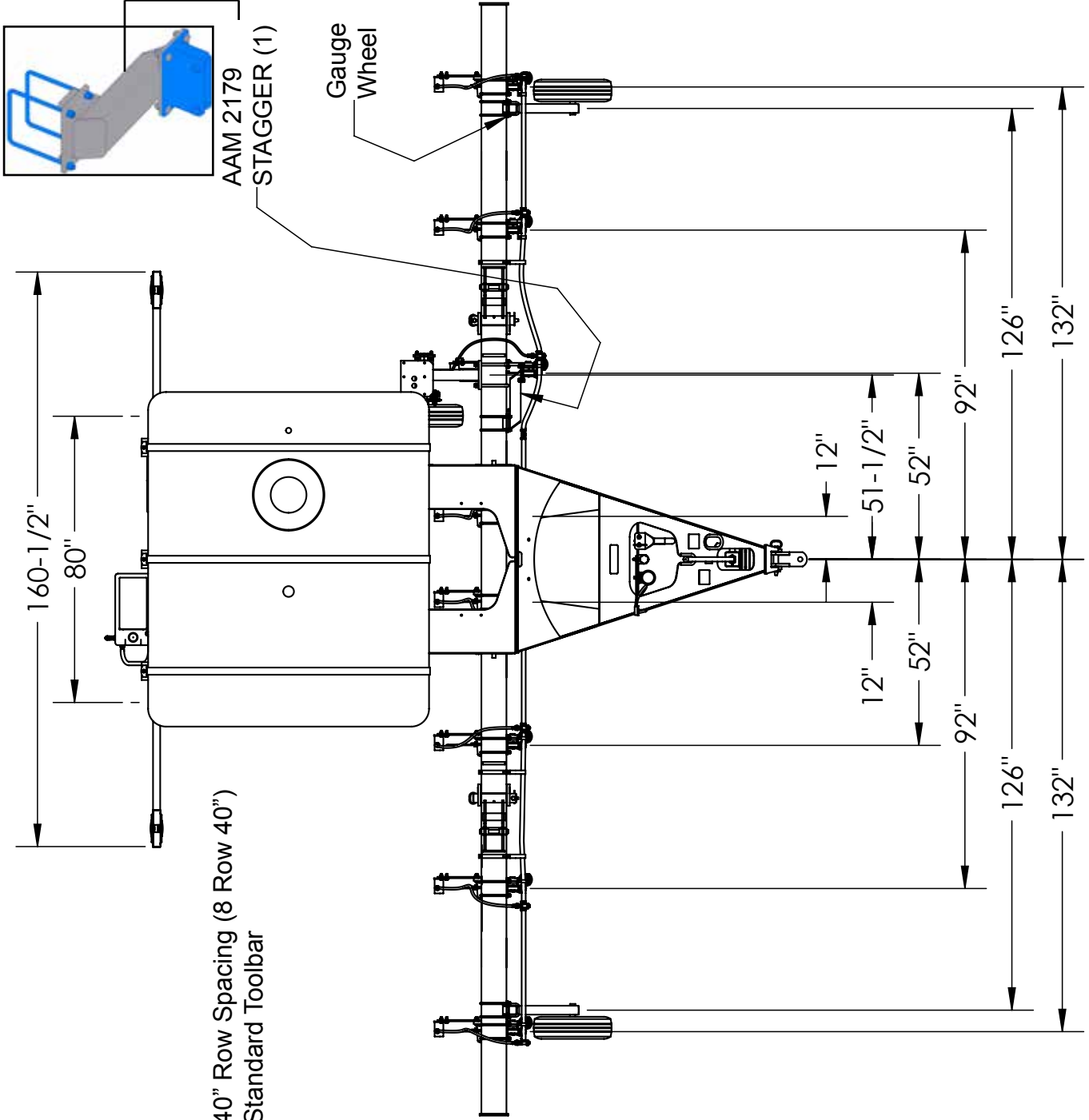
▶ **Mark out row spacing on tool bar**



**38" Row Spacing (8 Row 38")
Standard Toolbar**

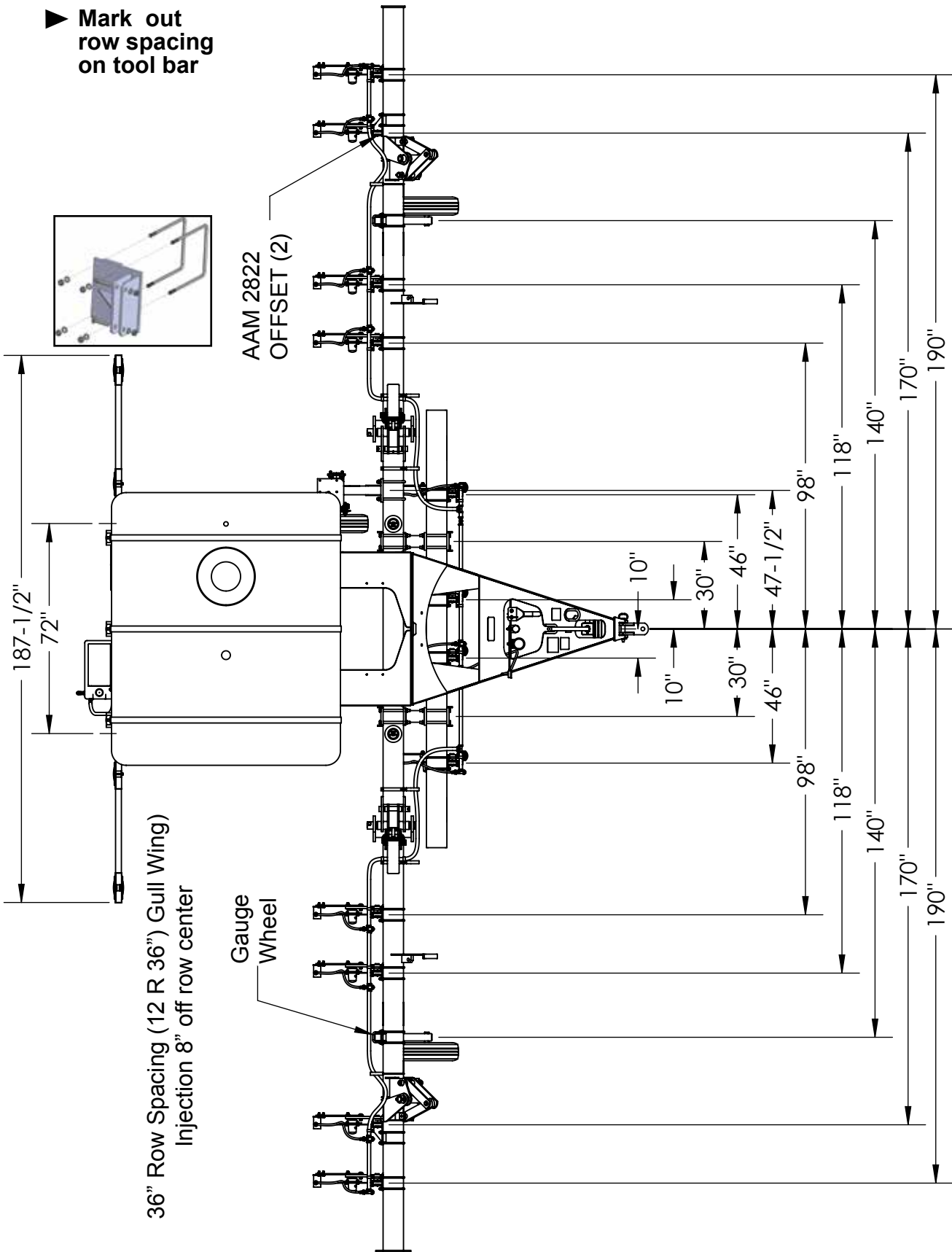
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▶ **Mark out row spacing on tool bar**



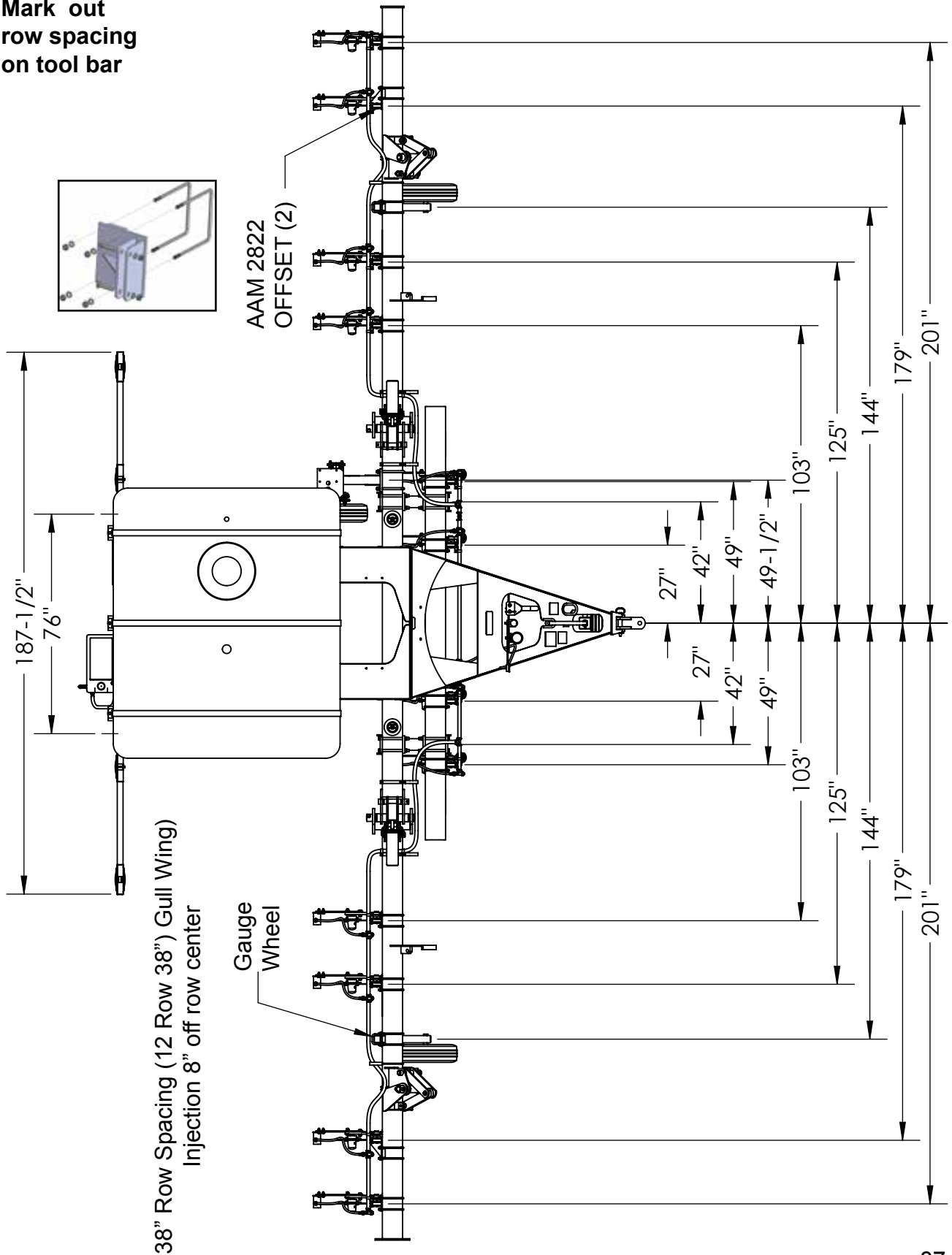
AT3000

▶ **Mark out row spacing on tool bar**



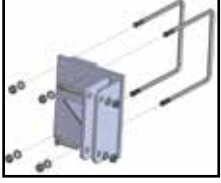
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▶ **Mark out row spacing on tool bar**

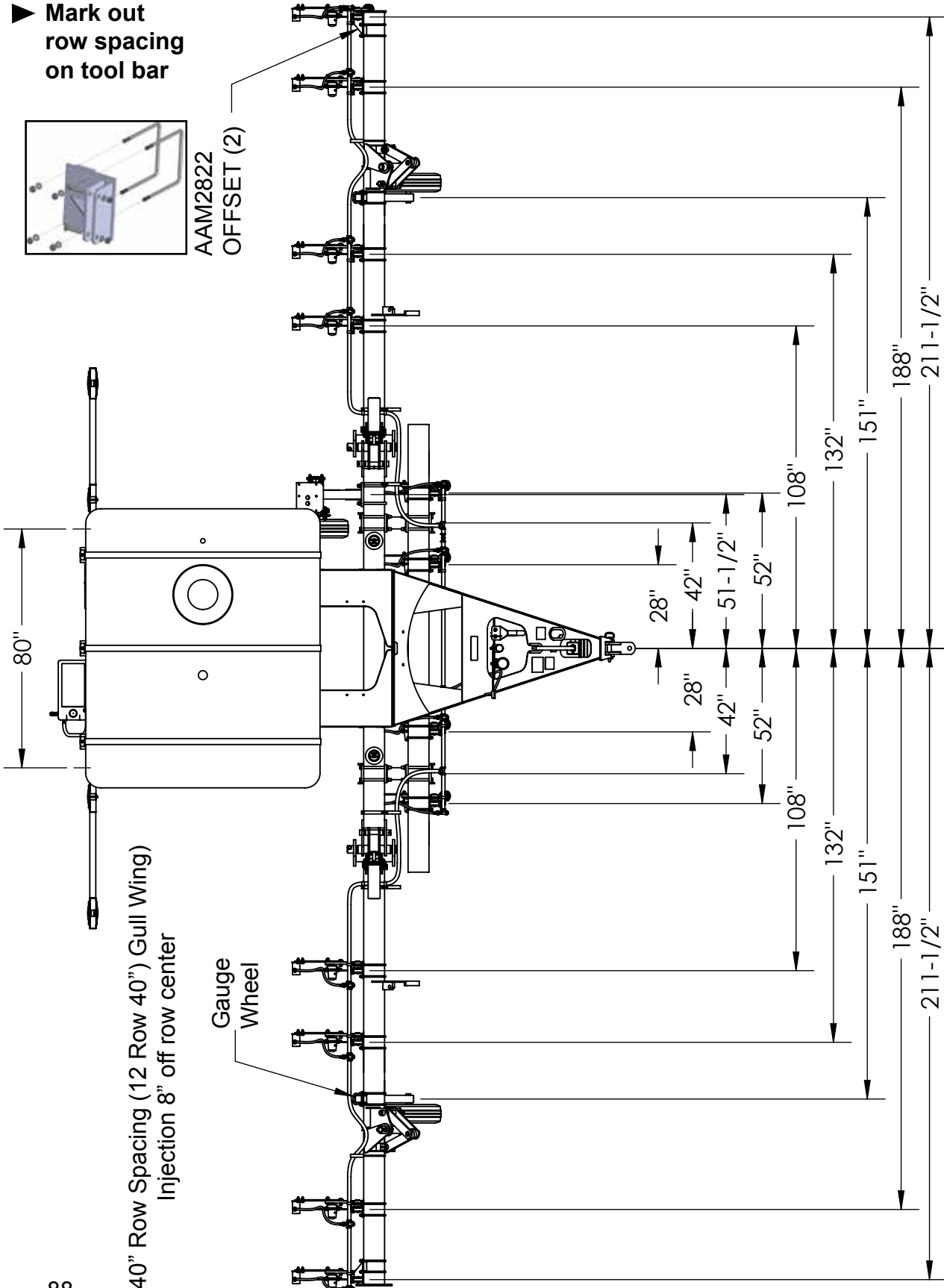


AT3000

▶ **Mark out row spacing on tool bar**

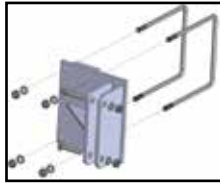


**AAM2822
OFFSET (2)**

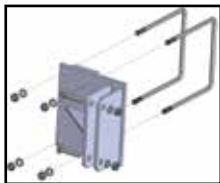
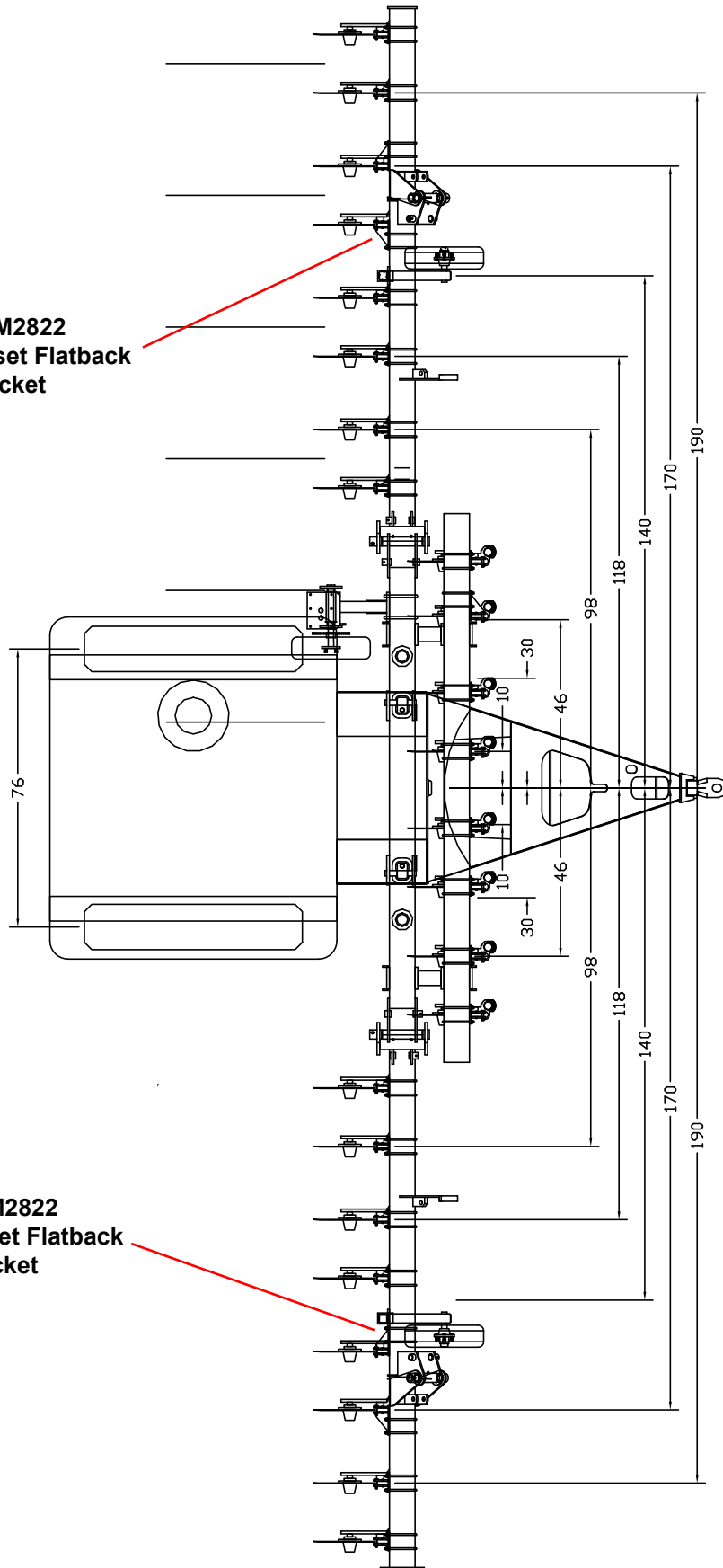


AT3000

► **Mark out
row spacing
on tool bar**



**AAM2822
Offset Flatback
Bracket**



**AAM2822
Offset Flatback
Bracket**



18 Inch Spacing Rate Chart

AT3000

Orifice #	PSI	GPM 10.65 lb./gal 28%	Gallons per Acre 18 Inch Spacing							
			5	6	7	8	9	10	11	12
			mph	mph	mph	mph	mph	mph	mph	mph
4916 49	60	0.320	21.1	17.6	15.1	13.2	11.7	10.5	9.6	8.8
	80	0.369	24.4	20.3	17.4	15.2	13.5	12.2	11.1	10.1
	100	0.413	27.2	22.7	19.4	17.0	15.1	13.6	12.4	11.3
	120	0.452	29.8	24.9	21.3	18.6	16.6	14.9	13.6	12.4
4916 57	60	0.432	28.5	23.8	20.4	17.8	15.9	14.3	13.0	11.9
	80	0.499	33.0	27.5	23.5	20.6	18.3	16.5	15.0	13.7
	100	0.558	36.8	30.7	26.3	23.0	20.5	18.4	16.7	15.4
	120	0.612	40.4	33.6	28.8	25.2	22.4	20.2	18.3	16.8
*4916 63	60	0.528	34.9	29.1	24.9	21.8	19.4	17.4	15.8	14.5
	80	0.610	40.3	33.5	28.8	25.2	22.4	20.1	18.3	16.8
	100	0.682	45.0	37.5	32.2	28.1	25.0	22.5	20.5	18.8
	120	0.747	49.3	41.1	35.2	30.8	27.4	24.7	22.4	20.5
*4916 70	60	0.652	43.0	35.9	30.7	26.9	23.9	21.5	19.6	17.9
	80	0.753	49.7	41.4	35.5	31.1	27.6	24.9	22.6	20.7
	100	0.842	55.6	46.3	39.7	34.7	30.9	27.8	25.3	23.2
	120	0.922	60.9	50.7	43.5	38.0	33.8	30.4	27.7	25.4
*4916 78	60	0.810	53.4	44.5	38.2	33.4	29.7	26.7	24.3	22.3
	80	0.935	61.7	51.4	44.1	38.6	34.3	30.9	28.1	25.7
	100	1.045	69.0	57.5	49.3	43.1	38.3	34.5	31.4	28.7
	120	1.145	75.6	63.0	54.0	47.2	42.0	37.8	34.4	31.5
*4916 86	60	0.984	65.0	54.1	46.4	40.6	36.1	32.5	29.5	27.1
	80	1.137	75.0	62.5	53.6	46.9	41.7	37.5	34.1	31.3
	100	1.271	83.9	69.9	59.9	52.4	46.6	41.9	38.1	34.9
	120	1.392	91.9	76.6	65.6	57.4	51.0	45.9	41.8	38.3
*4916 95	60	1.201	79.3	66.1	56.6	49.5	44.0	39.6	36.0	33.0
	80	1.387	91.5	76.3	65.4	57.2	50.9	45.8	41.6	38.1
	100	1.551	102.3	85.3	73.1	64.0	56.9	51.2	46.5	42.6
	120	1.699	112.1	93.4	80.1	70.1	62.3	56.1	51.0	46.7
4916 107	60	1.524	100.6	83.8	71.8	62.9	55.9	50.3	45.7	41.9
	80	1.760	116.1	96.8	83.0	72.6	64.5	58.1	52.8	48.4
	100	1.967	129.8	108.2	92.7	81.1	72.1	64.9	59.0	54.1
	120	2.155	142.2	118.5	101.6	88.9	79.0	71.1	64.7	59.3
4916 120	60	1.917	126.5	105.4	90.4	79.1	70.3	63.2	57.5	52.7
	80	2.213	146.1	121.7	104.3	91.3	81.1	73.0	66.4	60.9
	100	2.474	163.3	136.1	116.6	102.1	90.7	81.7	74.2	68.0
	120	2.710	178.9	149.1	127.8	111.8	99.4	89.4	81.3	74.5

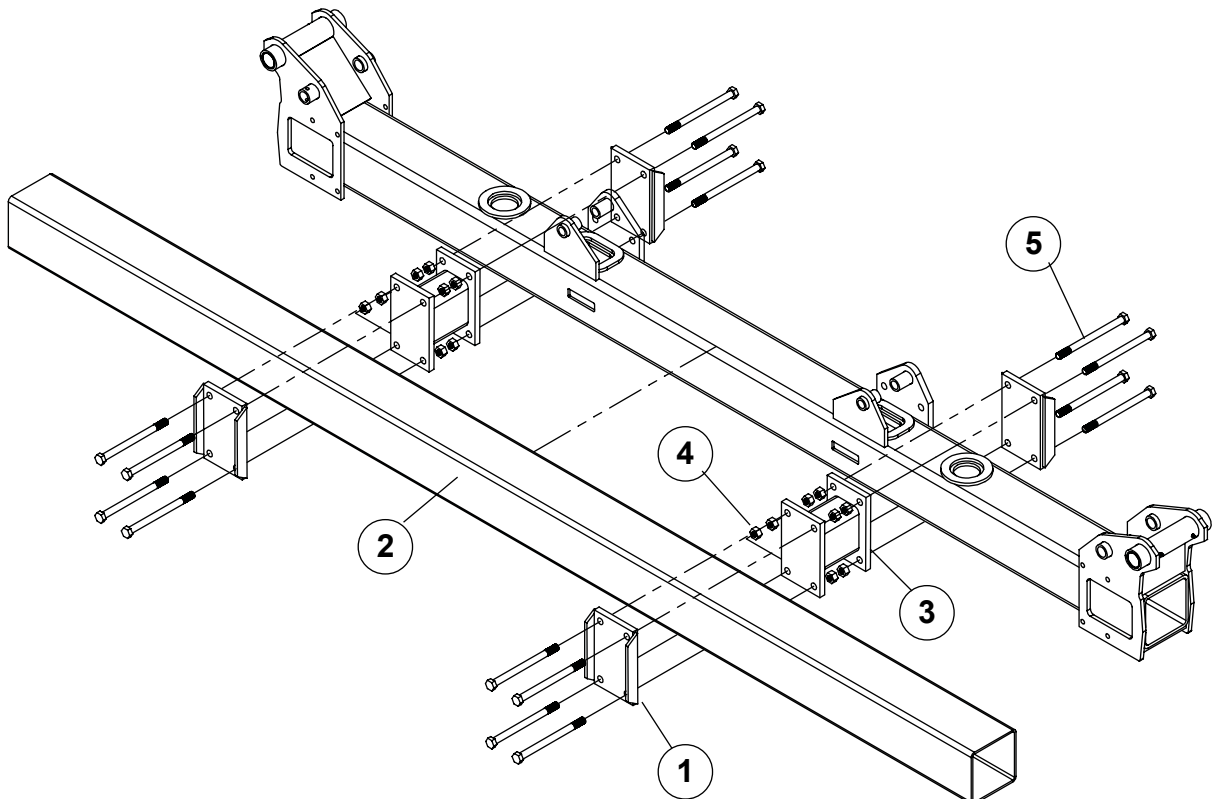
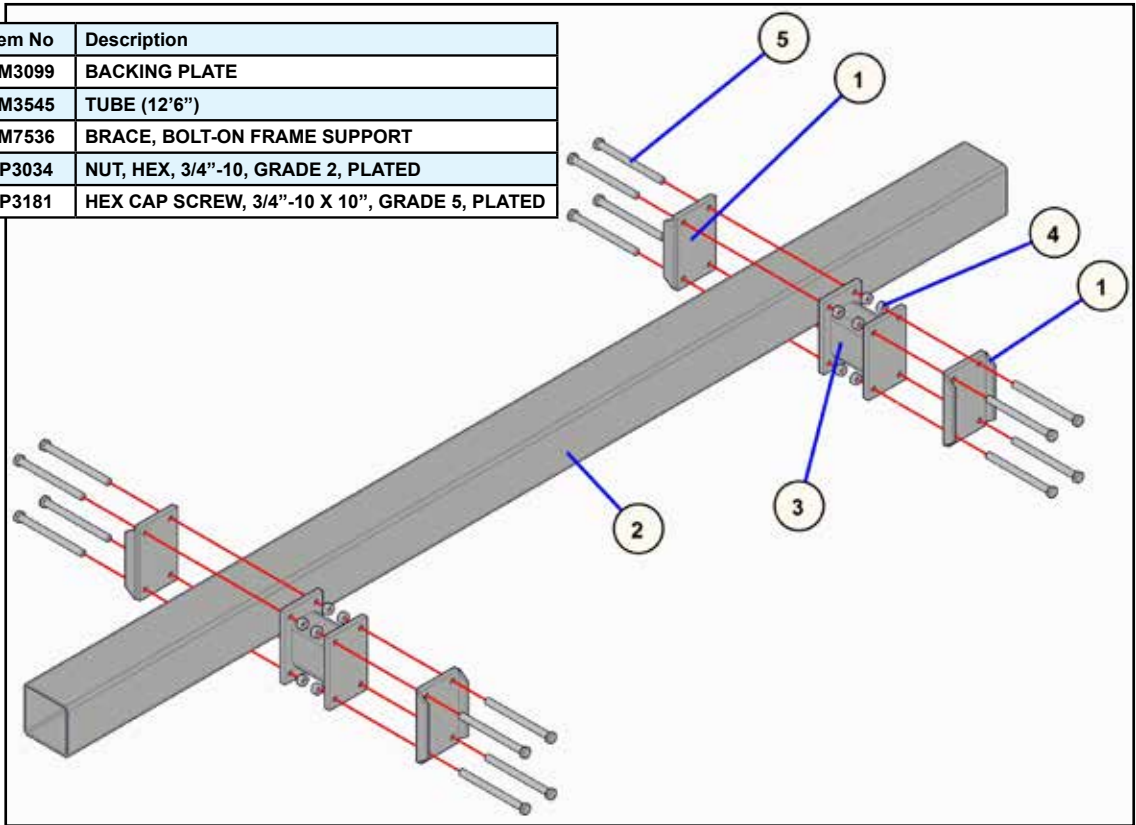
The 4916 series of orifices are available in many sizes falling between those listed on this chart.

* Standard equipment sizes.

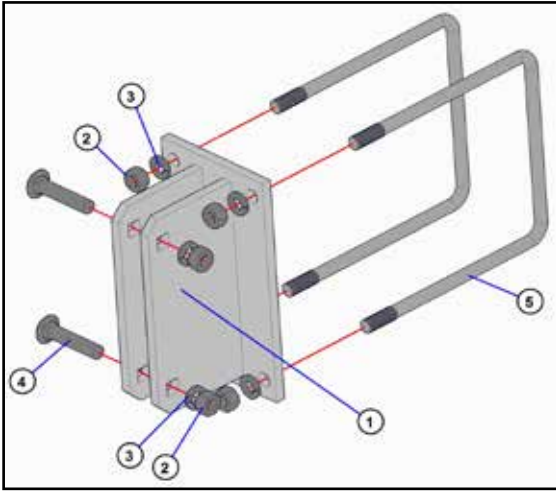
AT3000

► **AAM2647 Coulter Bar, Bolt-on, AT Liquid Gull Wing, Center**

BOM ID	Qty	Item No	Description
1	4	AM3099	BACKING PLATE
2	1	AM3545	TUBE (12'6")
3	2	AM7536	BRACE, BOLT-ON FRAME SUPPORT
4	16	BP3034	NUT, HEX, 3/4"-10, GRADE 2, PLATED
5	16	BP3181	HEX CAP SCREW, 3/4"-10 X 10", GRADE 5, PLATED

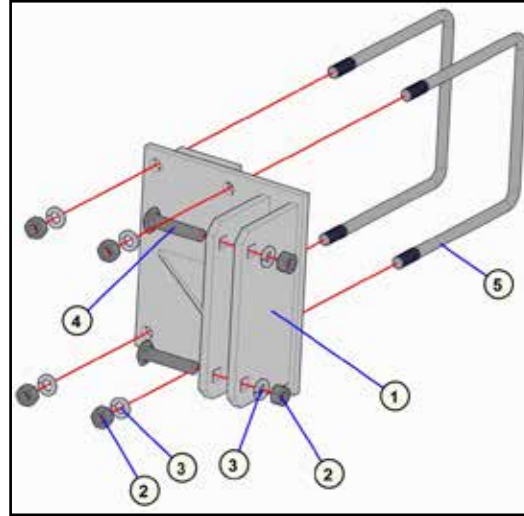


AT3000



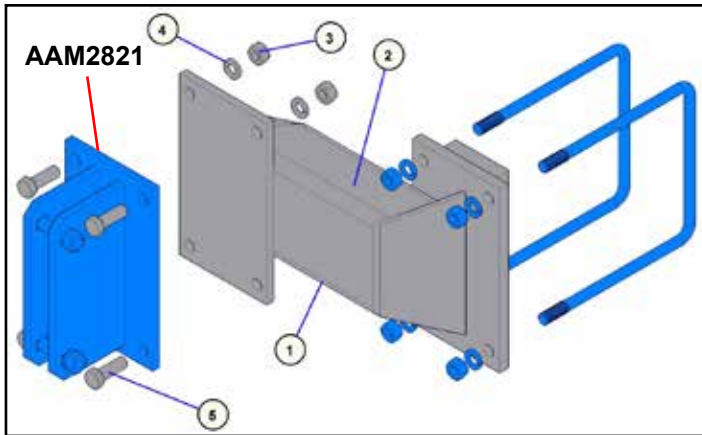
AAM2821 Couler, Flatback Centered Assembly, 7" x 7"

BOM ID	Qty	Item No	Description
1	1	AM4425	BRACKET, FLATBACK, 7" X 7", CENTERED
2	6	BP3042	NUT, HEX, 1/2"-13, GRADE 2, PLATED
3	6	BP3043	WASHER, LOCK, 1/2", PLATED
4	2	BP3229	BOLT, CARRIAGE, 1/2"-13 X 2-1/2", GRADE 5, PLATED
5	2	BP3356	U-BOLT, 1/2"-13 X 7"W X 8-1/4"L, GLOSS BLACK



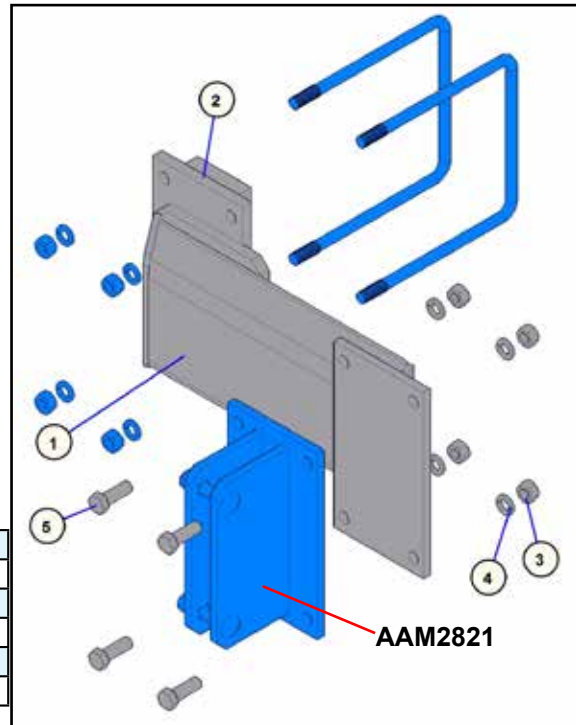
AAM2822 Couler, Flatback Offset Assembly, 7" x 7"

BOM ID	Qty	Item No	Description
1	1	AM4435	BRACKET, FLATBACK, 7" X 7", OFFSET
2	6	BP3042	NUT, HEX, 1/2"-13, GRADE 2, PLATED
3	6	BP3043	WASHER, LOCK, 1/2", PLATED
4	2	BP3229	BOLT, CARRIAGE, 1/2"-13 X 2-1/2", GRADE 5, PLATED
5	2	BP3356	U-BOLT, 1/2"-13 X 7"W X 8-1/4"L, GLOSS BLACK



► **AAM2180 Bracket, Offset, 10" X 4", With Hardware, 7" X 7" Flatback**

BOM ID	Qty	Item No	Description
1	1	AAM2180	BRACKET, OFFSET, 10" X 4", WITH HARDWARE, 7" X 7" FLATBACK
2	1	AM3574	BRACKET, OFFSET, 10" X 4", FOR 7" X 7" FLATBACK
3	4	BP3042	NUT, HEX, 1/2"-13, GRADE 2, PLATED
4	4	BP3043	WASHER, LOCK, 1/2", PLATED
5	4	BP3126	HEX CAP SCREW, 1/2"-13 X 1-1/2", GRADE 5, PLATED

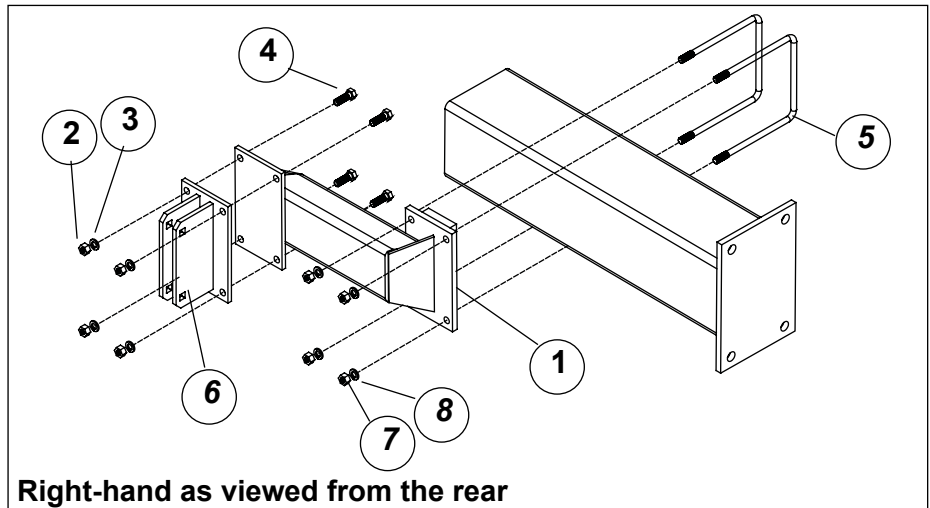
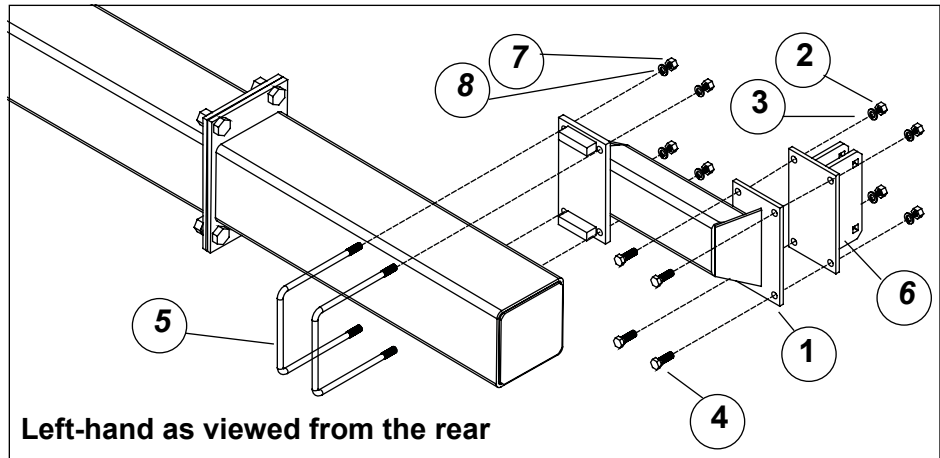


► **AAM2179 Bracket, Offset, 14" X 3-3/8", With Hardware, 7" X 7" Flatback**

BOM ID	Qty	Item No	Description
1	1	AAM2179	BRACKET, OFFSET, 14" X 3-3/8", WITH HARDWARE, 7" X 7" FLATBACK
2	1	AM7134	BRACKET, OFFSET, 14" X 4-3/8", FOR 7" X 7" FLATBACK
3	4	BP3042	NUT, HEX, 1/2"-13, GRADE 2, PLATED
4	4	BP3043	WASHER, LOCK, 1/2", PLATED
5	4	BP3126	HEX CAP SCREW, 1/2"-13 X 1-1/2", GRADE 5, PLATED

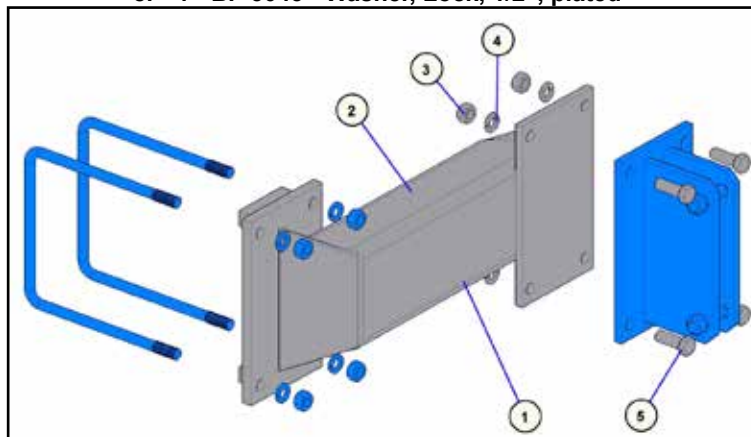
AT3000

► Offset Bracket
AAM2721



Part of the couler assembly

- 5. 2 BP 3356 U-bolt, 1/2"-13 x 7"W x 8-1/4"L, gloss Black
- 6. 1 AM 4425 Flatback 7" x 7" couler bracket
- 7. 4 BP 3042 Nut, Hex, 1/2"-13, grade 2, plated
- 8. 4 BP 3043 Washer, Lock, 1/2", plated



► **AAM2721 Bracket, Offset, 15" X 4", With Hardware, 7" X 7" Flatback**

BOM ID	Qty	Item No	Description
1	1	AAM2721	BRACKET, OFFSET, 15"X 4", WITH HARDWARE, 7"X 7" FLATBACK
2	1	AM3640	BRACKET, OFFSET, 15"X 4", FOR 7" X 7" FLATBACK
3	4	BP3042	NUT, HEX, 1/2"-13, GRADE 2, PLATED
4	4	BP3043	WASHER, LOCK, 1/2", PLATED
5	4	BP3126	HEX CAP SCREW, 1/2"-13 X 1-1/2", GRADE 5, PLATED

AT3000

With cylinder removed from machine, clean, drained of oil and fully retracted, proceed as follows:

Disassembly:

1. Secure cylinder in vice or other method to prevent rotation. With the immediate area clean of dirt so parts can be laid out.
2. Remove tie-rod nuts, item (1).
3. Pull rod assembly from cylinder. Remove tube item (3).
4. Loosen nut, item (4), and remove clevis, item (5), from rod assembly.
5. Place rod assembly in vice with copper or brass jaws so as not to damage.
6. Remove all seals from items (6), (8), and (9) for replacement. Clean and inspect all parts, for damage (nicks, scratches, cracks and etc.) replace as necessary. If you have any question please contact Prince Hydraulics (712) 235-1220.

Reassembly:

1. Replace all seals in items (6), (8), and (9). Do not replace small O-ring on ID of piston item, (8) until ready to attach rod, item (2).
2. Place small ID O-ring seal for piston over rod turndown and apply light coat of grease to seal. Slip piston, item (8) onto turndown with ID counter bore towards rod shoulder. Take care not to pinch O-ring between piston and rod shoulder. Replace nut, item (7), and secure.
3. Apply light coat of grease to seals in gland, item (6), and slip gland over rod end, carefully so as not to damage seals. Slip entire assembly into lightly oiled tube, item (3), piston first. Insure tube slips up over OD seals of gland.
4. Take total assembly in step 3 and slip tube over OD seal on butt, item (9). Align ports in butt and gland and apply nuts, item (1), to tie-rods and torque uniformly.

Tierod

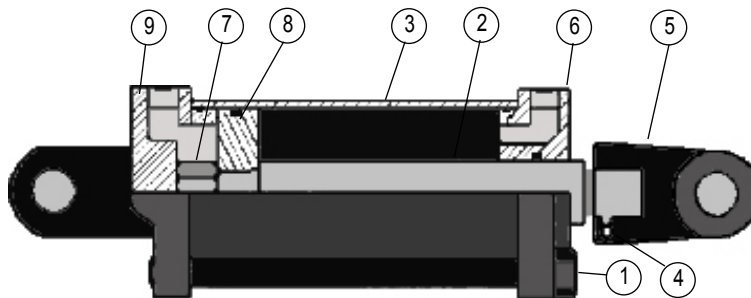
3/8" tierods 20-23 ft./lbs. (27-31 Nm)

1/2" tierods 45-52 ft./lbs. (61-70 Nm)

5/8" tierods 95-105 ft./lbs. (129-142 Nm)

3/4" tierods 150-165 ft./lbs (203-224 Nm)

5. Test for leaks and reinstall in machine. If you have any problems contact Prince Hydraulics (712) 235-1220.



WARNING Make sure you perform the required service and adjustments correctly. Failure will damage machine or injure operator.

6. The hydraulic system **MUST** have the air removed from the system after initial machine set-up or following the repair or replacement of any part of the system.
7. Connect implement to the tractor drawbar correctly before operating or making any adjustments.



Hydraulic Cylinders And Parts

AT3000

MFG # TMC #	Bore/Stroke					
		Repair Kit	Clevis	Butt	Gland	Piston
SAE-34020 DP 4375	4" X 20"	PMCK-SAE-34000 DP4310	100000326 DP4115	141900037 DP4270	081900354 DP4326	071900260 DP4328
SAE-34008SP DP 4490	4" X 8"	PMCK-SAE-34000 DP4310	100000326 DP 4115	141900037 DP4270	081900354 DP4326	071900260 DP4328
SAE-33008 DP 4494	3" X 8"	PMCK-SAE-33000 DP4308	100000423 DP4116	141500043 DP4250	081500323 DP4324	071500244 DP4330
SAE-33020SP DP 4492	3" X 20"	PMCK-SAE-33000 DP4308	100000423 DP4116	141500043 DP4250	081500323 DP4324	071500244 DP4330

MFG # TMC#	Piston Rod	Barrel	4 Req Tie Rod	2 Req Clevis Pin	4 Req Cotter Pin
SAE-34020 DP 4375	011000323 DP4357	051900014 DP4353	170301252 DP4354	190400035 BP3497	220001504 BP3511
SAE-34008SP DP 4490	011000318 DP4448	051900008 DP4449	170301132 DP4450	190400035 BP 3497	220001504 BP3511
SAE-33008 DP 4494	010700431 DP4429	051500007 DP4430	170201121 DP4431	190400001 BP3403	220001504 BP3511
SAE-33020SP DP 4492	010700437 DP4441	051500013 DP4442	170201241 DP4443	190400001 BP3403	220001504 BP3511


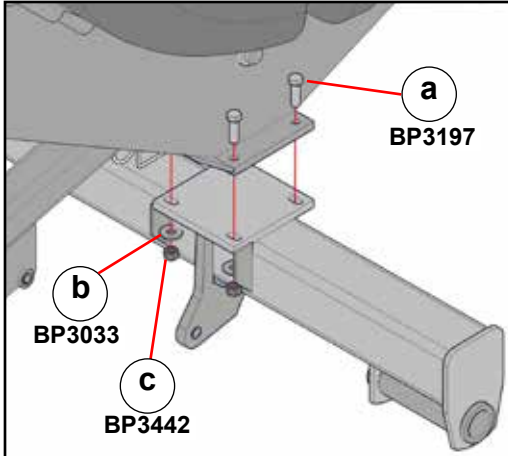
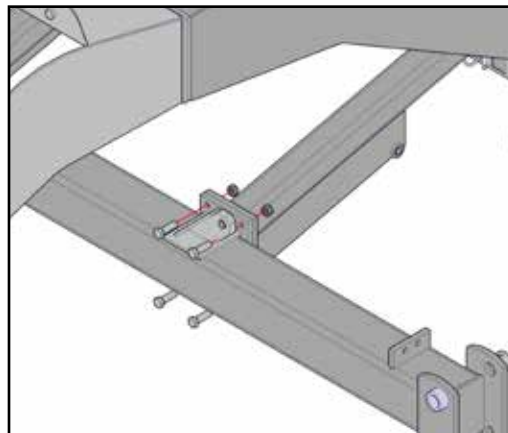
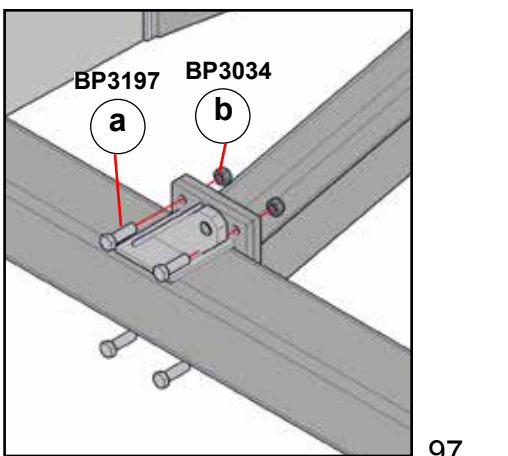


Specifications

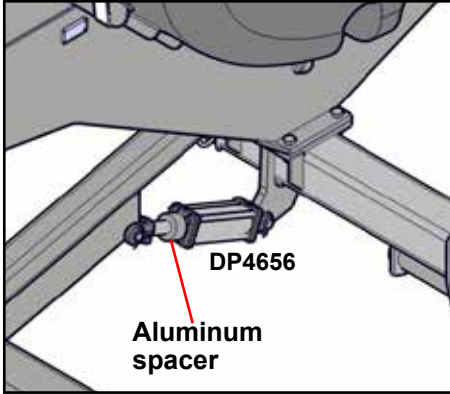

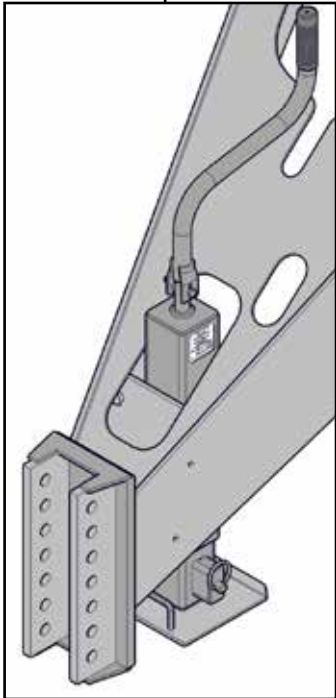
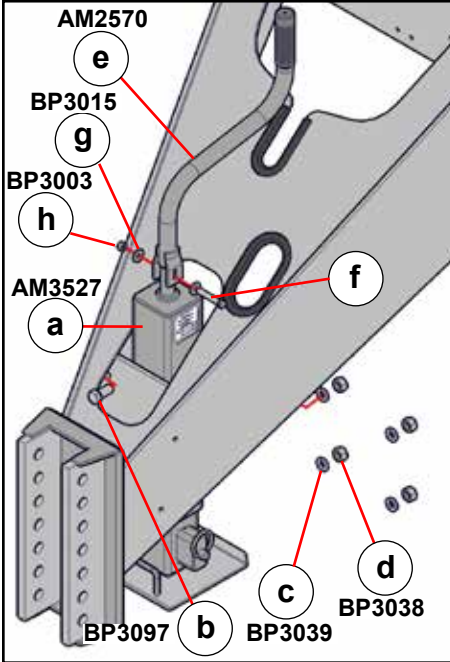
AT3000

- ▶ **Tank** Tank.....1000 Gallon Elliptical
- ▶ **Hitch** Drawbar Connection.....Category III Cast Tongue
- ▶ **Safety Chain** Safety Chain.....20,000 lbs.
- ▶ **Hydraulics** Center Section Lift Cylinders.....Two 3" x 8" 3000 PSI Side Ported
Standard Tool Bar Primary Cylinders.....Two 3" x 20" 3000 PSI
Gull Wing Tool Bar Primary Wing Cylinders.....Two 4" x 20" 3000 PSI
Secondary Wing Cylinders.....Two 3" x 20" 3000 PSI
- ▶ **Wheels and Tires** Rim..... 8 Bolt, 38" x 10" White AR&W
Tire.....12.4-38 14 Ply Tubeless
Wheel Bolt Torque..... 85 to 100 ft/lbs.
Tire Pressure.....56 P.S.I. Maximum
- ▶ **Pump Drive Tire** Tire.....155/80R12
Tire Pressure..... 44 P.S.I. Maximum
- ▶ **Parking Jack** Top Wind Jack..... 9,000 lbs. Capacity
- ▶ **Tractor Requirements** Two Hydraulic Remotes.....1,800 PSI
Electrical System.....12 volt, with 7 Pin Connector
- ▶ **Blade Size** Blade Size.....20 inch Smooth
- ▶ **AT3000 Models**

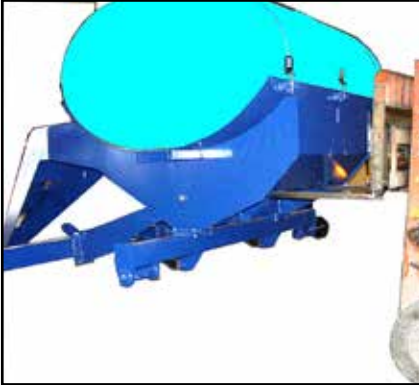





Models	Transport Width	Transport Height	Weight
11 Row 30" Standard	13'-4"	11'-6"	6190 lbs.
13 Row 30" Standard	15'-0"	13'-8"	6695 lbs.
11R30/15R30	16'-10"	12'-0"	7819 lbs.
17 Row 30"	17'-0"	12'-8"	8640 lbs.

AT3000	Task	Procedures	Illustrations
<p>▶</p> <p>▶</p> <p>▶</p>	<p>Mounting axle to main frame assembly</p> <p>WARNING Keep bystanders away during assembly</p> <p>NOTE: Consult row spacing pages for axle size</p>	<ol style="list-style-type: none"> 1. Raise main frame assembly rear with forklift or hoist until the axle can be positioned on assembly weldments. NOTE: Main frame (AAM2648) assembly instructions for export units can be found beginning on page 185. 2. Secure axle to main frame with (a) 8 (BP3197) 3/4" x 2-1/2" hex cap screws, (b) (BP3033) 3/4" flat washers and (c) 8 (BP3442) 3/4" lock hex nuts. NOTE: Flat washers are used on slotted hole side only. 	 
<p>▶</p>	<p>Installing tool bar to lift arm</p>	<ol style="list-style-type: none"> 3. Position (AM3523) standard toolbar AT3000 7'5" or (AM3528) gull wing center section on arm weldments. 4. Secure toolbar to lift arm with (a) (BP3197) 3/4" x 2-1/2" hex cap screws, grade 8, and (b) (BP3442) 3/4" lock hex nuts. 	 







Assembly (Lift Cylinders and Jack)

AT3000	Task	Procedures	Illustrations
<p>▶ Installing lift arm cylinders</p> <p>▶ NOTE: Before mounting lift cylinders remove clevis and install EM7236 1-1/2" ID x 3" OD Aluminum x 1-7/8", Hydraulic cylinder spacer</p>		<ol style="list-style-type: none"> 1. Attach (DP4656) 3" x 8" 3000 psi, side ported cylinders to axle weldment with cylinder pins and cotter keys provided with cylinders. 2. Raise the tool bar and arm assembly with the forklift until the rod end of the cylinder can be attached to the lift arm. Secure with cylinder pins and cotter keys provided with cylinders. 3. Slowly lower the front of the tool bar assembly on two blocks. 	 <p>DP4656 Aluminum spacer</p> 
<p>▶ Installing jack with crank</p> 		<ol style="list-style-type: none"> 4. Raise the tongue and place a 4" x 6" block under hitch. Insert (a) (AM3527) 9TW25DL jack inside tongue weldment and secure jack with four (b) (BP3097) 5/8" x 1-1/2" hex cap screws, (c) (BP3039) 5/8" lock washers and (d) (BP3038) 5/8" hex nuts. 5. Install (e) (AM2570) crank with grip with one (f) (BP3096) 3/8" x 2-1/2" hex cap screw. Place one (g) (BP3015) 3/8" flat washer on each side of the 3/8" hex cap screw and secure with (h) (BP3003) 3/8" hex lock nut. Do not over tighten, crank must move freely. 	 <p>AM2570 BP3015 BP3003 AM3527 BP3097 BP3039 BP3038 a b c d e f g h</p>

Assembly (Hub and Spindle)

AT3000	Task	Procedures	Illustrations
<p>▶</p> <p>▶</p> <p>▶</p>	<p>Mounting the hub and spindle assembly</p> <p>WARNING Keep bystanders away during assembly</p> <p>Mounting the hub and spindle assembly</p>	<ol style="list-style-type: none"> 1. Carefully insert fork lift teeth under tank assembly. Raise frame slowly until the hub and spindles can be inserted into axle. 2. Turn set screws out so hub and spindle can be inserted. 3. Apply anti-seize inside axle weldment and on spindle. 4. Insert hub and spindle AAM2800-1 608 hub 2-3/4" x 16" hub and spindle into axle weldment. 5. Measure from face of hub to axle plate 4-3/4". 6. Tighten set screws. 7. Remove the hub lugs. 	    
			

Assembly (Mounting Wheels)

AT3000	Task	Procedures	Illustrations
<p>▶</p> <p>⚠</p> <p>▶</p>	<p>Mounting wheels</p> <p>WARNING Keep bystanders away during assembly</p> <p>NOTE: <i>Place the valve stem to the inside</i></p>	<ol style="list-style-type: none"> 1. Move wheel into position with forklift near hub. 2. Slowly raise the mainframe until the rim can be inserted on hub. 	 
<p>▶</p> <p>▶</p> <p>▶</p>	<p>NOTE: <i>Wheel tread direction of travel</i></p> <p>NOTE: <i>Consult row spacing drawings for tire spacing</i></p> <p>NOTE: <i>Install AM4597 hub cap strap</i></p>	<ol style="list-style-type: none"> 3. Tighten lug nuts evenly and torque to 150-180ft. lbs. (Tire pressure should be 56 P.S.I. Maximum.) 4. Before removing forklift check spacing between tires. Spacing should be 120" from center to center of the tires. 	
			
			

AT3000

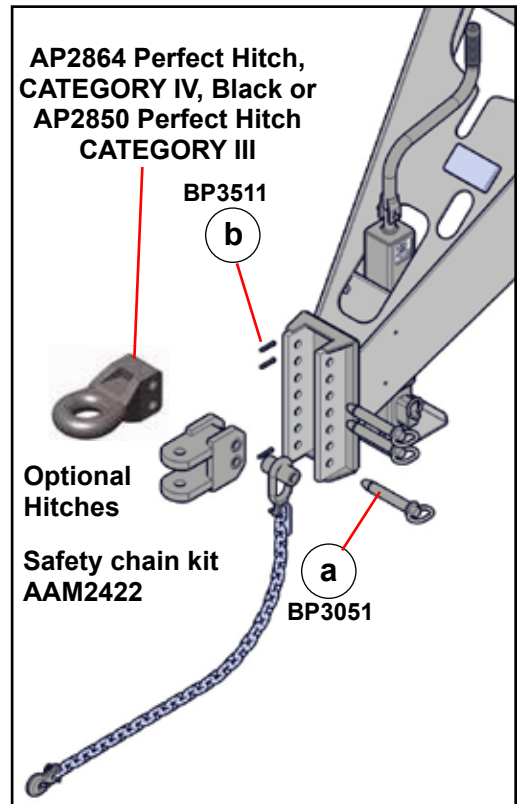
Task

Procedures

Illustrations

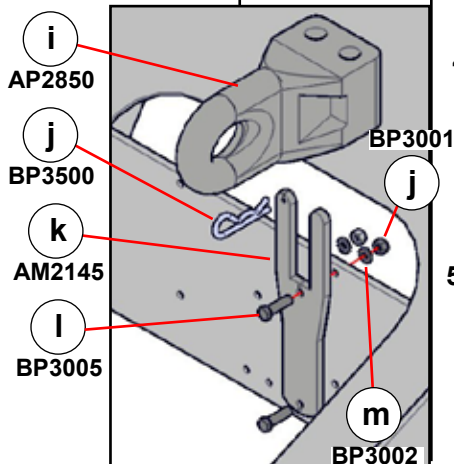
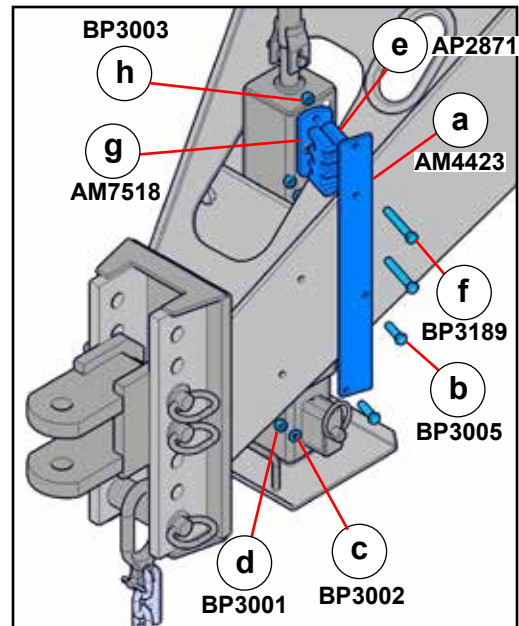
▶ **Attaching hitch and safety chain**

1. Install hitch and safety chain to tongue connector with (a) (BP3051) 1" x 6" hitch pins. Secure with (b) (BP3511) cotter pins 3/16" X 1-3/4".



▶ **Mounting hose holder**

2. Attach (a) (AM4423) hose holder strap to tongue with two (b) (BP3005) 3/8" x 1-1/2" hex cap screws. Secure with (c) (BP3002) 3/8" lock washers and (d) (BP3001) 3/8" hex nuts.
3. Mount (e) (AP2871) hose polyurethane retainer with two (f) (BP3189) 3/8" x 3-1/2" hex cap screws, (g) (AM7518) hose holder retainer and two (h) (BP3003) 3/8" hex lock nuts. *Do not tighten until hoses are inserted.*
4. Mount (k) (AM2145) 6" mounting hitch storage bracket to tongue frame with (l) (BP3005) 3/8" x 1-1/2" hex cap screws, (m) (BP3002) 3/8" lock washers, and (j) (BP3001) 3/8" hex nuts.



