Heartland
AG SYSTEMS
EQUIPMENT

6200
APPLICATOR

LIQUID FERTILIZER

OWNERS MANUAL
ASSEMBLY INSTRUCTIONS
AND PARTS LIST
OM-6200L

HEARTLAND AG SYSTEMS
1180 STATE HWY 7 EAST
HUTCHINSON, MN. 55350
(320) 587-4030

ISSUE
JUNE 2025

Heartland AG SYSTEMS
Heartland Agriculture, LLC

WARRANTY REGISTRATION

Heartland AG SYSTEMS EQUIPMENT

TO THE DEALER:
Inspect the implement thoroughly after assembly to be certain it is functioning properly before delivering it to the customer. Check off each item as it is found satisfactory or after proper adjust 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, "level operation", "drawbar height", etc.

_____5. Proper tongue weight after all options are mounted. Adjustments made if required.

_____6. Overall condition. Touch-up paint any scratches. Clean and polish

_____7. Operator's manual.

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

_____1. Safe operation and service

_____2. Correct machine installation and operation.

_____3. Correct and periodic lubrication and maintenance.

_____4. Daily and periodic inspection.

_____5. Troubleshooting.

_____6. Storing machine.

_____7. Heartland AG Systems parts and service

_____8. Have the customer write the machine model and serial number in the space provided in the manual introduction

_____9. Give the customer the operator's manual and encourage the customer to read the manual carefully.

Seller Information

Date set-up_____

Signature _____

Dealer name _____

Address _____

City, state, zip _____

Phone _____

Customer Information

Date delivered _____

Customer name _____

Customer address _____

Signature _____

Model number _____

Serial number _____

PLEASE FILL OUT THIS SHEET AND RETURN TO HEARTLAND AG SYSTEMS
1180 State Highway 7 East Hutchinson, MN 55350
www.heartlandag.com | Heartland Agriculture, LLC dba Heartland AG Systems

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ISSUE 11/9/20 6200CNTLQ

TO THE OWNER

This manual has been prepared to assist you in the assembly of your new equipment and contains information pertaining to safety, operating information and all its parts.

Our personnel in sales and service are always available to assist you when questions arise concerning the assembly and operation of your machine.

When ordering parts, please refer to part numbers and descriptions as listed throughout this book. All parts and whole goods will be shipped FOB Hutchinson, Minnesota. Always check merchandise immediately upon receipt for damage or shortage. Note any discrepancy on the carrier's bill of lading and notify Heartland AG Systems within 10 days.

Any returned goods will be subject to a 20 percent restocking charge.

Heartland AG Systems 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.

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Warranty Policies and Terms

The Heartland Agriculture, LLC warranty is a limited warranty that is provided to the retail purchaser in return for consideration paid as part of the purchase price for a product. The selling dealer must review the warranty coverage with the retail purchaser and obtain a signature on the Operators Manual for warranty verification.

The warranty described here is for Heartland Agriculture, LLC doing business as Heartland AG Systems and its product line Heartland AG Systems Equipment sold and registered in the United States and Canada and normally operated in the United States and Canada.

Warranty Period

The warranty period for all coverage begins at the time that any person, dealer or agent first places the unit into service. At the latest, a unit is placed into service when purchased or delivered to a purchaser.

What's Covered

If a defect in material or workmanship is found in a unit and reported during the Warranty period, Heartland AG Systems will pay parts and labor costs to repair the defects if the services are performed by an authorized Heartland AG Systems dealer. If parts are needed during the repair, Heartland AG Systems will, at its option, use genuine Heartland AG Systems, or remanufactured parts.

Heartland AG Systems provides no warranty, express or implied, for a component or other item that is separately warranted to the purchaser by its manufacturer, such as tires. Check with your local dealer for these details.

Exclusive Remedy

The remedy of repairing a defect in material or workmanship at a Heartland AG Systems dealership under the terms of this warranty is the purchaser's exclusive remedy and is in lieu of any other remedy otherwise available.

No Modification or Extension of Warranty

The Heartland AG Systems Warranty is limited to the written terms in the warranty statement. Heartland AG Systems does not authorize any person, dealer, or agent to change or extend the terms of this warranty in any manner. Any assistance to the purchaser in the repair or operation of any Heartland AG Systems product outside the terms or limitations or exclusions of this warranty will not constitute a waiver of the terms, limitations or exclusions of this warranty, nor will such assistance extend or re-establish the warranty.

The warranty is void if the unit is used in an application for which it is not designed or the unit has been scrapped, salvaged, stolen, junked or totaled.

Limitations and Exclusions

The Heartland AG Systems warranty gives you specific legal rights and you may also have other rights, which vary from state to state. This section contains the entire Heartland AG Systems warranty. Heartland AG Systems makes no other representations or warranties, expressed or implied, and specifically excludes the implied warranties of merchantability and fitness for particular purpose. Heartland AG Systems will not be liable for incidental or consequential damages resulting from a breach of the written warranty or any implied warranty.

- These limitations and exclusions may not be allowed by some states or provinces and shall not apply to the extent such limitations or exclusions are not allowed by applicable state/provincial law.

Owner's Responsibility

The Heartland AG Systems Warranty remains in effect during the warranty period if the owner performs the required maintenance at the recommended intervals outlined in the product's operator's manual and the unit is operated within its rated capacity. Genuine Heartland AG Systems service parts or Heartland AG Systems approved service parts that meet Heartland AG Systems specifications must be used for maintenance and repairs.

What Is Not Covered

- Replacement of non-defective wear items expected to be replaced during the warranty period, including, but not limited to: lights, fuses, belts, drive sprockets and chains, hose, soil engaging tools, spray tips, fertilizer deflectors, spinner blades and accessories or items replaced due to customer demand.
- Normal maintenance parts and service, including, but not limited to lubrication, coolants, and filters.
- All travel costs associated with hauling or towing a customer's machine to and from a repair center related to any warranty repair unless specifically covered by a program or policy.
- Repairs arising from any unauthorized modification to the product.
- Repairs arising from service performed by agents not approved by Heartland AG Systems.
- Repairs arising from storage deterioration, failure to maintain the equipment, improper use of the equipment, collision or other accident, vandalism, or other casualty, or operation beyond the rated capacity or specifications.
- Repairs arising from abuse or neglect including, but not limited to operation without adequate lubricants or coolant, over-speeding, contaminated fluids, improper storage, starting, warm-up, or shutdown practices.
- Failure of the machine, its implements or attachments caused by improper field application or overloading.
- Premiums charged for over-time labor costs.
- Economic loss, including lost profits, crop loss, equipment rental or other expenses.
- Cost associated with cleaning of machine in preparation for service.
- Loss or damage during shipment.

- Cost of initial setup or installation of any optional equipment or attachments to a unit.
- Items used for repairs include, but are not limited to: solvents, cleaners, anti-seize lubricants, oil-dry, shop towels, shop supplies, special tools, etc.
- Included, but not limited to are checkups, adjustments, and shimming, tune-ups, spread pattern checks, etc.
- Unauthorized modification or field fixes.
- All costs of special tools or shop supplies incurred with repairs.
- Claims for stolen equipment or parts.
- Claims for replacing a complete assembly when the repair is less than the replacement.
- Claims involving the inspection or reconditioning of units.
- Shop comebacks: any duplicate, repeat, or comeback repair resulting from improper diagnosis, testing, or poor service work.
- Cost of removing or installing Non-Heartland AG Systems optional equipment or attachments.

Base Warranty Coverage

- Base Warranty is the factory warranty provided to the customer at no additional cost for a specific period covering the complete machine.

• Liquid Applicators, except tires	1 Year
• Spreaders and Tenders, except tires	1 Year
• Nh3 Wagons, except tires	1 Year
• Bumper Hitches	1 Year
• Disc Covers	1 Year
• Parts	90 Days
• Tandem Wagons (except tires and main frame)	1 year
o Tandem Wagon main frame	5 Years
• Nitromaster Toolbars shall carry the following pro-rated warranty:	
o Year one, all components except tires	100%
o Year two, center section and wings	80%
o Year three, center section and wings	50%
o Year four, center section and wings	25%
o Year five, center section and wings	10%

Tires

Tires installed on all Heartland AG Systems Equipment are warranted and serviced by their manufacturer's service outlets. Some manufacturers have separate service outlets for off road agricultural and construction equipment. Service is available by contacting the tire manufacturer's local representative.

Warranty Registration

All machinery items, which are invoiced by Heartland AG Systems on separate receivables, must be registered for warranty. The warranty period for all coverage begins at the time that any person, dealer, or agent first places the unit into service. New machine warranty coverage begins when the machine is registered. Registration is accomplished when a properly completed Warranty Registration is received and processed by Heartland AG Systems.

Operator's Manual/Warranty Receipt Verification

The Heartland AG Systems New Equipment Limited Warranty for Agricultural Equipment statement must be filled out and signed by the customer indicating receipt and an understanding of the operator's manual and the warranty statement,

- The original form must be mailed to the address on the form.
- Make one copy for the Dealer. This copy must be retained by your dealership the same as any other legal document.
- Make a second copy for the customer.

Heartland AG Systems Responsibility

If a defect in material or workmanship is found in a product during its warranty period, Heartland AG Systems will pay parts and labor costs to repair the defect when the service is performed by an authorized Heartland AG Systems dealer or agent. If parts are needed during the repair, Heartland AG Systems will, at its option, use genuine Heartland AG Systems new or remanufactured parts. These responsibilities include, but are not limited to:

- Costs for repairs that are the result of defects in material and workmanship
- Payment to dealers per policy in a timely manner
- Service information to dealers
- Identify product deficiencies and take corrective action by field campaigns
- Make determination of premature wear
- Provide unit that is free of defects in material & workmanship

Dealer Responsibility

Heartland AG Systems dealers are responsible for providing prompt, courteous, and willing service to all Heartland AG Systems equipment owners. These responsibilities include but are not limited to:

- Equipment set-up and pre-delivery
- Sell the right product for the intended application
- Inspect the unit and initiate recovery action on any shipping damage and or shortages
- Instruct customer on proper use, maintenance, and safety features of machine
- Advise and explain warranty coverage to customer
- Diagnose the problem, repair the unit, and submit claims in accordance with the terms and conditions of the warranty claim policies
- Take responsibility for saying "NO" to customers on non-warranty failures
- Apply failure analysis to questionable repairs
- Complete product update campaigns
- Have properly trained technicians and adequate tools for the job
- Retain proper documentation of failure repaired

Owners Responsibility

The Heartland AG Systems warranty remains in effect during the stated warranty period if the owner performs the required maintenance at the recommended times as outlined in the products operator's manual. Genuine Heartland AG Systems or Heartland AG Systems approved service parts must be used for maintenance. Additionally, the owner will pay for all transportation or travel expenses related to any warranty repair.
These responsibilities include, but are not limited to:

- Perform maintenance as indicated in the operator's manual
- Use the unit in the correct application (non-abusive)
- Notify dealer of failures and have the machine available for repair in a timely manner
- Training operators
- Travel cost, towing charges, and service calls
- Normal wear items
- Machine damage (accidental)
- Adjustments for application
- Machine inspection (daily walk-around)

Warranty Eligibility

The dealer is responsible to determine that any Heartland AG Systems equipment is covered by Heartland AG Systems warranty before performing a repair and that the repair is a warrantable failure. Any dealer who is in doubt of the equipment's warranty eligibility may call Heartland AG Systems for verification.

Warranty Repairs Made by the Customer

If a Heartland AG Systems dealer determines that the customer is capable, and the customer requests permission to perform select(warranty)repairs on his product, the Heartland AG Systems dealer is authorized to grant this customer request. The servicing dealer should provide the parts to the customer upon request, and to assure that customer is properly instructed on how to perform the repairs correctly.
The servicing dealer is responsible and accountable for claim accuracy and validity; specifically, in areas such as the parts replaced date, and assurances that the parts are installed as instructed by Heartland AG Systems. The comments section of the claim should clearly state that the customer installed the parts. The claim reimbursement will be for parts and applicable handling only. No labor is allowed! All replacement parts must be held for possible recall.

Parts Shortages on Whole-Goods

Dealers may submit a claim for parts shortages discovered during pre-delivery or during final assembly at the dealer's location. All claims for shortages must be submitted 5 days from the original ship date from the plant and before the warranty start date.

Warranty Reimbursement Policies

Heartland AG Systems provides for warranty reimbursement due to defects in material or workmanship only. Warranty does not include restoring any machine or portion thereof, which has accumulated hours of operation, to factory new condition. This includes customer owned and used equipment.

Except for only a few items not available through Heartland AG Systems, all Heartland AG Systems manufactured equipment warranty repairs must be performed using only Heartland AG Systems genuine new or remanufactured parts and accessories. Installation of non-Heartland AG Systems parts does not qualify for warranty reimbursement and can void the machine's warranty.

Parts

It is fully expected that all claims be filed using part numbers from the applicable Heartland AG Systems equipment parts book whenever such part number exists. Heartland AG Systems shall reimburse the dealer at the dealer net price (cost) in effect on the parts replaced date.

Labor

Heartland AG Systems shall reimburse the dealer at 80% of the dealer's posted retail shop labor rate. The retail shop labor rate shall be subject to verification by Heartland AG Systems from copies of actual dealer invoices to customers.

Outside Charges

Specialized repair such as that done by a machine shop will be accepted as part of a warranty claim at actual cost. Explain the parts used and the service work performed in the description section of the claim and retain a copy of the receipt. Retain a copy of the invoice with the shop work order to support the claim. Outside repairs that exceed the cost of the same repair, if performed by the dealer, will be reimbursed at a lower rate.

Freight

Heartland AG Systems will pay the freight charges when a warranty recalled part is to be returned to Heartland AG Systems.

Travel

Travel will only be reimbursed when authorized by a field campaign.

Repairing or Replacing Parts and Components

When performing a warranty repair, a complete part or component should not be replaced under warranty if the repair can be accomplished at a lower cost. If the total cost of the repair including the cost of parts, labor, and/or outside labor or materials is less than 75% of the cost of the parts, the part must be repaired.

Filters and Lubricants

Replacement of lubricants and filters do not qualify for warranty reimbursement unless damage caused by a defect in material or workmanship results in contamination or sudden loss of fluid. Lack of maintenance, operator misuse, or neglect will not qualify for warranty reimbursement.

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Claim Form Guidelines

Claims Must Have

1. Product identification number (PIN) or serial number. All characters of the PIN must be used on the warranty claim.
   - Claims for parts warranty must use the word "PARTS" for the PIN. An invoice that shows date of sale or date of installation must be supplied for all parts claims.
2. Model Number
3. Date of failure – Claims must be submitted within 30 days or repair.
4. Date of repair
5. Warranty start date. Date the unit warranty starts or date the parts were sold for parts warranty.
6. Description of the problem. Describe all problems pertinent to the claim.

   Comments should be as precise as possible, attach a separate sheet if necessary, to describe the problem.
7. Description of the work performed. List each significant action of the repair.
8. Itemize labor. Provide a breakdown of labor for each significant repair action in the "Describe Work Performed" column.
9. Shop order numbers. The shop order number field is used for recording your shop work order number that is related to the claim. The shop order number field can also be used to record the parts invoice number when claiming a parts warranty.
10. Customer information. Customer information includes the customer name, city, state, county, and postal code. It must match the warranty registration.
11. Warranty claim total. The total of all reimbursement costs requested.
12. Dealer signature and date. All claims must be signed and dated by the distributor to be validated.

INTRODUCTION

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.

Right hand and left hand sides of the machine are determined by (standing behind the machine) facing in the direction the machine will travel when going forward.

SAFETY INFORMATION

DANGER: This message denotes the most serious specific potential hazard This sign will have the color combination of RED and WHITE.

WARNING: This message denotes a specific potential hazard.

CAUTION: This message denotes a reminder of safety practices.

NOTE: Indicates a special point of information.

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

Warranty is provided for cutomers 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 along with a copy of the dealer's invoice to Heartland Ag Systems. It is in your best interest to insure that this has been done.

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

Record your machine model and serial number in the space provided. Your dealer needs this infor–mation to give you prompt, efficient service when you order parts.

MODEL NUMBER _____

SERIAL NUMBER _____

DATE PURCHASED _____

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 the controls properly. Do not let anyone operate without instructions.

Keep your machine in proper working condition. Unauthorized modification to the machine may impair the function and/ or safety and affect the machine life

PROTECT CHILDEREN AND BYSTANDERS

Before you back, LOOK CAREFULLY behind for children

Clear area of children, pets, and bystanders

TRANSPORT SAFETY

-- Always use safety chains during road transportation.

-- Check wheel nuts daily

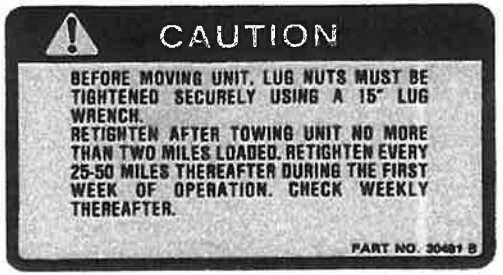
-- Use hydraulic cylinder transport lock-up during road transportation.

-- Maximum recommended road speed is 25 MPH

-- Clear machine of personnel and obstructions

PART NUMBER: 699102

PART NUMBER: 30481



PART NUMBER: 699107

PART NUMBER: 699101

PART NUMBER: USA

PART NUMBER: 699104

6200 TOOLBAR AND CADDY ASSEMBLY PROCEDURE with LIQUID TANK SKID

Your 6200 Toolbar and Caddy are shipped with the small parts and hardware packed in boxes marked for the different sections of the machine. If you find any items missing, contact Ag Systems, Inc. immediately.

Step 1. Select a smooth level service for the assembly of your toolbar.

Step 2. Refer to the illustration on Page 12. Place the caddy frame (Item 1) upon four steel saw horses, one at each corner of the frame.

Step 3. Install the axle assembly (Item 4) left hand, and (Item 5) right hand, with the u-bolts (Item 6) and appropriate hardware, snug only. The hubs are pre-assembled to the axles.

Step 4. Mount the wheels (Item 11) and tires (Item 13) on the hubs.

Step 5. Position the wheels at the desired track width and securely tighten the hardware.

Step 6. Place the toolbar center section (Item 26, Page 10) on two saw horses and attach it to the caddy frame with the pivot pins (Item 2, Page 12) and lynch pins (Item 3).

Step 7. Assemble the poles (Item 1, Page 10) left hand, and (Item 2) right hand, with the hitch mount (Items 3) and assemble to the center section with the appropriate hardware.

Step 8. Attach the "Perfect" hitch assembly (Items 7 to 11) and attach the jack (Item 14).

Step 9. Position the hydraulic cylinder (Item 45) between the center section and the caddy frame with the body towards the center section and the shaft on the caddy. Use a standard cylinder pin at the body end.

Step 10. Assemble the primary wings (Items 28 & 29 or 30 & 31) to the center section with the hinge pins (Item 32) and secure with the expansion pin (Item 33). Install the leveling screws (Item 37) with one nut (Item 38) on each side of the end plate on the center section.

Step 11. If applicable to your machine, assemble the secondary wings (Item 58 & 59) to the primary wings with the large hinge pins (Item 60) and secure with the collar (Item 61) and appropriate hardware.

Step 12. Position the main hydraulic cylinders (Item 39) to the center section and wings with the body on the center section and the shaft on the wings. Install the body end with the standard cylinder pin (Item 40). Install the shaft end with the clevis pin (Item 41), washers (Item 42), and cotter pin (Item 43).

Step 13. When secondary wings (Item 58 & 59) are used, install the hydraulic cylinder (Item 65) with the standard cylinder pins (Item 66) with the shaft on the secondary wing and the body on the primary wing.

Step 14. Assemble the pivot bracket base (Item 23, Page 12) to the center of the rear tube on the caddy frame with the u-bolts (Item 24) and appropriate hardware.

Step 15. Assemble the pivot bracket (Item 27) and pivot link (Item 32) to the bracket base with the clevis pin (Item 29) and the hairpin (Item 30).

Step 16. Assemble the hinge bracket (Item 14) to the left axle (Item 4) with the appropriate hardware.

Step 17. Assemble the ground wheel control (Item 22) to the hinge bracket with the shaft (Item 18) and appropriate hardware.

Step 18. Assemble the ground wheel control as follows:

A. Assemble the bearings (Item 45, Page 12) to the inside of the ground wheel control with the appropriate hardware.

B. Assemble the shaft (Item 51) with the drive sprocket (Item 52), the hub (Item 56), and the square key (Item 53) and secure with the set screws in the hub and sprocket.

C. Install the shaft assembly in the bearings in the ground wheel control and secure with the set screws in the bearings.

D. Assemble the idler sprocket (Item 47) to the ground wheel control with the bolt (Item 46) and one washer (Item 48) on each side of the sprocket and fasten with the appropriate hardware.

E. Position the eye bolt (Item 36) thru the slotted hole in the ground wheel assembly and attach it to the hinge bracket (Item 14) with the clevis pin (Item 37) and the cotter pin (Item 38).

F. Position the transport lock pin (Item 33) thru the guide tube on the ground wheel control and install the expansion pin (Item 35) in the end hole on the lock pin. Insert the hairpin (Item 34) in the hole in the guide tube and thru the hole nearest the handle in the lock pin.

G. Assemble the spring (Item 39) and the spring cap (Item 40) to the eye bolt and secure with two nuts (Item 41). Turn the nuts onto the eye bolt to a point so that at least ¾ inch of thread is protruding from the nuts.

H. Mount the wheel (Item 57) on the hub (Item 56).

I. Mount the pump (Not Shown) and install the drive chain (Item 54) and link (Item 55). Adjust the idler and drive sprocket positions so that all three sprockets line up and the drive wheel (Item 57) is centered on the caddy wheel. To do this you may have to move the sprocket on the shaft or reposition the shaft in the bearings and/or add washers to the idler sprocket.

Step 19. Assemble the clamp plate (Item 28) to the pivot bracket (Item 27) with the appropriate hardware, firmly clamping in place the square tube on the ground wheel control.

Step 20. Position a temporary shim (approximately ¼" thick) at the end of the transport lock pin (Item 33). Assemble the pivot bracket (Item 68, Page 10) to the center of the rear tube of the toolbar center section with the u-bolt (Item 69) and appropriate hardware. Assemble the pivot control rod (Item 74) to the bracket with one clevis pin (Item 73) and one hairpin (Item 72). Extend the adjustable clevis (Item 76) on the pivot control rod far enough so that when assembled with the pivot link (Item 32, Page 12) all the play is removed from the assembly. Remove the temporary shim from the transport lock pin. You should now be able to push in the transport lock pin and freely insert the hairpin. If you cannot insert the hairpin, repeat the above procedure using a thicker shim. When this assembly is adjusted satisfactorily, secure it in place with the nut on the adjustable clevis.

Step 21. Assemble the tank skid (Items 84,94,101 or 109) to the caddy frame with the appropriate hardware.

Step 22. Install the hydraulic fittings and hoses as indicated on the hydraulic schematic illustration on Page 21.

Step 23. Purge the air from the hydraulic system.

A. Firmly anchor the pole to a heavy stationary object or attach it to a tractor.
B. Pressurize the hydraulic system. Fully extend all cylinders and circulate the oil for approximately one minute.
C. Partially lift the wings and stop. Observe if the wings will sag. This would indicate air in the system.
D. Repeat Step B and Step C until the system operates satisfactorily.
E. Secure the hydraulic hoses as needed.

Step 24. Mount your chemical tank and install the plumbing to the pump.

Step 25. Attach the knife shanks (and coulters) at the desired spacings.

Step 26. Assemble the desired knives to the shanks.

Step 27. Install the chemical application hoses and secure safely.

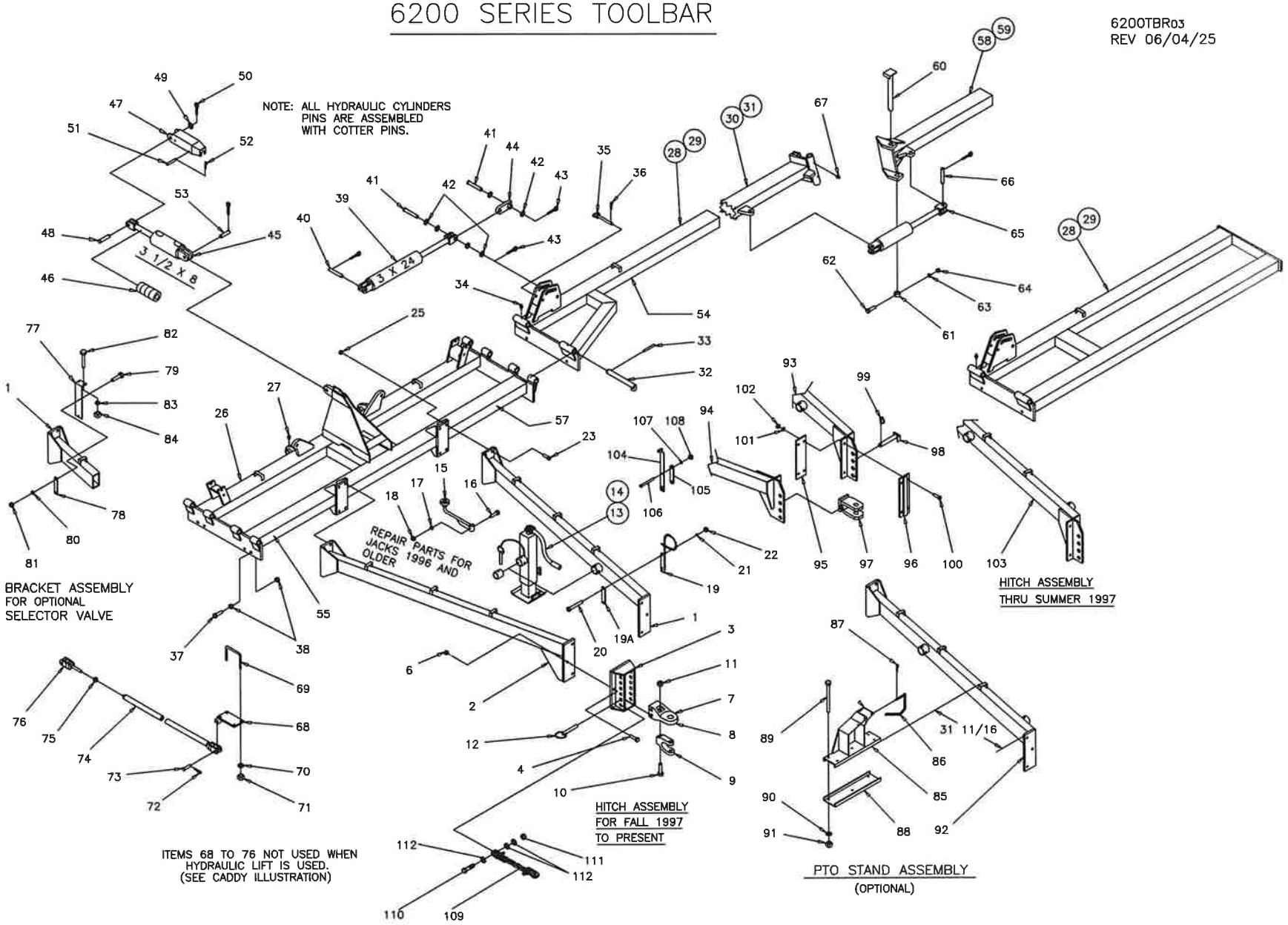
Step 28. Fold the wings and raise the machine to full transport height. Secure the transport locks at the caddy cylinder and the ground wheel control. Release the hydraulic pressure so that all supported items are resting on their transport locks.

Step 29. Check to see that all hoses are in a safe and secure position.

YOUR 6200 TOOLBAR IS NOW FULLY ASSEMBLED AND FIELD READY.

