

Heartland
AG SYSTEMS

EQUIPMENT

**DRY FERTILIZER APPLICATOR
HIGH CLEARANCE
PULL TYPE SPREADER
AG600 / AG800 / AGX10**

SINGLE AND DUAL SPINNERS

**OWNERS MANUAL
ASSEMBLY INSTRUCTIONS
AND PARTS LIST
OM-HCPTS**

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

ISSUE
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WARRANTY REGISTRATION

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.

Seller Information	
Date set-up	_____
Signature	_____
Dealer name	_____
Address	_____
City, state, zip	_____
Phone	_____

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.

Customer Information	
Date delivered	_____
Customer name	_____
Customer address	_____
Signature	_____
Model number	_____
Serial number	_____

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SPDRHCCNTS
11-6-20

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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 customers who operate and maintain their equipment as described in this manual. Warranty registration is accomplished by the dealer completing and forwarding the WARRANTY REGISTRATION FORM 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 information to give you prompt, efficient service when you order parts.

MODEL NUMBER _____

SERIAL NUMBER _____

DATE PURCHASED _____

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.

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.

SAFETY FIRST

Accidents can be prevented by recognizing the causes or hazards before an accident occurs...and then doing something about it.

Regardless of the care in the design and construction of the equipment, there are some areas that cannot be completely safe guarded without interfering with accessibility and efficient operation.

THIS MESSAGE ALERT SYMBOL, IDENTIFIES IMPORTANT SAFETY MEASURES IN THIS MANUAL. WHEN YOU SEE THIS SYMBOL, BE ALERT TO THE POSSIBILITY OF PERSONAL INJURY AND CAREFULLY READ THE MESSAGE THAT FOLLOWS.

In this manual and on labels on this machine, the words "DANGER", "WARNING", "CAUTION", "IMPORTANT", and "NOTE" are used to indicate the following:

DANGER indicates the most serious and immediate hazards with the highest potential for injury.

WARNING indicates serious hazards.

CAUTION indicates practices to be followed or to be avoided to prevent injury.

IMPORTANT and NOTE are used for informational purposes in areas which may involve damage or deterioration to equipment, but generally would not involve potential for personal injury.

WARNING: When mixing and applying herbicides, chemicals, or fertilizer observe all Federal and State EPA regulations regarding application, licensing and waste disposal. Safety instructions furnished by chemicals manufacturers must be followed exactly to prevent serious harm to the individual and environment. Always wear protective clothing, goggles and respirators when handling chemicals.

CAUTION: Fertilizer is very corrosive and will oxidize steel over a period of time. This weakens steel parts and can cause failure to perform as intended and can cause possible safety hazards. Periodically check all Safety shields and structural members for corrosion. Replace or repair anything that could cause a potential safety hazard.

SAFETY INSTRUCTIONS

WARNING: Observe the IMPORTANT SAFETY INSTRUCTIONS listed below at all times. **THE BEST KIND OF SAFETY DEVICE IS A CAREFUL OPERATOR.**

1. DO NOT ALLOW ANYONE TO OPERATE YOUR UNIT UNLESS THEY HAVE READ THIS MANUAL AND ARE COMPLETELY FAMILIAR WITH ALL SAFETY AND OPERATING PROCEDURES.
2. Always park the spreader on a level surface, and shut off the towing vehicle and lock the brakes before making adjustments or repairs.
3. Never allow anyone to climb upon or stand on the fertilizer spreader while it is operating.
4. Do not allow children, irresponsible persons, persons under the influence of alcohol, medications, or other drugs that can impair judgment or cause drowsiness, or persons unfamiliar with equipment and safe operating procedures to operate this equipment.
5. People who are allergic to fertilizer (or any other chemicals being used) must never be allowed near the fertilizer applicator.
6. Keep all shields in place.
7. Make sure everyone is clear of equipment before starting operation.
8. Keep all unauthorized people away from the fertilizer spreader while in operation.
9. If any safety devices are not functioning properly, do not use the fertilizer spreader. Remove it from service until it has properly repaired by a qualified service technician.
10. Do not replace components or parts with other than genuine AG Systems, Inc. factory service parts. To do so may reduce the effectiveness of safety features or decrease the accuracy of the unit.
11. Material is discharged off the spinning distributors on the rear of the fertilizer spreader at a high velocity which could inflict injury and/ or pain. Make sure none of this material is directed at humans or animals.

OPERATING AND SERVICE INSTRUCTIONS

UPON RECEIVING YOUR NEW AGX10, AG800, AG600, AG500, AG400

When you receive your new spreader be sure that all shipping fasteners are removed prior to operation. Check machine thoroughly for screws, bolts, fittings, etc., which may have come loose during shipping. Check wheel lug nuts for tightness before using machine.

HITCHING

The spreader should always be hooked up so the tongue is level when loaded. The PTO shaft should be approximately one-half extended when the spreader is attached to the tractor. Use a swinging draw bar or plate to accomplish this.

SIZE OF LOAD

We do not recommend loads over the rating for your machine 8-ton, 6-ton, 5-ton even though the spreaders will hold more than that of certain fertilizer analysis. It is **NOT** recommended to use this machine to spread Ag lime products.

FORWARD SPEED

Variation in forward speed will not affect the rate of application as the conveyor is ground driven. When spreading at rates over 600 pounds per acre do not exceed 8 mph.

**CAUTION -- Do not exceed speeds over 20 mph on the highway.
Do not back-up unless the drive wheel is disengaged.**

GATE SETTING

The marker for the gate is designed so that when the gate reading is 2 inches, the gate is 2 inches from the floor. These settings hold true throughout the gate settings. Each setting can be measured from the floor. To set the gate, look on the rate decal under the cubic foot weights on the top of the decal, then read gate opening in inches. Set the gate accordingly.

SPREAD PATTERN – ADJUSTMENT – SINGLE DISTRIBUTION UNITS

CHUTE AND BLADE ADJUSTMENTS

The rear chute and fan blades on AG Systems spreaders have been designed to be adjustable in order to yield accurate spread pattern with virtually all fertilizer used in agriculture today and the differences inherent in these products. It is **EXTREMELY IMPORTANT** to test the accuracy of the spread pattern of your spreader using the same fertilizer you intend to spread.

Adjustments of the rear chute and/or the distributor blades is frequently required. Refer to the spread pattern section of the manual for specific spread pattern testing instructions. Single distributor chute settings are shown on page 32. Dual distributor chute settings are shown on page 36.

ADJUSTMENTS OF THE BALANCE AND PATTERN

If the results of the spread pattern test indicate an unequal balance, movement of the chute forward will increase the amount of product spread to the left while rearward movement will increase the amount of product spread to the right. (Adjustments of 1/8" and less will have a significant effect on the balance of the pattern.)

The factory setting of the distributor blades is five blades on the third hole back and one blade on the second hole back, measured from blade being advanced to maximum. Adjusting the distributor blades toward the most advanced position will tend to move the material to the right side of the pattern. They may be adjusted at the same time.

Excellent spread patterns can be achieved when the above procedures have been followed. Should you still have problems adjusting your spread patterns contact your AG Systems, Inc. distributor or AG Systems, Inc. service department.

Single Distributor Units:

Standard Rate Decal – Part No. 30906 -- Metric – Part No. 32530

Special Low Rate Decal – Part No. 309067

Dual Distributor Units:

Standard Rate Decal – Part No. 30853 – Metric Part No. 32529

Special Low Rate Decal – Part No. 30854

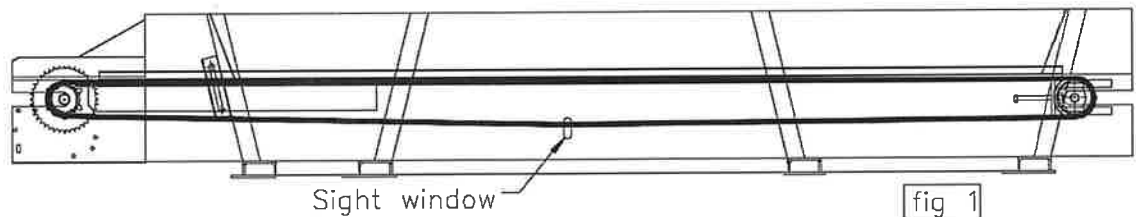
The dual distributors are set to spread a 40 foot pattern. The distributors should be run @ 750 rpm.

CALIBRATION

To check the accuracy of the gate settings, turn the conveyor drive wheel (small wheel on the left rear end of machine) 28 ½ turns on machines with single distributors, catching and weighing the fertilizer that comes off the conveyor. Twenty eight and one-half turns equals 1/10 of an acre. For machines with dual distributors, 35 turns equals 1/10 of an acre. For instance – if you have accumulated 11 pound of fertilizer, multiply this by 10 and you will know that you are spreading at the rate of 110 pounds per acre (11 lbs. x 10 = 110 lbs.)

NOTE: The two most frequent contributors to calibration error are

1. Weight per cubic foot of material not known (all materials and blends should be weighed).
2. Width of pattern not driven consistently.



CONVEYOR BELT:

Be sure that the heavy duty stainless steel conveyor belt has the proper tension at all times. After use, the conveyor belt will sag. Keep it between 1" and 3" at the center of the conveyor belt, in view thru the sight windows (see fig 1) on the side of the conveyor tunnel for proper operation. Do not allow excess sag to continue for operation. Conveyor belt is tightened by loosening the locknut on the take up (in front of machine) and turning nut clockwise, thereby tightening conveyor belt. If the conveyor belt is stretched out and you run out of thread on the take up bolt back off the locknuts so the belt is as loose as possible. Then find the splice link on the belt and remove one set of links from the belt. Reassemble and tighten the belt as indicated above.

NOTE -- BE SURE TO TIGHTEN BOTH SIDES EVENLY

When transporting the spreader the fertilizer can pack very tightly in and around the conveyor belt chain. Loosen the conveyor belt before engaging the drive wheel by manually rotating the drive wheel to make sure it will operate freely.

IF DURING FIELD OPERATION the conveyor is not running smoothly the drive wheel may be slipping. Increase the spring tension by adjusting the chain attached to the tension spring. This is more easily done when the drive tire is in engagement with the ground tire and the tongue is near the ground. For easier adjustment of the spring the drive tire could be removed from the shaft and the drive frame tripped into the engaged position. Adjust the spring chain as desired the put the drive frame in transport position and reassemble the drive tire.

DAILY CARE OF MACHINE

1. WHEEL LUG NUTS:

Check wheel lug nuts daily for tightness.

2. SAFETY SHIELDS:

Make sure that all safety shields are properly in place, pto, belts, shields, etc.

3. PTO SHAFT CARE:

Lubricate the P.T.O. shaft before use. Clean and lubricate the inner shaft at least twice a day. Grease the u-joints daily. Do not over grease the u-joints.