5. Place extra hitch on mount and secure with (j) (BP3500) 3/16" hair pin clip

Assembly (Standard Toolbar Wings, 26')

AT3000

Task

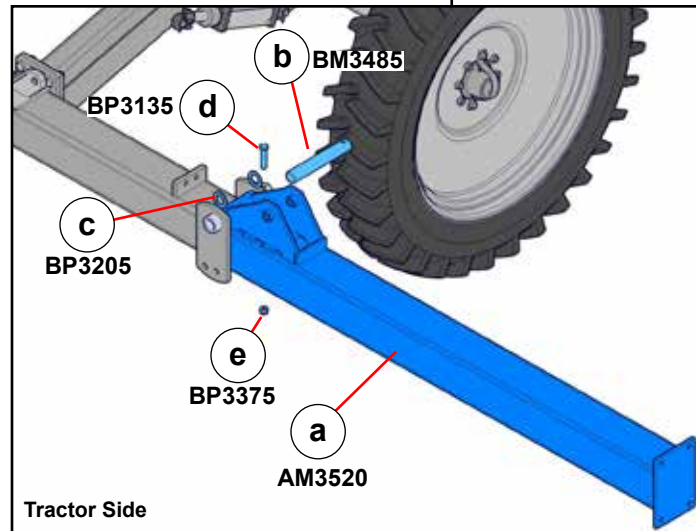
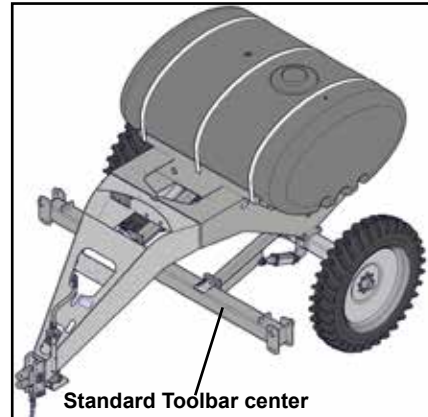
Procedures

Illustrations

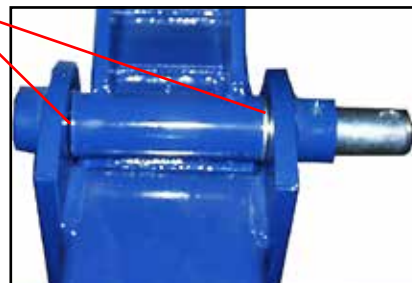
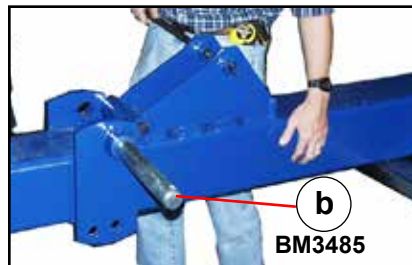
▶ Mounting Standard toolbar wings

▶ **NOTE:**
Right-hand and left-hand as viewed from the rear

1. Raise tool bar center frame and place on supports.



2. Position (a) (AM3520) standard toolbar wing 7'5" in center frame weldment and insert (b) (BM3485) 1-3/4" x 11-13/16" with 21/32 hole pin.
3. Place (c) (BP3205) 2-1/2" OD x 1-3/4" ID, 10 GA. machinery bushing on each side of the hinge weldment.
4. Secure pin with (d) (BP3135) 5/8" x 3-1/2", hex cap screw and (e) (BP3375) 5/8" nylock hex nut.



d BP3135

e BP3375

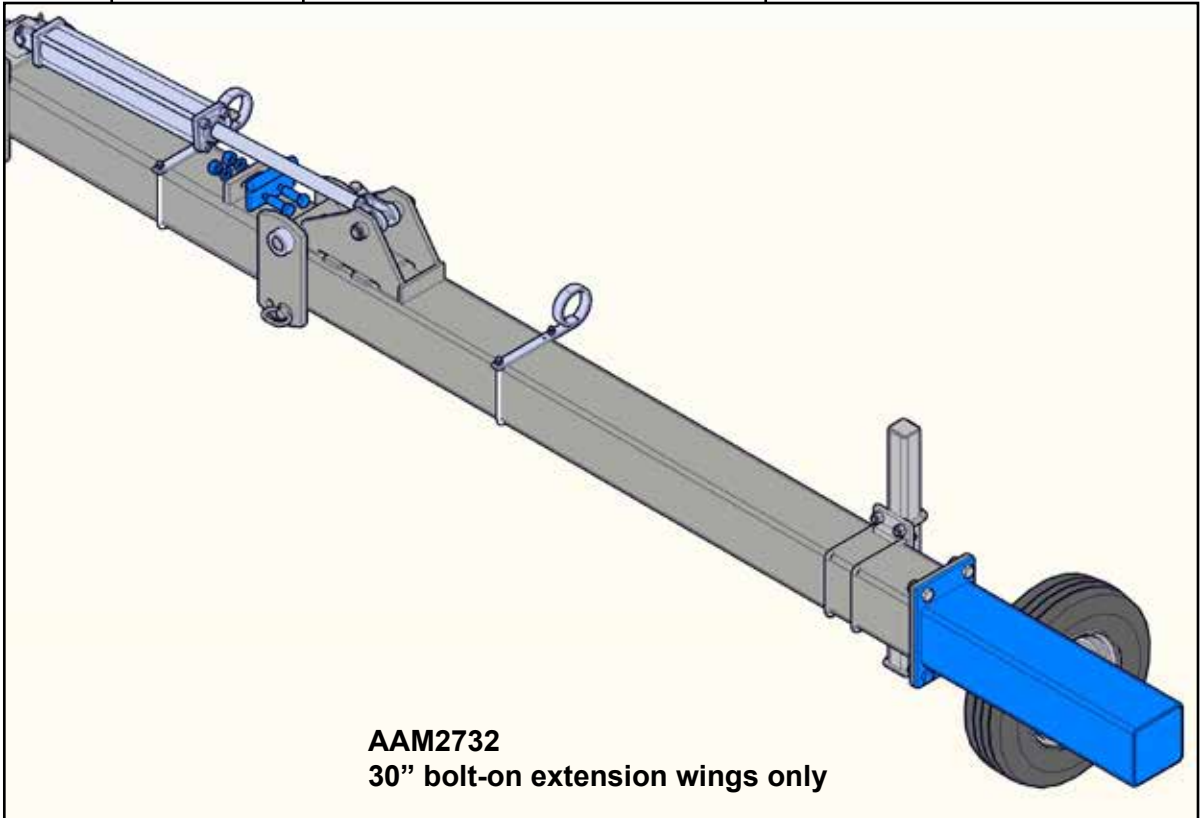
Assembly (Standard Toolbar Wing Stops, 31')

AT3000

Task

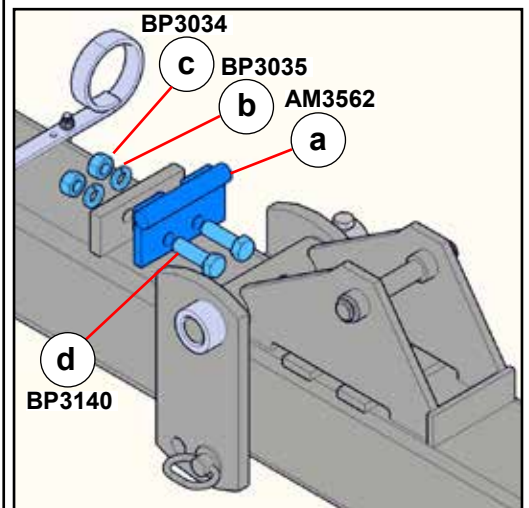
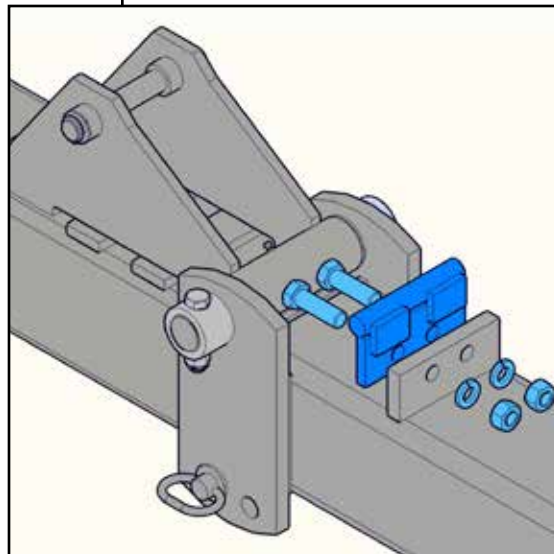
Procedures

Illustrations



NOTE:
Wing stops used with AAM2732 30" bolt-on extension wings only

1. Install (a) (AM3562) wing stops on the outside of center section weldment with (d) (BP3140) 3/4" x 2-1/2" hex cap screws, grade 5, plated (b) (BP3035) 3/4 lock washers and (c) (BP3034) 3/4" hex nuts.



Standard Tool Bar Assembly (Hydraulic Cylinders)

AT3000

Task

Procedures

Illustrations

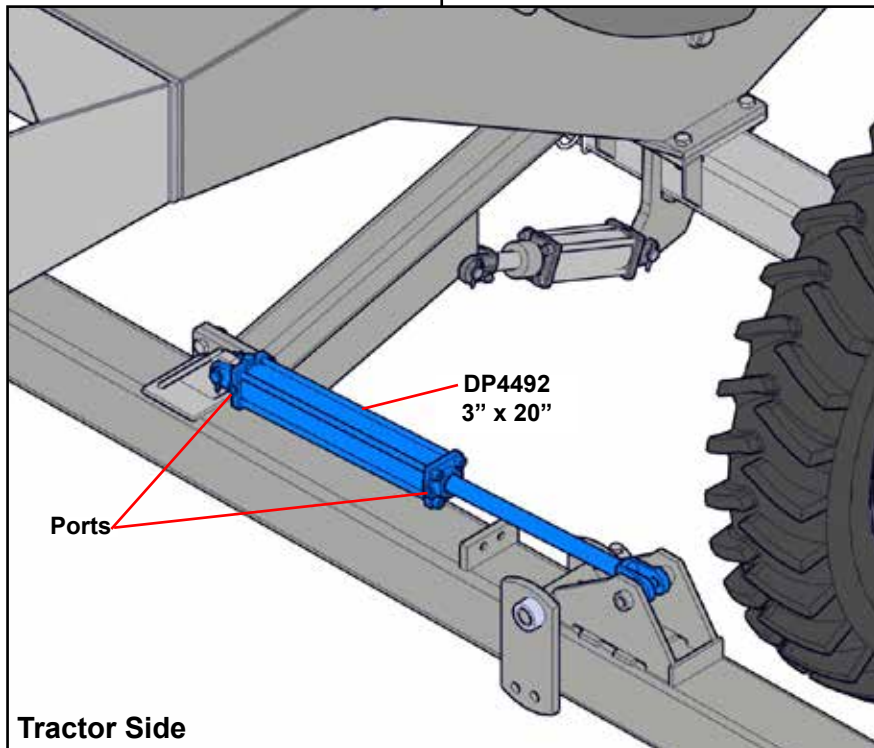
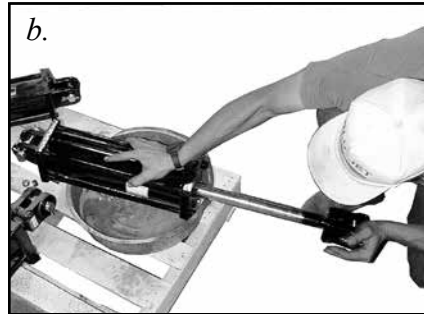
► Preparing hydraulic cylinders before installation

1. Remove cylinder plugs from cylinder (fig a).
2. Place cylinder, plug side down, over oil pan and pull cylinder rod in and out until the oil is removed (fig. b). In extended position, replace cylinder plugs loosely to prevent foreign matter from entering cylinder until fittings can be installed.

3. Mount (DP4492) 3" x 20" side part ported hydraulic cylinders on tool bar center frame cylinder lug with pins provided with cylinder.

NOTE: The cylinder ports must face the tractor.

Generic Examples



AT3000

Task

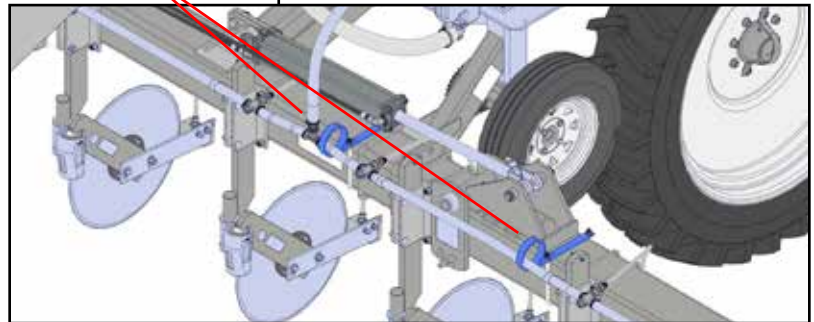
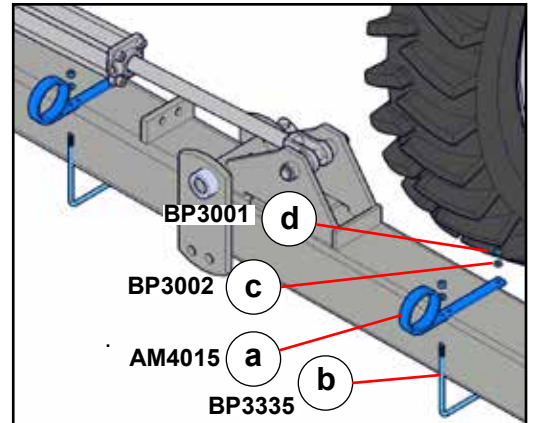
Procedures

Illustrations

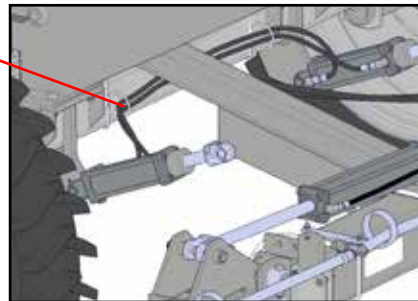
▶ **Mounting hose retainers**

1. Install two (a) (AM4015) close loop hose retainers near hinges on each side of the center toolbar and wing. Secure with (b) (BP3335) 3/8" x 7" W x 8" L u-bolt, (c) (BP3002) 3/8" lock washers and (d) (BP3001) 3/8" hex nuts.

Close loop hose retainers

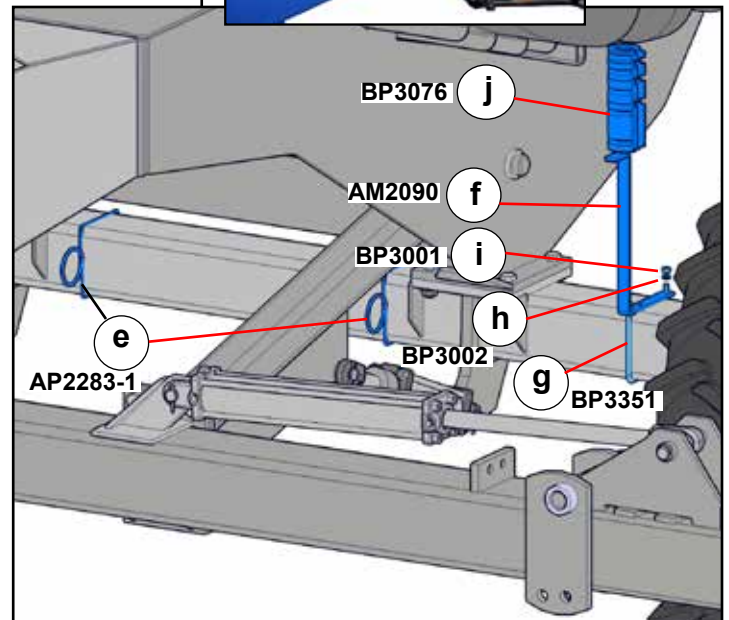


▶ **Attaching 6" x 6" hose retainers**



▶ **Mounting depth collar brackets**

2. Attach two (e) (AP2283-1) 6 x 6 hose retainers to center axle between cylinder lugs.
3. Mount (f) (AM2090) depth collar bracket on axle outside main frame. Secure with (g) (BP3351) 3/8" x 6" x 7" u-bolt, (h) (BP3002) 3/8" lock washers and (i) (BP3001) 3/8" hex nuts.
4. Place (j) (BP3076) depth collar set on each bracket.



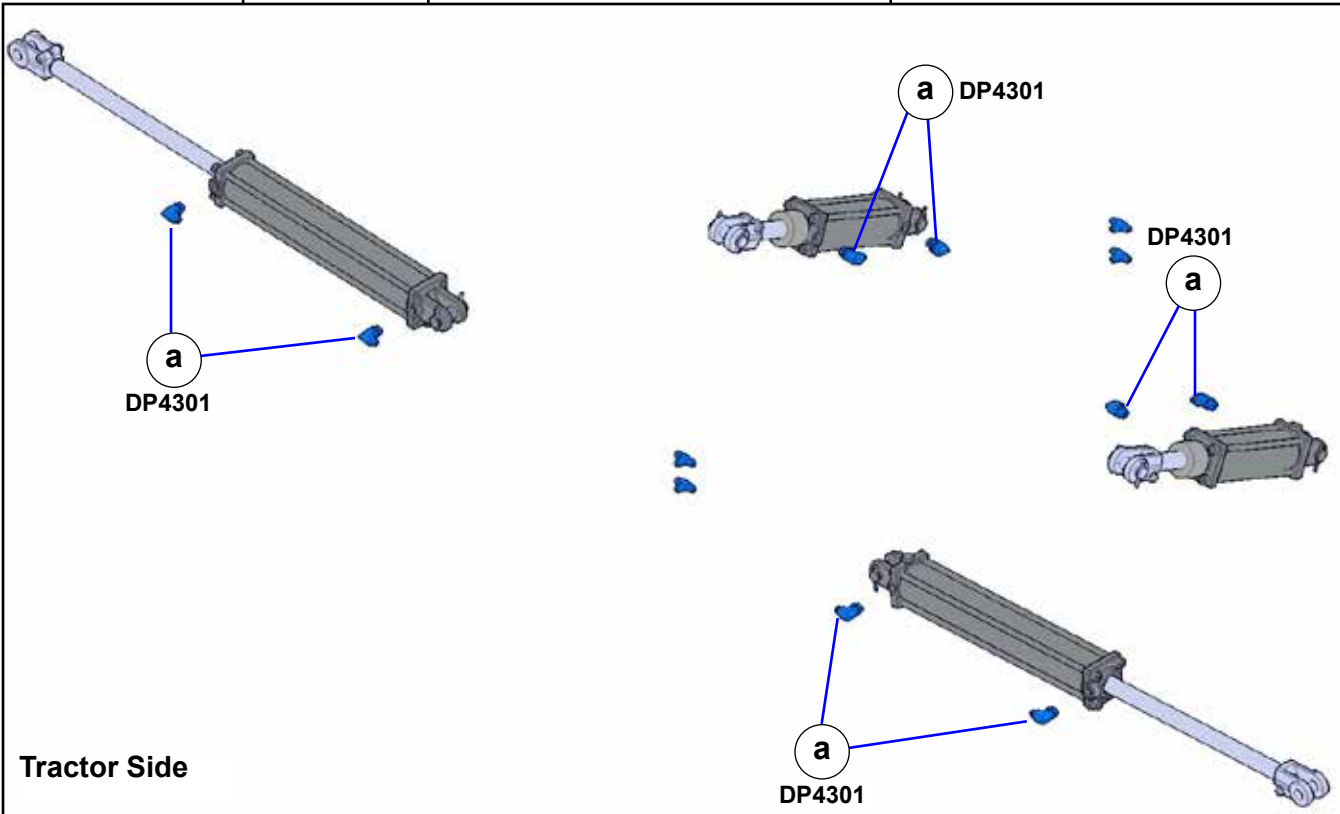
Standard Tool Bar Assembly (Cylinder Fittings)

AT3000

Task

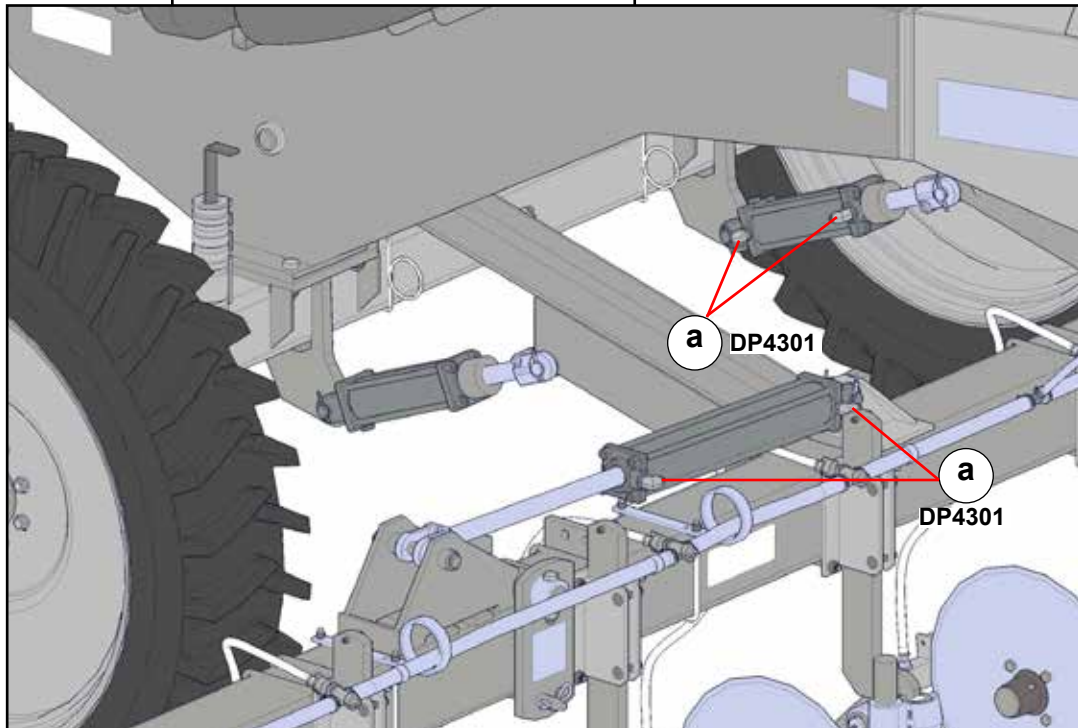
Procedures

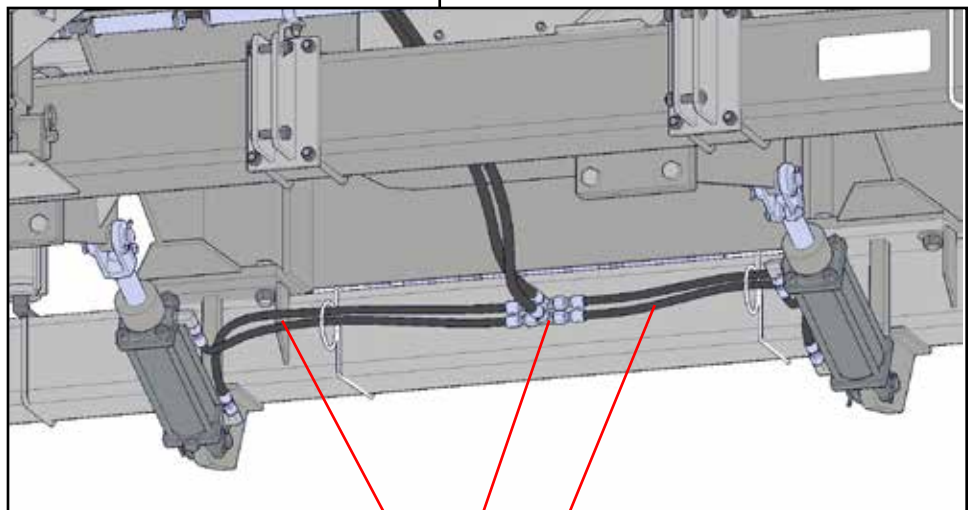
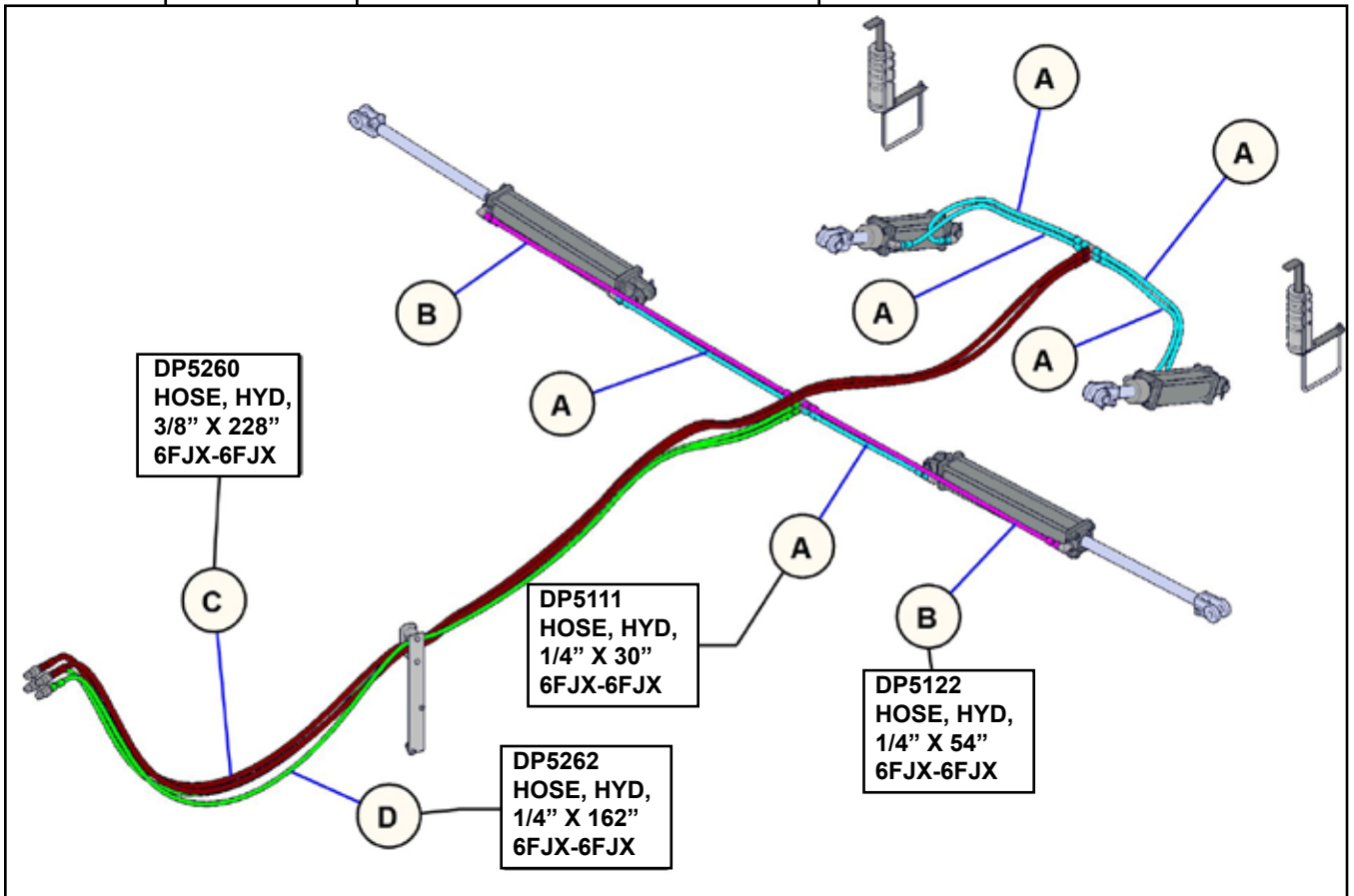
Illustrations



Standard tool bar hydraulics

1. Install eight (a) (DP4301) 6MJ-8MSAE, 90 degree adapters in all four cylinders.





DP5111 (A) (1) (A) DP5111
DP4004

1. Attach four (A) (DP5111) 1/4" x 30" (2'6"), 6FJX-6FJX hydraulic hoses to cylinder fittings and extend to center. Install (1) (DP4004) 6MJ-6MJ-6MJ tees.

Standard Toolbar Assembly (Hydraulic Hoses)

AT3000

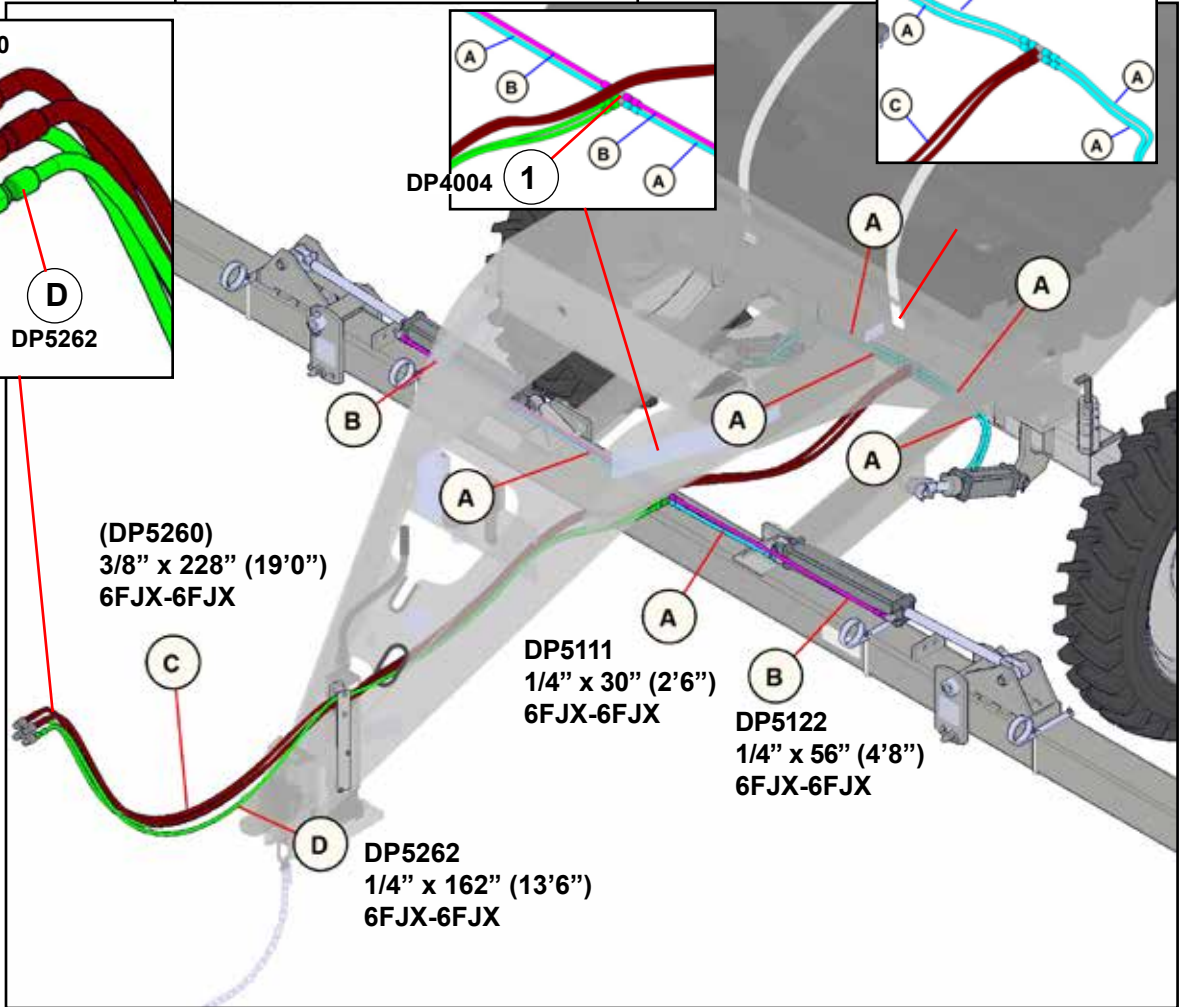
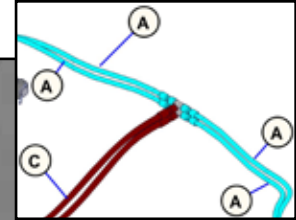
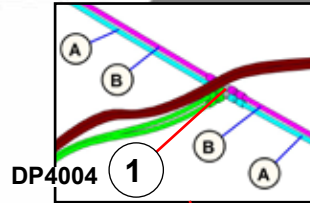
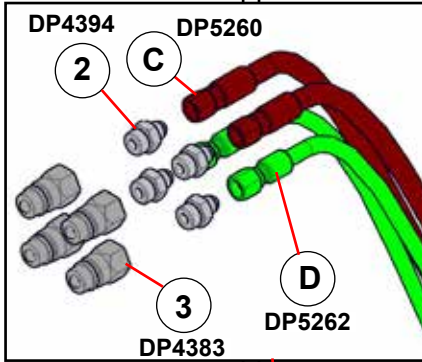
Task

Procedures

Illustrations

Standard tool bar hydraulics

1. Attach (C) (DP5260) 3/8" x 228" (19'0"), 6FJX-6FJX hydraulic hoses to lift tees. Extend hoses to tractor as shown in diagram.


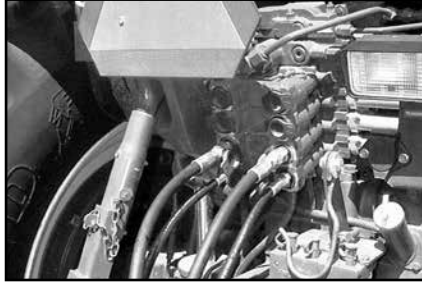
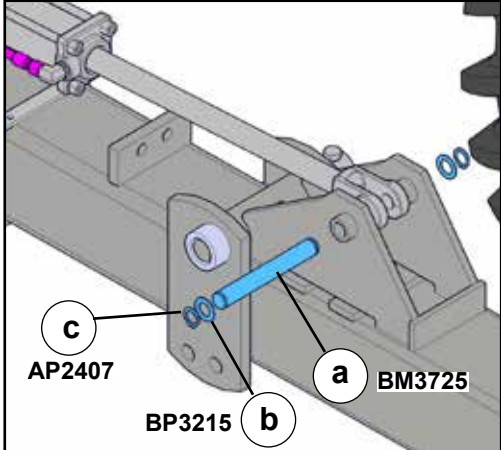



2. Attach (B) (DP5122) 1/4" x 56" (4'8"), 6FJX-6FJX to rod end of each side port, 3" x 20" cylinder. Extend to center of toolbar. Install (1) (DP4004) Tee, 6MJ-6MJ-6MJ.

3. Attach (A) (DP5111) 1/4" x 30" (2'6"), 6FJX-6FJX to butt end of each side port 3" x 20" cylinder. Extend to center of toolbar. Install (1) (DP4004) Tee, 6MJ-6MJ-6MJ.

4. Install two (D) (DP5262) 1/4" x 162" (13'6"), 6FJX-6FJX on (1) (DP4004) tees, 6MJ-6MJ-6MJ. Extend hoses to tractor as shown in diagram.

5. Install four (2) (DP4394) 8MSAE-6MJIC adapters and four (3) (DP4383) 8FSAE pioneer nipples.

	<h2 style="text-align: center;">Standard Toolbar Assembly (Hydraulic Hoses)</h2>		
AT3000	Task	Procedures	Illustrations
<p>▶ Connecting hydraulic hoses</p> <p>⚠ CAUTION Always hook tool bar to tractor before filling oil lines.</p> <p>▶ Charging the wing cylinders</p> <p>▶ NOTE: Cylinder should be blocked high enough to avoid damage to wings when rods are extend hydraulically</p> <p>⚠ CAUTION Always hook tool-bar to tractor before filling oil lines.</p> <p>▶ NOTE: Charging a hydraulic system will remove oil from a tractors hydraulic reservoir. Be sure to check tractor oil level after charging a new system</p>	<p>1. Connecting hydraulic hoses</p> <p>2. Charging the wing cylinders</p>	<p>1. Connect the hydraulic hoses to the tractor remote couplers. The 3/8" hoses supply oil to the wheel lift cylinders. The 1/4" hoses supply oil to the wing cylinders. Mark 1/4" hose pairs with paint or tape. Mark hoses so that they are plugged in correctly each time.</p> <p>2. Before charging the wing cylinders block rod ends up.</p> <p>3. Attach AT3000 to tractor. Connect the hydraulic lines to tractor ports.</p> <p>4. Begin by holding the tractor remote lever in one direction until the cylinders are fully extended or retracted. Hold 1 minute to purge air from lines. Reverse the direction of the remote lever to charge the other side of the system. Hold 1 minute to purge air from lines. Continue process until cylinders are extending and retracting completely.</p> <p>5. Extend cylinder rod slowly until centered over wing linkage.</p> <p>6. Insert (a) (BM3725) 1" x 7-1/2" double groove pin into wing weldment through cylinder rod. Place (b) (BP3215) 1-1/2" x 1" 14 GA. machine bushings over pin ends and secure with (c) (AP2407) 1" external heavy duty snap rings .</p> <p>7. Repeat procedure on opposite wing linkage.</p>	<p>Generic example</p>  <p>WARNING Hydraulic fluid escaping under pressure can have enough force to penetrate the skin. Hydraulic fluid may also infect a minor cut or opening in the skin. If injured by escaping fluid, see doctor at once. Serious infection or reaction can result if medical treatment is not given immediately. Make sure all connections are tight and that hoses and lines are in good condition before applying pressure to the system. Relieve all pressure before disconnecting the lines or performing other work on the hydraulic systems.</p>  

Coulter Assembly

AT3000

Task

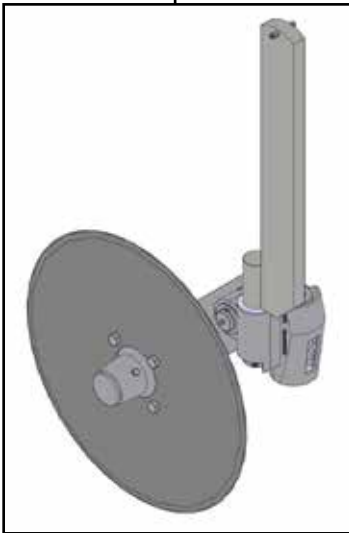
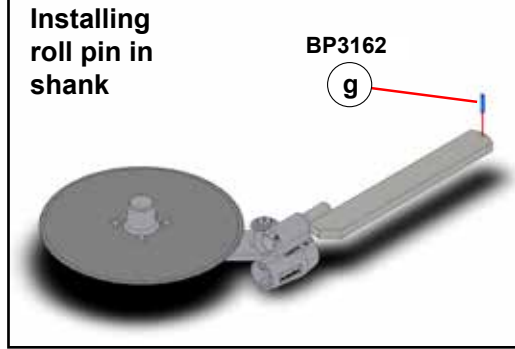
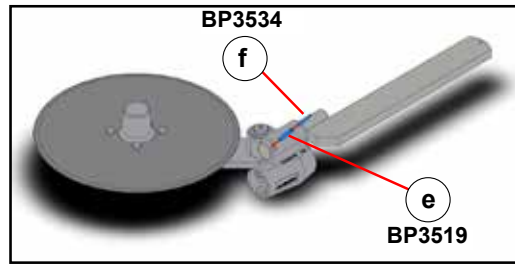
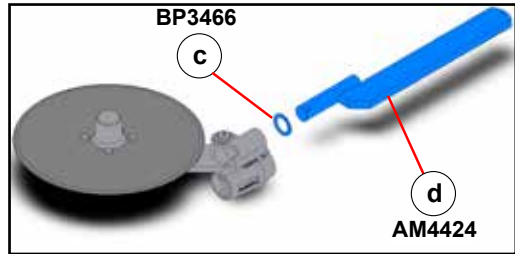
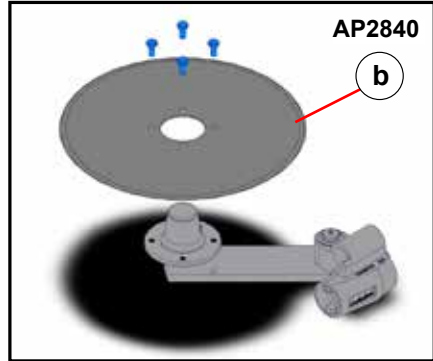
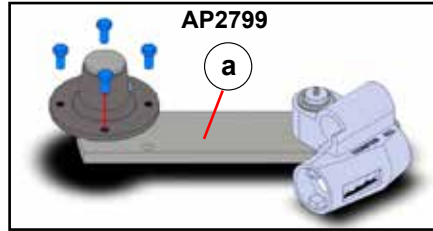
Procedures

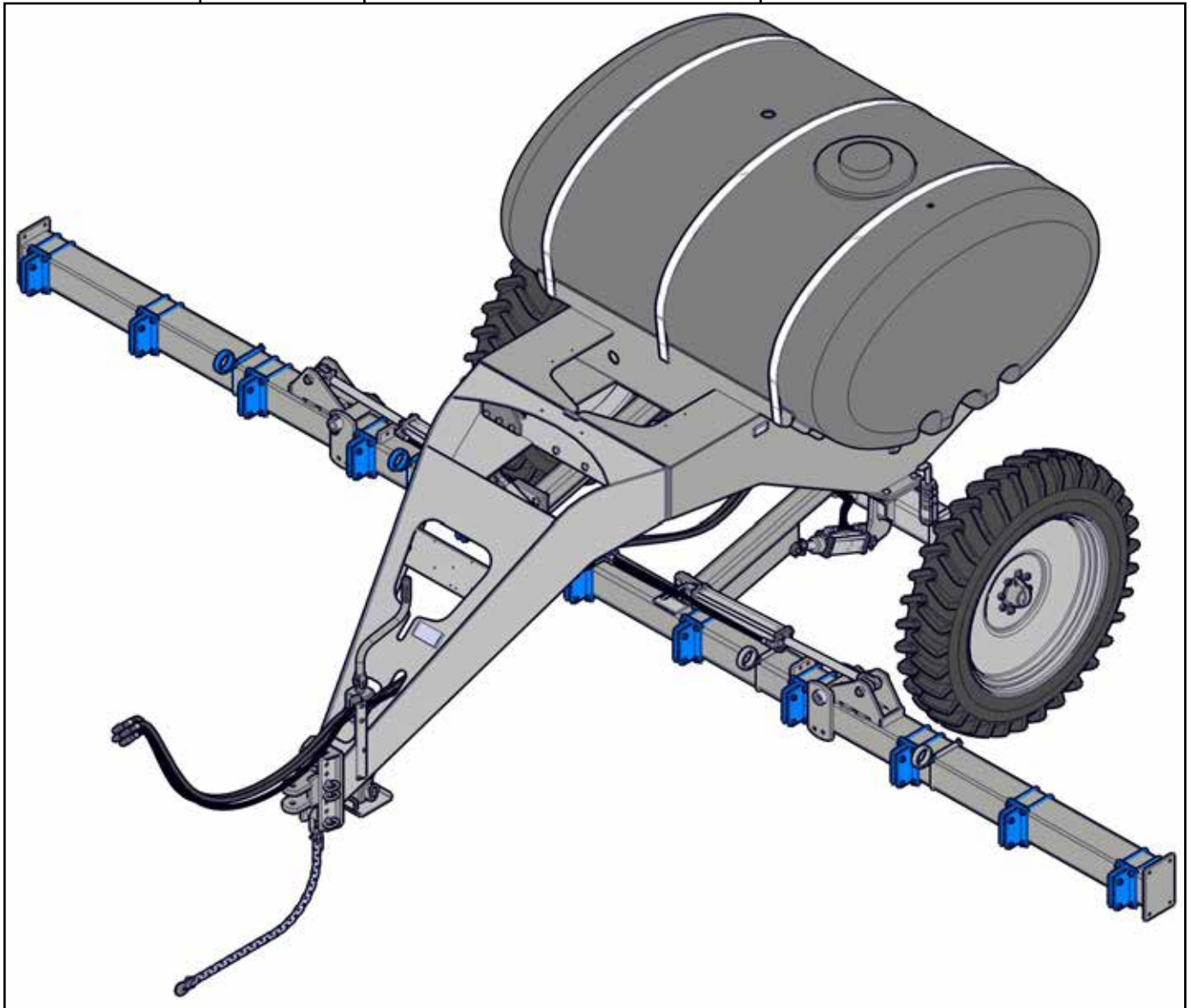
Illustrations

► Preparing coulters for mounting

1. Remove hex cap screws from hub (a) (AM2799) coulters arm with hub and knee casting assembly.
2. Place (AP2840) 20" smooth coulters blade on coulters assembly and replace hex cap screws.
3. Install (c) (BP3466) 2-1/2" OD x 1-3/4" ID, 10 GA., 18-8 SS machinery bushing over (d) (AM4424) 23" coulters shank weldment.
4. Insert the 23" coulters shank into coulters assembly. Start (e) (BP3519) 3/8" x 2-1/2" roll pin in base of coulters shank. Insert the (f) (BP3534) 7/32" x 2-1/2" roll pin in the end of the 3/8" roll pin and drive both pins together. Leave an equal amount of pin on each sides of the shank.
5. Install the (g) (BP3162) 3/8" x 2" roll pin through the shank weldment top hole.

AAM2728
Super 1200 coulters 1 row
(Blade not part of bundle.)

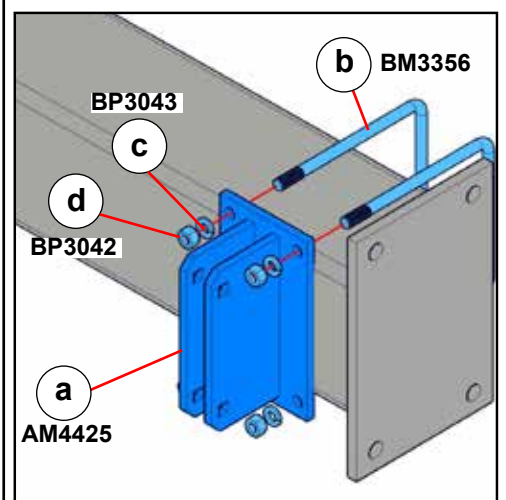


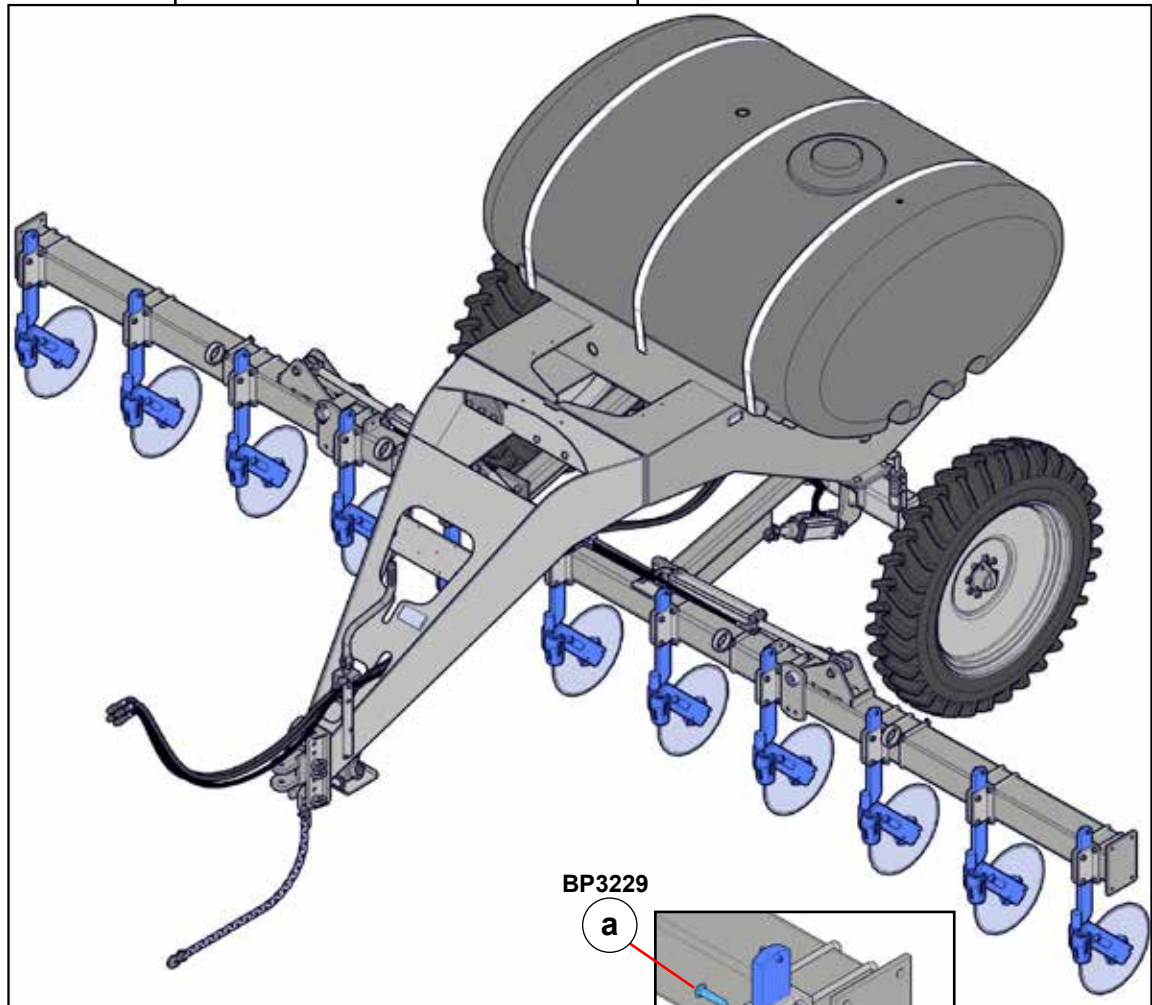


▶ Mounting
coulters

▶ **NOTE:**
*Consult
row spacing
pages for
measurements
and placement
of offset
brackets if
required.*

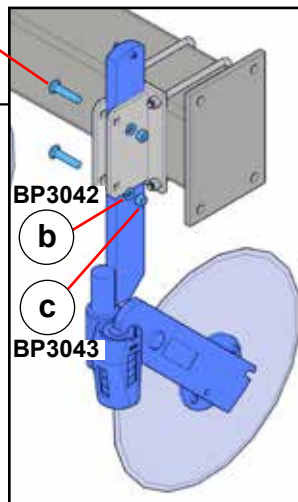
1. Level wings with center section and mark out row spacings from center.
2. Install (a) (AM4425) 7" x 7" flatbacks on tractor side of toolbar with (b) (BP3356) 1/2" x 7" x 8/1/4" u-bolts. Secure with (c) (BP3043) 1/2" lock washers and (d) (BP3042) 1/2" hex nuts.








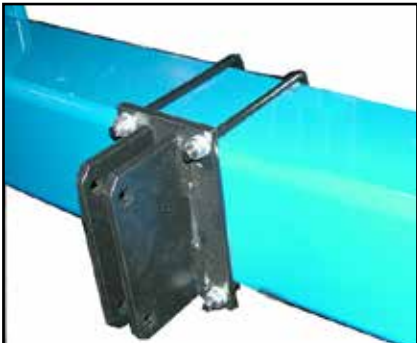


► **Mounting
coulters**

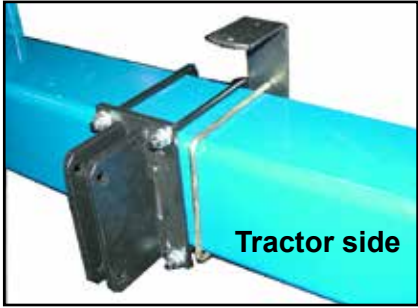
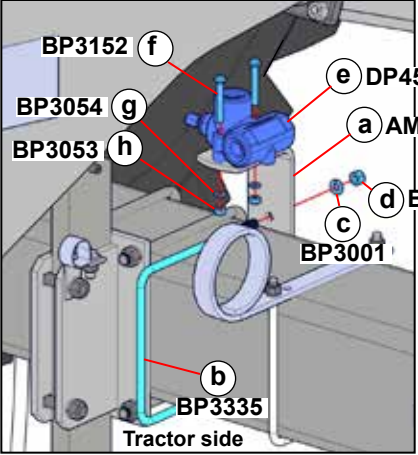
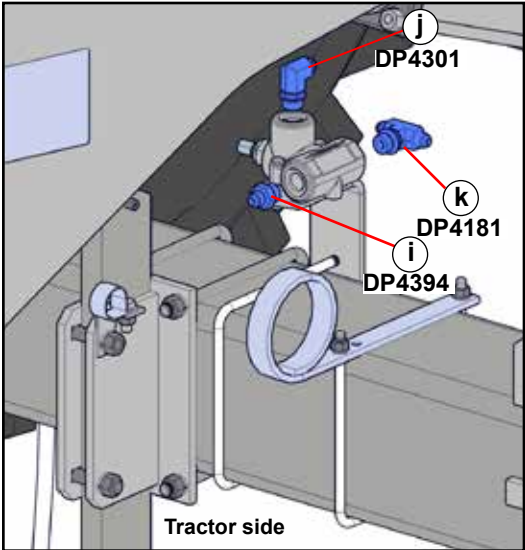
1. Insert coulters shank into the mounting and allow assembly to rest on shank roll pin.
2. Insert (a) (BP3229) 1/2"-13 x 2-1/2" carriage bolt into top hole of bracket. Push coulters shank assembly back into the bracket and insert the bottom carriage bolt. Place (b) (BP3043) 1/2" lock washer and (c) (BP3042) 1/2"-13 hex nut on each carriage bolt. Do not tighten at this point.
3. Raise coulters shank assembly in bracket and place a 3" spacer between the roll pin and the top of the bracket. Tighten the 1/2" hex nuts. This height is a starting point.



Gull Wing Toolbar Assembly (Center Section)

AT3000	Task	Procedures	Illustrations
▶	Installation of center section fittings	<p>1. Place center section on sturdy stands and remove cylinder plugs.</p>  <p>2. Install (DP4392) 8MSAE-10MJIC straight adapter in all four cylinder ports.</p> <p>3. Install (DP4418) 10MJIC-10MJIC 90 degree elbow on each straight adapter with all ports facing the center of the center section.</p>	  
▶	Attaching centered flatback to center section hinge area	<p>4. Attach (AM4425) 7" x 7" centered flatback bracket to center section hinge area. (<i>Tractor side</i>) Place (BP3043) 1/2" lock washers on each (BP3041) 1/2" x 2" hex cap screws and insert into flatback into center section weldment. Secure three hex cap screws with (BP3042) 1/2" hex nuts. The top right-hand from the front does not require a hex nut.</p>	 <p style="text-align: center;"><i>Tractor side</i></p>
▶	Mounting centered flatbacks to center section	<p>5. Consult row spacing page and mark out row spacings on center section. Install flatback brackets to the tractor side of the center section with (BP3356) 1/2" x 7"W x 8-1/4"L u-bolts, (BP3043) 1/2" lock washers and (BP3042) 1/2" hex nuts.</p>	

Gull Wing Toolbar Assembly (Relief Valve)

AT3000	Task	Procedures	Illustrations
<p>▶ Installation relief valve bracket</p> <p>▶ NOTE: Right-hand and left-hand as viewed from the rear</p>	<p>▶ Mounting relief valve</p>	<p>1. Position (a) (AM3544) relief valve mounting bracket to the left of the center section centered flatback mount. Secure with (b) (BP3335) 3/8" x 7"W x 8"L u-bolt, (c) (BP3002) 3/8" lock washers and (d) (BP3001) 3/8" hex nuts.</p> <p>2. Attach (e) (DP4563) relief valve, RV-5H, Prince 1500-3000 psi to mounting bracket with two (f) (BP3152) 1/4" x 2" hex cap screws, (g) (BP3054) 1/4" lock washers and (h) (BP3053) 1/4" hex nuts.</p> <p>3. Install (i) (DP4394) 8MSAE-6MJIC adapter to tractor side relief valve port. Install (j) (DP4301) 6MJ-8MSAE 90 degree adapter to top port facing to the rear.</p> <p>4. Install (k) (DP4181) 8MSAE x 6MJ-6MJ branch tee on rear port of relief valve.</p>	 <p>Tractor side</p>  <p>BP3152 (f) DP4563 (e) AM3544 (a) BP3054 (g) BP3053 (h) BP3002 (c) BP3001 (d) BP3001 (c) BP3335 (b) Tractor side</p>  <p>Tractor side</p> <p>DP4301 (j) DP4181 (k) DP4394 (i)</p>

Gull Wing Toolbar Assembly (Center Section Gull Wing)

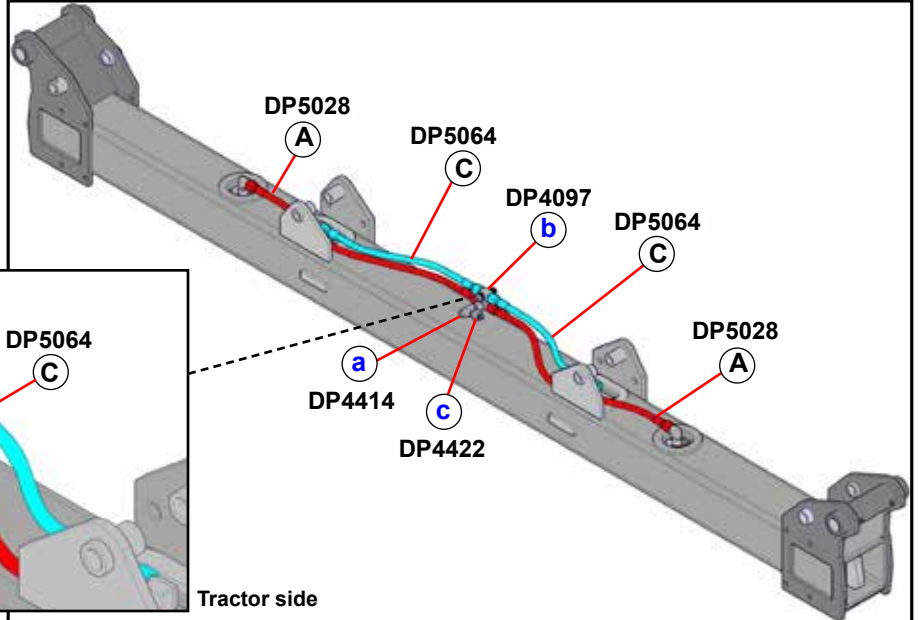
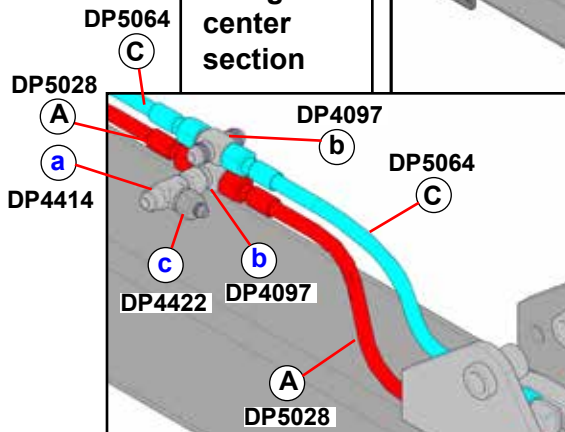
AT3000

Task

Procedures

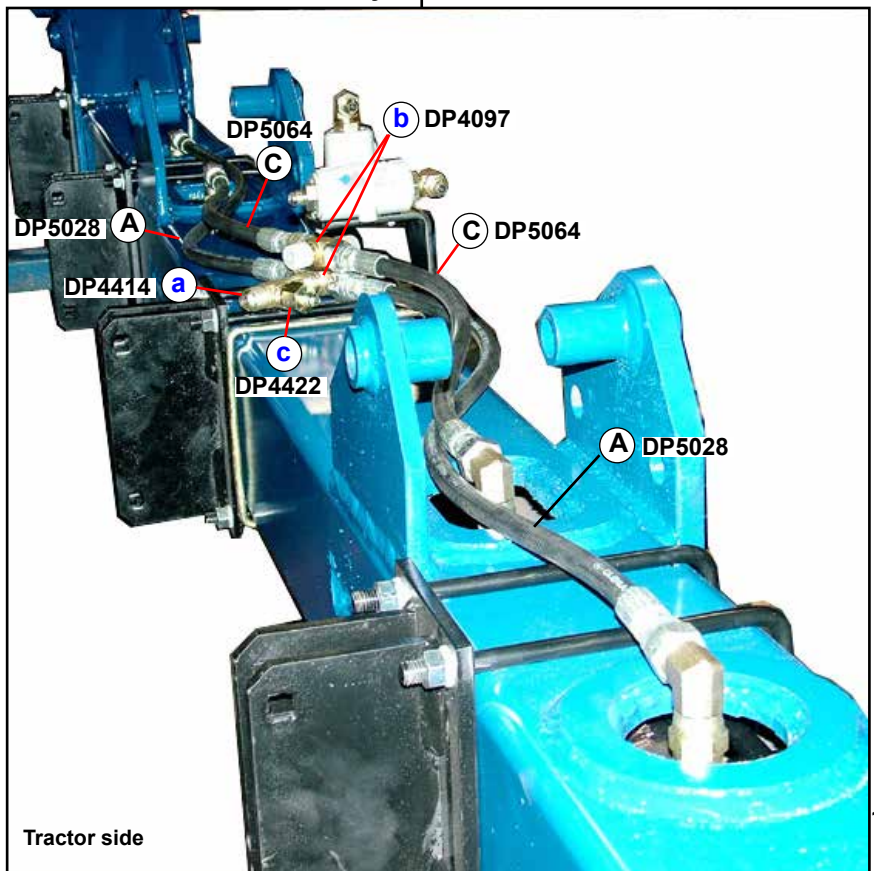
Illustrations

▶ Attaching gull wing hoses and cross fittings center section




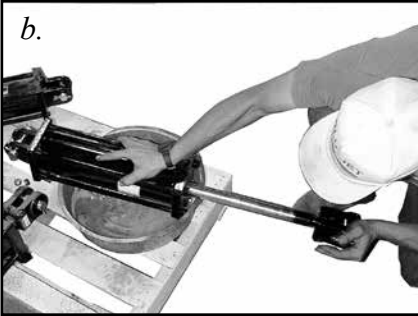
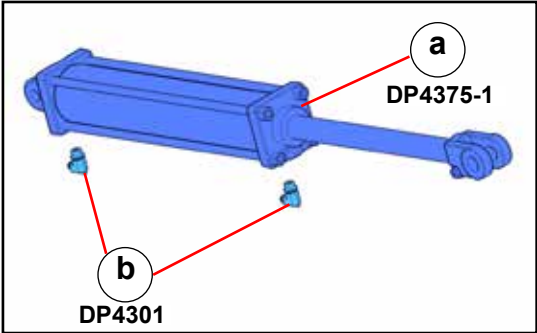

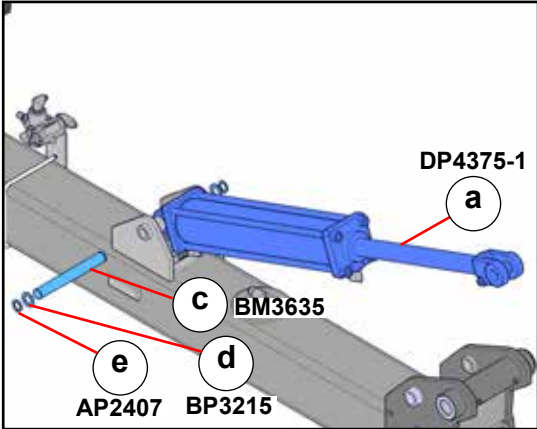

Tractor side

1. Assemble (a) (DP4414) 10FJC-10FJC-10MJIC tee on (b) (DP4097) 10MJ-10MJ-10MJ-10MJ cross. Install (c) (DP4422) 10FJ-6MJ adapter on (a).
2. Attach (A) (DP5028) 3/8" x 36" 10FJX-10FJX hydraulic hoses on each side of the assembly.
3. Attach opposite end of (A) to rod end of gull wing cylinders.
4. Install (C) (DP5064) 3/8" x 24" 10FJX-10FJX to (b) and extend hose to butt end of gull wing cylinders.