6200 SERIES TOOLBAR

6200TBR03
REV 06/04/25



6200 SERIES TOOLBAR
PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY.
1	47008618	POLE, LEFT HAND (STANDARD) ALSO SEE ITEM 92 – PTO OPTION	1
2	47008619	POLE, RIGHT HAND	1
3	47008482	HITCH MOUNT	1
4	18098435	BOLT, 3/4–10NC. X 2 1/2 GR.8	6
5	--	--,	–
6	18458452	LOCKNUT, 3/4–10NC.	6
7	Pi–301V3C	PERFECT HITCH ASSEMBLY INCLUDES ITEMS, 8 TO 11	1
8	PPi–301V3	PERFECT HITCH, (1 1/2" DRAWPIN)	1
9	PPi–208VR	PERFECT HITCH CLEVIS, WITH 1 1/4 OBROUND HOLE	1
10	18058442	BOLT, 3/4–10NC. X 5 GR. 8	1
11	18458452	LOCKNUT, 3/4–10NC. GR. 8	1
12	600182	HITCH PIN, 1" X 6	2
13	70924	JACK COMPLETE, (FINISH PAINTED)	1
ITEMS 15 TO 18		REPAIR PARTS ON UNITS 1996 & OLDER	
15	47007114	CRANK ASSEMBLY	1
16	18056830	BOLT, 3/8–16NC. X 2	1
17	18891200	LOCKWASHER, 3/8	1
18	18436800	HEX. NUT, 3/8–16NC.	1
19	47010165	HOSE BRACKET	2
19A	47008463	MOUNTING STRAP	2
20	18056850	BOLT, 3/8 X 16NC. X 4	4
21	18891200	LOCKWASHER, 3/8	4
22	18436800	HEX. NUT, 3/8–16NC.	4
23	18098435	BOLT, 3/4–10NC. X 2 1/2	8
24	--	--	–
25	18458452	LOCKNUT, 3/4–10NC.	8
26	47007769	CENTER SECTION	1
27	18901805	GREASE ZERK, STRAIGHT	2
28	47007784	PRIMARY WING (SHORT) L.H.	OPT.
	47007785	PRIMARY WING (SHORT) R.H.	OPT.
29	47007771	PRIMARY WING (STD.) L.H.	1
	47007772	PRIMARY WING (STD.) R.H.	1
	47019233	PRIMARY WING, L.H. DOUBLE BAR	OPT.
	47019234	PRIMARY WING, R.H. DOUBLE BAR	OPT.
30	47008437	PRIMARY WING, LEFT HAND WITH TILTED HINGE, (FALL 1996 TO PRESENT)	OPT.
	47007787	PRIMARY WING, LEFT HAND WITH SQUARE HINGE, (PREVIOUS TO FALL 1996)	OPT.
31	47008438	PRIMARY WING, RIGHT HAND WITH TILTED HINGE, (FALL 1996 TO PRESENT)	OPT.
	47007788	PRIMARY WING, RIGHT HAND WITH SQUARE HINGE, (PREVIOUS TO FALL 1996)	OPT.
32	47007627	HINGE PIN	4
33	18511034	EXPANSION PIN, 1/4 X 2 1/2	4
34	18901805	GREASE ZERK, STRAIGHT	4
35	600178	HITCH PIN, 3/4 X 6 (INCL. HAIRPIN)	2
36	18590148	HAIRPIN BRIDGE, .148 DIA. NO. 9	2
37	18058312	BOLT, 7/8–11NC. X 2 1/2 (FULL THD)	4
38	18417800	HEX. NUT, 7/8–11NC.	8
39	47300093	HYDRAULIC CYLINDER (3 X 24)	2
40	47003513	CYLINDER PIN KIT (1 X 3 1/2)	2
41	18549054	CLEVIS PIN (1 X 5)	4
42	18852200	FLATWASHER, 1"	12
43	18560826	COTTER PIN, 3/16 X 1 1/2	4
44	47007759	CYLINDER FLOAT BLOCK	2
	DISCONTINUED FROM 2003 PRODUCTION		
45	47300091	HYDRAULIC CYLINDER (3 1/2 X 8)	1
46	47005455	SET, DEPTH CONTROLS	1
47	47007229	TRANSPORT LOCK	1
48	18541651	CLEVIS PIN, 1 X 4 1/2	1
49	18852200	FLATWASHER, 1"	1
50	18560826	COTTER PIN, 3/16 X 1 1/2	1
51	18541254	CLEVIS PIN (TRAVEL LOCK)	1
52	18590916	HAIRPIN BRIDGE (.125 DIA)	1
53	PART OF ITEM 40	CYLINDER PIN 1 X 3 1/2	–

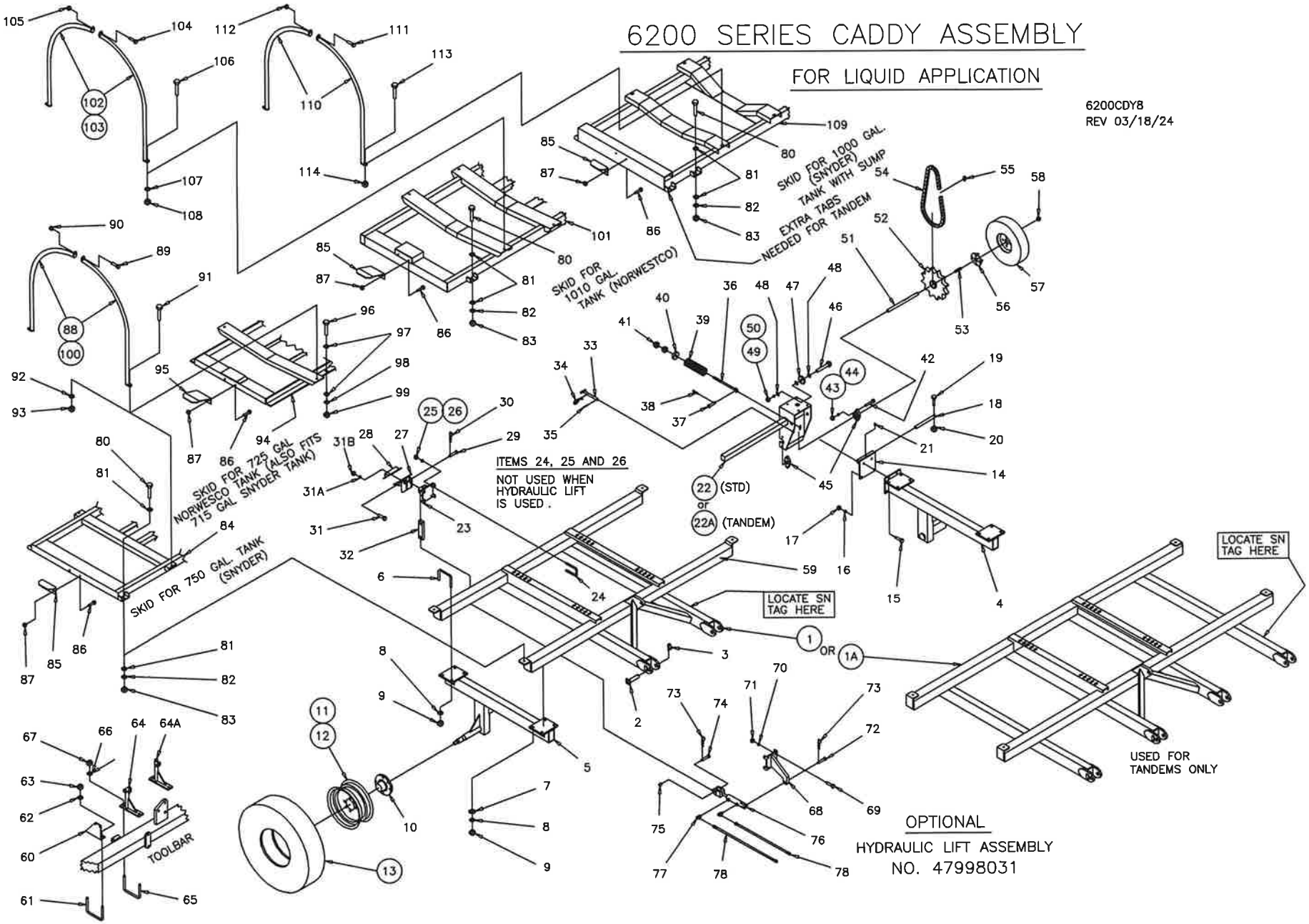
ITEM	PART NO.	DESCRIPTION	QTY.
54	699101	DECAL, DANGER FALLING WINGS	2
55	699107	DECAL, AG SYSTEMS	2
56	–	--	–
57	699102	DECAL, DANGER–VAPORS	1
58	47008441	SECONDARY WING, L.H. WITH TILTED HINGE, (FALL 1996 TO PRESENT)	1
59	47008448	SECONDARY WING, R.H. WITH TILTED HINGE, (FALL 1996 TO PRESENT)	1
	47007775	SECONDARY WING (SQUARE HINGE) (PREVIOUS TO FALL 1996)	2
60	47009562	HINGE PIN	2
61	47001168	COLLAR, HINGE PIN	2
62	18056834	BOLT, 3/8–16NC. X 2 1/2	2
63	18891200	LOCKWASHER, 3/8	2
64	18436800	HEX. NUT, 3/8–16NC.	2
65	47005491	HYDRAULIC CYLINDER (3 X 14)	2
66	47003513	CYLINDER PIN KIT (1 X 3 1/2)	2
67	18901805	GREASE ZERK, STRAIGHT	4
68	47007400	BRACKET, PIVOT CONTROL	1
69	47006545	U–BOLT, 1/2–13NC	2
70	18891400	LOCKWASHER, 1/2	4
71	18417400	HEX. NUT, 1/2–13NC.	4
72	18590148	HAIRPIN BRIDGE, .148 DIA. NO. 9	2
73	18541835	CLEVIS PIN, 3/4 X 2 1/2	2
	47997219	PIVOT CONTROL ROD COMPLETE INCLUDES ITEMS 74, 75, AND 76	
74	47007219	PIVOT CONTROL ROD	1
75	18449003	HEX. JAM NUT, 3/4–10NC.	1
76	47007220	CLEVIS, PIVOT ROD	1
		WITH SELECTOR VALVE OPTION	
77	47010171	SELECTOR VALVE BRACKET	1
78	47008463	MOUNTING STRAP	1
79	18056850	BOLT, 3/8–16NC. X 4	2
80	18891200	LOCKWASHER, 3/8	2
81	18436800	HEX. NUT, 3/8–16NC.	2
82	18056469	BOLT, 5/16–18NC. X 3 1/4	2
83	18811100	LOCKWASHER, 5/16	2
84	18406400	HEX. NUT, 5/16–18NC.	2
		WITH PTO OPTION	
85	47008245	PTO STAND	1
86	47006797	PIN AND CHAIN ASSEMBLY	1
87	18590091	HAIRPIN BRIDGE (.091 DIA.)	1
88	47008239	CLAMP PLATE	1
89	18057475	BOLT, 1/2–13NC. X 9	4
90	18891400	LOCKWASHER, 1/2	4
91	18417400	HEX NUT, 1/2–13NC.	4
92	47008622	POLE, LEFT HAND, WITH PTO ONLY	1
		POLE/HITCH AS USED THRU SUMMER 1997	
93	47007777	POLE, LEFT HAND	1
94	47007778	POLE, RIGHT HAND	1
95	47007616	POLE PLATE	1
96	47007618	POLE WEAR PLATE	1
97	47007622	HITCH CLEVIS	1
98	47007611	CLEVIS PIN	1
99	600190	LYNCH PIN, 7/16 X 1 3/8	1
100	18058434	BOLT, 3/4–10NC. X 2 1/2	4
101	18891800	LOCKWASHER, 3/4	4
102	18418400	HEX. NUT, 3/4–10NC.	4
103	47008557	POLE, LEFT HAND, WITH PTO ONLY	1
104	47010168	GUAGE BRACKET WELDMENT	1
105	47008463	MOUNTING STRAP	1
106	18056850	BOLT, 3/8 X 16NC. X 4	2
107	18891200	LOCKWASHER, 3/8	2
108	18436800	HEX. NUT, 3/8–16NC.	2
109	PPSC4156BS	CHAIN, SAFETY 1/2" X 56" LG	1
110	18059061	BOLT HX CAP GR5 NC ZC 1 X 4	1
111	18459002	NUT NYLOCK 1 GR 5	1
112	18852200	WASHER FLAT 1" SAE ZC	3

(ITEMS 109–12 CAN BE ORDERED AS A KIT P/N:47090314)

6200 SERIES CADDY ASSEMBLY

FOR LIQUID APPLICATION

6200CDY8
REV 03/18/24



6200CDL8
REV 06/04/25

6200 SERIES
CADDY ASSEMBLY PARTS LIST
FOR LIQUID APPLICATION

ALL HARDWARE IS ZINC PLATED UNLESS OTHERWISE SPECIFIED.

ITEM	PART NO.	DESCRIPTION	QTY.
1	47008649	CADDY FRAME (STANDARD)	1
1A	47005769	CADDY FRAME (TANDEM) SEE PAGE 45 OF THIS MANUAL FOR PARTS INFO	OR 1
2	47007254	PIVOT PIN, CADDY	2
3	600190	LYNCH PIN	2
4	47997190	AXLE COMPLETE W/HUB L.H. (STD)	1
	47007190	AXLE, LEFT HAND	1
	47009246	AXLE COMPLETE W/HUB L.H. (7500#)	OPT.
	47008246	AXLE, LEFT HAND (W/7500# SPINDLE)	OPT.
5	47998190	AXLE COMPLETE W/HUB R.H. (STD)	1
	47008190	AXLE, RIGHT HAND	1
	47009247	AXLE COMPLETE W/HUB R.H. (7500#)	OPT.
	47008247	AXLE, RIGHT HAND (W/7500# SPINDLE)	OPT.
6	47006518	U-BOLT, 3/4-10NC. (ZP)	8
7	18981800	FLATWASHER, 3/4 (GALV)	8
8	18991800	LOCKWASHER, 3/4 (GALV)	16
9	18998400	HEX. NUT, 3/4-10NC. (GALV)	16
10	47009712	HUB ASSEMBLY	2
	47009115	HUB ASSEMBLY 7500# CAP.	OPT.
11	47005816	RIM, 11 X 16.1 8 ON 8	2
12	20120012	VALVE STEM	2
13	32297	TIRE, 16.5L X 16.1 10PLY (36 psi)	2
	40013	WHEEL ASSY includes 11, 12, 13	2
		ALSO AVAILABLE	
	40039	USED 385/65R225 ON 22.5 X 11.25 (8 ON 8) RIM	2
	40042	MTD 385/65R22.5 ON HD 11.75 X 22.5	2
14	47007193	HINGE BRACKET	1
15	18057426	BOLT, 1/2-13NC. X 1 1/2	4
16	18891400	LOCKWASHER, 1/2	4
17	18417400	HEX. NUT, 1/2-13NC.	4
18	47007200	PIVOT SHAFT	1
19	18056830	BOLT, 3/8-16NC. X 2	1
20	18457800	SELF-LOCKING NUT, 3/8-16NC.	1
21	18901807	GREASE ZERK, 45 DEG.	1
22	47007201	GROUND WHEEL CONTROL (STD)	1
22A	47005783	GROUND WHEEL CONTROL (TANDEM)	1
23	47007247	PIVOT BRACKET MOUNT	1
24	47996487	U-BOLT, 1/2-13NC. (GALV)	2
25	18991500	LOCKWASHER, 1/2 (GALV)	4
26	18997500	HEX. NUT, 1/2-13NC. (GALV)	4
27	47007250	PIVOT BRACKET	1
28	47007251	CLAMP PLATE	1
29	18541566	CLEVIS PIN, 3/4 X 3 1/2	1
30	18590148	HAIRPIN BRIDGE (.148 DIA.)	1
31	18027417	BOLT, 1/2-13NC. X 2 (S.S.)	4
31A	18991400	LOCKWASHER, 1/2 (S.S.)	4
31B	18997400	HEX. NUT, 1/2-13NC. (S.S.)	4
32	47007227	PIVOT LINK	1
33	47007197	TRANSPORT LOCK PIN	1
34	18590094	HAIRPIN BRIDGE (.177 DIA.)	1
35	18511033	EXPANSION PIN 1/4 X 1 1/2	1
36	47301547	EYE BOLT	1
37	18541428	CLEVIS PIN, 1/2 X 1 3/4	1
38	18560722	COTTER PIN, 5/32 X 1	1
39	47301524	COMPRESSION SPRING	1
40	47301530	SPRING CAP	1
41	18417900	HEX. NUT, 5/8-11NC.	2
42	18057426	BOLT, 1/2-13NC. X 1 1/2	4
43	18891400	LOCKWASHER, 1/2	8
44	18417400	HEX. NUT, 1/2-13NC.	8
45	47008462	BEARING ASSEMBLY, 1"	2
46	18057934	BOLT, 5/8-11NC. X 2 1/2	1
47	34318	IDLER SPROCKET	1
48	18811600	FLATWASHER, 5/8	3
49	18891600	LOCKWASHER, 5/8	1
50	18417900	HEX. NUT, 5/8-11NC.	1
51	47007266	DRIVE SHAFT	1
52	10342	DRIVE SPROCKET	1
53	47006519	DRIVE KEY, 1/4 X 1/4 X 1 1/2	2
54	47007268	CHAIN, #50 X 96 LINKS (61.25")	1
55	31212	CONNECTING LINK	1
56	47007068	HUB, PUMP DRIVE WHEEL	1
57	44105518	DRIVE WHEEL ASSEMBLY (40 PSI)	1
58	47005011	WHEEL NUT, 1/2-20NF.	4
59	30481	DECAL, CAUTION (TIGHTEN LUG NUTS)	1
60	47008049	MANIFOLD BRACKET (USE 3/8 HDWR)	OPT.
61	47001028	U-BOLT, 3/8-16NC.	1
62	18891200	LOCKWASHER, 3/8	2
63	18436800	HEX. NUT, 3/8-16NC.	2
64	47002631	MANIFOLD STAND, (STD. TEE)	OPT.
64A	8060WJB	MANIFOLD STAND (SS 90 ELBOW)	OPT.
	47008060	MANIFOLD STAND, (S.S. TEE) (USE 1/2-13NC. HARDWARE)	OPT.
65	47006545	U-BOLT, 1/2-13NC.	1
66	18891400	LOCKWASHER, 1/2	2
67	18417400	HEX. NUT, 1/2-13NC.	2
	47988031	HYDRAULIC LIFT ASSEMBLY INCLUDES ITEMS 68 TO 78	1
68	47008031	CYLINDER BRACKET	1
69	18997456	BOLT, 1/2-13NC. X 5 1/2 (S.S.)	4
70	18991400	LOCKWASHER, 1/2 (S.S.)	4
71	18997400	HEX. NUT, 1/2-13NC. (S.S.)	4
72	18541642	CLEVIS PIN, 5/8 X 2 1/2	1
73	18560722	COTTER PIN, 5/32 X 1	2
74	18541644	CLEVIS PIN, 5/8 X 3	1
75	47008016	LINK BUSHING	1
76	47005437	HYDRAULIC CYLINDER (1 1/2 X 4)	1
77	2501-6-6	ELBOW, 90 DEG. 3/8MPT. X #6 MJIC	2
78	609258	HOSE, 1/4 X 258 #6 JICFS X 1/2 MPT ENDS	2
79	OMITTED		
80	18057926	BOLT, 5/8-11NC. X 1 1/2	4
81	18811600	FLATWASHER, 5/8	8
82	18891600	LOCKWASHER, 5/8	4
83	18417900	HEX. NUT, 5/8-11NC.	4
84	47008070	SKID (750 GAL TANK) (SNYDER) MOUNT WITH HARDWARE ITEMS 80 TO 83	OPT.
85	47008465	VALVE SUPPORT BRACKET	1
86	18056822	BOLT, 3/8-16NC. X 1	2
87	18496800	FLANGE NUT, 3/8-16NC.	2
	47028889	HOOP ASSEMBLY FOR SKID ITEM 84 (750 GAL. TANK)	3
88	47008889	HOOP (HALF)	6
89	18057430	BOLT, 1/2-13NC. X 2	3
90	18457650	SELF-LOCKING NUT, 1/2-13NC.	3
91	18057428	BOLT, 1/2-13NC. X 1 3/4	6
92	18811400	FLATWASHER, 1/2	6
93	18457650	SELF-LOCKING NUT, 1/2-13NC.	6
94	47008018	SKID (725 GAL. NORWESCO TANK) (ALSO FITS 715 GAL. SNYDER TANK) MOUNT WITH HARDWARE ITEMS 86 AND 87	OPT.
95	47008464	VALVE SUPPORT BRACKET	1
96	18058430	BOLT, 3/4-10NC. X 2	4
97	18811800	FLATWASHER, 3/4	8
98	18891800	LOCKWASHER, 3/4	4
99	18418400	HEX. NUT, 3/4-10NC.	4
	47028012	HOOP ASSEMBLY FOR SKID ITEM 94 (725 GAL. TANK)	3
100	47008012	HOOP (HALF) MOUNT WITH HARDWARE ITEMS 89 TO 93	6
101	47008485	SKID (1010 GAL. TANK) (NORWESTCO) (UP TO 1/21/97) MOUNT WITH HARDWARE ITEMS 80 TO 83	1
	47028664	HOOP ASSEMBLY, CENTER	2
102	47008664	HOOP (HALF) CENTER	4
	47028893	HOOP ASSEMBLY, END	2
103	47008893	HOOP (HALF) END MOUNT WITH HARDWARE ITEMS 104 TO 108	4
104	18057430	BOLT, 1/2-13NC. X 2	4
105	18457650	SELF-LOCKING NUT, 1/2-13NC.	4
106	18057428	BOLT, 1/2-13NC. X 1 3/4	8
107	18811400	FLATWASHER, 1/2	8
108	18457650	SELF-LOCKING NUT, 1/2-13NC.	8
109	47008929	SKID, (SNYDER TANK) (7/31/98 TO PRESENT) 1000 GAL. TANK W/SUMP, SEE NOTE	1
		NOTE: (EXTRA BOLTING TABS AND HARDWARE IS REQ'D IF USING WITH A TANDEM CADDY FRAME) MOUNT WITH HARDWARE ITEMS 80 TO 83	
USE	47008465	VALVE SUPPORT BRKT. (ITEM 85) MOUNT WITH HARDWARE ITEMS 86 AND 87	1
	47918891	HOOP ASSEMBLY FOR SKID ITEM 109 (1000 GAL. TANK)	4
110	47008891	HOOP (HALF)	8
111	18057430	BOLT, 1/2-13NC. X 2	4
112	18457650	SELF-LOCKING NUT, 1/2-13NC.	4
113	18057430	BOLT, 1/2-13NC. X 2	8
114	18457650	SELF-LOCKING NUT, 1/2-13NC.	8

6000LQ02
10-17-12
REV 06-23-15

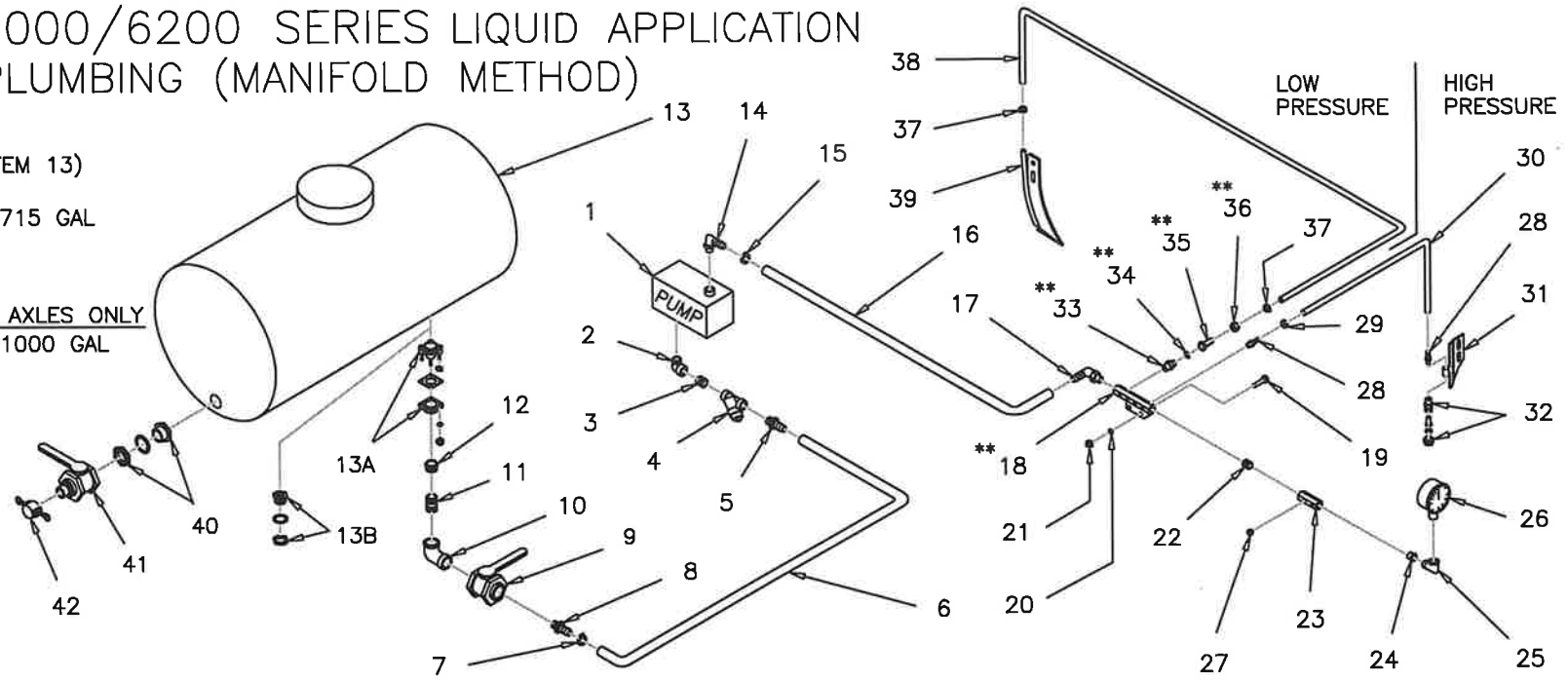
6000/6200 SERIES LIQUID APPLICATION PLUMBING (MANIFOLD METHOD)

AVAILABLE TANKS (ITEM 13)

1004337 LEG TANK, 715 GAL (SNYDER)

FOR 6200 CADDY
W 7500 LB CAPACITY AXLES ONLY

7541137 LEG TANK, 1000 GAL (SNYDER)



ITEM	PART NO.	DESCRIPTION	QTY.
1	NGP-7055	PUMP ASSEMBLY, SINGLE PISTON	1
	NGP-9055	PUMP ASSEMBLY TWIN PISTON	OPT.
2	200888	STREET ELBOW, 1 1/2 NPT X 90	1
3	200556	CLOSE NIPPLE, 1 1/2 NPT.	1
4	200056	LINE STRAINER, 1 1/2 X 1 1/2 NPT.	1
5	200334	HOSEBARB, 1 1/2 X 1 1/2	1
6	12012705	SOLUTION HOSE, 1 1/2 X 72"	1
7	200256	HOSE CLAMP, 1 5/16 TO 2 1/4	2
8	200334	HOSEBARB, 1 1/2 X 1 1/2	1
9	201150	BALL VALVE, 1 1/2 NPT	1
10	215090	STREET ELBOW, 1 1/2 NPT	1
11	200556	CLOSE NIPPLE, 1 1/2 NPT	1
12	200422	REDUCING BUSHING, 2 X 1 1/2 NPT	1
13	TANK	AS SPECIFIED, SEE LIST ABOVE	1
13A	290387	BOLT-IN FLANGE ASSEMBLY, 2 NPT. SUPPLIED WITH TANK	1
13B	501591	BULKHEAD ASSEMBLY, 1 1/2 NPT	
	OBSOLETE	SHOWN FOR REPAIR PART ONLY	
14	200380	HOSEBARB ELBOW, 1 X 1	1
15	200248	HOSE CLAMP, 11/16 TO 1 1/2	2
16	10040000	SPRAYER HOSE, 1 X 156"	1
17	200367	HOSEBARB ELBOW, 1/2 NPT. X 1	1
18	47008033	MANIFOLD, (8) PORT, S.S. * *	1
19	18026824	BOLT, 3/8-16NC. X 1 1/4 S.S.	2
20	18881201	3/8 LOCKWASHER, S.S.	2
21	18476800	HEX. NUT, 3/8-16NC. S.S.	2
22	200714	CLOSE NIPPLE, 1/2 NPT. S.S.	OPT.
23	47008035	MANIFOLD, (4) PORT, S.S.	OPT.
24	200810	REDUCING BUSHING, 1/2 X 1/4 NPT.	1

ITEM	PART NO.	DESCRIPTION	QTY.
25	200771	STREET ELBOW, 1/4 NPT. X 90	1
26	100347	PRESSURE GAUGE, 0 TO 160 PSI	1
27	200826	PLUG, 1/4 NPT. S.S.	AS REQ'D. *
	ITEMS 28 TO 32 USE FOR HI-PRESS. APPLICATION ONLY *		
28	100859	HOSEBARB, 1/4 NPT. X 1/2 S.S.	2 *
29	200244	HOSE CLAMP, 5/16 TO 7/8	
30	100804	HOSE, BRAIDED 1/2 X 85 FT (8 ROW) 1/2 X 135 FT. (11 ROW) 1/2 X 150 FT (12 ROW)	1
31	47309038	NOZZLE BRACKET	1 *
32	504017	NOZZLE BODY, INCLUDES (1) EACH OF	1 *
	500192	NOZZLE BODY ADAPTER	1 *
	504015	STREAM STABALIZER	1 *
	ORIFICE	SELECT FROM ORIFICE CHART	1 *
	503127	CAP	1 *
	ITEMS 33 TO 39 USE FOR LO-PRESS. APPLICATION ONLY		
33	500192	NOZZLE BODY ADAPTER	1 *
34	ORIFICE	SELECT FROM ORIFICE CHART	1 *
35	500643	HOSEBARB INSERT	1 *
36	503127	CAP, HOSEBARB	1 *
37	200244	HOSE CLAMP, 5/16 TO 7/8	2 *
38	15017007	TUBING, 1/2 X 85 FT. (8 ROW) 1/2 X 150 FT. (12 ROW)	1
39	KNIFE	AS SPECIFIED	1 *
	212600	FORCE-FILL PACKAGE INCL. ITEMS, 40 TO 42	OPT.
40	20020019	TANK BUNG, 2"	1
41	200037	BALL VALVE, 2 NPT	1
42	200172	CAP, 2 NPT.	1

FOR ALTERNATE GAUGE MOUNTINGS, REFER TO THE "MANIFOLD ASSEMBLY ILLUSTRATIONS ".