CAUTION – Check pto shaft shields. If shields are damaged, replace at once. Do not operate with damaged pto shields.

4. METERING GATE SLIDES:

Keep metering gate slides clean at all times. Always close the metering gate before loading the spreader.

5. BUILD-UP OF MATERIAL ON CHUTES:

Keep the chute free from build-up so that the fertilizer will fall correctly onto the distributor blades. Always clean the top of the chute thoroughly. If build-up occurs on the top of the chute, a streak will be left under the spreader while spreading.

6. BUILD-UP OF MATERIAL ON CONVEYOR BED:

CAUTION – Be sure to inspect conveyor bed daily for build-up of excess fertilizer material under conveyor belt. Excessive build-up first appears on the skid plate between the rear roller and the gate. This condition can most easily be noted by sighting through the gate opening.

Hosing the machine out with water after each day's run will eliminate build-up if done before the material has hardened. However, if build-up has already occurred, remove the conveyor belt and scrape the floor clean.

7. OVERNIGHT STORAGE

Avoid overnight storage of material in machine in order to prevent excessive compaction. In the event the spreader does stand overnight, or is subjected to rain or high humidity with a small amount of material on the floor, move the conveyor

belt in the proper direction by turning small drive wheel manually to insure free movement prior to actual operation.

ALL UNITS SHOULD BE WASHED DAILY.
DO NOT USE A PRESSURE WASHER AS YOU WILL FORCE FERTILIZER INTO THE BEARINGS.

WEEKLY CARE

1. LUBRICATION:

Grease all points every 75 hours of operation with the exception of the conveyor belt bearings, which should be greased every 200 hours, and the pto shaft which, mentioned earlier, should be greased daily.

CAUTION – Do not over-grease sealed bearings. Over-greasing will break the seal, thus allowing fertilizer to work into the bearing, eventually causing it to fail. Use only ONE pump of the grease gun per greasing. NEVER USE AN AIR GREASE GUN!

2. V BELT MAINTENANCE:

Check and adjust after first two hours of operation, and weekly thereafter, to insure proper operation and even spreading of material.

3. TIRE MAINTENANCE:

Be sure that tires are properly inflated at all times. Recommended tire pressures are as follows:

<u>Tire/rim</u>	<u>Tire Size</u>	<u>Offset</u>	<u>Tire press PSI</u>	<u>Load Capacity</u>
40014HD	320/85R38	1 1/8	52psi/30mph 52psi/10mph	6000lbs@30mph 7980 lbs@10mph
40014RHD	320/85R38	1 1/8	52psi/10mph 52psi/10mph	6000 lbs@30mph 7980 lbs@10mph
40031	380/90R46	0	49psi/30mph 49psi/10mph	8800 lbs@30mph 11,704lbs@10mph
40031R	380/90R46	0	49psi/30mph 49psi/10mph	8800 lbs@30mph 11,704lbs@10mph
44105519	16.5 x 6.5 x 8	0	25psi	

Also see Wheel and Rim Torque Requirements page 49 of this owners manual for lug nut torque recommendations, tightening procedures, and checking information.

CARE BETWEEN SEASONS

1. DISTRIBUTOR GEARBOXES:

Gearboxes should be checked for oil level BEFORE and AFTER each busy season. If low, refill with #90 gear lube to the level plug located on the side of the gearbox. (half full)

2. WHEEL BEARING MAINTENANCE:

Remove, clean and inspect all wheel bearings after each busy season, or at least twice a year. Replace any worn bearings and repack with wheel bearing grease and adjust for proper tension. Never let a machine set for any period of time with old grease in the bearings.

3. FAN BLADE MAINTENANCE:

Check fan blades, straighten or replace when needed. Also be sure to keep fan blades free from material build-up, otherwise the quality of the spread will be affected. Keep them clean.

4. SPREADER STORAGE:

Always store the spreader with the tarp removed. Otherwise, moisture may be confined within the box, causing undue rust.

SPREAD PATTERN TESTING

1. EQUIPMENT REQUIRED:

Spread Pattern Test Kit No. 5323 includes –

- | | |
|--|--------------------|
| ■ Scale | ■ 11 Boxes |
| ■ Instructions for Spread Pattern Test | ■ Funnel |
| ■ Width Marker for Setting Boxes | ■ 4 Flags |
| ■ 100 Spread Pattern Test Charts | ■ 11 Tubes in Rack |

2. PROCEDURE TO SET MACHINE AND COURSE:

Select site – Flat level ground preferably, 900 feet long and wide enough for two passes at selected pattern width.

Clean spreader – chip fertilizer from rear conveyor floor, gate, chute area and distributor blades.

Check distributor shaft centers (dual distributor) from center of chute. The proper dimension is 10 1/8".

Check for bent or worn blades, blade settings and curved deflectors.

Check belts and chain tension front and rear.

Check gate opening in closed position. There should be 1 1/2" from bottom of gate to floor.

Check material weight per cubic foot using scale.

Select rate per acre and set gate to correct setting.

Use tractor or other prime mover with wide front wheel spread (to clear boxes) – hoop up spreader with spreader as level as possible.

Check distributor rpm with tachometer per manual. Note tractor with pto to be run at 540 rpm.

(c) Hydraulic drive set for 740-750 distributor rpm per manual.

(d) Truck spreader or hydraulic drive requires at least 1,700 engine rpm. Spread material for 450' before passing boxes.

Drive 450' beyond boxes with spreader operating, turn right or left at flag and around opposite flag and line up with center of box 1 or 11 and continue to pass for 450' past boxes to original starting line.

Depending on rate per acre, one or more complete passes may be run to obtain at least 1" of material in test tubes. (At 100# per acre at least two complete passes are required to obtain a measurable quantity of material in the tubes).

Starting with box 1 pour contents into test tube #1 using funnel and continue through box 11.

Record tube level in inches or other units on data sheet for boxes 1 through 11 and complete data sheet information.

Pattern on graph should be level within plus or minus 10%.

If the graph is not acceptable, readjust machine per manual.

GENERAL NOTE --

(a) Spread at accurate widths, failure to do so will cause poor spread patterns resulting in field streaking and failure to meet a rate per acre application.

(b) ASAE and TFI recommends a spreader capacity calculation based on a standard material density of 65# per cubic foot.

(c) It is necessary to confirm actual material density (pounds per cubic foot) in order to be assured of correct rate per acre.

Lay out course and set boxes per "Spread Pattern Test" procedure (with direction of travel in to and away from wind).

- (a) Find wind direction (do not spread if wind velocity is over 5 mph).
- (b) Using width marker set boxes at 90 degrees (within 15 degrees) to wind direction, if possible, at spacings required per data sheet.
NOTE – for all spread widths, box 1 and 2 and 10 and 11 are spaced at 72" (6' 0") center to center of box for wheel clearance, and boxes 2 through 10 are spaced per "x" dimension on data sheet using marker. Allow 450" of spreader travel on each side (forward and aft) of boxes.
- (c) Set four flags, two in line with box 2 and two in line with box 10, 450' from center line of boxes per data sheet.

Material used for spread pattern should be sized and enough in the hopper to assure a full amount at the gate at test completion. EXAMPLE – 450' before boxes and 450' after boxes plus 40' between boxes plus 900' (second pass) = 1,840 lineal feet of spreader travel x 40' spread width = 73,600 square feet divided by 43,560 square feet per acre = 1.69 acres x 300# per acre = 507# of material used for one complete test.

3. PROCEDURE – spread pattern test:

Drive prime mover off course at least 450' with conveyor drive disengaged to settle spreader contents. Turn conveyor drive to bring material to rear roller.

Drive towards center of box 1 or 11, for right hand or left hand pattern, with conveyor drive engaged and distributors turning at correct rpm, at 5 mph.

- (a) Tractor tachometer at 540 rpm (gives 740 distributor rpm).
- (b) Power pack set for 740-750 distributor rpm; engine governor controls rpm (output shaft speed is 540 rpm).
- (c)

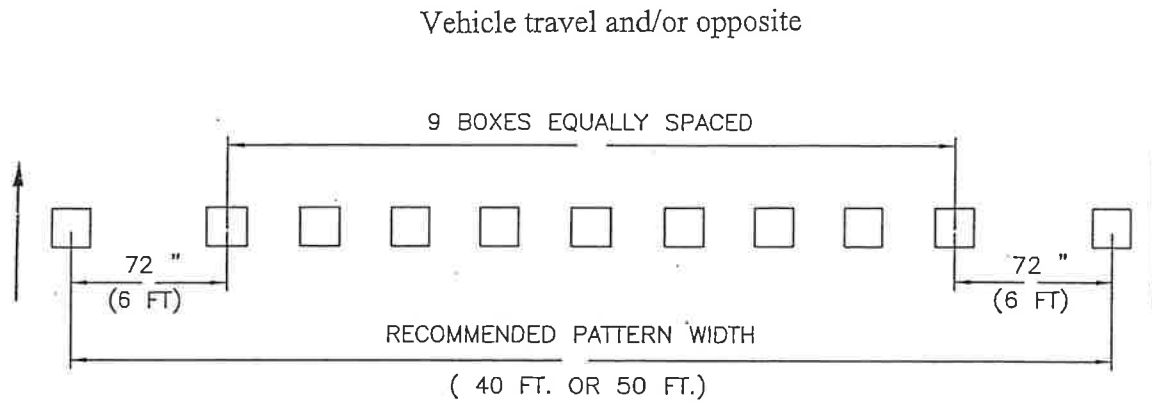
FIELD DEMONSTRATION SPREAD PATTERN TEST PROCEDURE

Check List

- (a) Power source – tractor with wide front and pto shaft.
- (b) Set tractor tachometer at 540 pto speed.
- (d) Ground speed for testing trailer spreader unit, 5 mph, spreader trucks, 8 mph.
- (e) Always know the exact weight per cubic foot of the material to be spread (recommended seedburrow-type scale).