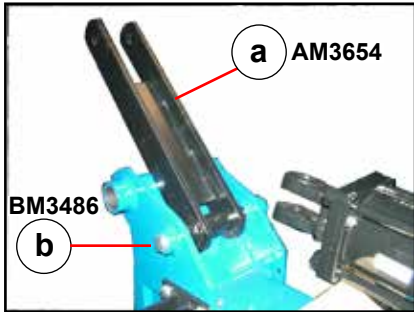
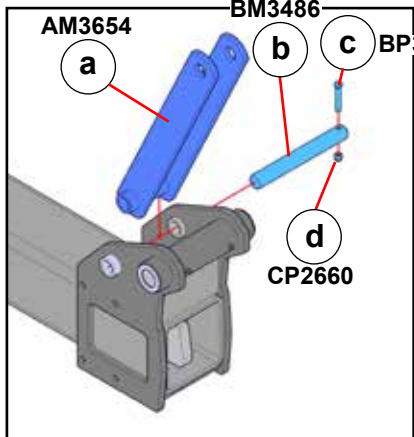
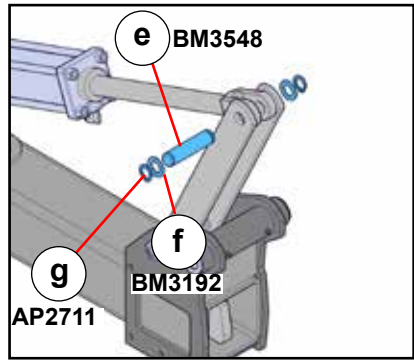
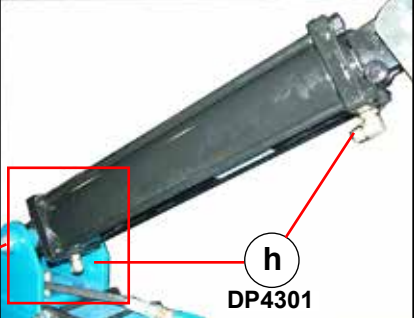
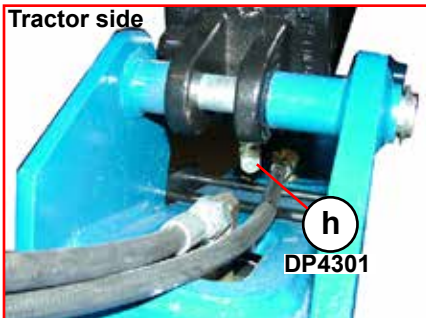


Tractor side

Gull Wing Toolbar Assembly (Wing Cylinders)

AT3000	Task	Procedures	Illustrations
<p>▶ Preparing hydraulic cylinders before installation</p>		<ol style="list-style-type: none"> 1. Remove cylinder plugs from cylinder (fig a). 2. Place cylinder, plug side down, over oil pan and pull cylinder rod in and out until the oil is removed (fig. b). In extended position, replace cylinder plugs loosely to prevent foreign matter from entering cylinder until fittings can be installed. 	<p>Generic Examples</p>  <p>a.</p>  <p>b.</p>
<p>▶ Installing primary wing cylinders</p> <p>▶ NOTE: <i>Right-hand and left-hand as viewed from the rear</i></p>		<ol style="list-style-type: none"> 3. Before mounting (a) DP4375-1 4" x 20" primary wing cylinders install (b) (DP4301) 6MJ-8MSAE, 90 degree adapter with 6MJ end pointing to the butt end of the cylinders. 	 <p>a DP4375-1</p> <p>b DP4301</p>
<p>▶ Installing primary wing cylinders</p>		<ol style="list-style-type: none"> 4. Mount (a) (DP4375-1) 4" x 20" primary wing hydraulic cylinder in center section weldments with (c) (BM3635) 1" x 8-3/4" pin, (d) (BP3215) 1-1/2" OD x 1" ID 14 GA. machinery bushing and (e) (AP2407) 1" external snap rings. 5. Repeat assembly for right-hand linkage assembly.  <p>c BM3635</p>	 <p>a DP4375-1</p> <p>c BM3635</p> <p>d BP3215</p> <p>e AP2407</p> 

BLU-JET **Gull Wing Toolbar Assembly (Primary Wing Fold Linkage)**

AT3000	Task	Procedures	Illustrations
▶	<p>Mounting of primary wing fold linkage</p>	<p>1. Insert (a) (AM3654) 19" double wing fold linkage with the grease zerks facing the center of the tool bar in the center section weldment. Insert (b) (BM3486) 1-1/4" x 10-7/16" OAL, W/13/32" hole pin.</p> <p>2. Secure pin with (c) (BP3096) 3/8" x 2-1/2" hex cap screw and (d) (CP2660) 3/8" Nylock hex lock nut.</p> <p>3. Raise cylinder and rotate clevis. Attach to linkage with (e) (BM3548) 1-1/4" x 4-3/4" double groove pin. Place (f) (BP3192) 1-7/8" OD x 1-1/4" ID x 10 GA. machinery bushings and (g) (AP2711) 1-1/4" heavy duty snap rings on each end.</p>	  
▶	<p>Primary wing cylinder fittings</p>	<p>4. Offset fitting (h) to miss gull wing cylinder fitting.</p>	 

AT3000

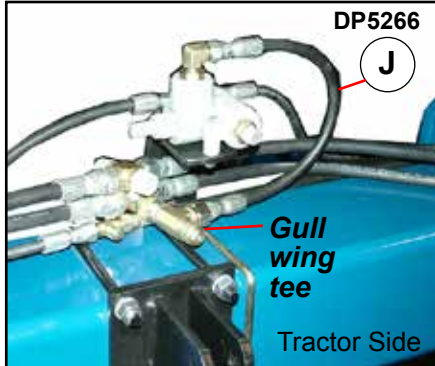
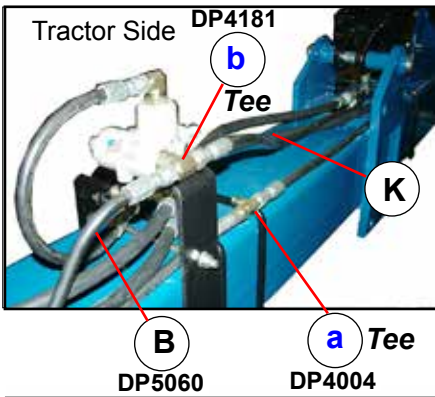
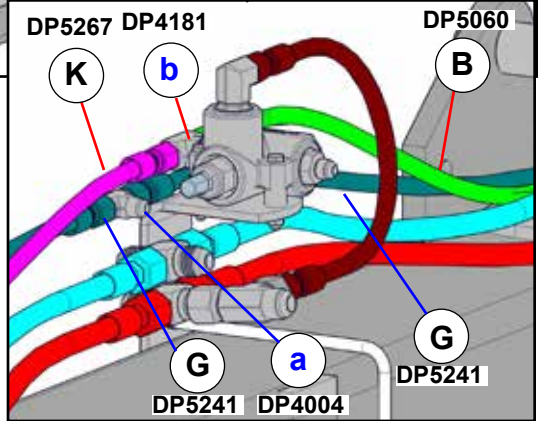
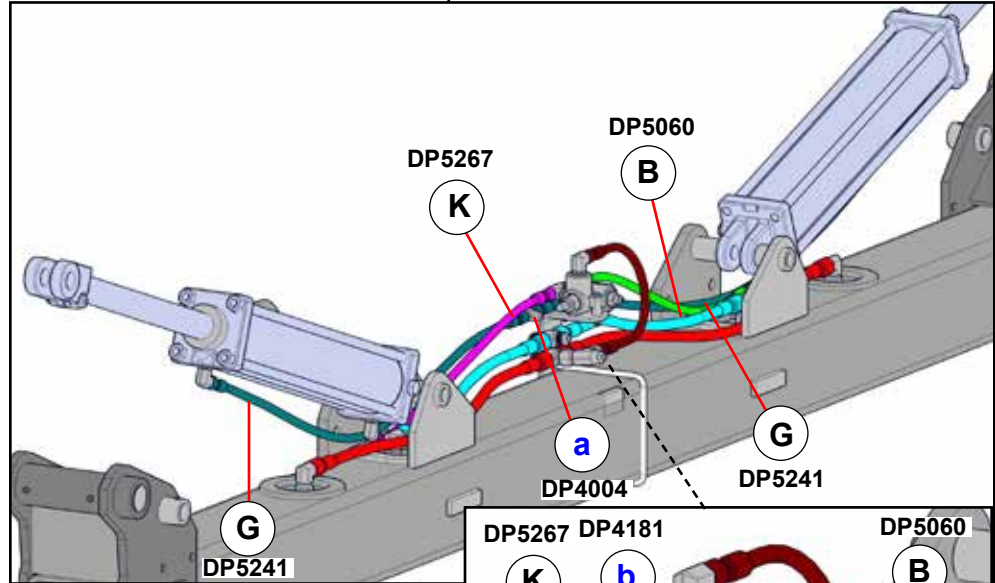
Task

Procedures

Illustrations

▶ Attaching primary wing cylinders

▶ **NOTE:**
Right-hand and left-hand as viewed from the rear



1. Attach (G) (DP5241) 1/4" x 52" 6FJX-6FJX hydraulic hose to rod end of 4" x 20" cylinders. Attach hoses to (a) (DP4004) 6MJ-6MJ-6MJ tee.
2. Install (K) (DP5267) 1/4" x 32" 6FJX-6FJX hydraulic hose to butt end of right-hand 4" x 20" cylinder. Extend to relief valve (b) (DP4181) 8MSAE x 6MJ-6MJ tee. Attach (B) (DP5060) 1/4" x 24" 6FJX-6FJX hydraulic hose to butt end of left-hand 4" x 20" cylinder. Extend to relief valve (b) (DP4181) 8MSAE x 6MJ-6MJ tee.
3. Install (J) (DP5266) 1/4" x 18" 6FJX-6FJX hydraulic hose to top port relief valve 90 degree fitting. Extend to gull wing tee.

Gull Wing Toolbar Assembly (Mounting Center Section)

AT3000

Task

Procedures

Illustrations

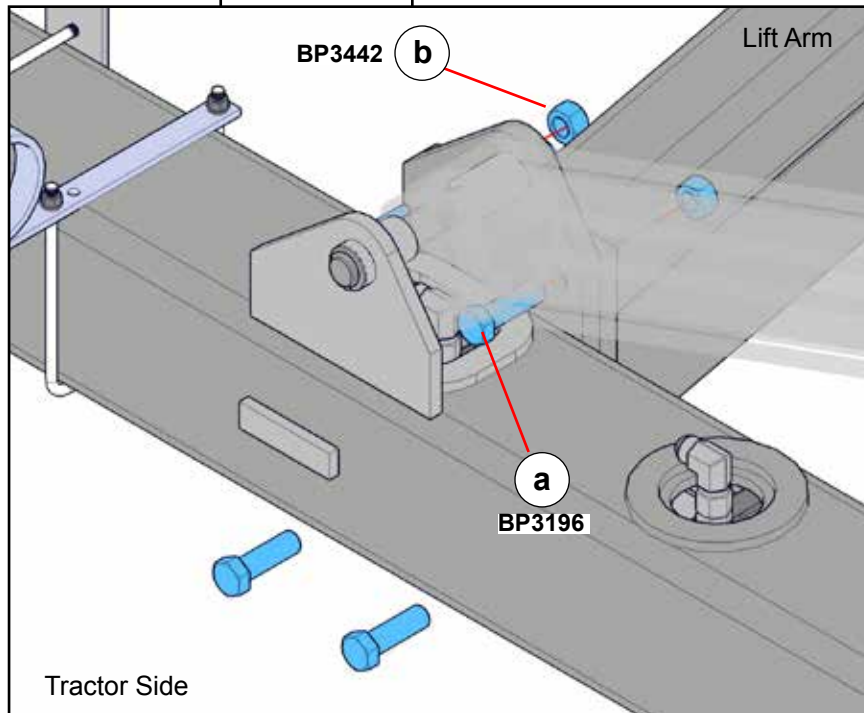
▶ Mounting center section

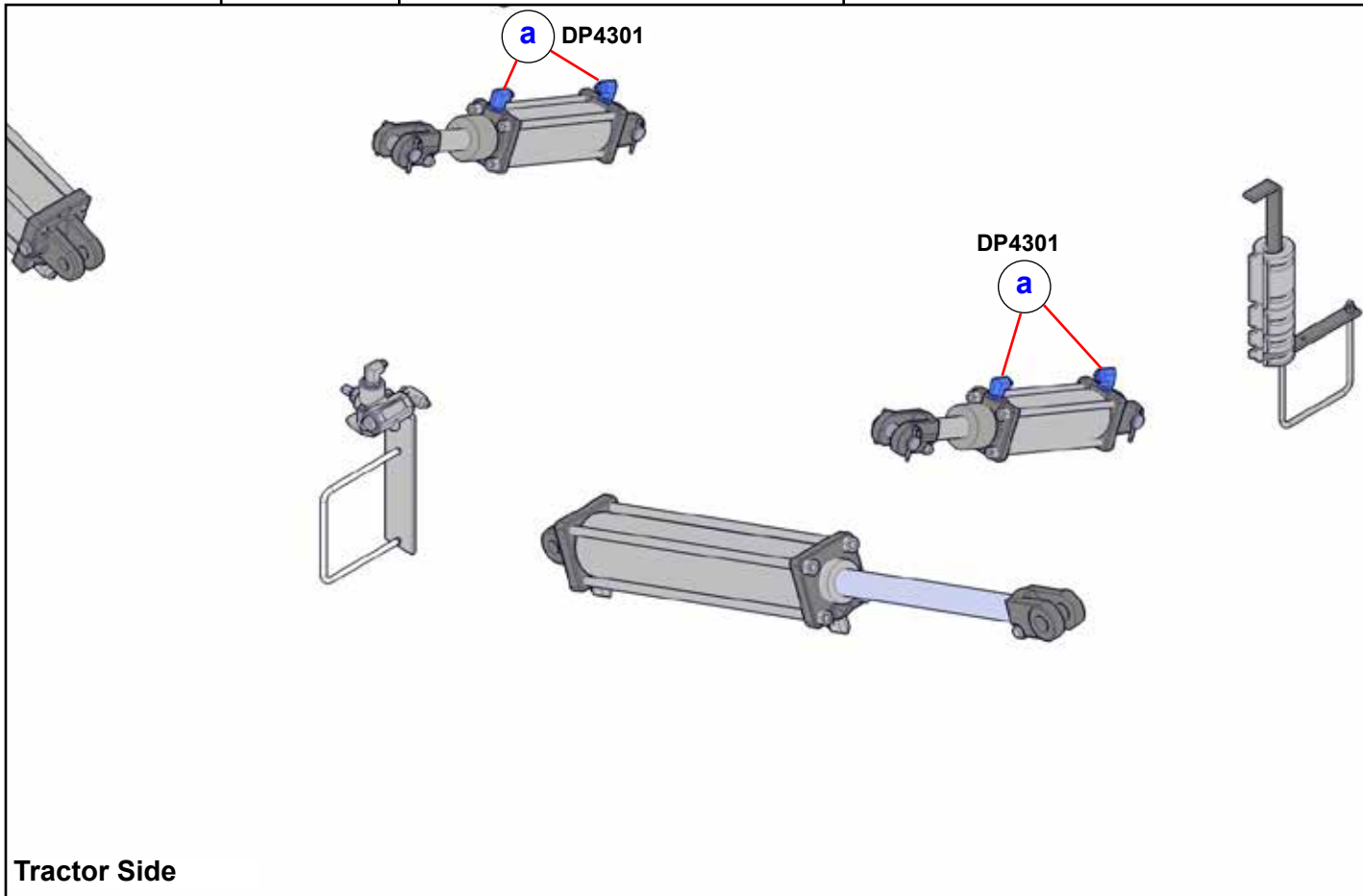


CAUTION

Center section is top heavy raise into position with extreme care.

1. Position center section under frame and align with lift arms.
2. Secure heavy duty chain or lifting strap carefully to center of center section. Raise slowly with personnel on both sides to guide center into position.
3. Secure toolbar to lift arm with (a) (BP3197) 3/4" x 2-1/2" hex cap screws, grade 8, and (b) (BP3442) 3/4" lock hex nuts.

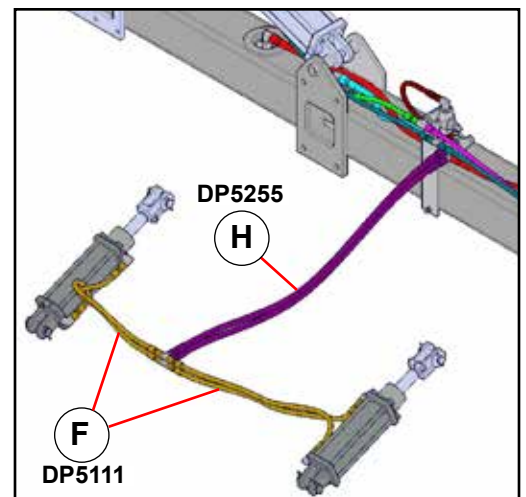
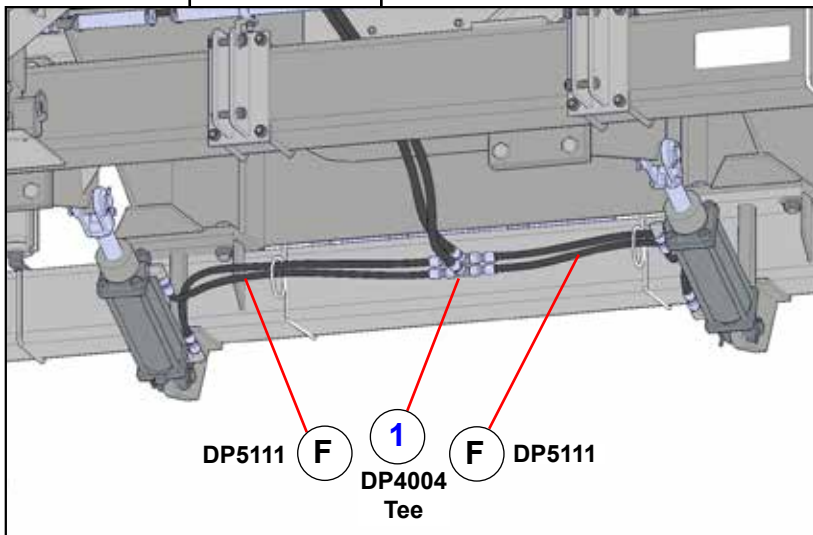
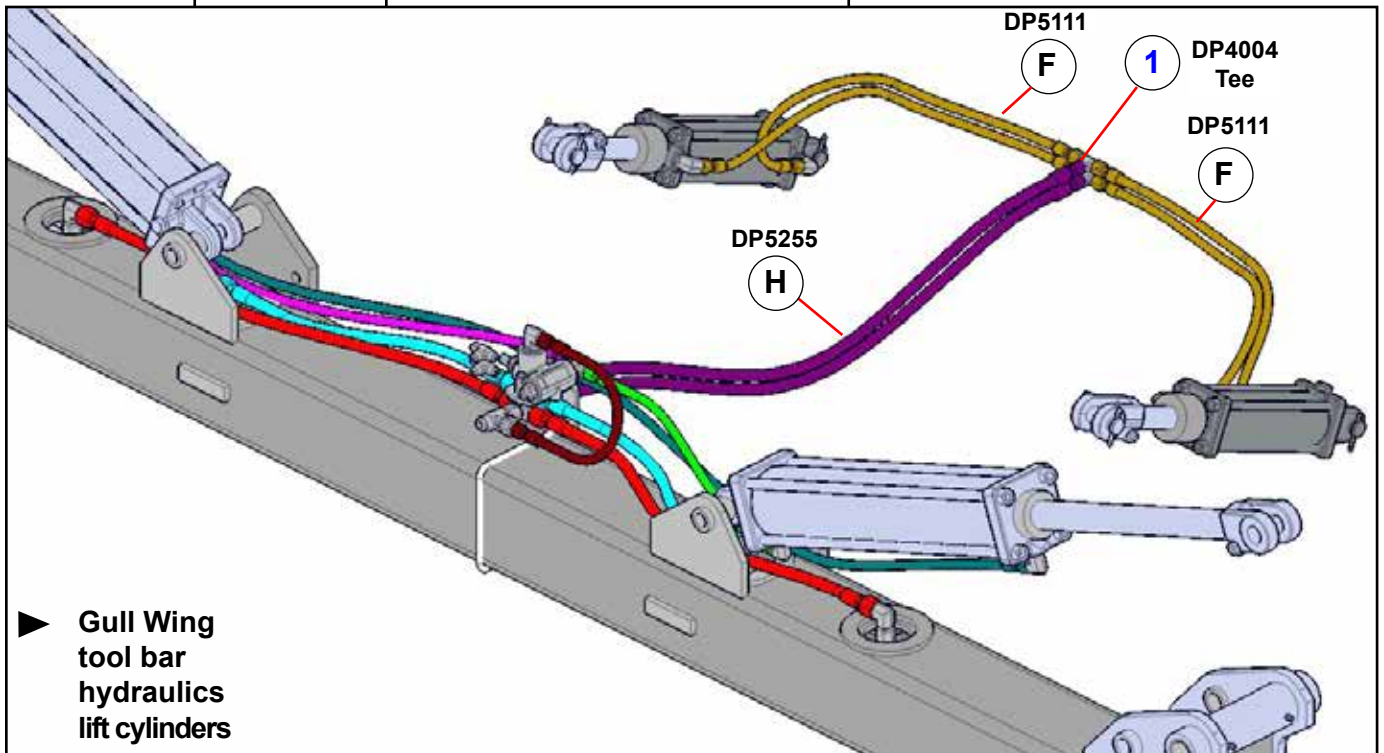




**Gull Wing
tool bar
hydraulics
lift cylinders**

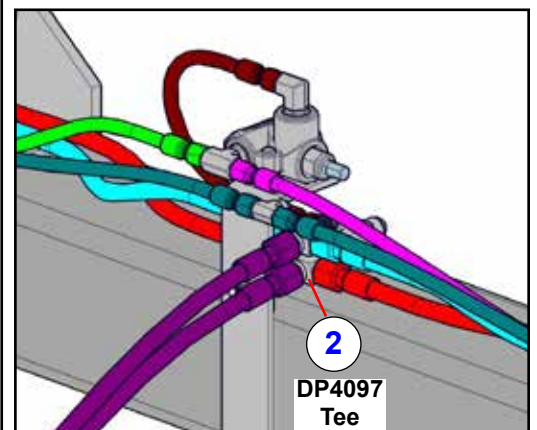
1. Install eight (a) (DP4301) 6MJ-8MSAE, 90 degree adapters in all four cylinders.


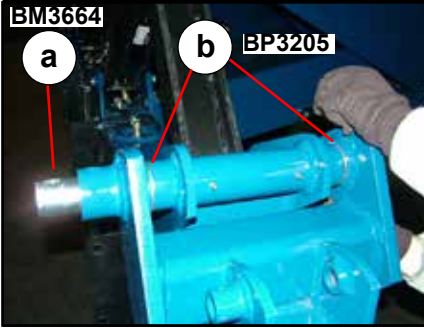
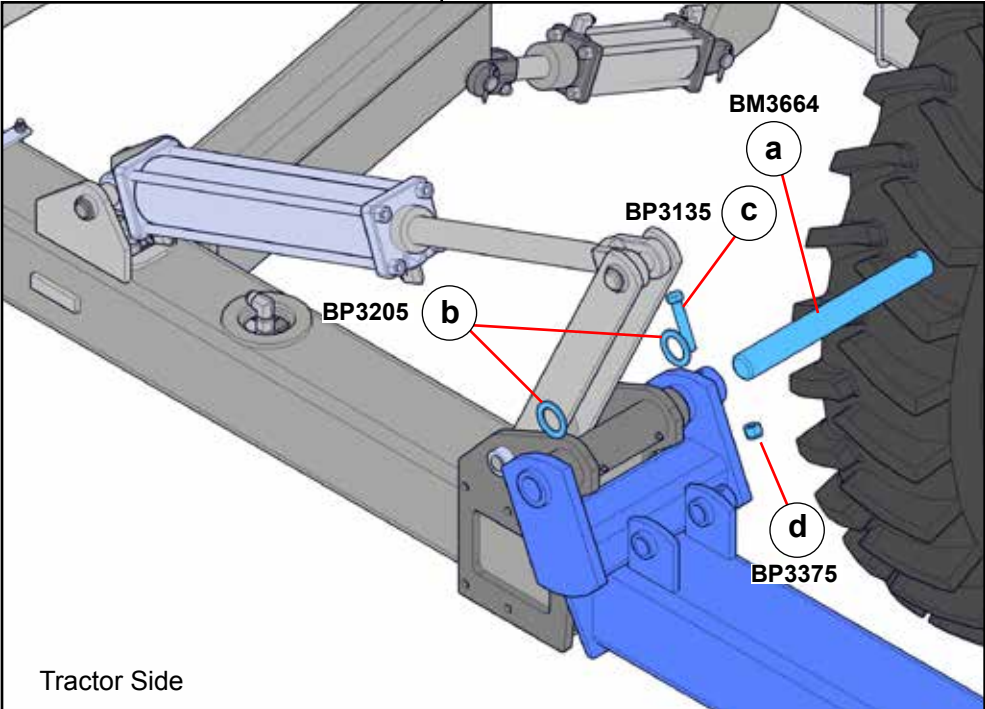




1. Attach four (F) (DP5111) 1/4" x 30", 6FJX-6FJX hydraulic hoses to lift cylinder fittings and extend rod hoses to center. Install (1) (DP4004) 6MJ-6MJ-6MJ tee. Extend butt hoses to center. Install (1) (DP4004) 6MJ-6MJ-6MJ tee.

2. Attach (H) (DP5255) 3/8" x 56", 10FJX-6FJX hydraulic hoses to (1) (DP4004) 6MJ-6MJ-6MJ tees. Extend hose to center section tees. Rod hose attaches to the rod (Red Hoses) center section tee. Butt hose attaches to the butt (Cyan Hoses) center section tee.



AT3000	Task	Procedures	Illustrations
<p>▶ Mounting Primary wings</p> <p>▶ NOTE: <i>Right-hand and left-hand as viewed from the rear</i></p>		<ol style="list-style-type: none"> Position (AM3535) left-hand primary wing over center section hinge weldment. Insert (a) (BM3664) 1-3/4" x 16-9/16" OAL W/21/32" hole into primary wing weldment, placing (b) (BP3205) 2-1/2" OD x 1-3/4" ID, 10 GA. machinery bushings on each side of center section hinge weldment. Secure hinge pin with (c) (BP3135) 5/8" x 3-1/2" hex cap screw and (d) (BP3375) 5/8" hex lock nut. 	   <ol style="list-style-type: none"> Place two 1 x 4 wood spacers in hinge area to keep the primary wing up before removing forklift. Repeat procedures for right-hand primary wing.

AT3000

Task

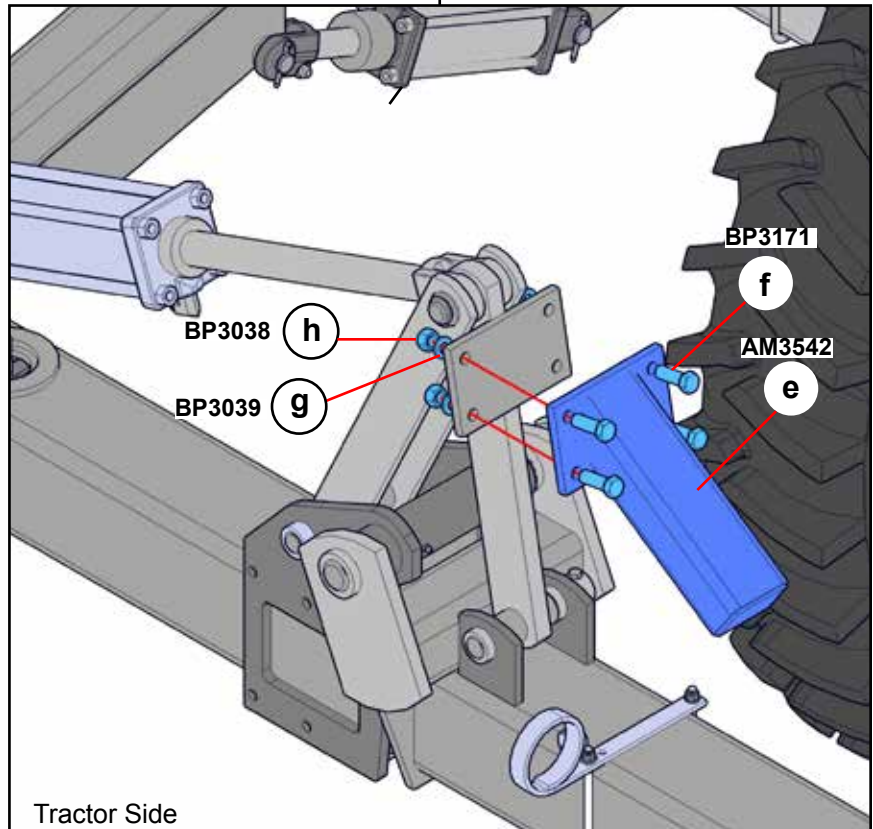
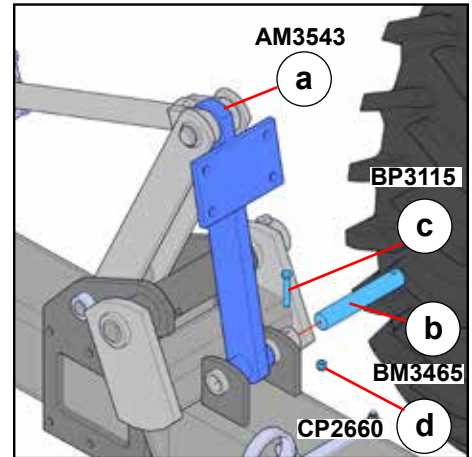
Procedures

Illustrations

▶ Installation wing stop linkage

▶ **NOTE:**
Right-hand and left-hand as viewed from the rear

1. Mount (a) (AM3543) 19" single wing linkage w/wing stop mount in primary wing hinge weldment. *Grease zerks face outward.*
2. Insert (b) (BM3465) 1-1/4" x 7-3/4" OAL, W/13/32" pin.
3. Secure pin with (c) (BP3115) 3/8" x 2" hex cap screw and (d) (CP2660) 3/8" Nylock hex lock nut.
4. Attach (e) (AM3542) wing stop to linkage with four (f) (BP3171) 5/8" x 2" hex cap screws and (g) (BP3039) 5/8" lock washers and (h) (BP3038) 5/8" hex nuts.
5. Repeat assembly for right-hand linkage.



AT3000

Task

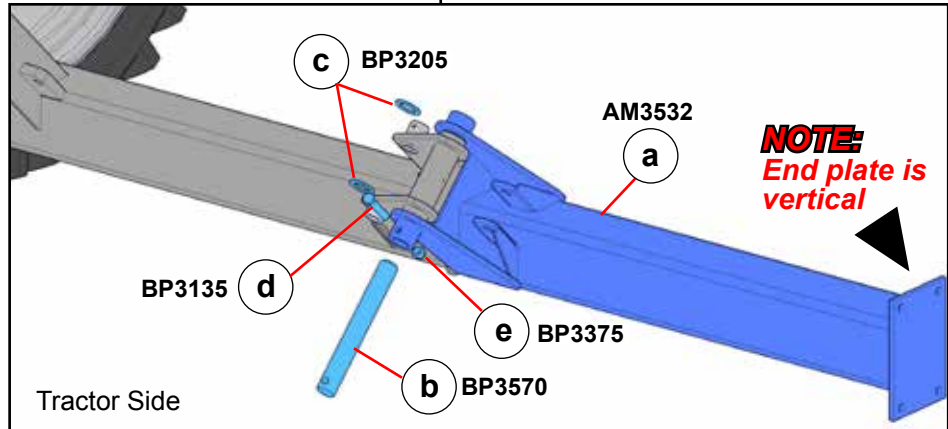
Procedures

Illustrations

▶ **Mounting secondary wing gull wing**

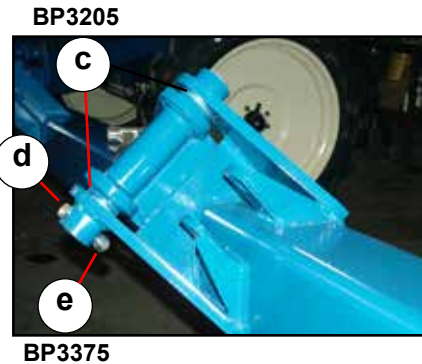
▶ **NOTE:**
Right-hand and left-hand as viewed from the rear

1. Position (a) (AM3532) secondary wing on outer primary wing weldment. Secure secondary wing with (b) (BM3570) 1-3/4" x 14" with 21/32" hole pin. Place (c) (BP3205) 2-1/2" OD x 1-3/4" ID, 10 GA. machinery bushing as needed next to hinge weldments.

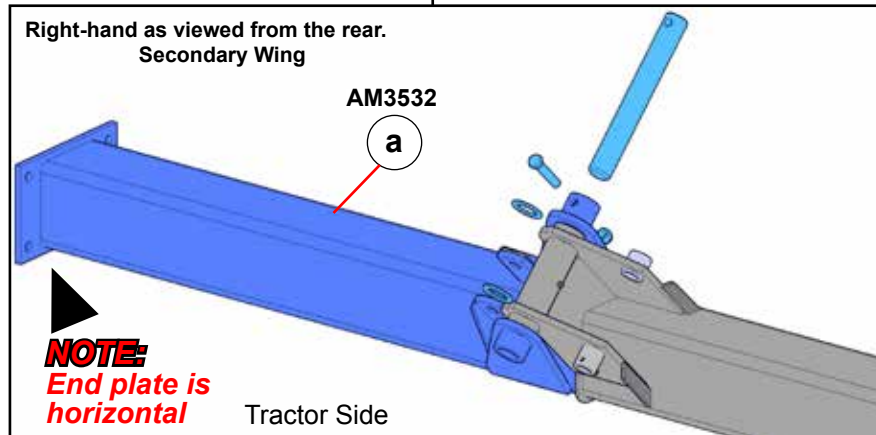


2. Secure pin with (d) (BP3135) 5/8" x 3-1/2" hex cap screw and (e) (BP3375) 5/8" Nylock hex lock nut.

BP3135



3. Repeat steps 1 and 2 for (a) (AM3532) Right-hand secondary wing.



Gull Wing Toolbar Assembly (Secondary Wing Linkages)

AT3000

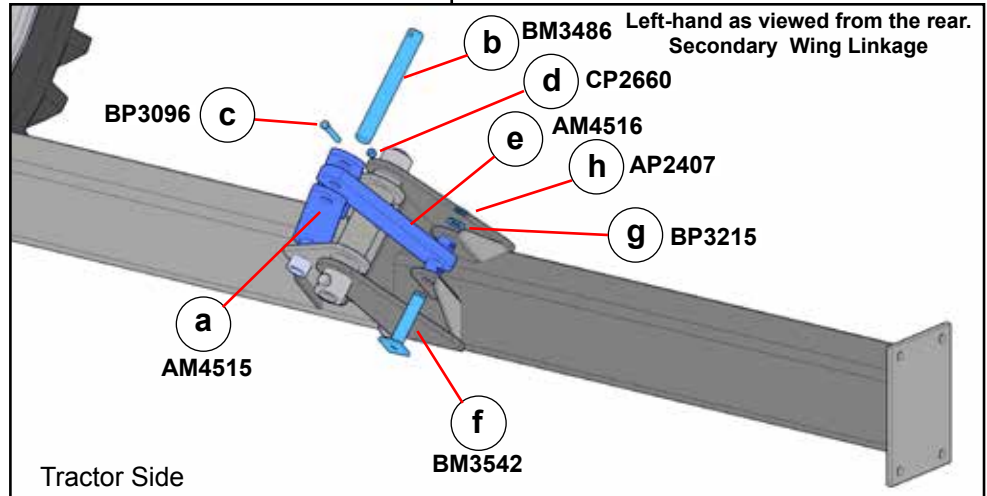
Task

Procedures

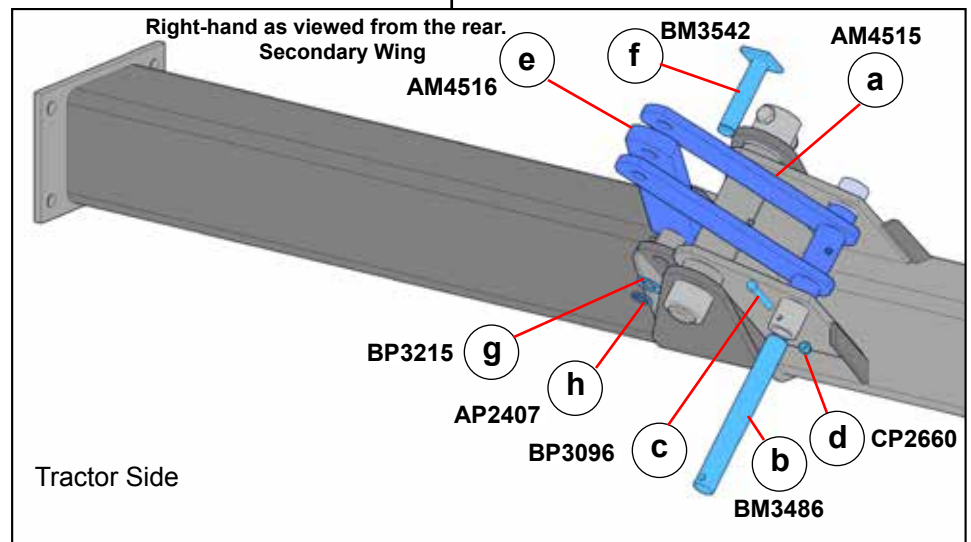
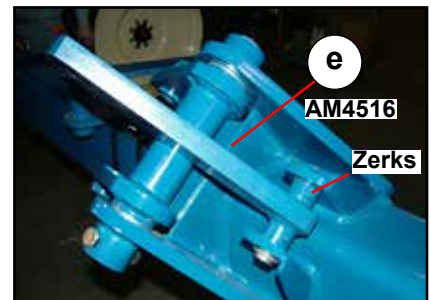
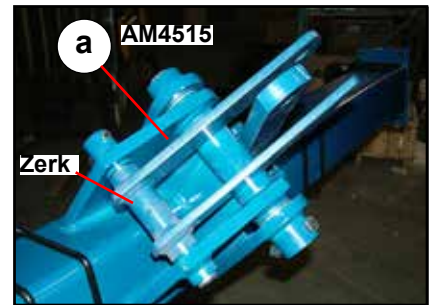
Illustrations

▶ Installing secondary wing linkages


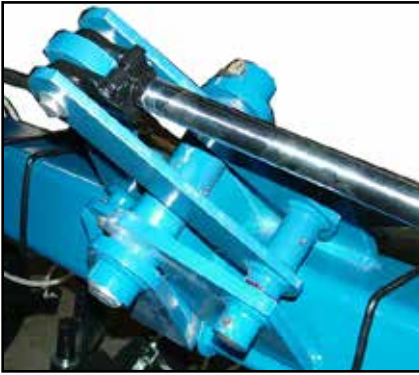
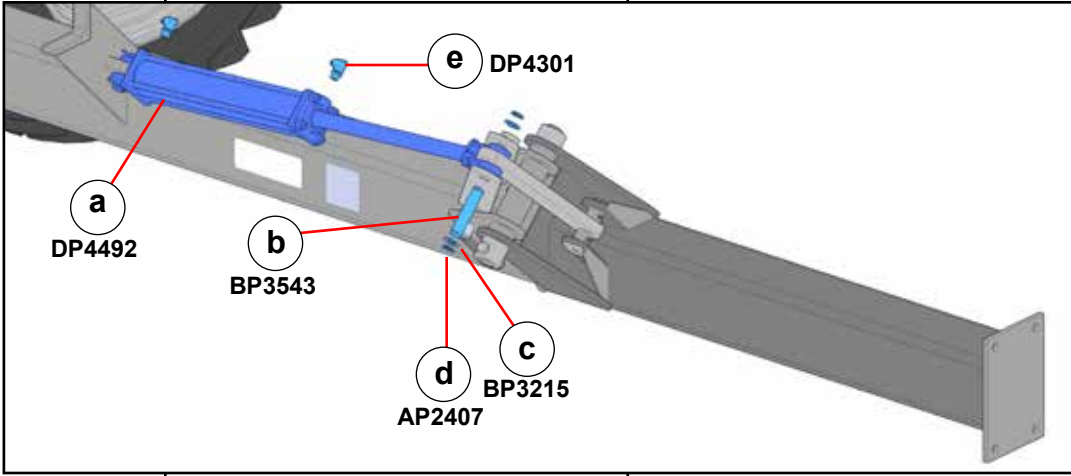
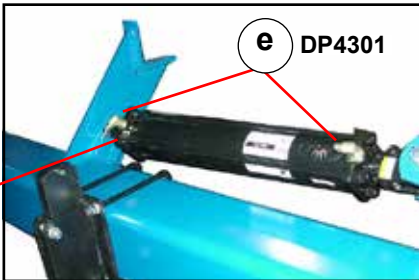

▶ **NOTE:**
Right-hand and left-hand as viewed from the rear




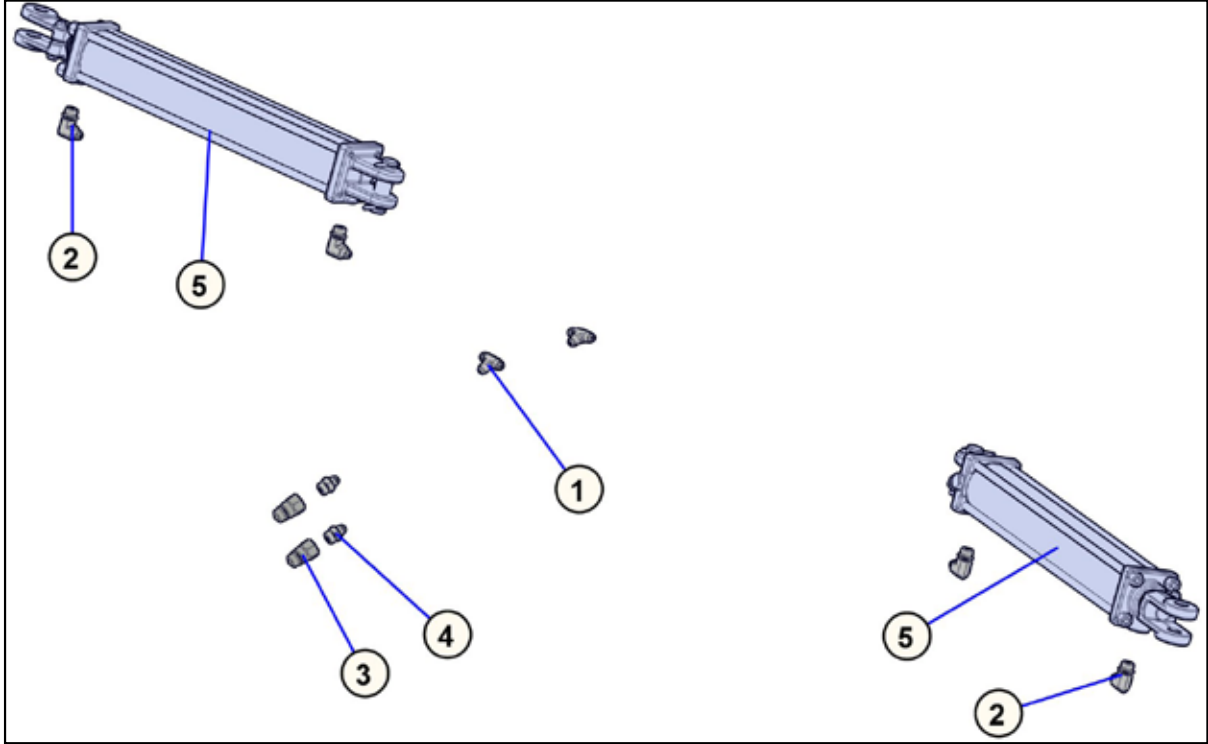
1. Insert (a) (AM4515) secondary linkage #1 with the grease zerks facing the center of the tool bar in the primary wing weldment. Secure with (b) (BM3486) 1-1/4" x 10-7/16" OAL, W/ 13/32" hole pin, (c) (BP3096) 3/8" x 2-1/2" hex cap screw and (d) (CP2660) 3/8" hex lock nut, Nylock.
2. Mount (e) (AM4516) secondary linkage #2 to secondary wing weldment (*Grease zerks face outward.*) with (f) (BM3542) 1" x 4-5/8" w/groove pin, (g) (BP3215) 1-1/2" OD x 1" ID 14 GA. machinery bushing and (h) (AP2407) 1" heavy duty external snap ring.



Gull Wing Toolbar Assembly (Secondary Wing Cylinders)

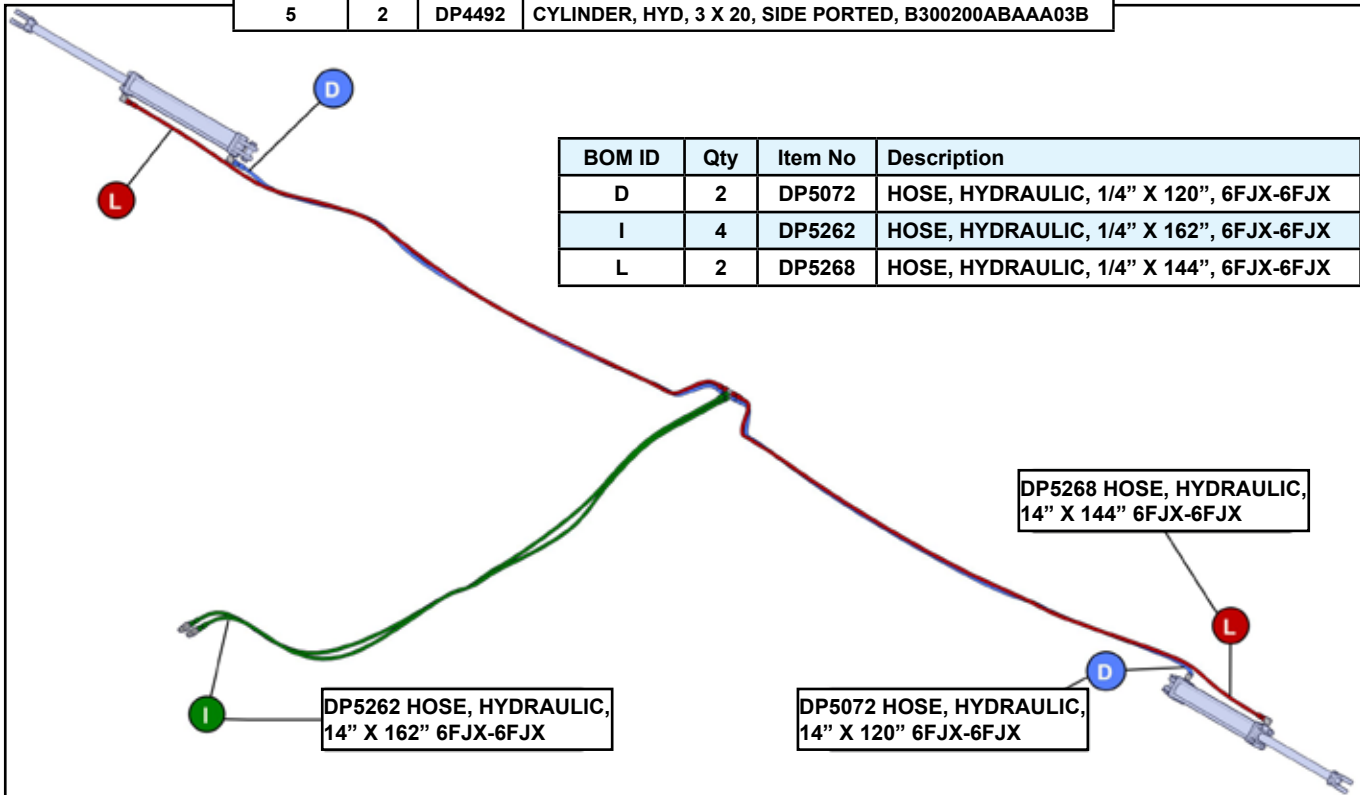
AT3000	Task	Procedures	Illustrations
<p>▶</p> <p>▶</p>	<p>Installing secondary wing cylinders</p> <p>NOTE: <i>Adjust cylinder clevis if pin and linkage holes are out of alignment</i></p>	<ol style="list-style-type: none"> 1. Mount (a) (DP4492) 3" x 20" side ported hydraulic cylinder to primary wing cylinder lug with pin provided with cylinder. Remove plugs and extend cylinder rod manually towards wing linkages. or extend cylinder hydraulically later in the assembly. 2. Secure to linkages with (b) (BP3543) 1" x 4-5/16" double grooved pin, (c) (BP3215) 1-1/2" OD x 1" ID 14 GA. machinery bushings and (d) (AP2407) 1" external snap rings. 	 
			
		<ol style="list-style-type: none"> 3. Install (e) (DP4301) 6MJ-8MSAE 90 degree adapters pointing to the center in the side ports of 3" x 20" cylinder. 	 

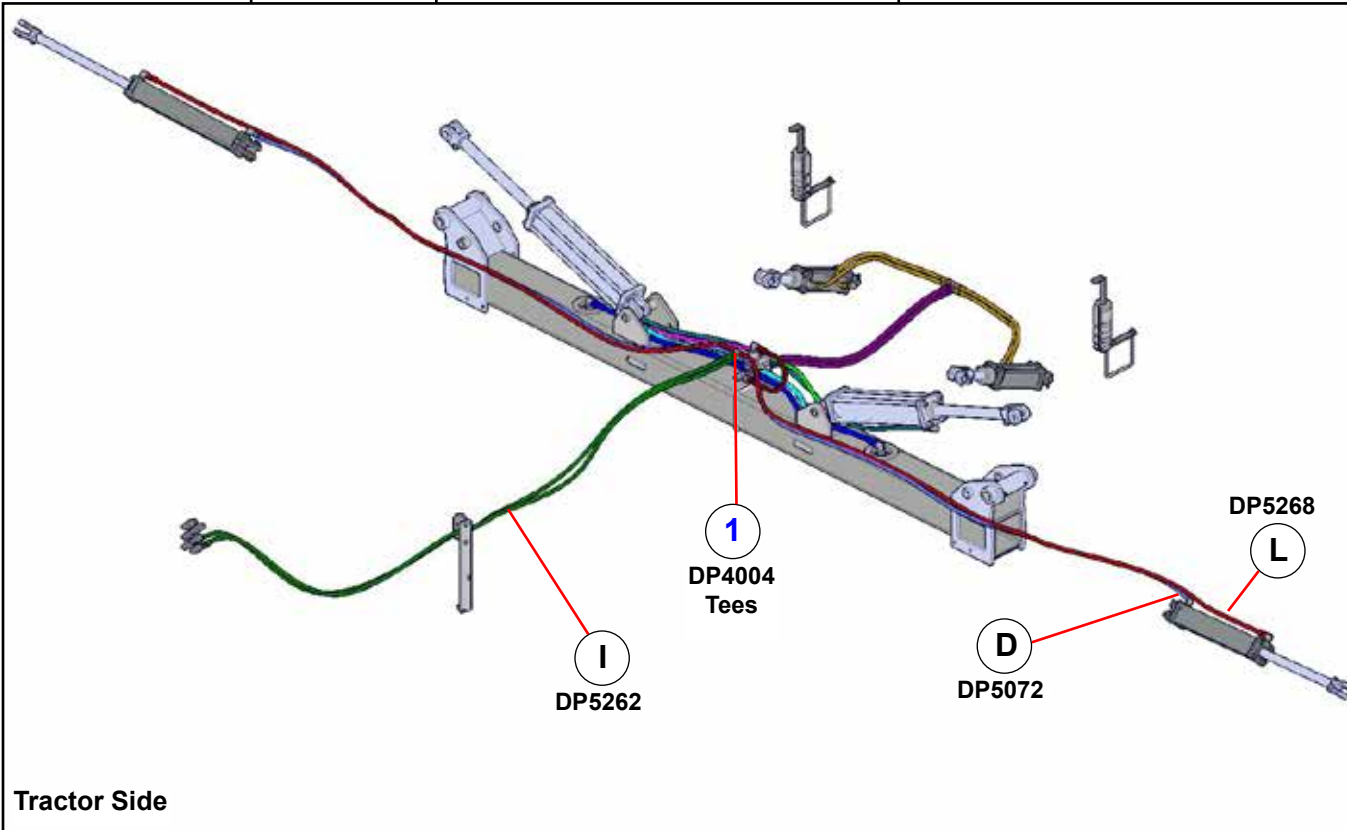
	Secondary Gull Wing Hydraulics (PKG00178)		
	AT3000	Task	Procedures



► PKG00178 Package, Hydraulics Kit, AT Liquid Secondary Wing Kit

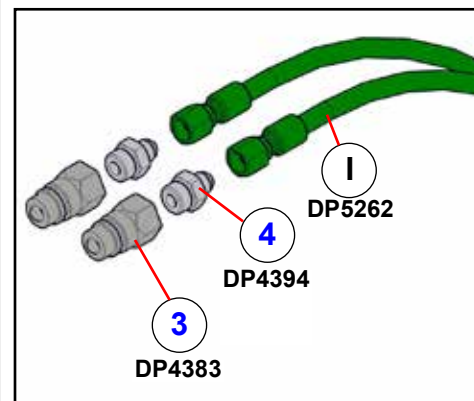
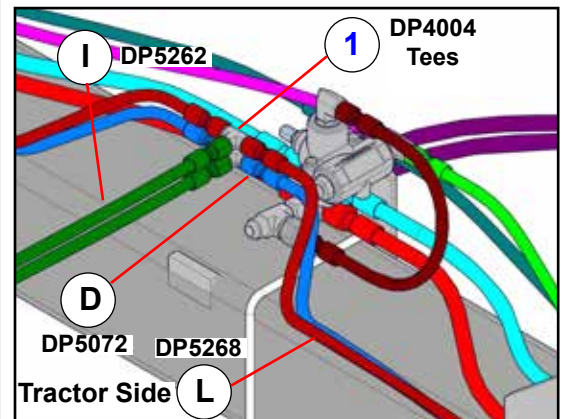
BOM ID	Qty	Item No	Description
1	2	DP4004	TEE, 10MJ-10MJ-10MJ
2	4	DP4301	ADAPTER, 6MJ-8MSAE, 90 DEGREE
3	2	DP4383	COUPLER, PIONEER, 8MQBA-8FSAE
4	2	DP4394	ADAPTER, 8MSAE-6MJIC, 6400-6-8
5	2	DP4492	CYLINDER, HYD, 3 X 20, SIDE PORTED, B300200ABAAA03B





▶ **Installing secondary wing cylinder hoses**

1. Attach (L) (DP5268) 1/4" x 144", 6FJX-6FJX hoses to the rod end of each 3" x 20" secondary wing cylinders. Extend to center of center section and join with (1) (DP4004) 10MJ-10MJ-10MJ tee.
2. Attach (D) (DP5072) 1/4" x 120", 6FJX-6FJX hoses to the butt end of each 3" x 20" secondary wing cylinders. Extend to center of center section and join with (1) (DP4004) 10MJ-10MJ-10MJ tee.
3. Install (I) (DP5262) 1/4" x 162", 6FJX-6FJX hoses to tees and extend to tractor.
4. Install (4) (DP4394) 8MSAE-6MJIC adapters and (3) (DP4383) 8MQBA-8FSAE Pioneer couplers.



Gull Wing Toolbar Assembly (Hydraulic Hoses)

AT3000

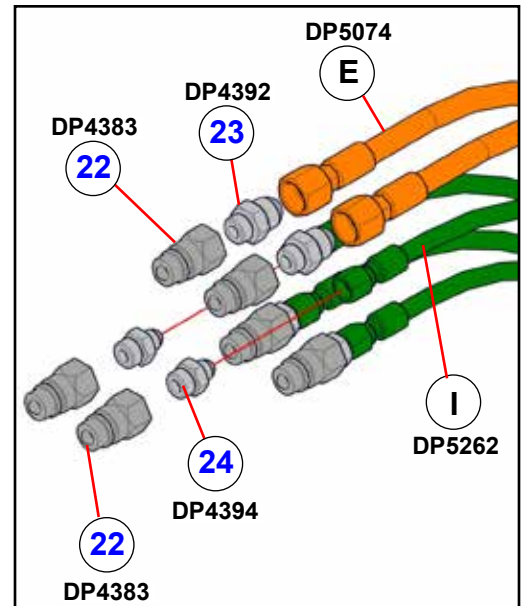
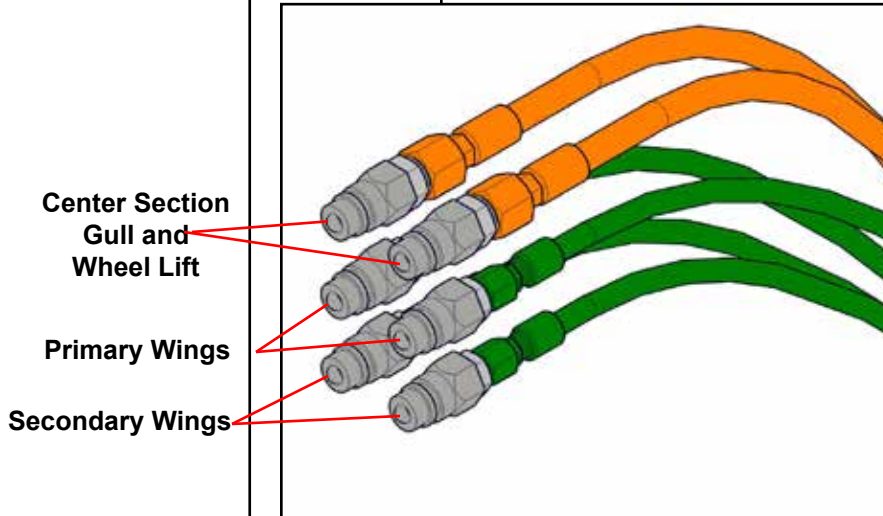
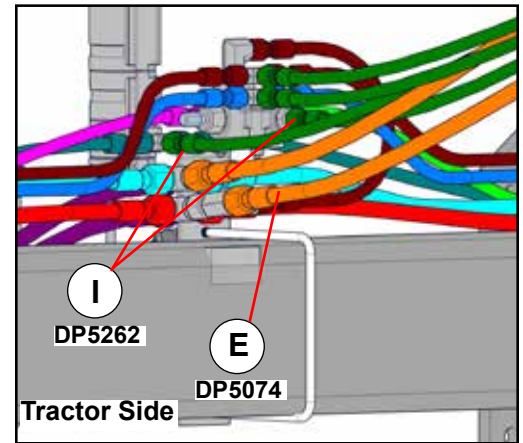
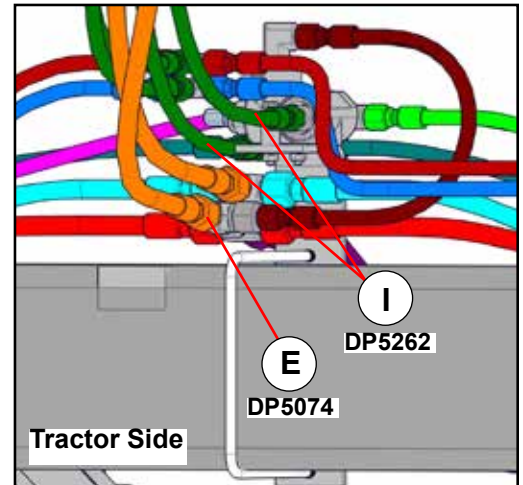
Task

Procedures

Illustrations

► Gull Wing tool bar hydraulics tractor hoses

1. Install (E) (DP5074) 3/8" x 162", 10FJX-10FJX hydraulic hoses to center section gull wing and lift cylinder tees.
2. Extend to tractor and install (23) (DP4392) 8MSAE-10MJIC, straight adapters and (22) (DP4383) 8MQBA-8FSAE Pioneer couplers.
3. Attach (I) (DP5262) 1/4" x 162" 6FJX-6FJX to straight adapter, tractor side, on the relief valve.
4. Install second (I) (DP5262) 1/4" x 162" 6FJX-6FJX to the tee connecting the rod ends of the primary cylinders.
5. Extend to tractor and install (24) (DP4394) 8MSAE-6MJIC, straight adapters and (22) (DP4383) 8MQBA-8FSAE Pioneer couplers.



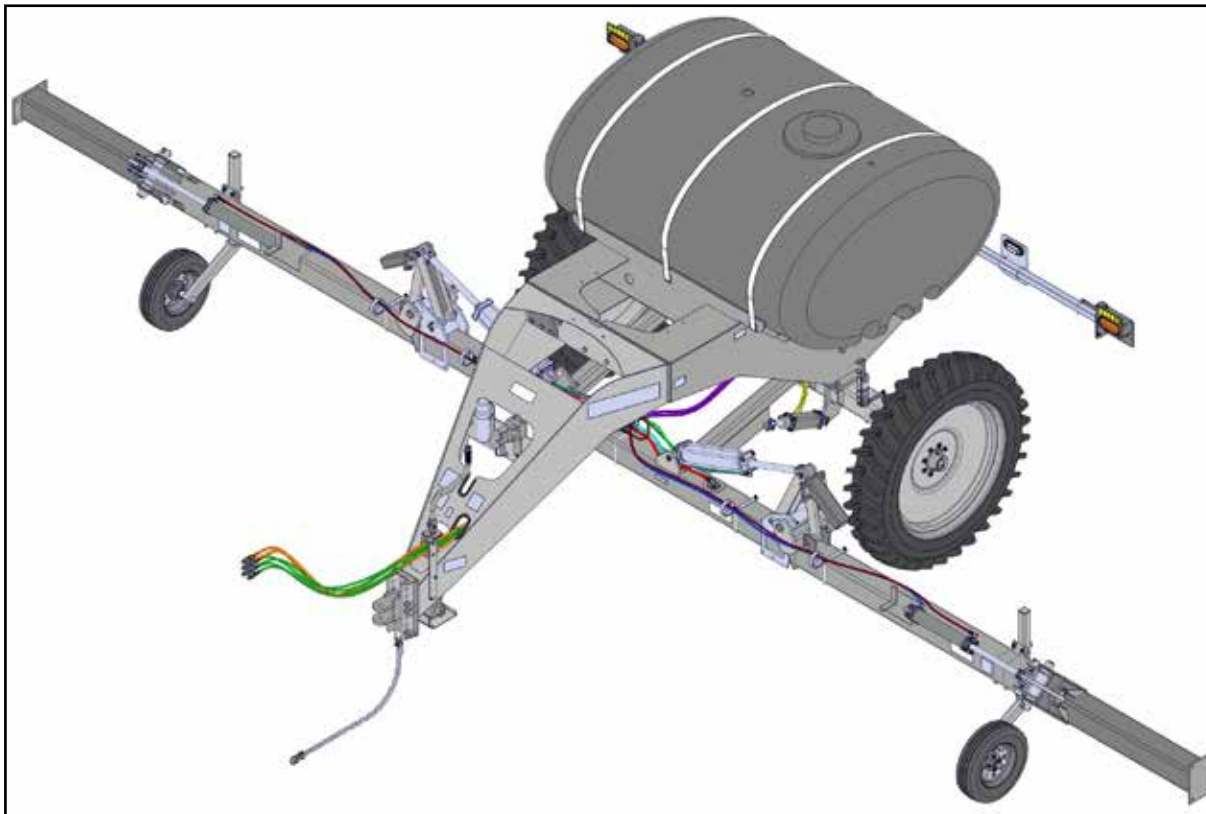
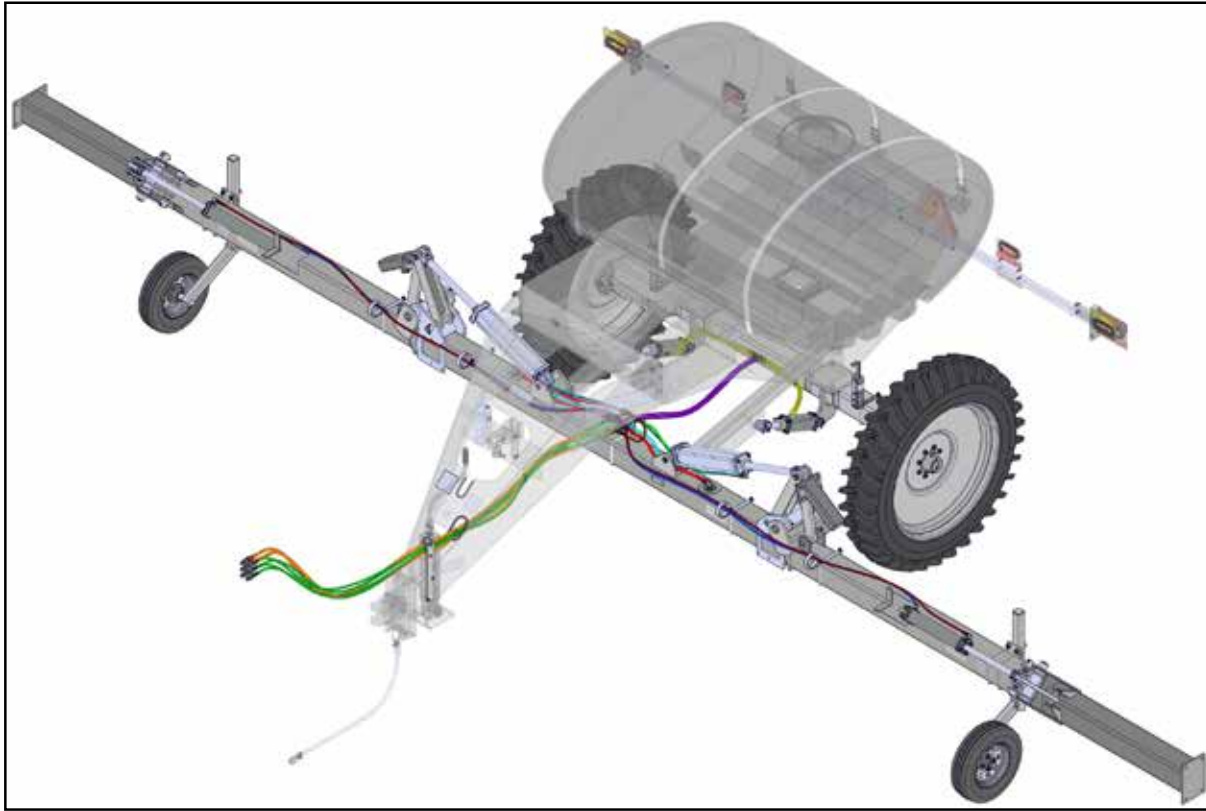
Gull Wing Toolbar Assembly (Hydraulic Hoses)

AT3000

Task

Procedures

Illustrations



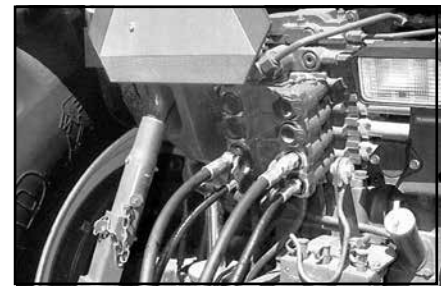
BLU-JET **Toolbar Assembly (Charging Gull Wing Cylinders)**

AT3000	Task	Procedures	Illustrations
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▶ Connecting hydraulic hoses

⚠ **CAUTION**
Always hook tool bar to tractor before filling oil lines.