QUANTITIES MARKED * ARE FOR ONE NOZZLE ONLY. REFER TO THE "MANIFOLD ASSEMBLY ILLUSTRATIONS " TO DETERMINE ACTUAL QUANTITIES FOR YOUR TOOLBAR.

FOR NYLON MANIFOLD INFO ITEM 18 MARKED * * AND ITEMS 33,34,35, & 36 MARKED * * REFER TO THE "NYLON" MANIFOLD ASSEMBLY ILLUSTRATION.

LIQUID PLUMBING
6200 SERIES APPLICATORS
NON–MANIFOLD PLUMBING
(SPRAY–BOOM STYLE)
HIGH PRESSURE SYSTEM

6200LQAPP2
10–16–12
REV 06–23–15

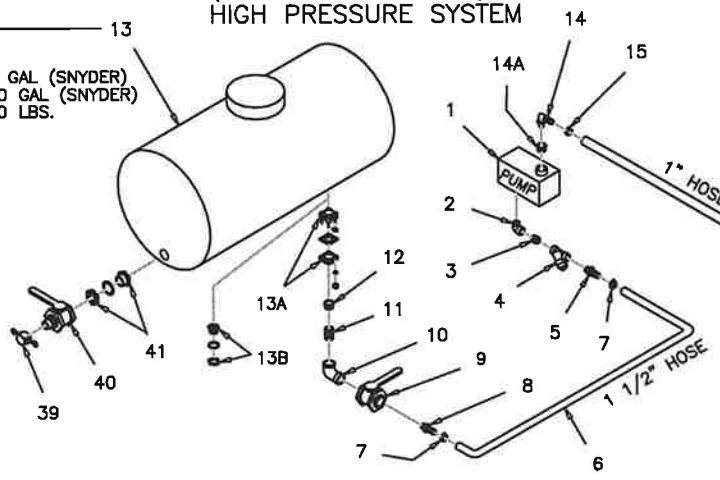
TANK REFERENCE CHART
AVAILABLE TANKS (ITEM 13)

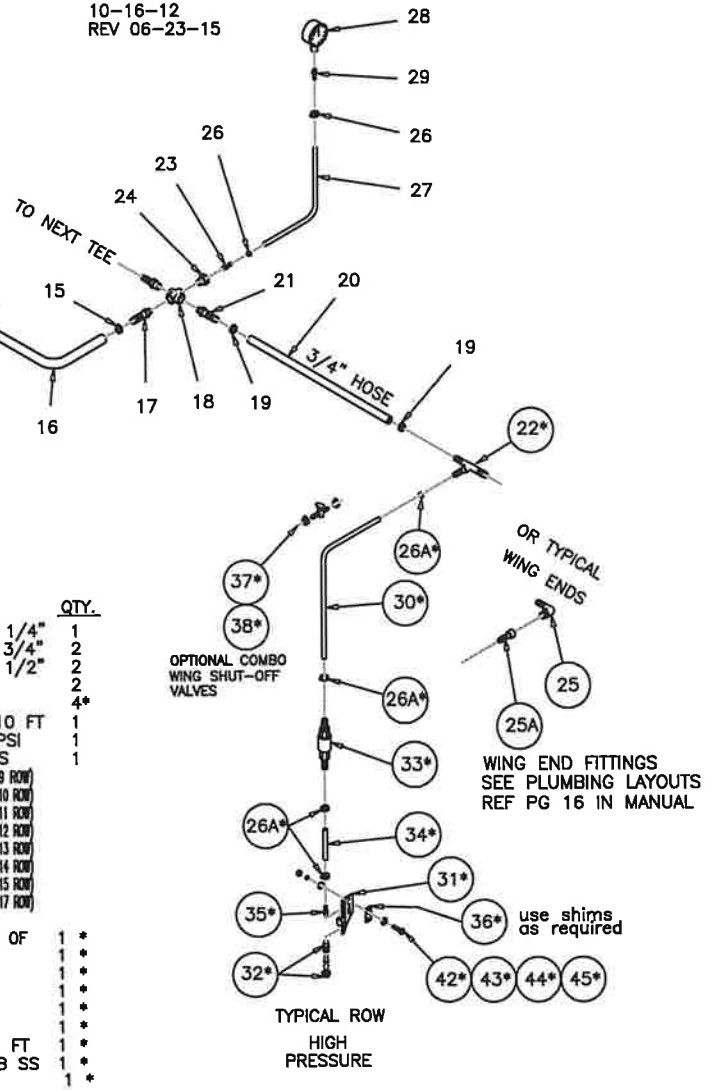
1004337 DRAINABLE TANK, 715 GAL (SNYDER)
7541137 DRAINABLE TANK, 1000 GAL (SNYDER) FOR CADDY WITH 7500 LBS. CAPACITY AXLES ONLY

APPLICATION RATE
THIS METHOD IS USED FOR UP TO MAX 30 GAL/ ACRE

QUANTITIES MARKED * ARE FOR ONE ROW ONLY.

REFER TO THE PLUMBING LAYOUT TO DETERMINE ACTUAL QUANTITIES REQ'D FOR YOUR TOOLBAR DEPENDING ON THE NUMBER OF ROWS.





ITEM	PART NO.	DESCRIPTION	QTY.
1	NGP–7055	PUMP ASSY, HI–PRESS. SGL PISTON	1
	NGP–9055	PUMP ASSY, HI–PRESS. DBL PISTON	OPT
	606200	TANK TO PUMP PLUMBING PACKAGE INCLUDES ITEMS 2 THRU 12	
2	215090	STREET ELBOW, 1 1/2 NPT X 90	1
3	200556	CLOSE NIPPLE, 1 1/2 NPT.	1
4	200056	LINE STRAINER, 1 1/2 X 1 1/2 NPT.	1
5	200334	HOSEBARB, 1 1/2 X 1 1/2	1
6	12012705	SOLUTION HOSE, 1 1/2 X 6 FT LONG	1
7	200256	HOSE CLAMP, 1 5/16 TO 2 1/4	2
8	200334	HOSEBARB, 1 1/2 X 1 1/2	1
9	201150	BALL VALVE, 1 1/2" NPT	1
10	215090	STREET ELBOW 1 1/2" NPT	1
11	200556	CLOSE NIPPLE 1 1/2" NPT	1
12	200422	REDUCER BUSHING 2" X 1 1/2" NPT	1
13	TANK	(SEE AVAILABLE TANKS CHART)	1
13A	290387	BOLT–IN FLANGE ASSEMBLY, 2" NPT (SUPPLIED WITH TANK)	1
13B	501591	BULKHEAD ASSEMBLY, 1 1/2" NPT OBSOLETE, SHOWN HERE FOR REPAIR PARTS ONLY	1
14	200380	HOSEBARB ELBOW, 1 X 1	1
14A	2150100	REDUCER BUSHING, 1 1/2" – 1"	1
15	200250	HOSE CLAMP, 3/4" – 1 3/4"	2
16	10040000	SPRAYER HOSE, 1" X VARIES W ROWS	1
17	200328	HOSEBARB, POLY 1" MPT X 1" HB	1
18	250100	POLY CROSS, 1 INCH	1
19	200250	HOSECLAMP, 3/4 TO 1 3/4	2*
20	200228	HOSE, 3/4 ID X 17 FT. (9 ROW)	
	200228	HOSE, 3/4 ID X 19 FT. (10 ROW)	
	200228	HOSE, 3/4 ID X 23 FT. (11 ROW)	
	200228	HOSE, 3/4 ID X 25 FT. (12 ROW)	
	200228	HOSE, 3/4 ID X 27 FT. (13 ROW)	
	200228	HOSE, 3/4 ID X 30 FT. (14 ROW)	
	200228	HOSE, 3/4 ID X 36 FT. (15 ROW)	
	200228	HOSE, 3/4 ID X 38 FT. (17 ROW)	
21	HB100–075	HOSEBARB, POLY 1" X 3/4 HOSE	2
22	HBT075–050	HOSEBARB TEE	1*
23	HB025–050	HOSEBARB, POLY 1/4 MPT X 1/2"	1

606200 TANK TO PUMP PKG (includes items 2 thru 12)

AVAILABLE PUMP PACKAGE
NGP–7055 HI–PRESS. JBLUE SGL PISTON
NGP–9055 HI–PRESS. JBLUE TWN PISTON

ITEM	PART NO.	DESCRIPTION	QTY.
24	2100025	REDUCER BUSHING, POLY 1" X 1/4"	1
25	200376	HOSEBARB ELBOW, 3/4 NPT X 3/4"	2
25A	200449	FEMALE HOSEBARB 3/4 NPT X 1/2"	2
26	200244	HOSE CLAMP, 7/16 – 1 "	2
26A	200244	HOSE CLAMP, 7/16 – 1 "	4*
27	100804	TUBING, BRAIDED EVA 1/2" X 10 FT	1
28	100347	PRESSURE GAUGE, 0 TO 160 PSI	1
29	100859	HOSEBARB,, 1/4 NPT X 1/2 SS	1
30	100804	HOSE, BRAIDED 1/2 X 36 FT. (9 ROW)	
		HOSE, BRAIDED 1/2 X 40 FT. (10 ROW)	
		HOSE, BRAIDED 1/2 X 44 FT. (11 ROW)	
		HOSE, BRAIDED 1/2 X 48 FT. (12 ROW)	
		HOSE, BRAIDED 1/2 X 52 FT. (13 ROW)	
		HOSE, BRAIDED 1/2 X 56 FT. (14 ROW)	
		HOSE, BRAIDED 1/2 X 60 FT. (15 ROW)	
		HOSE, BRAIDED 1/2 X 68 FT. (17 ROW)	
31	47309038	NOZZLE BRACKET	
32	504017	NOZZLE ASSY, INCLUDES (1) EACH OF	1 *
	500192	NOZZLE BODY	1 *
	504015	STREAM STABILIZER	1 *
	ORIFICE	SELECT FROM ORIFICE CHART	1 *
	503127	CAP	1 *
33	115286–01	CHECKVALVE, POLY	1 *
34	100804	TUBING, BRAIDED EVA 1/2" X 1 FT	1 *
35	100859	HOSEBARB, 1/4 NPT X 1/2" HB SS	1 *
36	47306661	SHIM, 1/4 X 2 X 4 1/2	1 *
	47306662	SHIM, 1/8 X 2 X 4 1/2	1 *
	47306663	SHIM, 14GA X 2 X 4 1/2	1 *
37	500553	COMBO WING SHUTOFF VALVE (per row)	OPT
38	200244	HOSE CLAMP, 7/16 – 1 " (per row)	OPT
	212600	FORCE–FILL OPTION includes items 39–41	OPT
39	200172	CAP	1
40	200037	BALL VALVE, 2" NPT	1
41	20020019	TANK BUNG ASSEMBLY, 2 NPT.	1
42	18057434	BOLT, HX HD 1/2 X 2 1/2 GR 5	2*
43	18417400	NUT, HEX, 1/2NC ZC	2
44	18811400	FLATWASHER, USS ZC 1/2	4*
45	18891400	WASHER, LOCK 1/2 ZC	2*
46	609643	CABLE TIES 28"	2*

212600 FORCEFILL PKG INCLUDES ITEMS 39 THRU 41

AVAILABLE PUMP PLUMBING PACKAGE
20026000 JBLUE PUMP PLUMBING PKG

AVAILABLE HIGH PRESSURE PLUMBING KITS

9 ROW KIT NUMBER 601506
10 ROW KIT NUMBER 601509
11 ROW KIT NUMBER 601512
12 ROW KIT NUMBER 601518
13 ROW KIT NUMBER 601521
14 ROW KIT NUMBER 601527
15 ROW KIT NUMBER 601530
17 ROW KIT NUMBER 601539

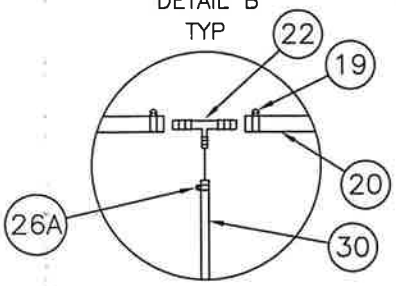
SEE PAGE 16 FOR GENERAL TOOLBAR PLUMBING REFERENCE

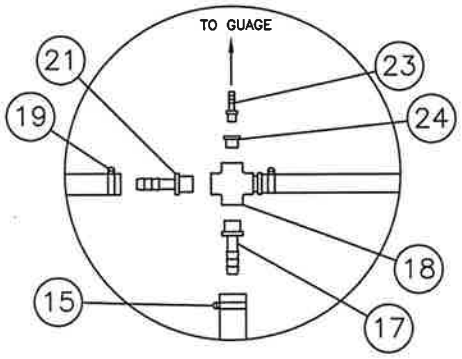
6200 TOOLBAR

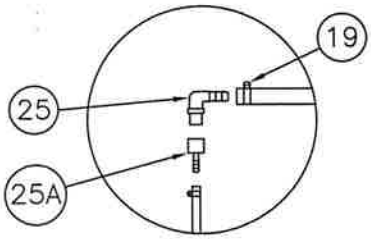
NON–MANIFOLD HIGH PRESSURE METHOD
GENERAL LIQUID TOOLBAR PLUMBING LAYOUT
(SPRAY–BOOM METHOD SHOWN)

AG37 COULTERS AT 30 INCH SPACING
(11 ROWS AT 30" SPACING SHOWN)

6200HPPLBG
12–20–10

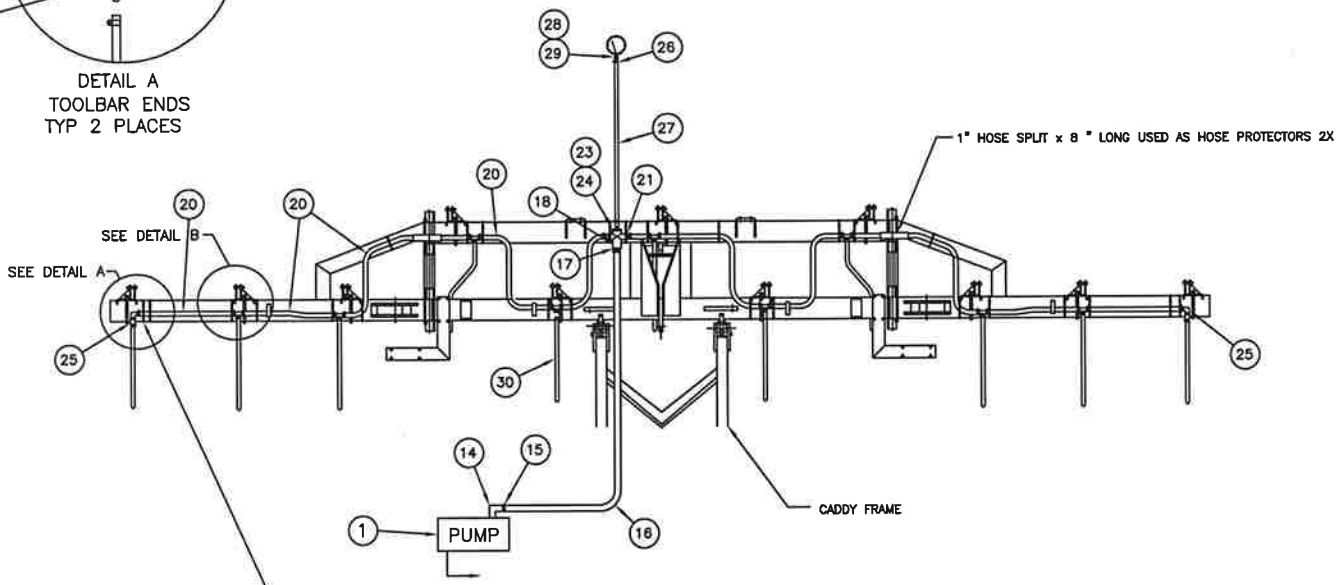






DETAIL A
TOOLBAR ENDS
TYP 2 PLACES

SEE PAGE 15 FOR
REPLACEMENT PART
INFORMATION



SECURE PLUMBING TO TOOLBAR USING 32" ZIP TIES APPROX AS SHOWN

NOTE: MAKE SURE HOSES DON'T RUB ON FRAME WHEN FOLDING OR PREMATURE WEAR–THRU MAY OCCUR.
HOSES NEAR HINGED AREAS SHOULD BE SLIGHTLY LONGER TO ALLOW FOR FOLDING
BE SURE HOSES CLEAR PROPERLY AND DO NOT KINK OR HANG UP WHEN FOLDING.

Application Information Using 4916 Orifice Plates
(Table based on spraying 28% Nitrogen on 22 inch spacings)
****see conversion tables below for other weight solutions**

Orifice Plate No.	Pressure (psi)	Capacity Spraying 28% Nitrogen (GPM)	GPA Spraying 28% Nitrogen on 22 inch spacing			
			3 mph	4 mph	5 mph	6 mph
4916-37	60	0.18	16.6	12.5	10.0	8.3
	80	0.21	18.9	14.2	11.3	9.5
	90	0.23	21	15.5	12.4	10.4
	100	0.24	22	16.2	13.0	10.8
	120	0.26	23	17.6	14.0	11.7
4916-40	60	0.22	19.8	14.9	11.9	9.9
	80	0.25	23	16.9	13.5	11.3
	90	0.27	24	18.2	14.6	12.2
	100	0.28	25	18.9	15.1	12.6
	120	0.31	28	21	16.7	14.0
4916-43	60	0.25	22	16.8	13.4	11.2
	80	0.29	26	20	15.7	13.1
	90	0.30	27	20	16.2	13.5
	100	0.32	29	22	17.3	14.4
	120	0.35	32	24	18.9	15.8
4916-47	60	0.30	27	20	16.0	13.3
	80	0.34	31	23	18.4	15.3
	90	0.36	32	24	19.4	16.2
	100	0.38	34	26	21	17.1
	120	0.42	38	28	23	18.9
4916-49	60	0.32	29	21	17.2	14.3
	80	0.37	33	25	20	16.7
	90	0.39	35	26	21	17.6
	100	0.41	37	28	22	18.5
	120	0.45	41	30	24	20
4916-52	60	0.36	32	24	19.5	16.2
	80	0.42	38	28	23	18.9
	90	0.44	40	30	24	20
	100	0.47	42	32	25	21
	120	0.51	46	34	28	23
4916-55	60	0.41	37	27	22	18.3
	80	0.47	42	32	25	21
	90	0.50	45	34	27	23
	100	0.52	47	35	28	23
	120	0.57	51	38	31	26
4916-56	60	0.43	39	29	23	19.4
	80	0.50	45	34	27	23
	90	0.53	48	36	29	24
	100	0.56	50	38	30	25
	120	0.61	55	41	33	27
4916-59	60	0.47	42	31	25	21
	80	0.54	49	36	29	24
	90	0.57	51	38	31	26
	100	0.60	54	41	32	27
	120	0.66	59	45	36	30
4916-61	60	0.50	45	34	27	23
	80	0.58	52	39	31	26
	90	0.61	55	41	33	27
	100	0.65	59	44	35	29
	120	0.71	64	48	38	32

Orifice Plate No.	Pressure (psi)	Capacity Spraying 28% Nitrogen (GPM)	GPA Spraying 28% Nitrogen on 22 inch spacing			
			3 mph	4 mph	5 mph	6 mph
4916-65	60	0.56	51	38	30	25
	80	0.65	59	44	35	29
	90	0.69	62	47	37	31
	100	0.73	66	49	39	33
	120	0.80	72	54	43	36
4916-68	60	0.62	55	42	33	28
	80	0.71	64	48	38	32
	90	0.75	68	51	41	34
	100	0.80	72	54	43	36
	120	0.87	78	59	47	39
4916-70	60	0.66	59	44	36	30
	80	0.76	68	51	41	34
	90	0.81	73	55	44	36
	100	0.85	77	57	46	38
	120	0.93	84	63	50	42
4916-75	60	0.75	67	50	40	34
	80	0.86	77	58	46	39
	90	0.92	83	62	50	41
	100	0.97	87	65	52	44
	120	1.06	95	72	57	48
4916-80	60	0.85	77	58	46	38
	80	0.99	89	67	53	45
	90	1.05	95	71	57	47
	100	1.10	99	74	59	50
	120	1.21	109	82	65	54
4916-83	60	0.97	87	65	52	44
	80	1.12	101	76	60	50
	90	1.19	107	80	64	54
	100	1.25	113	84	68	56
	120	1.37	123	92	74	62
4916-89	60	1.06	95	71	57	48
	80	1.22	110	82	66	55
	90	1.29	116	87	70	58
	100	1.36	122	92	73	61
	120	1.49	134	101	80	67
4916-93	60	1.18	106	80	64	53
	80	1.36	122	92	73	61
	90	1.44	130	97	78	65
	100	1.52	137	103	82	68
	120	1.67	150	113	90	75
4916-95	60	1.23	111	83	67	55
	80	1.42	128	96	77	64
	90	1.51	136	102	82	68
	100	1.59	143	107	86	72
	120	1.74	157	117	94	78
4916-98	60	1.35	121	91	73	61
	80	1.55	140	105	84	70
	90	1.65	149	111	89	74
	100	1.74	157	117	94	78
	120	1.90	171	128	103	86

Orifice Plate No.	Pressure (psi)	Capacity Spraying 28% Nitrogen (GPM)	GPA Spraying 28% Nitrogen on 22 inch spacing			
			3 mph	4 mph	5 mph	6 mph
4916-103	60	1.41	127	95	76	63
	80	1.63	147	110	88	73
	90	1.72	155	116	93	77
	100	1.82	164	123	98	82
	120	1.99	179	134	107	90
4916-107	60	1.58	143	107	86	71
	80	1.83	165	124	99	82
	90	1.94	175	131	105	87
	100	2.04	184	138	110	92
	120	2.24	202	151	121	101
4916-110	60	1.32	119	89	71	59
	80	1.52	137	103	82	68
	90	1.62	146	109	87	73
	100	1.70	153	115	92	77
	120	1.87	168	126	101	84
4916-115	60	1.85	166	125	100	83
	80	2.13	192	144	115	96
	90	2.26	203	153	122	102
	100	2.39	215	161	129	108
	120	2.61	235	176	141	117
4916-125	60	2.11	190	143	114	95
	80	2.44	220	165	132	110
	90	2.59	223	175	140	117
	100	2.73	246	184	147	123
	120	2.99	269	202	161	135
4916-132	60	2.36	212	159	127	106
	80	2.72	245	184	147	122
	90	2.89	260	195	156	130
	100	3.04	274	205	164	137
	120	3.34	301	225	180	150
4916-140	60	2.73	246	184	147	123
	80	3.15	284	213	170	142
	90	3.34	301	225	180	150
	100	3.52	317	238	190	158
	120	3.86	347	261	208	174
4916-147	60	2.97	268	201	161	134
	80	3.43	309	232	185	154
	90	3.64	328	246	197	164
	100	3.84	346	259	207	173
	120	4.21	379	284	227	189
4916-156	60	3.34	301	226	181	150
	80	3.86	347	261	208	174
	90	4.10	369	277	221	185
	100	4.32	389	292	233	194
	120	4.73	426	319	255	213
4916-166	60	3.70	333	249	200	166
	80	4.27	384	288	231	192
	90	4.53	408	306	245	204
	100	4.77	429	322	258	215
	120	5.23	471	353	282	235

****Conversion Factors for Spraying Solutions other than 28% Nitrogen for use only with the Above GPA tables**

Weight of Solution	Conversion Factor
7.0 lbs./gal.	0.81
8.0 lbs./gal.	0.87
8.34 lbs./gal. – Water	0.88
9.0 lbs./gal.	0.92
10.0 lbs./gal.	0.97

Weight of Solution	Conversion Factor
10.65 lbs./gal. – 28% N	1.00
11.00 lbs./gal.	1.01
12.0 lbs./gal.	1.06
14.0 lbs./gal.	1.14

Application Information Using 4916 Orifice Plates
(Table based on spraying 28% Nitrogen on 30 inch spacings)
****see conversion tables below for other weight solutions**

Orifice Plate No.	Pressure (psi)	Capacity Spraying 28% Nitrogen (GPM)	GPA Spraying 28% Nitrogen on 30 inch spacing			
			3 mph	4 mph	5 mph	6 mph
4916-37	60	0.18	12.2	9.1	7.3	6.1
	80	0.21	13.9	10.4	8.3	6.9
	90	0.23	15.2	11.4	9.1	7.6
	100	0.24	15.8	11.9	9.5	7.9
	120	0.26	17.2	12.9	10.3	8.6
4916-40	60	0.22	14.5	10.9	8.7	7.3
	80	0.25	16.5	12.4	8.9	8.3
	90	0.27	17.8	13.4	10.7	8.9
	100	0.28	18.5	13.9	11.1	9.2
	120	0.31	20	15.3	12.3	10.2
4916-43	60	0.25	16.4	12.3	9.8	8.2
	80	0.29	19.1	14.4	11.5	9.6
	90	0.30	20	14.9	11.9	9.9
	100	0.32	21	15.8	12.7	10.6
	120	0.35	23	17.3	13.9	11.6
4916-47	60	0.30	20	14.6	11.7	9.8
	80	0.34	22	16.8	13.5	11.2
	90	0.36	24	17.8	14.3	11.9
	100	0.38	25	18.8	15.0	12.5
	120	0.42	28	21	16.6	13.9
4916-49	60	0.32	21	15.7	12.6	10.5
	80	0.37	24	18.3	14.7	12.2
	90	0.39	26	19.3	15.4	12.9
	100	0.41	27	20	16.2	13.5
	120	0.45	30	22	17.8	14.9
4916-52	60	0.36	24	17.9	14.3	11.9
	80	0.42	28	21	16.6	13.9
	90	0.44	29	22	17.4	14.5
	100	0.47	31	23	18.6	15.5
	120	0.51	34	25	20	16.8
4916-55	60	0.41	27	20	16.1	13.4
	80	0.47	31	23	18.6	15.5
	90	0.50	33	25	20	16.5
	100	0.52	34	26	21	17.2
	120	0.57	38	28	23	18.8
4916-56	60	0.43	28	21	17.1	14.2
	80	0.50	33	25	20	16.5
	90	0.53	35	26	21	17.5
	100	0.56	37	28	22	18.5
	120	0.61	40	30	24	20
4916-59	60	0.47	31	23	18.5	15.4
	80	0.54	36	27	21	17.8
	90	0.57	38	28	23	18.8
	100	0.60	40	30	24	20
	120	0.66	44	33	26	22
4916-61	60	0.502	33	25	20	16.6
	80	0.58	38	29	23	19.1
	90	0.61	40	30	24	20
	100	0.65	43	32	26	21
	120	0.71	47	35	28	23