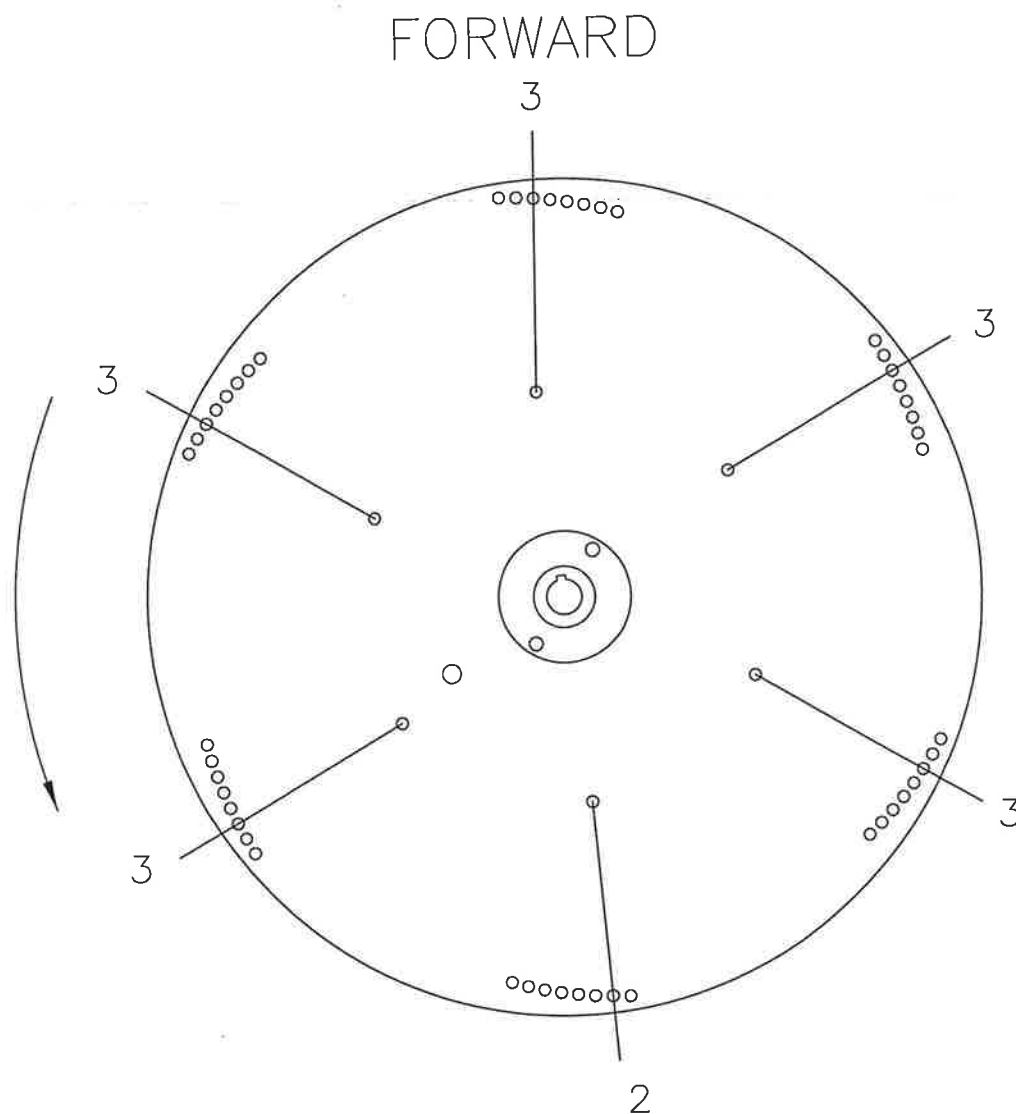
Spread Pattern Test – Overlap Pass

Set boxes in a straight line on smooth, level ground, per graph below:



Recommended pattern width

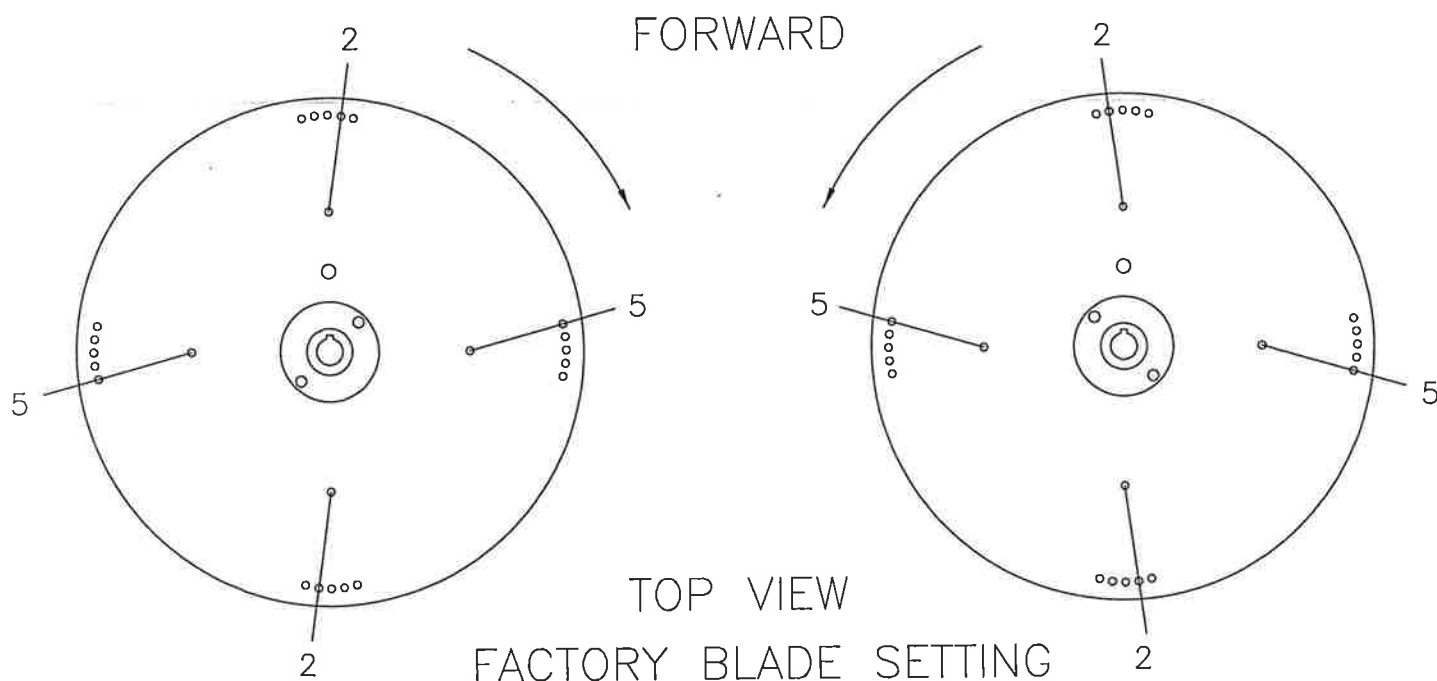
- (a) Set boxes so test can be run driving directly into the wind.
- (b) Drive over boxes as shown. (right hand overlap pattern shown – left hand opposite).
- (c) For low rates per acre, run at least two passes.
- (d) Ideal pattern would be a pattern that has an equal amount of fertilizer in each tube.



FACTORY BLADE SETTING

SINGLE DISTRIBUTER SPREADERS

This factory blade setting is five (5) blades on the 3rd hole back from the rotation of the distributor, and one (1) on the 2nd hole back. Adjusting the blades toward the rotation of the distributor will tend to move the material around to the right hand side of the pattern. Adjusting the blades back from the rotation (opposite) will tend to move the material around to the left hand side of the pattern.



DUAL DISTRIBUTOR SPREADERS

The distributor blades are "factory set" as outlined above, at the 5th and the 2nd holes. However, we recommend that you "spread pattern check" your unit as described elsewhere in the manual.

By moving the blades forward (toward the rotation of the distributors) the material will be moved farther out into the outside ranges of the pattern. By moving the blades backward (opposite the rotation of the distributors) the material will be moved back into the middle range of the pattern.

Normally most fertilizers can be effectively spread at the recommended pattern width. However, in some instances, a narrower width may be advisable.

Urea may be one of the products where a narrower spread pattern may be advised due to the characteristics of the product (light weight, small pellets etc.).

Spread pattern testing the unit will determine the most effective width. This may be in the area of 30 to 36 feet. It may be necessary to make blade adjustment for best results.

HOW TO DETERMINE WEIGHT PER CUBIC FOOT OF MATERIAL:

1. Weigh an empty one gallon container. Use a gallon oil can or anti-freeze can with the top removed;
2. Fill the container level full with desire material;
3. Weigh container with material; subtract weight of container from gross weight;
4. Multiply this weight by 7.5 (7.5 gallons equals 1 cubic foot).
This will give you the correct pounds per cubic foot.

EXAMPLE – Typical material = phosphate; weight of one gallon container = 2 lbs.

Gross weight of container and materials = 9.95 lbs.

Deduct container weight 2.0 lbs. = 7.95 lbs.

Material weight without container = $7.95 \times 7.5 = 59.62$ lbs. per cubic foot (round off to 60 lbs.)

For Canada Using Liters:

- a. Weight of an empty 4 liter container
(Use a 4 liter oil can or anti-freeze can with top removed.)
- b. Fill container level with desired material.
- c. Weigh container with material. Subtract weight of container from gross weight.
- d. Multiply this weight by 7.08 (28.3 liters equals 1 cubic foot).
This yields the correct pounds per cubic foot.

DECALS:

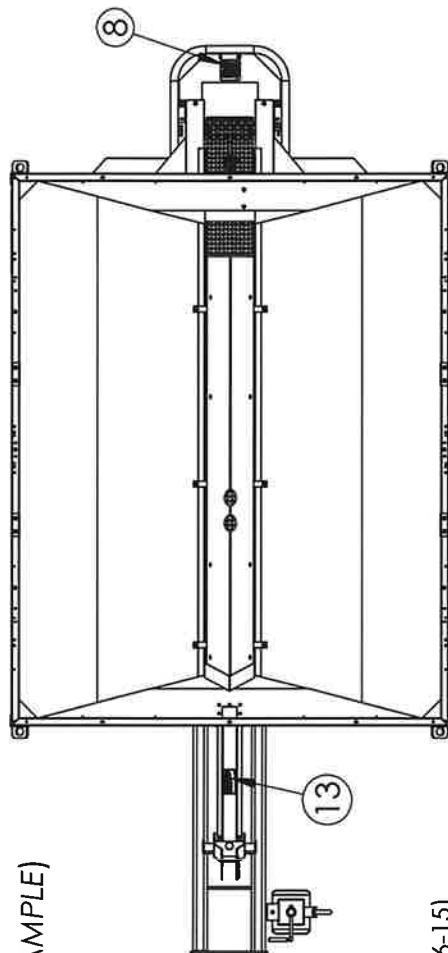
#10163 Operating Instructions Decals	#30481 Wheel Nut Decal
#10346 PTO Decal	#31868 Do Not Back Up Decal
(2) #12181 Caution – Guards	#31894 Caution Decal
#10554 Caution Decal	#37578 PTO RPM
#12182 Safety Alert Decal	(4) #699107 Ag Systems Decal
#12429 Caution Decal	(2) Capacity Decals
#5970, 540-1000 RPM Conversion Decal	(AGX10, AG 800, and AG 600,)

RATE CHART DECALS

30906C, see Page 24

OPERATOR NOTES

AND REFLECTIVE TAPE



(AG800HC SHOWN FOR EXAMPLE)