1. Connect the hydraulic hoses to the tractor remote couplers. The 3/8" hoses supply oil to the wheel lift cylinders and gull wing cylinders. The 1/4" hoses supply oil to the wing cylinders. Mark 1/4" hose pairs with paint or tape. Mark hoses so that they are plugged in correctly each time.



Generic example

⚠ **WARNING** Hydraulic fluid escaping under pressure can have enough force to penetrate the skin. Hydraulic fluid may also infect a minor cut or opening in the skin. If injured by escaping fluid, see doctor at once. Serious infection or reaction can result if medical treatment is not given immediately. Make sure all connections are tight and that hoses and lines are in good condition before applying pressure to the system. Relieve all pressure before disconnecting the lines or performing other work on the hydraulic systems.

▶ Charging the wing cylinders block rod ends up.

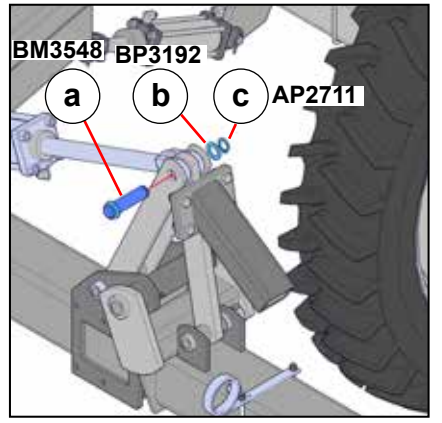
▶ **NOTE:** Cylinder should be blocked high enough to avoid damage to wings when rods are extend hydraulically

2. Before charging the wing cylinders block rod ends up.
3. Attach AT3000 to tractor. Connect the hydraulic lines to tractor ports.
4. Begin by holding the tractor remote lever in one direction until the cylinders are fully extended or retracted. Hold 1 minute to purge air from lines. Reverse the direction of the remote lever to charge the other side of the system. Hold 1 minute to purge air from lines. Continue process until cylinders are extending and retracting completely.



⚠ **CAUTION**
Always hook tool bar to tractor before filling oil lines.

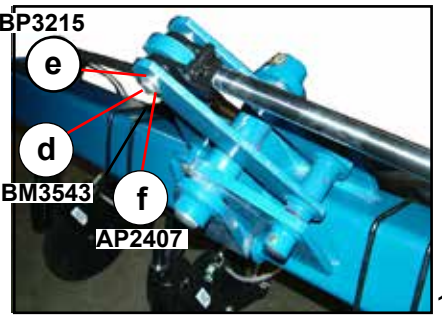
5. Extend cylinder rod slowly until centered over wing linkage. Remove (a) (BM3548) 1-1/4" x 4-3/4" double grooved pin from both primary wing linkages and attach both linkage to cylinder clevis. Secure (b) (BP3192) 1-7/8" OD x 1-1/4" ID x 10 GA. machinery bushings and (c) (AP2711) 1-1/4" heavy duty snap rings.



Primary wing linkage

▶ **NOTE:** Charging a hydraulic system will remove oil from a tractors hydraulic reservoir. Be sure to check tractor oil level after charging a new system

6. Extend cylinder rod slowly until centered over wing linkage. Insert (d) (BM3543) 1" x 4-5/16" double groove pin into wing linkage. Place (e) (BP3215) 1-1/2" x 1" 14 GA. machine bushings over pin ends and secure with (f) (AP2407) 1" external heavy duty snap rings.



Secondary wing linkage

Coulter Assembly

AT3000

Task

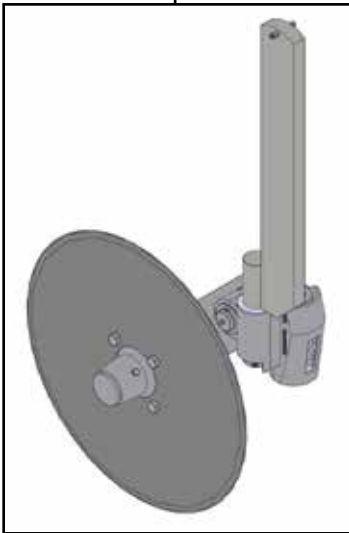
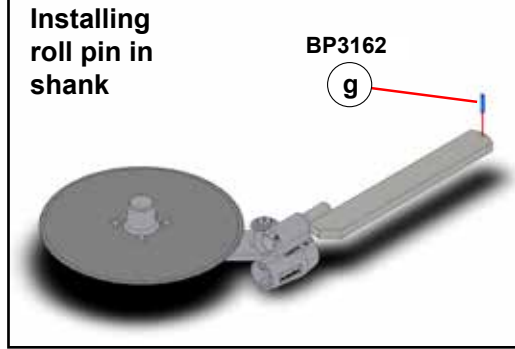
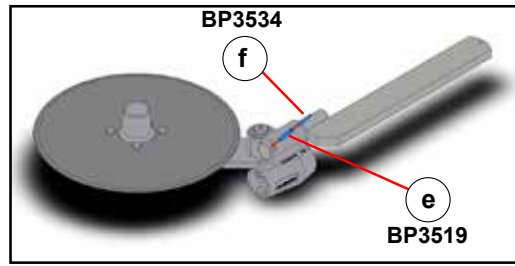
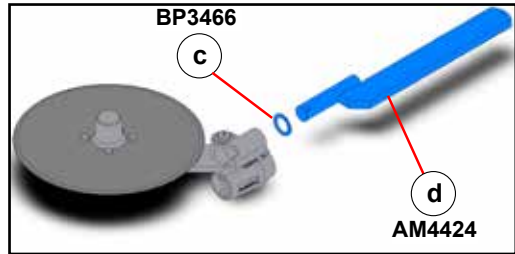
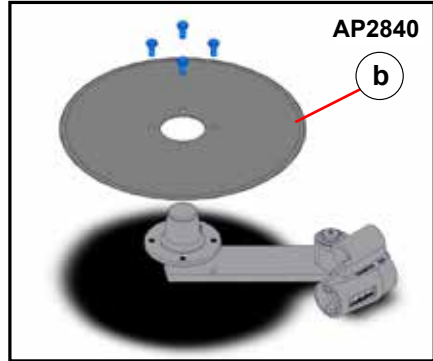
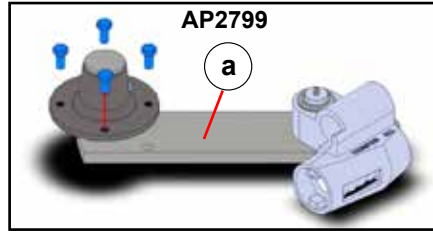
Procedures

Illustrations

▶ Preparing coulters for mounting

1. Remove hex cap screws from hub (a) (AM2799) coulters arm with hub and knee casting assembly.
2. Place (AP2840) 20" smooth coulters blade on coulters assembly and replace hex cap screws.
3. Install (c) (BP3466) 2-1/2" OD x 1-3/4" ID, 10 GA., 18-8 SS machinery bushing over (d) (AM4424) 23" coulters shank weldment.
4. Insert the 23" coulters shank into coulters assembly. Start (e) (BP3519) 3/8" x 2-1/2" roll pin in base of coulters shank. Insert the (f) (BP3534) 7/32" x 2-1/2" roll pin in the end of the 3/8" roll pin and drive both pins together. Leave an equal amount of pin on each sides of the shank.
5. Install the (g) (BP3162) 3/8" x 2" roll pin through the shank weldment top hole.

AAM2728
Super 1200 coulters 1 row
(Blade not part of bundle.)



AT3000

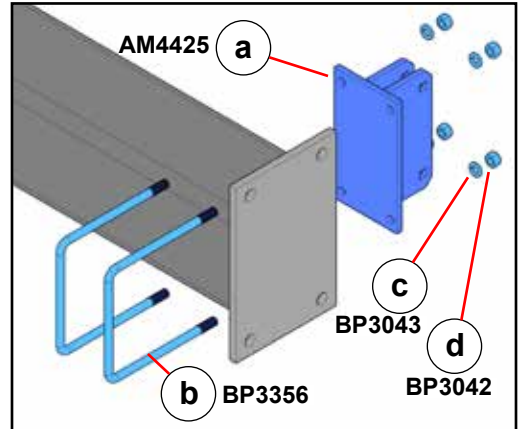
Task

Procedures

Illustrations

- ▶ Mounting Flatbacks
- ▶ **NOTE:** Consult row spacing pages for measurements and placement of offset brackets if required.
- ▶ **NOTE:** Flatbacks are placed on the rear side of the primary and secondary wings.
- ▶ Installation of coulters assembly

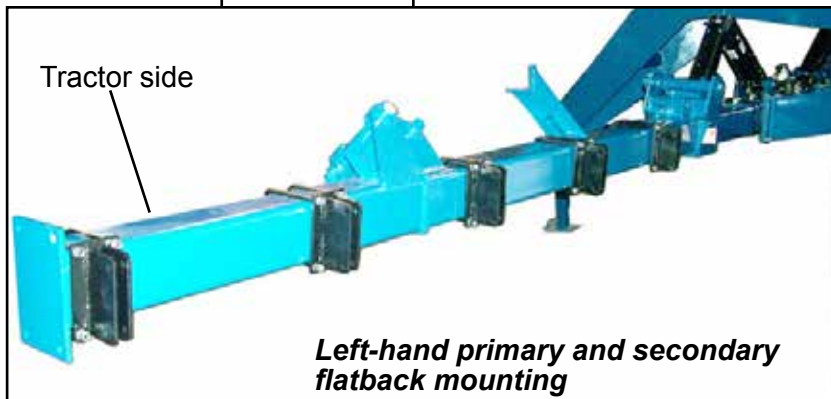
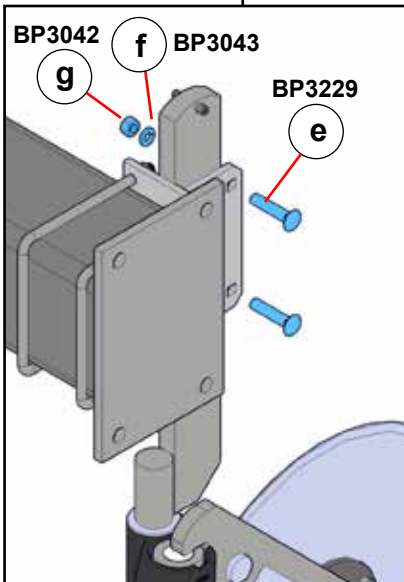
1. Install (a) (AM4425) 7" x 7" flatbacks on rear side of the primary and secondary wings and tractor side of the center section.
Install (b) (BP3356) 1/2" x 7" x 8-1/4" u-bolts.
Secure with (c) (BP3043) 1/2" lock washers and (d) (BP3042) 1/2" hex nuts.
2. Insert coulters shank into the mounting.
3. Insert the (e) (BP3229) 1/2"-13 x 2-1/2" carriage bolt into top hole of bracket. Push coulters shank assembly back into the bracket and insert the bottom carriage bolt. Place (f) (BP3043) 1/2" lock washer and (g) (BP3042) 1/2"-13 hex nut on each carriage bolt. Do not tighten at this point.
4. Raise coulters shank assembly in bracket and place a 3" spacer between the roll pin and the top of the bracket. Tighten the 1/2" hex nuts. This height is a starting point.



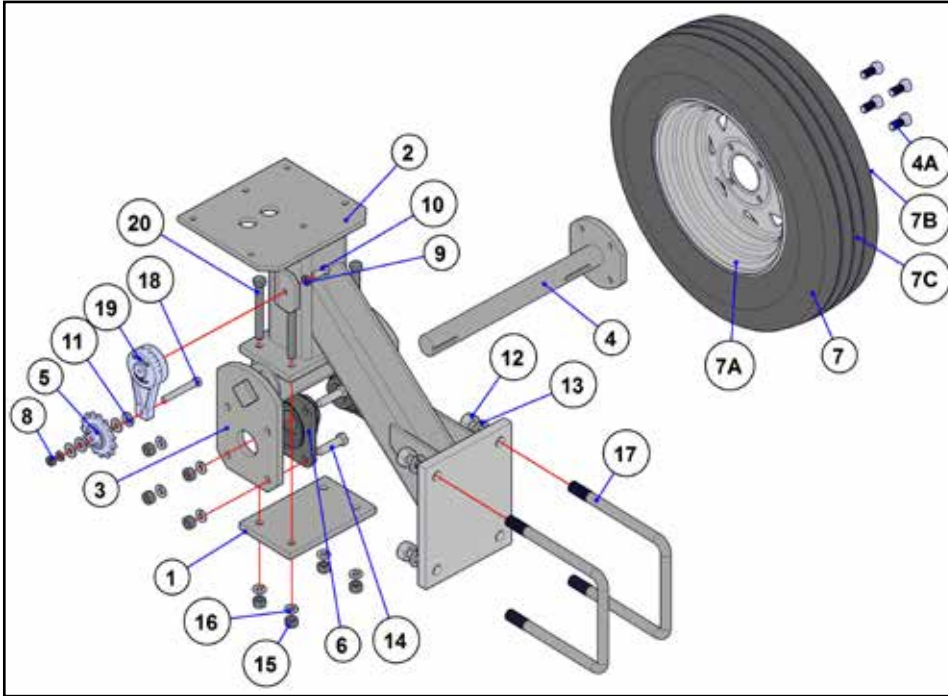
Center section coulters mounting



Primary and secondary wings coulters mounting

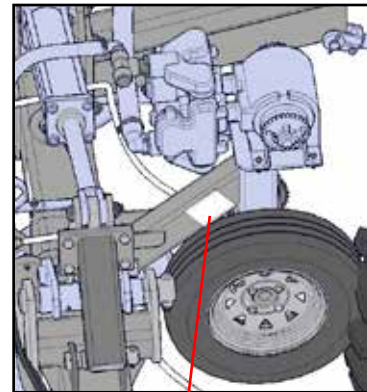


AT3000

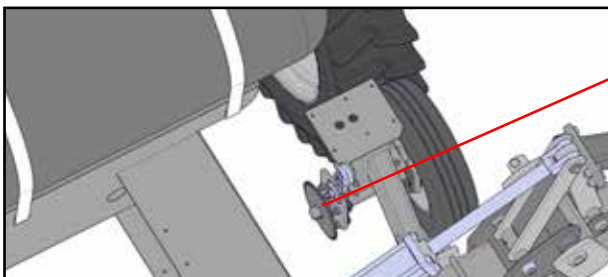


► PKG00137 Package, AT3000, Pump Drive

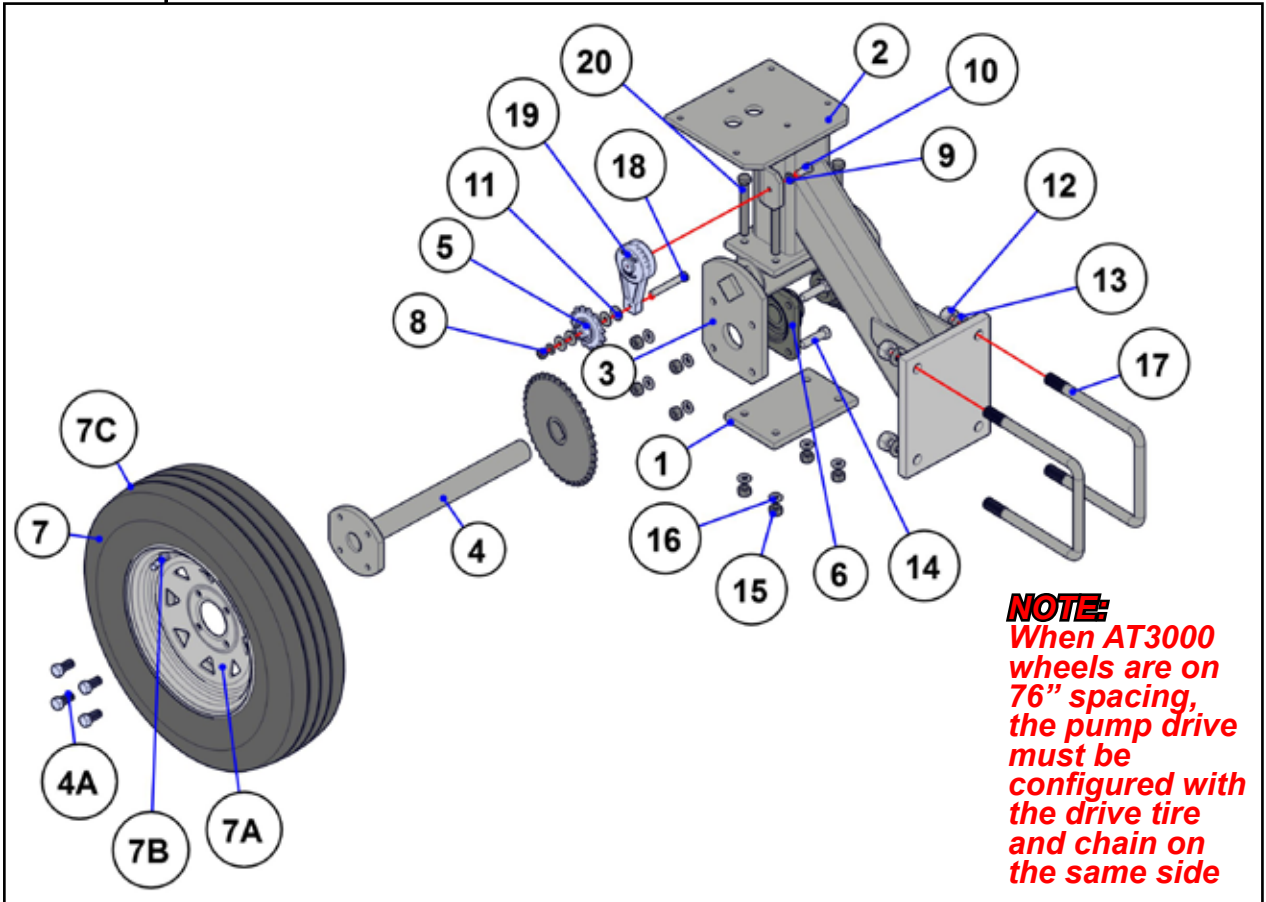
BOM ID	Qty	Item No	Description
1	1	EM7053	BACKING PLATE, AT3000 PUMP DRIVE
2	1	AM3514	PUMP MOUNTING, AT3000
3	1	AM3515	AXLE MOUNT, AT3000 PUMP DRIVE
4	1	AM3516	PUMP DRIVE WHEEL MOUNT
4A	4	AP2049	WHEEL BOLT, 1/2"-20 X 1"
5	1	AP2382	SPROCKET, IDLER, 15T #50 CHAIN, WITH CLEVIS ADAPTER
6	2	AP2697	BEARING, 1-1/2", SQUARE 4 BOLT FLANGE & LOCK COLLAR
7	1	AP4240	WHEEL, 155/80R12, 12 X 4 X 4, 4" BOLT CIRCLE
7A	1	AP2374	RIM, 12 X 4 X 4, WHITE, 12440
7B	1	AP2790	VALVE STEM, METAL
7C	1	AP4241	TIRE, P155/80R12
8	1	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
9	2	BP3002	WASHER, LOCK, 3/8", PLATED
10	1	BP3006	HEX CAP SCREW, 3/8"-16 X 1", GRADE 5, PLATED
11	4	BP3015	WASHER, FLAT, 3/8"
12	4	BP3034	NUT, HEX, 3/4"-10, GRADE 2, PLATED
13	4	BP3035	WASHER, LOCK, 3/4", PLATED
14	8	BP3041	HEX CAP SCREW, 1/2"-13 X 2", GRADE 5, PLATED
15	12	BP3042	NUT, HEX, 1/2"-13, GRADE 2, PLATED
16	12	BP3043	WASHER, LOCK, 1/2", PLATED
17	2	BP3058	U-BOLT, 3/4"-10 X 7"W X 9"L
18	1	BP3116	HEX CAP SCREW, 3/8"-16 X 3", GRADE 5, PLATED
19	1	BP3239	TENSIONER, RT1002
20	4	BP3693	HEX CAP SCREW, 1/2"-13 X 4-1/2", GRADE 5, PLATED



AP2472
**AP2472, Decal,
 CAUTION, Avoid
 Pump Damage**



NOTE:
 Sprocket location
 for standard and
 Gull Wing centers
 section



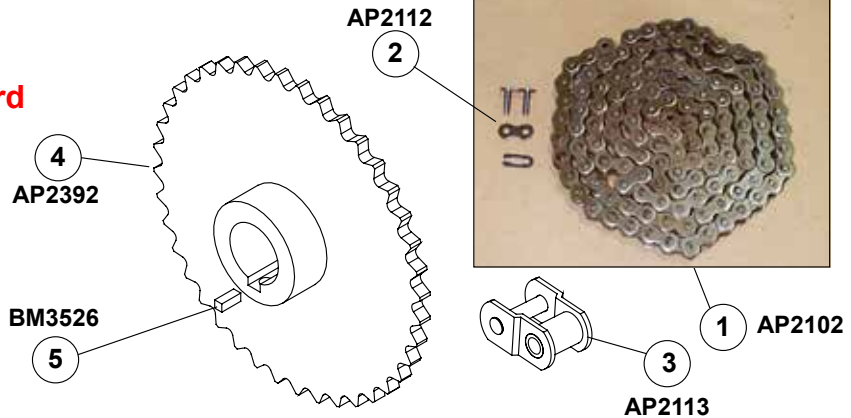
► PKG00137 Package, AT3000, Pump Drive

BOM ID	Qty	Item No	Description
1	1	EM7053	BACKING PLATE, AT3000 PUMP DRIVE
2	1	AM3514	PUMP MOUNTING, AT3000
3	1	AM3515	AXLE MOUNT, AT3000 PUMP DRIVE
4	1	AM3516	PUMP DRIVE WHEEL MOUNT
4A	4	AP2049	WHEEL BOLT, 1/2"-20 X 1"
5	1	AP2382	SPROCKET, IDLER, 15T #50 CHAIN, WITH CLEVIS ADAPTER
6	2	AP2697	BEARING, 1-1/2", SQUARE 4 BOLT FLANGE & LOCK COLLAR
7	1	AP4240	WHEEL, 155/80R12, 12 X 4 X 4, 4" BOLT CIRCLE
7A	1	AP2374	RIM, 12 X 4 X 4, WHITE, 12440
7B	1	AP2790	VALVE STEM, METAL
7C	1	AP4241	TIRE, P155/80R12
8	1	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
9	2	BP3002	WASHER, LOCK, 3/8", PLATED
10	1	BP3006	HEX CAP SCREW, 3/8"-16 X 1", GRADE 5, PLATED
11	4	BP3015	WASHER, FLAT, 3/8"
12	4	BP3034	NUT, HEX, 3/4"-10, GRADE 2, PLATED
13	4	BP3035	WASHER, LOCK, 3/4", PLATED
14	8	BP3041	HEX CAP SCREW, 1/2"-13 X 2", GRADE 5, PLATED
15	12	BP3042	NUT, HEX, 1/2"-13, GRADE 2, PLATED
16	12	BP3043	WASHER, LOCK, 1/2", PLATED
17	2	BP3058	U-BOLT, 3/4"-10 X 7"W X 9"L
18	1	BP3116	HEX CAP SCREW, 3/8"-16 X 3", GRADE 5, PLATED
19	1	BP3239	TENSIONER, RT1002
20	4	BP3693	HEX CAP SCREW, 1/2"-13 X 4-1/2", GRADE 5, PLATED

Sprockets & Roller Chains

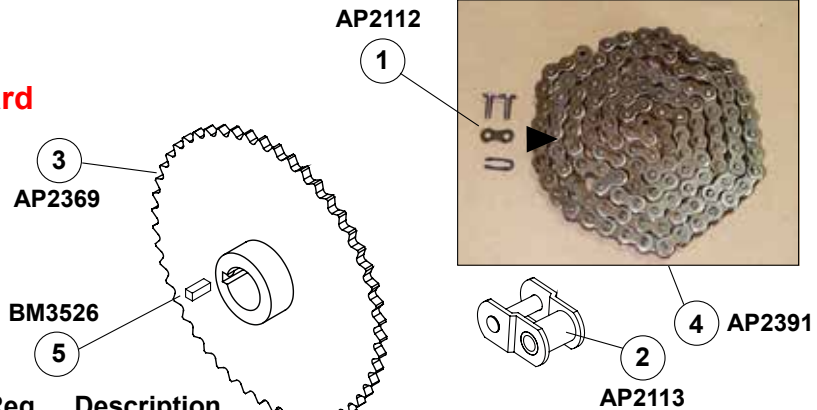
AT3000	Task	Procedures	Illustrations
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► **Bundle Number**
33000133
40 Tooth Standard
Rate



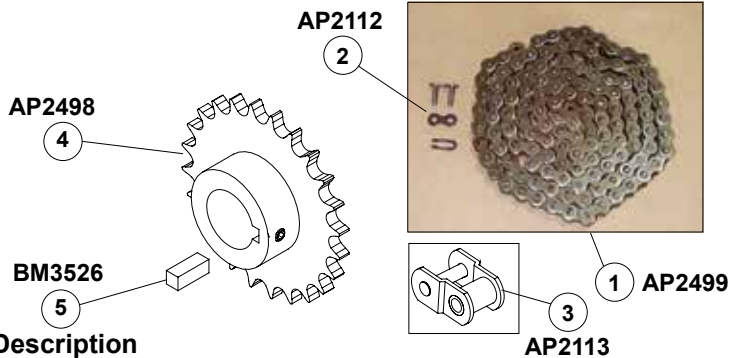
Ref. Part No.	Req.	Description
1. AP2102	1	Chain, roller, stainless steel, #50, 57"
2. AP2112	1	#50 stainless connector link
3. AP2113	1	#50 stainless 1/2" link
4. AP2392	1	Sprocket, 5040 x with/hub, 1-1/2" RND bore, 3/8" key
5. BM3526	1	Key, 3/8" x 3/8" x 1"
6. PKG00137	1	AT3000 Pump Package

► **Bundle Number**
33000134
50 Tooth Standard
Standard
Rate



Ref. Part No.	Req.	Description
1. AP2112	1	#50 stainless connector link
2. AP2113	1	#50 stainless 1/2" link
3. AP2369	1	Sprocket, 5050 x with/hub 1-1/2" RND bore, 3/8" key
4. AP2391	1	Chain, roller, stainless steel, #50, x 60"
5. BM3526	1	Key, 3/8" x 3/8" x 1"
6. PKG00137	1	AT3000 Pump Package

► **Bundle Number**
33000130
24 Tooth Low Rate
Rate



Ref. Part No.	Req.	Description
1. AP2499	1	Chain, roller, stainless steel, #50, 84 Pitch 52-1/2"
2. AP2112	1	#50 stainless connector link
3. AP2113	1	#50 stainless 1/2" link
4. AP2498	1	Sprocket, 5024 x with/hub, 1-1/2" RND bore, 3/8" key
5. BM3526	1	Key, 3/8" x 3/8" x 1"
6. PKG00137	1	AT3000 Pump Package

AT3000

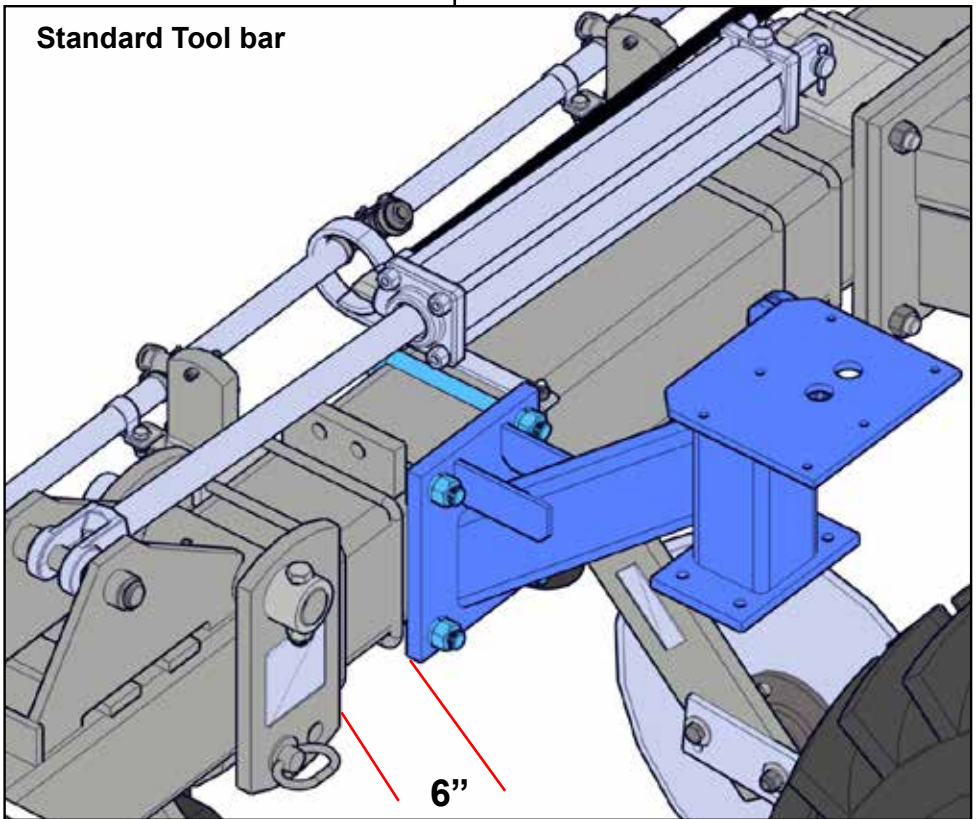
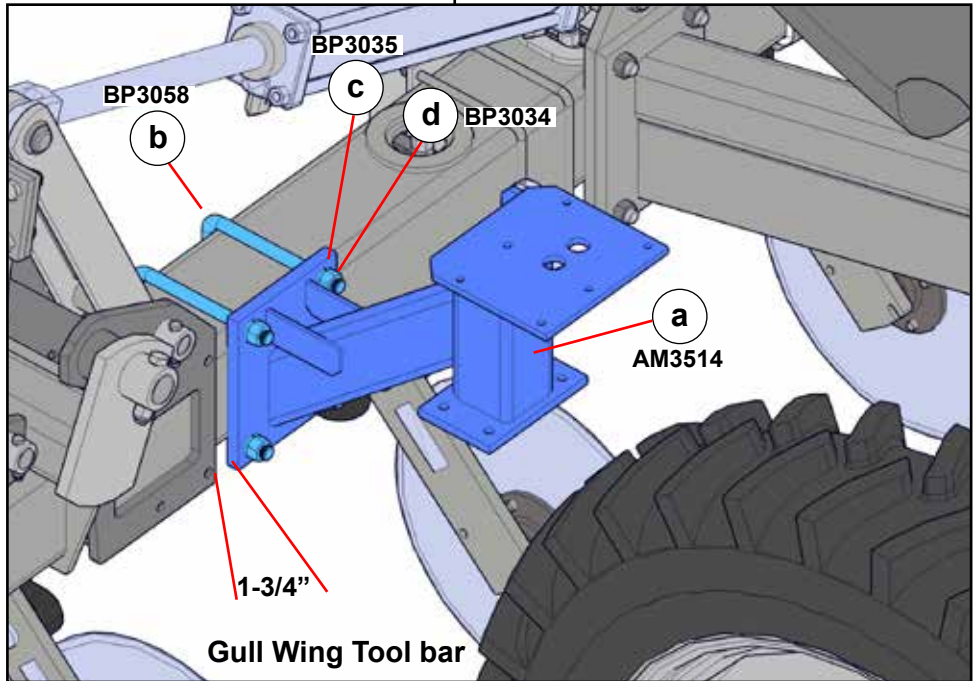
Task

Procedures

Illustrations

► Pump assembly and mounting

1. Mount (a) (AM3514) pump drive frame on rear side of tool bar center 1-3/4" from hinge weldment to mounting plate gull wing center. Install (b) (BP3058) 3/4" x 7"W x 9"L u-bolts, (c) (BP3035) 3/4" lock washers and (d) (BP3034) 3/4" hex nuts. Do not completely tighten 3/4" hex nuts until pump assembly is complete and pump wheel centered on drive tire.



Toolbar Assembly (Pump Drive On Outside)

AT3000

Task

Procedures

Illustrations

► Pump assembly and mounting

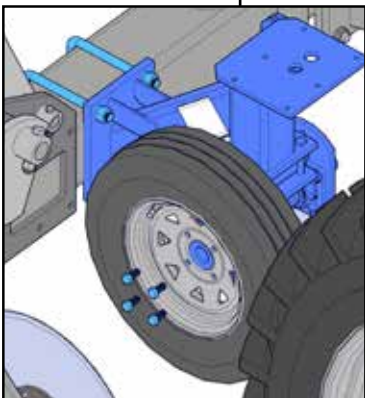
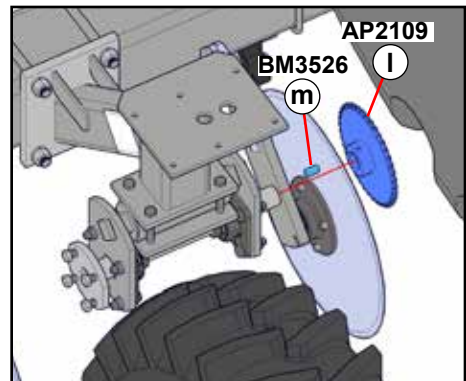
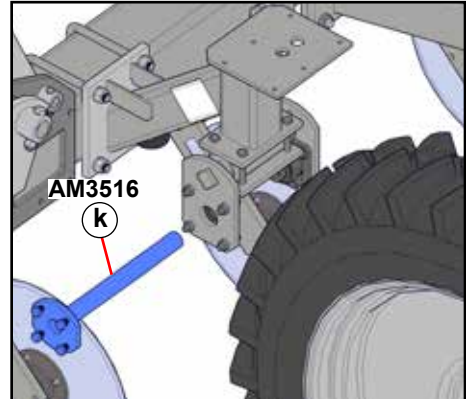
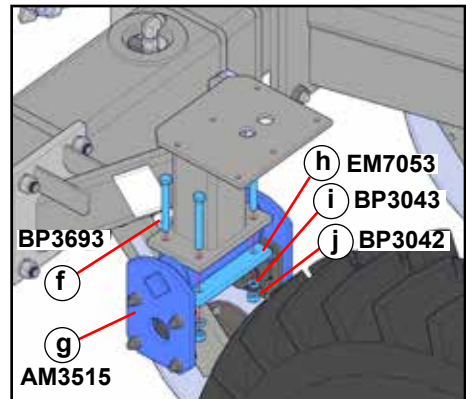
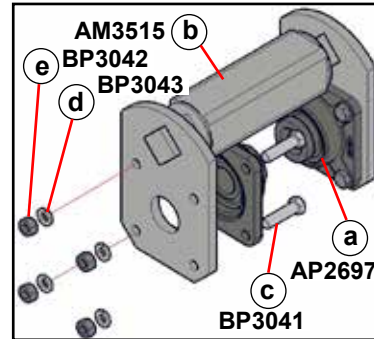
1. Pre-assemble (a) (AP2697) 1-1/2" bearings with lock collar inside the (b) (AM3515) pump drive axle mount. Insert (c) (BP3041) 1/2" x 2" hex cap screws from the inside and secure with (d) (BP3043) 1/2" lock washers and (e) (BP3042) 1/2" hex nuts.
2. Insert (f) (BP3693) 1/2" x 4-1/2" hex cap screws into pump mounting.
3. Position (g) (AM3515) axle mount under pump mounting.
4. Place (h) (EM7053) backing plate under axle mount through hex cap screws.
5. Secure with (i) (BP3043) 1/2" lock washers and (j) (BP3042) 1/2" hex cap screws.

► Do not secure lock collars until wheel is centered on drive tire.

6. Insert (k) (AM3516) pump drive wheel mounting into axle mount. Place lock collars on shaft while inserting.
7. Place (l) (AP2109) 5040 sprocket on pump drive wheel mount with (m) (BM3526) 3/8" x 3/8" x 1" key.

► Do not secure sprocket until the final alignment with the pump chain is completed.

8. Remove lug bolts and mount (AP4240) 155/80R12 wheel.



Toolbar Assembly (Pump Drive On Inside)

AT3000

Task

Procedures

Illustrations

▶ Pump assembly and mounting

NOTE:

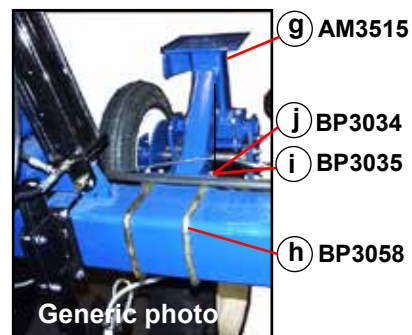
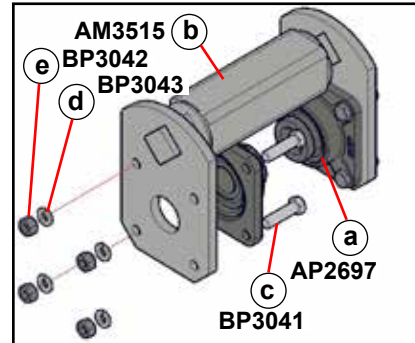
Photos show 1/2" x 2" hex cap screws (14) inserted from the outside. Hex cap screws must be inserted from the inside out

NOTE:

When AT3000 wheels are on 76" spacing, the pump drive must be configured with the drive tire and chain on the same side

1. Install (a) (AP2697) 1-1/2" bearings with lock collar inside the (b) (AM3515) pump drive axle mount. Insert (c) (BP3041) 1/2" x 2" hex cap screws from the inside and secure with (d) (BP3043) 1/2" lock washers and (e) (BP3042) 1/2" hex nuts.
2. Place sprocket on (f) (AM3516) pump drive wheel mount with key. Do not tighten set screw on sprocket until the sprocket and pump sprocket are align. Insert drive assembly into axle mount. Place lock collars on shaft while inserting.

Do not secure lock collars until wheel is centered on drive tire.
3. Mount (g) (AM3514) pump drive frame on rear side of toolbar center aligning the pump tire with the drive tire. Install (h) (BP3058) 3/4" x 7"W x 9"L u-bolts, (i) (BP3035) 3/4" lock washers and (j) (BP3034) 3/4" hex nuts. Do not completely tighten 3/4" hex nuts until pump assembly is complete and pump wheel centered on tire.
4. Remove lug bolts and mount (k) (AP4240) wheel.



Toolbar Assembly (Tension Arm)

AT3000

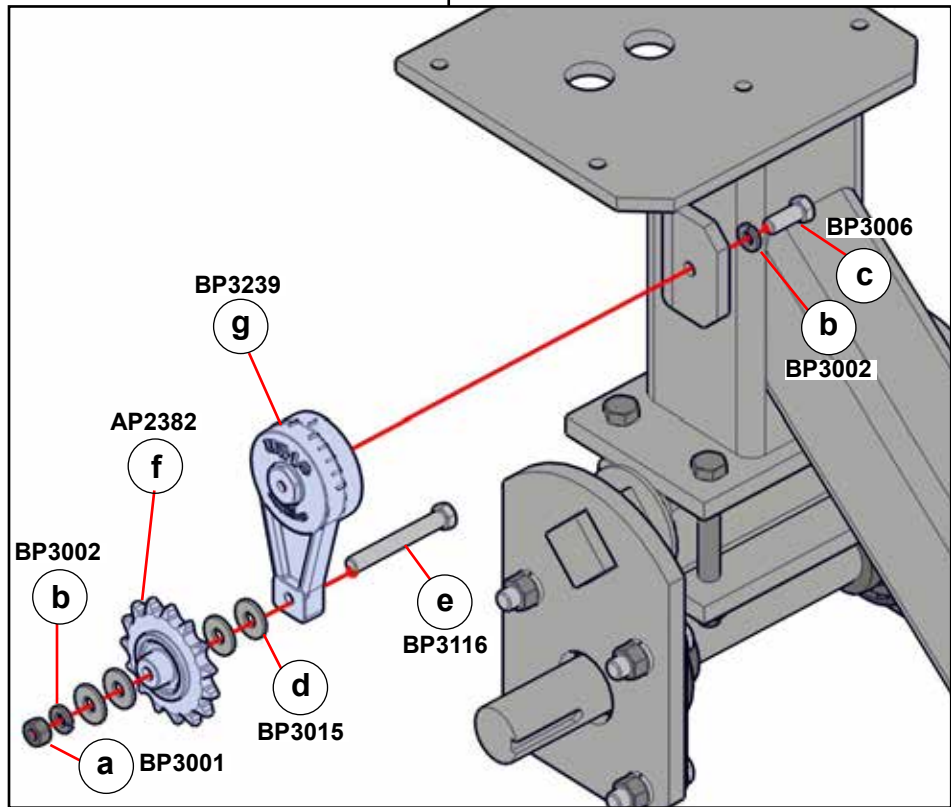
Task

Procedures

Illustrations

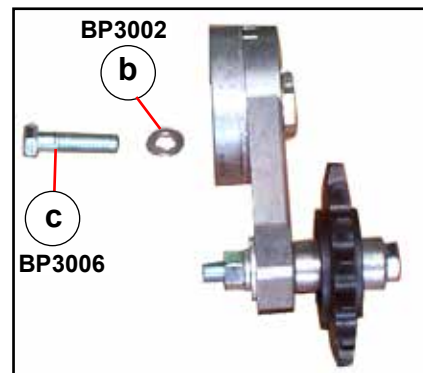
► Tension arm and sprocket parts

1. a. BP3001 4 Nut, hex, 3/8"-16, grade 2 plated
- b. BP3002 2 Washer, lock, 3/8", plated
- c. BP3006 1 Hex cap screw, 3/8"-16 x 1" x 3/8"
- d. BP3015 4 Washer, flat, 3/8", plated
- e. BP3116 1 Hex cap screw, 3/8"-16 x 3"
- f. AP2382 1 Idler sprocket, 15T #50 chain w/clevis adapter
- g. BP3239 1 Tensioner, RT 1002



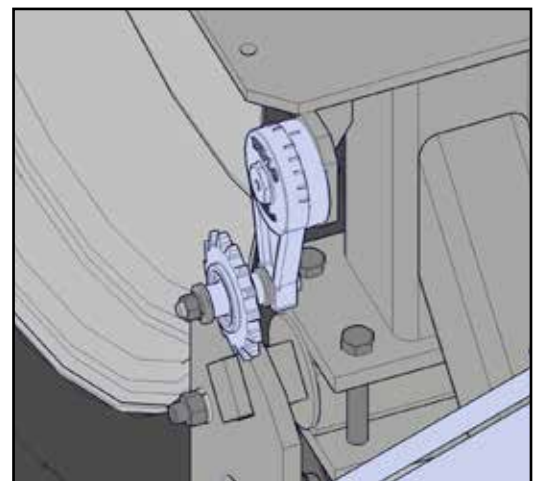
► Installing tensioner arm

2. Place (b) (BP3002) 3/8" lock washer (c) (BP3006) 3/8"-16 x 1" hex cap screw into tension arm mounting bracket.





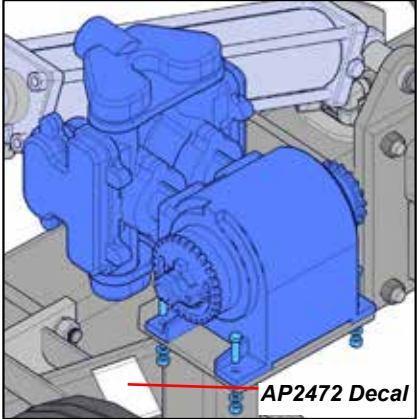



► Mounting Idler sprocket

3. Install (g) (BP3239) tensioner RT 1002 on 3/8" hex cap screw and tighten.
4. Insert (e) (BP3116) 3/8"-16 x 3" hex cap screw through (f) (AP2382) sprocket, idler 15T # 50 chain, w/clevis adapter, (d) (BP3015) 3/8" flat washers and tensioner. Secure with (b) (BP3002) 3/8" lock washer and (a) (BP3001) 3/8" hex nut.



► **NOTE:**
Flat washers are used to align the sprocket with the chain. Start with three between sprocket and tensioner

	Toolbar Assembly (Mounting Pump)		
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AT3000	Task	Procedures	Illustrations
<p>▶ Installing pump on pump mounting stand</p> <p>▶ NOTE: Install Decal AP2472 CAUTION Avoid Pump Damage</p>	<p>▶ Installation of roller chain</p> <p>▶ NOTE: Tensioner must be placed on the slack side of the chain</p>	<ol style="list-style-type: none"> 1. Place the pump on the pump mounting and secure with bolts included with pump. (3/8" x 1-1/2" hex cap screws, 3/8" lock washers and 3/8" hex nuts) 2. Remove plug and replace with vented plug included with pump.  <ol style="list-style-type: none"> 3. Line up lower sprocket with pump sprocket. 4. Place (CM2248) roller chain, #50, 128 over pump sprocket, under tensioner and around wheel drive sprocket.  <ol style="list-style-type: none"> 5. Connect chain together with (AP2103) connector link #50. 6. Align chain on sprockets. Spin wheel to assure alignment and tighten tension arm mounting. 7. Secure lock collars and set screw on large sprocket. 8. Align assembly with drive tire and secure 3/4" hex nuts on mounting bracket. 9. Loosen 3/8" hex cap screw at the rear of the tensioner. Place a 15/16" wrench on the hex nut on the tensioner. Adjust the arm down until the center mark aligns with center mark on the arm. This is a starting point further adjustment may be need later. 	  <p style="text-align: right; margin-right: 10px;">Standard Center Pump Assembly</p>  <p style="text-align: right; margin-right: 10px;">Gull Wing Center Pump Assembly</p>  <p style="text-align: right; margin-right: 10px;">Center mark arm</p> <p style="text-align: right; margin-right: 10px;">Center Mark</p> <ol style="list-style-type: none"> 10. Tighten 3/8" hex nut at the rear of the tensioner bracket to lock adjustment in position.
<p>▶ Adjusting tensioner</p>			

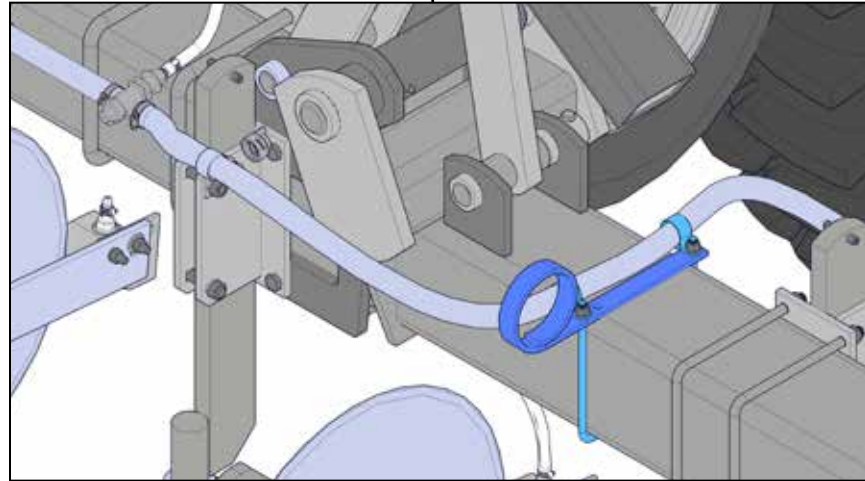
AT3000

Task

Procedures

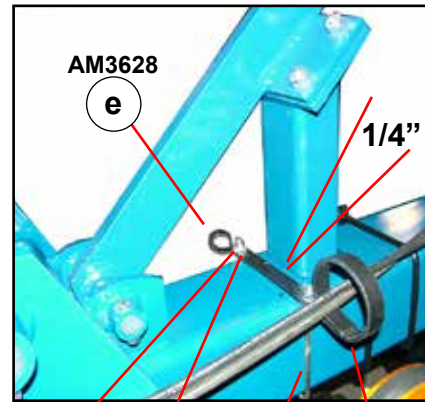
Illustrations

▶ Mounting hose retainers



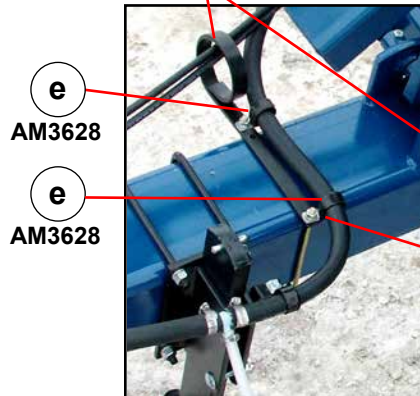
▶ **NOTE:**
Suction hoses around the primary wing hinges are 54" from row to row

1. Install (a) (AM4015) closed loop hose retainer at least 1/4" from the wing stop. Secure with (b) (BP3335) 3/8" x 7"W x 8"L u-bolt.
2. Place two (e) (AM3628) liquid trunk line mounting bracket over u-bolt before securing u-bolt with (c) (BP3002) 3/8" lock washers and (d) (BP3001) 3/8" hex nuts.



(d) (c) (b) (a)
BP3001 BP3002 BP3335 AM4015

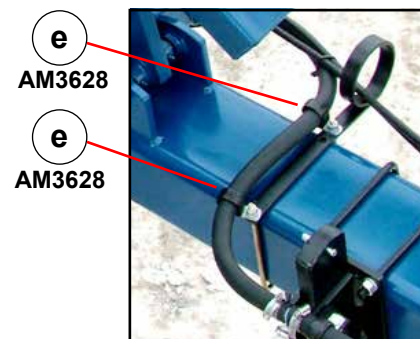
Tractor side



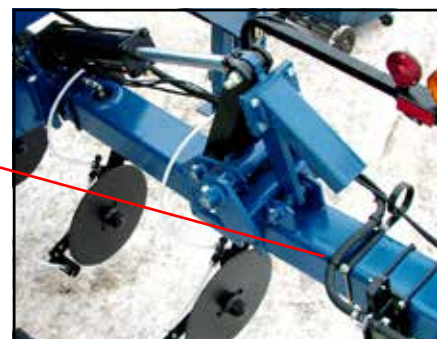
(e) AM3628
(e) AM3628



Left-hand side from the rear



(e) AM3628
(e) AM3628



Right-hand side from the rear

Toolbar Assembly (Mounting Gauge Wheels)

AT3000

Task

Procedures

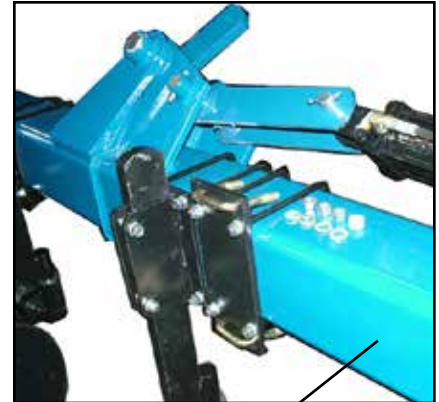
Illustrations

▶ **Mounting gauge wheels**

▶ **Gauge Wheel set 33000112**

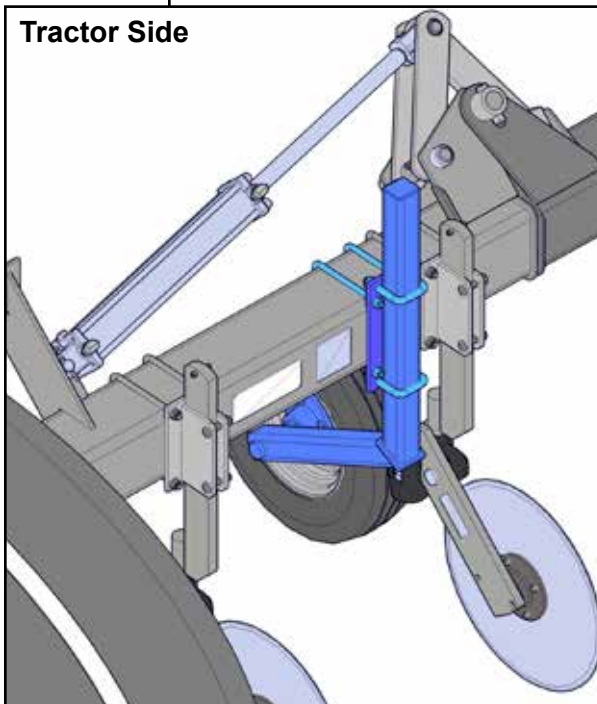
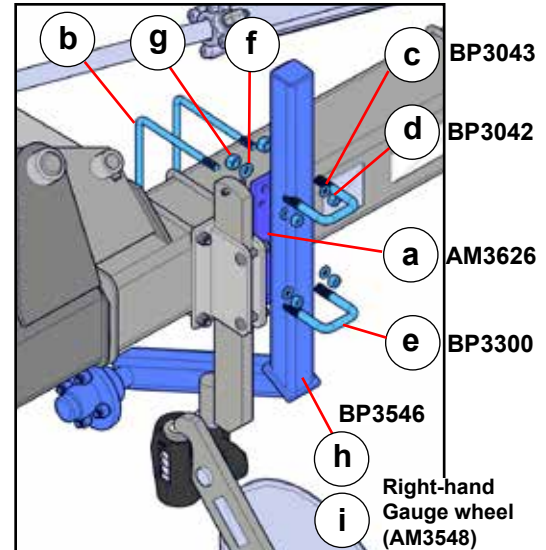
▶ **NOTE:**
Consult row spacings pages for gauge wheel placement

1. Place (a) (AM3626) gauge wheel mounting on rear side of primary wing 3/4" from the flatback plate.
2. Attach mounting with (b) (BP3356) 1/2" x 7"W x 8-1/4"L u-bolts, (c) (BP3043) 1/2" lock washers and (d) (BP3042) 1/2" hex nuts.
3. Insert (e) (BP3300) 5/8" x 2-1/2" x 4" u-bolts into mounting plate and place (f) (BP3039) 5/8" lock washers and (g) (BP3038) 5/8" hex nuts on u-bolts. Insert (h) (AM3546) left-hand or (i) (AM3548) right-hand gauge wheel assembly through u-bolts. Extend assembly up 8" and tighten 5/8" hex nuts. *Gauge wheels will require adjustment in the field.*
4. Mount gauge wheel tire.

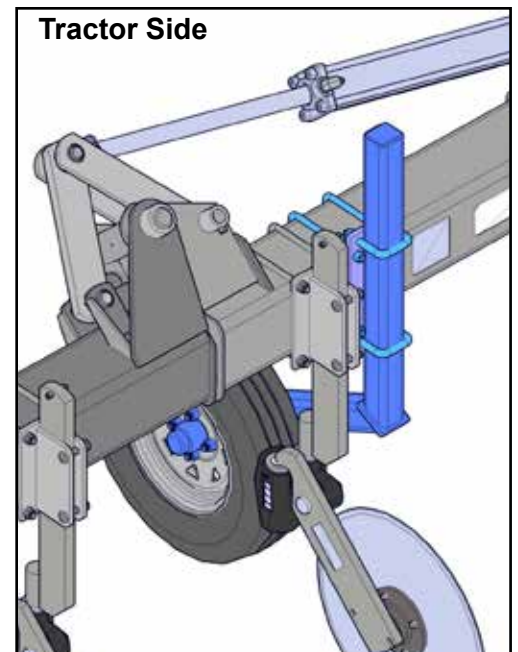


Primary wing rear

BP3356 BP3038 BP3039

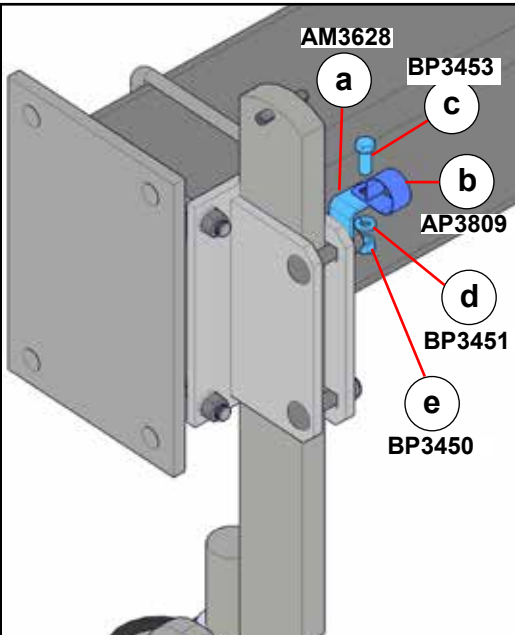
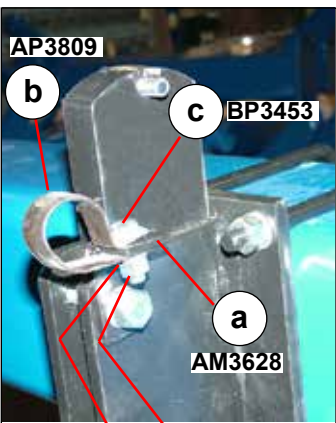

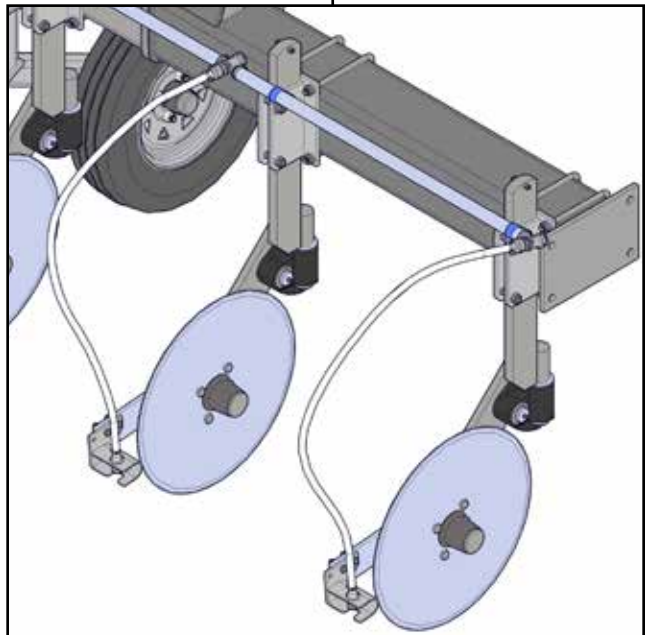


Tractor Side
From the rear right-hand side

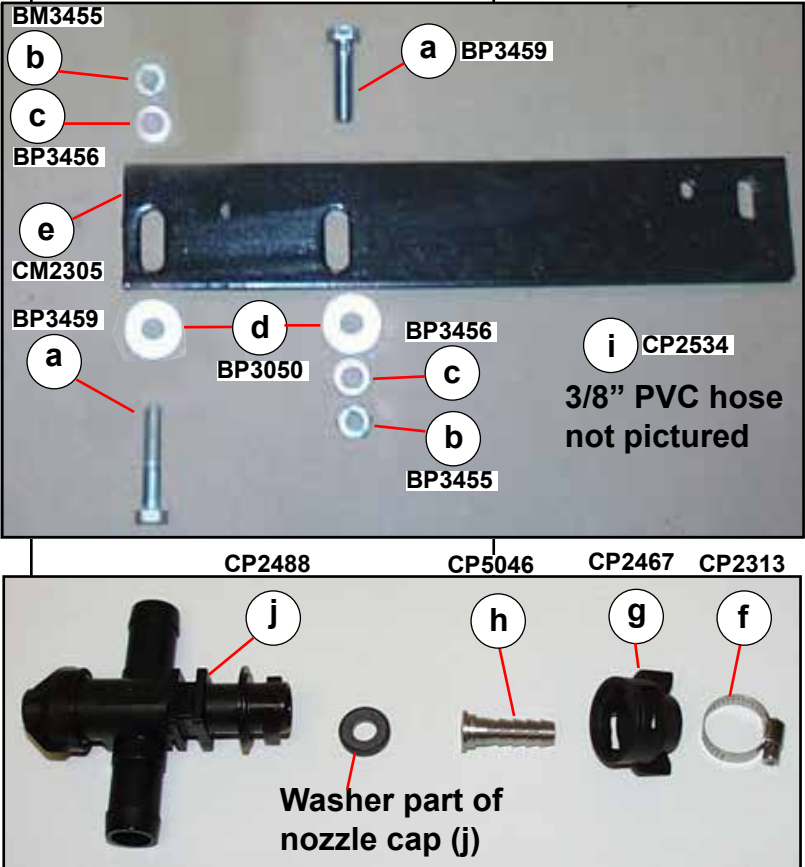
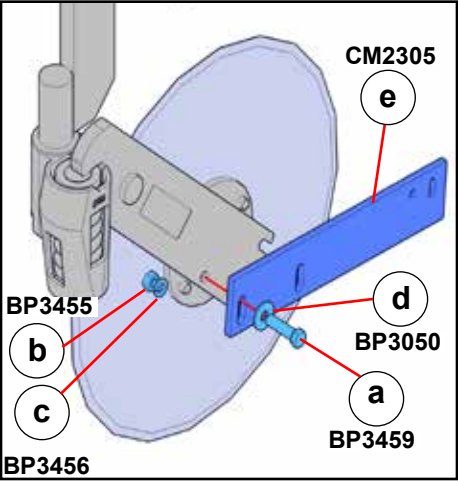


Tractor Side
From the rear left-hand side

Assembly (Hose Support Clamps)

AT3000	Task	Procedures	Illustrations
<p>▶</p> <p>▶</p>	<p>Attaching hose support clamps</p> <p>NOTE: Do not tighten hose support clamps until suction hoses are inserted and adjusted</p>	<ol style="list-style-type: none"> 1. Remove 1/2" hex nut and lock from top carriage bolt of each flatback. Install (a) (AM3628) liquid trunk line mounting bracket over carriage bolt. Replace 1/2" lock and hex nut. 2. Attach (b) (AP3809) 1-1/4" hose support clamp to (a) with (c) (BP3453) 3/8" x 1" hex cap screw, (d) (BP3451) 3/8" lock washer, 18-8 SS and (e) (BP3450) 3/8" hex nut, F594 GR 1 CW. 	   