Orifice Plate No.	Pressure (psi)	Capacity Spraying 28% Nitrogen (GPM)	GPA Spraying 28% Nitrogen on 30 inch spacing			
			3 mph	4 mph	5 mph	6 mph
4916-65	60	0.56	37	28	22	19
	80	0.65	43	32	26	21
	90	0.69	46	34	27	23
	100	0.73	48	36	29	24
	120	0.80	53	40	32	26
4916-68	60	0.62	41	30	24	20
	80	0.71	47	35	28	23
	90	0.75	50	37	30	25
	100	0.80	53	40	32	26
	120	0.87	57	43	34	29
4916-70	60	0.66	44	33	26	22
	80	0.76	50	38	30	25
	90	0.81	53	40	32	27
	100	0.85	56	42	34	28
	120	0.93	61	46	37	31
4916-75	60	0.75	49	37	30	25
	80	0.86	57	43	34	28
	90	0.92	61	46	36	30
	100	0.97	64	48	38	32
	120	1.06	70	52	42	35
4916-80	60	0.85	56	42	34	28
	80	0.99	65	49	39	33
	90	1.05	69	52	42	35
	100	1.10	73	54	44	36
	120	1.21	80	60	48	40
4916-83	60	0.97	64	48	38	32
	80	1.12	74	55	44	37
	90	1.19	79	59	47	39
	100	1.25	83	62	50	41
	120	1.37	90	68	54	45
4916-89	60	1.06	70	52	42	35
	80	1.22	81	60	48	40
	90	1.29	85	64	51	43
	100	1.36	90	67	54	45
	120	1.49	98	74	59	49
4916-93	60	1.18	78	58	47	39
	80	1.36	90	67	54	45
	90	1.44	95	71	57	48
	100	1.52	100	75	60	50
	120	1.67	110	83	66	55
4916-95	60	1.23	81	61	49	41
	80	1.42	94	70	56	47
	90	1.51	100	75	60	50
	100	1.59	105	79	63	52
	120	1.74	115	86	69	57
4916-98	60	1.35	89	67	53	44
	80	1.55	102	77	61	51
	90	1.65	109	82	65	54
	100	1.74	115	86	69	57
	120	1.90	125	94	75	63

Orifice Plate No.	Pressure (psi)	Capacity Spraying 28% Nitrogen (GPM)	GPA Spraying 28% Nitrogen on 30 inch spacing			
			3 mph	4 mph	5 mph	6 mph
4916-103	60	1.41	93	70	56	46
	80	1.63	108	81	65	54
	90	1.72	114	85	68	57
	100	1.82	120	90	72	60
	120	1.99	131	99	79	66
4916-107	60	1.58	105	78	63	52
	80	1.83	121	91	72	60
	90	1.94	128	96	77	64
	100	2.04	135	101	81	67
	120	2.24	148	111	89	74
4916-110	60	1.32	87	65	52	44
	80	1.52	100	75	60	50
	90	1.62	107	80	64	53
	100	1.70	112	84	67	56
	120	1.87	123	93	74	62
4916-115	60	1.85	122	91	73	61
	80	2.13	141	105	84	70
	90	2.26	149	112	89	75
	100	2.36	158	118	95	79
	120	2.61	172	129	103	86
4916-125	60	2.11	139	105	84	70
	80	2.44	161	121	97	81
	90	2.59	171	128	103	85
	100	2.73	180	135	108	90
	120	2.99	197	148	118	99
4916-132	60	2.36	156	117	93	78
	80	2.72	180	135	108	90
	90	2.89	191	143	114	95
	100	3.04	201	150	120	100
	120	3.34	220	165	132	110
4916-140	60	2.73	180	135	106	90
	80	3.15	208	156	125	104
	90	3.34	220	165	132	110
	100	3.52	232	174	139	116
	120	3.86	255	191	153	127
4916-147	60	2.97	196	147	118	98
	80	3.43	226	170	136	113
	90	3.64	240	180	144	120
	100	3.84	253	190	152	127
	120	4.21	278	208	167	139
4916-156	60	3.34	221	166	132	110
	80	3.86	255	191	153	127
	90	4.10	271	203	162	135
	100	4.32	285	214	171	143
	120	4.73	312	234	187	156
4916-166	60	3.70	244	183	146	122
	80	4.27	282	211	169	141
	90	4.53	299	224	179	149
	100	4.77	315	236	189	157
	120	5.23	345	259	207	173

****Conversion Factors for Spraying Solutions other than 28% Nitrogen for use only with the Above GPA tables**

Weight of Solution	Conversion Factor
7.0 lbs./gal.	0.81
8.0 lbs./gal.	0.87
8.34 lbs./gal. – Water	0.88
9.0 lbs./gal.	0.92
10.0 lbs./gal.	0.97

Weight of Solution	Conversion Factor
10.65 lbs./gal. – 28% N	1.00
11.00 lbs./gal.	1.01
12.0 lbs./gal.	1.06
14.0 lbs./gal.	1.14

Application Information Using 4916 Orifice Plates
(Table based on spraying 28% Nitrogen on 38 inch spacings)
****see conversion tables below for other weight solutions**

Orifice Plate No.	Pressure (psi)	Capacity Spraying 28% Nitrogen (GPM)	GPA Spraying 28% Nitrogen on 38 inch spacing			
			3 mph	4 mph	5 mph	6 mph
4916-37	60	0.18	9.6	7.2	5.8	4.8
	80	0.21	10.9	8.2	5.6	5.5
	90	0.23	12.0	9.0	7.2	8.0
	100	0.24	12.5	9.4	7.5	6.3
	120	0.26	13.5	10.2	8.1	6.8
4916-40	60	0.22	11.5	8.6	6.9	5.7
	80	0.25	13.0	9.8	7.8	6.5
	90	0.27	14.1	10.6	8.4	7.0
	100	0.28	14.6	10.9	8.8	7.3
	120	0.31	16.2	12.1	9.7	8.1
4916-43	60	0.25	12.9	9.7	7.8	6.5
	80	0.29	15.1	11.3	9.1	7.6
	90	0.30	15.6	11.7	9.4	7.8
	100	0.32	18.7	12.5	10.0	8.3
	120	0.35	18.2	13.7	10.9	9.1
4916-47	60	0.30	16.4	11.6	9.2	7.7
	80	0.34	17.7	13.3	10.6	8.9
	90	0.36	18.8	14.1	11.3	9.4
	100	0.38	20	14.9	11.9	9.9
	120	0.42	22	16.4	13.1	10.9
4916-49	60	0.32	16.8	12.4	9.9	8.3
	80	0.37	19.3	14.5	11.6	9.6
	90	0.39	20	15.2	12.2	10.2
	100	0.41	21	16.0	12.8	10.7
	120	0.45	23	17.6	14.1	11.7
4916-52	60	0.36	18.8	14.1	11.3	9.4
	80	0.42	22	16.4	13.1	10.9
	90	0.44	23	17.2	13.8	11.5
	100	0.47	24	18.4	14.7	12.2
	120	0.51	27	20	15.9	13.3
4916-55	60	0.41	21	15.9	12.7	10.6
	80	0.47	24	18.4	14.7	12.2
	90	0.50	28	20	15.6	13.0
	100	0.52	27	20	16.3	13.5
	120	0.57	30	22	17.8	14.9
4916-56	60	0.43	22	16.9	13.5	11.2
	80	0.50	26	20	15.6	13.0
	90	0.53	28	21	16.6	13.8
	100	0.58	29	22	17.5	14.6
	120	0.61	32	24	19.1	15.9
4916-59	60	0.47	24	18.2	14.6	12.2
	80	0.54	28	21	16.9	14.1
	90	0.57	30	22	17.8	14.9
	100	0.60	31	23	18.8	15.6
	120	0.66	34	26	21	17.2
4916-61	60	0.502	26	20	15.7	13.1
	80	0.58	30	23	18.1	15.1
	90	0.61	32	24	19.1	15.9
	100	0.65	34	25	20	16.9
	120	0.71	37	28	22	18.5

Orifice Plate No.	Pressure (psi)	Capacity Spraying 28% Nitrogen (GPM)	GPA Spraying 28% Nitrogen on 38 inch spacing			
			3 mph	4 mph	5 mph	6 mph
4916-65	60	0.56	29	22	17.6	14.6
	80	0.65	34	25	20	16.9
	90	0.69	36	27	22	18.0
	100	0.73	38	29	23	19.0
	120	0.80	42	31	25	21
4916-68	60	0.62	32	24	19.3	16.0
	80	0.71	37	28	22	18.5
	90	0.75	39	29	23	19.5
	100	0.80	42	31	25	21
	120	0.87	45	34	27	23
4916-70	60	0.66	34	26	21	17.2
	80	0.76	40	30	24	19.8
	90	0.81	42	32	25	21
	100	0.85	44	33	27	22
	120	0.93	48	36	29	24
4916-75	60	0.75	39	29	23	19.5
	80	0.86	45	34	27	22
	90	0.92	48	36	29	24
	100	0.97	51	38	30	25
	120	1.06	55	41	33	28
4916-80	60	0.85	44	33	27	22
	80	0.99	52	39	31	26
	90	1.05	55	41	33	27
	100	1.10	57	43	34	29
	120	1.21	83	47	38	32
4916-83	60	0.97	50	38	30	25
	80	1.12	58	44	35	29
	90	1.19	62	47	37	31
	100	1.25	65	49	39	33
	120	1.37	71	54	43	36
4916-89	60	1.06	55	41	33	28
	80	1.22	64	48	38	32
	90	1.29	67	50	40	34
	100	1.36	71	53	43	35
	120	1.49	78	58	47	39
4916-93	60	1.18	61	46	37	31
	80	1.38	71	53	43	35
	90	1.44	75	55	45	38
	100	1.52	79	59	48	40
	120	1.67	87	65	52	44
4916-95	60	1.23	64	48	39	32
	80	1.42	74	55	44	37
	90	1.51	79	59	47	39
	100	1.59	83	62	50	41
	120	1.74	91	68	54	45
4916-98	60	1.35	70	53	42	35
	80	1.55	81	81	48	40
	90	1.65	86	64	52	43
	100	1.74	91	68	54	45
	120	1.90	99	74	59	50

Orifice Plate No.	Pressure (psi)	Capacity Spraying 28% Nitrogen (GPM)	GPA Spraying 28% Nitrogen on 38 inch spacing			
			3 mph	4 mph	5 mph	6 mph
4916-103	60	1.41	75	56	44	37
	80	1.63	85	64	51	42
	90	1.72	90	67	54	45
	100	1.82	95	71	57	47
	120	1.99	104	78	62	52
4916-107	60	1.68	83	62	50	41
	80	1.83	95	72	57	48
	90	1.94	101	76	61	51
	100	2.04	105	80	64	53
	120	2.24	117	88	70	58
4916-110	60	1.32	69	52	41	34
	80	1.62	79	59	48	40
	90	1.62	84	63	51	42
	100	1.70	89	66	63	44
	120	1.87	97	75	68	49
4916-115	60	1.85	96	72	58	48
	80	2.13	111	83	87	55
	90	2.28	118	88	71	59
	100	2.39	125	93	75	62
	120	2.51	136	102	82	68
4916-125	60	2.11	110	83	88	55
	80	2.44	127	95	76	64
	90	2.59	195	101	81	87
	100	2.73	142	107	85	71
	120	2.99	156	117	93	78
4916-132	60	2.36	123	92	74	61
	80	2.72	142	106	85	71
	90	2.89	151	113	90	75
	100	3.04	158	119	95	79
	120	3.34	174	131	104	87
4916-140	60	2.73	142	107	85	71
	80	3.15	184	123	98	82
	90	3.34	174	131	104	87
	100	3.52	183	138	110	92
	120	3.86	201	151	121	101
4916-147	60	2.97	155	116	93	77
	80	3.43	179	134	107	89
	90	3.64	190	142	114	85
	100	3.84	200	150	120	100
	120	4.21	219	165	132	110
4916-156	60	3.34	174	131	105	87
	80	3.86	201	151	121	101
	90	4.10	214	160	128	107
	100	4.32	225	169	135	113
	120	4.73	248	185	148	123
4916-166	60	3.70	193	144	116	96
	80	4.27	222	167	133	111
	90	4.63	236	177	142	118
	100	4.77	249	186	149	124
	120	5.23	273	204	164	136

****Conversion Factors for Spraying Solutions other than 28% Nitrogen for use only with the Above GPA tables**

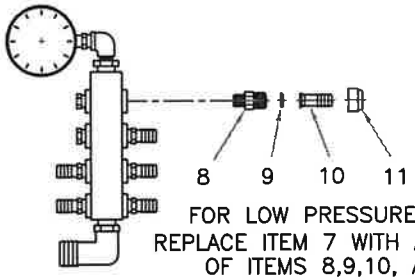
Weight of Solution	Conversion Factor
7.0 lbs./gal.	0.81
8.0 lbs./gal.	0.87
8.34 lbs./gal. – Water	0.88
9.0 lbs./gal.	0.92
10.0 lbs./gal.	0.97

Weight of Solution	Conversion Factor
10.65 lbs./gal. – 28% N	1.00
11.00 lbs./gal.	1.01
12.0 lbs./gal.	1.06
14.0 lbs./gal.	1.14

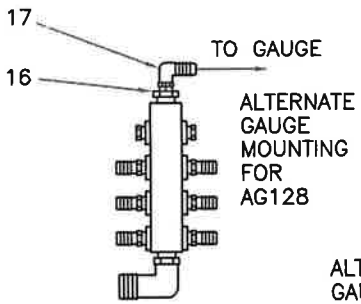
MNFLDSTNLS
ISSUE JUNE/2008

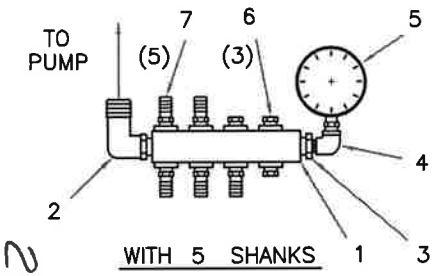
MANIFOLD ASSEMBLY ILLUSTRATION

WITH STAINLESS STEEL MANIFOLD

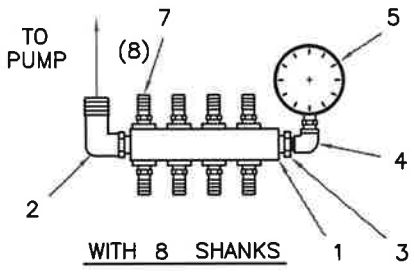


FOR LOW PRESSURE SYSTEM
REPLACE ITEM 7 WITH AN ASSEMBLY
OF ITEMS 8,9,10, AND 11

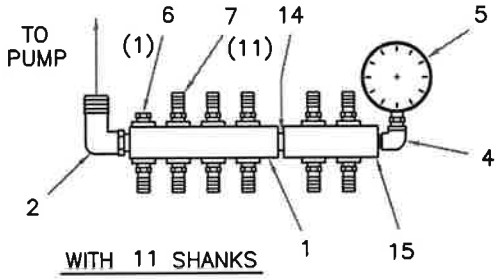




WITH 5 SHANKS

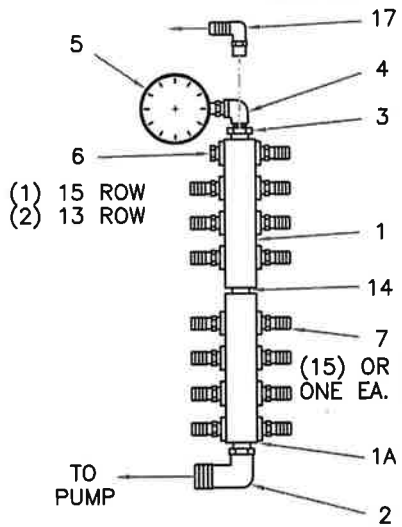


WITH 8 SHANKS

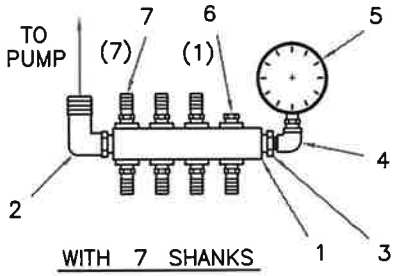


WITH 11 SHANKS

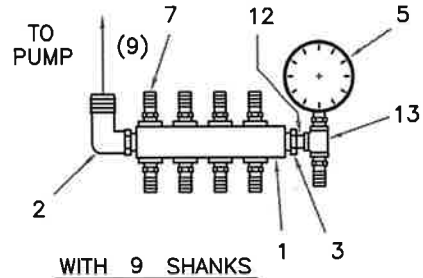
ALTERNATE
GAUGE
MOUNTING



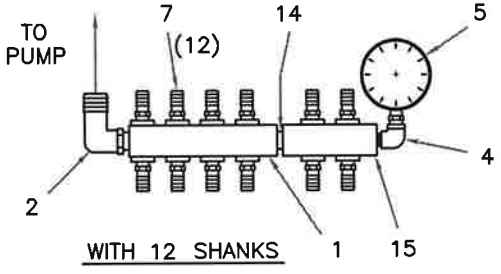
WITH 15 SHANKS
(OR) 13 SHANKS



WITH 7 SHANKS



WITH 9 SHANKS

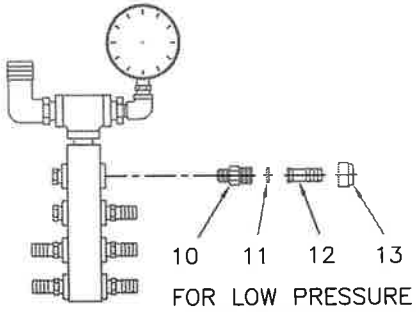


WITH 12 SHANKS

ITEM	PART NO.	DESCRIPTION	QTY
1	47008033	MANIFOLD, 8 OUTLET–W/ MTG. BRKT.	1
1A	47007490	MANIFOLD, 8 OUTLET–W/O MTG. BRKT.	1
2	200367	HOSEBARB ELBOW, 1/2 NPT. X 1	1
3	200810	RED. BUSHING, 1/2 X 1/4 NPT.	*
4	200771	STREET ELBOW, 1/4 NPT. X 90	*
5	500160	PRESSURE GAUGE, 0 TO 160	1
6	200826	PLUG, 1/4 NPT.	*
7	100859	HOSEBARB, 1/4 NPT. X 1/2	*

FOR QUANTITIES ON ITEMS MARKED *
REFER TO THE ILLUSTRATION THAT
SHOWS YOUR MANIFOLD ARRANGEMENT

ITEM	PART NO.	DESCRIPTION	QTY
8	500192	ADAPTER, NOZZLE BODY {LO–PRESSURE}	*
9	ORIFICE	REFER TO ORIFICE CHART { ONLY }	*
10	500643	HOSEBARB INSERT, 1/2" {LO–PRESSURE}	*
11	503127	CAP, HOSEBARB INSERT { ONLY }	*
12	200712	CLOSE NIPPLE, 1/4 NPT	1
13	200786	TEE, 1/4 NPT.	1
14	200714	CLOSE NIPPLE, 1/2 NPT.	1
15	47008035	MANIFOLD, (4) PORT	1
16	200810	RED. BUSHING, 1/2 X 1/4 NPT.	1
17	200348	HOSEBARB ELBOW, 1/4 NPT, X 1/2 (POLY)	1



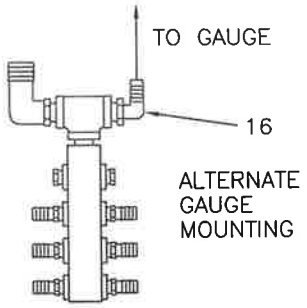
FOR LOW PRESSURE SYSTEM
REPLACE ITEM 9 WITH AN ASSEMBLY
OF ITEMS 10,11,12 AND 13

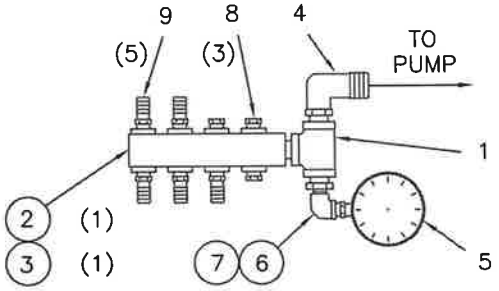
MANIFOLD ASSEMBLY ILLUSTRATION

WITH NYLON MANIFOLD
USED ON 6000 AND 6200
SERIES APPLICATORS

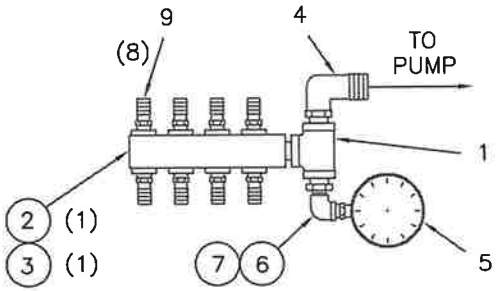
FOR QUANTITIES ON ITEMS MARKED *
REFER TO THE ILLUSTRATION THAT
SHOWS YOUR MANIFOLD ARRANGEMENT

MNFLDNYL
OBSOLETE
FOR 2004

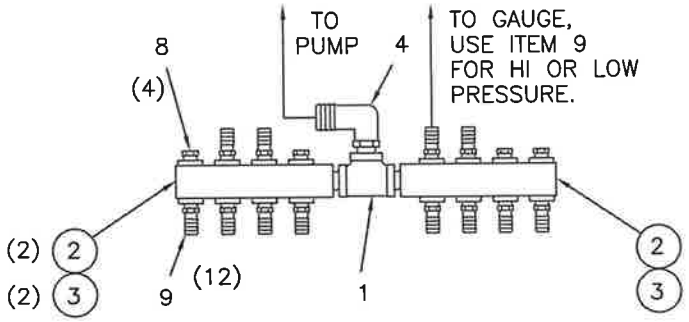




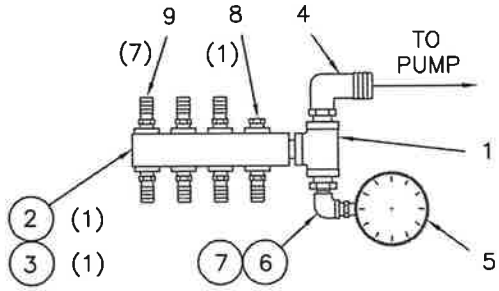
WITH 5 SHANKS



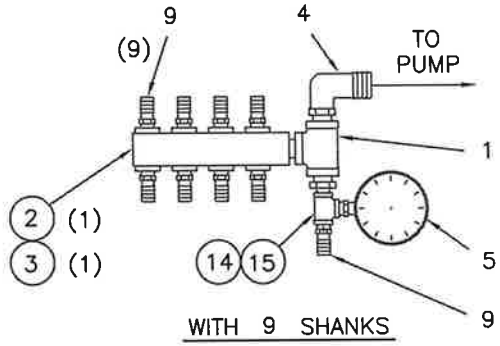
WITH 8 SHANKS



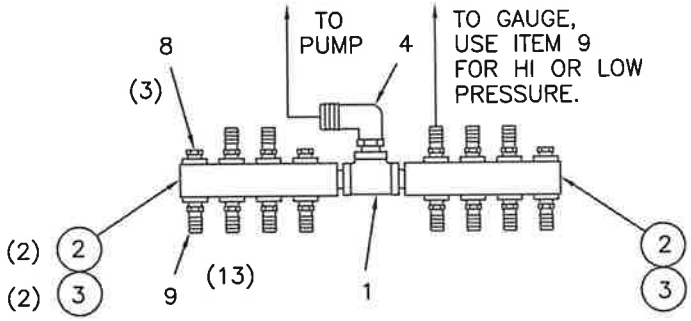
WITH 11 SHANKS



WITH 7 SHANKS



WITH 9 SHANKS



WITH 12 SHANKS

ITEM	PART NO.	DESCRIPTION	QTY
1	47002631	MANIFOLD STAND, STANDARD	1
	47008060	MANIFOLD STAND, WITH S.S. TEE	OPT.
2	200458	MANIFOLD, 8 OUTLET	*
3	200714	CLOSE NIPPLE, 1/2 NPT. S.S.	*
4	200367	HOSEBARB ELBOW, 1/2 NPT. X 1	1
5	100347	PRESSURE GAUGE, 0 TO 160	1
6	200540	STREET ELBOW, 1/4 NPT. X 90	1
7	2050025	RED. BUSHING, 1/2 X 1/4 NPT.	*
8	200480	PLUG, 1/4 NPT.	*

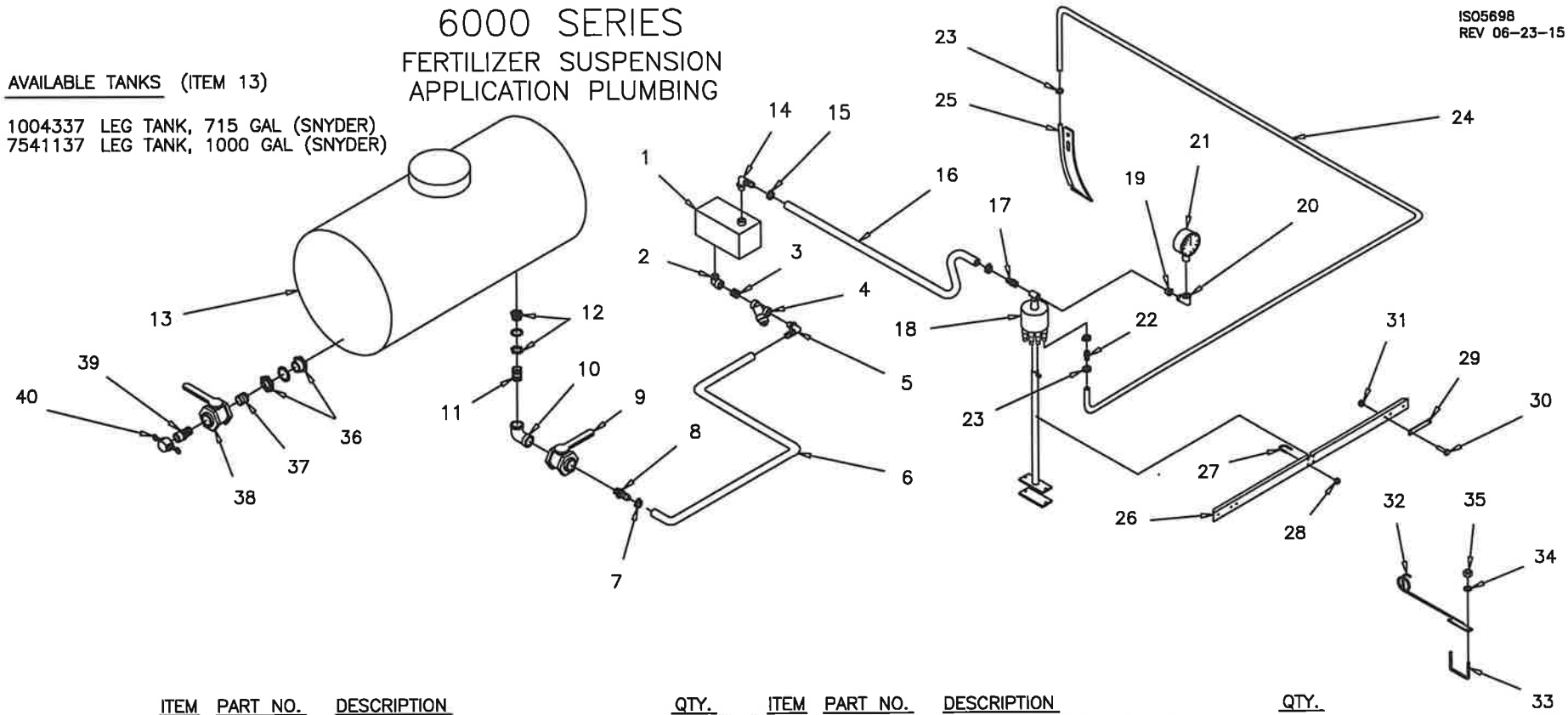
ITEM	PART NO.	DESCRIPTION	QTY
9	200294	HOSEBARB, 1/4 NPT. X 1/2	*
10	500122	ADAPTER, NOZZLE BODY { LOW	*
11	ORIFICE	REFER TO ORIFICE CHART { PRESSURE	*
12	505140	HOSEBARB INSERT, 1/2" { ONLY	*
13	200428	CAP, HOSEBARB INSERT	*
14	200530	REDUCING NIPPLE, 1/2 X 1/4 NPT	1
15	200488	TEE, 1/4 NPT.	1
16	200362	HOSEBARB ELBOW, 1/2 NPT. X 1/2	1 OPT

6000 SERIES
FERTILIZER SUSPENSION APPLICATION PLUMBING

ISO5698
REV 06-23-15

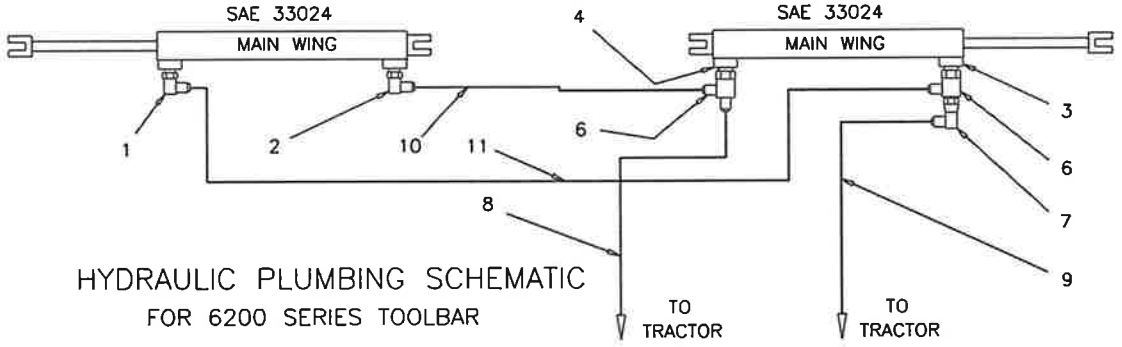
AVAILABLE TANKS (ITEM 13)