REFLECTIVE TAPE

KIT P.N.#20-4

24' TOTAL

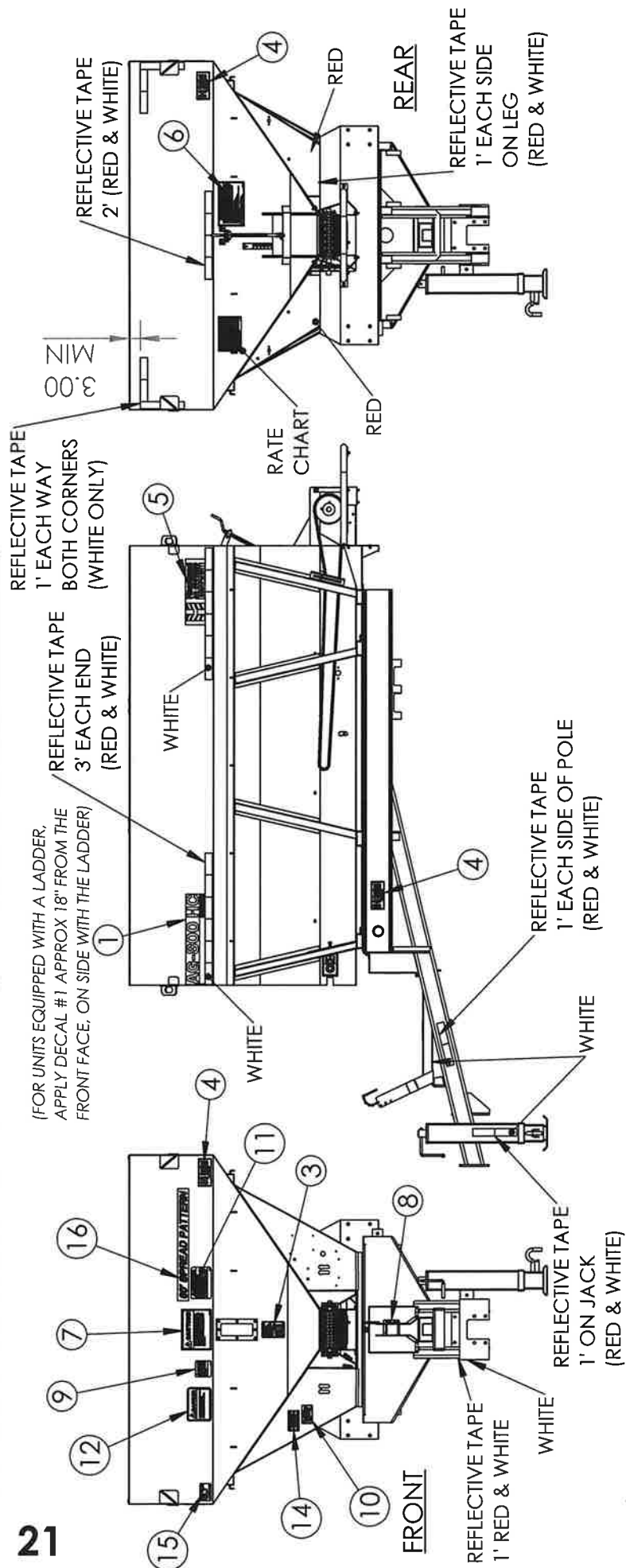
DECAL PACKAGE P/N:48030801

(SEE FOLLOWING PAGES FOR

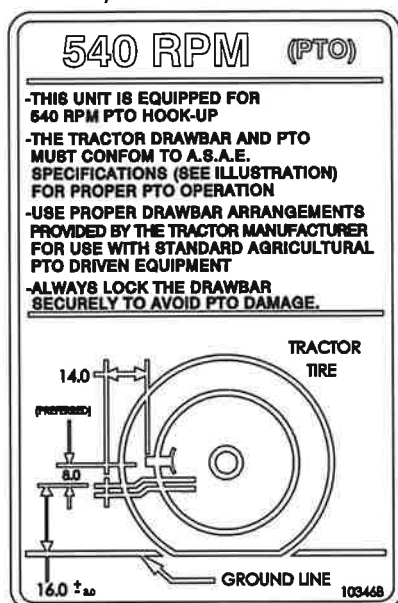
DECAL DESCRIPTION)

(DECAL KIT INCLUDES ITEMS 3-4 & 6-15)

ITEM #	PART #	QTY
1 (800)	71608/71607	1 EA
(600)	71606/71605	
(X-10)	71610/71609	
2	--	-
3	10346B	1
4	699107L	4
5	54135	2
6	10163A	1
7	31894A	1
8	12181A	2
9	12429A	1
10	30481B	1
11	37578	1
12	12182B	1
13	10554A	1
14	31868A	1
15	USA	1
16	70930	1

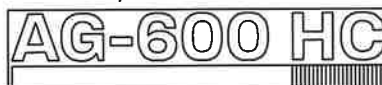


P/N: 10346B



DRIVER SIDE

P/N: 71606



P/N: 71608



P/N: 71610

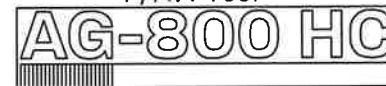


DITCH SIDE

P/N: 71605



P/N: 71607



P/N: 71609



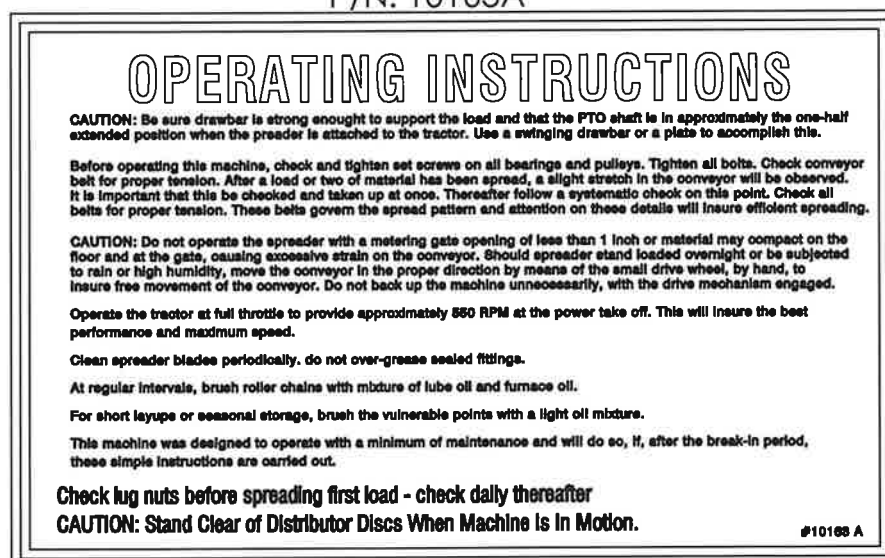
P/N:
699107L

**DECALS
NOT TO
SCALE**

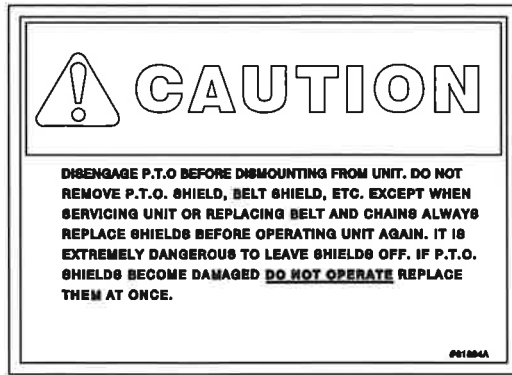
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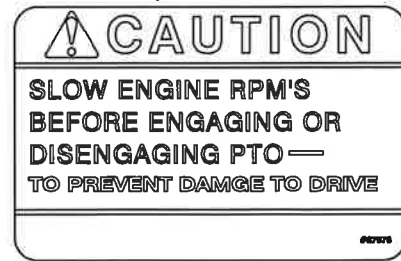
P/N: 10163A



P/N: 31894A



P/N: 37578



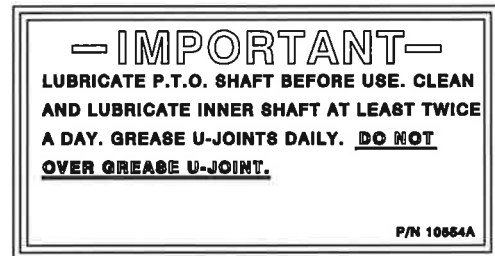
P/N: 12182B



P/N: 12181A



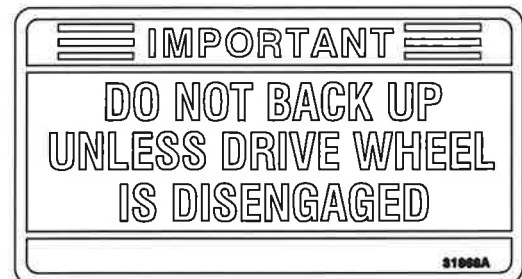
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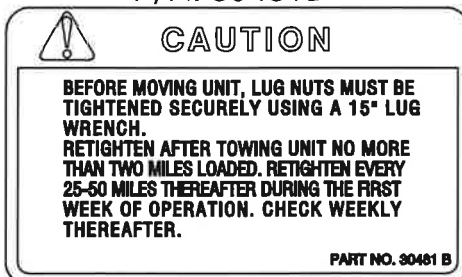
P/N: 12429A