Assembly (Liquid Injection)

	Task	Procedures	Illustrations
<p>AT3000</p> <p>▶ Clear liquid injection parts</p>		<p>1. JetStream Clear Liquid injection (AAM3353)</p>	
		<p>a. BP3459 2 Hex cap screw, 1/2"-13, x 2", F593 GR 1 CW b. BP3455 2 Nut, hex, 1/2"-13, F594 GR 1 CW c. BP3456 2 Washer, Lock, 1/2", 18-8 SS d. BP3050 2 Washer, flat, 1/2", Plated e. CM2305 1 Jet Stream mounting arm f. CP2313 2 Stainless steel hose clamp 5/8"-1" g. CP2467 1 Nozzle cap, 25608-1-NYR h. CP5046 1 Hose barb insert, 3/8" hose Stainless Steel i. CP2534 5 3/8" PVC 250# PSI hose Jet Stream j. CP2488 1 Diaphragm check valve, double shank 3/4" hose k. DP4086 3 Cable Tie 11-3/8" standard (Not pictured)</p>	
<p>▶ Attaching injection mounting brackets</p>		<p>2. Place (e) (CM2305) Jet Stream mounting arm on coultter arm. Place (d) (BP3050) 1/2" flat washer on (a) (BP3459) 1/2" x 2" hex cap screw into coultter arm slotted hole through mounting arm. Place (c) (BP3456) 1/2" lock washer and (b) (BP3455) 1/2" hex nut on hex cap screw next to blade.</p>	

Assembly (Liquid Injection)

AT3000

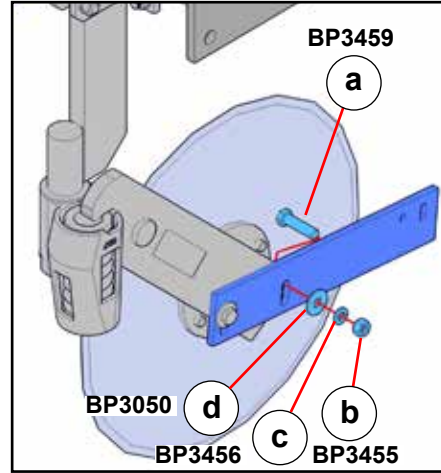
Task

Procedures

Illustrations

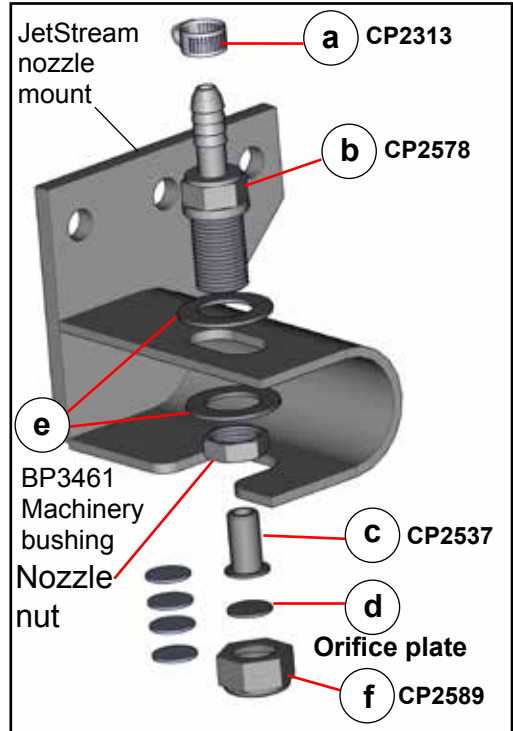
▶ Attaching injection mounting brackets

1. Raise mounting arm and insert (a) (BP3459) 1/2" x 2" hex cap screw blade side into coultter arm slotted hole through mounting arm. Place (d) (BP3050) 1/2" flat washer, (c) (BP3456) 1/2" lock washer on hex cap screw. Raise mounting arm and secure with (b) (BP3455) 1/2" hex nut.



▶ Nozzle assembly parts

2. Nozzle Assembly
- a. CP2313 1 Stainless steel hose clamp 5/8"-1"
 - b. CP2578 1 Straight nozzle body with/nut, 3/8" hose, SS
 - c. CP2537 1 Stream stabilizer -SS
 - d. Orifice plate:
 - CP2541 1 #4916-63
 - CP2542 1 #4916-70
 - CP2543 1 #4916-78
 - CP2544 1 #4916-86
 - CP2545 1 #4916-95
 - f. CP2589 1 Nozzle cap, SS



▶ Nozzle body assembly

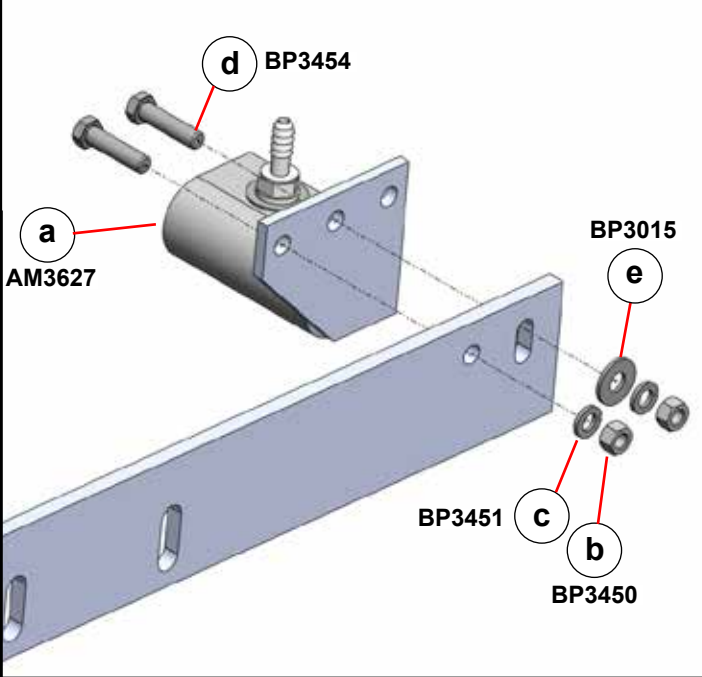
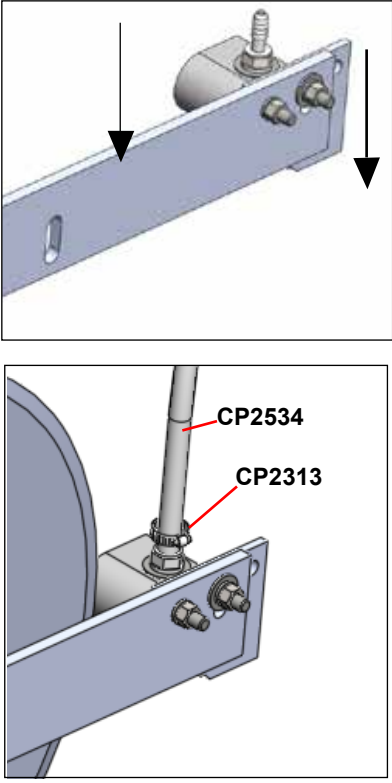
3. Place JetStream nozzle mount in vise. Insert (b) (CP2578) straight nozzle body into (e) (BP3461) 5/8", 1-1/2" OD, 0.78, 18-8 SS, flat washer. Insert into nozzle mount. Place second (e) (BP3461) 5/8", 1-1/2" OD, 0.78, 18-8 SS, flat washer over threads of nozzle assembly, center assembly on slotted hole and secure with nozzle nut.

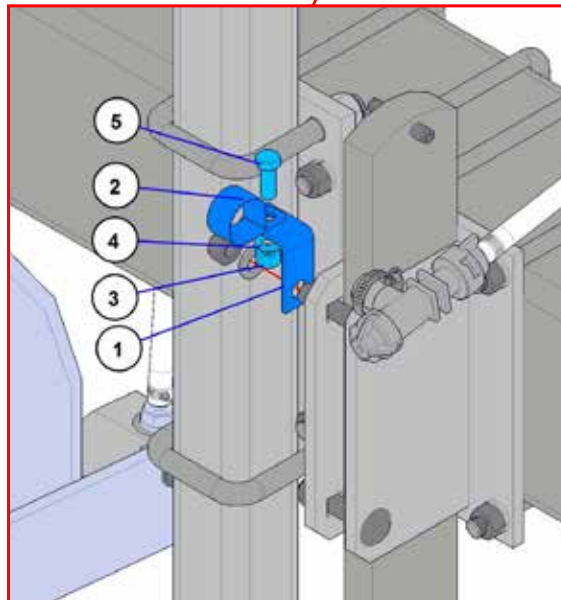
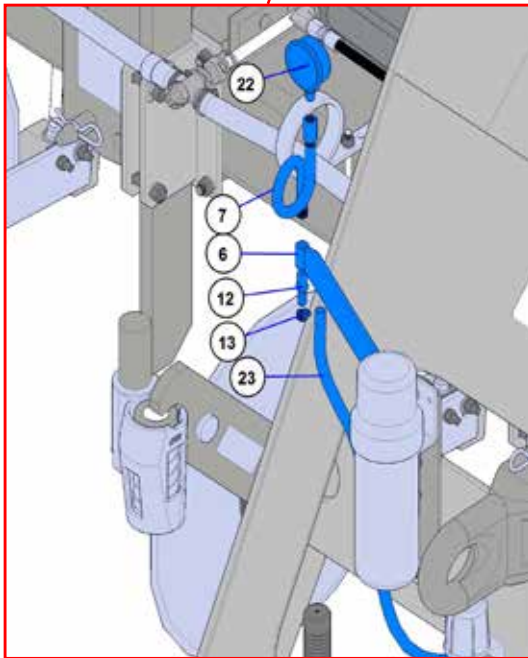
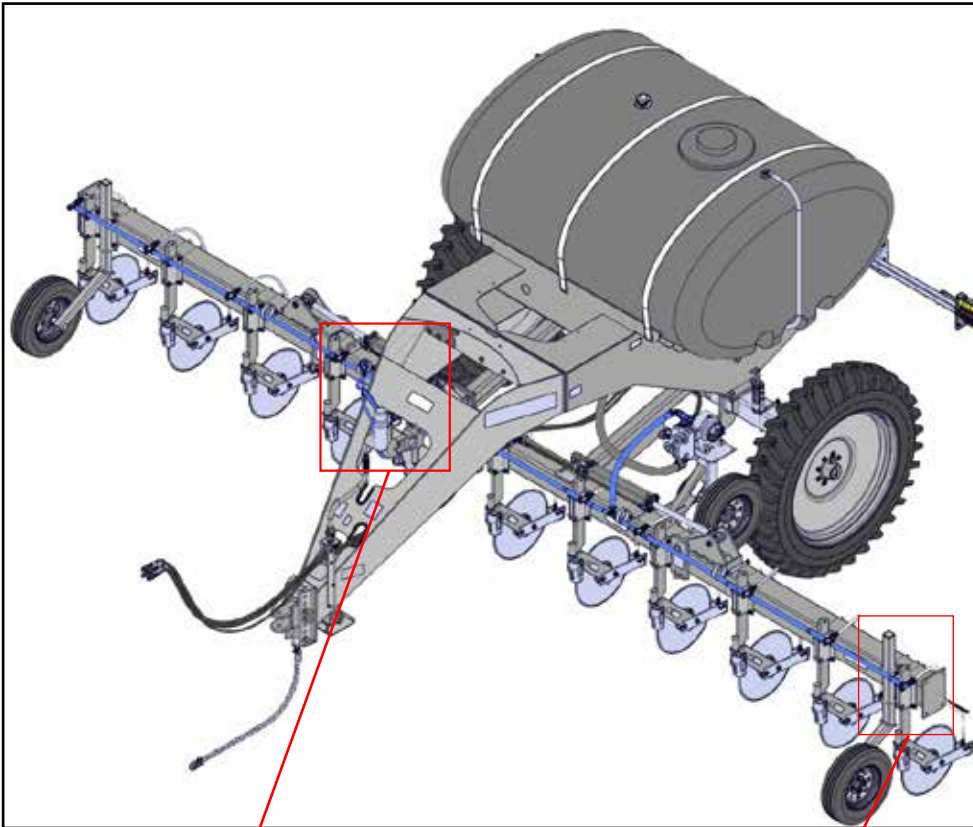
Nozzle assembly should be aligned with blade after coultter assembly is complete.


▶ **NOTE:**
Consult rate chart for orifice size

4. Place orifice plate (d) into (f) (CP2589) nozzle cap. Insert (c) (CP2537) stream stabilizer-SS into nozzle cap. Install assembly into nozzle body.

Assembly (Liquid Injection)

AT3000	Task	Procedures	Illustrations
<p>▶</p>	<p>Jet Stream mounting bracket parts</p>		
<p>▶</p>	<p>NOTE: <i>Rotate rear of nozzle mount down before securing</i></p>	<ol style="list-style-type: none"> <p>a. AM3627 1 Nozzle mount, JetStream</p> <p>b. BP3450 2 Nut, Hex, 3/8"-16, F594 GR 1 CW</p> <p>c. BP3451 2 Washer, Lock, 3/8", 18-8 SS</p> <p>d. BP3454 2 3/8"-16 x 1-1/2" hex cap screw, F593 GR 1 CW</p> <p>e. BP3015 1 Washer, flat, 3/8", Plated</p> <p>Mount (a) (AM3627) JetStream nozzle mount to JetStream mounting arm with two (d) (BP3454) 3/8" x 1-1/2" hex cap screws, F594 GR 1 CW. Secure each hex cap screws with (e) (BP3015) 3/8" flat washers, (c) (BP3451) 3/8" lock washers, 18-8 SS and (b) (BP3450) 3/8" hex nuts, F594 GR 1 CW.</p> <p>Push assembly down. Secure with (e) (BP3015) 3/8" flat washers, (c) (BP3451) 3/8" lock washers 18-8 SS and (b) (BP3450) 3/8"-16 hex nuts F594 GR 1 CW.</p> <p>Cut lengths from bulk (CP2534) 3/8" PVC 250# psi hose <u>as needed</u>. Push hose over hose barb and secure with (CP2313)</p> 	
	<p>▶ Attaching PVC hose to assembly</p>		



BLU-JET 	Manifold Liquid Injection Assembly (Standard Toolbar)		
	AT3000	Task	Procedures

► **44000159 Manifold Assembly, AT3000 3/4" EPDM Hose, 11 Row**

BOM ID	Qty	Item No	Description
1	11	AM3628	BRACKET, MOUNTING, LIQUID TRUNK LINE
2	11	AP3809	1-1/4" HOSE SUPPORT CLAMP, 3/8" BOLT
3	11	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
4	11	BP3002	WASHER, LOCK, 3/8", PLATED
5	11	BP3006	HEX CAP SCREW, 3/8"-16 X 1", GRADE 5, PLATED
6	1	CM2221	NH3 GAUGE HOLDER, TONGUE MOUNT
7	1	CP1999	GAUGE PROTECTOR, PIGTAIL
8	1	CP2190	ELBOW, 90 DEGREE, 1"MP X 1" HOSE BARB, POLY
9	1	CP2249	NIPPLE, 1" POLY
10	1	CP2252	TEE, 1" FP, POLY
11	1	CP2296	PLUG, 1" PIPE, POLY
12	1	CP2308	HOSE BARB
13	2	CP2313	HOSE CLAMP, 1/4"- 5/8" TUBING, STAINLESS STEEL
14	26	CP2314	HOSE CLAMP, 1/2"- 1" TUBING, STAINLESS STEEL
15	1	CP2468	TEE, 3/4"FP X 3/4"HB X 3/4" HOSE BARB, POLY
16	1	CP2469	HOSE BARB, 3/4"MP X 1" HOSE BARB, POLY
17	1	CP2470	TEE, 3/8"HB X 3/4"HB X 3/4" HOSE BARB, POLY
18	12	CP2472	HOSE, EPDM RUBBER, 3/4", 200#
19	2	CP2487	DIAPHRAGM CHECK VALVE, SINGLE SHANK, 3/4" HOSE
20	1	CP2489	REDUCER BUSHING 1-1/2"MP X 1"FP, POLY
21	1	CP2519	HOSE, EPDM RUBBER, 1", 200
22	1	CP2524	GAUGE, 0-160 PSI, GLYCERIN FILLED
23	1	CP2534	HOSE, EVA, 3/8" BRAID JET STREAM

ABBREVIATIONS

NH3-	ANNHYDROUS AMMONIA
MP-	MALE PIPE THREAD
FP-	FEMALE PIPE THREAD
HB-	HOSE BARB
SS-	STAINLESS STEEL
POLY-	NON-METALIC
EVA-	ETHYL VINYL ACETATE
EPDM-	ETHYLENE PROPYLENE DIENE MONOMER



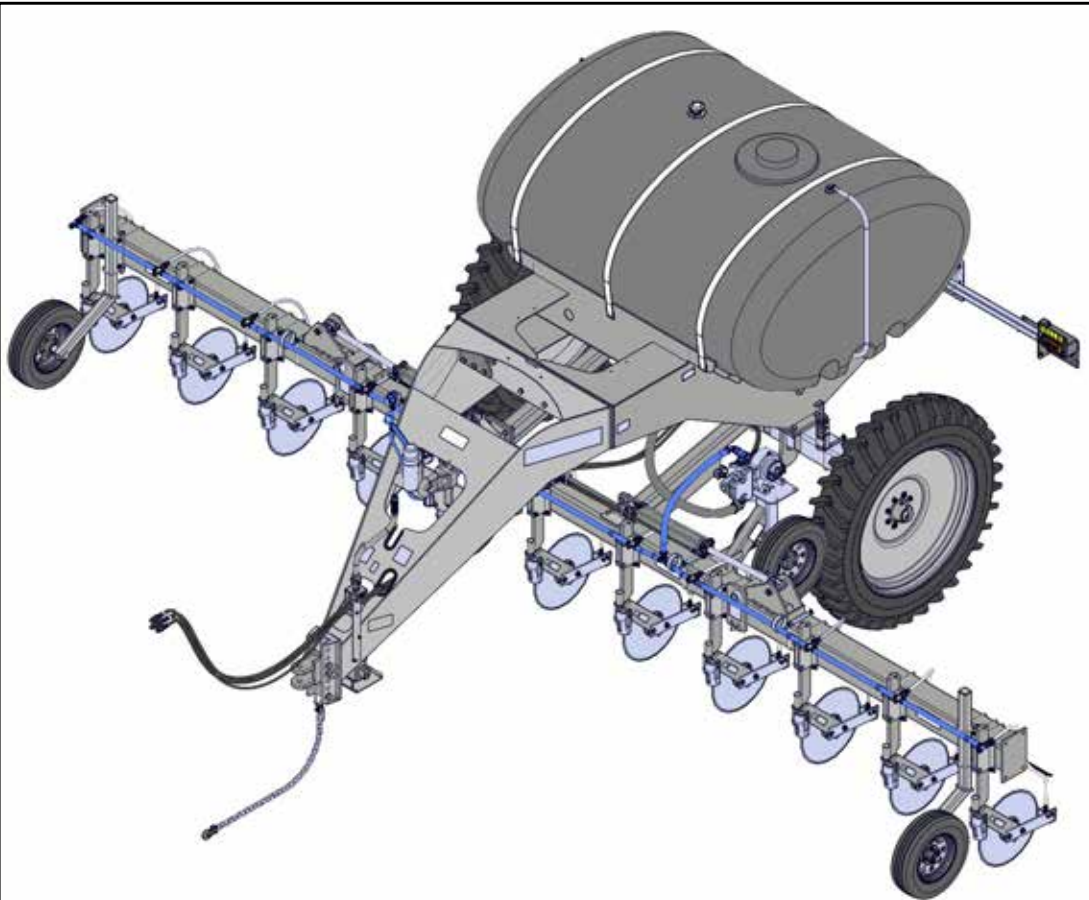
Manifold Liquid Injection Assembly (Standard Toolbar)

AT3000

Task


Procedures

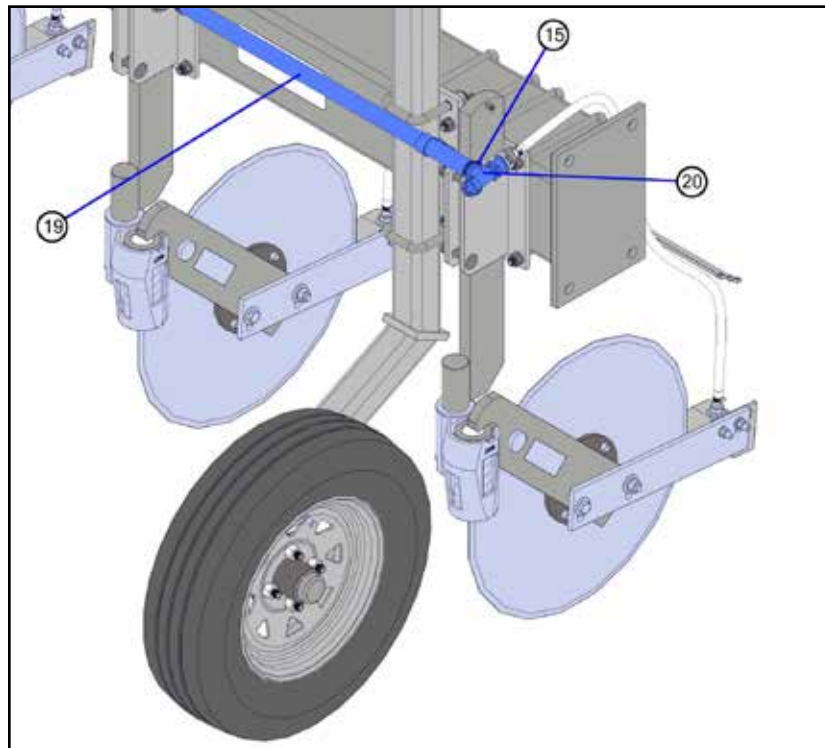
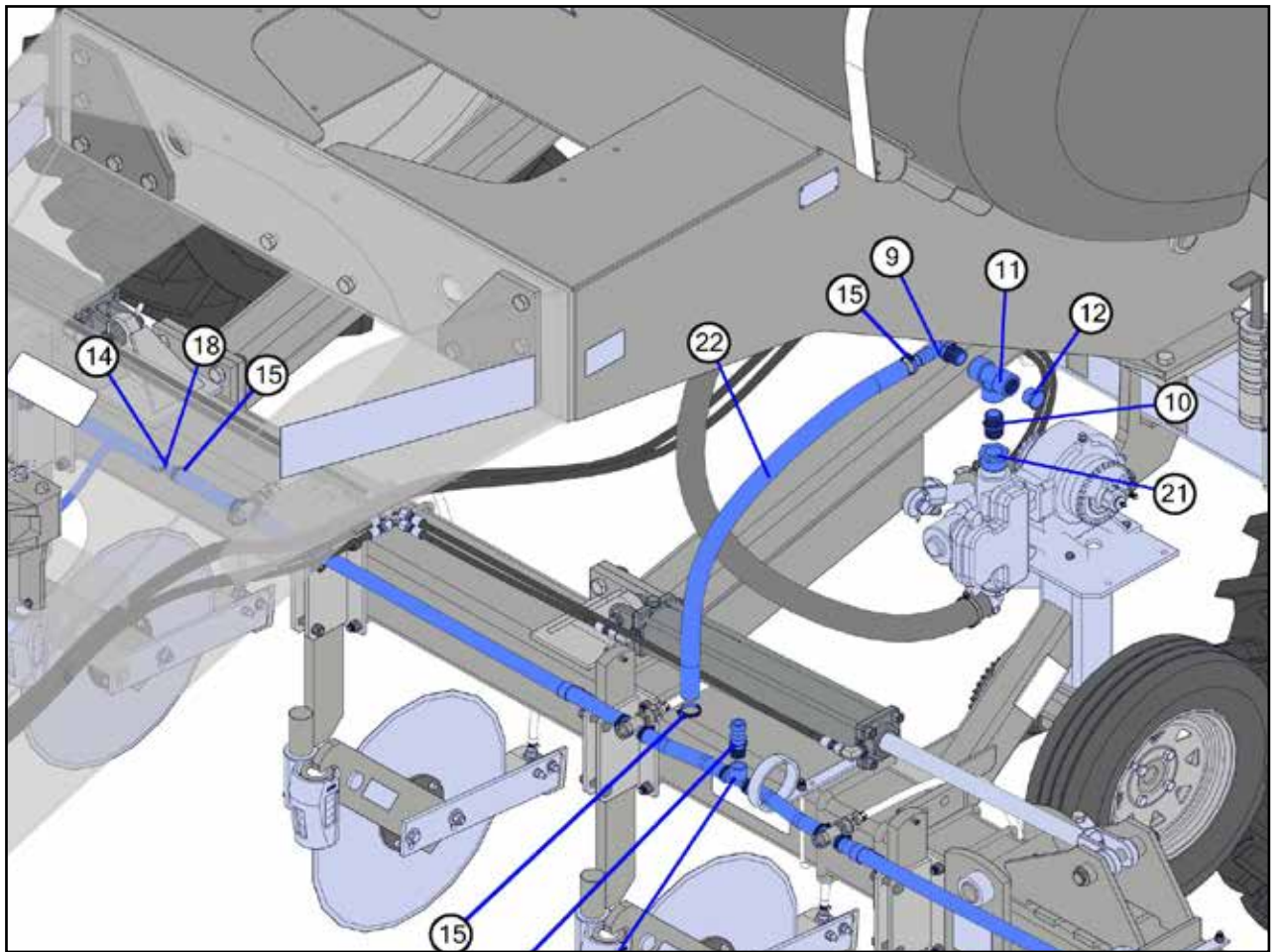
Illustrations



► **44000159 Manifold Assembly, AT3000 3/4" EPDM Hose, 11 Row**

BOM ID	Qty	Item No	Description
1	11	AM3628	BRACKET, MOUNTING, LIQUID TRUNK LINE
2	11	AP3809	1-1/4" HOSE SUPPORT CLAMP, 3/8" BOLT
3	11	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
4	11	BP3002	WASHER, LOCK, 3/8", PLATED
5	11	BP3006	HEX CAP SCREW, 3/8"-16 X 1", GRADE 5, PLATED
6	1	CM2221	NH3 GAUGE HOLDER, TONGUE MOUNT
7	1	CP1999	GAUGE PROTECTOR, PIGTAIL
8	1	CP2190	ELBOW, 90 DEGREE, 1"MP X 1" HOSE BARB, POLY
9	1	CP2249	NIPPLE, 1" POLY
10	1	CP2252	TEE, 1" FP, POLY
11	1	CP2296	PLUG, 1" PIPE, POLY
12	1	CP2308	HOSE BARB
13	2	CP2313	HOSE CLAMP, 1/4"- 5/8" TUBING, STAINLESS STEEL
14	26	CP2314	HOSE CLAMP, 1/2"- 1" TUBING, STAINLESS STEEL
15	1	CP2468	TEE, 3/4"FP X 3/4"HB X 3/4" HOSE BARB, POLY
16	1	CP2469	HOSE BARB, 3/4"MP X 1" HOSE BARB, POLY
17	1	CP2470	TEE, 3/8"HB X 3/4"HB X 3/4" HOSE BARB, POLY
18	12	CP2472	HOSE, EPDM RUBBER, 3/4", 200#
19	2	CP2487	DIAPHRAGM CHECK VALVE, SINGLE SHANK, 3/4" HOSE
20	1	CP2489	REDUCER BUSHING 1-1/2"MP X 1"FP, POLY
21	1	CP2519	HOSE, EPDM RUBBER, 1", 200
22	1	CP2524	GAUGE, 0-160 PSI, GLYCERIN FILLED
23	1	CP2534	HOSE, EVA, 3/8" BRAID JET STREAM

	Manifold Liquid Injection Assembly (Standard Toolbar)		
AT3000	Task	Procedures	Illustrations





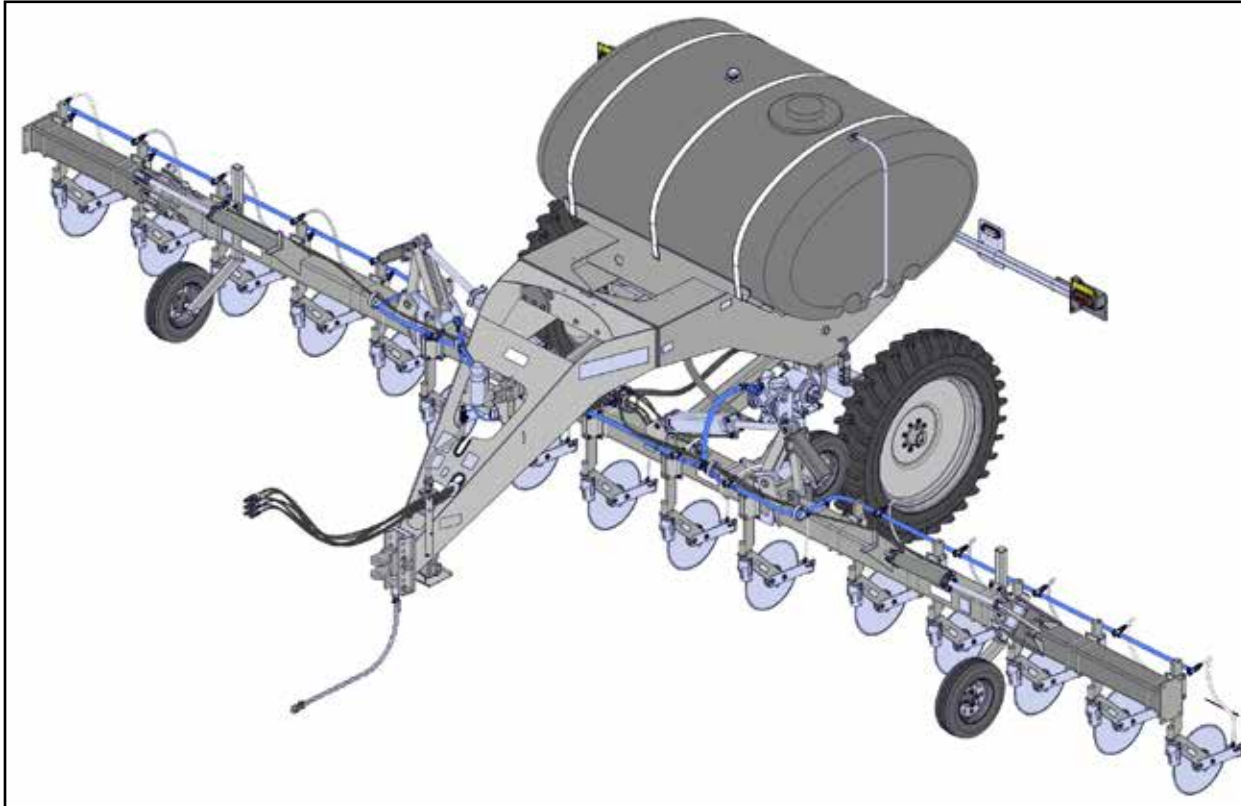
Manifold Liquid Injection Assembly (Gull Wing Toolbar) 15 Row 30"

AT3000

Task


Procedures

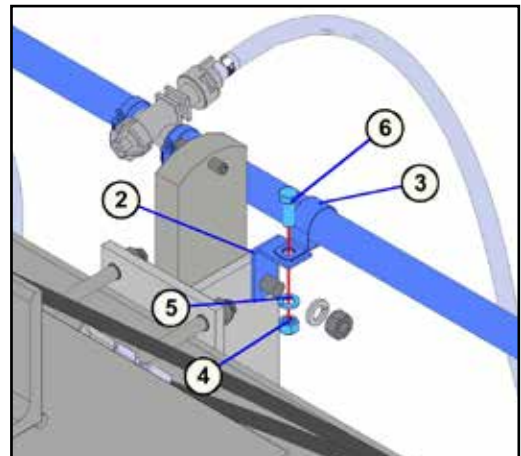
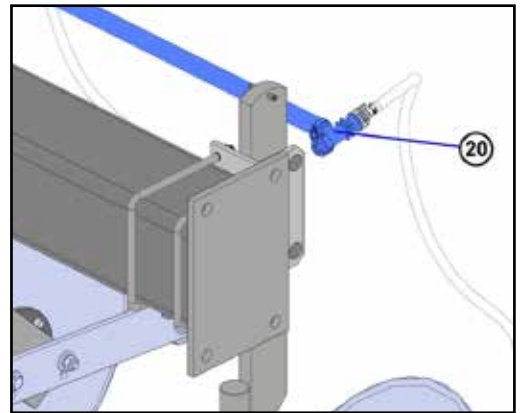
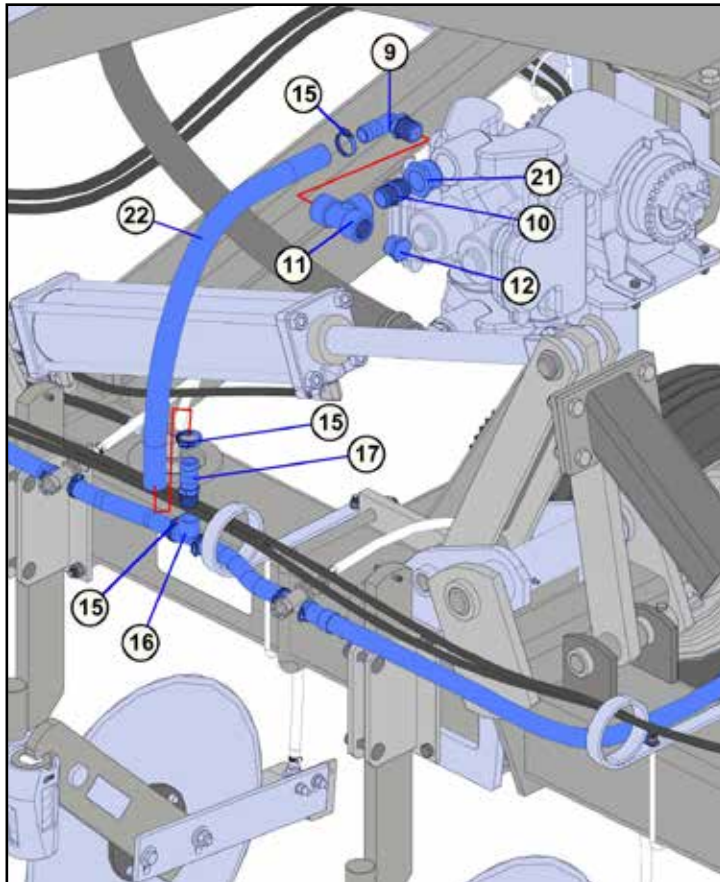
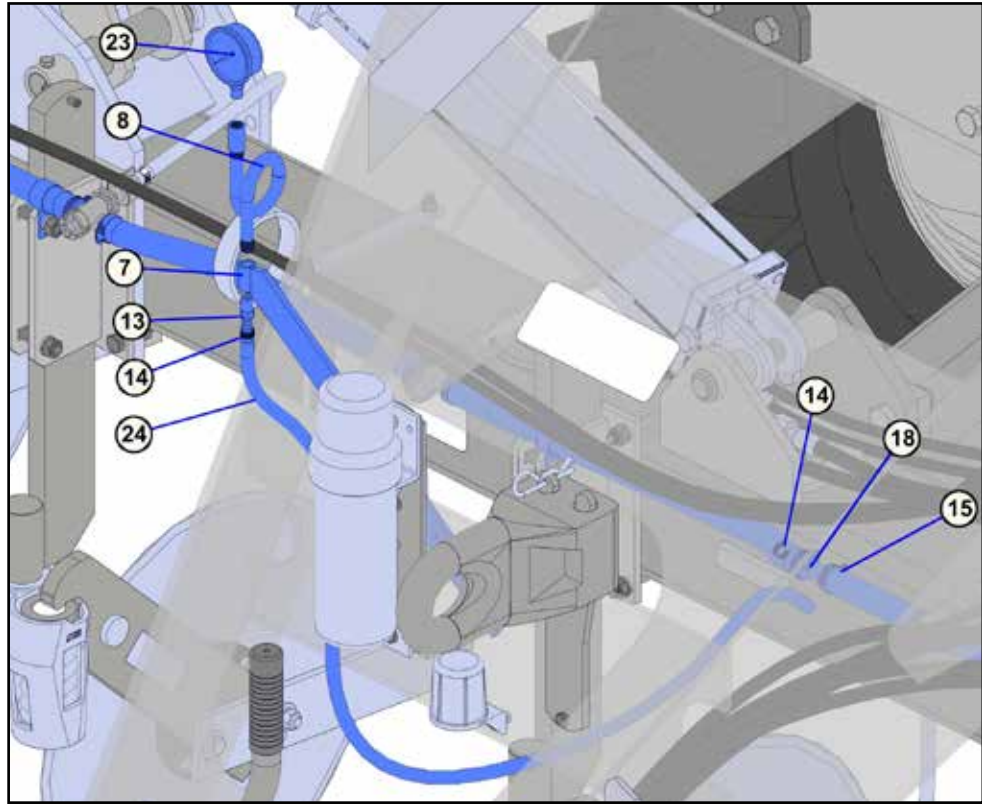
Illustrations



► 33000109 Manifold Assembly AT3000 15 ROW

BOM ID	Qty	Item No	Description
1	1	33000109	MANIFOLD ASSEMBLY, AT3000, 15 ROW
2	15	AM3628	BRACKET, MOUNTING, LIQUID TRUNK LINE
3	19	AP3809	1-1/4" HOSE SUPPORT CLAMP, 3/8" BOLT
4	15	BP3450	NUT, HEX, 3/8"-16, F594 GRADE 1
5	15	BP3451	WASHER, LOCK, 3/8", 18-8 STAINLESS STEEL
6	15	BP3453	HEX CAP SCREW, 3/8"-16 X 1", F593 GRADE 1
7	1	CM2221	NH3 GAUGE HOLDER, TONGUE MOUNT
8	1	CP1999	GAUGE PROTECTOR, PIGTAIL
9	1	CP2190	ELBOW, 90 DEGREE, 1"MP X 1" HOSE BARB, POLY
10	1	CP2249	NIPPLE, 1" POLY
11	1	CP2252	TEE, 1" FP, POLY
12	1	CP2296	PLUG, 1" PIPE, POLY
13	1	CP2308	HOSE BARB
14	2	CP2313	HOSE CLAMP, 1/4"- 5/8" TUBING, STAINLESS STEEL
15	34	CP2314	HOSE CLAMP, 1/2"- 1" TUBING, STAINLESS STEEL
16	1	CP2468	TEE, 3/4"FP X 3/4"HB X 3/4" HOSE BARB, POLY
17	1	CP2469	HOSE BARB, 3/4"MP X 1" HOSE BARB, POLY
18	1	CP2470	TEE, 3/8"HB X 3/4"HB X 3/4" HOSE BARB, POLY
19	16	CP2472	HOSE, EPDM RUBBER, 3/4", 200#
20	2	CP2487	DIAPHRAGM CHECK VALVE, SINGLE SHANK, 3/4" HOSE
21	1	CP2489	REDUCER 1-1/2"MP X 1"FP, POLY
22	1	CP2519	HOSE, EPDM RUBBER, 1", 200
23	1	CP2524	GAUGE, 0-160 PSI, GLYCERIN FILLED
24	1	CP2534	HOSE, EVA,N 3/8" BRAID JET STREAM

	Manifold Liquid Injection Assembly (Gull Wing Toolbar) 15 Row 30"		
AT3000	Task	Procedures	Illustrations





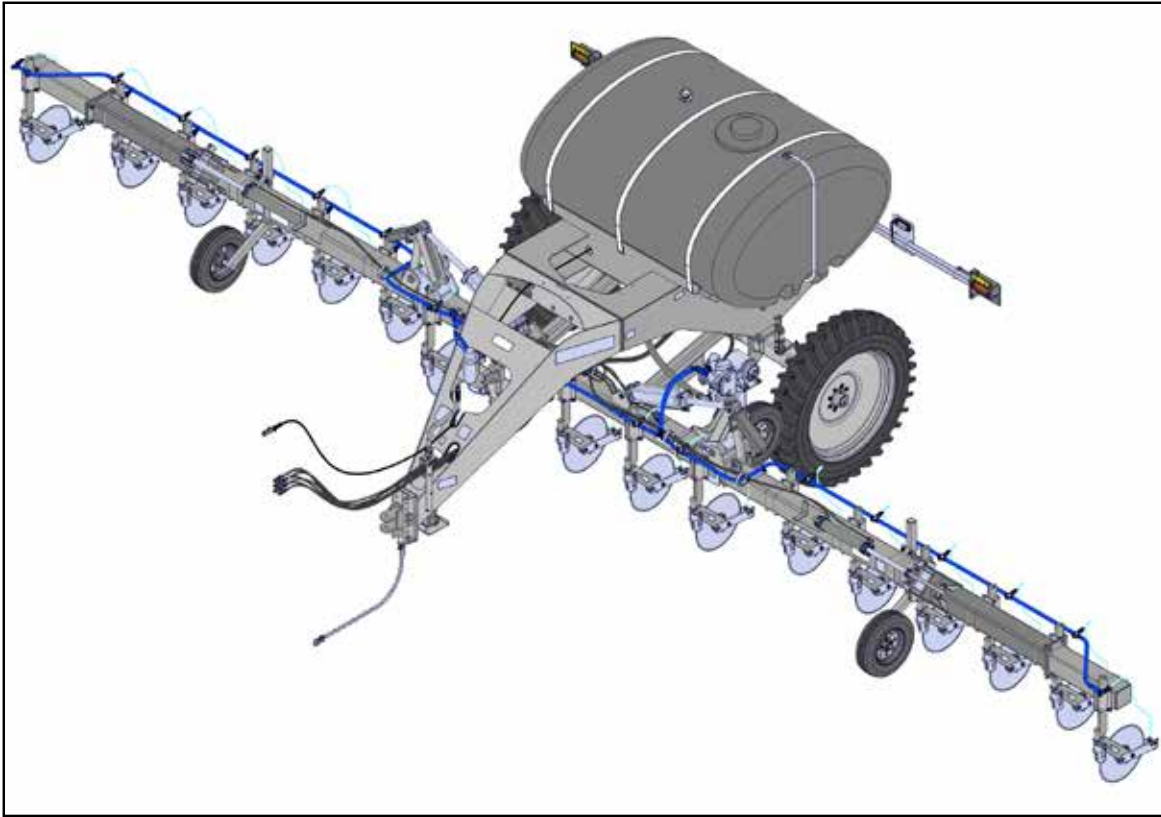
Manifold Liquid Injection Assembly (Gull Wing Toolbar) 17 Row 30''

AT3000

Task


Procedures

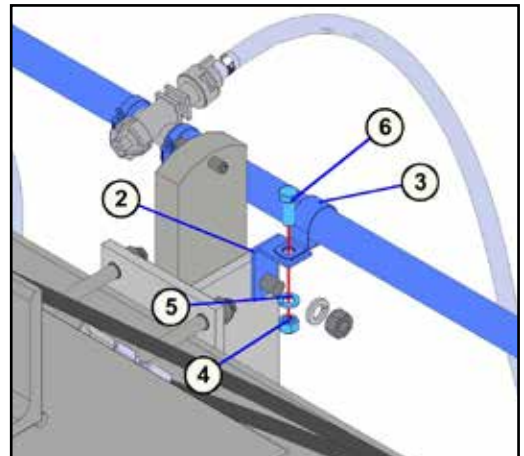
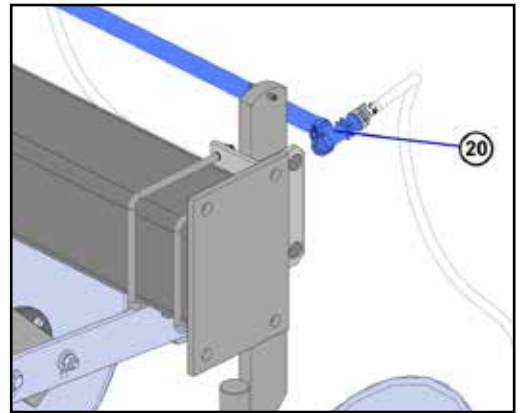
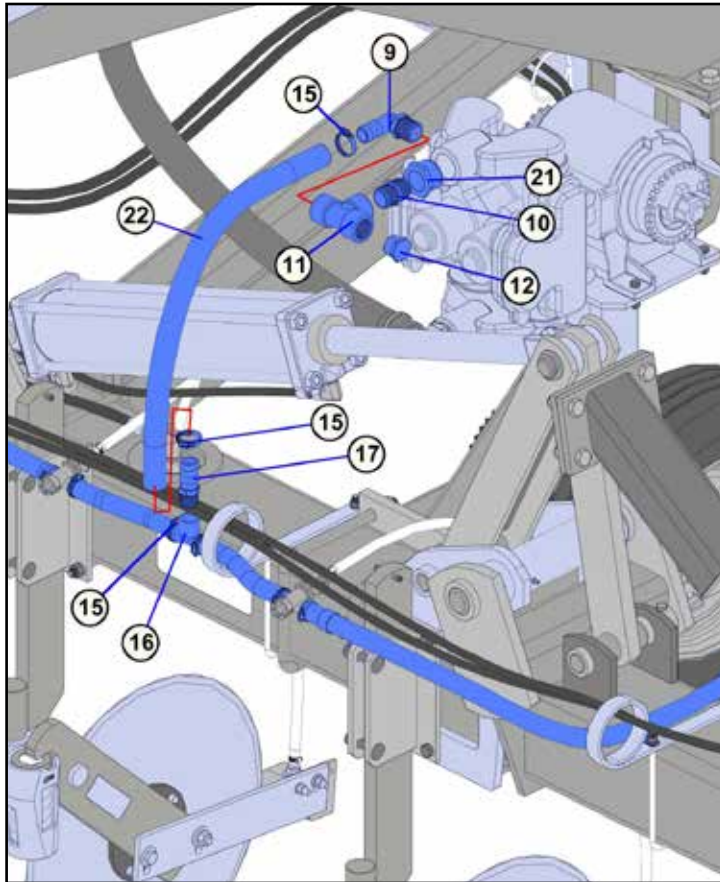
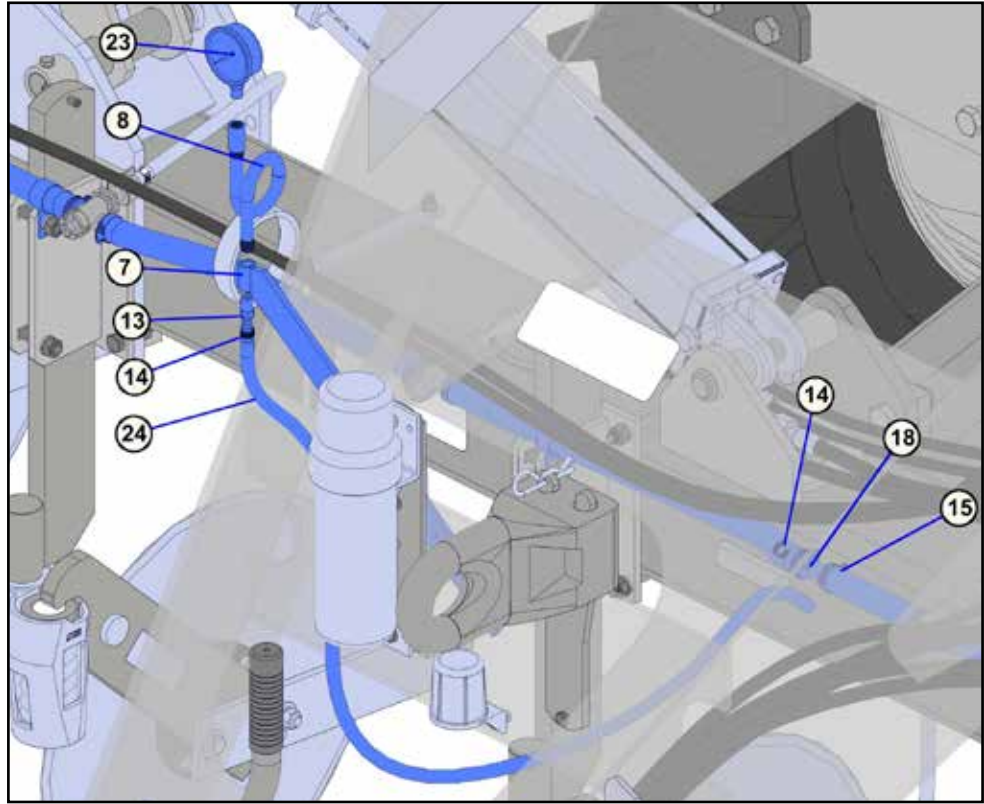
Illustrations



► **33000117 Manifold Assembly AT3000 17 ROW**

BOM ID	Qty	Item No	Description
1	1	33000117	MANIFOLD ASSEMBLY, AT3000, 17 ROWS
2	17	AM3628	BRACKET, MOUNTING, LIQUID TRUNK LINE
3	21	AP3809	1-1/4" HOSE SUPPORT CLAMP, 3/8" BOLT
4	17	BP3450	NUT, HEX, 3/8"-16, F594 GRADE 1
5	17	BP3451	WASHER, LOCK, 3/8", 18-8 STAINLESS STEEL
6	17	BP3453	HEX CAP SCREW, 3/8"-16 X 1", F593 GRADE 1
7	1	CM2221	NH3 GAUGE HOLDER, TONGUE MOUNT
8	1	CP1999	GAUGE PROTECTOR, PIGTAIL
9	1	CP2190	ELBOW, 90 DEGREE, 1"MP X 1" HOSE BARB, POLY
10	1	CP2249	NIPPLE, 1" POLY
11	1	CP2252	TEE, 1" FP, POLY
12	1	CP2296	PLUG, 1" PIPE, POLY
13	1	CP2308	HOSE BARB
14	2	CP2313	HOSE CLAMP, 1/4"- 5/8" TUBING, STAINLESS STEEL
15	38	CP2314	HOSE CLAMP, 1/2"- 1" TUBING, STAINLESS STEEL
16	1	CP2468	TEE, 3/4"FP X 3/4"HB X 3/4" HOSE BARB, POLY
17	1	CP2469	HOSE BARB, 3/4"MP X 1" HOSE BARB, POLY
18	1	CP2470	TEE, 3/8"HB X 3/4"HB X 3/4" HOSE BARB, POLY
19	18	CP2472	HOSE, EPDM RUBBER, 3/4", 200#
20	2	CP2487	DIAPHRAGM CHECK VALVE, SINGLE SHANK, 3/4" HOSE
21	1	CP2489	REDUCER 1-1/2"MP X 1"FP, POLY
22	1	CP2519	HOSE, EPDM RUBBER, 1", 200#
23	1	CP2524	GAUGE, 0-160 PSI, GLYCERIN FILLED
24	1	CP2534	HOSE, EVA,N 3/8" BRAID JET STREAM

	Manifold Liquid Injection Assembly (Gull Wing Toolbar) 17 Row 30"		
AT3000	Task	Procedures	Illustrations



Top Port Pump Fittings Assembly (Standard Toolbar)

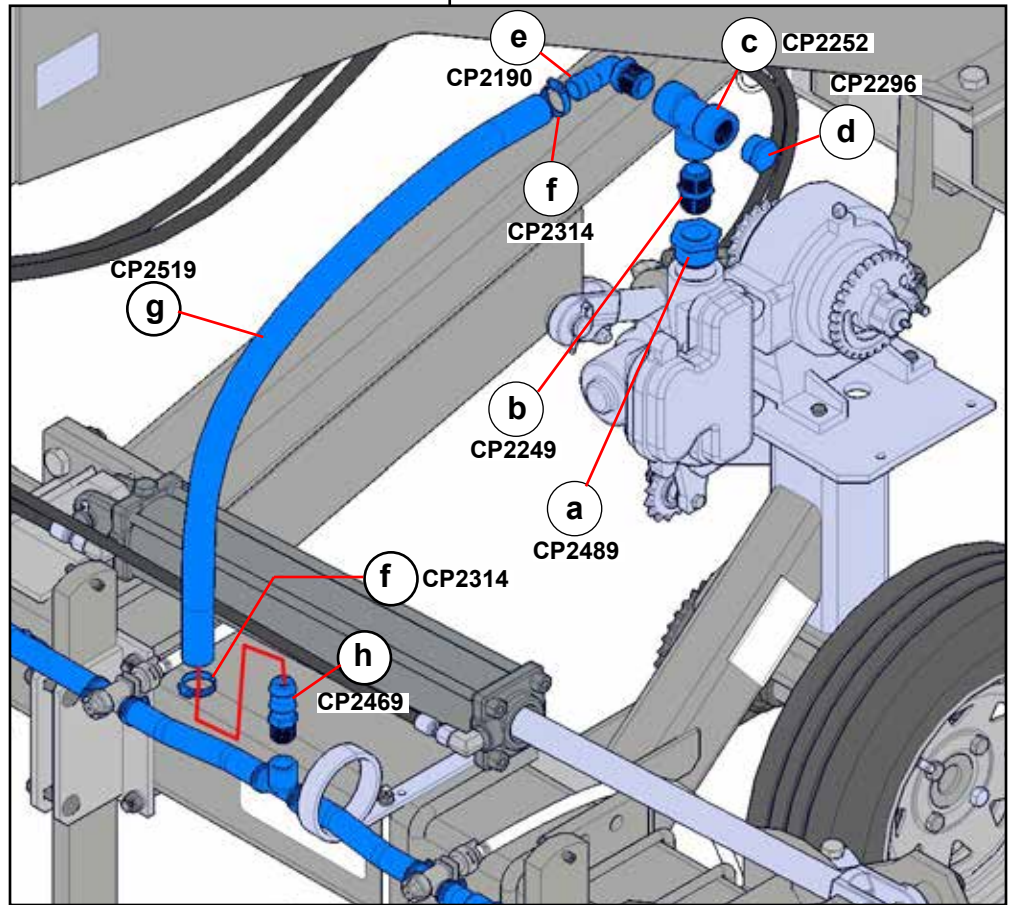
AT3000

Task

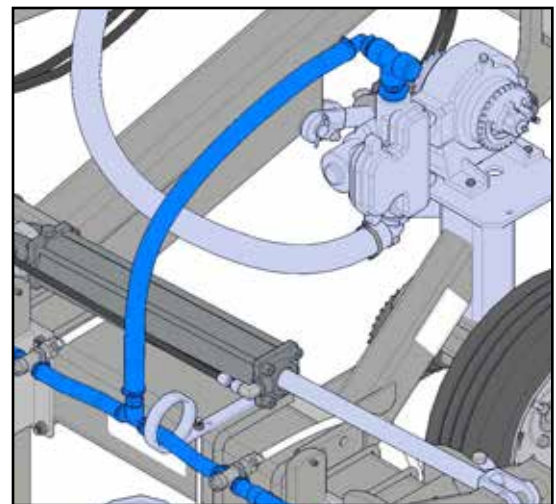
Procedures

Illustrations

► Installation of top port pump fitting
CP2568
Single Piston Pump



1. Apply sealant to (a) (CP2489) threads, 1-1/2" MP x 1" FP poly reducer bushing. Install into pump top port. Apply sealant to (b) (CP2249) 1" poly close nipple install in (a). Apply sealant to (c) (CP2252) 1" poly FP tee install on (b). Apply sealant to (d) (CP2296) 1" poly pipe plug, install in end of (c). Apply sealant to (e) (CP 2190) 1" MPTx 1" HB 90 degree fitting, install in (c). Place (f) (CP2314) 3/4" -1-1/2" worm gear hose clamp over (g) (CP2519) 1" suction hose and install on (e). Tighten worm gear clamp.
2. Extend (g) suction hose to (h) (CP2469) 3/4" MP-1" HP, poly coupler and place (f) (CP2314) 3/4" -1-1/2" worm gear hose clamp over hose. Push hose on (h) and secure with worm gear clamp.



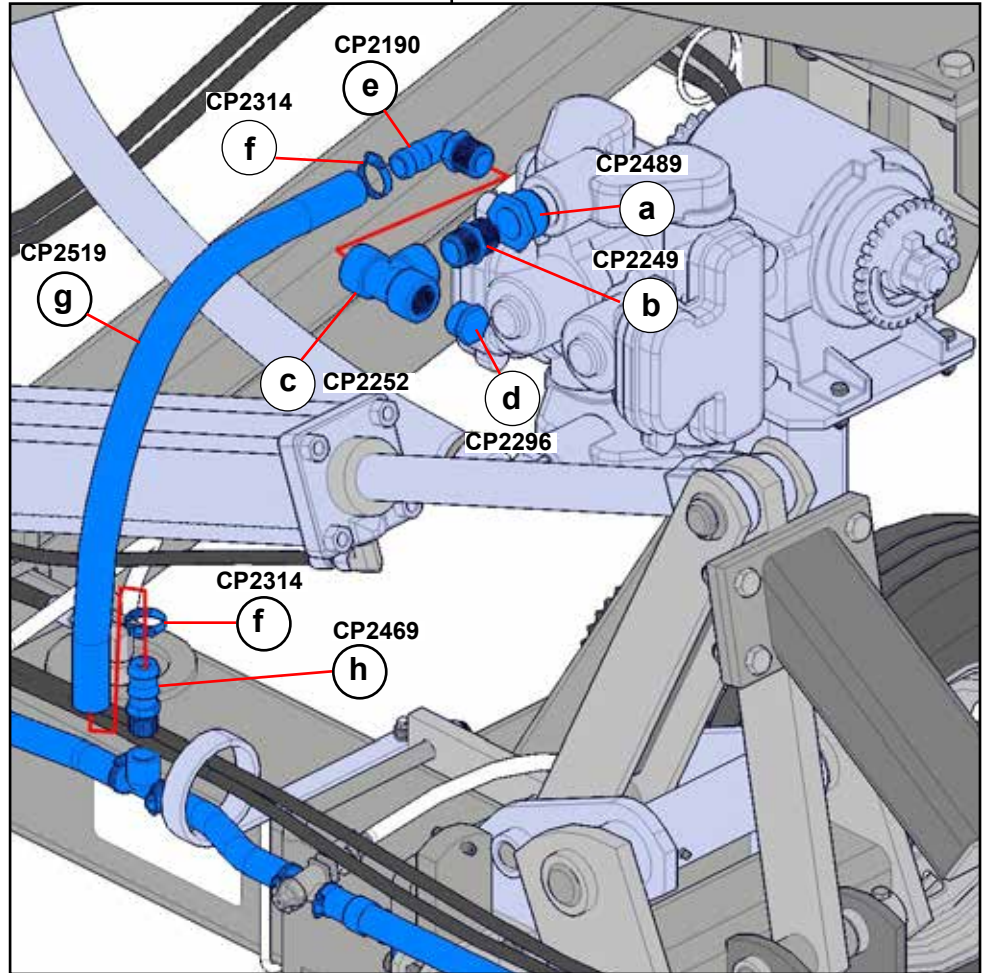
AT3000

Task

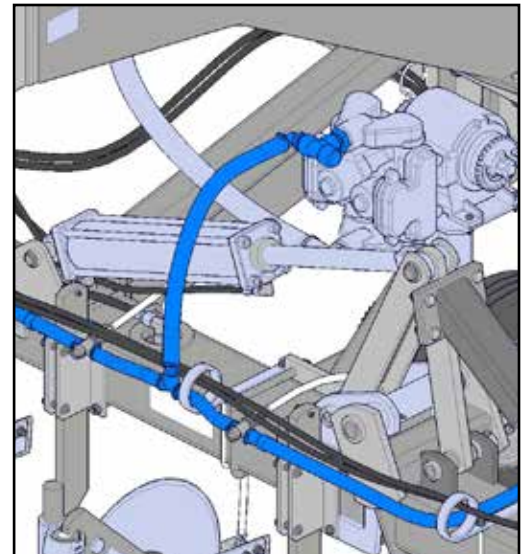
Procedures

Illustrations

► Installation of top port pump fitting
CP2569
Twin Piston Pump



1. Apply sealant to (a) (CP2489) threads, 1-1/2" MP x 1" FP poly reducer bushing. Install into pump top port. Apply sealant to (b) (CP2249) 1" poly close nipple install in (a). Apply sealant to (c) (CP2252) 1" poly FP tee install on (b). Apply sealant to (d) (CP2296) 1" poly pipe plug, install in end of (c). Apply sealant to (e) (CP2190) 1" MPT x 1" HB 90 degree fitting, install in (c). Place (f) (CP2314) 3/4" -1-1/2" worm gear hose clamp over (g) (CP2519) 1" suction hose and install on (e). Tighten worm gear clamp.
2. Extend (g) suction hose to (h) (CP2469) 3/4" MP-1" HP, poly coupler and place (f) (CP2314) 3/4" -1-1/2" worm gear hose clamp over hose. Push hose on (h) and secure with worm gear clamp.



Manifold Liquid Injection Assembly

AT3000

Task

Procedures

Illustrations

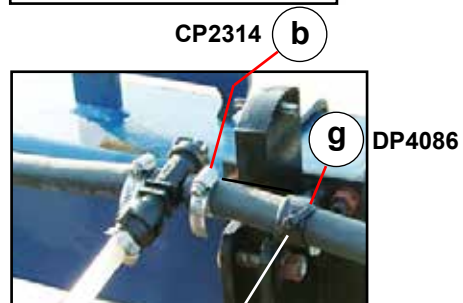
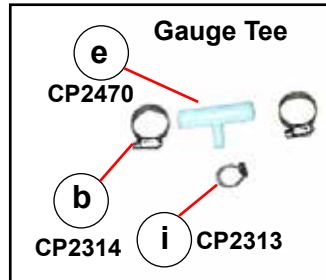
▶ Manifold assembly

▶ **NOTE:**
Allow extra hose in hinge areas to avoid kinking of hose

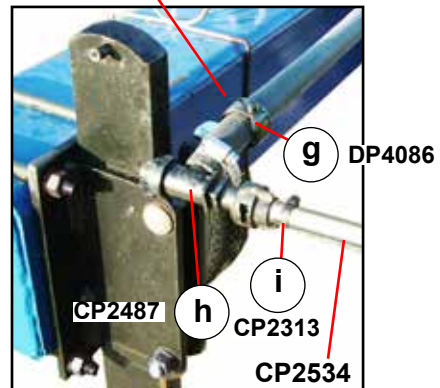
1. Extend and center (a) (CP2472) 3/4" EPDM rubber hose on toolbar.
2. In front of the pump mounting cut hose. Place (b) (CP2314) 1/2" - 1-1/2" worm gear hose clamp over both ends of the suction hose. Install (c) (CP2469) 3/4" MP-1"HP coupler in (d) (CP2468) 3/4"FP-3/4"HB-3/4"HB tee. Insert (d) (CP2468) tee, 3/4"FP-3/4"HB-3/4"HB ploy into both ends of the 3/4" suction hose. Secure with worm gear hose clamps.
3. Work hose from the pump assembly down both sides through hose retainers and hose support clamps.
4. Cut 3/4" suction hose in line with the right-hand tongue. Place (b) (CP2314) 1/2" - 1" worm gear hose clamp over both ends of the 3/4" hose. Insert (e) (CP2470) Tee, 3/8 HB-3/4"-HB-3/4"HB ploy into both ends of the 3/4" suction hose. Secure with worm gear hose clamps.
5. Cut 3/4" suction hose at each row. Place (b) (CP2314) 1/2" - 1-1/2" worm gear hose clamp over both ends of the 3/4" hose. Insert (f) (CP2488) diaphragm check valve, double shank 3/4" hose into both ends of the 3/4" suction hose. Secure with worm gear hose clamps.
6. Secure 3/4" suction hose to row (AP3809) 1-1/4" hose support clamp with (g) (DP4086) 11-3/8" cable ties.
7. Trim hose on last row and place (b) (CP2314) 1/2" - 1-1/2" worm gear hose clamp over end of the 3/4" hose. Install (h) (CP2487) diaphragm check valve single shank, 3/4" hose. Secure with worm gear clamp.
8. Attach (CP2534) 3/8" PVC 250# psi hose to check valve assembly with (i) (CP2313) Stainless steel hose clamp 5/8"-1".