1004337 LEG TANK, 715 GAL (SNYDER)
7541137 LEG TANK, 1000 GAL (SNYDER)

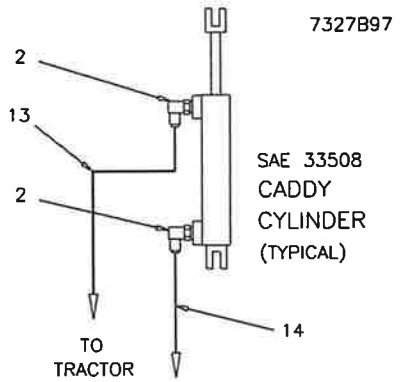


ITEM	PART NO.	DESCRIPTION	QTY.
1	20024405	PUMP ASSEMBLY, LO-PRESSURE	1
2	200888	STREET ELBOW, 1 1/2 NPT X 90	1
3	200556	CLOSE NIPPLE, 1 1/2 NPT.	1
4	200056	LINE STRAINER, 1 1/2 X 1 1/2 NPT.	1
5	200386	HOSEBARB ELBOW, 1 1/2 X 1 1/2	1
6	12012705	SOLUTION HOSE, 1 1/2 X 72"	1
7	200256	HOSE CLAMP, 1 5/16 TO 2 1/4	2
8	200334	HOSEBARB, 1 1/2 X 1 1/2	1
9	201150	BALL VALVE, 1 1/2 NPT.	1
10	200888	STREET ELBOW, 1 1/2 NPT.	1
11	200556	CLOSE NIPPLE, 1 1/2 NPT.	1
12	501591	TANK BUNG ASSEMBLY, 1 1/2 NPT.	1
13	TANK	AS SPECIFIED, SEE LIST ABOVE	1
14	200380	HOSEBARB ELBOW, 1 X 1	1
15	200248	HOSE CLAMP, 11/16 TO 1 1/2	2
16	10040000	SUCTION HOSE, 1" X 18 FT.	1
17	200325	HOSEBARB, 3/4 NPT. X 1	1
18	504018	DISTRIBUTION POT, 8 OUTLET	1
	504025	DISTRIBUTION POT, 5 OUTLET	OPT.
	504016	DISTRIBUTION POT, 6 OUTLET	OPT.
	504037	DISTRIBUTION POT, 7 OUTLET	OPT.
	504019	DISTRIBUTION POT, 9 OUTLET	OPT.
19	275025	REDUCING BUSHING, 3/4 X 1/4 NPT S.S.)	1
20	200771	STREET ELBOW, 1/4 NPT. X 90	1

ITEM	PART NO.	DESCRIPTION	QTY.
21	500160	PRESSURE GAUGE, 0 TO 160 PSI	1
22	200504	HOSEBARB JOINER, 3/4 X 3/4	8
	NOTE: QTY. REQ'D. EQUALS 1 X NO. OF OUTLETS		
23	200244	HOSE CLAMP, 5/16 TO 7/8	24
	NOTE: QTY. REQ'D. EQUALS 3 X NO. OF OUTLETS		
24	100806	HOSE, BRAIDED EVA, (3/4" X 100 FT.)	1
25	KNIFE	AS SPECIFIED	
26	47008063	SUPPORT BAR, (HOSES)	1
27	47008065	U-BOLT, 5/16-18NC.	2
28	18496400	5/16-18NC. FLANGE-NUT	4
29	47008064	CLAMP STRAP	2
30	18056430	5/16-18NC. X 2 BOLT	4
31	18457500	5/16-18NC. SELF-LOCKING NUT	4
32	47008066	HOSE SUPPORT PIGTAIL	2
33	47001028	U-BOLT, 3/8-16NC.	2
34	18891200	3/8 LOCKWASHER	4
35	18436800	3/8-16NC. HEX. NUT	4
	21280	FORCE-FILL PACKAGE (ITEMS 36 TO 40)	OPT.
36	20020019	TANK BUNG, 2"	1
37	200557	CLOSE NIPPLE, 2 NPT.	1
38	200014	BALL VALVE, 2 NPT	1
39	200170	MALE ADAPTER, 2 NPT.	1
40	200172	CAP, 2 NPT.	1



HYDRAULIC PLUMBING SCHEMATIC
FOR 6200 SERIES TOOLBAR



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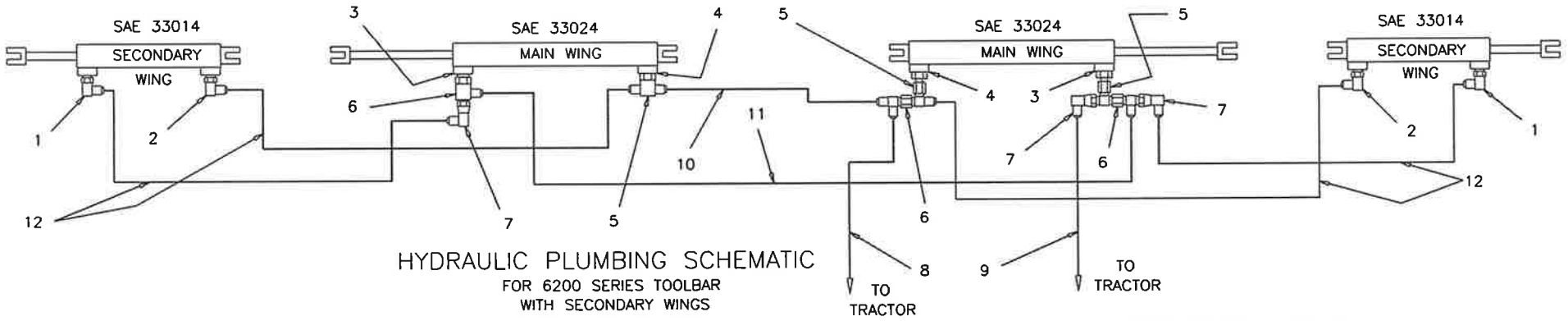
HOSE PACKAGE NO. 6200X12

ITEM	PART NO.	DESCRIPTION	QTY	
8	608168	HOSE, 3/8 X 168 – 1/2 MPT X # 6 JICFS	1	
9	609161	HOSE, 3/8 X 213 – 1/2 MPT X # 6 JIC.FS	1	
10	609040	HOSE, 3/8 X 48 – #6 JICFS BOTH ENDS	1	
11	608108	HOSE, 3/8 X 108 – #6 JICFS BOTH ENDS	1	
13	609161	HOSE, 3/8 X 213 – 1/2 MPT X # 6 JICFS	1	(CADDY CYL)
14	608182	HOSE, 3/8 X 182 – 1/2 MPT X # 6 JICFS	1	(CADDY CYL)

FITTING PACKAGE NO. 620232

ITEM	PART NO.	DESCRIPTION	QTY
1	6801-6-8R	ADAPTER ELBOW #6 MJIC X #8 M O-RING WITH .045 ORIFICE (BLACK FINISH)	1
2	6801-6-8	ADAPTER ELBOW #6 MJIC X #8 M O-RING	3
3	6400-6-8R	CONNECTOR, #6 MJIC X #8 M O-RING WITH .045 ORIFICE (BLACK FINISH)	1
4	6400-6-8	CONNECTOR, #6 MJIC X #8 M O-RING	1
5			
6	6602-6	RUN TEE, #6 MJIC X #6 FJIC SWIVEL	2
7	6500-6	ELBOW #6 MJIC X #6 FJIC SWIVEL	1



HYDRAULIC PLUMBING SCHEMATIC
FOR 6200 SERIES TOOLBAR
WITH SECONDARY WINGS

HOSE PACKAGE NO. 6202X12

ITEM	PART NO.	DESCRIPTION	QTY	
8	608168	HOSE, 3/8 X 168 – 1/2 MPT X # 6 JICFS	1	
9	609161	HOSE, 3/8 X 213 – 1/2 MPT X # 6 JICFS	1	
10	609040	HOSE, 3/8 X 48 #6 JICFS BOTH ENDS	1	
11	608108	HOSE, 3/8 X 108 #6 JICFS BOTH ENDS	1	
12	608094	HOSE, 3/8 X 112 #6 JICFS BOTH ENDS	4	
13	609161	HOSE, 3/8 X 213 – 1/2 MPT X # 6 JICFS	1	(CADDY CYL)
14	608182	HOSE, 3/8 X 182 – 1/2 MPT X # 6 JICFS	1	(CADDY CYL)

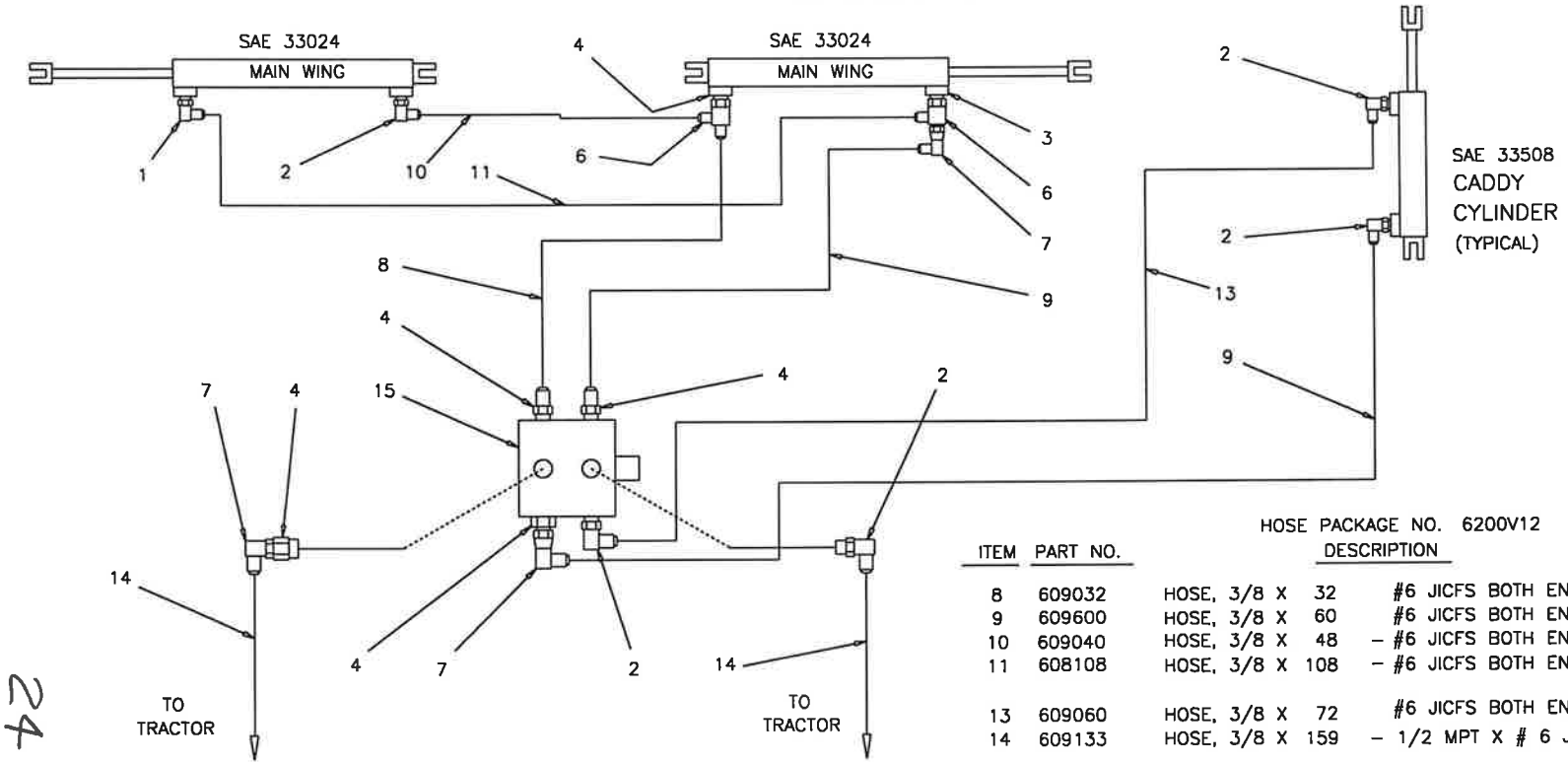
FITTING PACKAGE NO. 620242

ITEM	PART NO.	DESCRIPTION	QTY
1	6801-6-8R	ADAPTER ELBOW #6 MJIC X #8 M O-RING WITH .045 ORIFICE (BLACK FINISH)	2
2	6801-6-8	ADAPTER ELBOW #6 MJIC X #8 M O-RING	4
3	6400-6-8R	CONNECTOR, #6 MJIC X #8 M O-RING WITH .045 ORIFICE (BLACK FINISH)	2
4	6400-6-8	CONNECTOR, #6 MJIC X #8 M O-RING	2
5	6600-6	BRANCH TEE, #6 MJIC X #6 FJIC SWIVEL	3
6	6602-6	RUN TEE, #6 MJIC X #6 FJIC SWIVEL	3
7	6500-6	ELBOW #6 MJIC X #6 FJIC SWIVEL	3

HYDRAULIC PLUMBING SCHEMATIC

FOR 6200 SERIES TOOLBAR

WITH SELECTOR VALVE



HOSE PACKAGE NO. 6200V12

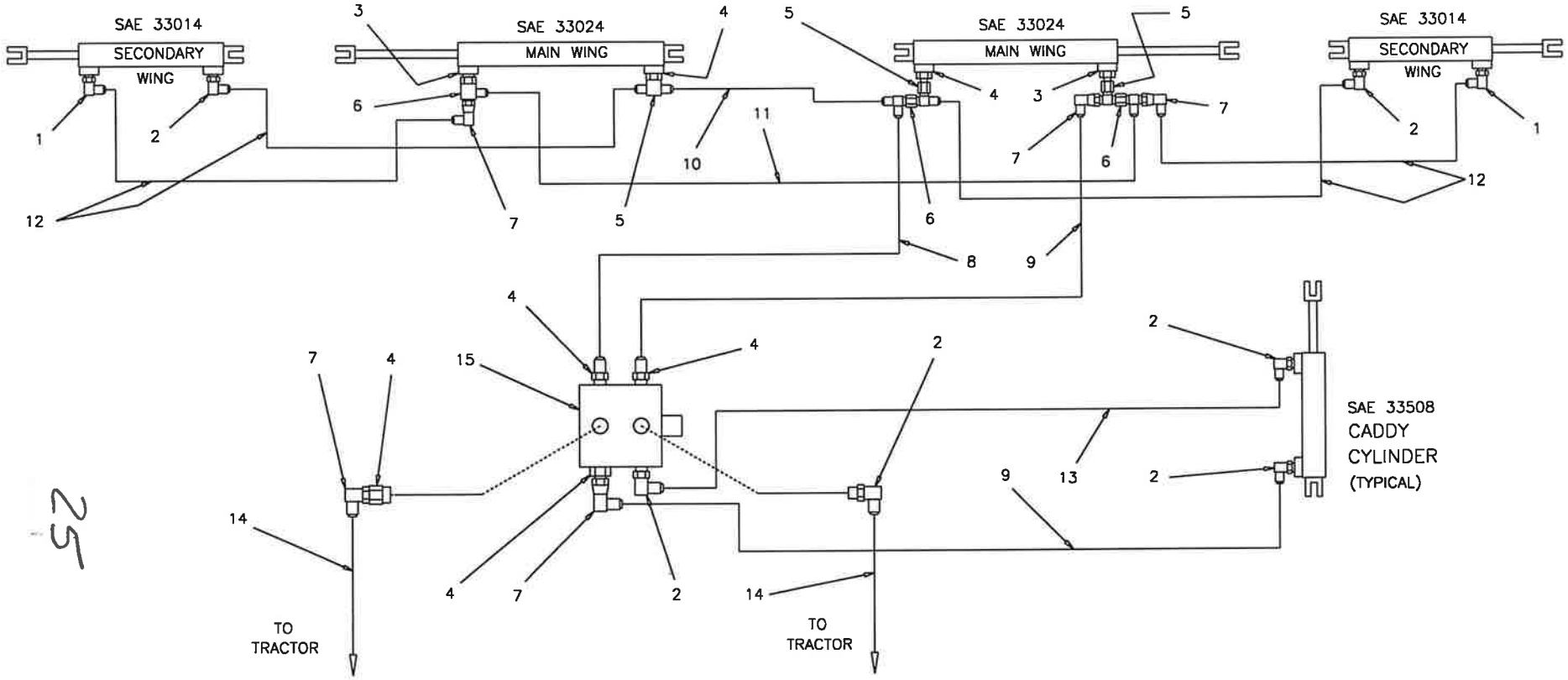
ITEM	PART NO.	DESCRIPTION	QTY
8	609032	HOSE, 3/8 X 32 #6 JICFS BOTH ENDS	1
9	609600	HOSE, 3/8 X 60 #6 JICFS BOTH ENDS	2
10	609040	HOSE, 3/8 X 48 – #6 JICFS BOTH ENDS	1
11	608108	HOSE, 3/8 X 108 – #6 JICFS BOTH ENDS	1
13	609060	HOSE, 3/8 X 72 #6 JICFS BOTH ENDS	1
14	609133	HOSE, 3/8 X 159 – 1/2 MPT X # 6 JICFS	2

FITTING PACKAGE NO. 620V32

ITEM	PART NO.	DESCRIPTION	QTY
1	6801-6-8R	ADAPTER ELBOW #6 MJIC X #8 M O-RING WITH .045 ORIFICE (BLACK FINISH)	1
2	6801-6-8	ADAPTER ELBOW #6 MJIC X #8 M O-RING	5
3	6400-6-8R	CONNECTOR, #6 MJIC X #8 M O-RING WITH .045 ORIFICE (BLACK FINISH)	1
4	6400-6-8	CONNECTOR, #6 MJIC X #8 M O-RING	5
6	6602-6	RUN TEE, #6 MJIC X #6 FJIC SWIVEL	2
7	6500-6	ELBOW #6 MJIC X #6 FJIC SWIVEL	3
15	100902	SELECTOR VALVE ASSEMBLY	1

HYDRAULIC PLUMBING SCHEMATIC

FOR 6200 SERIES TOOLBAR
WITH SECONDARY WINGS WITH SELECTOR VALVE



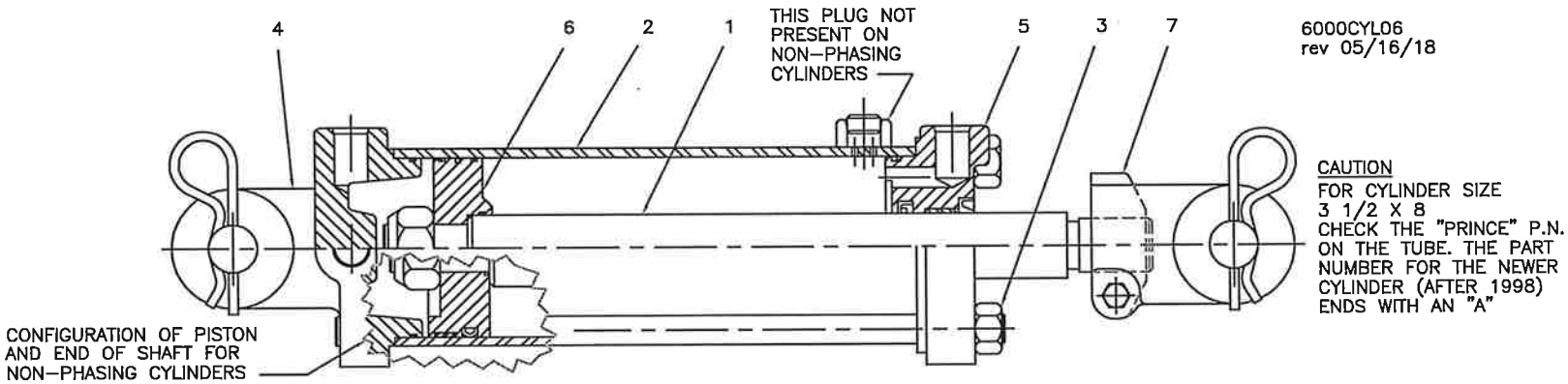
25

HOSE PACKAGE NO. 6202V12

ITEM	PART NO.	DESCRIPTION	QTY
8	609032	HOSE, 3/8 X 32 – #6 JICFS BOTH ENDS	1
9	609600	HOSE, 3/8 X 60 – #6 JICFS BOTH ENDS	2
10	609040	HOSE, 3/8 X 48 – #6 JICFS BOTH ENDS	1
11	608108	HOSE, 3/8 X 108 – #6 JICFS BOTH ENDS	1
12	608094	HOSE, 3/8 X 112 – #6 JICFS BOTH ENDS	4
13	609060	HOSE, 3/8 X 72 – #6 JICFS BOTH ENDS	1
14	609133	HOSE, 3/8 X 159 – 1/2 MPT X # 6 JICFS	2

FITTING PACKAGE NO. 620V42

ITEM	PART NO.	DESCRIPTION	QTY
1	6801-6-8R	ADAPTER ELBOW #6 MJIC X #8 M O-RING WITH .045 ORIFICE (BLACK FINISH)	2
2	6801-6-8	ADAPTER ELBOW #6 MJIC X #8 M O-RING	6
3	6400-6-8R	CONNECTOR, #6 MJIC X #8 M O-RING WITH .045 ORIFICE (BLACK FINISH)	2
4	6400-6-8	CONNECTOR, #6 MJIC X #8 M O-RING	6
5	6600-6	BRANCH TEE, #6 MJIC X #6 FJIC SWIVEL	3
6	6602-6	RUN TEE, #6 MJIC X #6 FJIC SWIVEL	3
7	6500-6	ELBOW #6 MJIC X #6 FJIC SWIVEL	5
15	100902	SELECTOR VALVE ASSEMBLY	1



ITEM NO.	REPAIR PART DESCRIPTION	CYL. 1 1/2 X 4 47005437 (AK–284)	CYL. 3 1/2 X 8 47300091 A350080BBAAA07A	CYLINDER 4 X 8 47300092 A400080BBAGA07A	CYLINDER 3 X 24 47300093 B300240BBAAA07F	CYLINDER 3 X 14 47005491 B300140BBAAA070A	QTY. REQ'D.
1	PISTON ROD	010300124	010700682	011015438A	010729750A	010719750A	1
2	TUBE	060800136	051710063A	051910563A	051526063A	051526063A	1
3	TIE ROD ASSEMBLY	———	170201123	170301134	170201282	170201282	4
4	BUTT	———	1417005SF	1419005SF	1415005SF	1415005SF	1
5	GLAND ASSEMBLY	080800083	0817BBGSF	0819BBNSF	0815BBGSF	0815BBGSF	1
6	PISTON	070800071	071700174	071900260	071500244	071500244	1
7	CLEVIS ASSEMBLY	100000444	100000577	110000326	100000423	100000423	1
	REPAIR KIT	470AK284 (PRE 2018) (CAST CLEVIS) 20214 (POST 2018) (WELDED CLEVIS)	47033500	47034000	47033000	47033000	1

Repair kit items not available individually.

TIE ROD DISASSEMBLY–/–ASSEMBLY PROCEDURE.

With the cylinder removed from the machine, cleaned, drained of oil and fully retracted, proceed as follows.

DISASSEMBLY,

1. Secure the cylinder in a vice or other method to prevent rotation. Clean the immediate area so the parts can be laid out.
2. Remove the tie rod nuts. Pull the shaft assembly from the cylinder. Remove the tube item (2).
3. Loosen the clevis nut and remove the clevis item (7) from the shaft assembly.
4. Place the shaft assembly in a vice with brass or copper jaws so as not to damage the shaft.
5. Remove all seals from the butt, (item 4) gland assembly, (item 5) and piston (item 6) for replacement. Clean and inspect all parts for damage, (nicks, scratches, cracks etc.). Replace as necessary. If you have any question please contact Prince Engineering (712–277–4061)

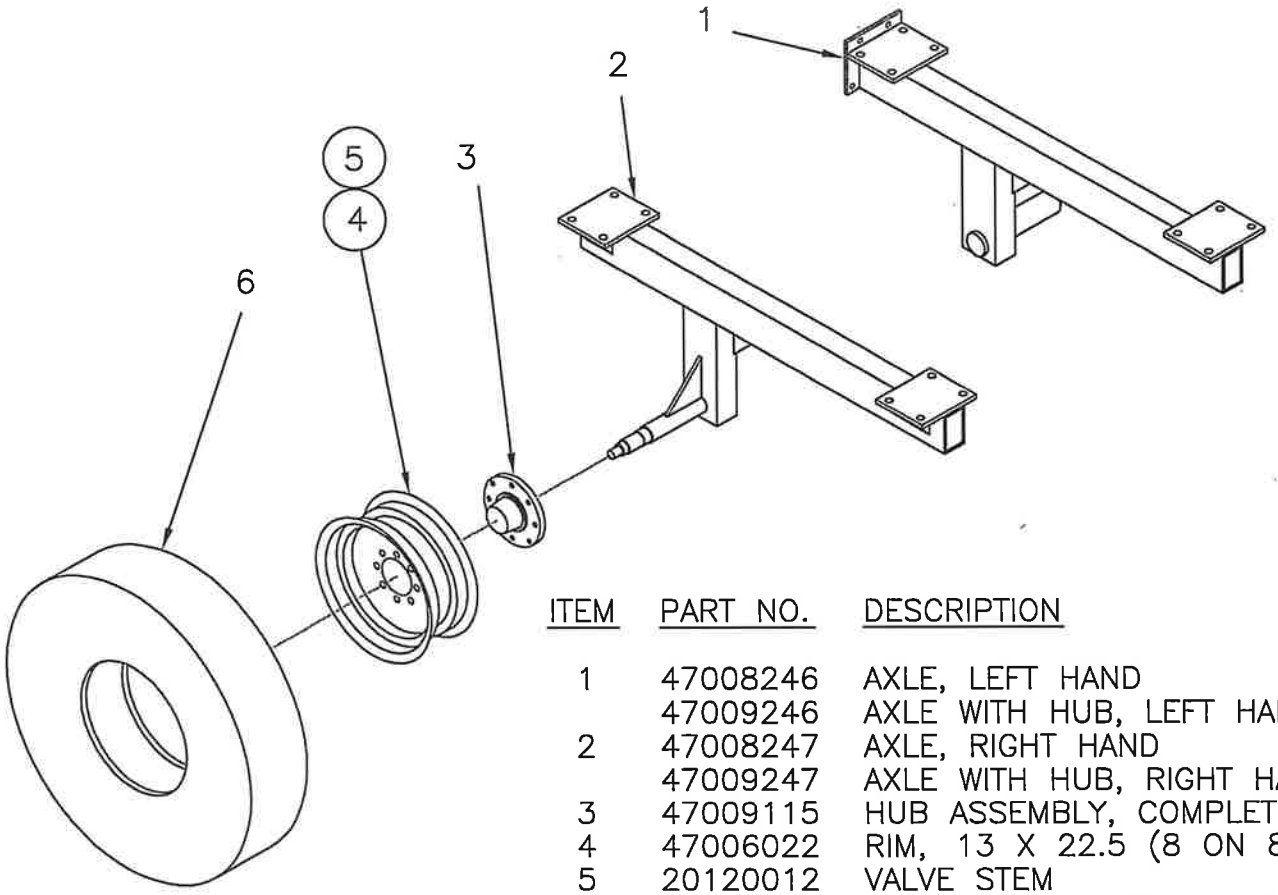
REASSEMBLY,

1. Replace all the seals on items (4), (5), and (6) except, for non–phasing cylinders do not replace the small o–ring on the ID of the piston item (6) until you are ready to attach the shaft item (1).
2. For non–phasing cylinders, place the small o–ring seal for the piston over the shaft turndown. Apply a light coat of grease to the seal. Slip the piston item (6) onto the turndown with the o–ring counterbore towards the shaft shoulder. Take care not to pinch the o–ring between the piston and the shoulder.
3. Replace the shaft end nut and secure.
4. Apply a light coat of grease to the seals on the gland item (5) and slip the gland over the shaft end. Be very carefull not to damage the seals. Slip the entire assembly into the lightly oiled tube, item (2) with the piston first making sure the tube slips over the OD seals of the gland.
5. Take the entire assembly from step 4 and slip the tube over the OD seal on the butt item (4). Align the ports in the butt and the gland and assemble the nuts to the tie rods and torque uniformly.
6. Test the reassembled cylinder for leaks and install in your machine. If you have any problems please contact Prince Engineering (712–277–4061)

AXLE ASSEMBLY 7500 lb. CAPACITY

(15000 lb. CADDY CAP.)