P/N: 31868A



P/N: 30481B



P/N: USA



P/N: 70930

60' SPREAD PATTERN

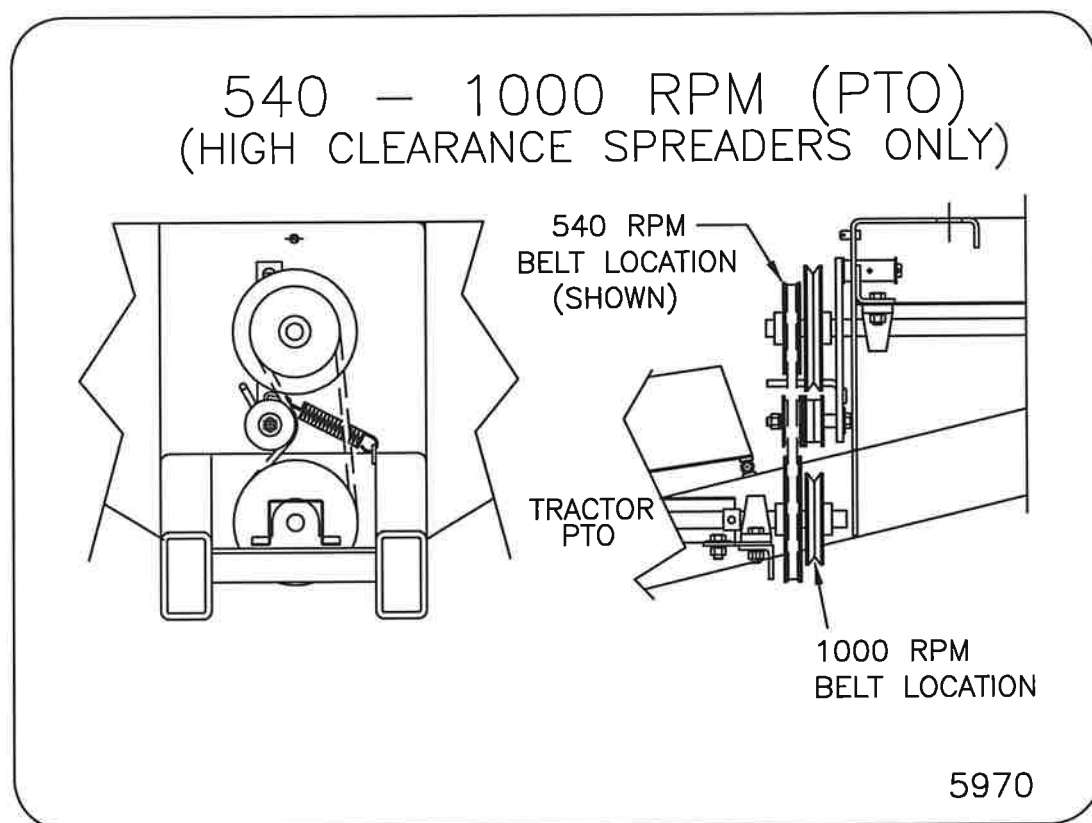
NOTES

RATE DECAL - STANDARD 60 FOOT PATTERN FERTILIZER

Gate Opening	45	50	52	54	56	58	60	62	64	66	68	70	72	74	76
1 1/2	49	55	57	59	60	63	65	68	69	71	74	76	78	80	83
2	66	74	77	79	83	86	87	91	94	96	100	103	105	109	112
2 1/2	85	95	98	102	105	110	113	117	121	124	128	132	136	140	143
3	102	113	117	122	128	132	136	140	145	149	155	159	164	168	173
3 1/2	122	135	140	145	151	157	162	167	173	178	184	189	194	200	205
4	137	155	159	167	173	178	188	191	197	203	210	216	222	228	234
4 1/2	264	293	305	317	329	340	352	364	375	387	399	410	422	434	446
	157	175	182	189	195	203	210	216	227	231	238	245	252	258	266
	299	332	345	359	373	385	399	412	425	438	452	465	478	491	505
5	175	194	201	210	217	225	233	240	248	257	264	272	280	287	295
	333	370	384	400	415	428	444	459	473	487	503	518	532	547	563
5 1/2	193	214	222	231	240	248	257	266	275	283	291	300	308	317	326
	367	408	424	441	457	473	490	506	523	539	554	572	588	604	621
6	212	235	245	254	263	272	282	292	301	311	320	329	338	348	357
	402	447	465	482	500	518	536	554	572	590	608	626	644	662	680
6 1/2	230	256	266	276	286	297	307	317	328	338	348	358	368	379	388
	438	487	507	527	545	565	585	604	624	644	662	682	702	723	741
7	247	274	285	296	307	318	329	339	351	362	373	383	394	406	417
	471	523	545	565	586	607	627	648	670	690	711	733	753	774	796

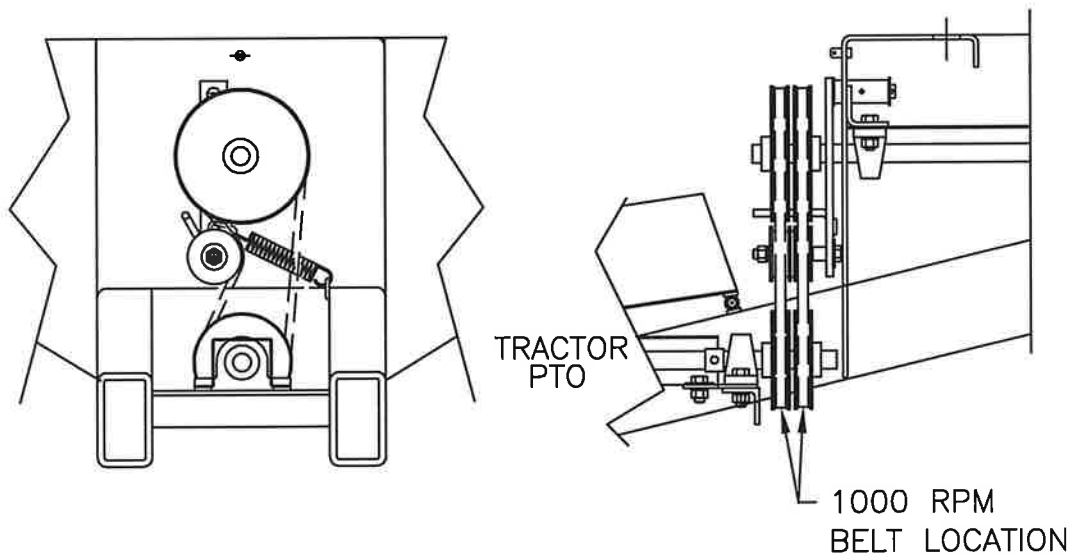
LOW RANGE - Using 15 tooth to 96 tooth sprockets - For rate per acre use top number in box.
HIGH RANGE - Using 25 tooth to 84 tooth sprockets - For rate per acre use bottom number in box

DECAL USED FOR 540–1000 RPM
PTO CONVERSIONS ONLY, TO
POSITION DRIVE BELTS



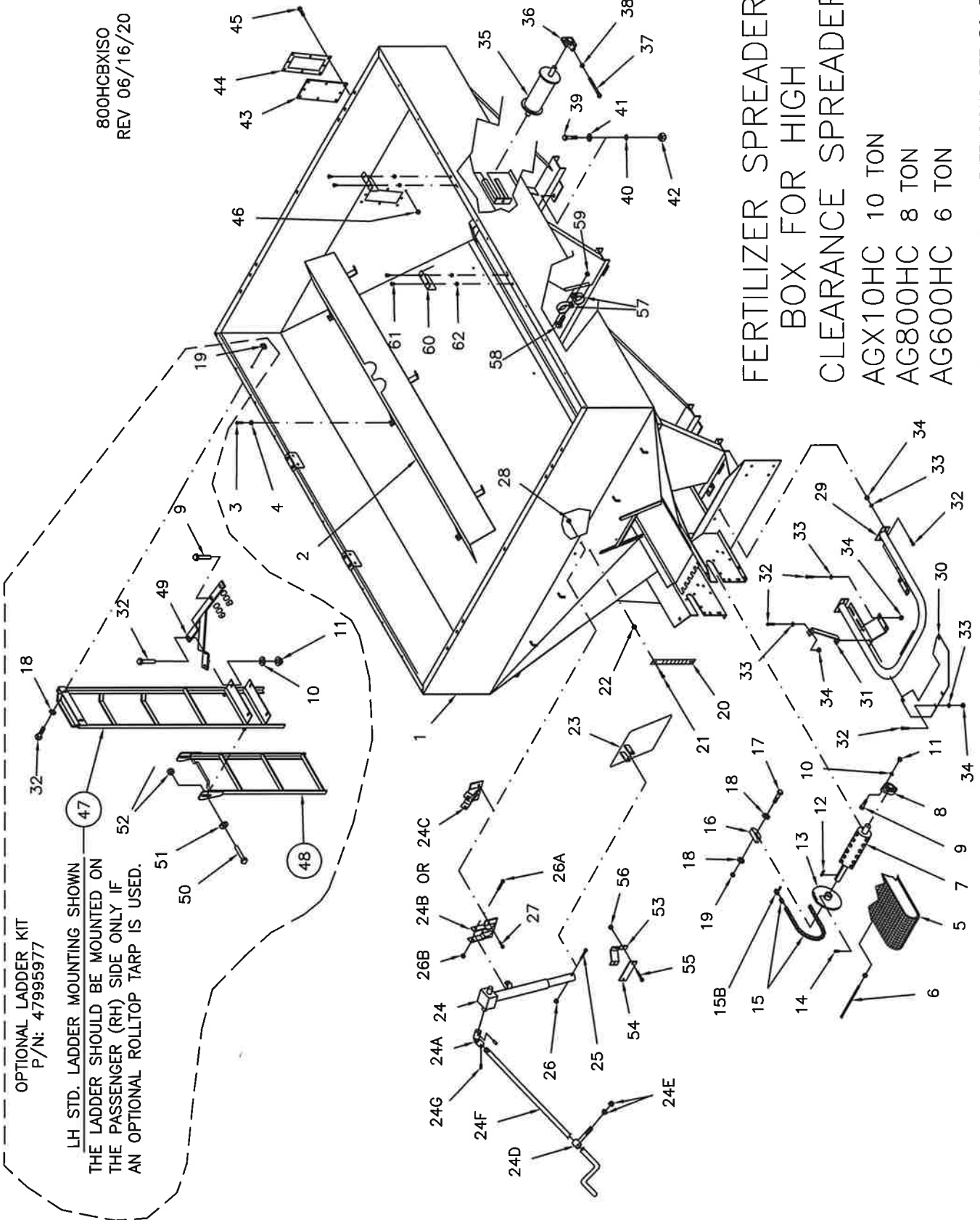
THIS DECAL IS FOR HIGH CLEARANCE MODELS ONLY
SETUP FOR 1000 RPM PTO ONLY, TO POSITION DRIVE BELTS

1000 RPM (PTO) MODEL
(HIGH CLEARANCE SPREADERS ONLY)



5970-1K

800HCBXISO
REV 06/16/20



FERTILIZER SPREADER BOX FOR HIGH CLEARANCE SPREADERS

AGX10HC 10 TON
AG800HC 8 TON
AG600HC 6 TON

FOR DEFLECTOR SHIELD EXTENSIONS SEE PG 31A

AGX10HC, AG800HC, AG600HC (HIGH CLEARANCE)