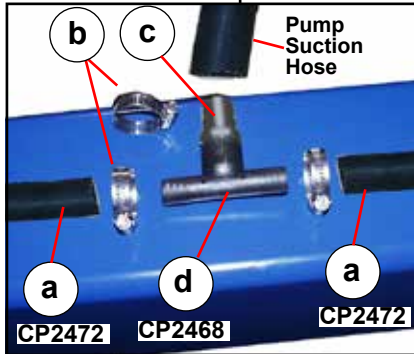
Generic Photo



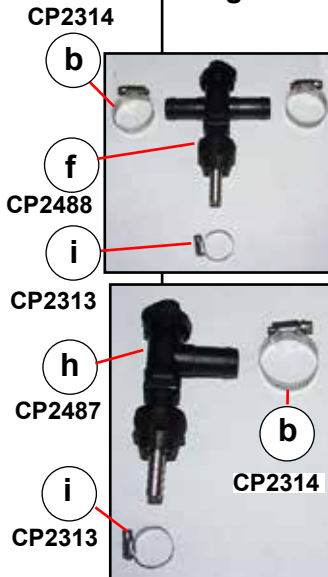
Hose support clamp



CP2314 CP2469



▶ Installation of tongue gauge fittings



BLU-JET	Manifold Liquid Injection Assembly (Standard Toolbar)		
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AT3000	Task	Procedures	Illustrations
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- ▶ Manifold assembly Standard Wing

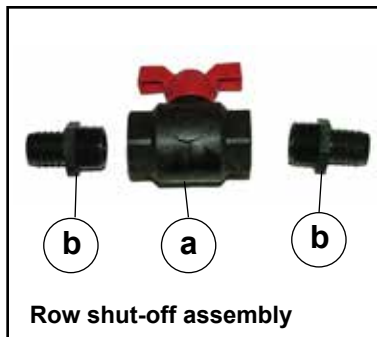
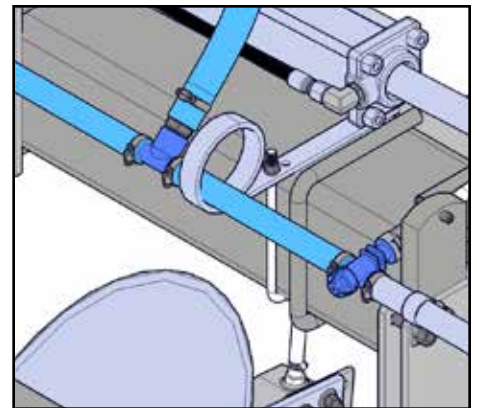
NOTE:
Allow extra hose in hinge areas to avoid kinking of hose



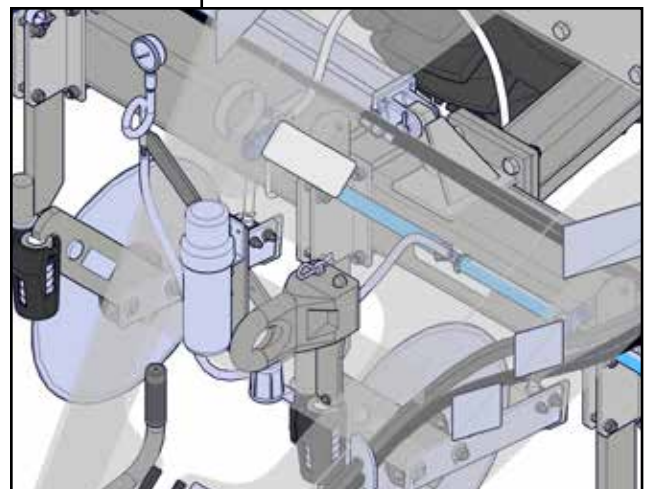
CP2487 diaphragm check valve single shank



CP2488 diaphragm check valve double shank



- Row shut-off assembly**
- a. CP2576 2 Valve, ball, 3/4" FP 125 PSI. min.
 - b. CP2577 4 Hose barb, 3/4" MP x 3/4" HP, Poly



Manifold Liquid Injection Assembly (Gull Wing)

AT3000	Task	Procedures	Illustrations
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- ▶ Manifold assembly Standard Wing

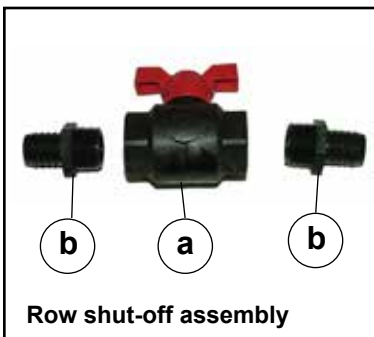
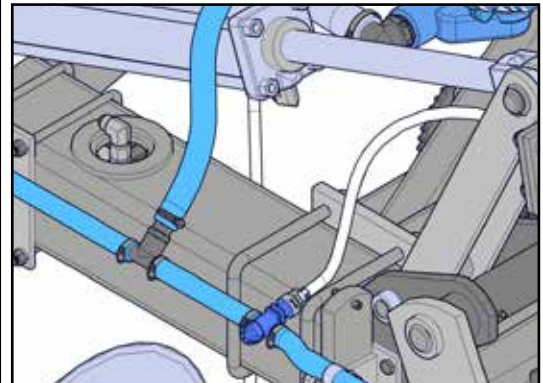
▶ **NOTE:**
Allow extra hose in hinge areas to avoid kinking of hose



CP2487 diaphragm check valve single shank

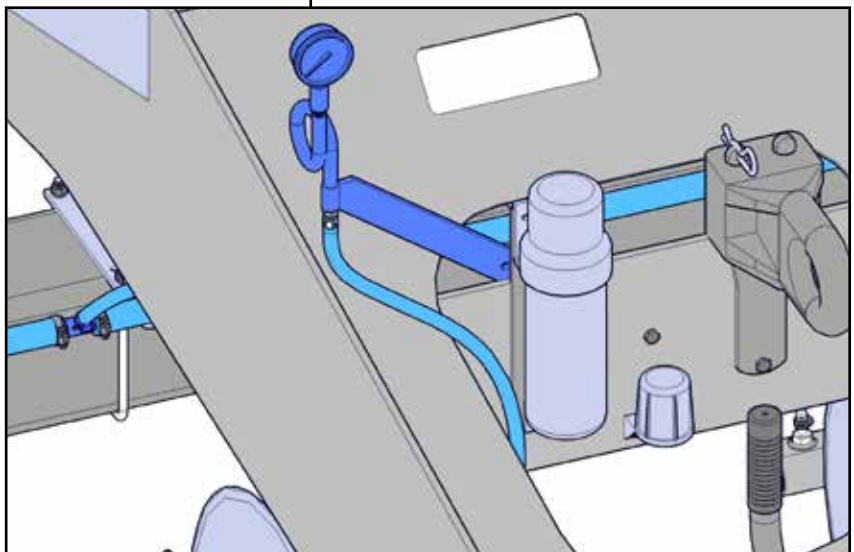


CP2488 diaphragm check valve double shank



Row shut-off assembly

- a. CP2576 2 Valve, ball, 3/4" FP 125 PSI min.
- b. CP2577 4 Hose barb, 3/4" MP x 3/4" HP, Poly



AT3000

Task

Procedures

Illustrations

- ▶ Manifold assembly hinge hose lengths

▶ **NOTE:**
Allow extra hose in hinge areas to avoid kinking of hose



(Gull Wing hose 54") Primary wing hinge (30" row spacing)



(Gull Wing hose 41-1/4") Secondary wing hinge (30" row spacing)

AT3000

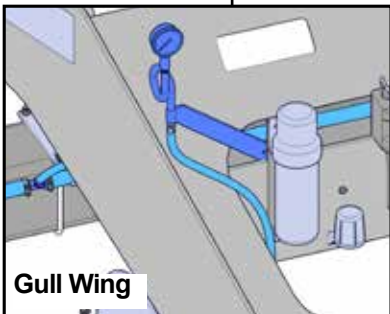
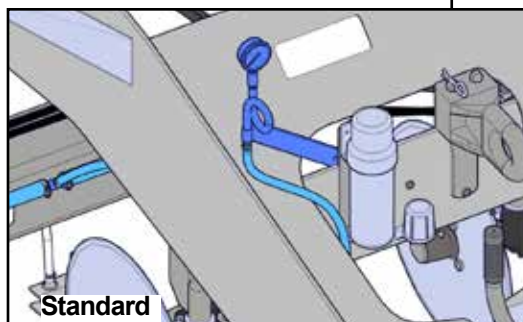
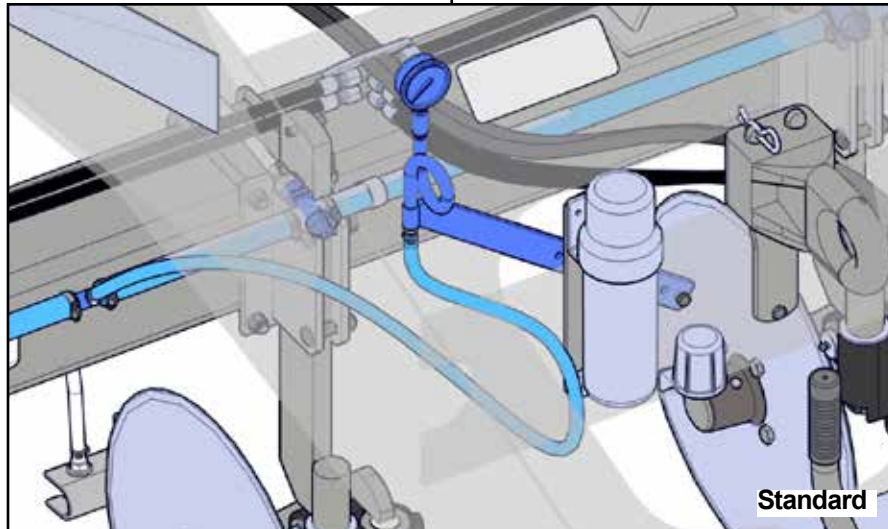
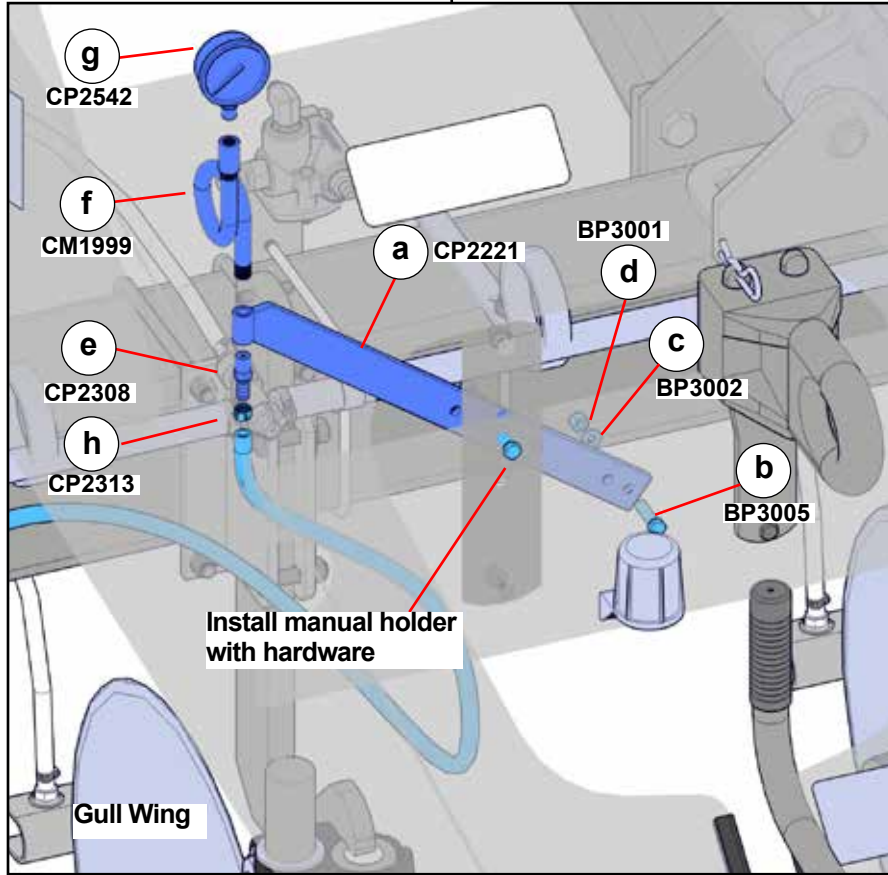
Task

Procedures

Illustrations

Mounting gauge

1. Mount (a) (CP2221) NH3 gauge holder tongue mount to tongue frame with (b) (BP3005) 3/8"-16 x 1-1/2" hex cap screw. Secure with (c) (BP3002) 3/8" lock washers and (d) (BP3001) 3/8" hex nuts. Use the hex cap screw and hardware in the Manual Holder assembly to mount the top part of the bracket.
2. Tape and install (e) (CP2308) hose barb 1/4" x 3/8" hose A1132 in bottom port of holder.
3. Tape threads of (f) (CM1999) gauge protector and install in top port of holder.
4. Pour oil into pigtail and tape threads of (g) (CP2524) 160# Glycerin filled gauge. Install in top port of pigtail.
5. Extend 3/8" hose from center section tee through large hole in the tongue.
6. Place (h) (CP2313) stainless steel hose clamp 5/8"-1" over 3/8" PVC hose. Push hose over hose barb on gauge holder. Secure with hose clamp.



AT3000

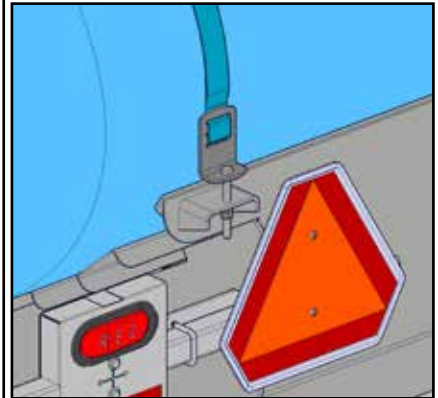
Task

Procedures

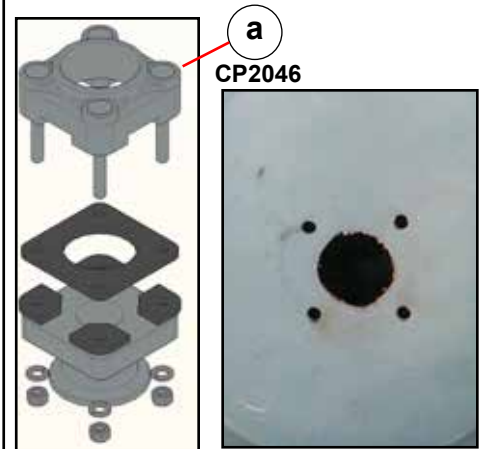
Illustrations

▶ Removal of tank from main

1. Loosen hex nuts on tank straps bolts. Unhook the Blue straps from the tank. Remove tank from saddle to install tank fittings.



2. Disassemble (a) (CP2046) tank outlet fitting 2" flange. Remove black five hole gasket and use as a pattern on the bottom of the tank.

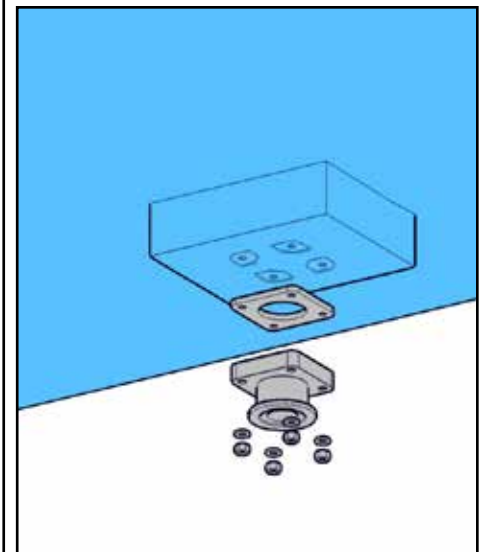
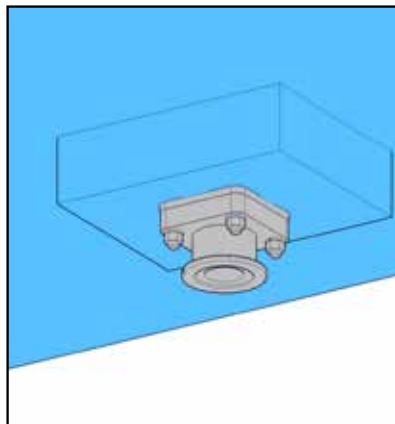


▶ Installing bottom tank fittings

3. Drill 2-1/4" center hole and four 3/8" bolt holes in bottom of tank.

▶ **NOTE:** Some tanks will have fitting installed at factory

4. Attach 2-1/2" PVC threaded end to a piece of 2" PVC eight foot long. Place (CP2046) tank outlet fitting 2" flange on PVC pole and insert into tank. Insert into holes at bottom of tank. Install five hole gasket, black flange, lock washers and hex nuts. Tighten hex nuts.



PVC used to install outlet fitting. Not part of plumbing kit.



Tank Outlet fitting

Tank Plumbing Assembly (Sight Gauge)

AT3000

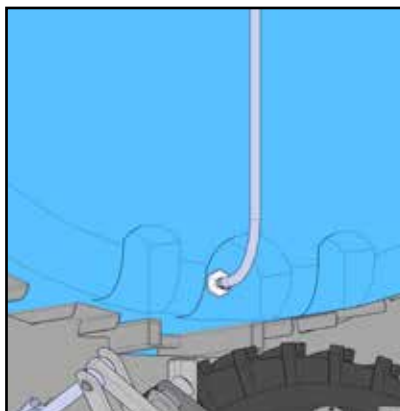
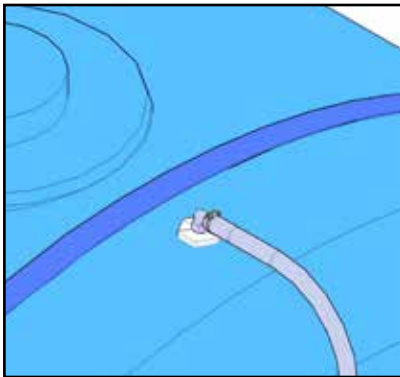
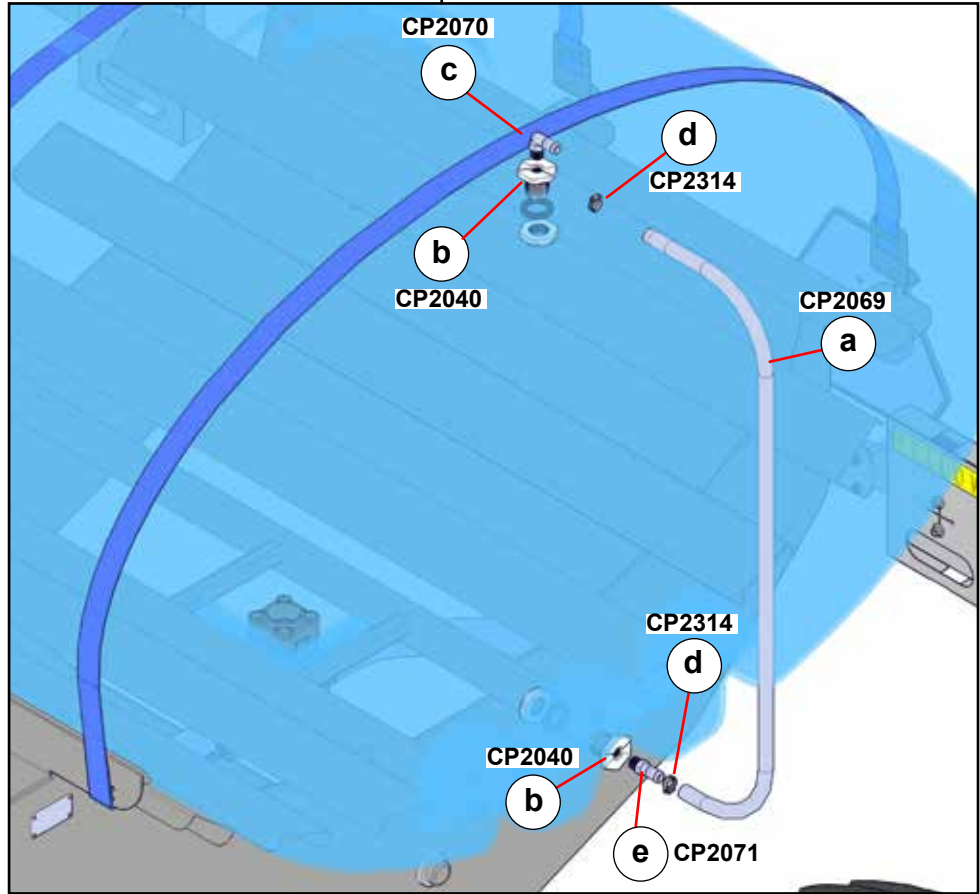
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Procedures

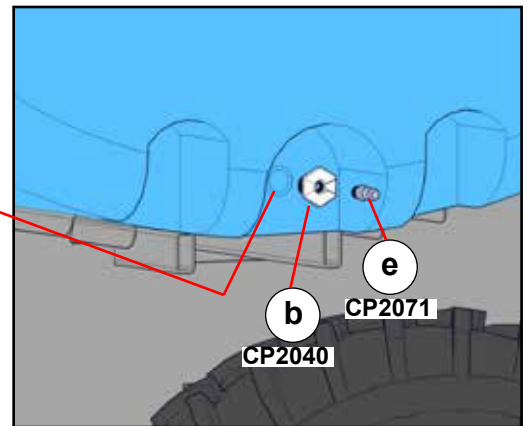
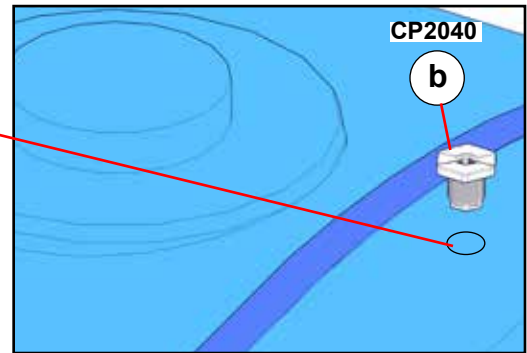
Illustrations

Sight gauge installation

1. Sight gauge parts:
 - a. CP2069 (1) 3/4" sight gauge hose
 - b. CP2040 (2) Tank outlet fitting 1/2" FPT fits 1-3/8" hole
 - c. CP2070 (1) Elbow, 1/2" MPT x 3/4" hose barb 90 degree
 - d. CP2314 (2) Stainless steel hose clamp 1/2"-1"
 - e. CP2071 (1) Hose barb 1/2" MPT x 3/4" hose



2. Drill 1-1/2" hole at the top of tank near end of sight gauge groove.
3. Insert (b) (CP2040) tank outlet fitting 1/2" FPT fits 1-3/8" hole. Install (c) (CP2070) 90 degree elbow with 3/4" hose barb.
4. Attach (a) (CP2069) 3/4" sight gauge hose to upper (c) (CP2070) 90 degree 3/4" hose barb and secure with (d) (CP2314) stainless steel hose clamp, 1/2"-1".
5. Drill 1-1/2" hole at the bottom of tank.
6. Insert (b) (CP2040) tank outlet fitting 1/2" FPT fits 1-3/8" hole. Install (e) (CP2071) hose barb 1/2" MPT x 3/4" hose.
7. Attach sight gauge to the bottom 3/4" hose barb. Secure with (d) (CP2314) stainless steel hose clamp, 1/2"-1".



Tank Plumbing Assembly (Hooded Vent)

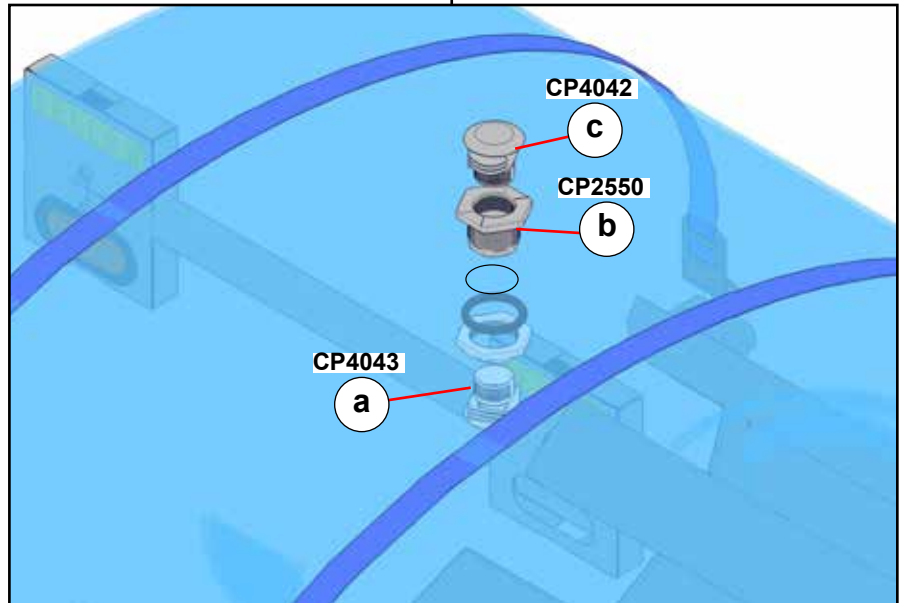
AT3000

Task

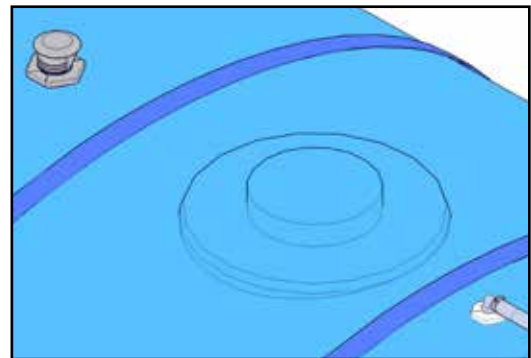
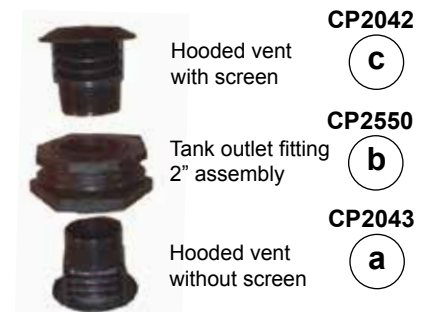
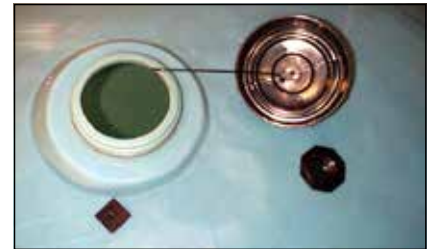
Procedures

Illustrations

▶ Mounting hooded vent to top of tank



1. Enlarge 1" hole at the top center of the tank to 3" with hole saw.
2. Install (a) (CP2043) hooded vent *without* screen into tank outlet fitting assembly. Tighten hooded vent. The outlet fitting nut goes on the outside of the tank. Insert (b) (CP2550) tank outlet fitting 2" assembly into 3" hole from inside the tank. Tighten tank fitting hex nut.
3. Install (c) (CP2042) hooded vent *with* screen to the outside of the tank.
4. Place tank assembly back in saddle and replace tank straps. Tighten straps evenly.



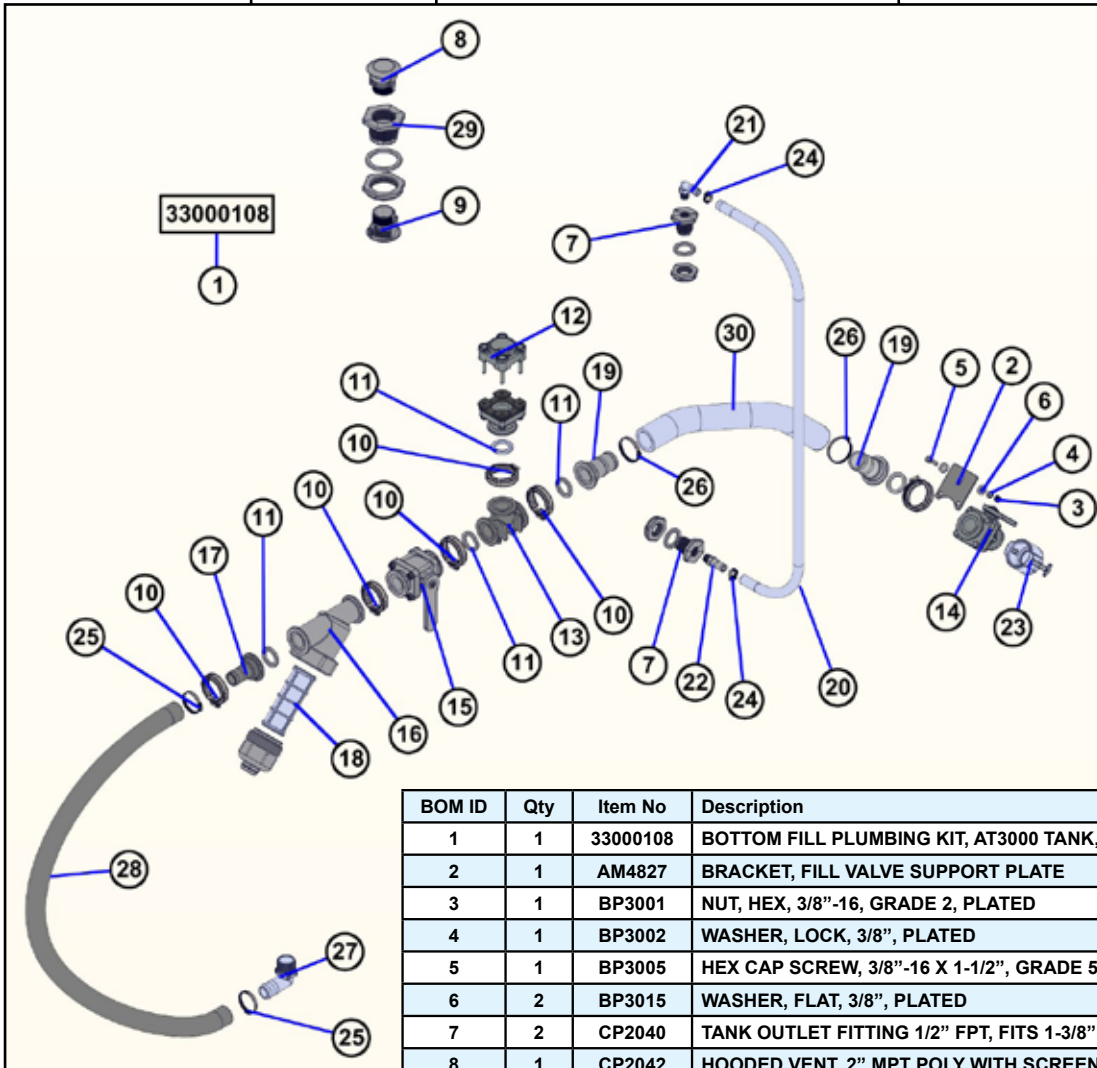
AT3000 Bottom Fill Plumbing (33000108)

AT3000

Task

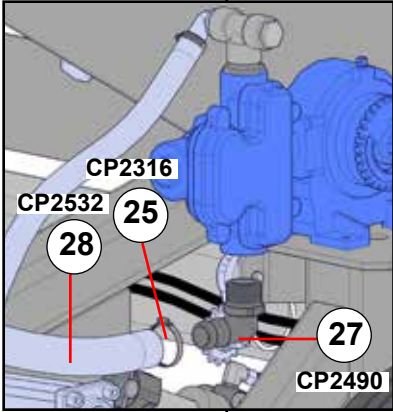
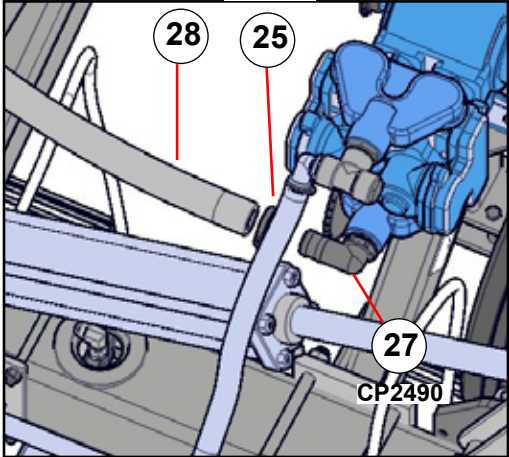
Procedures

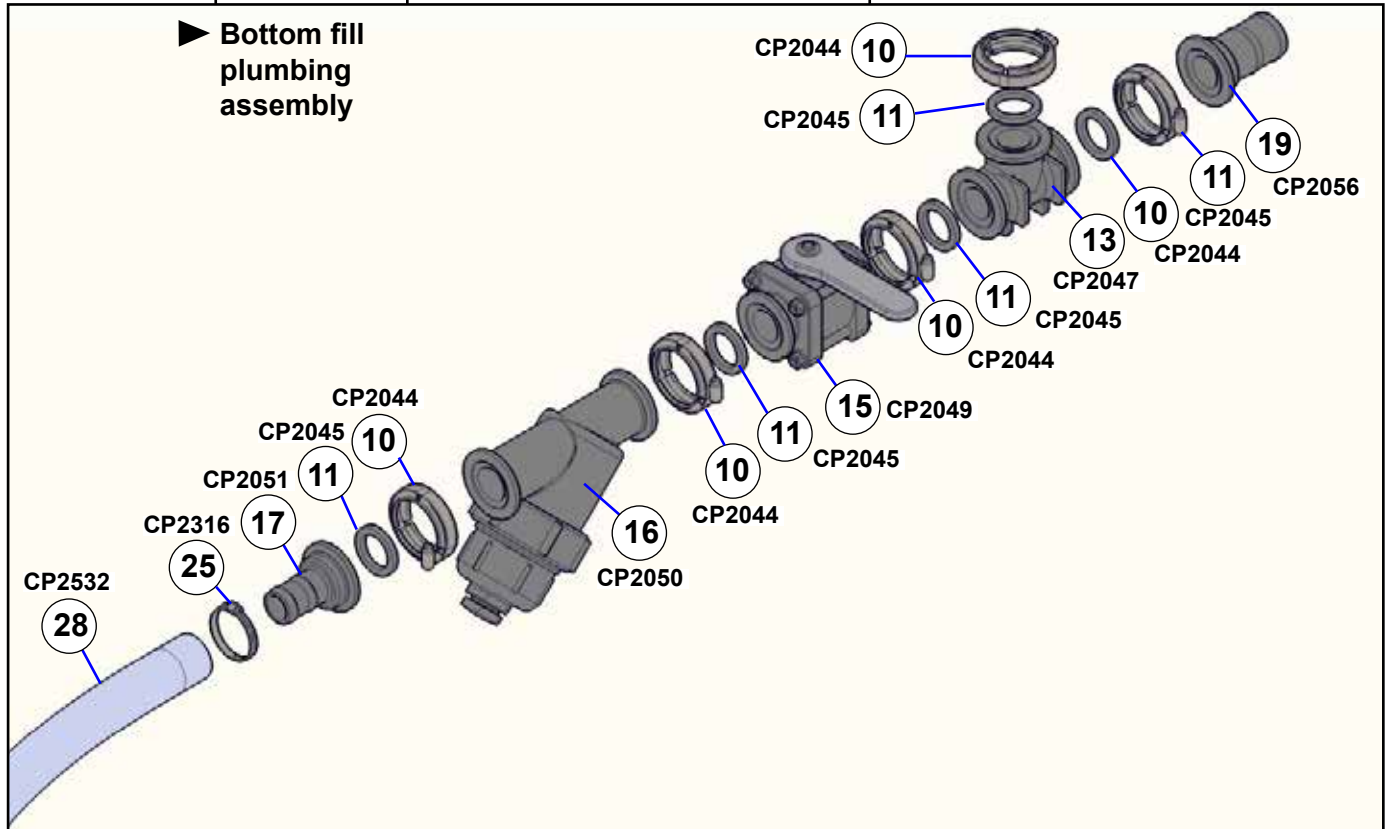
Illustrations






BOM ID	Qty	Item No	Description
1	1	33000108	BOTTOM FILL PLUMBING KIT, AT3000 TANK, 1 PUMP, 2" FILL
2	1	AM4827	BRACKET, FILL VALVE SUPPORT PLATE
3	1	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
4	1	BP3002	WASHER, LOCK, 3/8", PLATED
5	1	BP3005	HEX CAP SCREW, 3/8"-16 X 1-1/2", GRADE 5, PLATED
6	2	BP3015	WASHER, FLAT, 3/8", PLATED
7	2	CP2040	TANK OUTLET FITTING 1/2" FPT, FITS 1-3/8" HOLE
8	1	CP2042	HOODED VENT, 2" MPT POLY WITH SCREEN
9	1	CP2043	HOODED VENT, 2" MPT POLY WITHOUT SCREEN
10	6	CP2044	CLAMP, 2" FLANGE
11	6	CP2045	GASKET, EPDM, 2" FLANGE
12	1	CP2046	TANK OUTLET FITTING, 2" FLANGED
13	1	CP2047	TEE, 2" FLANGE
14	1	CP2049	VALVE, BALL, 2"- 1-1/2" PORT- 2" MALE ADAPTER
15	1	CP2049	VALVE, BALL, 2" - 1-1/2" PORT
16	1	CP2050	STRAINER, 2" FLANGE
17	1	CP2051	HOSE BARB, 2" FLANGE X 1-1/2" HOSE
18	1	CP2055	STRAINER SCREEN, 30 MESH, LS230
19	2	CP2056	HOSE BARB, 2" FLANGE X 2" HOSE
20	1	CP2069	HOSE, SITE GAUGE, 3/4"
21	1	CP2070	ELBOW, 90 DEGREE, 1/2" MP X 3/4" HOSE BARB, POLY
22	1	CP2071	HOSE BARB, 1/2" MP X 3/4" HOSE, POLY
23	1	CP2235	CAP, 2"
24	2	CP2314	HOSE CLAMP, 1/2" - 1" TUBING, STAINLESS STEEL
25	2	CP2316	HOSE CLAMP, 1-1/4" - 2" TUBING, STAINLESS STEEL
26	2	CP2408	HOSE CLAMP, 2" - 2-1/2" TUBING, STAINLESS STEEL
27	1	CP2490	ELBOW, 90 DEGREE, 1-1/2" MP X 1-1/2" HB, POLY
28	1	CP2532	HOSE, EPDM RUBBER, 1-1/2", 150#
29	1	CP2550	TANK OUTLET FITTING, 2", FITS 3" HOLE
30	1	CP2590	HOSE, EPDM RUBBER, 2", REINFORCED, 100#

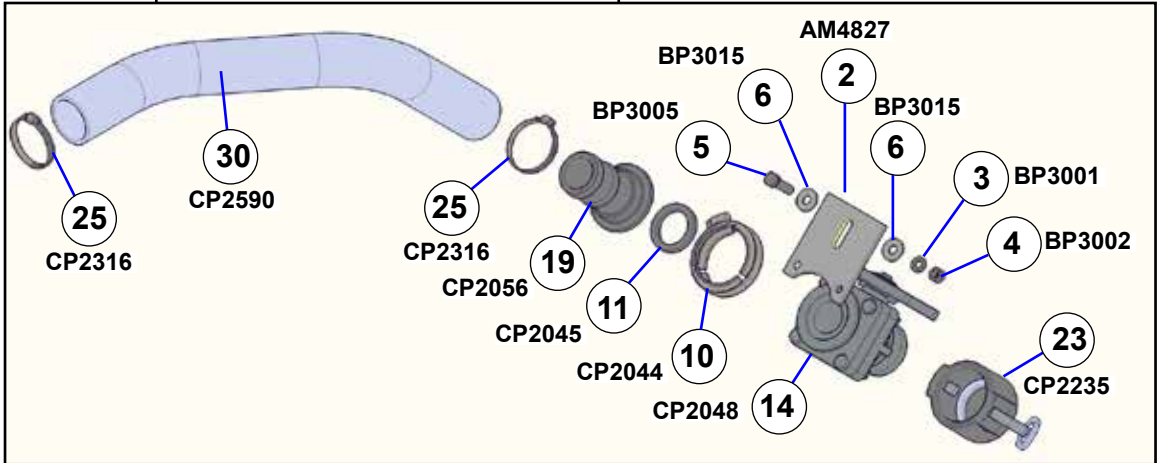
Bottom Fill Plumbing

AT3000	Task	Procedures	Illustrations
<p>▶ Assembly of pump plumbing</p>  <p>Bottom port CP2568 Single Piston Pump</p>	<p>1. Place sealant on (27) (CP2490) 1-1/2" MP x 1-1/2" HB 90 degree elbow in bottom port of pump. Rotate elbow towards frame. Place (25) (CP2316) 1-1/2" - 2" worm gear hose clamp over (28) (CP2532) 1-1/2" rubber 150# hose. Install on hose barb elbow. Secure hose with worm gear clamp.</p> <p>2. Pre-assemble bottom fill fittings.</p> <p>3. Align the fittings and position flange clamp around flanges. Tighten flange clamps.</p>	 <p>Bottom Port CP2569 Twin Piston Pump</p>	



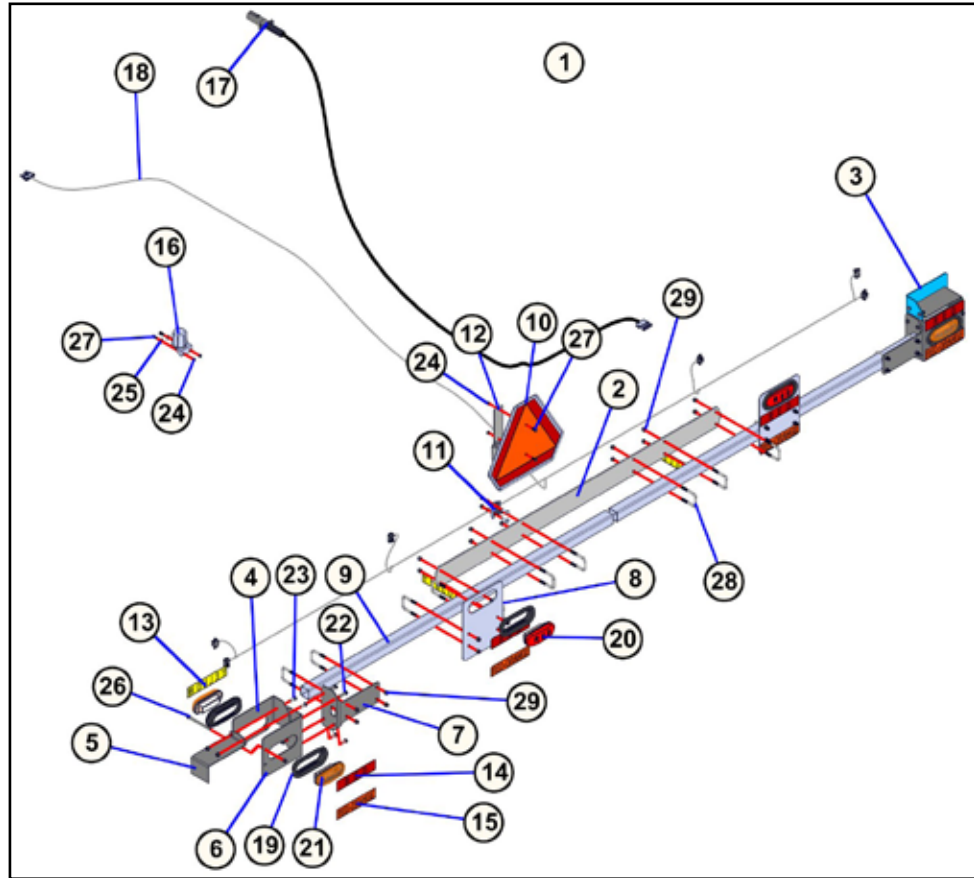
Bottom Fill Plumbing

AT3000	Task	Procedures	Illustrations
<p>▶</p>	<p>Mounting bottom fill plumbing to tank</p>	<p>4. Place (10) (CP2044) 2" worm screw flange clamp over end of tee. Align the two fittings and position flange clamp around flanges. Tighten flange clamp.</p> <p>5. Remove the top two hex cap screws from (14) (CP2048) Valve, ball, 2"- 1-1/2" port- 2" male adapter. Install (2) AM4827 fill valve vertical support plate and replace hex cap screws.</p> <p>6. Assemble fill valve assembly.</p>	 
		<p>7. Mount fill assembly to frame with (5) (BP3005) hex, cap screw, 3/8"-16 x 1-1/2", (6) (BP3015) washers, flat, 3/8, (4) (BP3002) washer, lock, 3/8" and (3) (BP3001) nut, hex, 3/8"-16, grade 2, plated.</p>	



Light Kit Parts (41000011)

AT3000



BOM ID	Qty	Item No	Description
1	1	41000011	LIGHTING KIT, AT LIQUID APPLICATOR
2	1	AM3406	BACKING PLATE, LIGHT KIT
3	1	AM3415	LIGHT BRACKET, FRONT, LEFT HAND
4	1	AM3417	LIGHT BRACKET, FRONT, RIGHT HAND
5	2	AM3418	SHIELD, LIGHT BRACKET
6	2	AM3421	LIGHT BRACKET, SIDE MOUNT
7	2	AM3422	LIGHT BRACKET, SIDE MOUNT BAR
8	2	AM3429	LIGHT MOUNT
9	2	AM3430	TUBE, LIGHT BRACKET (5'11-1/4")
10	1	AP2542	SMV (SLOW MOVING VEHICLE) SIGN
11	1	AP2543	SMV (SLOW MOVING VEHICLE) MOUNTING SOCKET
11A	1	AP2543	SMV (SLOW MOVING VEHICLE) MOUNTING SOCKET
11B	2	AP2543-Bolt	ROUND HEAD BOLT, 5/16"-18 X 1-1/4"
11C	2	BP3157	NUT, HEX, 5/16"-18, GRADE 2, PLATED
11D	2	BP3158	WASHER, LOCK, 5/16", PLATED
12	1	AP2544	SMV (SLOW MOVING VEHICLE) MOUNTING SPADE
13	4	AP2547	DECAL, REFLECTOR, YELLOW, 2" X 9"
14	4	AP2548	DECAL, REFLECTOR, RED, 2" X 9"
15	4	AP2551	DECAL, FLUORESCENT, RED-ORANGE, 2" X 9", NON-REFLECTIVE
16	1	AP2829	DUST CAP
17	1	AP3142	ELECTRICAL HARNESS, 10' MAIN 5-WIRE, 7 PIN & DUST CAP
18	1	AP3155	ELECTRICAL HARNESS, 17' 2 POST, 5-WIRE
19	6	AP3551	GROMMET, OVAL, MODEL 60
20	2	AP4312	LAMP, LED, OVAL, STOP TURN & TAIL, RED
21	4	AP4415	LAMP, LED, OVAL, TURN SIGNAL, AMBER, LED
22	4	BP3005	HEX CAP SCREW, 3/8"-16 X 1-1/2", GRADE 5, PLATED
23	9	BP3006	HEX CAP SCREW, 3/8"-16 X 1", GRADE 5, PLATED
24	4	BP3053	NUT, HEX, 1/4"-20, GRADE 2
25	2	BP3055	WASHER, FLAT, 1/4", PLATED
26	2	BP3118	HEX CAP SCREW, 3/8"-16 X 5", GRADE 5, PLATED
27	4	BP3233	HEX CAP SCREW, 1/4"-20 X 3/4", GRADE 2, PLATED
28	14	BP3736	U-BOLT, 3/8"-16 X 2"W X 3"L, PLATED
29	43	CP2660	NUT, HEX LOCK, 3/8"-16, NYLOCK

Light Kit Assembly and Mounting

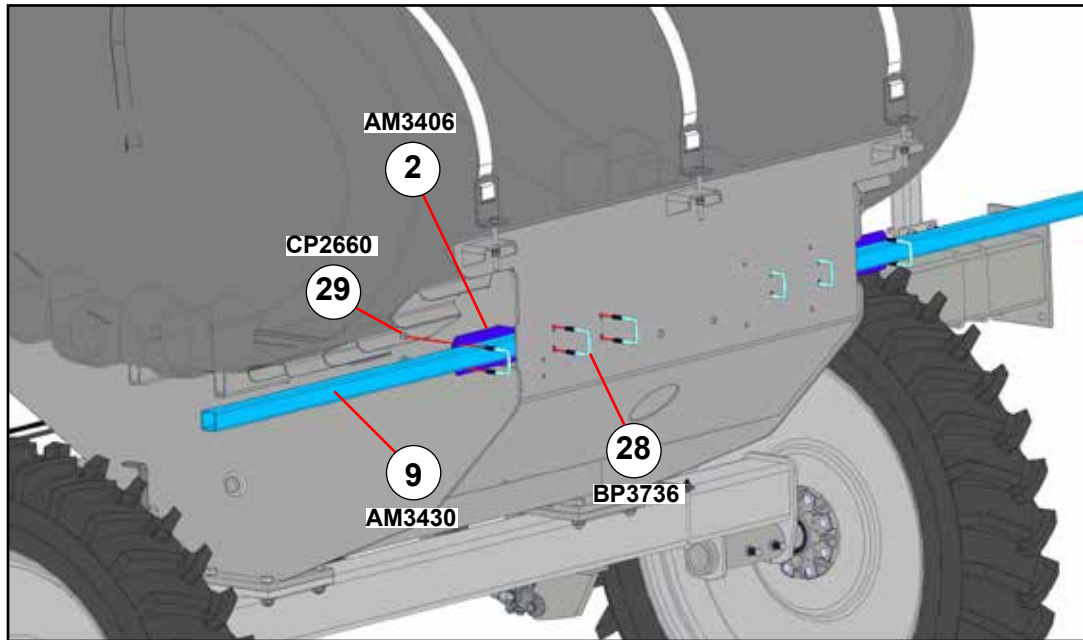
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Task

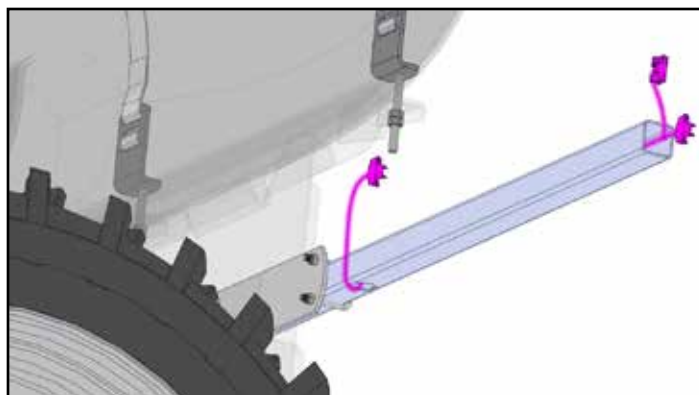
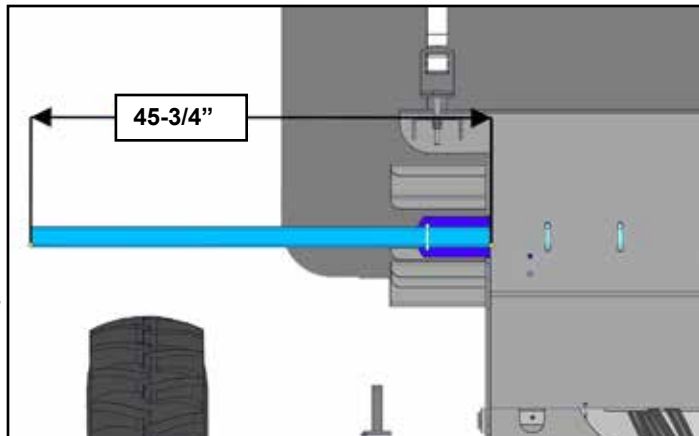
Procedures

Illustrations

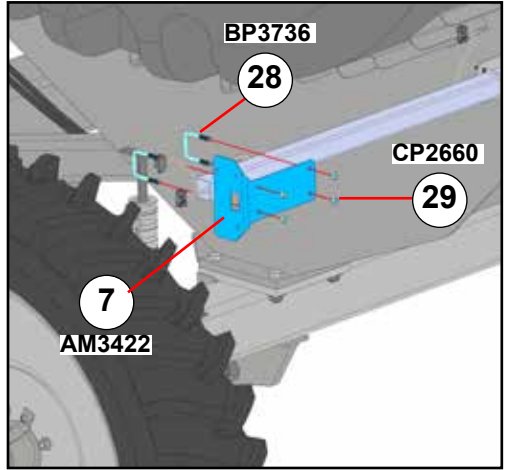
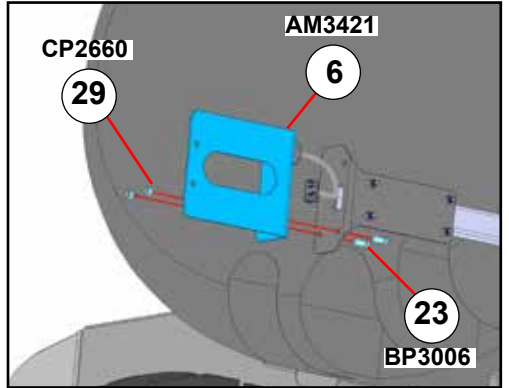
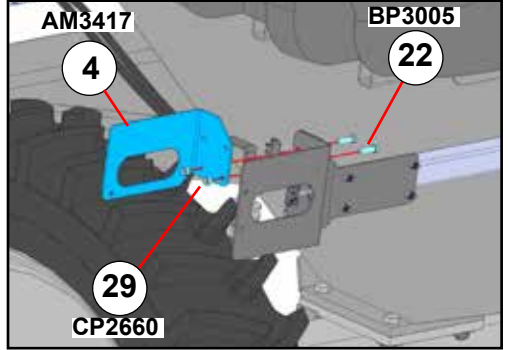
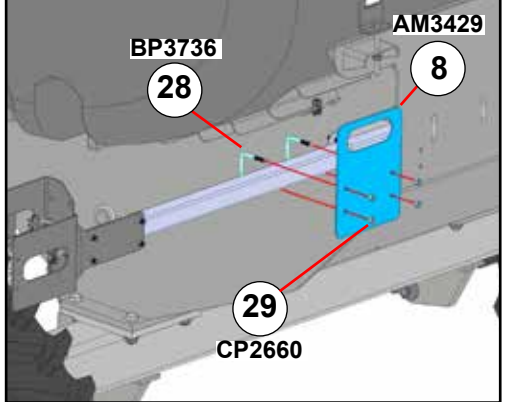
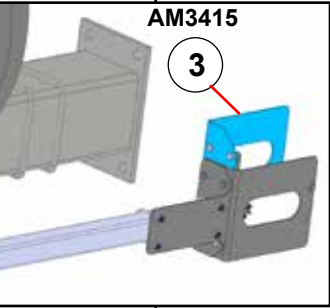
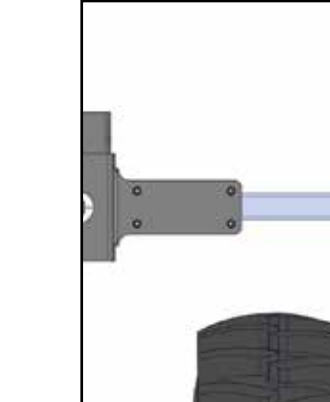
▶ Light Kit Assembly



1. Insert (2) (AM3406) light backing plate into opening at the rear of the frame.
2. Install four (28) (BP3736) 3/8" x 2"W x 3"L u-bolts through frame into light backing plate. Start (29) (CP2660) 3/8" hex lock nuts on each u-bolt. *Do not tighten until the light tubes are installed.*
3. Insert two (28) (BP3736) 3/8" x 2"W x 3"L u-bolts in the outside holes on the light backing plate. Start (29) (CP2660) 3/8" hex lock nuts on each u-bolt.
4. Insert (9) (AM3430) light tube brackets 5'11-3/4" with the **hole down**, through u-bolts on each sides. Extend tube from the frame to end of tube 45-3/4".
5. Tighten lock nuts on all six u-bolts.
6. Extend a wire from the end of the light tube to the center of frame. Tape the Amber light ends to the wire and pull through the tube.
7. Pull the Red wire end through the hole in the center of tube.
8. Repeat on the opposite side.



Light Kit Assembly and Mounting

AT3000	Task	Procedures	Illustrations
	<p>▶ Light Kit Assembly</p> <p>▶ NOTE: Left-hand and right-hand as viewed from the rear</p>	<ol style="list-style-type: none"> 1. Install (7) (AM3422) side mount bar light bracket to end of tube with (28) (BP3736) 3/8" x 2" W x 3" L, u-bolts and (29) (CP2660) 3/8" hex lock nuts, Nylock. 2. Attach (6) (AM3421) side mount light bracket to (7) with (23) (BP3006) 3/8" x 1" hex cap screws in the bottom holes of (7). Secure with (29) (CP2660) 3/8" hex lock nuts, Nylock. 3. Insert (22) (BP3005) 3/8" x 1-1/2", grade 5 hex cap screws in top two holes of (7). Place (4) (AM3417) front right-hand light bracket over hex nuts. Secure with (29) (CP2660) 3/8" hex lock nuts, Nylock. 4. Attach (8) (AM3429) light mount to tube with (28) (BP3736) 3/8" x 2"W x 3"L u-bolts and (29) (CP2660) 3/8" hex lock nuts, Nylock. Position light mount 8" from the side of the frame to light mount. 	   
			
			

Light Kit Assembly and Mounting

AT3000

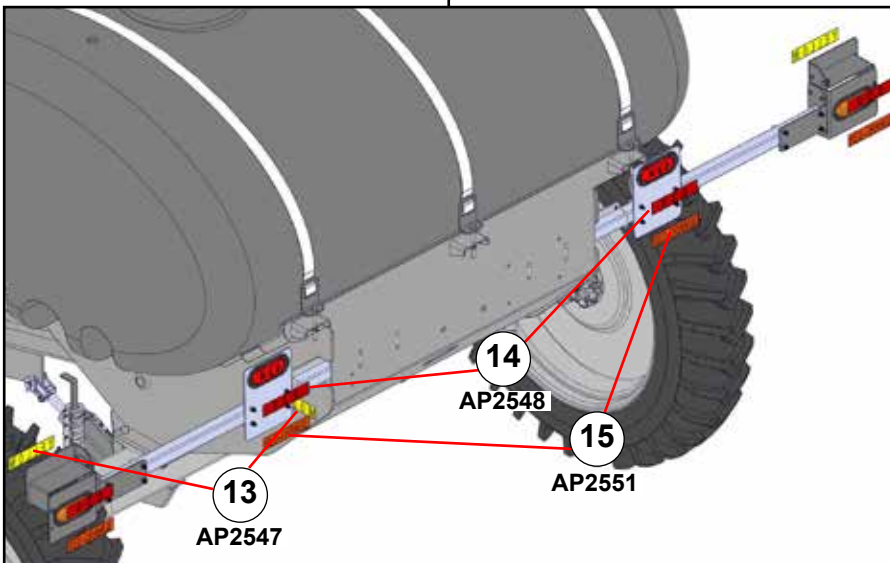
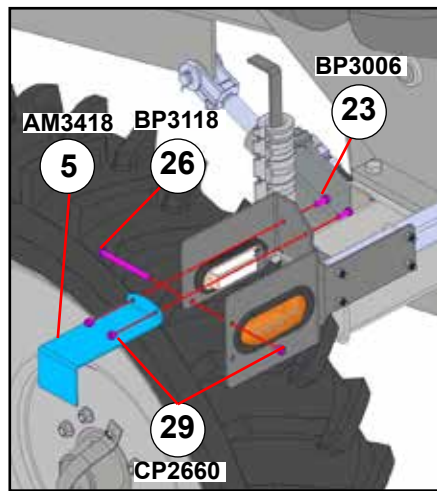
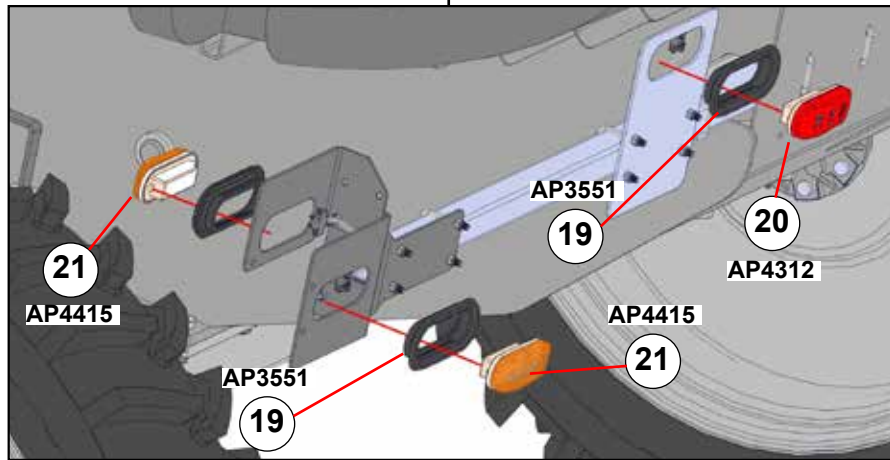
Task

Procedures

Illustrations

▶ Light Kit Assembly

1. Insert (19) (AP3551) oval grommets into mountings.
2. Insert (20) (AP4312) Red lamp into inside grommets. Attach wiring harness connector.
3. Insert (21) (AP4415) Amber lamps into outside brackets. Attach wiring harness connectors.
4. Attach (5) (AM3418) light shield bracket to light assembly with (23) (BP3006) 3/8" x 1" hex cap screws and (29) (CP2660) 3/8" hex lock nuts, Nylock.
5. Insert (26) (BP3118) 3/8" x 5" hex cap screw through tractor side hole and secure with (29) (CP2660) 3/8" hex lock nuts, Nylock.
6. Attach (14) (AP2528) 2 x 9 Red reflector below the Red lamp and above the Amber lamp.
7. Attach (15) (AP2551) 2 x 9 Red-Orange reflector below the Red reflector and below the Amber lamp.
8. Install (13) (AP2547) 2 x 9 Yellow reflector above the tractor side Amber lamps and on the side of the main frame.



Light Kit Assembly and Mounting

AT3000	Task	Procedures	Illustrations
	<p>▶ Light Kit Assembly</p> <ol style="list-style-type: none"> <li data-bbox="354 380 800 583">1. Install (11) (AP2543) SMV mounting socket to frame with (11B) (AP2543-Bolt) 5/16" x 1-1/4" round head bolts, (11D) (BP3158) 5/16" lock washers and (11C) (BP3157) 5/16" hex nuts. <li data-bbox="354 615 789 789">2. Mount (10) (AP2542) SMV sign to (12) (AP2544) SMV mounting spade with (27) (BP3233) 1/4" x 3/4" hex cap screws and (24) (BP3053) 1/4" hex nuts. <li data-bbox="354 821 769 961">3. Connect (17) (AP3142) 10' main 5 wire, 7 pin and dust cap electrical harness to (18) (AP3155) 17" 2 post, 5 wire electrical harness. <li data-bbox="354 993 764 1167">4. Attach (16) (AP2829) dust cap with (27) (BP3233) 1/4" x 3/4" hex cap screws, (25) (BP3055) 1/4" flat washers and (24) (BP3053) 1/4" hex nuts. 		