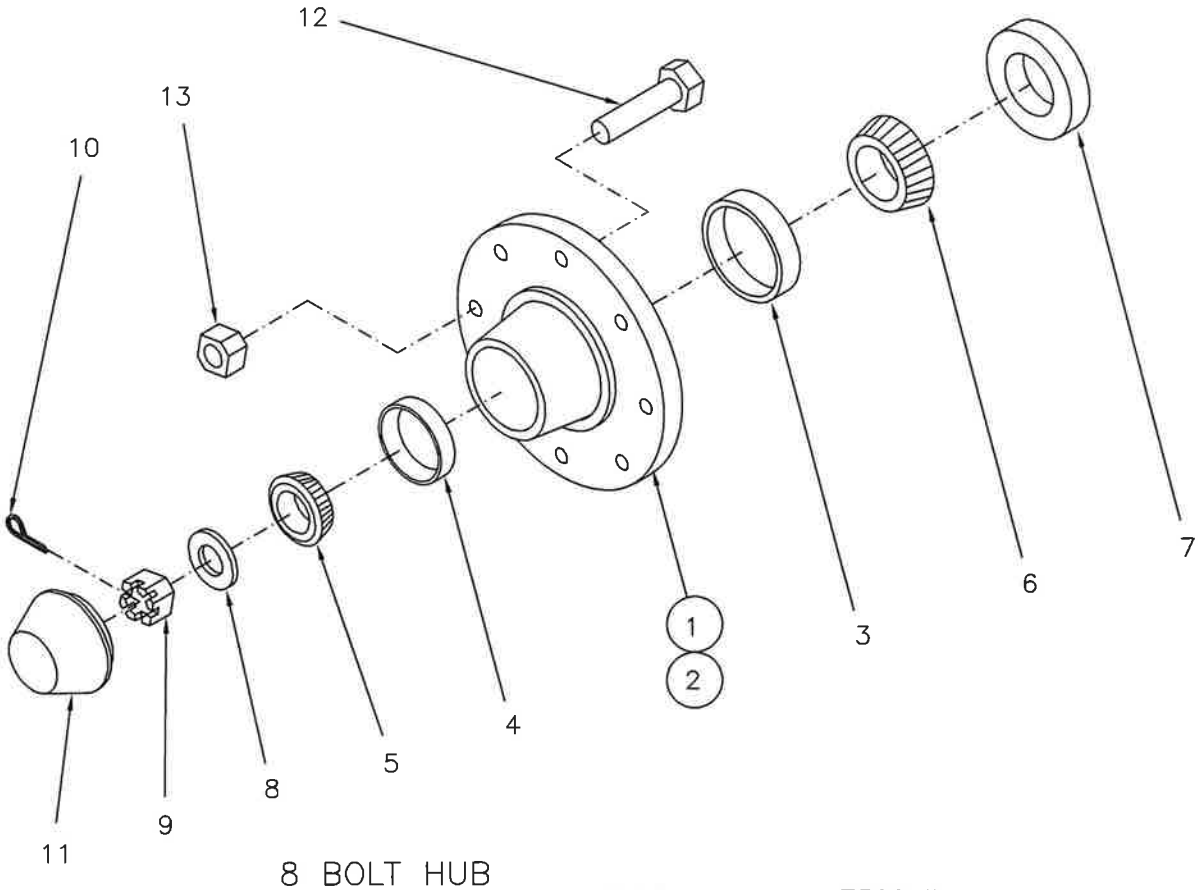
IS060



ITEM	PART NO.	DESCRIPTION	QTY.
1	47008246	AXLE, LEFT HAND	1
	47009246	AXLE WITH HUB, LEFT HAND	
2	47008247	AXLE, RIGHT HAND	1
	47009247	AXLE WITH HUB, RIGHT HAND	
3	47009115	HUB ASSEMBLY, COMPLETE	2
4	47006022	RIM, 13 X 22.5 (8 ON 8)	2
5	20120012	VALVE STEM	2
6	20100021	TIRE, 385-65R X 22.5 (8000 lb.)	2
	40021	TIRE, MOUNTED (INC. ITEMS 4,5,6)	

HUB ASSEMBLIES

6200HUB
06/04/25



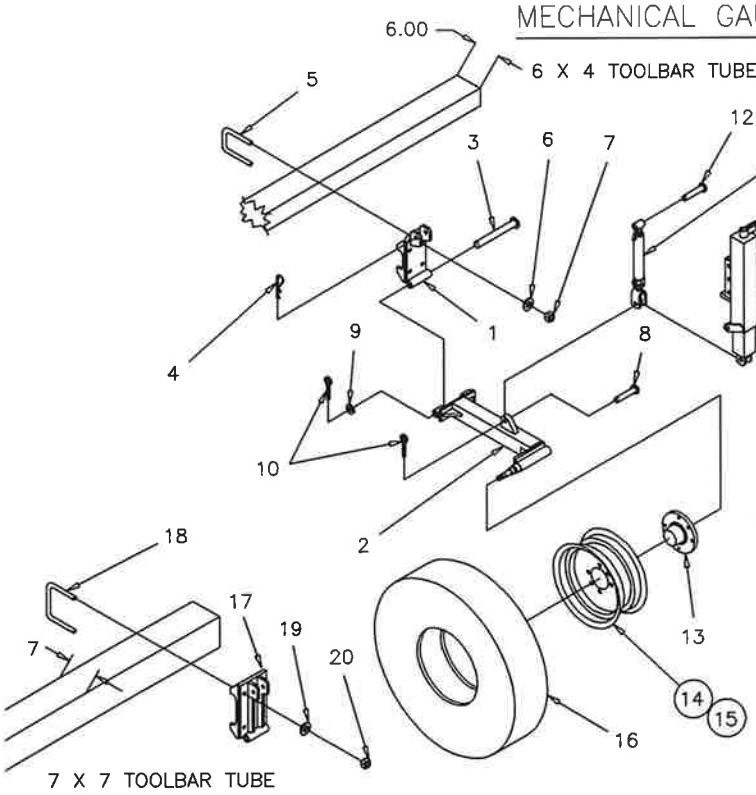
8 BOLT HUB

ITEM	DESCRIPTION	6000 lb. CAPACITY PART NO.	7500 lb. CAPACITY PART NO.	QTY.
1	HUB COMPLETE MFGR. PART NUMBER INCLUDES ITEMS 2 THRU 7 AND 11 THRU 13 ONLY	47009712 HD812-5	47009115 H817	1
2	HUB WITH RACES	47005712	47005115	1
3	INNER BEARING RACE	47005372	47005328	1
4	OUTER BEARING RACE	47005272	47005131	1
5	OUTER BEARING CONE	47005279	47005349	1
6	INNER BEARING CONE	47005378	47005387	1
7	GREASE SEAL	47005017	47005776	1
8	SPINDLE WASHER	18000017	18000023	1
9	SPINDLE NUT	18489100	18000038	1
10	COTTER PIN 3/16 X 2	18560830	18560830	1
11	DUST CAP	47005917	47005212	1
12	LUG BOLT	47005041	47005735	8
13	LUG NUT	47005040	47005736	8

MECHANICAL GAUGE WHEEL ASSEMBLY

MCHGAWHL
REV C

REV 06/04/25



NOTES

"SET" OF (2) GAUGE WHEEL ASSEMBLIES

ASSEMBLY NO. 47008001 INCLUDES
ALL STANDARD COMPONENTS

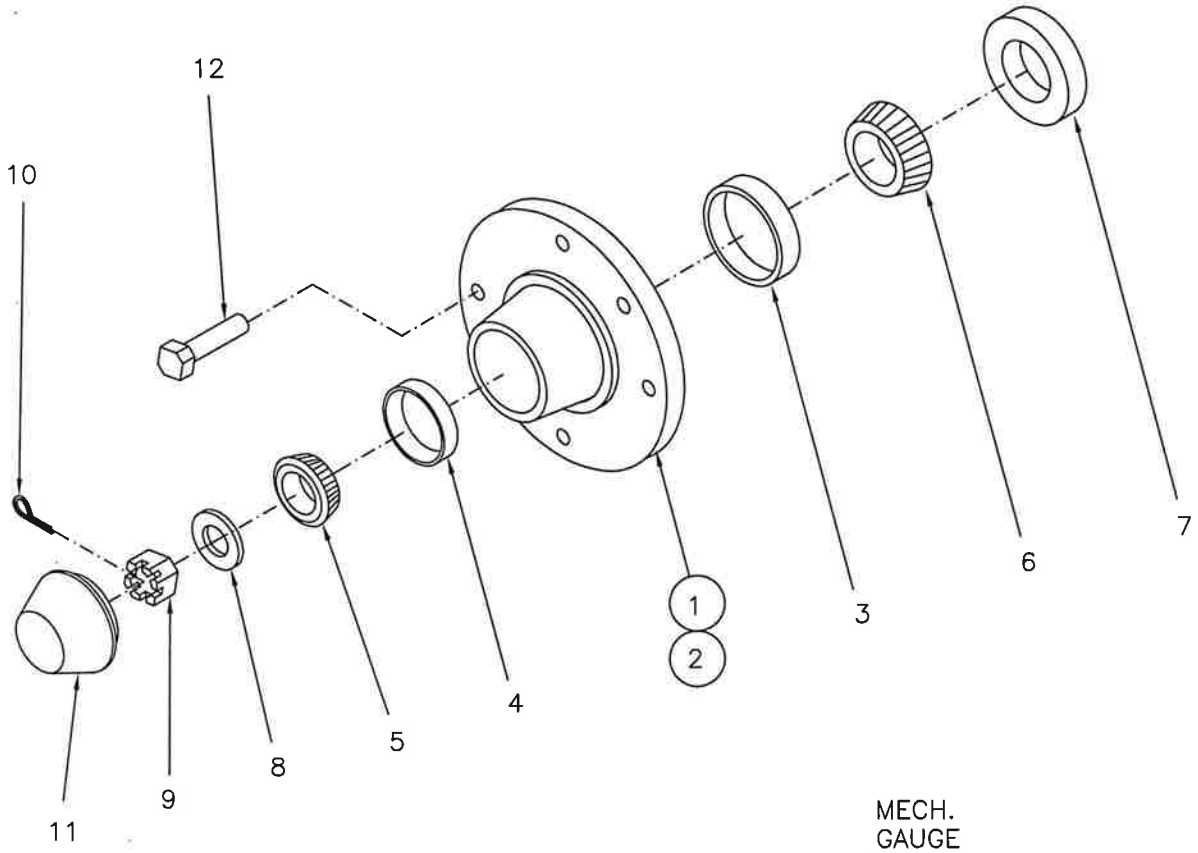
ASSEMBLY NO. 47998001 INCLUDES
ALL STANDARD COMPONENTS EXCEPT
USE HEAVY JACK. P.N. 47008514

ASSEMBLY NO. 47888001 INCLUDES
HEAVY JACK P.N. 47008514
PIVOT ARM WITH
2 INCH SPINDLE P.N. 47019335
6 BOLT HUB P.N. 47009611
6 BOLT WHEEL P.N. 47005589
8 PLY TIRE P.N. 10261

ASSEMBLY NO. 47648001
ALL STANDARD COMPONENTS
EXCEPT DELETE MTG BRACKET 47010412 AND
HARDWARE ITEMS 5, 6, AND 7
REPLACE WITH MTG BRACKET 47004742 AND
HARDWARE ITEMS 18, 19 AND 20

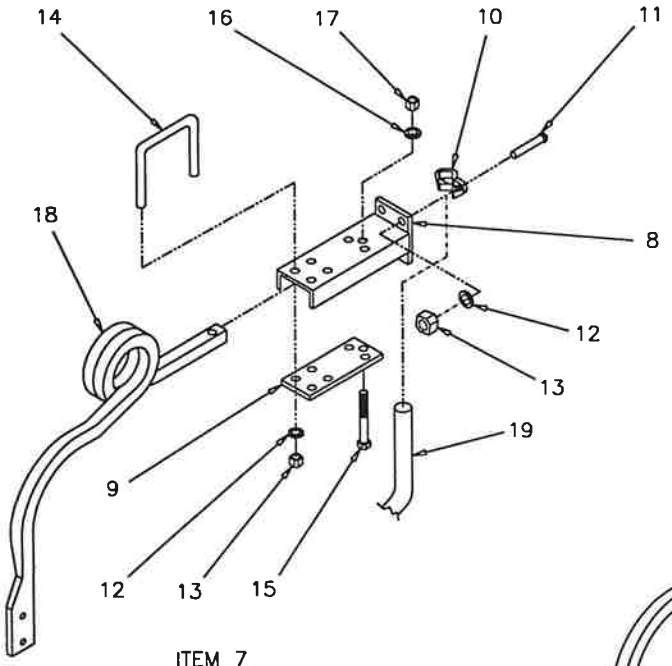
ITEM	PART NO.	DESCRIPTION	QTY FOR ASSY. NO. 47008001	QTY FOR ASSY. NO. 47998001	QTY FOR ASSY. NO. 47888001	QTY FOR ASSY. NO. 47648001
1	47010412	MOUNTING BRACKET	2	2	2	–
	47000413	PIVOT ARM COMPLETE, STANDARD	2	2	–	2
	47999335	PIVOT ARM COMPLETE, HEAVY DUTY INCLUDES ITEMS 2 AND 13	–	–	2	–
2	47010413	PIVOT ARM, STANDARD	2	2	–	2
	47019335	PIVOT ARM, HEAVY DUTY (2" SPINDLE)	–	–	2	–
3	47010425	PIVOT PIN	2	2	2	2
4	18560826	COTTER PIN, 3/16 X 1 1/2	2	2	2	2
5	47007286	U-BOLT, 3/4-10NC.	4	4	4	–
6	18891800	LOCKWASHER, 3/4	8	8	8	–
7	18418400	HEX. NUT, 3/4-10NC.	8	8	8	–
8	18541835	CLEVIS PIN, 3/4 X 2 1/2	2	2	2	2
9	18852200	FLATWASHER, 1" SAE ZC	2	2	2	2
10	18560726	COTTER PIN, 5/32 X 1 1/2	4	4	4	4
11	690063	JACK, TURNBUCKLE TYPE (STANDARD)	2	–	–	2
(ALT)	47008514	JACK COMPLETE, SQUARE BODY	–	2	2	–
	USE WITH	HEAVY DUTY PIVOT ARM, OR WITH IN-LINE TOW BAR OPTION				
12	18541566	CLEVIS PIN, 3/4 X 3 1/2	2	2	2	2
13	47005348	HUB ASSEMBLY COMPLETE, (5) BOLT	2	2	–	2
	47009611	HUB ASSEMBLY COMPLETE, (6) BOLT	–	–	2	–
14	47005590	WHEEL, 15" X 5 BOLT (STANDARD)	2	2	–	2
	47005589	WHEEL, 15" X 6 BOLT	–	–	2	–
15	20120012	VALVE STEM	2	2	2	2
16	20067015	TIRE, 670 X 15 (STANDARD) (32 PSI)	2	2	–	2
	10261	TIRE, 11L X 15, 8-PLY (36 PSI)	–	–	2	–
17	47004742	MOUNTING BRACKET (7 X 7 TUBE ONLY)	–	–	–	2
18	47305002	U-BOLT, 5/8-11NC. (FOR 7 X 7 BAR)	–	–	–	4
19	18891600	LOCK WASHER, 5/8 ZC	–	–	–	8
20	18417900	HEX. NUT, 5/8-NNC. ZC	–	–	–	8

HUB ASSEMBLIES

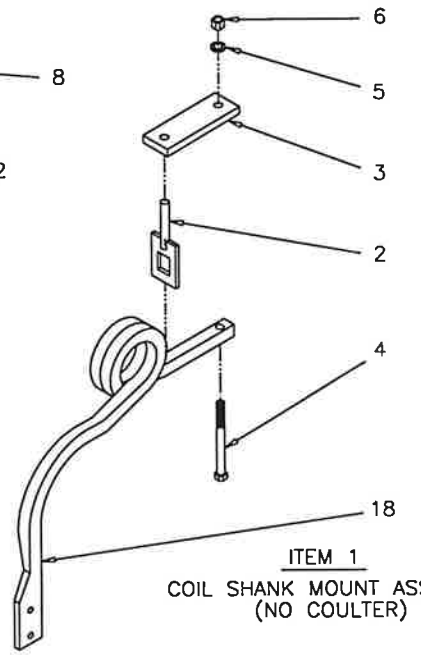


ITEM	DESCRIPTION	5 BOLT HUB PART NO.	6 BOLT HUB PART NO.	MECH. GAUGE WHEEL ONLY 6 BOLT HUB PART NO.	QTY.
1	HUB COMPLETE INCLUDES ITEMS 2 THRU 7 AND 11 THRU 12 ONLY	47005348	47009618	47009611	1
	MFGR. PART NUMBER	HA511	H618	H611	
2	HUB WITH RACES	47006348	47005618	47005511	1
3	INNER BEARING RACE	47005010	47005520	47005710	1
4	OUTER BEARING RACE	44501910	47005510	47005010	1
5	OUTER BEARING CONE	44501949	47005548	47005048	1
6	INNER BEARING CONE	47005048	47005580	47005749	1
7	GREASE SEAL	47006011	47005030	47005013	1
8	SPINDLE WASHER	———	18000017	18000017	1
9	SPINDLE NUT	18488600	18489100	18489100	1
10	COTTER PIN	18560826	18560828	18560828	1
11	DUST CAP	47005297	47005515	47005513	1
12	LUG BOLT	———	47005012	47005014	6
12	LUG BOLT	47005014	———	———	5

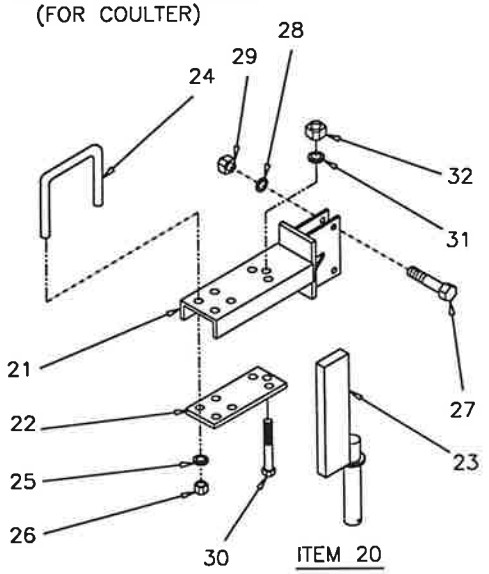
STANDARD UNIVERSAL MOUNT



ITEM 7
COIL SHANK MOUNT ASSEMBLY
(FOR COULTER)



ITEM 1
COIL SHANK MOUNT ASSEMBLY
(NO COULTER)



ITEM 20

SHANK MOUNT ASSEMBLY for 1 X 2 FLAT KNIFE SHANK
AND COULTER MOUNTED WITH 1 X 3 FLAT BAR COULTER SHANK

ISO14B

COIL SHANK MOUNTING

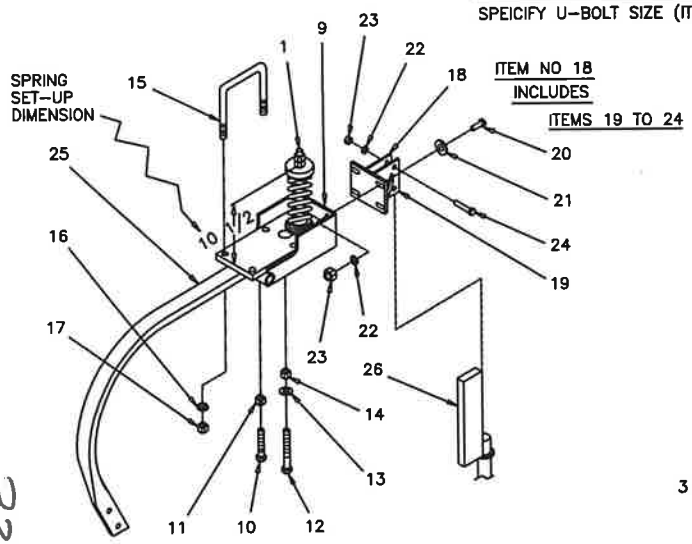
ITEM	PART NO.	DESCRIPTION	QTY
1	40511000	SHANK CLAMP SET, (6 X 4 BAR)	1
	40512000	SHANK CLAMP SET, (4 X 4 BAR) INCLUDES ITEMS 2 TO 6	OPT.
2	44009306	LOLLIPOP, FOR SQUARE SHANK	1
	602083	LOLLIPOP, FOR 1 X 2 SHANK WITH LOCKWASHER & NUT	OPT.
3	44006685	TOP PLATE, (6 X 4 BAR)	1
	44006685	TOP PLATE, (4 X 4 BAR)	OPT.
4	18058470	BOLT, 3/4-10NC. X 7	1
5	18891800	LOCKWASHER, 3/4	2
6	18418400	HEX. NUT, 3/4-10NC.	2
7	47309184	SHANK MOUNT ASS'Y. (SQUARE SHANK) INCLUDES ITEMS 8 TO 14	1
	47309177	SHANK MOUNT ASS'Y. (1 X 2 SHANK) ON 6 X 4 BAR	OPT.
	47308184	SHANK MOUNT ASS'Y. (1 X 2 SHANK) ON 4 X 4 BAR INCLUDES ITEMS 8 TO 14	OPT.
8	47309406	SHANK HOLDER, (SQUARE SHANK)	1
	47302890	SHANK HOLDER, (1 X 2 SHANK)	OPT.
9	47306005	CLAMP PLATE, (SQUARE SHANK)	1
	47006832	CLAMP PLATE, (1 X 2 SHANK)	OPT.
10	47301538	CLAMP, COULTER SHANK	2
11	18057940	BOLT, 5/8-11NC. X 3 1/2	4
12	18891600	LOCKWASHER, 5/8	8
13	18417900	HEX. NUT, 5/8-11NC.	8
14	47006950	U-BOLT, 5/8-11NC. (6 X 4 BAR)	2
	47006951	U-BOLT, 5/8-11NC. (4 X 4 BAR)	OPT.
15	18058436	BOLT, 3/4-10NC. X 3	1
16	18891800	LOCKWASHER, 3/4	1
17	18418400	HEX. NUT, 3/4-10NC.	1
18	80310	COIL SHANK (OR AS SPECIFIED)	1
19	4036000	COULTER ASSEMBLY, AG36 WITH STRAIGHT OR BENT COULTER SHANK AS SPECIFIED.	1
20	47999370	SHANK MOUNT ASSEMBLY COMPLETE INCLUDES ITEMS 21 TO 29	1
21	47309370	SHANK HOLDER, (1 X 2 SHANK)	1
22	47006832	CLAMP PLATE, (1 X 2 SHANK)	1
23	47303811	FLAT BAR COULTER SHANK, 18"	1
	47309811	FLAT BAR COULTER SHANK, 12"	OPT.
24	47006950	U-BOLT, 5/8-11NC. (6 X 4 BAR)	2
	47006951	U-BOLT, 5/8-11NC. (4 X 4 BAR)	OPT.
25	18891600	LOCKWASHER, 5/8	4
26	18417900	HEX. NUT, 5/8-11NC.	4
27	18057434	BOLT, 1/2-13NC. X 2 1/2	2
28	18891400	LOCKWASHER, 1/2	2
29	18417400	HEX. NUT, 1/2-13NC.	2
30	18058436	BOLT, 3/4-10NC. X 3	1
31	18891800	LOCKWASHER, 3/4	1
32	18418400	HEX. NUT, 3/4-10NC.	1

SPRING BUNDLE ASSEMBLY

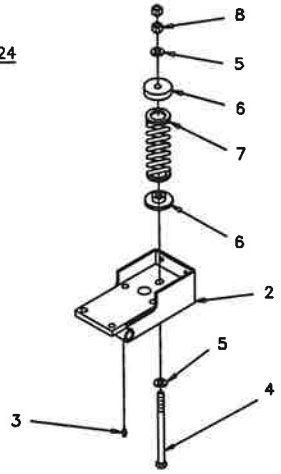
FOR 6 X 4 BAR AND 6 X 6 BAR

YEAR 2000 TO PRESENT

SPEICIFY U-BOLT SIZE (ITEM 15)



ITEM NO. 9
INCLUDES ITEM 1
AND 10 TO 17



ITEM NO. 1
INCLUDES ITEMS 2 TO 8

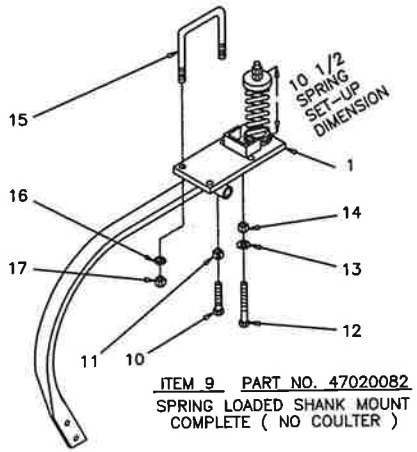
ITEM	PART NO.	DESCRIPTION	QTY
1	47010082	SPRING SHANK MOUNT ASSEMBLY INCLUDES ITEMS 2 TO 8	1
2	47010189	SHANK MOUNTING BASE	1
3	18901805	GREASE ZERK	2
4	47007766	BOLT, 3/4-10NC. X 15	1
5	18851800	FLATWASHER, 3/4	2
6	47007085	END COLLAR	2
7	47007565	COMPRESSION SPRING	1
8	18446890	HEX. NUT, 3/4-10NC. GR. 5	2
9	47020082	SPRING LOADED SHANK MOUNT COMPLETE (NO COULTER) INCLUDES ITEMS 1 AND 10 TO 17	
	47990082	(SHIPPING INFO) HARDWARE PACKAGE INCLUDES ITEMS 10 TO 17	
10	18058429	BOLT, 3/4-10NC. X 1 3/4	1
11	18449003	HEX. JAM NUT, 3/4-10NC.	1
12	18058436	BOLT, 3/4-10NC. X 3	1
13	18891800	LOCKWASHER, 3/4	1
14	18418400	HEX. NUT, 3/4-10NC.	1
15	47007083	U-BOLT, 5/8-11NC. (4 X 6 BAR)	2
	47009847	U-BOLT, 5/8-11NC. (6 X 6 BAR)	OR
16	18891600	LOCKWASHER, 5/8	4
17	18417900	HEX. NUT, 5/8-11NC.	4

P.N. 47039417
SPRING BUNDLE ASSEMBLY COMPLETE
INCLUDES AT ITEMS (1 TO 25)
DOES NOT INCLUDE THE SHANK OR COULTER

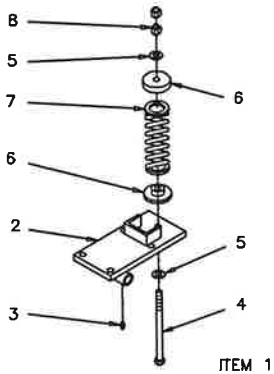
ITEM	PART NO.	DESCRIPTION	QTY
1	47029413	SPRING SHANK MOUNT ASSEMBLY INCLUDES ITEMS 2 TO 8	1
2	47019413	SHANK MOUNTING BASE	1
3	18901805	GREASE ZERK	2
4	47007766	BOLT, 3/4-10NC. X 15	1
5	18811800	FLATWASHER, 3/4	2
6	47007085	END COLLAR	2
7	47007565	COMPRESSION SPRING	1
8	18446890	HEX. NUT, 3/4-10NC. GR. 5	2
9	47039413	SPRING LOADED SHANK MOUNT COMPLETE (NO COULTER) INCLUDES ITEMS 1 AND 10 TO 17	
10	18058429	BOLT, 3/4-10NC. X 1 3/4	1
11	18449003	HEX. JAM NUT, 3/4-10NC.	1
12	18058436	BOLT, 3/4-10NC. X 3	1
13	18891800	LOCKWASHER, 3/4	1
14	18418400	HEX. NUT, 3/4-10NC.	1
15	47007083	U-BOLT, 5/8-11NC. (4 X 6 BAR)	2
	47009847	U-BOLT, 5/8-11NC. (6 X 6 BAR)	OR
16	18891600	LOCKWASHER, 5/8	4
17	18417900	HEX. NUT, 5/8-11NC.	4
18	47029417	COULTER MOUNTING BRACKET ASSEMBLY INCLUDES ITEM 19 TO 24	
19	47019417	COULTER MOUNTING BRACKET	1
20	18057426	BOLT, 1/2-13NC. X 1 1/2	4
21	18811400	FLATWASHER, 1/2	4
22	18891400	LOCKWASHER, 1/2	6
23	18417400	HEX. NUT, 1/2-13NC.	6
24	18057434	BOLT, 1/2-13NC. X 2 1/2	2
25	103471	SPRING SHANK (OR AS SPECIFIED)	1
26		COULTER ASSEMBLY COMPLETE	1

REFER TO COULTER ILLUSTRATIONS (AG36 OR AG38) FOR ITEM PART NUMBERS AND SPECIFY BLADE ASSEMBLY NUMBER AND SWIVEL BAR NUMBER.