800HCBLST
REV 08/27/24

DRY FERTILIZER BOX

COMPLETE P.N. AGX10 41100100				COMPLETE P.N. 800 47999000				COMPLETE P.N. 600 47999039			
ITEM	PART NO.	DESCRIPTION	QTY.	ITEM	PART NO.	DESCRIPTION	QTY.				
1	47009000	HC BOX WELDMENT, 8 TON CAP.	1	26A	18997446	BOLT, 1/2NC X 4.00"	S.S. 1				
		OR		26B	18567400	LOCKNUT, HEX 1/2 NC	S.S. 1				
47609039		HC BOX WELDMENT, 6 TON CAP.	1	27	18706621	BOLT, TRUSS HD. 3/8-16NC. X 3/4	S.S. 2				
		OR		28	18987900	FLANGE NUT, 3/8-16NC.	S.S. 2				
47003610		HC BOX WELDMENT, 10 TON CAP.	1	29	47008956	BUMPER	1				
		CONVEYOR HOOD	1	30	47008962	SHIELD PLATE	1				
2	47019019	BOLT, TRUSS HD. 3/8-16NC. X 3/4 S.S.	6	31	47008961	BRACE, BUMPER	2				
3	18706621	FLANGE NUT, 3/8-16NC.	S.S. 6	32	18026822	BOLT, 3/8-16NC. 1	S.S. 14				
4	18987900	CONVEYOR CHAIN, 21 FT. 8 1/2 IN.	1	33	18991200	FLATWASHER, 3/8	S.S. 14				
5	30934	SPLICE PIN WITH NUT	1	34	18987900	FLANGE NUT, 3/8-16NC.	S.S. 14				
6	10275	DRIVE ROLLER	1	35	03005	FRONT ROLLER	1				
7	03301B	FLANGE BLOCK WITH BEARING	2	36	10024	TAKE-UP BEARING WITH BEARING	2				
8	30708	BOLT, 3/8-16NC. X 1 1/4	S.S. 4	37	10485	REPLACEMENT BEARING ONLY	2				
9	18026824	LOCKWASHER, 3/8	S.S. 4	38	01055	TAKE-UP BOLT	2				
10	18881201	HEX. NUT, 3/8-16NC.	S.S. 4	39	18997400	HEX. NUT, 1/2-13NC.	S.S. 4				
11	18476800	DRIVE KEY, 1/4 X 1/4 X 1 1/2	1	40	18058430	BOLT, 3/4-10NC. X 2	ZP 4				
12	47006519	DRIVE SPROCKET, NO. 50-40T	1	41	18991800	LOCKWASHER, 3/4	ZP 4				
13	31440	SQ. HD. SET SCREW, 5/16-18NC. X 1 1/4	2	42	18811800	FLATWASHER, 3/4	ZP 4				
14	18767451	ROLLER CHAIN, #20-50 X 107"	1	43	18418400	HEX. NUT, 3/4-10NC.	ZP 4				
15	71964	(INCLUDES ITEMS 15A & 15B)									
15A	30678	CONNECTER LINK ONLY, #20-50	1	44	47003947	SIGHTGLASS WINDOW PANE (LEXAN)	1				
				45	47003946	SIGHTGLASS WINDOW FRAME	1				
15B	30688	OFFSET LINK, NO. 20-50 CHAIN	1	46	18026418	BOLT, 5/16-18 X 3/4	S.S. 8				
		USED WITH AG600 ONLY		47	18476351	NUT, 5/16-18 SELF LOCK	S.S. 8				
16	10113	CHAIN TIGHTENER BLOCK	1	48	28124A	UPPER LADDER	1				
17	18476834	BOLT, 3/8-16NC. X 2 1/2	S.S. 1	49	28125	LOWER LADDER	1				
18	18991200	FLATWASHER, 3/8	S.S. 3	50	47005977	LADDER MOUNT	1				
19	18987900	FLANGE NUT, 3/8-16NC.	S.S. 1	51	18027438	BOLT, 1/2-13 X 3 ZC	2				
20	30927	GATE SCALE	1	52	18824800	FLATWASHER, 1/2 ZC	2				
21	18706421	BOLT, TRUSS HD. 5/16-18NC. X 3/4	S.S. 2		18567400	NUT, 1/2-13 NYLOCK SS	2				
22	18987700	FLANGE NUT, 5/16-18NC.	S.S. 2								
23	47005864	METERING GATE FOR HC SPREADERS	1								
24	312994	HC SCREW JACK ASSEMBLY	1								
24A	85002	JACK U-JOINT	1								
24B	47005867	GATE BRKT WELDMENT 600HC ONLY	1								
		OR									
24C	47005868	GATE BRKT WELDMENT 800/X10 HC	1								
24D	47005871	GUIDE WELDMENT, GATE CRANK	1								
24E	18977400	NUT, SERATED FLANGE SS	2								
24F	47005872	GATE CRANK	1								
24G	18006000	ROLLPIN, 3/16 DIA X 1" LONG	S.S. 2								
25	18476833	BOLT, 3/8-16NC. X 3.0	S.S. 1								
26	18566400	LOCKNUT, NYLOCK 3/8-16NC.	S.S. 1								

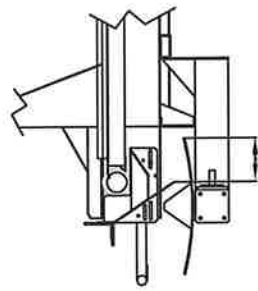
47995977 — OPTIONAL LADDER MOUNT KIT
(CONTAINS ITEMS 47 THRU 52 AND
ITEM 9 QTY 1 / ITEMS 10 & 11 QTY 3 EA/
(NOT IN LIST) ITEMS 18 & 19 QTY 2 EA / ITEM 32 QTY 4)

SINGLE DISTRIBUTOR ASSEMBLY

AGX10HC, AG800HC & AG600HC

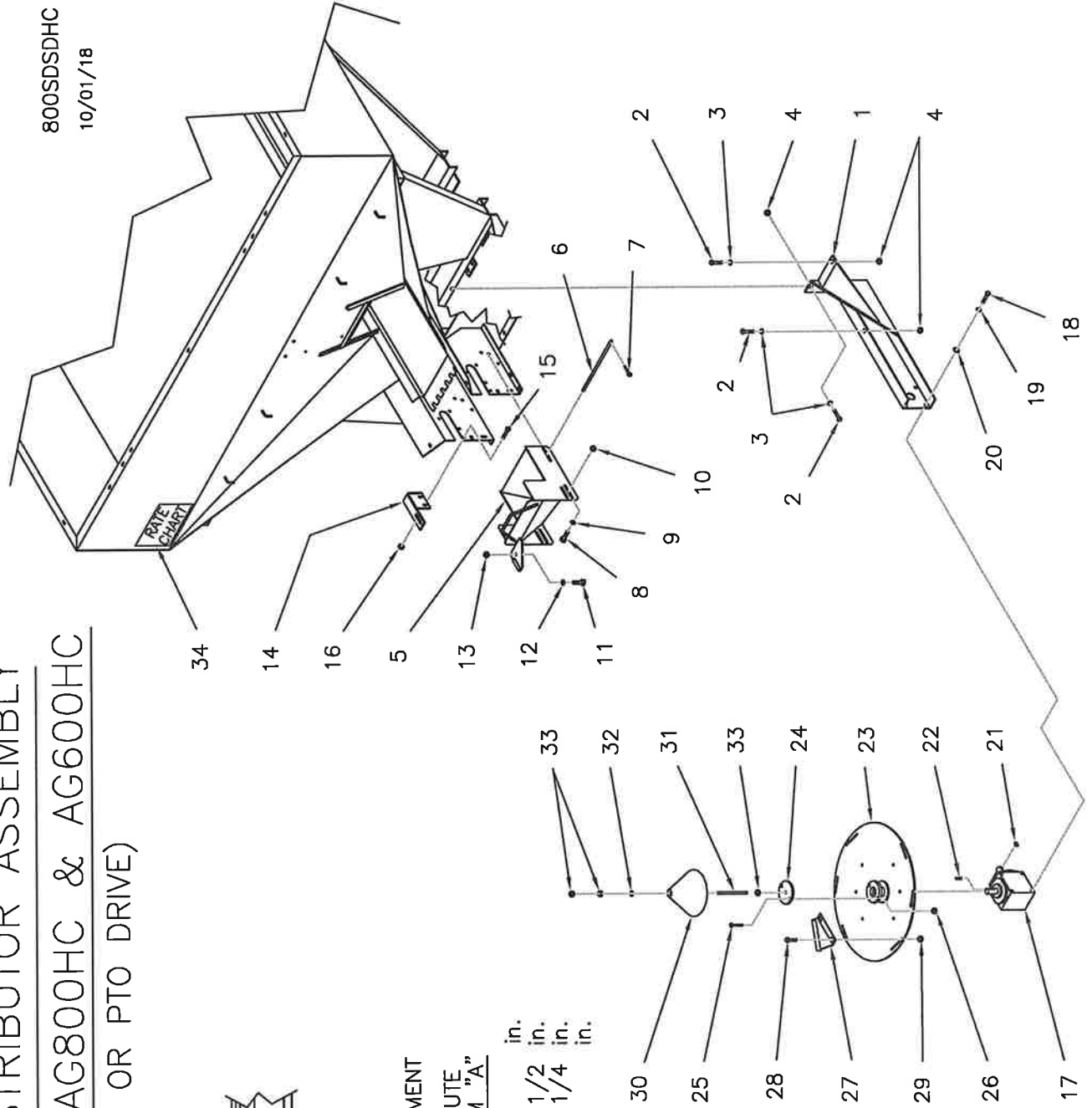
(MECHANICAL OR PTO DRIVE)

800SDSDHC
10/01/18



RECOMMENDED CHUTE ADJUSTMENT

MATERIAL WEIGHT	CHUTE DIM "A"	
50 lbs.	8	in.
54 lbs.	7 1/2	in.
60 lbs.	7 1/4	in.
70 lbs.	7	in.