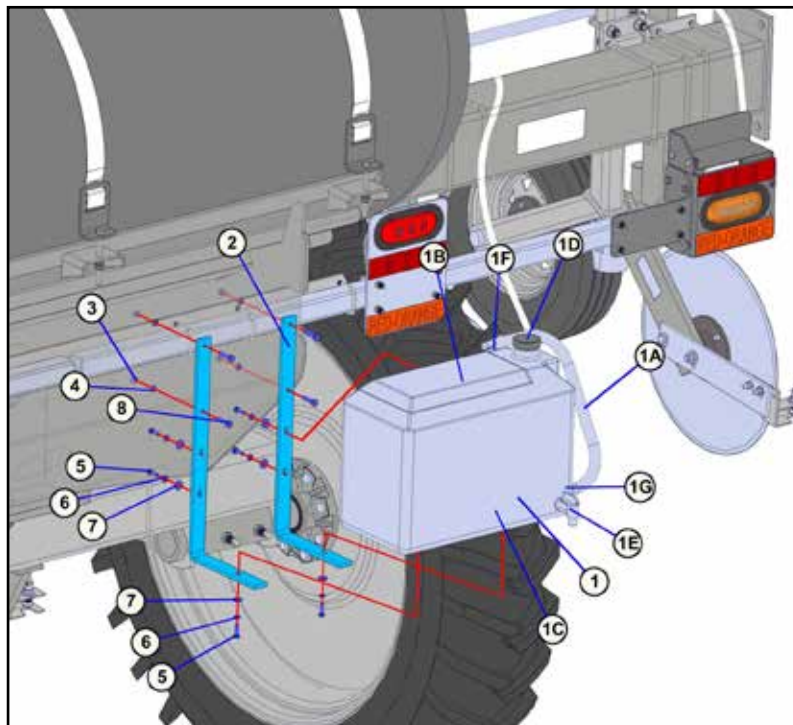
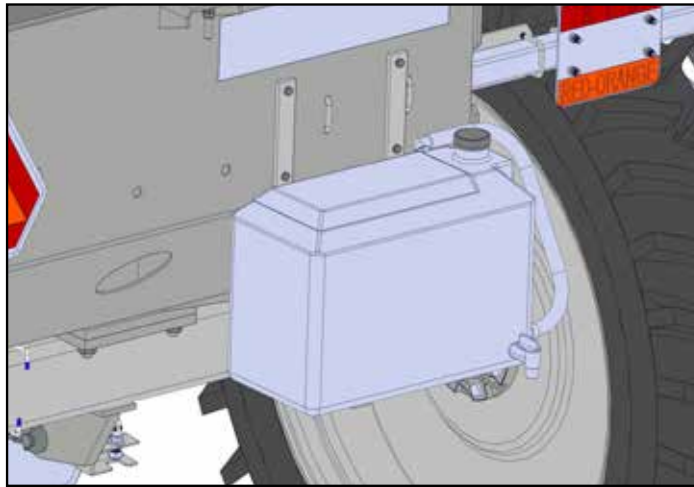
Safety Tank, 9 Gallon

AT3000

Task

Procedures

Illustrations



BOM ID	Qty	Item No	Description
1	1	AP2137	SAFETY TANK, 9 GALLON
1A	1	AP2137HOSE	3/4" CLEAR HOSE - CP2069 - 24" LENGTH
1B	1	AP2137LID	TOOLBOX LID
1C	1	AP2137TANK	TANK
1D	1	AP2272	2" FILL CAP
1E	1	AP2329	SPIGOT
1F	1	CP2471	ELBOW, 90 DEGREE, 3/4"MP X 3/4" HOSE BARB POLY
1G	1	CP2577	HOSE BARB, 3/4"MP X 3/4" HOSE BARB, POLY
2	2	AM4421	BRACKET, TANK MOUNT, 9 GALLON
3	4	BP3001	NUT, HEX, 3/8"-16, GRADE 2, PLATED
4	4	BP3002	WASHER, LOCK, 3/8", PLATED
5	6	BP3108	HEX CAP SCREW, 5/16"-18 X 1", GRADE 5, PLATED
6	6	BP3158	WASHER, LOCK, 5/16, PLATED
7	6	BP3159	WASHER, FLAT, 5/16, PLATED
8	4	BP3005	HEX CAP SCREW, 3/8"-16 X 1-1/2", GRADE 5, PLATED

Safety Tank Mounting

AT3000

Task

Procedures

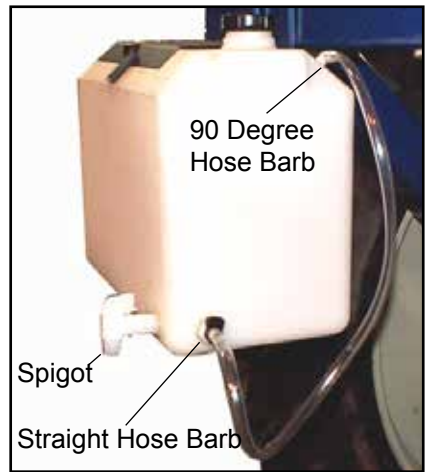
Illustrations

▶ **Mounting safety tank**

1. Attach two (2) (AM4421) 9 gallon tank mounting brackets to (1) (AP2137) 9 gallon fresh water safety tank with six (7) (BP3159) 5/16" flat washers, (6) (BP3158) 5/16" lock washers and (5) (BP3108) 5/16" x 1" hex cap screws.



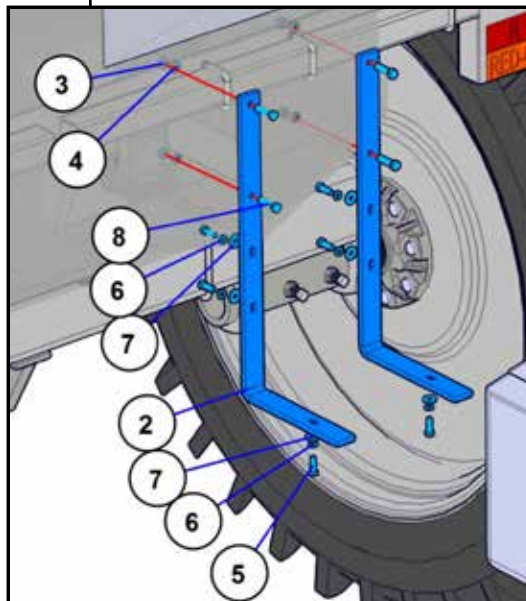
2. Place sealant on tank spigot and install in the front of the tank. Place sealant on hose barbs and install top and bottom. Place hose clamp on clear hose and attach to bottom tank hose barb.



The top hose barb does not require a clamp.

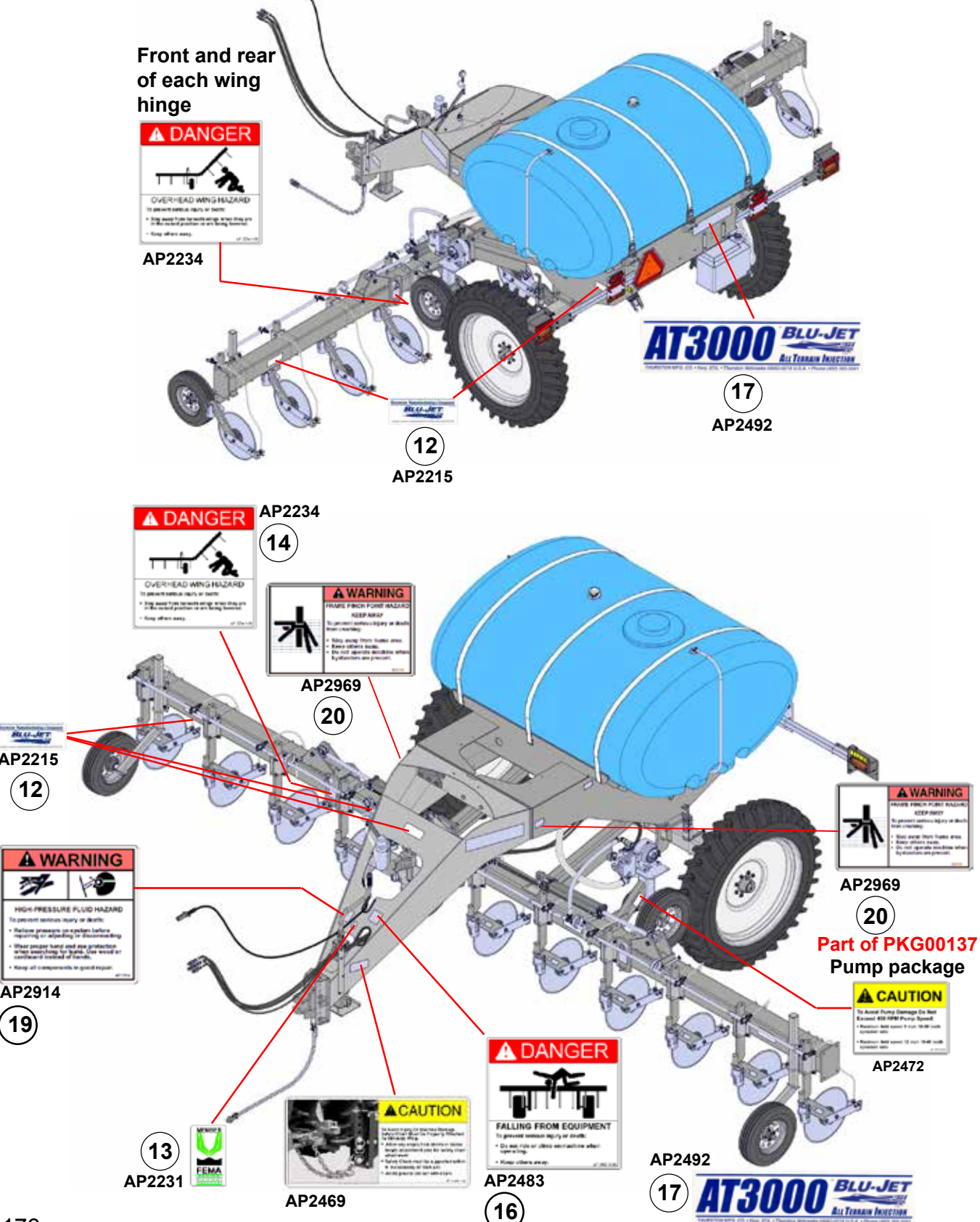
▶ **NOTE:**
Right-hand and left-hand as viewed from the rear

3. Attach tank on the right-hand side with four (8) (BP3005) 3/8" x 1-1/2" hex cap screws, inserted from the outside. Secure with (4) (BP3002) 3/8" lock washers and (3) (BP3001) 3/8" hex nuts.



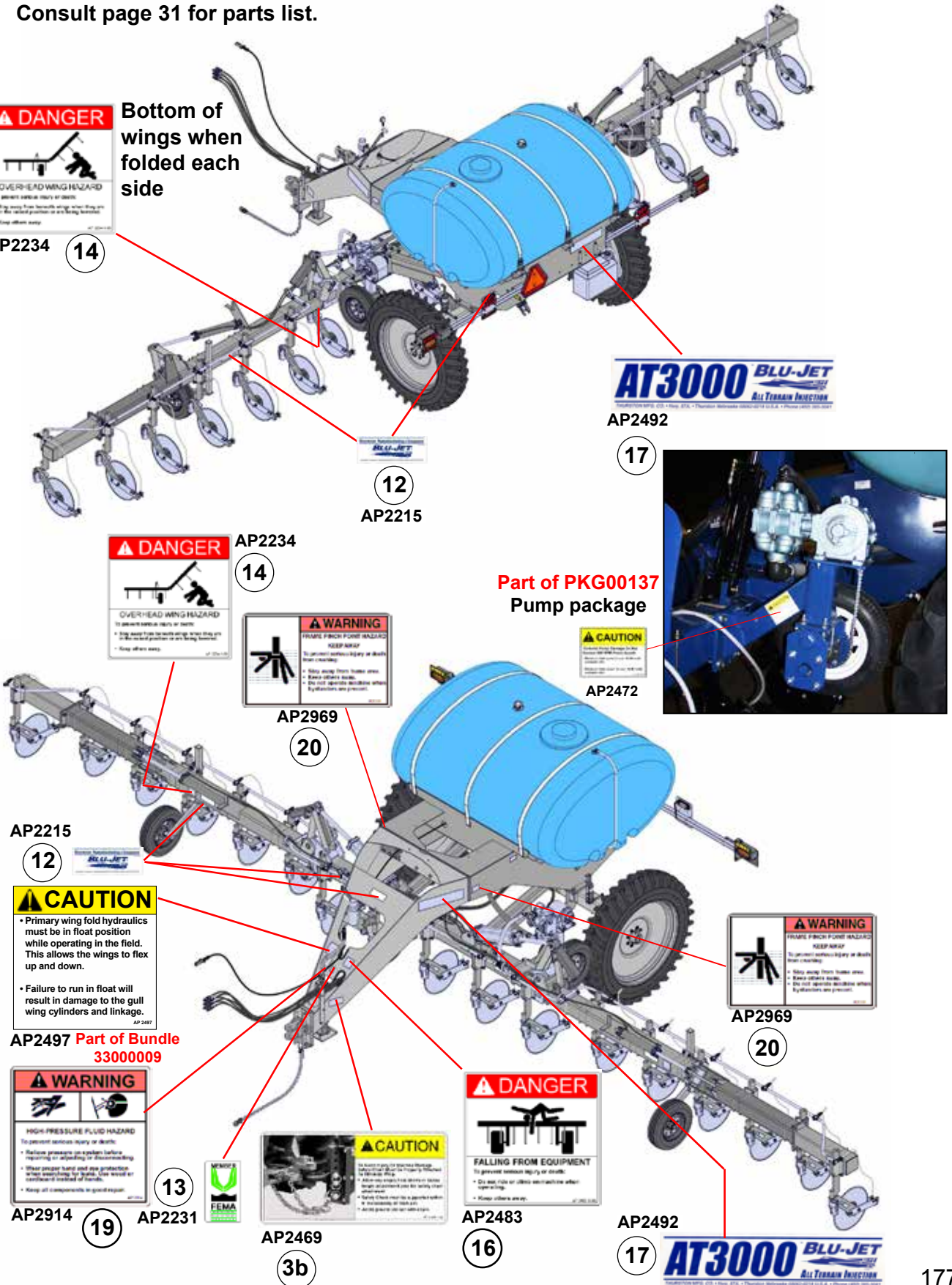
	<h1>Decals Standard</h1>		
AT3000	Task	Procedures	Illustrations

Consult page 31 for parts list.



	<h1>Decals Gull Wing</h1>		
AT3000	Task	Procedures	Illustrations

Consult page 31 for parts list.



14 **DANGER**
OVERHEAD WING HAZARD
To prevent serious injury or death:
• Stay away from overhead wings when they are in the raised position or are being lowered.
• Keep others away.

12 **BLU-JET**

17 **AT3000 BLU-JET**
All Terrain Injection

17 **Part of PKG00137 Pump package**

14 **DANGER**
OVERHEAD WING HAZARD
To prevent serious injury or death:
• Stay away from overhead wings when they are in the raised position or are being lowered.
• Keep others away.

20 **WARNING**
FRAME PINCH POINT HAZARD
KEEP AWAY
To prevent serious injury or death from crushing:
• Stay away from trailer area.
• Place wheels aside.
• Do not operate machine when hydraulics are present.

20 **WARNING**
FRAME PINCH POINT HAZARD
KEEP AWAY
To prevent serious injury or death from crushing:
• Stay away from trailer area.
• Place wheels aside.
• Do not operate machine when hydraulics are present.

13 **CAUTION**
HIGH-PRESSURE FLUID HAZARD
To prevent serious injury or death:
• Release pressure on system before repairing or adjusting or disconnecting.
• Wear proper hand and eye protection when working on parts. Use word or symbol if needed for hands.
• Keep all components in good repair.

16 **DANGER**
FALLING FROM EQUIPMENT
To prevent serious injury or death:
• Do not climb or utilize machine while operating.
• Keep others away.

19 **WARNING**
HIGH-PRESSURE FLUID HAZARD
To prevent serious injury or death:
• Release pressure on system before repairing or adjusting or disconnecting.
• Wear proper hand and eye protection when working on parts. Use word or symbol if needed for hands.
• Keep all components in good repair.

17 **CAUTION**
In order to prevent hydraulic damage, adjust the air for proper inflation to 30-35 psi. Do not inflate tires beyond an amount past the rating on the sidewall.
• Spraying fluid must be a specific color, or otherwise as noted.
• All tire pressure must be checked.

13b **MEMBER FEMA**

17 **AT3000 BLU-JET**
All Terrain Injection

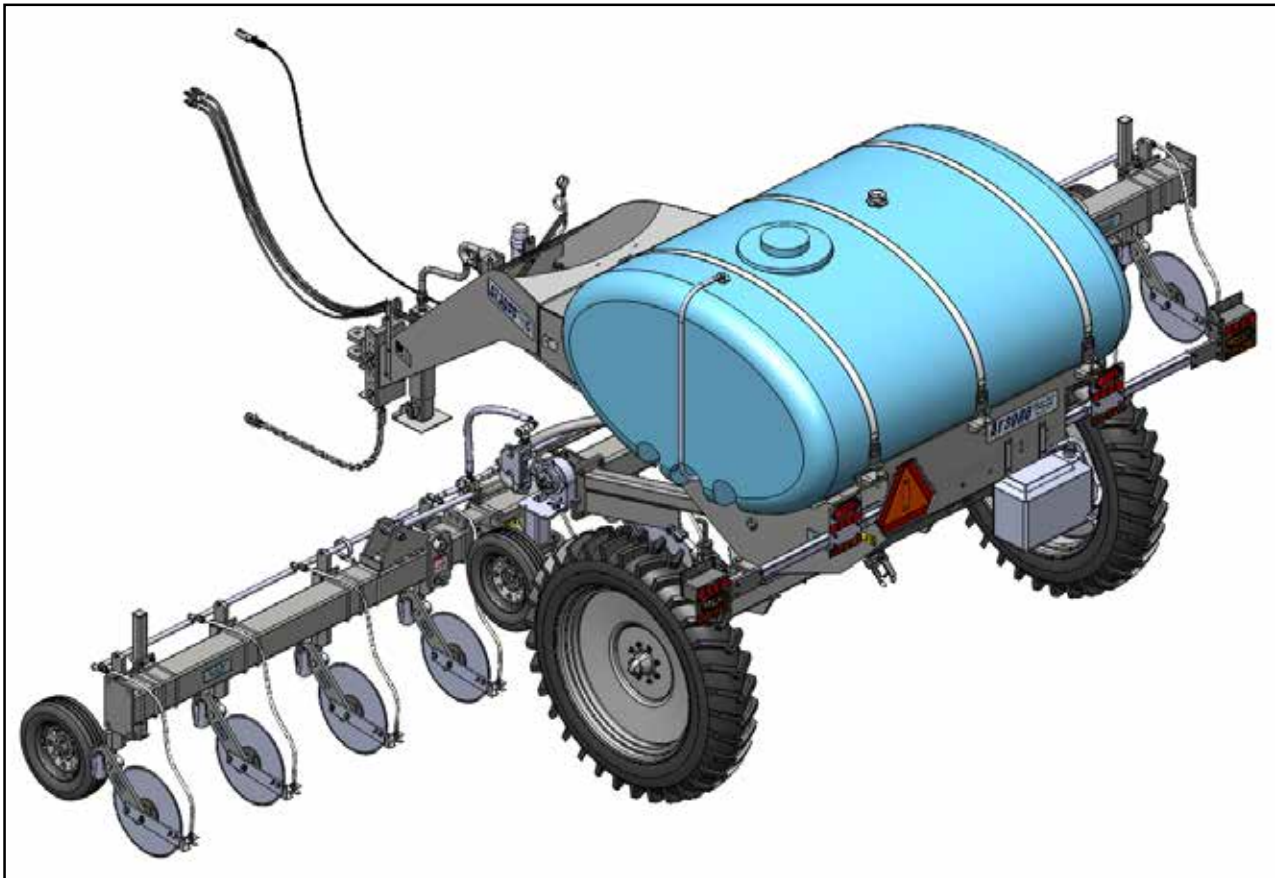
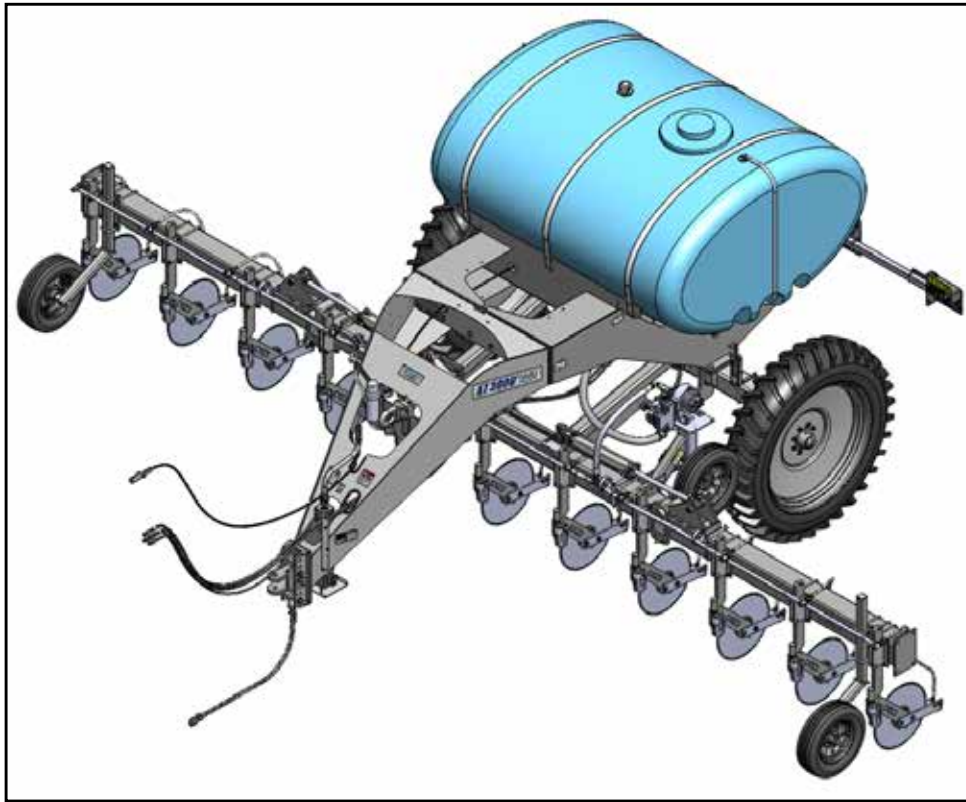
Standard 11 Row 30"

AT3000

Task

Procedures

Illustrations



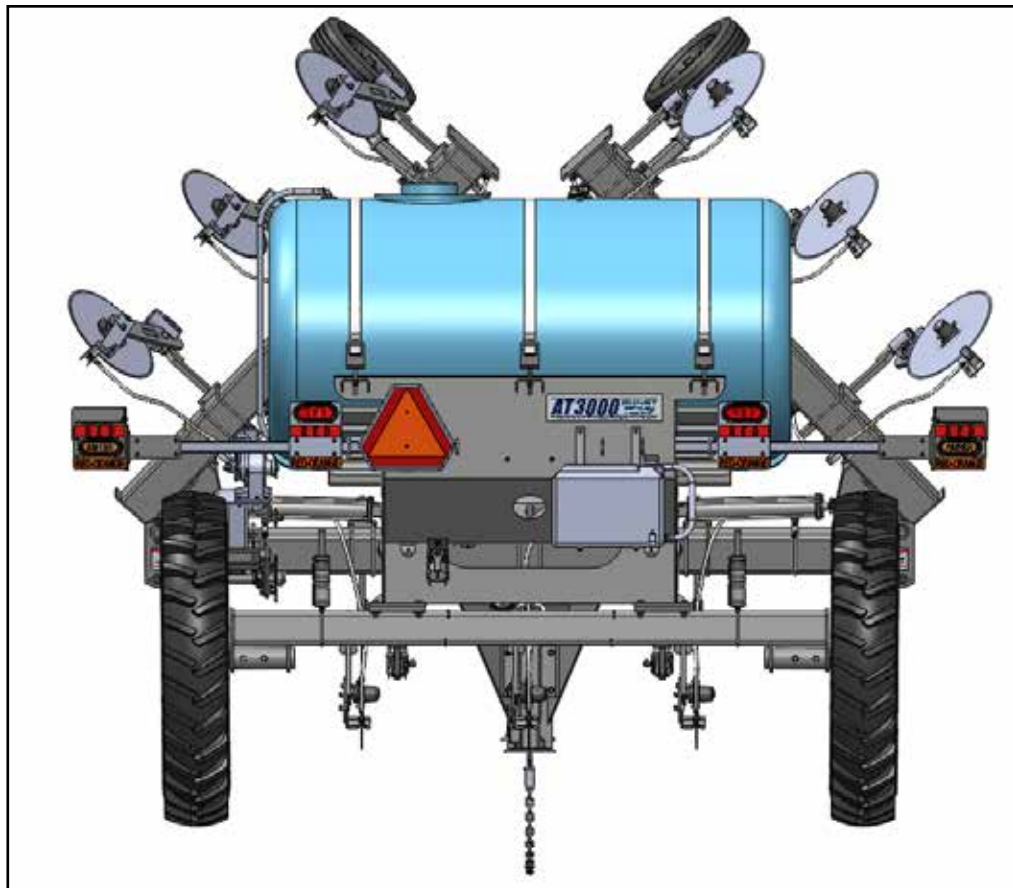
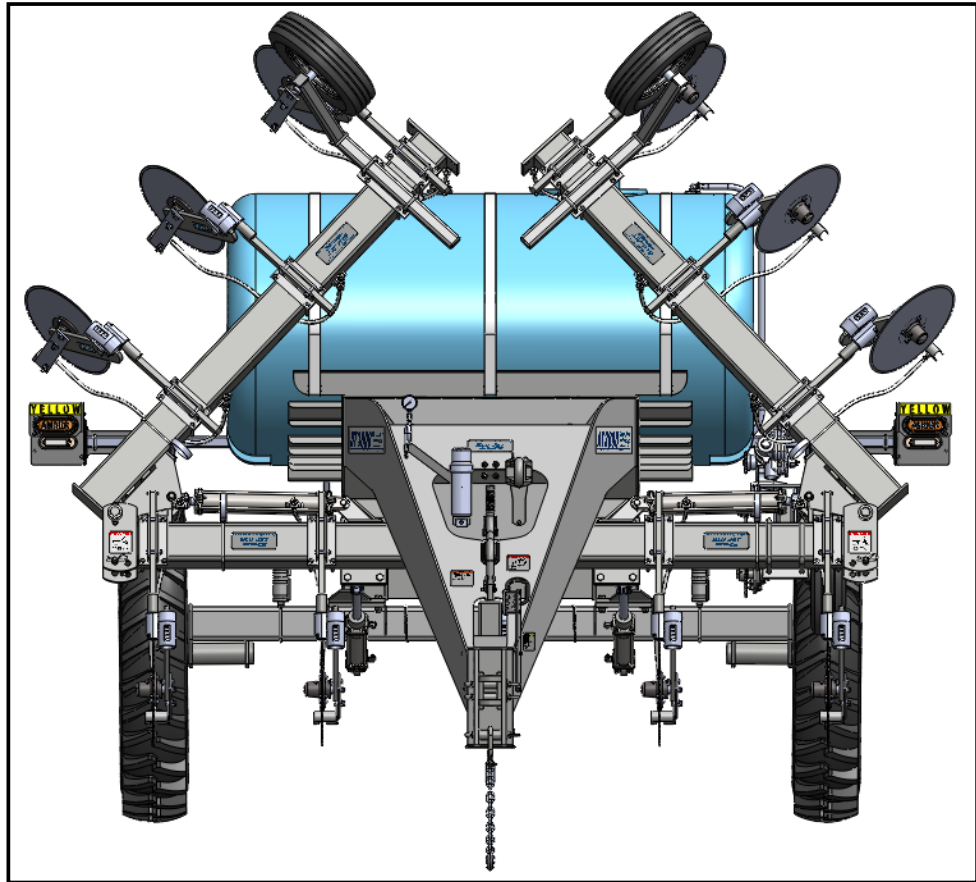
Standard 11 Row 30"

AT3000

Task

Procedures

Illustrations



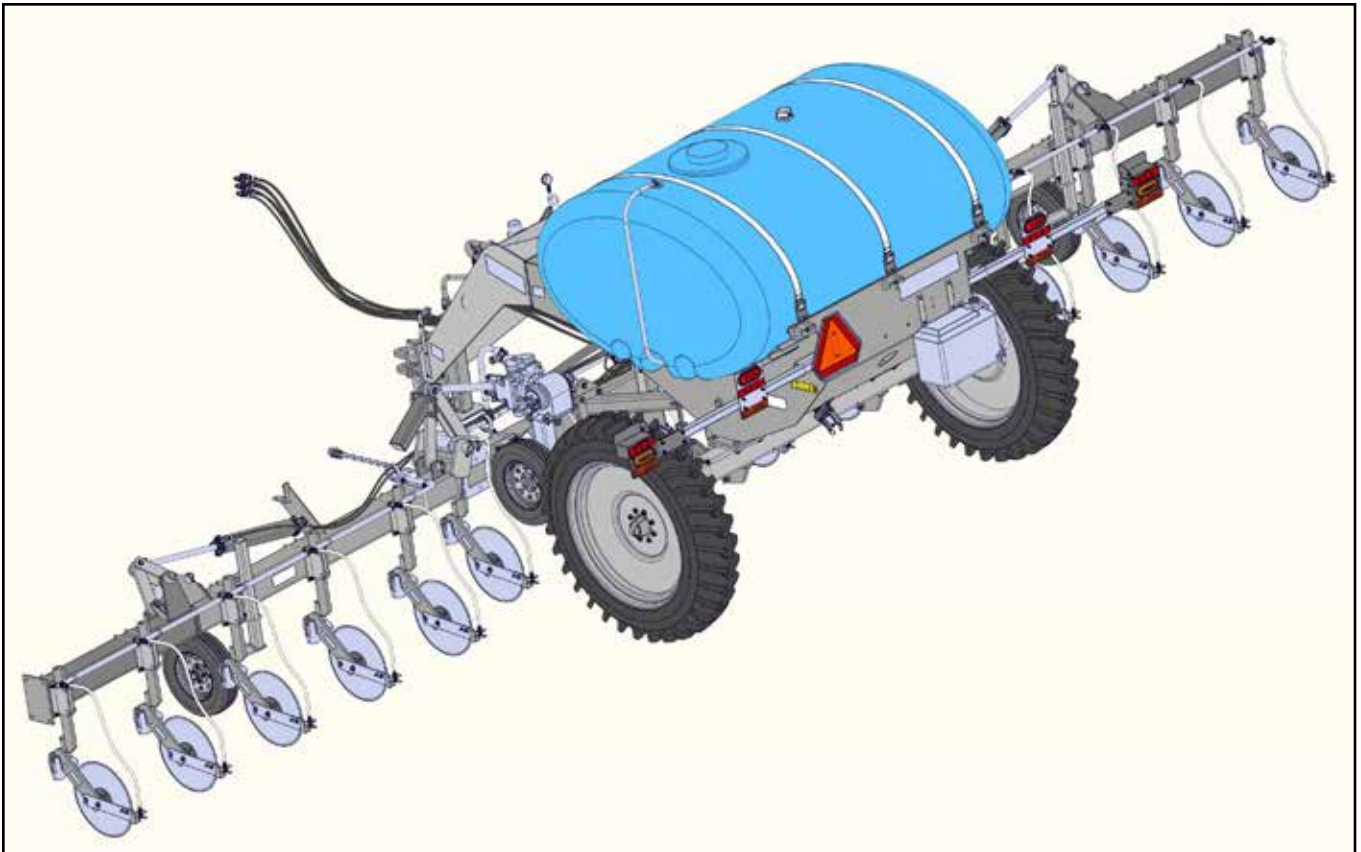
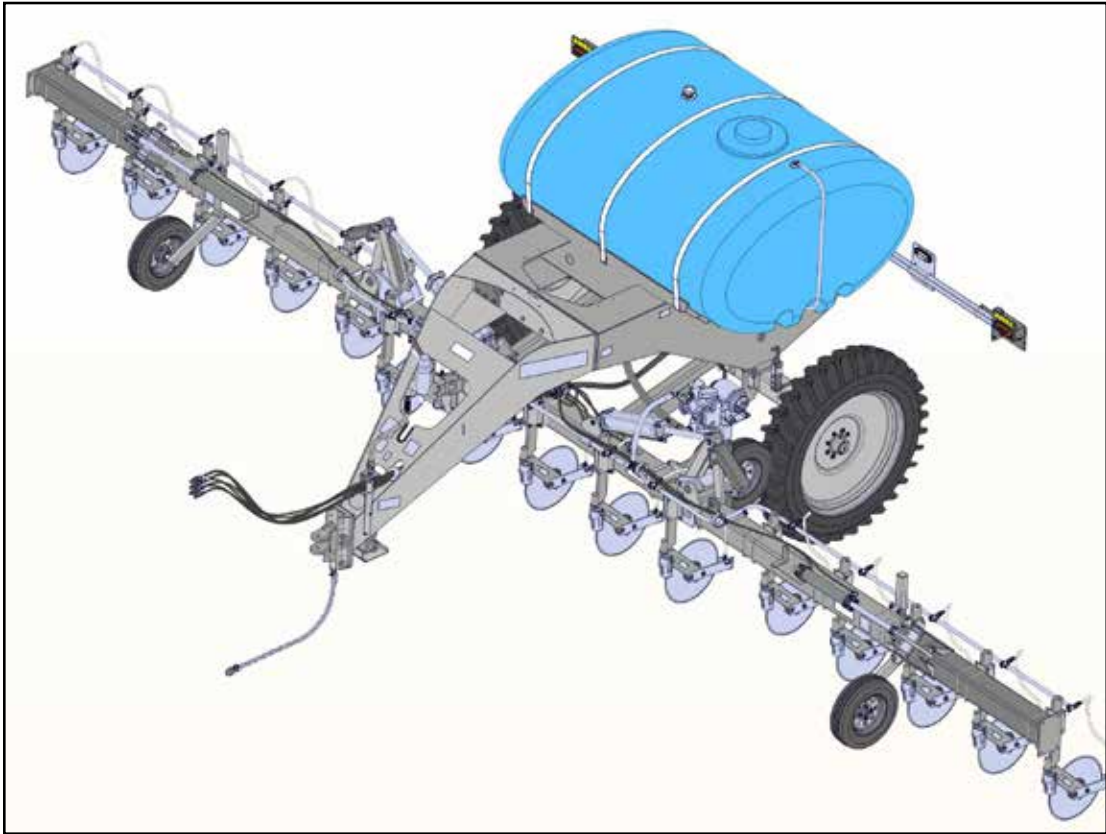
Deluxe Fold, 11 Row 30" - 15 Row 30"

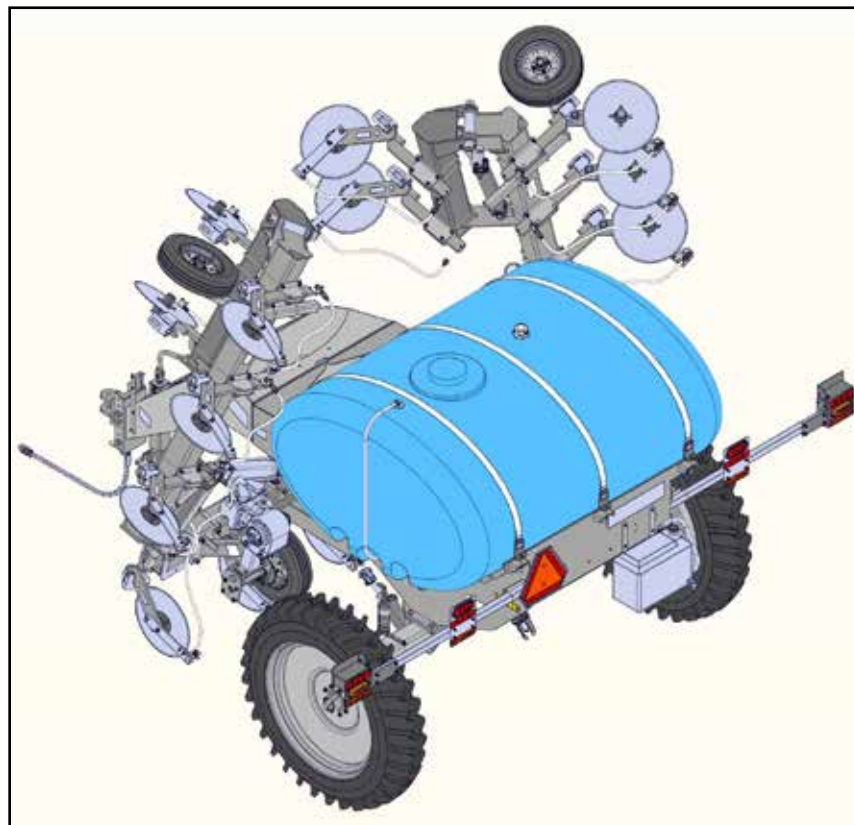
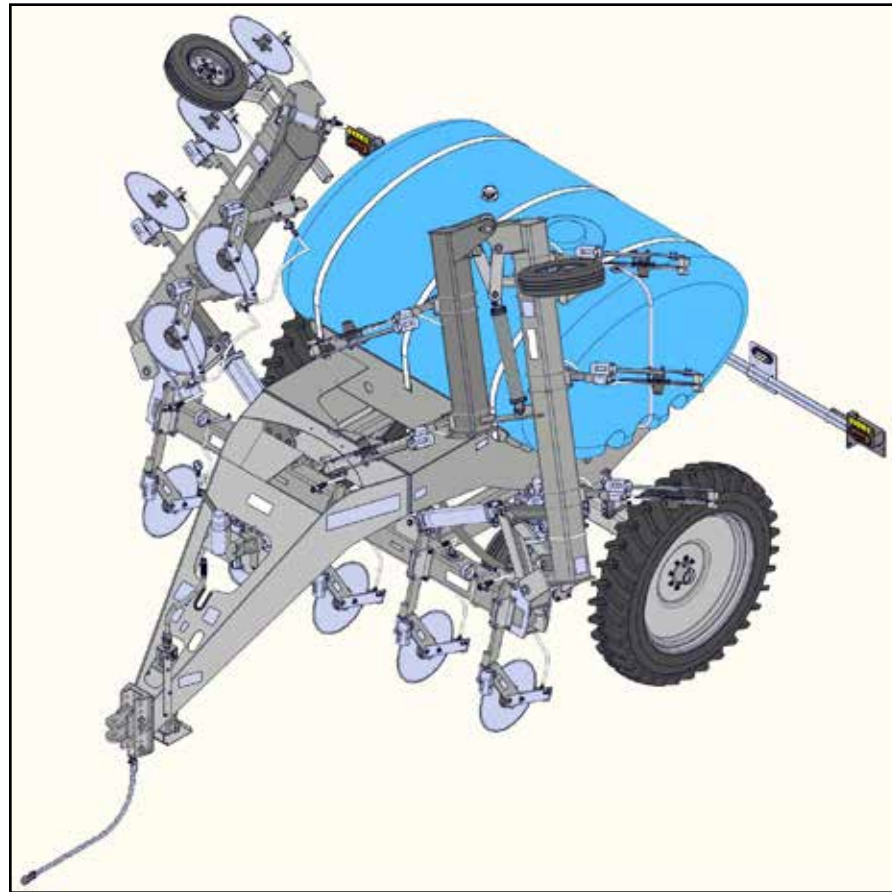
AT3000

Task

Procedures

Illustrations





BLU-JET

Deluxe Fold, 11 Row 30" - 15 Row 30"

Gull Winged Photos

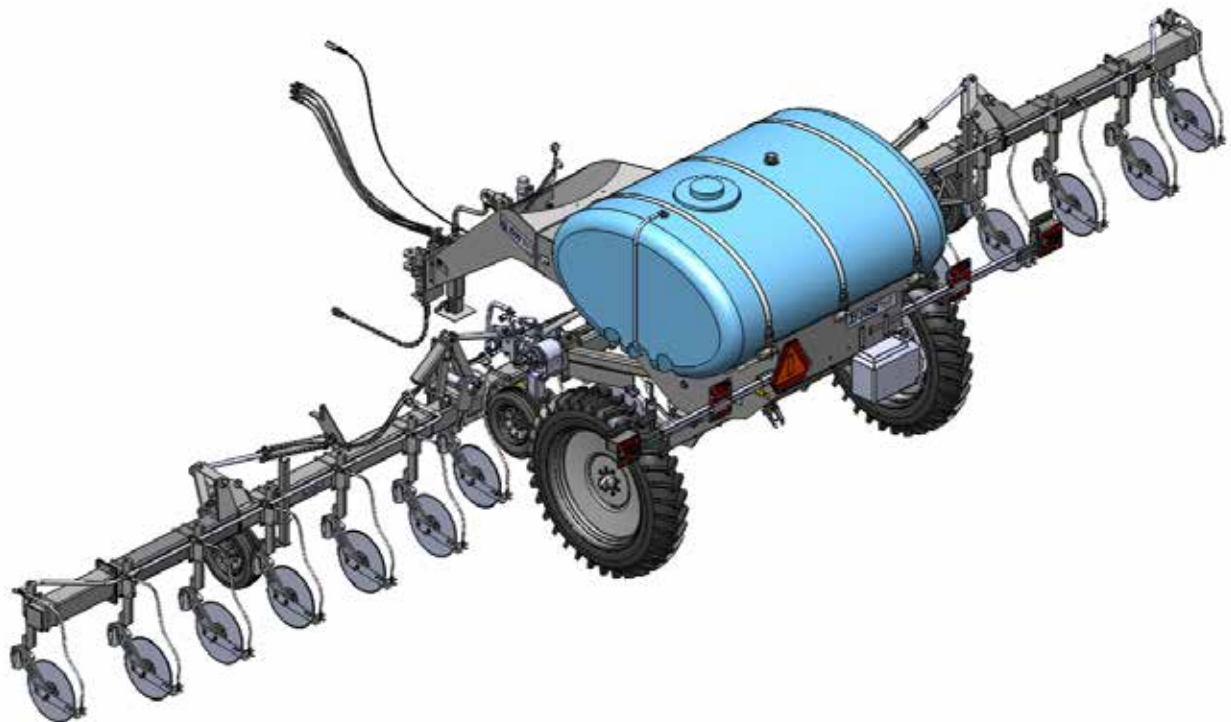
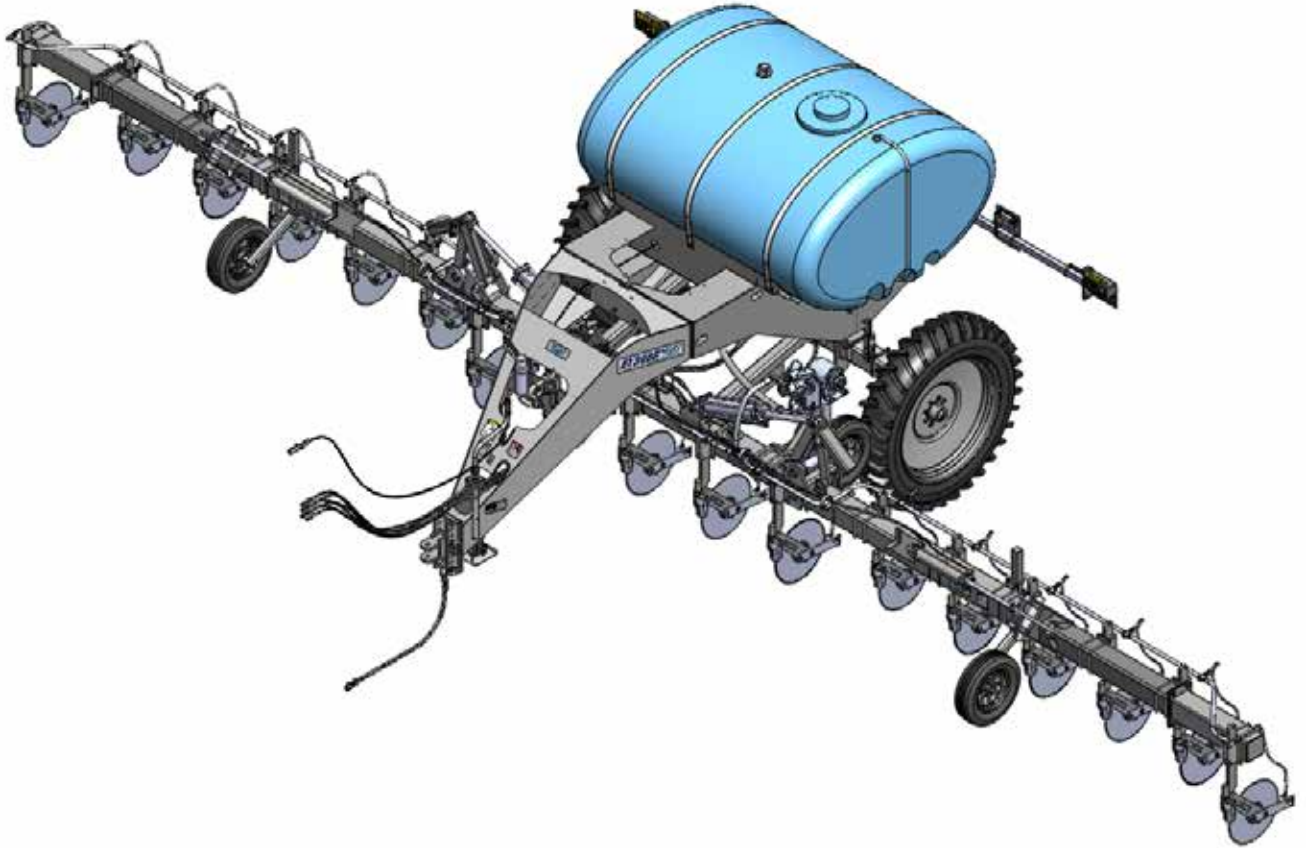
AT3000

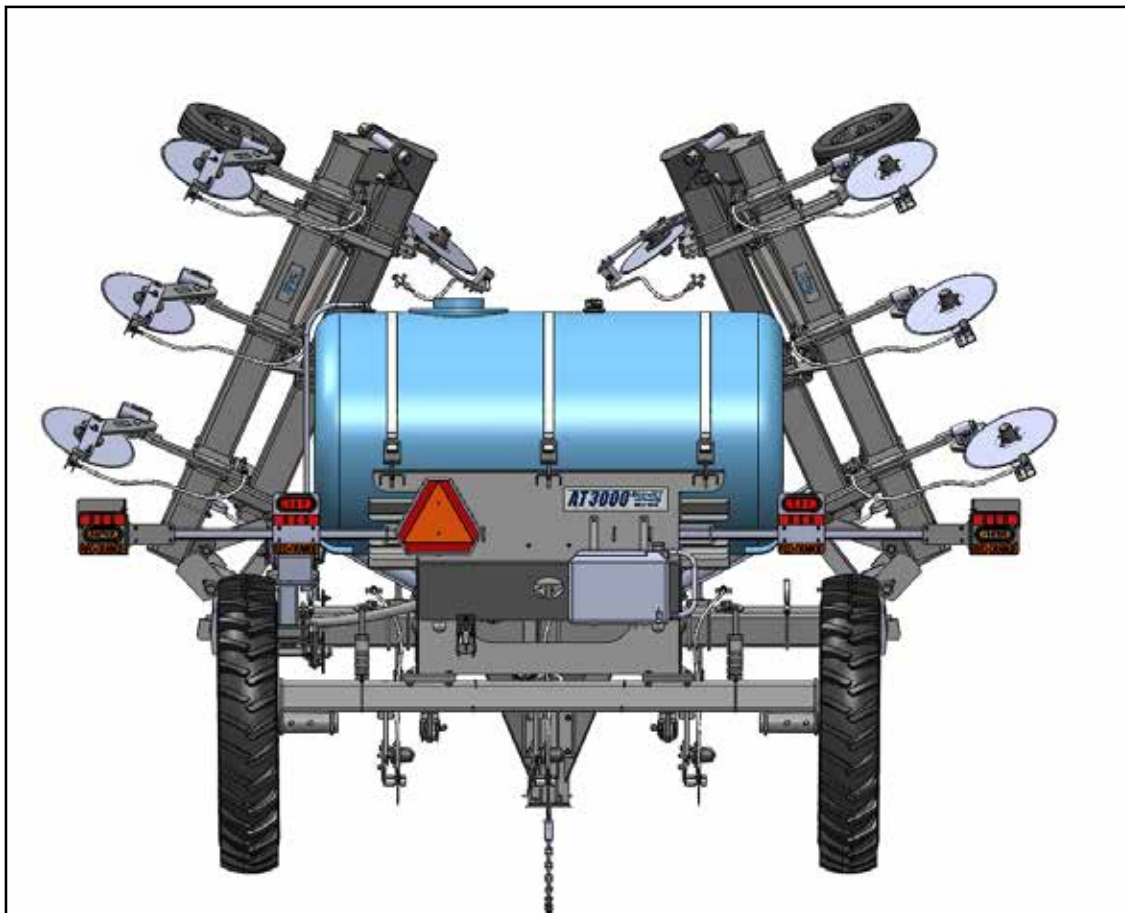
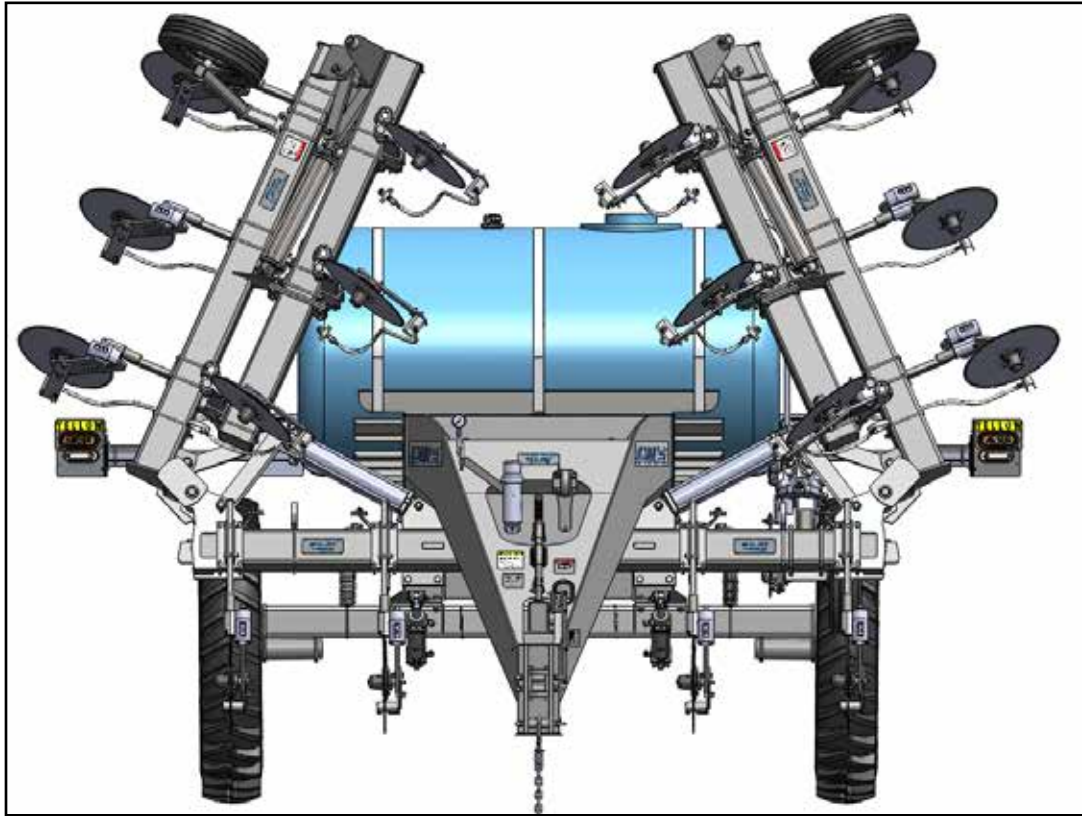
Task


Procedures

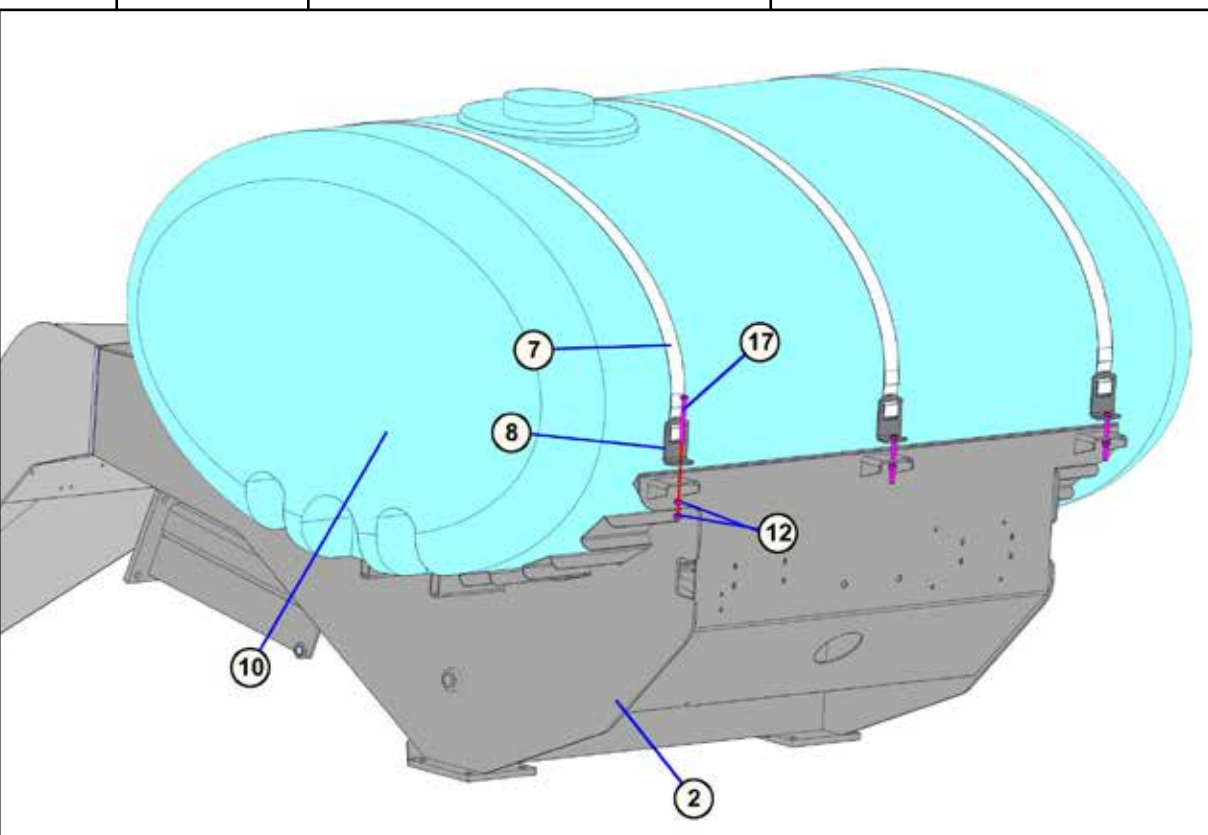
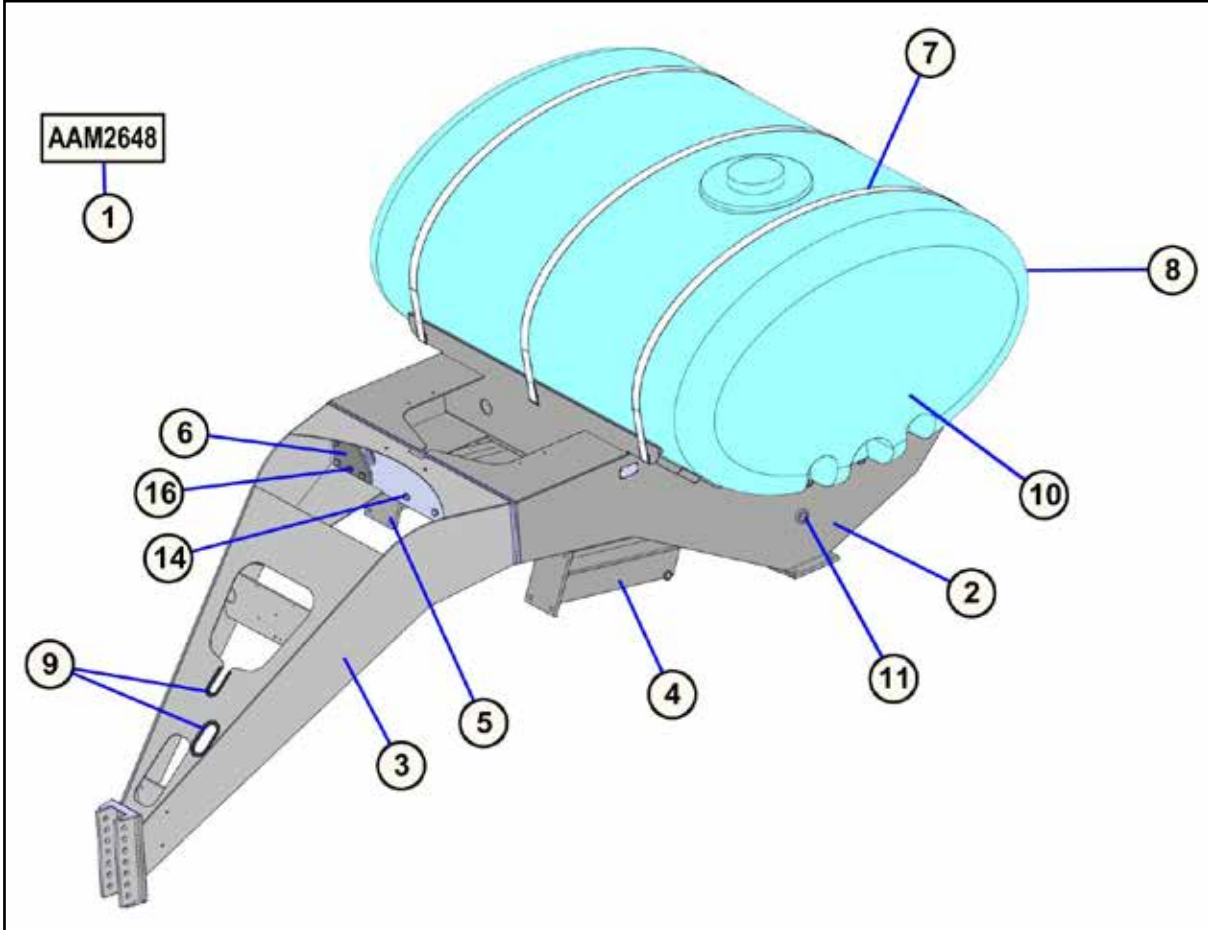
Illustrations







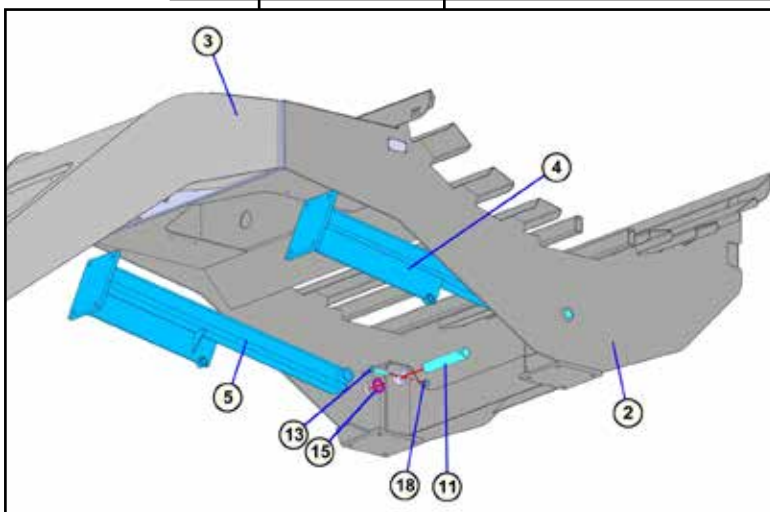
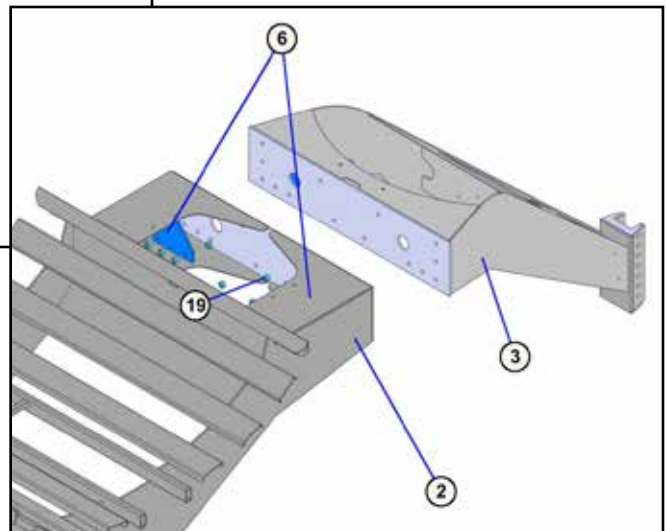
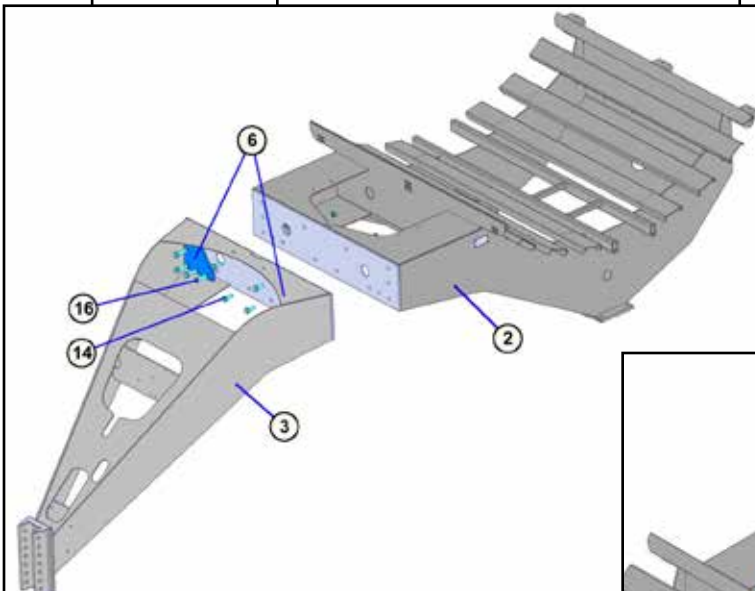
	<h2>AAM2648 Cart Frame Assembly (Export Units)</h2>		
AT3000	Task	Procedures	Illustrations



AAM2648 Cart Frame Assembly (Export Units)

AT3000

BOM ID	Qty	Item No	Description
1	1	AAM2648	ASSEMBLY, AT3000 CART WITH TANK, FOR SHIPPING
2	1	AM3524	FRAME, MAIN, AT3000
3	1	AM3554	TONGUE, AT3000
4	1	AM3555	ARM, TOOLBAR LIFT, LEFT HAND
5	1	AM3556	ARM, TOOLBAR LIFT, RIGHT HAND
6	4	AM3566	CORNER BRACE
7	3	AM3570	TANK STRAP, 2" X 132", POLYESTER WEBBING, BLUE
8	3	AM4432	BRACKET, TANK STRAP ADJUSTMENT
9	2	AP2741	TRIM, 1/8"
10	1	AP4217	TANK, 1025 GALLON ELLIPTICAL
11	2	BM3496	PIN, 1-3/4" X 10-3/4" OAL, WITH 21/32 HOLE, PLATED
12	6	BP3042	NUT, HEX, 1/2"-13, GRADE 2, PLATED
13	2	BP3135	HEX CAP SCREW, 5/8"-11 X 3-1/2", GRADE 5, PLATED
14	4	BP3139	HEX CAP SCREW, 3/4"-10 X 2", GRADE 5, PLATED
15	2	BP3205	MACHINERY BUSHING, 2-1/2" OD X 1-3/4" ID, 10 GAUGE, PLATED
16	10	BP3209	HEX CAP SCREW, 3/4"-10 X 3", GRADE 8, PLATED
17	3	BP3217	HEX CAP SCREW, 1/2"-13 X 5", FULL THREAD, GRADE 8, PLATED
18	2	BP3375	NUT, HEX LOCK, 5/8"-11, NYLOCK
19	14	BP3442	NUT, HEX LOCK, 3/4"-10, TOP LOCK, GRADE C, PLATED



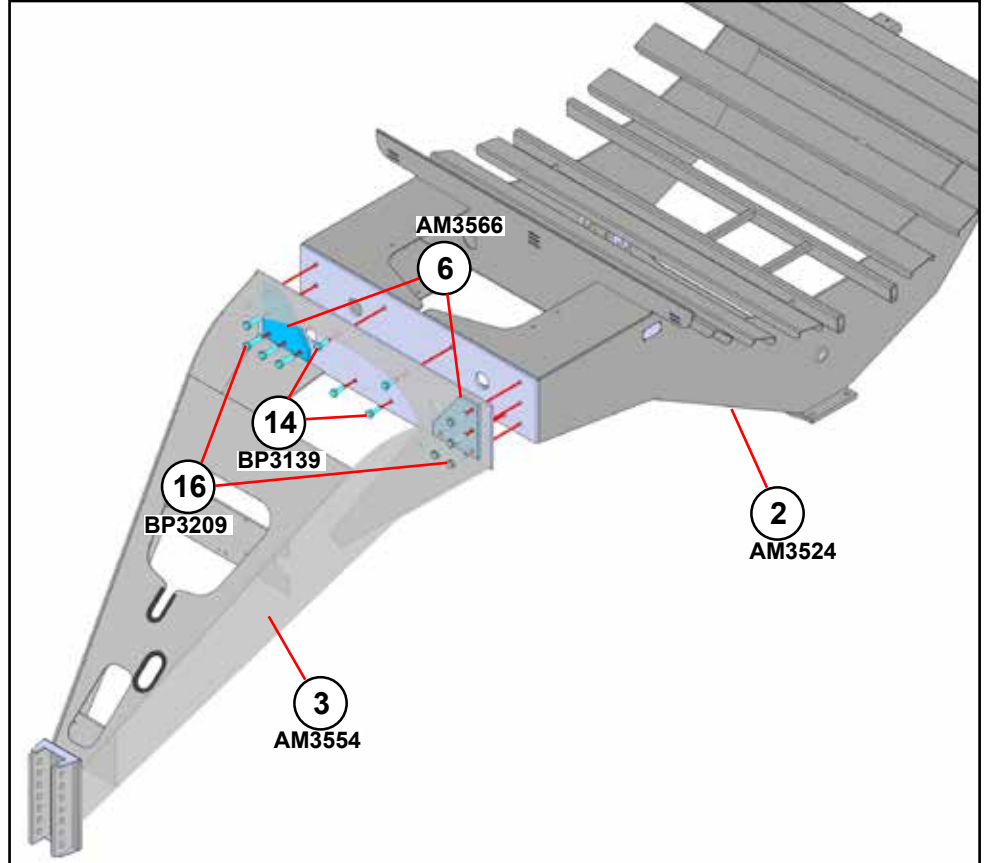
AT3000

Task

Procedures

Illustrations

▶ **Connecting Frame and Tongue**

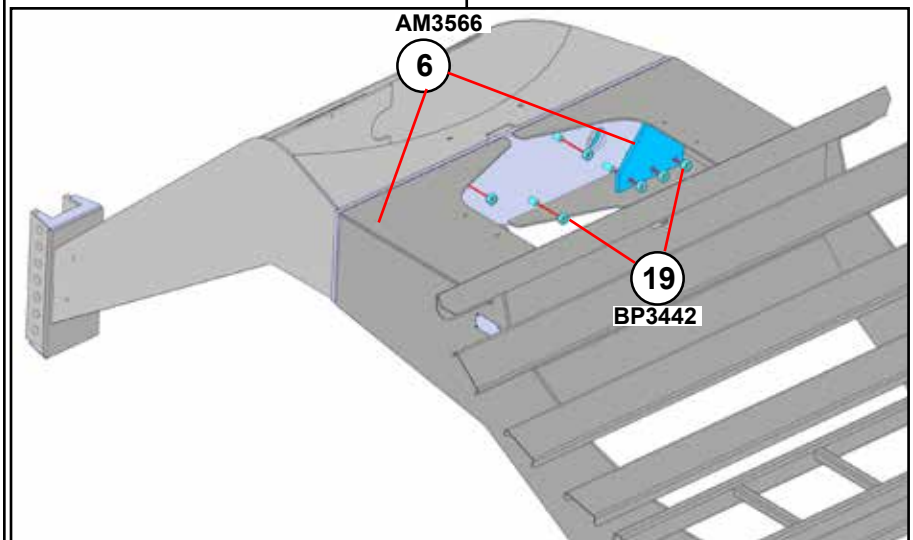


1. Align (2) (AM3524) main frame with (3) (AM3554) tongue. In the four holes near the center of the weldments use (14) (BP3139) 3/4"-10 x 2" hex cap screws and (19) (BP3442) 3/4"-10 top lock nuts to connect (2) and (3). **Do not tighten.**

2. Attach (6) (AM3566) corner braces on left and right sets of holes in tongue mounting plate with (16) (BP3209) 3/4"-10 x 3" hex cap screws.