SPRING LOADED SHANK MOUNTING



ITEM 9 PART NO. 47020082
SPRING LOADED SHANK MOUNT COMPLETE (NO COULTER)

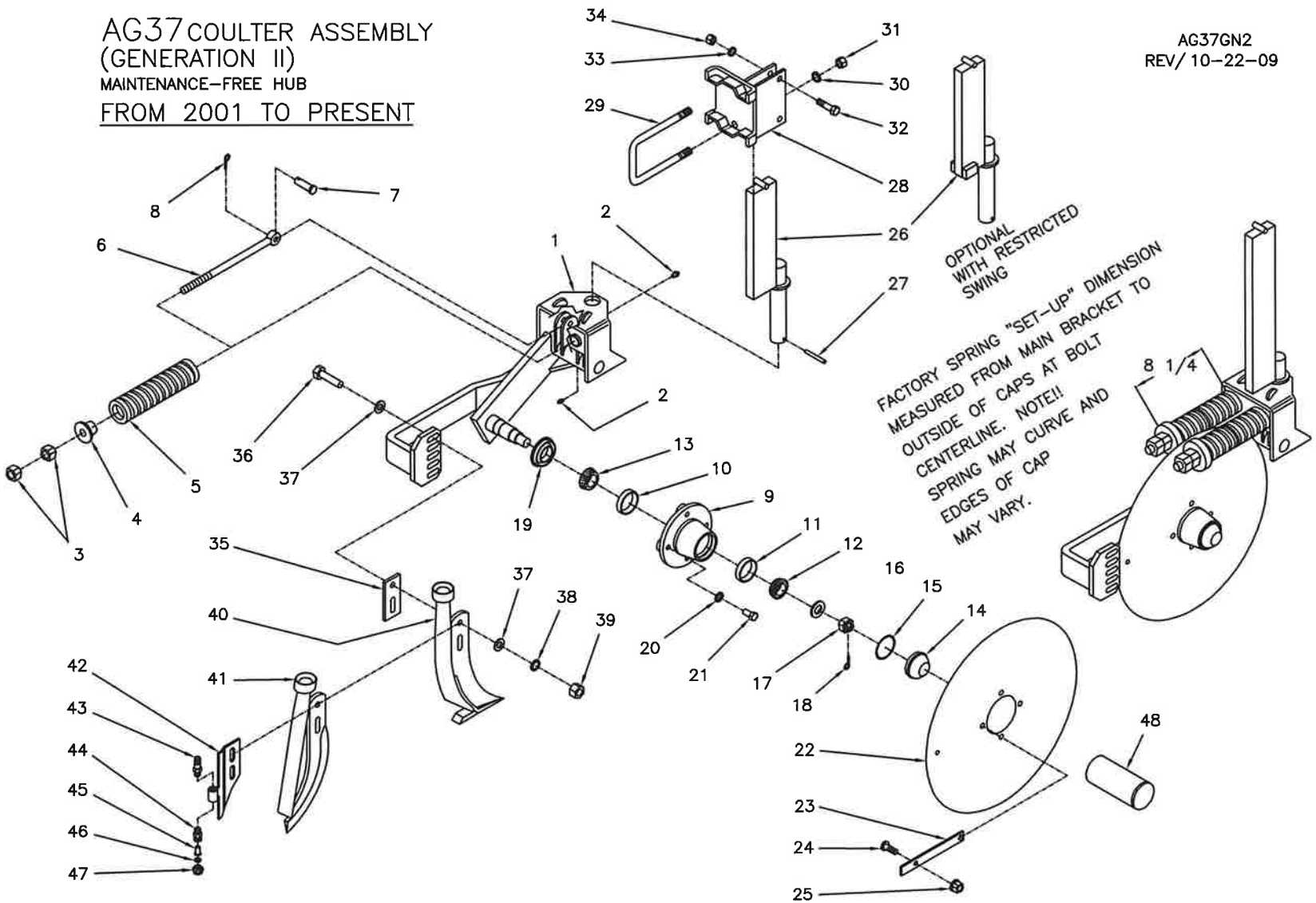


ITEM 1 (REPAIR PARTS)
SPRING SHANK MOUNT ASSEMBLY
INCLUDES ITEMS 2 TO 8

AG37 COULTER ASSEMBLY
(GENERATION II)
MAINTENANCE–FREE HUB

FROM 2001 TO PRESENT

AG37GN2
REV/ 10–22–09



AG37 COULTER ASSEMBLY (GENERATION II)

with MAINTENANCE–FREE HUB

MOUNTING INSTRUCTIONS AND PARTS LIST

AG37GN2LS
REV. 01/28/22

1. Your AG37 main bracket and hub are pre–assemble at the factory and the trip springs are pre–loaded to provide 525 pounds blade pressure. This should be adequate for normal field conditions. The coulter arm should trip up only when hitting a solid obstruction. During your field operation check to make sure the coulter arm is staying rigid most of the time. Excessive flexing will cause premature spring failure. If repeated tripping is ocurring, tighten the spring tension till rigid normal operation is achieved.
2. Assemble the blade (item 22) to the hub, and (if used) the scraper (item 23) to the blade with the hardware (item 24 and item 25).
3. Assemble the swivel bar (item 26) to the main bracket (item 1). Be sure the 1 x 3 bar is positioned between the half moon stops on top of the main bracket. Install the roll pin (item 27).
4. Position the mounting brackets (item 28) at the desired spacing and fasten with the U–bolts (item 29) and hardware (items 30 and 31).
5. Install the coulter assemblies to the mounting brackets (item 28) and fasten with the bolts (item 32) and hardware (items 33 and 34). Assemble the hardware snug only.
6. Adjust the coulter blade to the desired depth and tighten the hardware securely.
7. Assemble the knife (item 40 or 41) to the coulter assembly with the shims (item 35), bolts (item 36) and hardware (items 37, 38 and 39). Select and install the shims in a manner so that as you rotate the blade a complete revolution you observe that the point of the knife and the lower area of the knife is behind the blade at all times. The knife should also be set at zero clearance (see step 7). This will maintain the blade's trash cutting ability. The top of the knife should be away from the blade far enough so that the scraper can pass the top, thick part of the knife without rubbing the knife. NOTE: The bolt head should be located next to the bracket (see illustration) and any shims not needed should be placed between the backside of the bracket and the flatwasher next to the head of the bolt.
8. Adjust the knife position relative to the blade edge. The backswept knife (item 41) should be positioned to obtain maximum backsweep. Locate the upper bolt to the front of the slot and the lower bolt to the back of the slot. The forward swept knife (item 40) should be positioned as close to the blade edge as possible. Rotate the coulter blade to determine the point of maximum eccentric runout of the circumference and adjust the knife to zero clearance at this point. NOTE: The knife will have to be re–adjusted regularly.
9. Make sure all hardware is tightened securely.
10. During field operation grease the swivel bar journals weekly. And grease for end–of–season storage. Inspect the coulter blade and knife clearance daily. Adjust per step 8 if required. The coulter hub is greased–for–life and should need no regular maintenance. Check for damage to the dust cap and grease seal daily.

ITEM	PART NO.	DESCRIPTION	QTY
	47309905	MAIN BRKT. & BLADE ASSEMBLY, L.H.	1
	47307705	MAIN BRKT. & BLADE ASSEMBLY, R.H.	OPT.
		INCLUDES ITEMS 1 TO 22	
	47109570	MAIN BRKT W/HUB ASSEMBLY, L.H.	
	47109568	MAIN BRKT W/HUB ASSEMBLY, R.H.	OPT.
		INCLUDES ITEMS 1 TO 21 (W/O BLADE)	
1	47309570	MAIN BRACKET, L.H. (W/O HUB OR BLADE)	1
	47309568	MAIN BRACKET, R.H. (W/O HUB OR BLADE)	OPT.
2	18901805	GREASE ZERK, STRAIGHT	2
3	18407900	HEX. NUT, 5/8–11NC.	4
4	47301530	SPRING CAP	2
5	47301524	COMPRESSION SPRING	2
6	47301547	EYE BOLT, SPRING RETAINER	2
7	18541428	CLEVIS PIN, 1/2 X 1 3/4	2
8	18560722	COTTER PIN, 5/32 X 1	2
	47300350	HUB COMPLETE (W/O SEAL & BOLTS)	
		INCLUDES ITEMS 9 TO 15	
9	47300351	HUB WITH CUPS ITEMS 10 & 11	1
10	47005510	BEARING CUP, INNER	1
11	47005010	BEARING CUP, OUTER	1
12	47005048	BEARING CONE, OUTER	1
13	47005548	BEARING CONE, INNER	1
14	47005513	DUST CAP	1
15	47990351	O–RING DUST SEAL	1
16	47300352	SPINDLE WASHER	1
17	47300353	SLOTTED NUT, 7/8–14UNF	1
18	18560726	COTTER PIN, 5/32 X 1 1/2	1
19	40030326	GREASE SEAL	1
20	18891400	LOCK WASHER, 1/2 I.D.	4
21	18057522	WHEEL BOLT, 1/2–20NF X 1	4
22	47305027	COULTER BLADE, 20" RIPPLED	1

ITEM	PART NO.	DESCRIPTION	QTY
23	47306921	SCRAPER	1
24	18033810	BOLT, 3/8–16NC. X 1, TRUSS HEAD	1
25	18496800	HEX. NUT, 3/8–16NC. FLANGED	1
26	47303811	COULTER SWIVEL BAR, 18" (INCL ITEM 27)	1
	47309811	COULTER SWIVEL BAR, 12" (INCL ITEM 27)	OPT.
	OPTIONAL	COULTER BAR W/RESTRICTED SWING	
		10 DEG. AND 15 DEG. AVAILABLE	
	47005147	18" BAR 10° RESTR. SWING (BOTH WAYS)	
	47005147L	18" BAR 10° RESTR. SWING (LH ONLY)	
	47005147R	18" BAR 10° RESTR. SWING (RH ONLY)	
	47005149	18" BAR 15° RESTR. SWING (BOTH WAYS)	
	47005149L	18" BAR 15° RESTR. SWING (LH ONLY)	
	47005149R	18" BAR 15° RESTR. SWING (RH ONLY)	
		CALL AG SYSTEMS FOR INFO.	
27	18511032	ROLL PIN, 1/4 X 2 1/4	1
28	47309893	MOUNTING BRACKET, (4" VERTICAL) STD.	1
29	47006951	U–BOLT, 5/8–11NC. (4"V X 6"H BAR)	1
	44001616	U–BOLT, 5/8–11NC. (4"V X 4"H BAR)	
	OTHER MOUNTING BRACKET OPTIONS		
28	47309887	MOUNTING BRKT., (2 1/2" VERTICAL)	
29	47006659	U–BOLT, 5/8–11NC. (2 1/2"V X 2 1/2"H BAR)	
28	47309732	MOUNTING BRACKET, (3" VERTICAL)	
	47309907	MOUNTING BRKT., (3" VERT., EXT.)	
29	47306677	U–BOLT, 5/8–11NC. (3"V X 3"H BAR)	
28	47309888	MOUNTING BRKT., (6" VERTICAL)	
29	47010154	U–BOLT, 5/8–11NC. (6"V X 4"H BAR)	
	47009847	U–BOLT, 5/8–11NC. (6"V X 6"H BAR)	
28	47309736	MOUNTING BRKT., (7" VERTICAL)	
29	47302730	U–BOLT, 1/2–13NC. (7"V X 7"H BAR)	
	NOTE for 7" U–BOLT USE 1/2–13NC. HEX. NUTS		

ITEM	PART NO.	DESCRIPTION	QTY
30	18891600	LOCKWASHER, 5/8	2
31	18417900	HEX. NUT, 5/8–11NC.	2
32	18057434	BOLT, 1/2–13NC. X 2 1/2	2
33	18891400	LOCKWASHER, 1/2	2
34	18417400	HEX. NUT, 1/2–13NC.	2
35	47306661	SHIM, 1/4	1
	47306662	SHIM, 1/8	1
	47306663	SHIM, 1/16	1
36	18057432	BOLT, 1/2–13NC. X 2 1/4	2
37	18811400	FLATWASHER, 1/2	2
38	18891400	LOCKWASHER, 1/2	2
39	18417400	HEX. NUT, 1/2–13NC	2
40	47309735	DRY KNIFE. W/BUSHING, (FORWARD)	1
	47309734	DRY KNIFE, W/O BUSHING, (FORWARD)	OPT.
	47309742	LIQUID KNIFE, (FORWARD)	OPT.
	47007468	LIQUID KNIFE, (FORWARD) S.S. TUBE	OPT.
41	47309748	DRY KNIFE, W/BUSHING, (BACKSWEPT)	OPT.
	47309759	DRY KNIFE, W/O BUSHING, (BACKSWEPT)	OPT.
	47309750	LIQUID KNIFE, (BACKSWEPT)	OPT.
42	47309038	NOZZLE BRACKET	1
43	100859	HOSEBARB, S.S. 1/4 NPT. X 1/2 TUBE	1
44	500192	ADAPTER	1
45	504015	STREAM STABALIZER	1
46	ORIFICE	SELECT FROM ORIFICE CHART	1
47	503127	CAP	1
48	47005500	DUST CAP INSTALLATION TOOL (OPTIONAL)	1

REF 47300300 SPINDLE ONLY

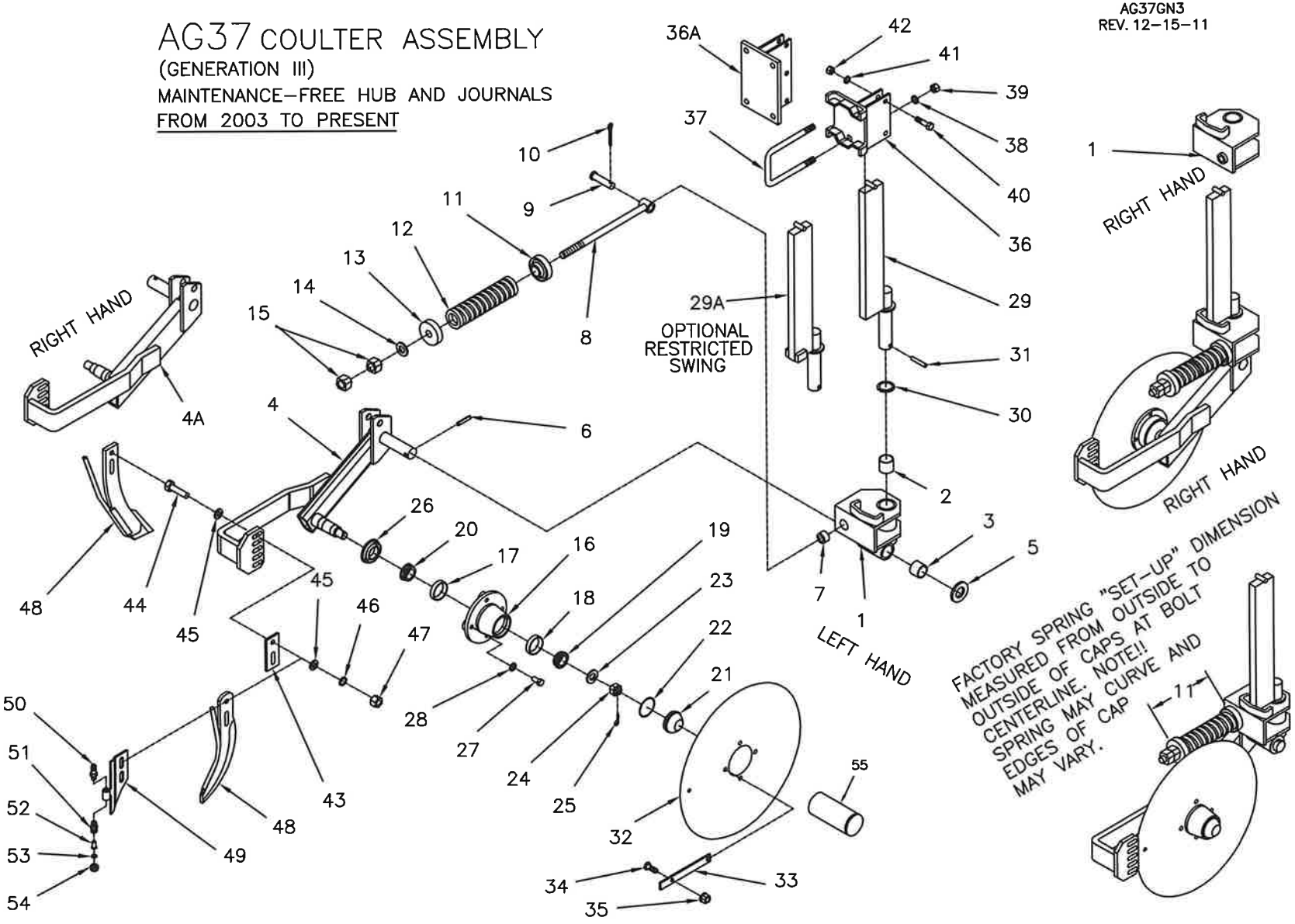
AG37 COULTER ASSEMBLY

(GENERATION III)

MAINTENANCE–FREE HUB AND JOURNALS

FROM 2003 TO PRESENT

AG37GN3
REV. 12–15–11



AG37 COULTER ASSEMBLY (GENERATION III)

AG37GN3LS
REV. 01/28/22

MAINTENANCE–FREE HUB AND JOURNALS

MOUNTING INSTRUCTIONS AND PARTS LIST

1. Your AG37 Gen III main bracket and hub are pre–assembled at the factory and the trip spring is preloaded to provide 600 pounds blade pressure. This should be adequate for normal field conditions. The coulter arm should trip up only when hitting a solid obstruction. During your field operation check to make sure the coulter arm is staying rigid most of the time. Excessive flexing will cause premature spring failure. If repeated tripping is ocurring, tighten the spring tension till rigid normal operation is achieved.
2. Assemble the blade (item 32) to the hub, and (if used) the scraper (item 33) to the blade with the hardware (items 34 & 35).
3. Assemble the swivel bar (item 29) to the bracket assembly. Be sure the swivel bar is positioned between the swivel control lugs on top of the main bracket. Install the washer (item 30) and pin (item 31).
4. Position the mounting bracket (item 36) at the desired spacing and fasten with the u–bolt (item 37) and hardware (items 38 and 39).
5. Install the coulter assemblies in the mounting brackets (item 36) and fasten with the bolts (item 40) and hardware (items 41 and 42). Assemble the hardware snug only.
6. Adjust the coulter blade to the desired depth and tighten the hardware securely.
7. Assemble the knife (item 48) to the coulter assembly with the shims (item 43), bolts (item 44) and hardware (items 45, 46 and 47). Select and install the shims in a manner so that as you rotate the blade a complete revolution you see that the point of the knife and the lower area of the knife is behind the blade at all times. The backsept knife should be positioned to obtain maximum backsweep. Locate the upper bolt to the front of the slot and the lower bolt to the back of the slot. Note, the bolt head should be located next to the bracket (see illustration) and any shims not needed should be placed between the back side of the bracket and the flat washer next to the head of the bolt.
8. The front swept knife should be positioned as close to the blade edge as possible. Zero clearance. This will maintain the blade's trash cutting ability. Rotate the coulter blade to determine the point of maximum eccentric runout of the circumference and adjust the knife to zero clearance at this point. The top of the knife should be away from the blade far enough so that the scraper can pass the top, thick part, of the knife without rubbing the knife. NOTE, The knife position should be inspected frequently and re–adjusted regularly.
9. Make sure all hardware is tightened securely.
10. No field operation lubricating is required. The hubs are sealed and greased for life. The swivel journals are assembled with grease–less bushings. For repair procedure, see separate sheet titled PROCEDURE TO SERVICE A COULTER HUB.

REF 47300300 SPINDLE ONLY

ITEM	PART NO.	DESCRIPTION	QTY
	40350000	MAIN BRKT. & BLADE, L.H. (STANDARD)	1
	40351000	MAIN BRKT. & BLADE, RIGHT HAND	OPT.
		INCLUDES ITEMS 1 TO 32	
	47304500	MAIN BRKT. W/HUB, L.H. (STANDARD)	1
	47314500	MAIN BRKT. W/HUB, RIGHT HAND	OPT.
		INCLUDES ITEMS 1 TO 31 (W/O BLADE)	
1	47004500	HOUSING W/BUSHINGS, L.H. (STD)	1
	47014500	HOUSING W/BUSHINGS, RIGHT HAND	OPT.
2	47009954	SWIVEL BUSHING, 1 1/2 I.D.	2
3	47009953	PIVOT BUSHING, 1 3/8 I.D.	2
4	47004507	PIVOT ARM, L.H. FRONT SWEPT KNIFE	1
4A	47014507	PIVOT ARM, R.H. FRONT SWEPT KNIFE	OPT.
5	18300326	RETAINING WASHER, 1 3/8 I.D.	1
6	18511035	EXPANSION PIN, 3/8 X 2	1
7	2–6668	EYE BOLT GUIDE	1
8	47004518	EYE BOLT, SPRING RETAINER	1
9	18541835	CLEVIS PIN, 3/4 X 2 1/2	1
10	18560726	COTTER PIN, 5/32 X 1 1/2	1
11	47004521	SPRING CAP, WITH COUNTER–BORE	1
12	47007565	COMPRESSION SPRING	1
13	47007085	SPRING CAP, STANDARD CASTING	1
14	18851800	FLAT WASHER, 3/4	1
15	18446890	HEX. NUT, 3/4–10NC	2
	47300350	HUB COMPLETE (W/O SEAL & BOLTS)	
		INCLUDES ITEMS 16 TO 22	
16	47300351	HUB WITH CUPS ITEMS 17 & 18	1
17	47005510	BEARING CUP, INNER	1
18	47005010	BEARING CUP, OUTER	1
19	47005048	BEARING CONE, OUTER	1

ITEM	PART NO.	DESCRIPTION	QTY
20	47005548	BEARING CONE, INNER	1
21	47005513	DUST CAP	1
22	47990351	O–RING DUST SEAL	1
23	47300352	SPINDLE WASHER	1
24	47300353	SLOTTED NUT, 7/8–14UNF	1
25	18560726	COTTER PIN, 5/32 X 1 1/2	1
26	40030326	GREASE SEAL	1
27	18057522	WHEEL BOLT, 1/2–20NF X 1	4
28	18891400	LOCK WASHER, 1/2 I.D.	4
29	47304522	COULTER SWIVEL BAR, 18" STANDARD	1
	OPTIONAL	COULTER BAR W/RESTRICTED SWING	
		10 DEG. AND 15 DEG. AVAILABLE	
29A	47005144	18" BAR 10° RESTR. SWING (BOTH WAYS)	
	47005144L	18" BAR 10° RESTR. SWING LH ONLY	
	47005144R	18" BAR 10° RESTR. SWING RH ONLY	
	47005145	18" BAR 15° RESTR. SWING (BOTH WAYS)	
	47005145L	18" BAR 15° RESTR. SWING LH ONLY	
	47005145R	18" BAR 15° RESTR. SWING RH ONLY	
		CALL AG SYSTEMS FOR INFO.	
30	18300323	RETAINING WASHER, 1 1/2 I.D.	1
31	18511036	EXPANSION PIN, 3/8 X 2 1/4	1
32	47305027	COULTER BLADE, 20" RIPPLED	1
ITEMS	33 TO 35	OPT. USE W/FRONT SWEPT KNIFE ONLY	
33	47306921	SCRAPER	1
34	18033810	BOLT, 3/8–16NC. X 1, TRUSS HEAD	1
35	18496800	HEX. NUT, 3/8–16NC. FLANGED	1
36	47309893	MOUNTING BRACKET, (4" VERTICAL) STD.	1
37	47006951	U–BOLT, 5/8–11NC. (4"V X 6"H BAR)	1
	44001616	U–BOLT, 5/8–11NC. (4"V X 4"H BAR)	
36	47309888	MOUNTING BRACKET, (6" VERTICAL)	OPT.

ITEM	PART NO.	DESCRIPTION	QTY
37	47010154	U–BOLT, 5/8–11NC. (6"V X 4"H BAR)	
	47009847	U–BOLT, 5/8–11NC. (6"V X 6"H BAR)	
36A	47309736	MOUNTING BRACKET, (7" VERTICAL)	1
37	47302730	U–BOLT, 1/2–13NC. (7"V X 7"H BAR)	2
38	18891400	LOCKWASHER, 1/2	4
39	18417400	HEX. NUT, 1/2–13NC	4
38	18891600	LOCKWASHER, 5/8	2
39	18417900	HEX. NUT, 5/8–11NC.	2
40	18057434	BOLT, 1/2–13NC. X 2 1/2	2
41	18891400	LOCKWASHER, 1/2	2
42	18417400	HEX. NUT, 1/2–13NC.	2
ITEMS	40, 41 & 42	(3) REQ'D. W 6 X 6 OR 7 X 7 TUBE	
43	47306661	SHIM, 1/4	1
	47306662	SHIM, 1/8	1
	47306663	SHIM, 1/16	1
44	18057432	BOLT, 1/2–13NC. X 2 1/4	2
45	18811400	FLATWASHER, 1/2	2
46	18891400	LOCKWASHER, 1/2	2
47	18417400	HEX. NUT, 1/2–13NC	2
48	47309756	LIQUID KNIFE, (BACKSWEPT)	OPT.
	47309742	LIQUID KNIFE, (FRONTSWEPT)	OPT.
	47307468	LIQUID KNIFE, (FRONTSWEPT) S.S. TUBE	OPT.
49	47309038	NOZZLE BRACKET (L.H) (STANDARD)	OPT.
49A	47997038	NOZZLE BRACKET (R.H.)	OPT.
50	100859	HOSEBARB, S.S. 1/4 NPT. X 1/2 TUBE	1
51	500192	ADAPTER	1
52	504015	STREAM STABALIZER	1
53	ORIFICE	SELECT FROM ORIFICE CHART	1
54	503127	CAP	1
55	47005500	DUST CAP INSTALLATION TOOL (OPTIONAL)	1

PROCEDURE TO SERVICE A COULTER HUB
"MAINTENANCE-FREE" HUB

The factory procedure to assemble the coulter hub has been developed to obtain maximum life and to eliminate damage to the components. IT IS IMPORTANT to understand and follow this procedure when servicing the coulter hub. If possible, obtain an illustration of the coulter before proceeding.

ASSEMBLE THE COULTER HUB AS FOLLOWS.

1: Pre-pack the inner bearing cone with grease and insert it into the back of the hub.

2: Add grease to cover the back of the bearing and cup. CAUTION – CAUTION : Do not "fill" the back of the hub with grease. Do not get any grease on the sealing seat for the grease seal. The seal is treated with a sealing agent and grease or oil on the sealing surface will destroy the effectiveness of the seal. If there is any grease on the sealing surface in the hub wipe it with a degreasing agent.

3: Carefully insert the grease seal. Do not get any grease on the outer sealing surface of the seal. Tap or press the seal in place. Make sure the seal is entering and seating squarely.

4: Turn the hub over and fill the center cavity with grease. Pre-pack the outer bearing with grease and insert it into the hub.

5: Position the hub on the spindle and install the spindle washer and the slotted nut.

6: Rotate the hub by hand while tightening the slotted nut until the hub locks-up. This will align and seat the bearing rollers. Back off the nut until you can freely rotate the hub by hand and install the cotter pin. Bend the ends of the cotter pin "down" only. Not one half up and one half down.

7: Completely fill the front cavity of the hub with grease.