AGX10HC, AG800HC & AG600HCSINGLE DISTRUBUTOR ASSEMBLY

(MECHANICAL OR PTO DRIVE)

COMPLETE P.N. 48010801

ITEM	PART NO.	DESCRIPTION	QTY.
1	47008950	MOUNTING ARM, LEFT HAND	1
	47018950	MOUNTING ARM, RIGHT HAND	1
2	18475240	BOLT, 1/2-13NC. X 1 1/4	S.S. 6
3	18824800	FLATWASHER, 1/2	S.S. 6
4	18977400	FLANGE NUT, 1/2-13NC.	S.S. 6
5	02298	CHUTE	1
6	37036	FRONT PIN, CHUTE	1
7	18660622	COTTER PIN, 1/8 X 1	S.S. 2
8	18026822	BOLT, 3/8-16NC. X 1	S.S. 2
9	18991200	FLATWASHER, 3/8	S.S. 2
10	18987900	FLANGE NUT, 3/8-16NC.	S.S. 2
11	18026822	BOLT, 3/8-16NC. X 1	S.S. 1
12	18881201	LOCKWASHER, 3/8	S.S. 1
13	18987900	FLANGE NUT, 3/8-16NC.	S.S. 1
14	47019398	CHUTE LOCK BRACKET	1
15	18706421	BOLT, TRUSS HD. 5/16-18NC. X 3/4	S.S. 2
16	18476350	HEX. NUT 5/16-18NC	S.S. 2
17	05359	GEARBOX	1
18	18026822	BOLT, 3/8-16NC. X 1	S.S. 8
19	18881201	LOCKWASHER, 3/8	S.S. 8
20	18991200	FLATWASHER, 3/8	8
21	30977	WOODRUFF KEY,	1
22	47006519	SQUARE KEY, 1/4 X 1/4 X 1 1/2	1
23	05157A	DISTRIBUTOR DISK ASSEMBLY	1
		INCLUDES ITEMS, 23A, 24, 25 AND 26	
23A	01695	DISTRIBUTOR DISK ONLY, INCLUDES	
	18767450	SET SCREW, SQ. HD. 5/16-18 X 3/4	2
24	34760	CONE MOUNT PLATE	1
25	18026824	BOLT, 3/8-16 NC. X 1 1/4	S.S. 2
26	18987900	FLANGE NUT, 3/8-16NC.	S.S. 2
27	31366	DISTRIBUTOR BLADE, HIGH LIFT	6
28	18706421	BOLT, TRUSS HD. 5/16-18NC. X 3/4	S.S. 12
29	18476350	HEX. NUT 5/16-18NC	S.S. 12
30	36378	CENTER CONE	1
31	37037	CONE HOLD-DOWN BOLT	1
32	18991200	FLATWASHER, 3/8	1
33	18476800	HEX. NUT, 3/8-16NC.	3
34	30906C	DECAL, RATE CHART (50 FT.)	1

DUAL DISTRIBUTOR ASSEMBLY

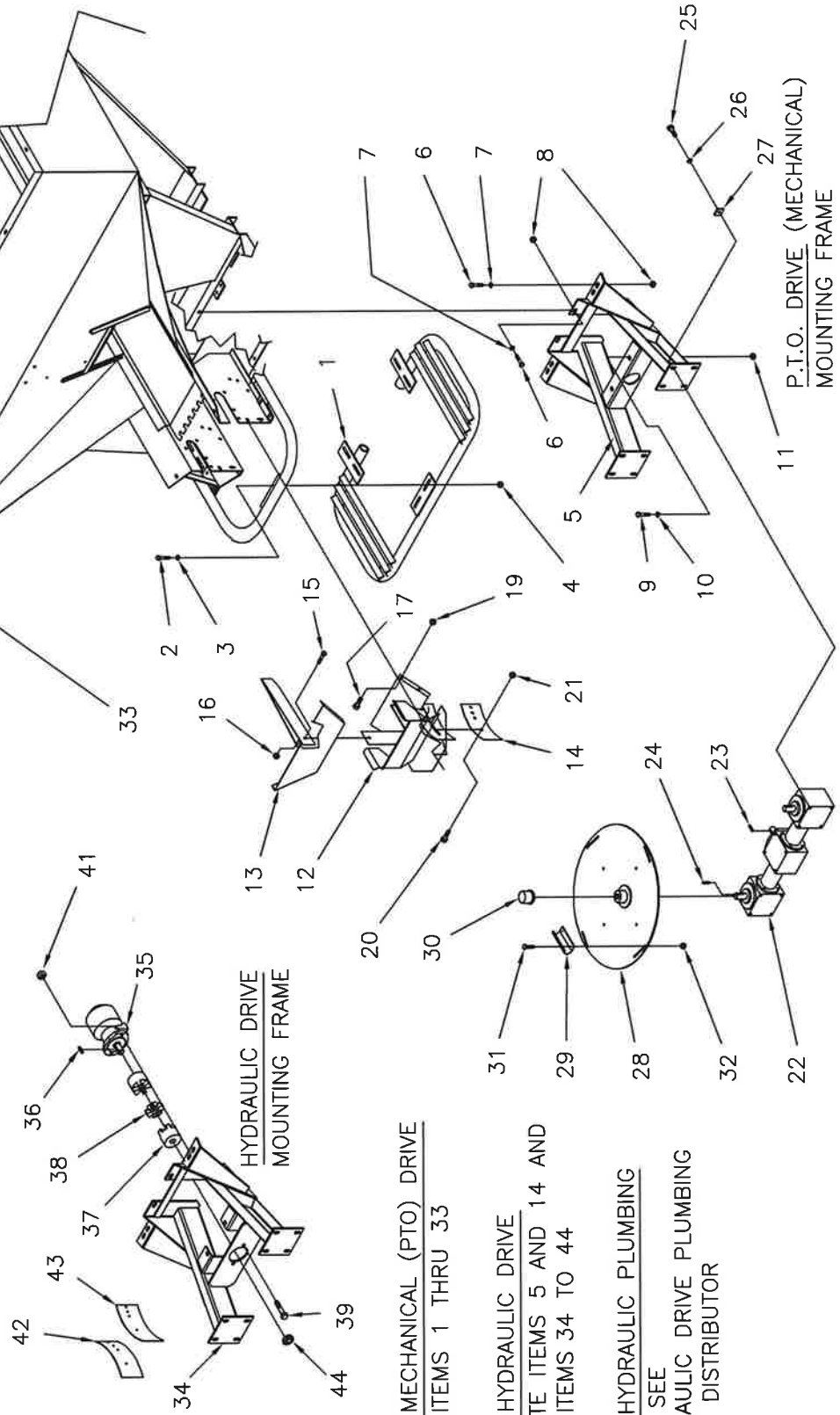
FOR AGX10, AG800, AG600 AND AG500

MECHANICAL DRIVE ASSEMBLY NO. 48020801

HYDRAULIC DRIVE ASSEMBLY NO. 48020809

800DDSD2016

REV 02/02/24



FOR MECHANICAL (PTO) DRIVE
USE ITEMS 1 THRU 33

FOR HYDRAULIC DRIVE
DELETE ITEMS 5 AND 14 AND
ADD ITEMS 34 TO 44

FOR HYDRAULIC PLUMBING
INFO SEE
HYDRAULIC DRIVE PLUMBING
DUAL DISTRIBUTOR

AGX10, AG800, AG600 AND AG500

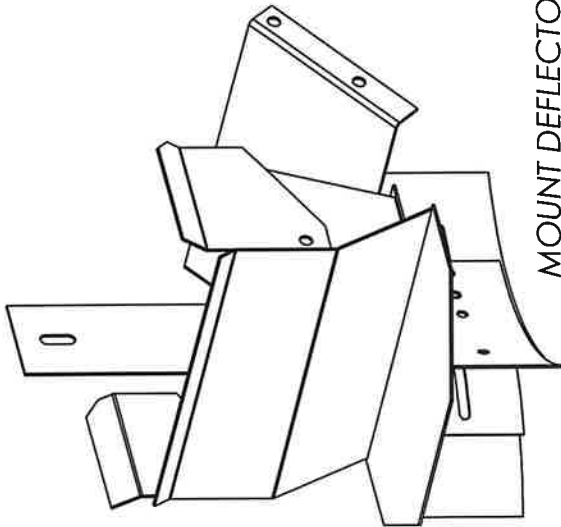
DUAL DISTRIBUTOR ASSEMBLY

800DDSDL2016

RV 09/30/24

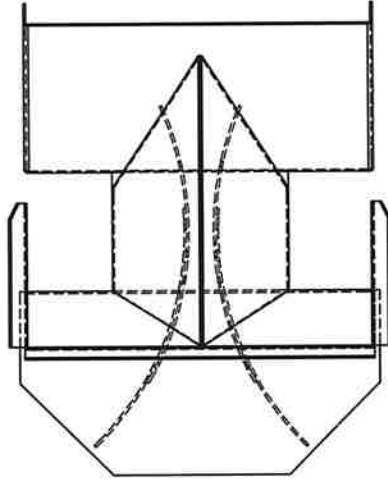
ITEM	PART NO.	DESCRIPTION	QTY.
	48020801	MECHANICAL DISTRIBUTER DRIVE COMPLETE INCLUDES ITEMS 1 TO 33	
1	05936	BUMPER, DUAL DISTRIBUTER	1
2	18026824	BOLT, 3/8-16NC. X 1 1/4	S.S. 6
3	18991200	FLATWASHER, 3/8	S.S. 6
4	18987900	FLANGE NUT, 3/8-16NC.	S.S. 6
5	47008967	DUAL GEARBOX MOUNT (MECHANICAL)	1
6	18475240	BOLT, 1/2-13NC. X 1 1/4	S.S. 6
7	18824800	FLATWASHER, 1/2	S.S. 6
8	18977400	FLANGE NUT, 1/2-13NC.	S.S. 6
9	18475240	BOLT, 1/2-13NC. X 1 1/4	S.S. 2
10	18824800	FLATWASHER, 1/2	S.S. 2
11	18977400	FLANGE NUT, 1/2-13NC.	S.S. 2
12	03334	FERTILIZER CHUTE	1
13	03336	UPPER DIVIDER	1
14	30741	DEFLECTOR EXTENSION (409 SS)	2
	30308	DEFLECTOR EXTENSION (304 SS)	OR
15	18026830	BOLT, 3/8-16NC. X 2	S.S. 1
16	18476800	HEX. NUT, 3/8-16NC.	S.S. 2
17	18026822	BOLT, 3/8-16NC. X 1	S.S. 4
18	18881201	LOCKWASHER, 3/8	S.S. 4
19	18987900	FLANGE NUT, 3/8-16NC.	S.S. 4
20	18706427	BOLT, TRUSS HD. 5/16-18NC. X 1/2	S.S. 4
21	18987700	FLANGE NUT, 5/16-18NC.	S.S. 4
22	05350A	GEARBOX ASSEMBLY	1
23	47009654	SQUARE KEY, 1/4 X 1/4 X 1 1/4	1
24	47006519	SQUARE KEY, 1/4 X 1/4 X 1 1/2	2
25	18026822	BOLT, 3/8-16NC. X 1	S.S. 8
26	18881201	LOCKWASHER, 3/8	S.S. 8
27	2-8983	BACKING WASHER	8
28	03380C	DISTRIBUTER DISC ASSEMBLY	2
29	31365	DISTRIBUTER BLADE, (409 S.S.)	8
	10339	DISTRIBUTER BLADE, (MILD STEEL)	OPT
30	34664	VINYL SHAFT COVER	2
31	18706423	BOLT, TRUSS HD. 1/4-20NC. X 3/4	S.S. 16
32	18475700	HEX. NUT, 1/4-20NC.	S.S. 16
33	30853C	DECAL, RATE CHART (40 FT.)	1
	48020809	HYDRAULIC DISTRIBUTER DRIVE COMPLETE INCLUDE ITEMS 1 TO 4, 6 TO 13 AND ITEMS 15 TO 44	
34	47009650	DUAL GEARBOX MOUNT, HYDRAULIC	1
35	02182	HYD. MOTOR, (TF0080WB080AAAB)(2016&up)	1
	02183	HYD. MOTOR, (M30A-842-MEAB12-43)(2015&OLDER)	
	BN92392	REPLACEMENT SEAL KIT	OPT
36	47009654	SQUARE KEY, 1/4 X 1/4 X 1 1/4	1
37	32197	FLEXIBLE COUPLING COMPLETE	1
38	95036	RUBBER SPIDER (REPLACEMENT)	-
39	18022026	BOLT, 1/2-13 NC. X 1 1/2 SS	2
40	---	---	-
41	18567400	NUT, NYLOCK 1/2-13 SS	2
42	47009655	DEFLECTOR EXTENSION, L.H.	1
43	47009656	DEFLECTOR EXTENSION, R.H.	1
44	2380K26	COLLAR, CLAMPING 2 PIECE 1" ZC	1