3. On the back of the frame mounting plate, place (6) corner braces on (16) from step 2. Install (19) on all bolts and tighten.

▶ **NOTE:**
Right-hand and left-hand as viewed from the rear



AAM2648 Cart Frame Assembly (Export Units)

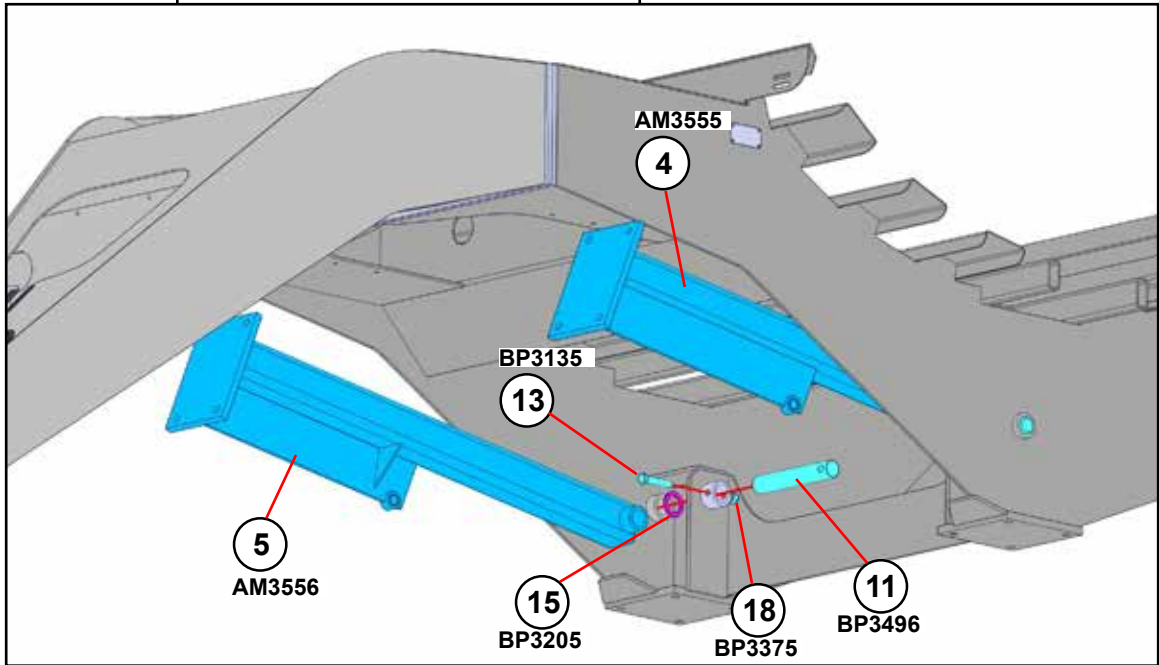
AT3000

Task

Procedures

Illustrations

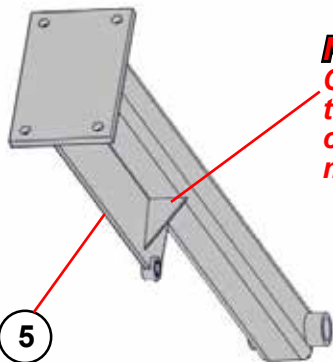
▶ **Attaching Lift Arms**



1. Position (5) (AM3556) RH lift arm into pivot weldment of main frame.
2. Install (11) (BP3496) 1-3/4" x 10-3/4" pin through weldment, (5) and (15) (BP3205) 2-1/2" OD x 1-3/4" ID machinery bushing.
3. Line up holes of pin and pivot weldment to install (13) (BP3135) 5/8"-11 x 3-1/2" hex cap screw. Secure with (18) (BP3375) 5/8"- 11 Nylock hex nut.
4. Repeat procedure on left side of frame with (4) (AM3555) LH lift arm.

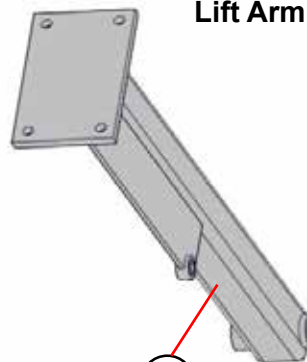
▶ **NOTE:**
Right-hand and left-hand as viewed from the rear

Right Hand Lift Arm



(5)
AM3556

Left Hand Lift Arm



(4)
AM3555

NOTE:
Gusset towards center of machine

AAM2648 Cart Frame Assembly (Export Units)

AT3000

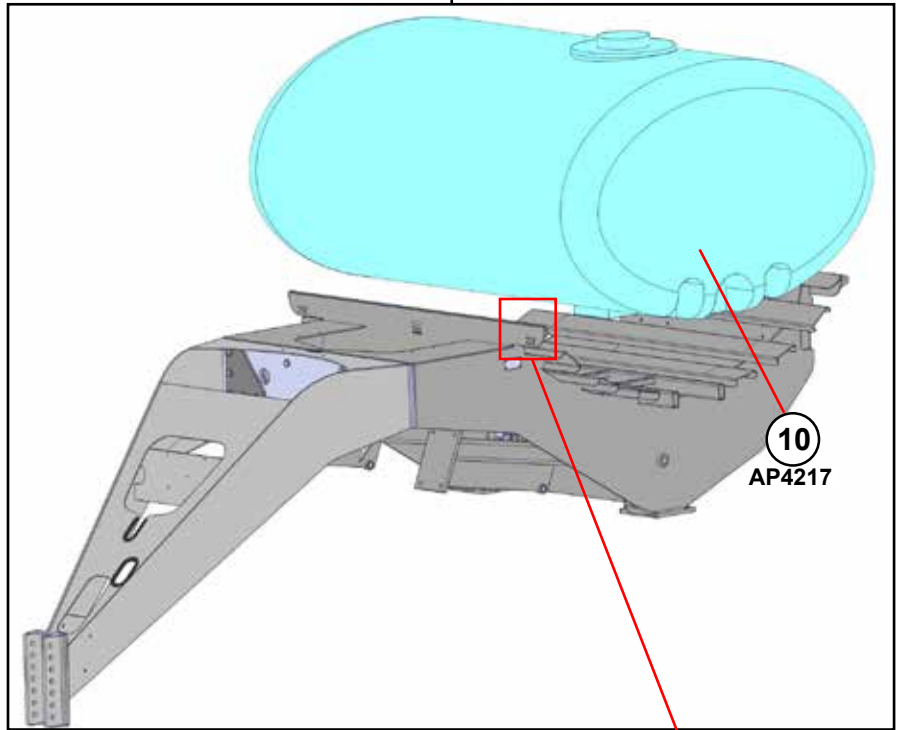
Task

Procedures

Illustrations

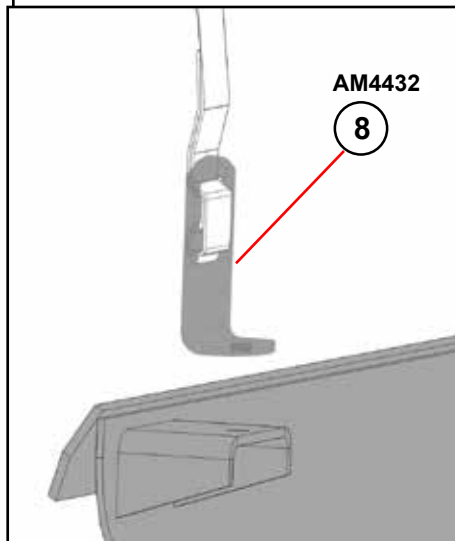
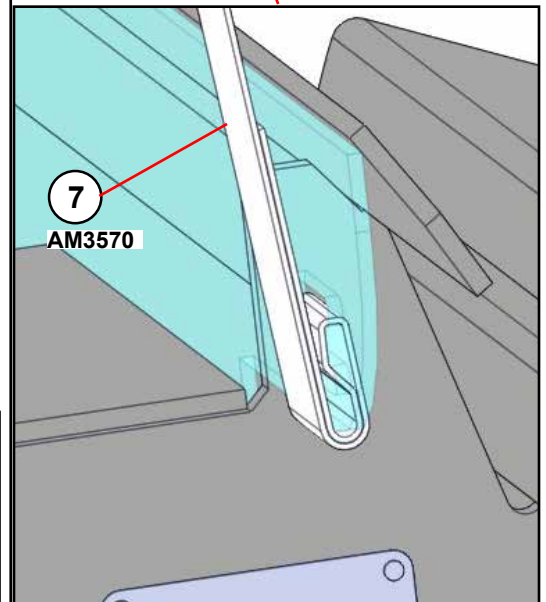
▶ Attaching Tank and Straps

▶ **NOTE:**
Consult pages 163-165 to install tank fittings before mounting to frame.



1. Place (10) (AP4217) tank onto main frame so that the square sump is between the braces.
2. Feed (7) (AM3570) 2" tank strap through slots in front frame plate as shown. Repeat for center and right hand side.
3. Run the three straps over the top of tank to rear of frame.
4. Feed straps as shown through (8) (AM4432) strap adjustment bracket so that it is approximately 4" above the tie down plate.

▶ **NOTE:**
Right-hand and left-hand as viewed from the rear



AAM2648 Cart Frame Assembly (Export Units)

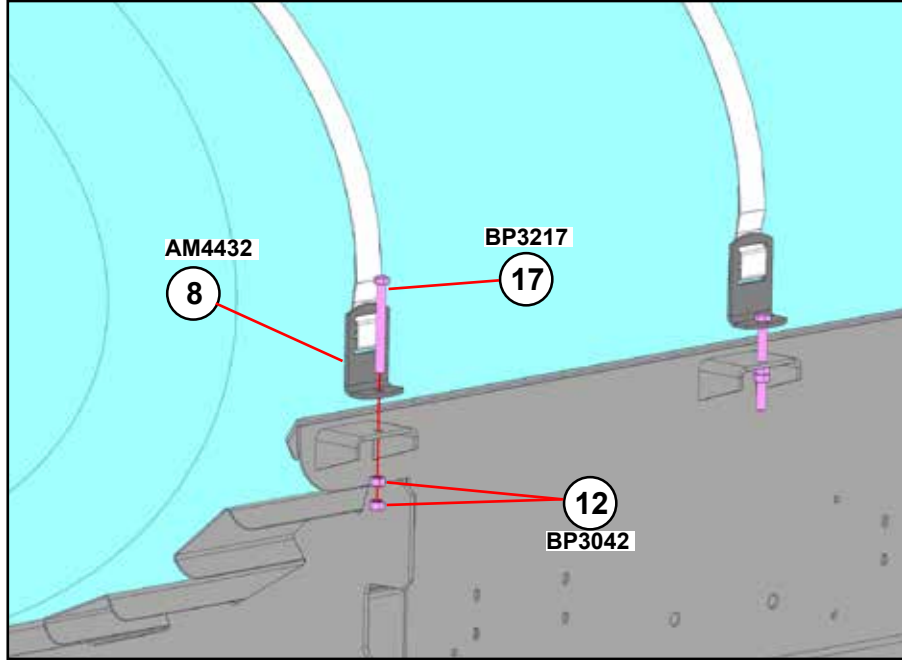
AT3000

Task

Procedures

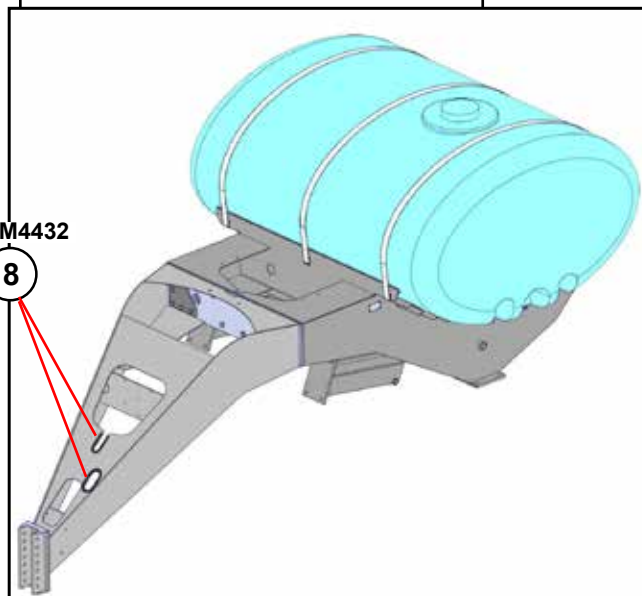
Illustrations

▶ **Attaching Tank and Straps**



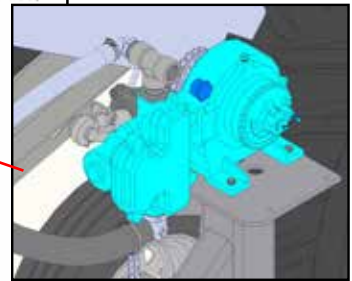
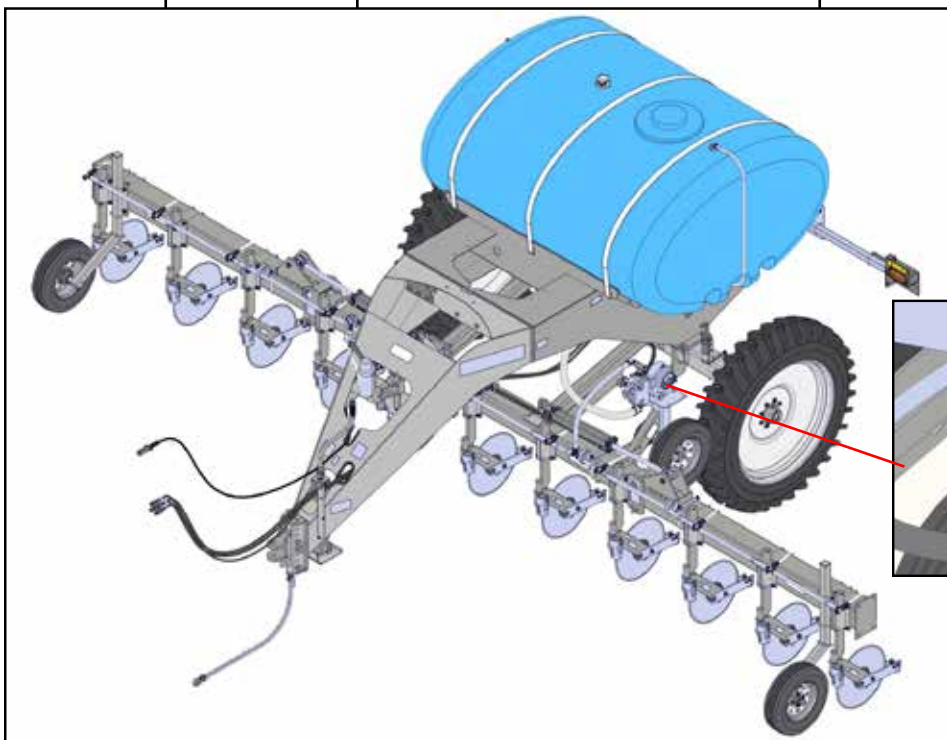
1. Attach (8) to rear tie down bracket with (17) (BP3217) 1/2" -13 x 5 full thread hex cap screw and (12) (BP3042) 1/2"-13 hex nut.
2. Draw up the threads on the bolt until the strap is tight.
3. Install second hex nut (12) to lock the first one in place. Repeat for remaining straps.
4. Install (9) (AP2741) 1/8" trim around the edge of the hose routing hole and the jack handle storage slot.

▶ **Attaching Trim**



BLU-JET	Storage		
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AT3000	Task	Procedures	Illustrations
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▶	<p>Preparing for storage</p>	<ul style="list-style-type: none"> A. Drain and rinse tank of all fertilizer. B. Remove plug from pump tee. Install a watering hose fitting in tee. Attach hose and turn on water. Turn pump wheel to rinse the components of fertilizer. C. Remove hose fitting. Insert a flexible hose fill container into tee. Pour Recreational Vehicle Anti-freeze into pump while turning pump wheel to fill components with anti-freeze. Replace plug. D. Consult pump manual for storage procedures. E. Power wash machine to remove dirt and fertilizer residue. F. Store the machine in a dry place. If the storage building has a dirt floor, place a board under the jack pad to prevent the pad from entering the ground. G. Relieve pressure from hydraulic circuits. Heat from the sun can cause hydraulic systems to become over pressurized and cause hoses or components to burst. H. Before storing, apply grease to all hydraulic cylinder rods to prevent rust or store with cylinders retracted if possible. I. Place hydraulic hose ends in tongue hose holders. J. Paint any surface that can rust. K. Lubricate all grease fittings. L. Inspect the machine for worn or broken parts and replace the parts as needed.
▶	<p>Removing from storage</p>	<ul style="list-style-type: none"> A. Remove the protective grease from the hydraulic cylinder rods. B. Assemble any parts taken off for storage or reconditioning. C. Check the complete machine for loose bolts and cotter pins. Check for parts out of adjustment which could result in rapid wear, possible breaking and poor operation. D. Lubricate the complete machine. E. Check tires for correct air pressure. F. Check wheel bolt torque. G. Remove plug from pump tee. Install a watering hose fitting in tee. Attach hose and turn on water. Turn pump wheel to rinse the components of anti-freeze.

Coulter Mounting

AT3000

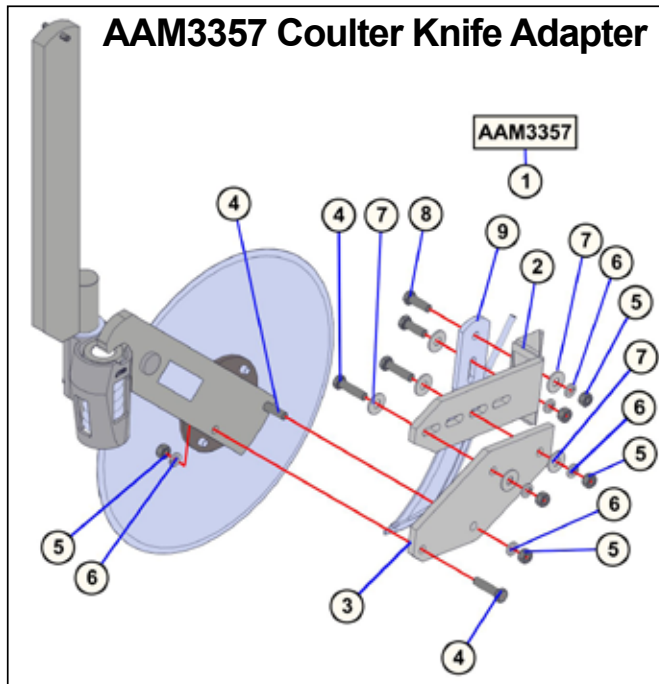
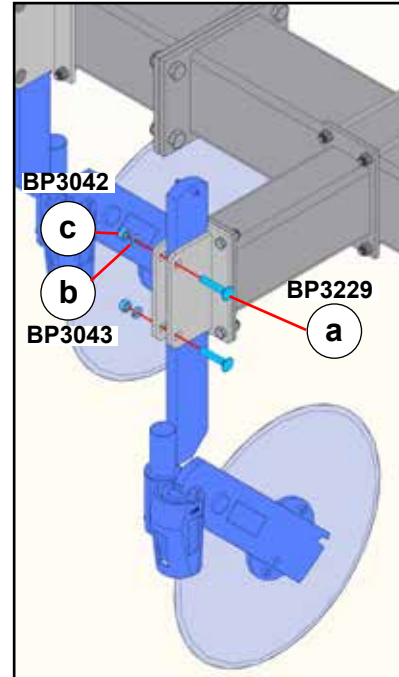
Task

Procedures

Illustrations



1. Insert coulter shank into the mounting and allow assembly to rest on shank roll pin.
2. Insert (a) (BP3229) 1/2"-13 x 2-1/2" (12,7 mm x 6,4 cm) carriage bolt into top hole of bracket. Push coulter shank assembly back into the bracket and insert the bottom carriage bolt. Place (b) (BP3043) 1/2" (12,7 mm) lock washer and (c) (BP3042) 1/2"-13 (12,7 mm) hex nut on each carriage bolt. *Do not tighten at this point.*
3. Raise coulter shank assembly in bracket and place a 3" (8,9 cm) spacer between the roll pin and the top of the bracket. Tighten the 1/2" (12,7 mm) hex nuts. *This height is a starting point.*



BOM ID	Qty	Item No	Description
1	1	AAM3357	COULTER KNIFE ADAPTER, WITH CO-50 KNIFE, 1 ROW
2	1	AM3313	KNIFE HOLDER/ MOUNTING ARM
3	1	AM3324	ADAPTER PLATE, COULTER KNIFE
4	4	BP3041	HEX CAP SCREW, 1/2"-13 X 2", GRADE 5, PLATED
5	6	BP3042	NUT, HEX, 1/2"-13, GRADE 2, PLATED
6	6	BP3043	WASHER, LOCK, 1/2", PLATED
7	6	BP3050	WASHER, FLAT, 1/2", PLATED
8	2	BP3126	HEX CAP SCREW, 1/2"-13 X 1-1/2", GRADE 5, PLATED
9	1	CP5038	CO-50 3/8" LIQUID KNIFE EXTRA THIN

Assembly (Knife Injection)

AT3000	Task	Procedures	Illustrations
▶	Assemble knife holder and adapter plate	<ol style="list-style-type: none"> 1. Pre-assemble (2) (AM3313) mounting arm knife holder and (3) (AM3324) coultter knife adapter plate. 2. Secure assembly with (8) (BP3126) 1/2" x 1-1/2", grade 5, hex cap screws, (7) (BP3050) 1/2", flat washers, (6) (BP3043) 1/2", lock washers and (5) (BP3042) 1/2", hex nuts. 	
▶	Mounting to coultter arm	<ol style="list-style-type: none"> 3. Mount assembly to coultter arm by inserting (4) (BP3041) 1/2"x 2", grade 5, hex cap screw into notched hole at the base of coultter arm. Install (6) (BP3043) 1/2", lock washer and (5) (BP3042) 1/2", hex nut. Insert (4) (BP3041) 1/2" x 2", grade 5, hex cap screw into adapter plated through hole in coultter arm. Secure with (6) (BP3043) 1/2", lock washer and (5) (BP3042) 1/2", hex nut. 4. Tighten each 1/2" hex nuts. 	
▶	Attaching knife	<ol style="list-style-type: none"> 5. Attach (9) (CP5038) liquid knife to mounting arm with (8) (BP3126) 1/2" x 1-1/2", grade 5, hex cap screws, (7) (BP3050) 1/2" flat washers, (6) (BP3043) 1/2" lock washers and (5) BP3042) 1/2" hex nuts. 6. Adjust the knife and knife holder arm until the knife is 1/2" from blade. This is a starting point. 7. Center of knife must align with blade edge to avoid trash plugging. 	



36 Inch Row Spacing (11 Row 36") GullWing Tool Bar

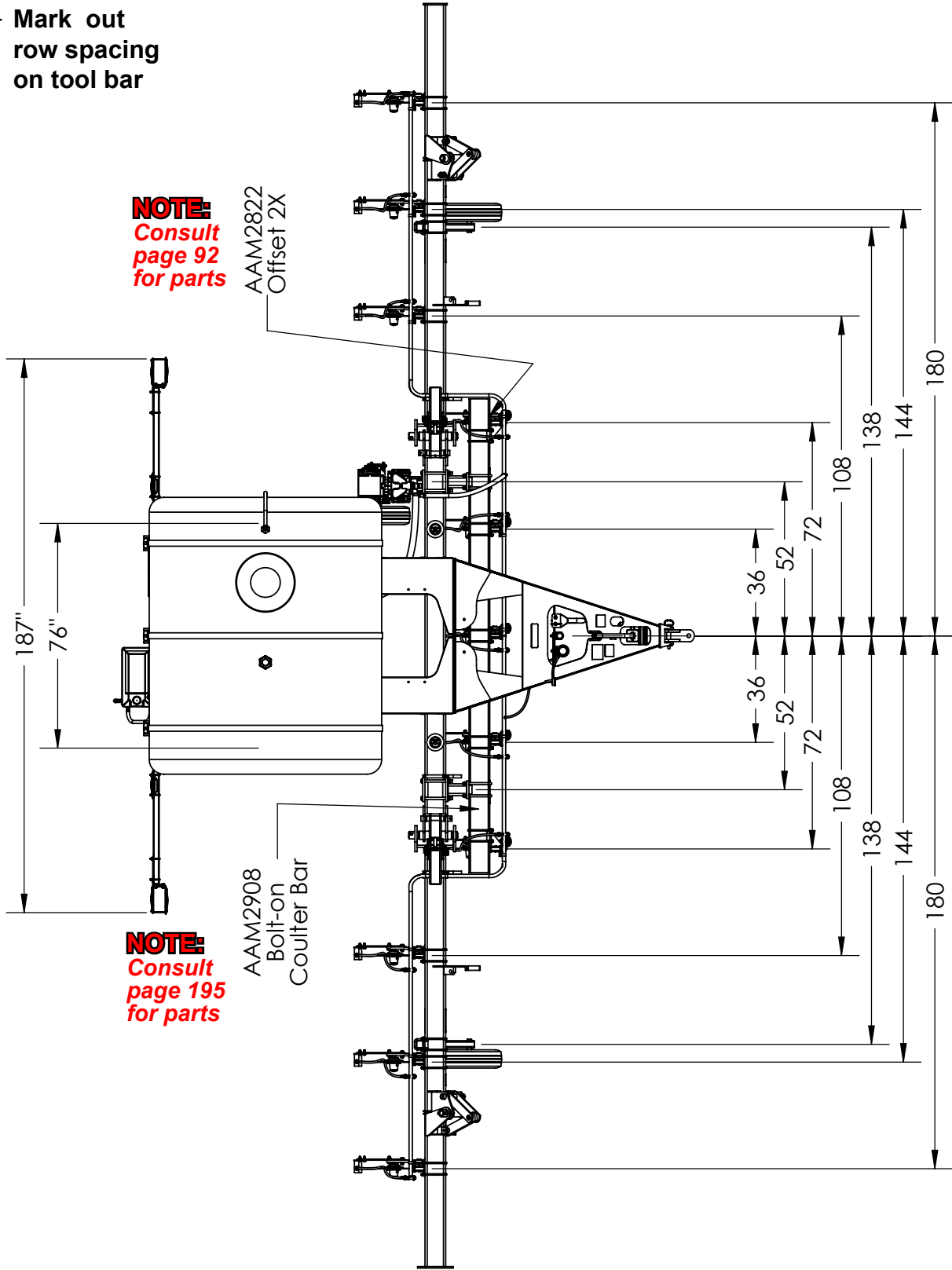
AT3000

Task

Procedures

Illustrations

► Mark out row spacing on tool bar




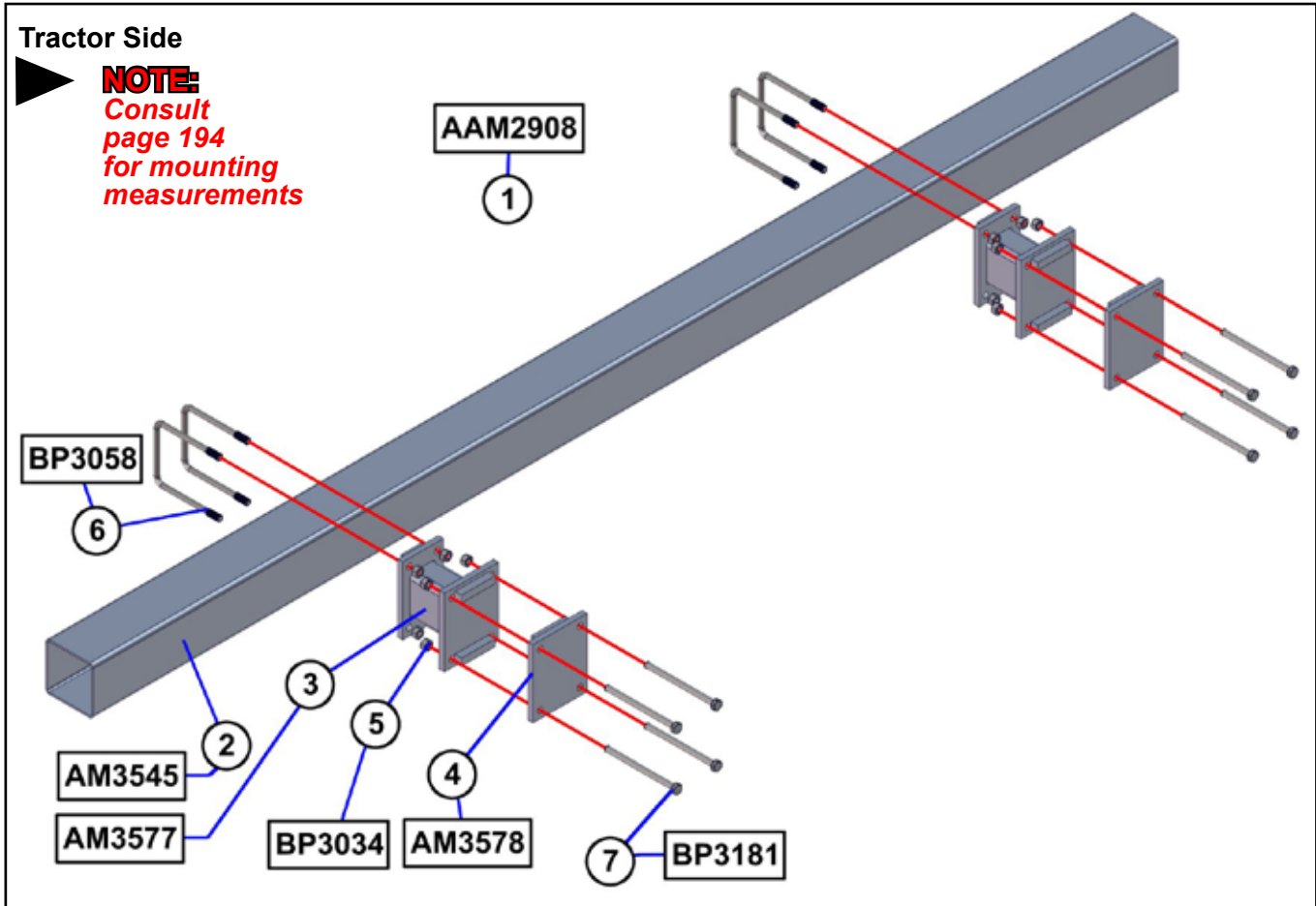
NOTE:
Consult
page 92
for parts

AAM2822
Offset 2X

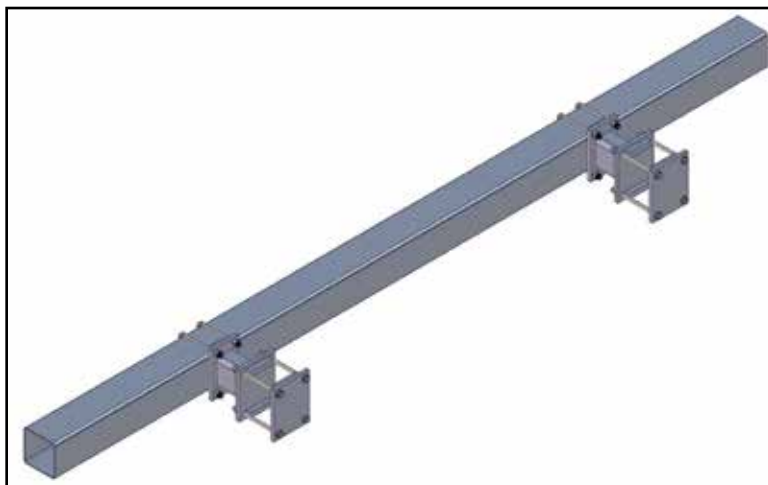
NOTE:
Consult
page 195
for parts

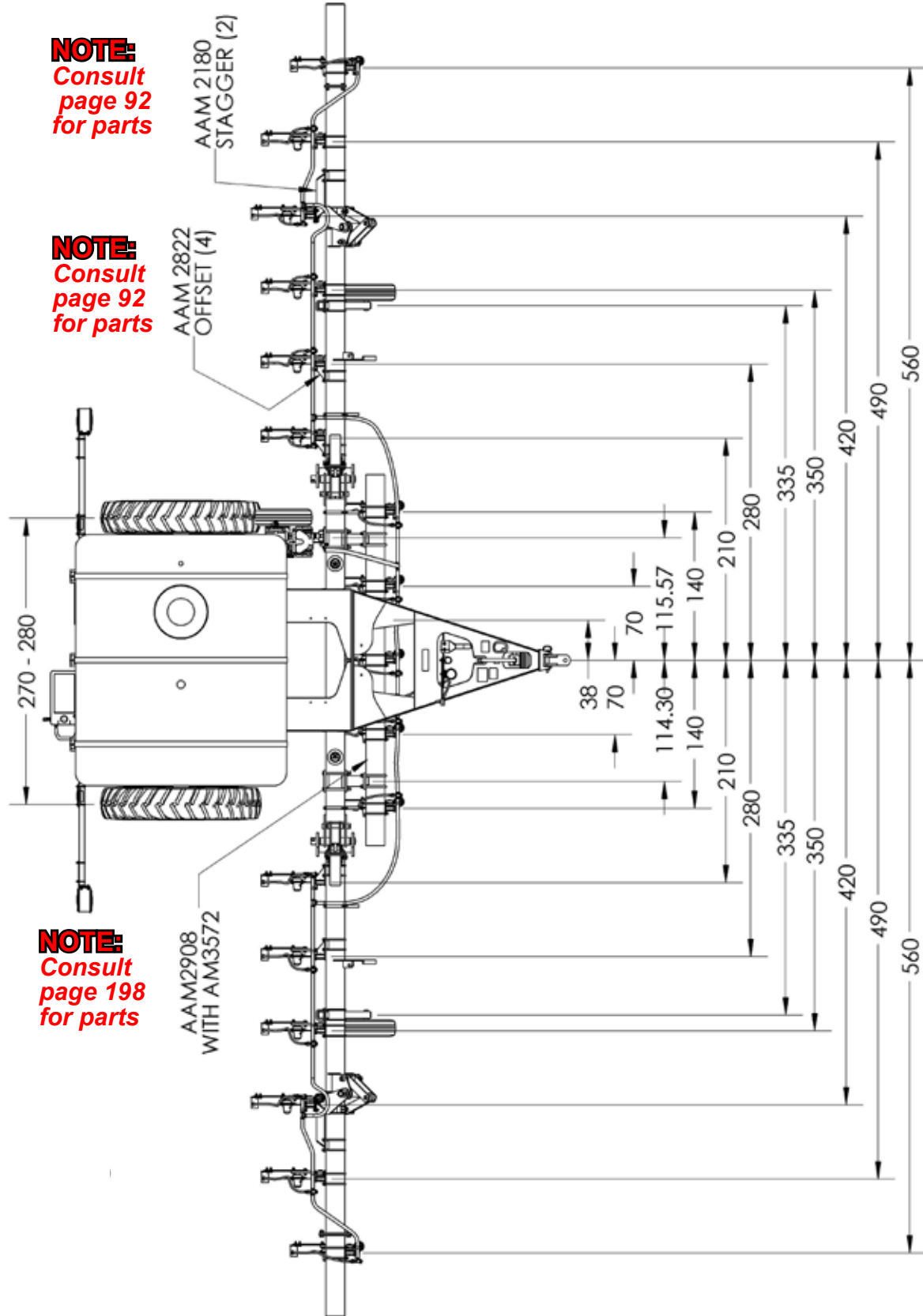
AAM2908
Bolt-on
Coulters Bar


	AAM2908 Bolt-on Coulter Bar Gull Center		
AT3000	Task	Procedures	Illustrations

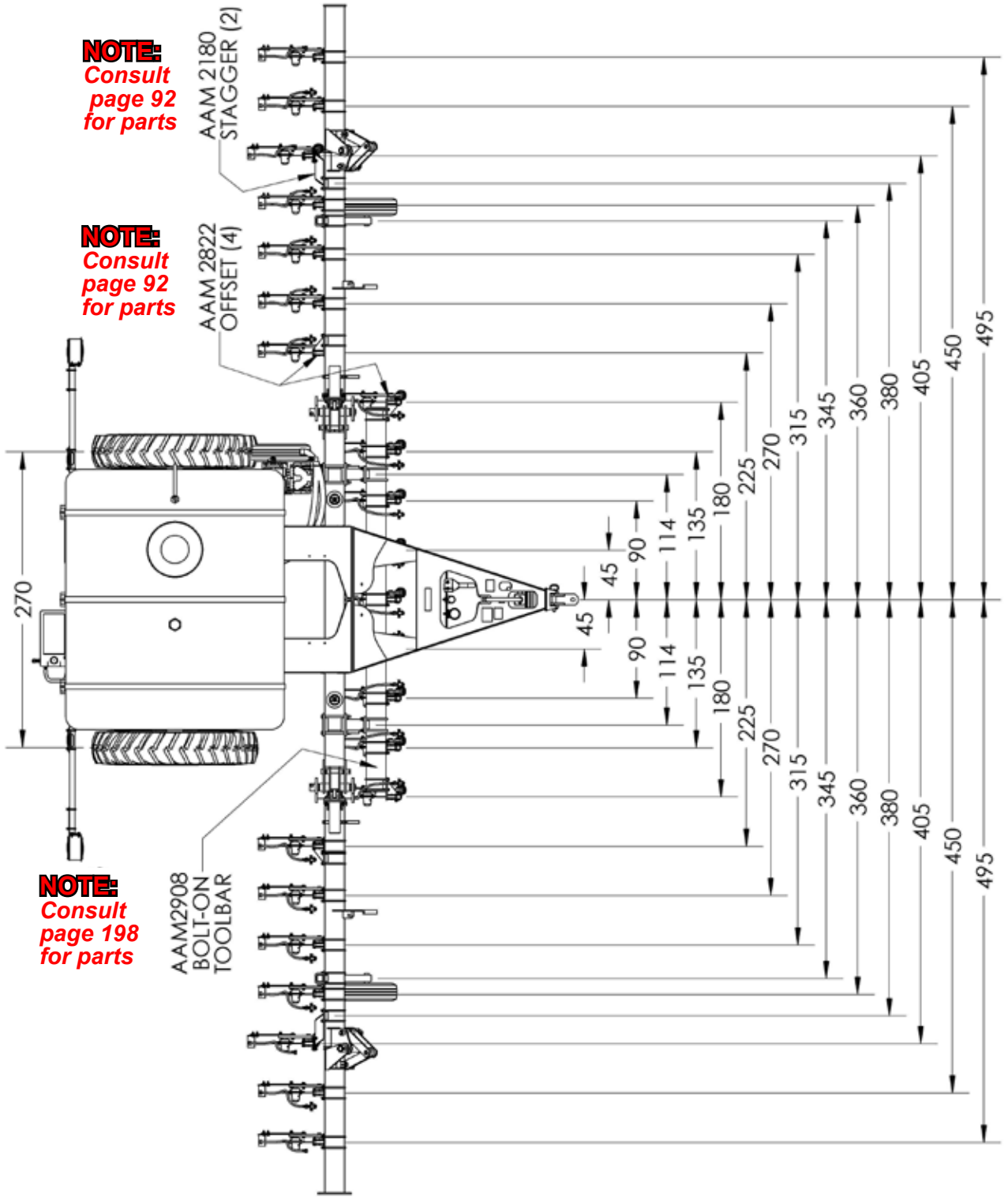


BOM ID	Qty	Item No	Description
1	1	AAM2908	COULTER BAR, BOLT-ON, AT3/AT4010 GULL CENTER
2	1	AM3545	TUBE (13'4")
3	2	AM3577	MOUNTING BRACKET, BOLT-ON COULTER BAR
4	2	AM3578	BACKING PLATE
5	16	BP3034	NUT, HEX, 3/4"-10, GRADE 2, PLATED
6	4	BP3058	U-BOLT, 3/4"-10 X 7"W X 9"L
7	8	BP3181	HEX CAP SCREW, 3/4"-10 X 10", GRADE 5, PLATED





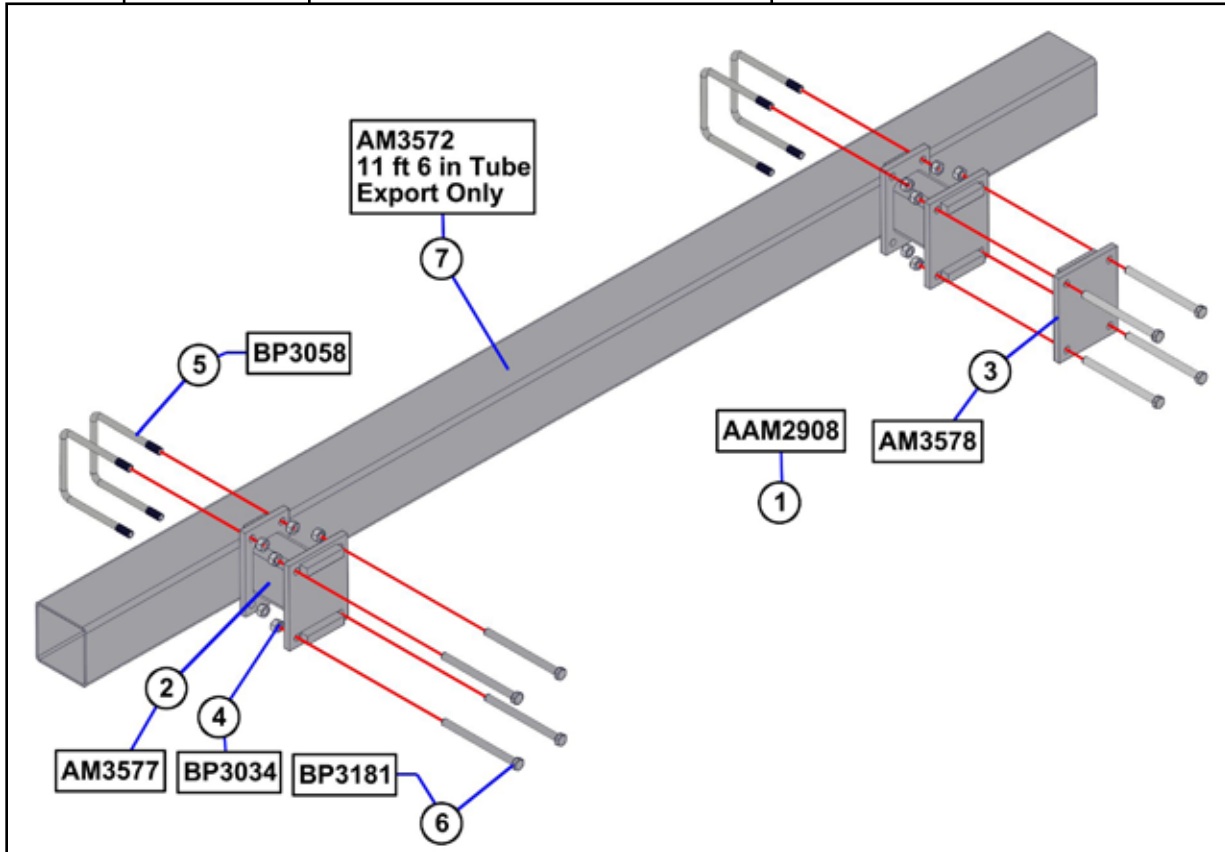
	45 cm Row Spacing (23 Row 45 cm) GullWing Tool Bar		
AT3000	Task	Procedures	Illustrations



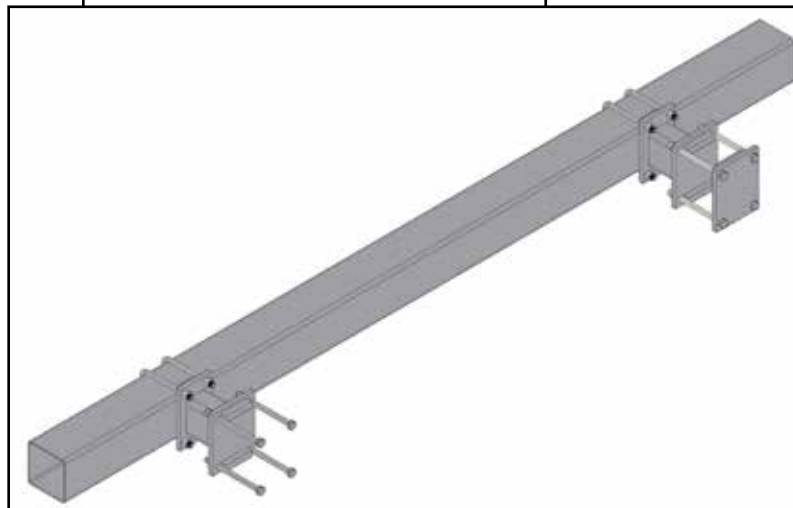



EXPORT ONLY AAM2908 Bolt-on Coultter Bar Gull Center

AT3000	Task	Procedures	Illustrations
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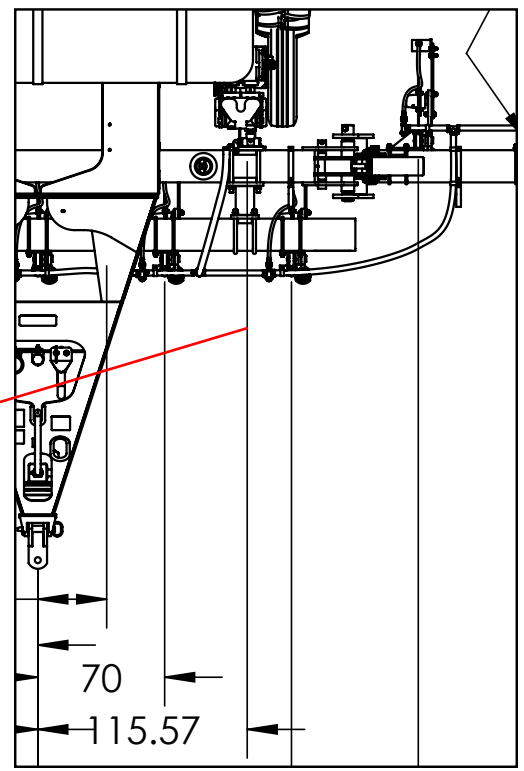
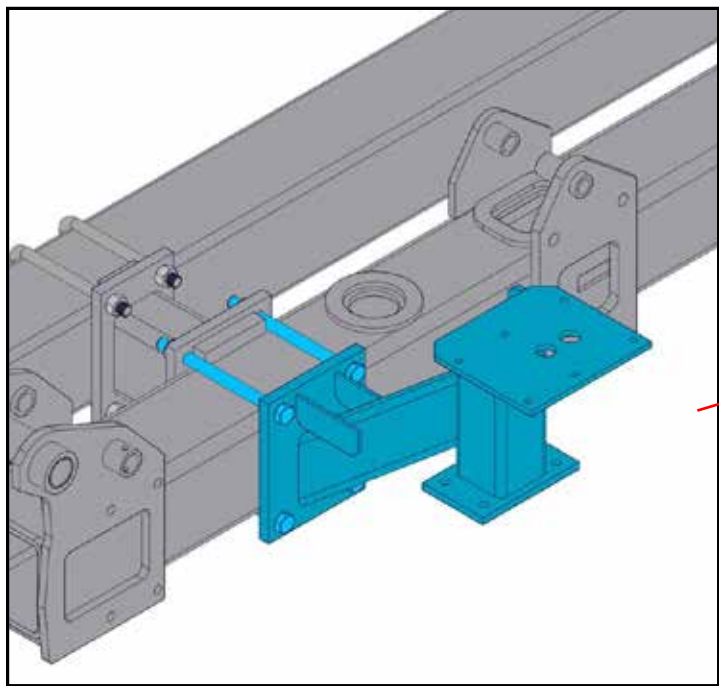
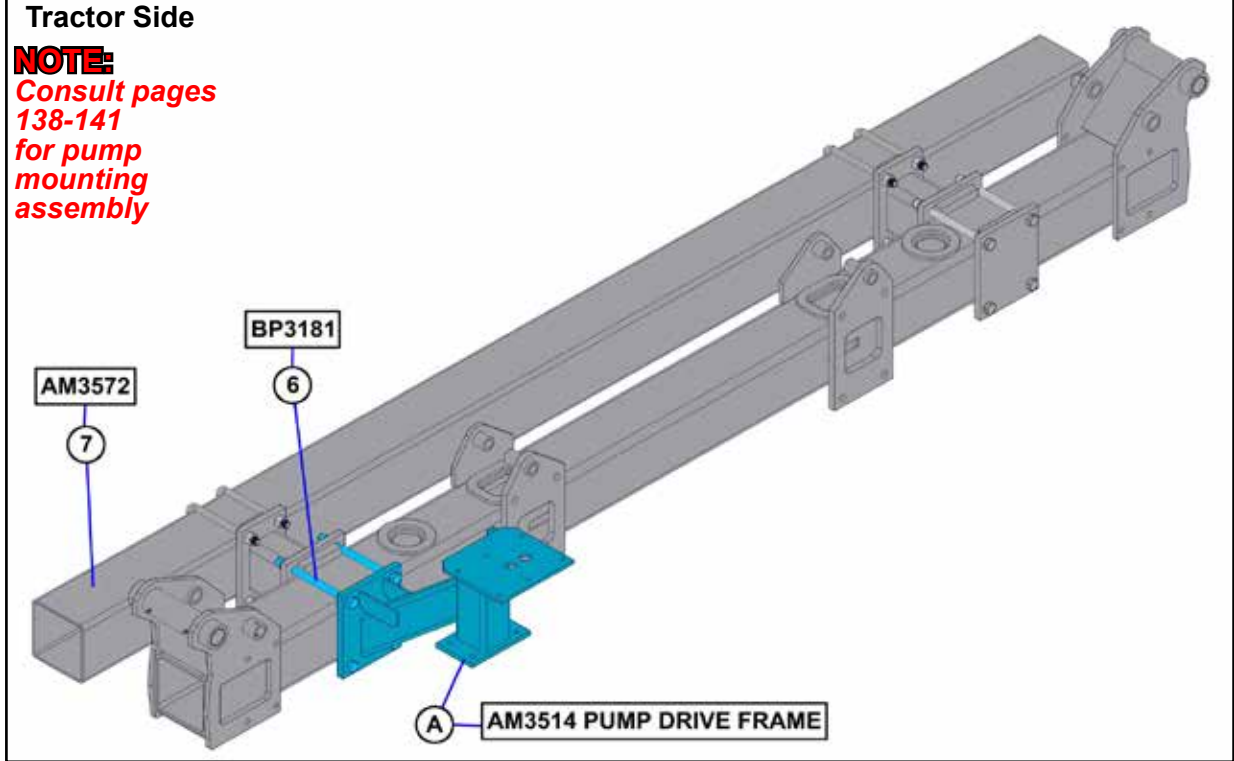
BOM ID	Qty	Item No	Description
1	1	AAM2908	COULTTER BAR, BOLT-ON, AT3000/AT4010 GULL CENTER
2	2	AM3577	MOUNTING BRACKET, BOLT-ON COULTTER BAR
3	1	AM3578	BACKING PLATE
4	16	BP3034	NUT, HEX, 3/4"-10, GRADE 2, PLATED
5	4	BP3058	U-BOLT, 3/4"-10 X 7"W X 9"L
6	8	BP3181	HEX CAP SCREW, 3/4"-10 X 10", GRADE 5, PLATED
7	1	AM3572	TUBE (11'6")



	<h1>17 Row 70 cm (Pump Drive Frame Mounting)</h1>		
AT3000	Task	Procedures	Illustrations

Tractor Side

NOTE:
 Consult pages
 138-141
 for pump
 mounting
 assembly

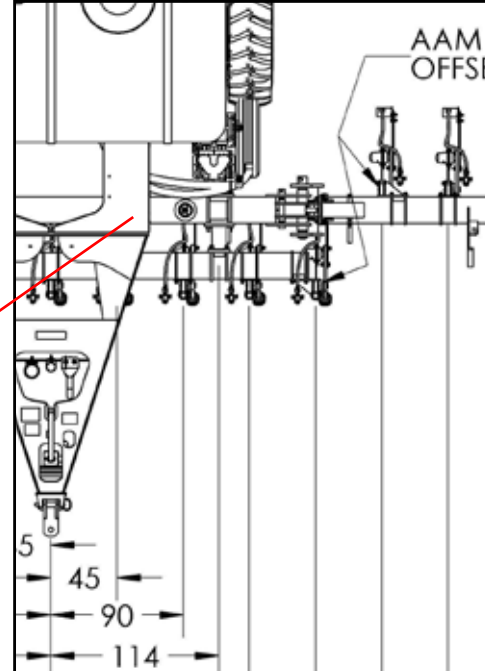
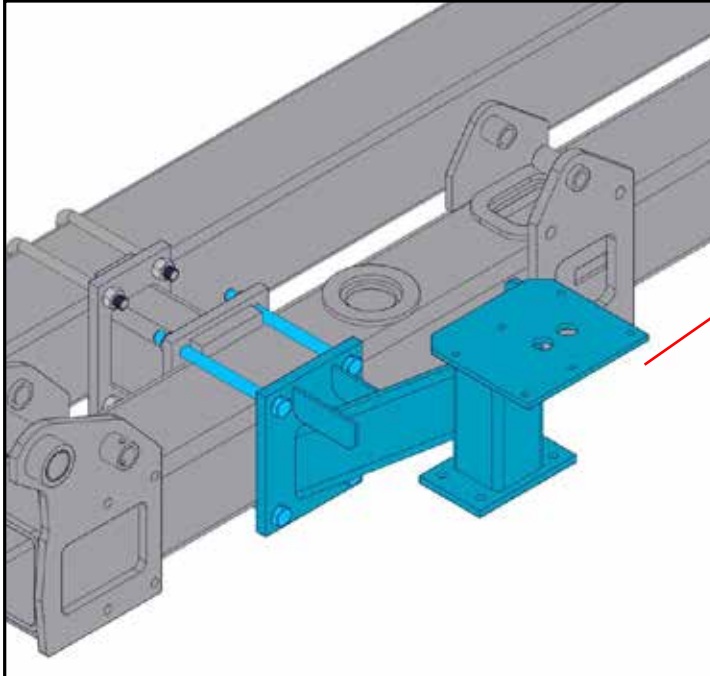
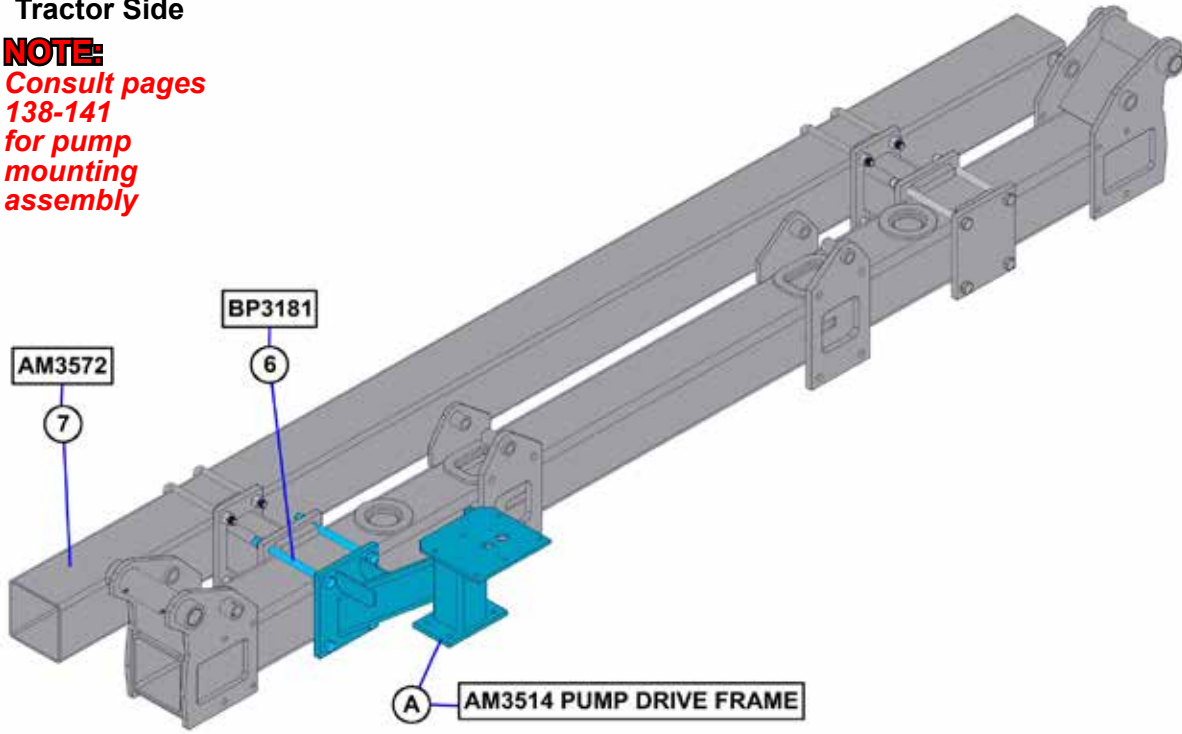


NOTE:
 Pump drive frame
 replaces AM3578
 backing plate
 with this row
 spacing.

115.57 cm center to center)

Tractor Side

NOTE:
Consult pages
138-141
for pump
mounting
assembly



(114 cm center to center)

NOTE:
Pump drive frame
replaces AM3578
backing plate
with this row
spacing.