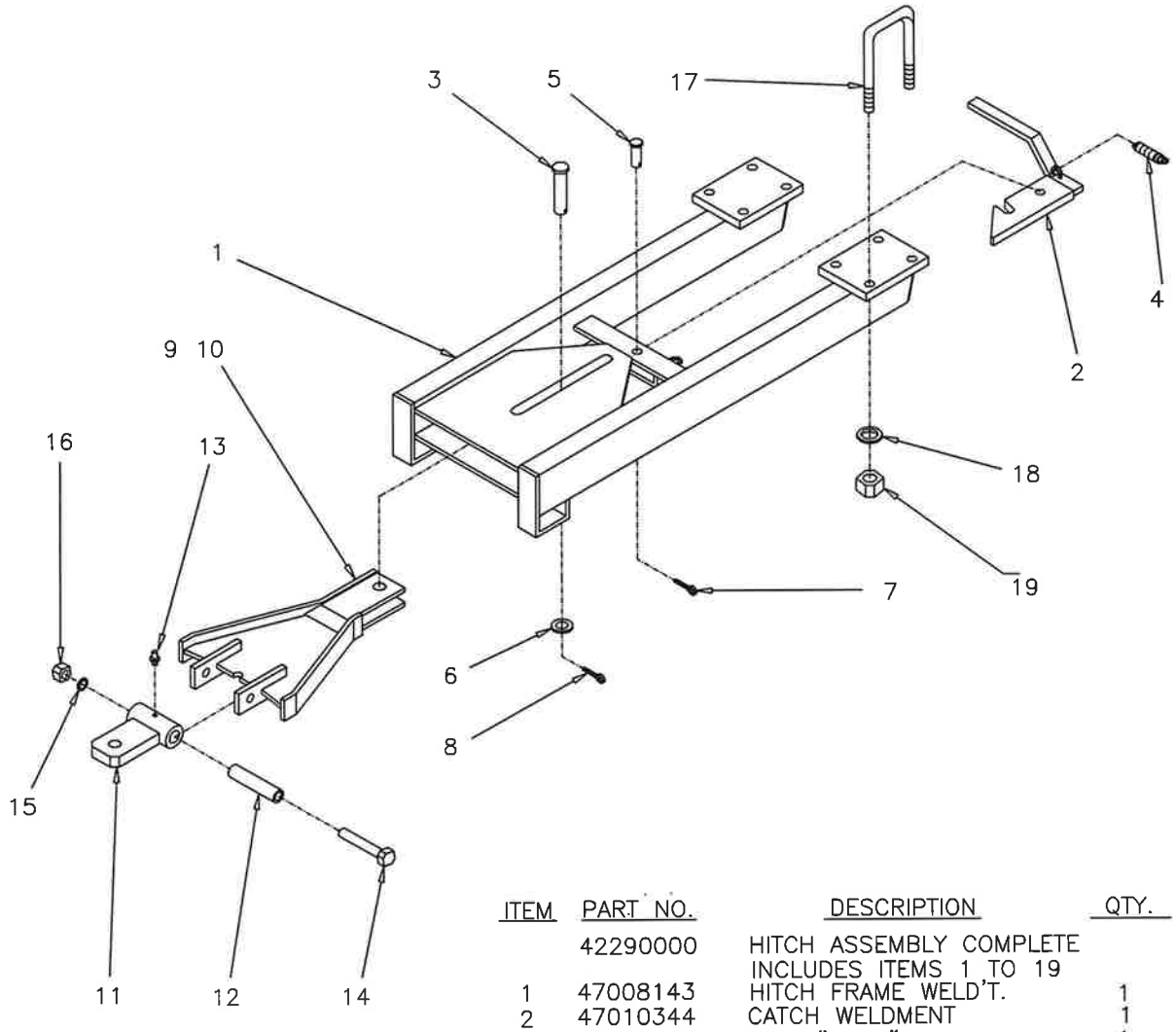
8: Inspect the hub to make sure it is properly assembled and then install the dust cap.
CAUTION: Once the dust cap is installed it cannot be removed with out destroying it. Take care to be sure the dust cap is square to the bore when starting and seating it. An old dust cap or a piece of tubing with the right I. D. and O. D. may be helpful.

9: You may now assemble the coulter blade. During field operation check the coulter blade periodically for wobble. This could be a result of hitting rocks and/or normal wear. Re-adjust the bearing tension (see step 6). Wobble in the hub could damage the seal and cause bearing failure. Note that you will need to install a new dust cap after a bearing adjustment. REVIEW step 8.

SRVCLTRHUB

AG229 FIELD HITCH ASSEMBLY

IS057



SECURELY TIGHTEN THE NUT (ITEM 16) SO THAT THE INNER BUSHING (ITEM 12) IS CLAMPED BETWEEN THE MOUNTING EARS ON THE DRAWBAR (ITEM 10) CHECK PERIODICALLY TO INSURE THAT THE BUSHING REMAINS SECURE.

ITEM	PART NO.	DESCRIPTION	QTY.
	42290000	HITCH ASSEMBLY COMPLETE INCLUDES ITEMS 1 TO 19	
1	47008143	HITCH FRAME WELD'T.	1
2	47010344	CATCH WELDMENT	1
3	47109009	PIN 1" X 4"	1
4	47101013	EXTENSION SPRING	1
5	18541830	CLEVIS PIN 3/4 X 2	1
6	18842200	WASHER 1" SAE	1
7	18560726	COTTER PIN 5/32 X 1 1/2	1
8	18561026	COTTER PIN 1/4 X 1 1/2	1
9	47007272	DRAWBAR ASSEMBLY INCLUDES ITEMS 10 TO 16	1
10	47007276	DRAWBAR WELDMENT	1
11	47007277	CLEVIS WELDMENT	1
12	47007285	INNER BUSHING	1
13	18901805	GREASE ZERK, STRAIGHT	1
14	18058460	3/4-10NC. X 6 1/2 BOLT	1
15	18891800	3/4 LOCK WASHER	1
16	18418400	3/4-10NC. HEX. NUT	1
17	47006518	3/4-10NC. U-BOLT	4
18	18891800	3/4 LOCK WASHER	8
19	18418400	3/4-10NC. HEX. NUT	8

OTHER OPTIONS

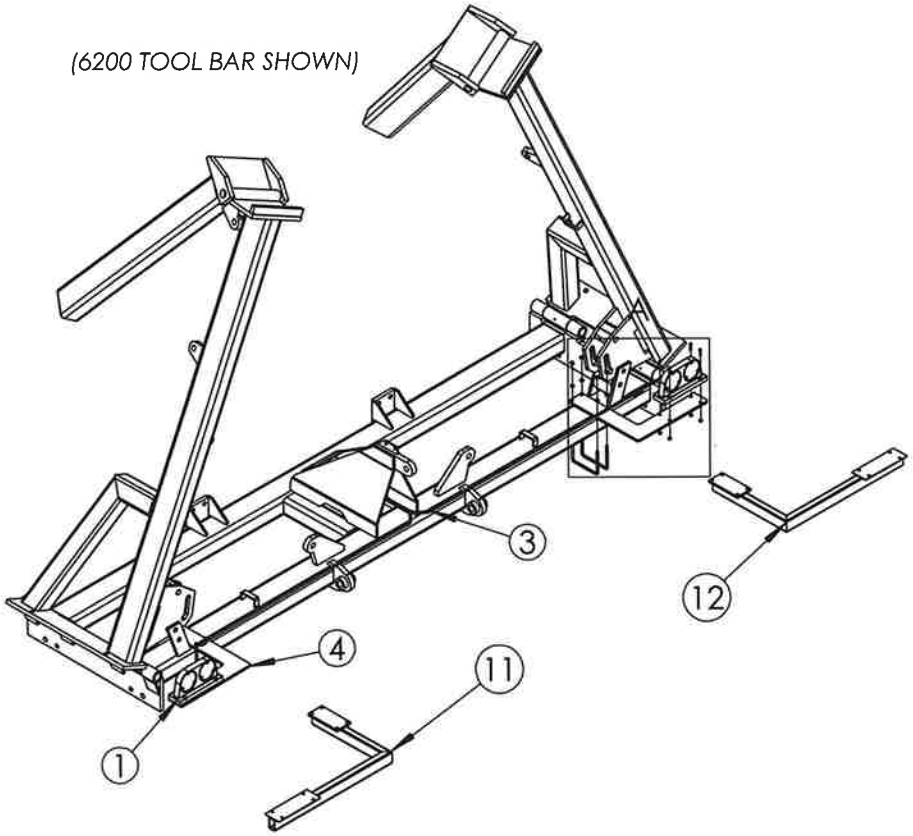
Tank, Skids and Saddles

770750	750 Gallon Crown/Snyder Drainable Poly Leg Tank
47018070	Skid and Band Pkg with Hardware for 750 Gallon Crown/Snyder Tank
47018018	Skid and Hoop Pkg with Hardware for 725 Gallon Norwesco Tank
7541137	1000 Gallon Snyder Drainable Poly Leg Tank
47018929	1000 Gallon Skid with tank bands and hardware pkg

SAFETY LIGHT KIT FOR TOOLBARS

P/N: 47999316

(6200 TOOL BAR SHOWN)

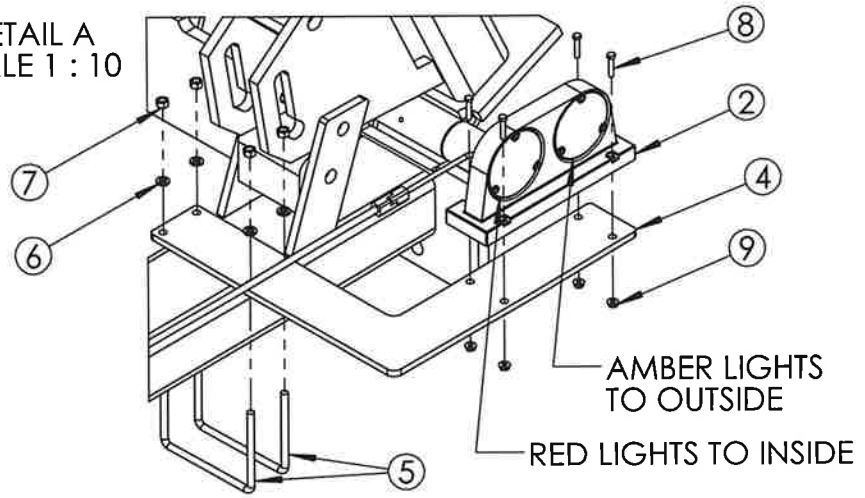


ITEMS 11 AND 12 ARE OPTIONAL

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
11	47009789	LITE BRACKET, LH	1
12	47009790	LITE BRACKET, RH	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	54209-008	DUAL LAMP ASSY, LH	1
2	54209-022	DUAL LAMP ASSY, RH	1
3	71675	35' HD CABLE WITH 7 PIN PLUG	1
4	47009316	LIGHT MOUNTING BRACKET	2
5	47001028	U-BOLT, 3/8-16NC.	4
6	18891200	LOCKWASHER, 3/8 ZC	8
7	18436800	NUT 3/8 NCZC	8
8	18055724	BOLT HX CAP G5 NCZC 1/4 X 1 1/4	8
9	18495700	NUT HX SER FLG 1/4 NC ZC	8
10	504560	NYLON TIE STRAP	5

DETAIL A
SCALE 1 : 10

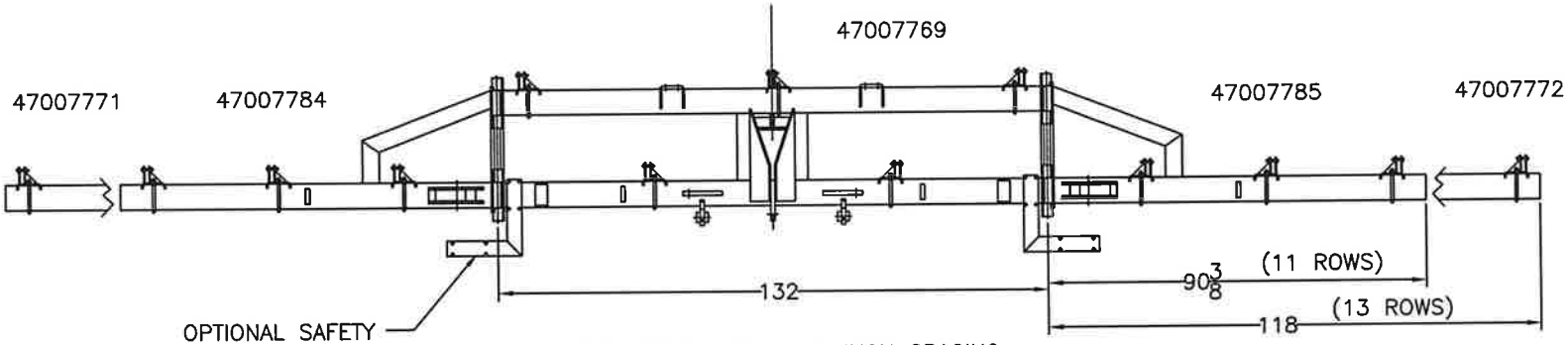


AMBER REPLACEMENT LENS PN 802650
RED REPLACEMENT LENS PN 802651

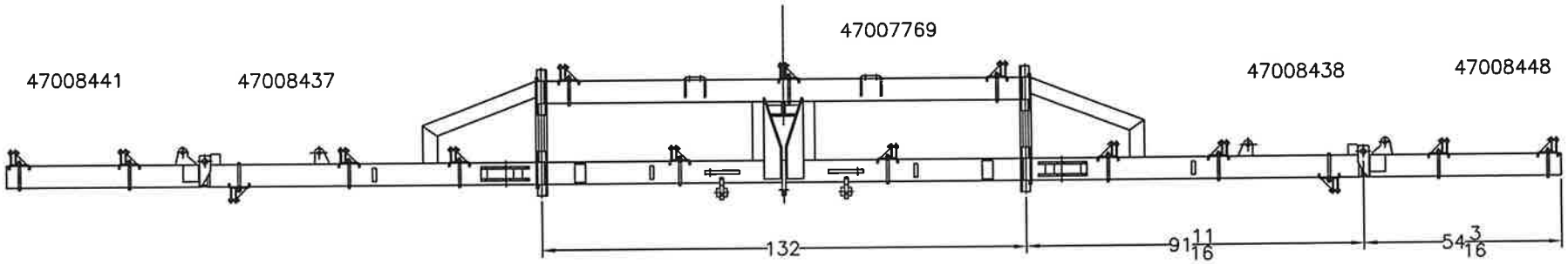
6200 TOOLBAR

STANDARD ARRANGEMENTS
(ODD NUMBER OF ROWS)

62K30STD
REV 4-30-09



AG37 COULTERS AT 30 INCH SPACING
11 ROWS OR 13 ROWS



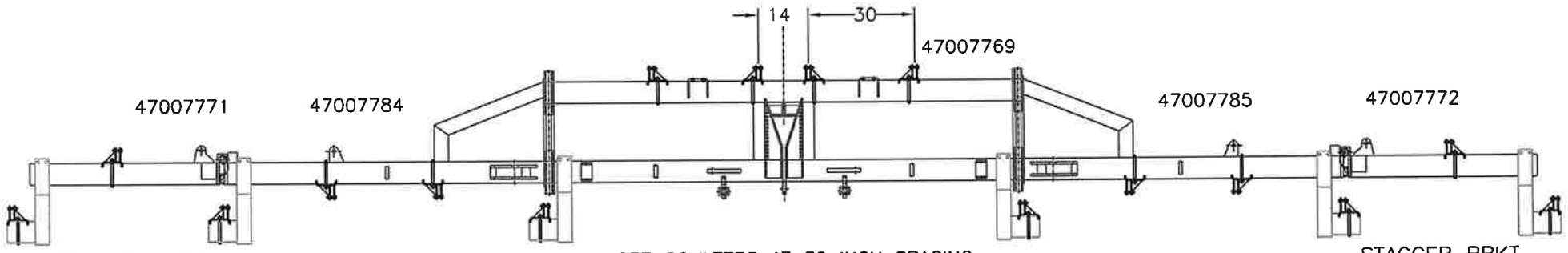
AG37 COULTERS AT 30 INCH SPACING
15 ROWS

6200 TOOLBAR

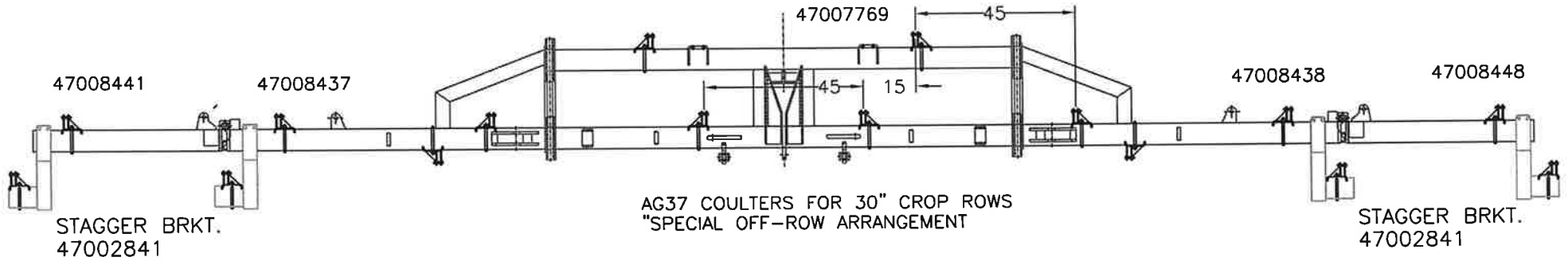
62KEVEN

SPECIAL ARRANGEMENTS

16 ROWS



43

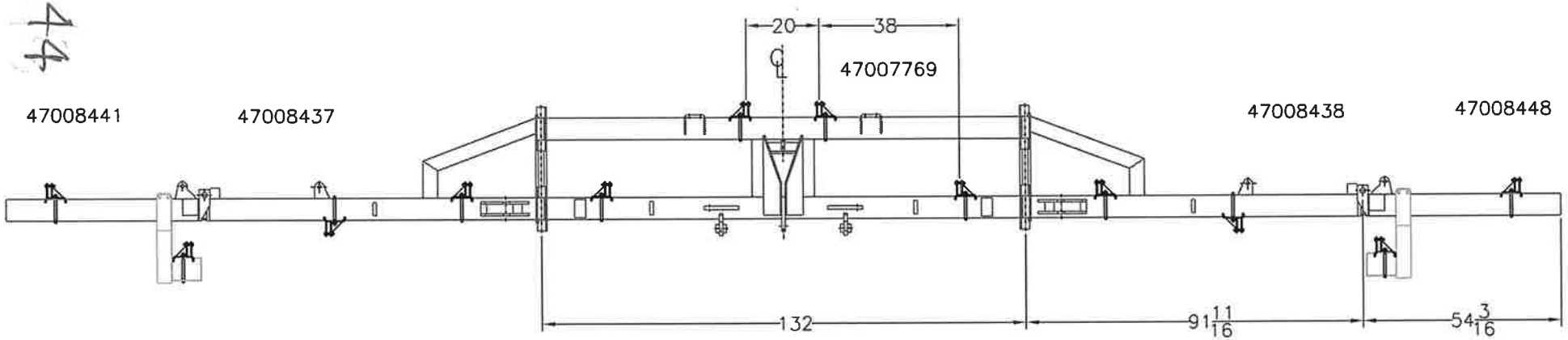


6200 TOOLBAR

62K38SD
06/13/06

AG37 COULTERS FOR SIDE-DRESS
12 ROWS AT 38 INCH SPACING

44

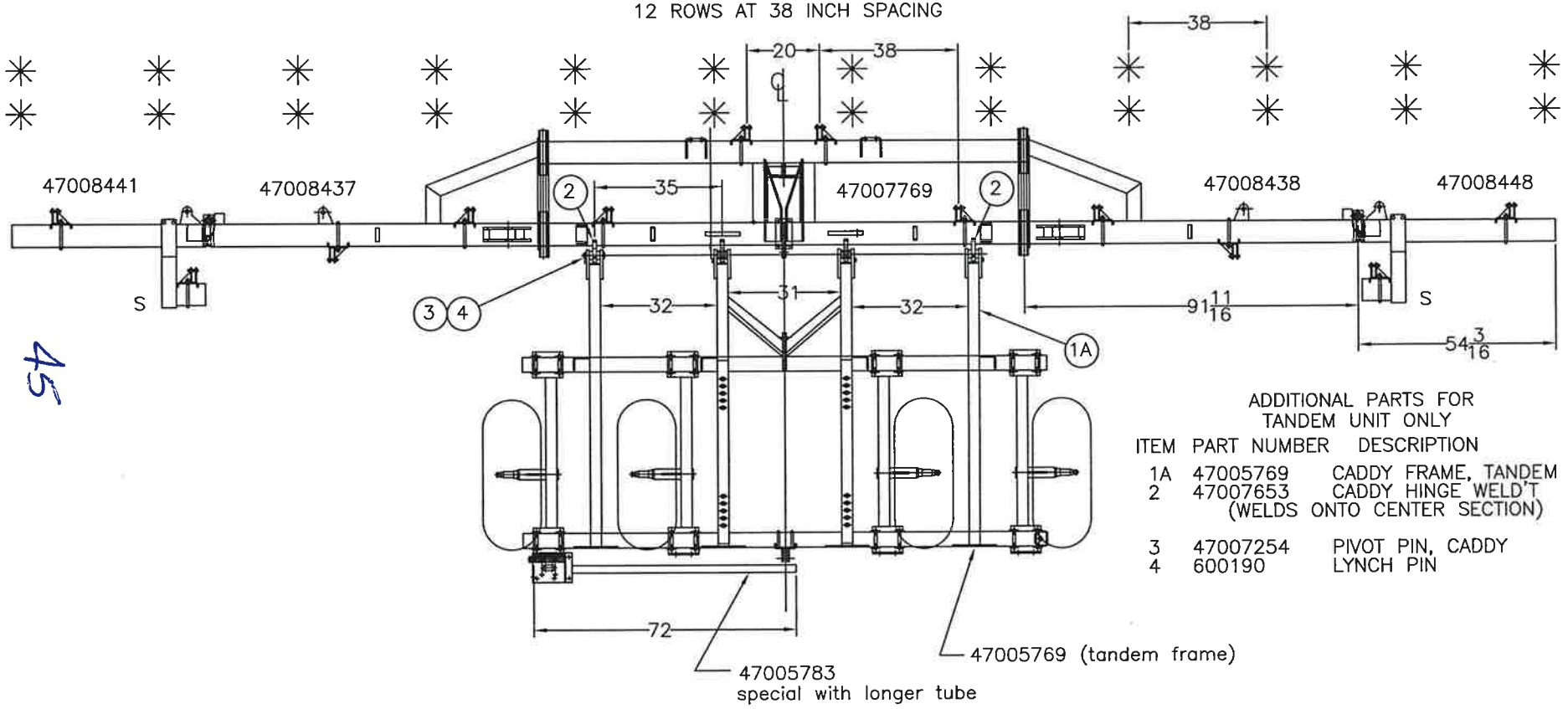


6200 TOOLBAR (35 FT)

WITH TANDEM WHEELS OPTION

62K38SDTANDEMGWD
12-05-12

AG37 COULTERS FOR SIDE-DRESS
12 ROWS AT 38 INCH SPACING

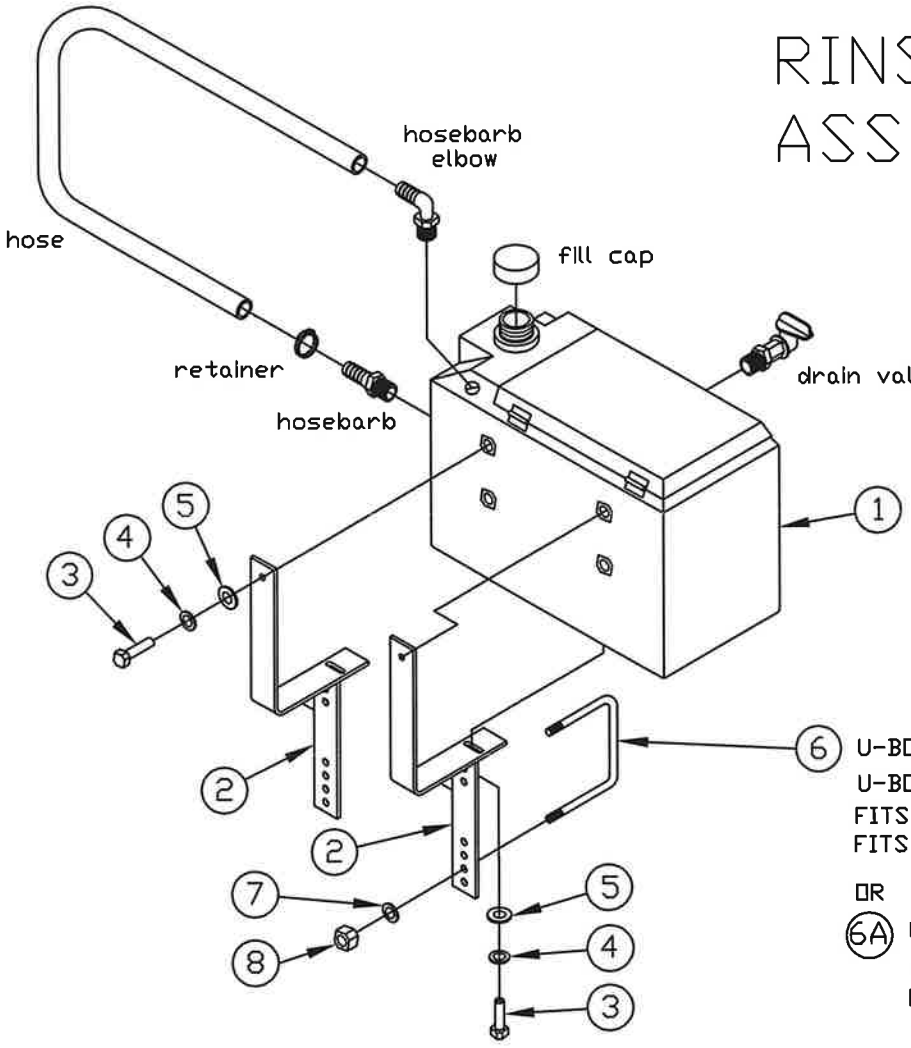


ADDITIONAL PARTS FOR
TANDEM UNIT ONLY

ITEM	PART NUMBER	DESCRIPTION	QTY
1A	47005769	CADDY FRAME, TANDEM	1
2	47007653	CADDY HINGE WELD'T (WELDS ONTO CENTER SECTION)	2
3	47007254	PIVOT PIN, CADDY	2
4	600190	LYNCH PIN	2

45

RINSE TANK ASSEMBLY



6 U-BOLT, FITS 4 X 6 TUBE
U-BOLT (4 X 6 TUBE)
FITS 6000, 6300, 6400, 6500, 6600
FITS 7000, 7200, 7300, 8000, 8500

OR

6A U-BOLT, FITS 3 X 5 TUBE
U-BOLT (3 X 5 TUBE)
FITS 6200 ONLY

ITEM	QTY	PARTNUMBER	DESCRIPTION
		601547	COMPLETE RINSE TANK KIT KIT INCLUDES ALL ITEMS 1 THRU 8
		47005781	RINSE TANK MOUNTING KIT INCLUDES ITEMS 2 THRU 8 ONLY
1	1	CRM6000-30	RINSE TANK ASSEMBLY INCLUDES HOSE, VALVE, CAP, AND FITTINGS
2	2	47005780	RINSE TANK BRACKET
3	4	18026422	BOLT, HEX 5/16 X 1/2SS
4	4	18991110	LOCKWASHER, 5/16 SS
5	4	18991100	FLATWASHER, 5/16 SS
6	2	47006545	U-BOLT (4 X 6 TUBE)
6A	2		U-BOLT (4 X 5 TUBE)
7	4	18891400	LOCKWASHER, 1/2 ZP
8	4	18417400	NUT, HEX, 1/2-13 ZP

MOUNTING INSTRUCTIONS

MOUNT TO THE LH HITCH POLE WITH BRACKETS ON THE INSIDE OF THE HITCH POLE. DRAIN VALVE ON TANK TO THE OUTSIDE. MOUNT FOR MAXIMUM DRAINAGE THRU SPIGOT USING ADJUSTMENT HOLES.

Heartland AG SYSTEMS
Heartland Agriculture, LLC

WARRANTY CLAIM FORM

Heartland AG SYSTEMS EQUIPMENT

Dist. Acct. No.	Shop Order No.		Part Number	Qty	Description	Distributor Total	Approved Total
Customer Name							
City	State						
Country	Postal Code						
Model No.	P.I.N.						
Warranty Start Date	Failure Date	Date of Repair					
Describe Problem(s)							
			Outside Expenses		Invoice No		
Describe Work Performed	Itemize Labor						
			Total Parts Cost Including Outside Expenses:				
			Labor	HRS	X Hourly Rate		
						Warranty Claim Total:	
			Distributer Signature				
			Authorized Signature		Status	Date	

November 4, 2020

Warranty claims must be submitted within 30 days of repair | Remit to address: 1180 Hwy 7 W Hutchinson MN 55350

Heartland Agriculture LLC, dba Heartland AG Systems