DUAL DISTRIBUTOR CHUTE DEFLECTOR SETTINGS

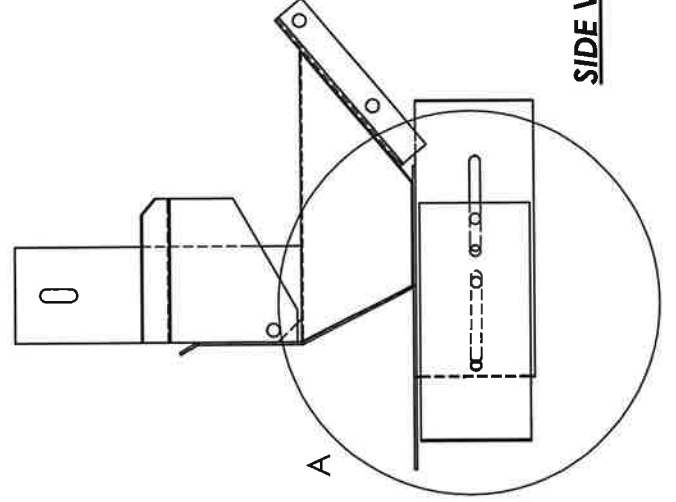


MOUNT DEFLECTORS ON THE OUTSIDE

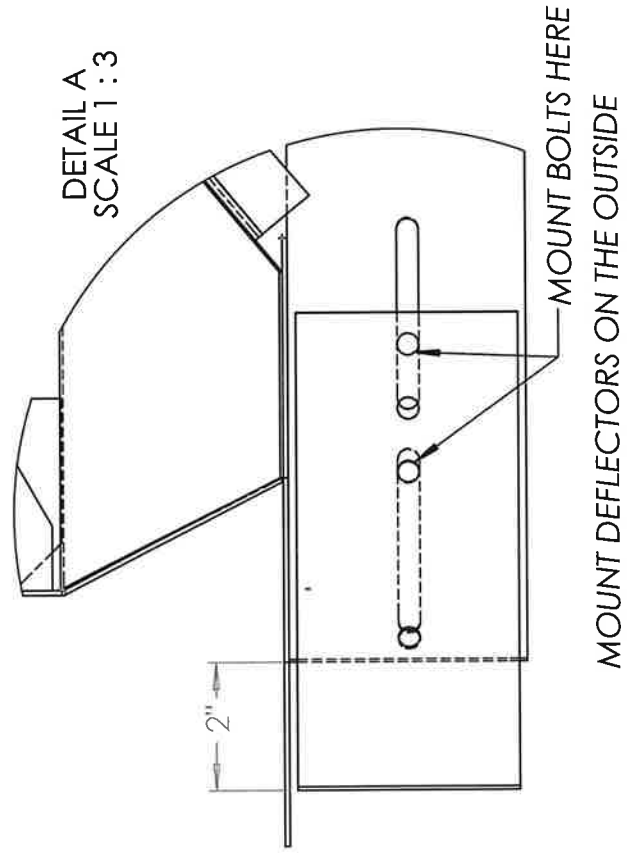
60 FOOT PATTERN
FOR APPLICATION RATE
SEE DECAL P/N: 30909B



TOP VIEW



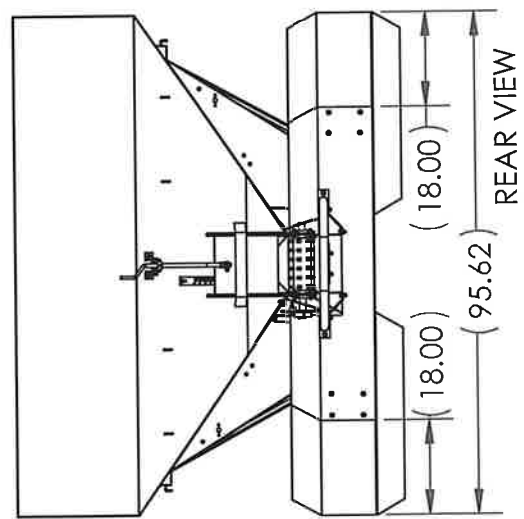
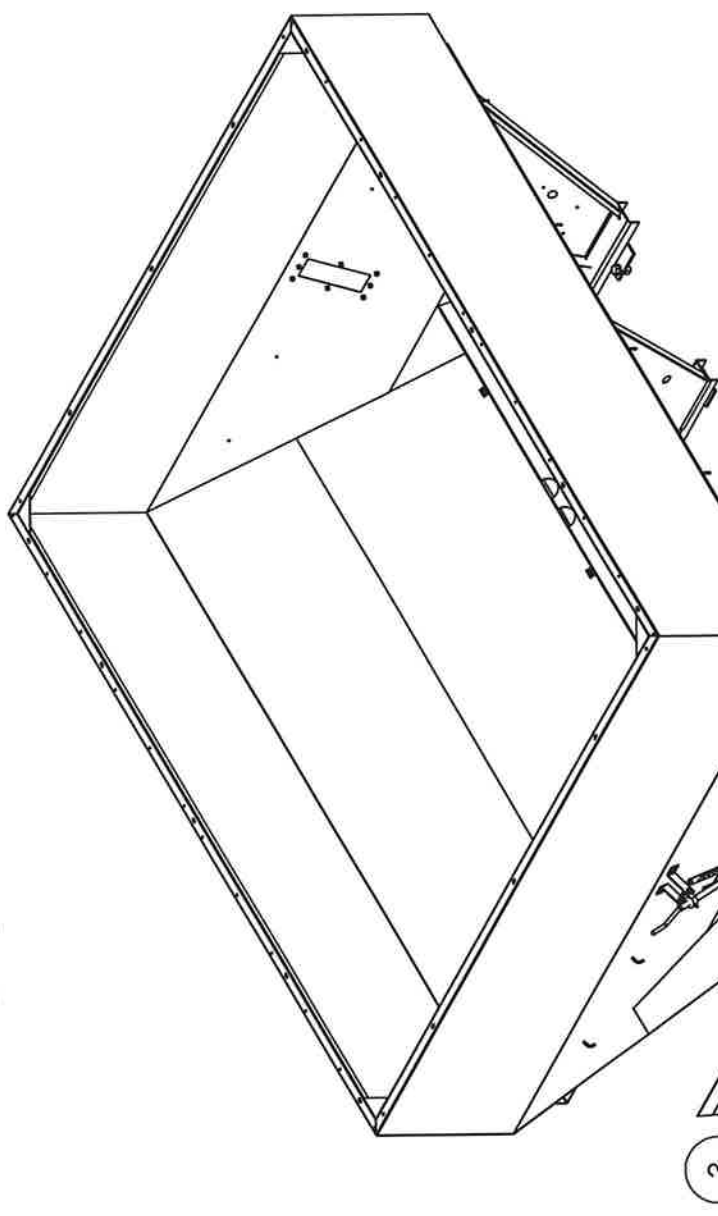
SIDE VIEW



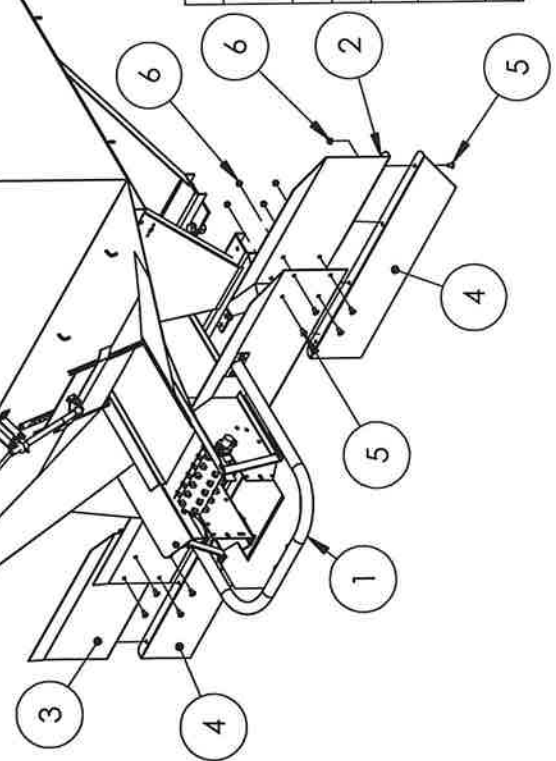
DETAIL A
SCALE 1 : 3

MOUNT DEFLECTORS ON THE OUTSIDE

HIGH CLEARANCE DEFLECTOR SHIELD EXTENSION



PART #:47993619 - DEFLECTOR SHIELD UPDATE KIT
INCLUDED STANDARD ON 2019 UNITS
(INCLUDES ITEMS 2 -6)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	48000800	AG800 HC BOX (FOR REFERENCE ONLY)	1
2	3617	HC DEFLECTOR SHIELD EXT RH	1
3	3618	HC DEFLECTOR SHIELD EXT LH	1
4	3619	HC DEFLECTOR SHIELD EXT. BOT	2
5	18706621	SCREW, SLOTTED TRUSS HEAD 3/8 X 3/4 SS	16
6	18987900	NUT SER FLG SS 3/8	16

SINGLE DISTRIBUTOR (2015 AND OLDER)

HYDSPDRV

REV 01-15-10

HYDRAULIC DRIVE PLUMBING FOR AG800, AG600 AND AG500

COMPLETE KIT (COR916)

HYDRAULIC SETTING SPECIFICATIONS:

2250 PSI MAXIMUM SYSTEM RELIEF SETTING

15 GALLONS PER MINUTE MIN/ 15.5 GPM MAX HYD FLOW AT OPERATING SPEED

INSTRUCTIONS FOR SETTING DISTRIBUTOR SPINNER SPEED

A PROPER AMOUNT OF OIL FLOW IS REQUIRED TO OPERATE THE HYDRAULIC MOTOR
AT 740 TO 750 RPM. THIS SHOULD TAKE 15 TO 15.5 GALLONS PER MINUTE FLOW RATE.

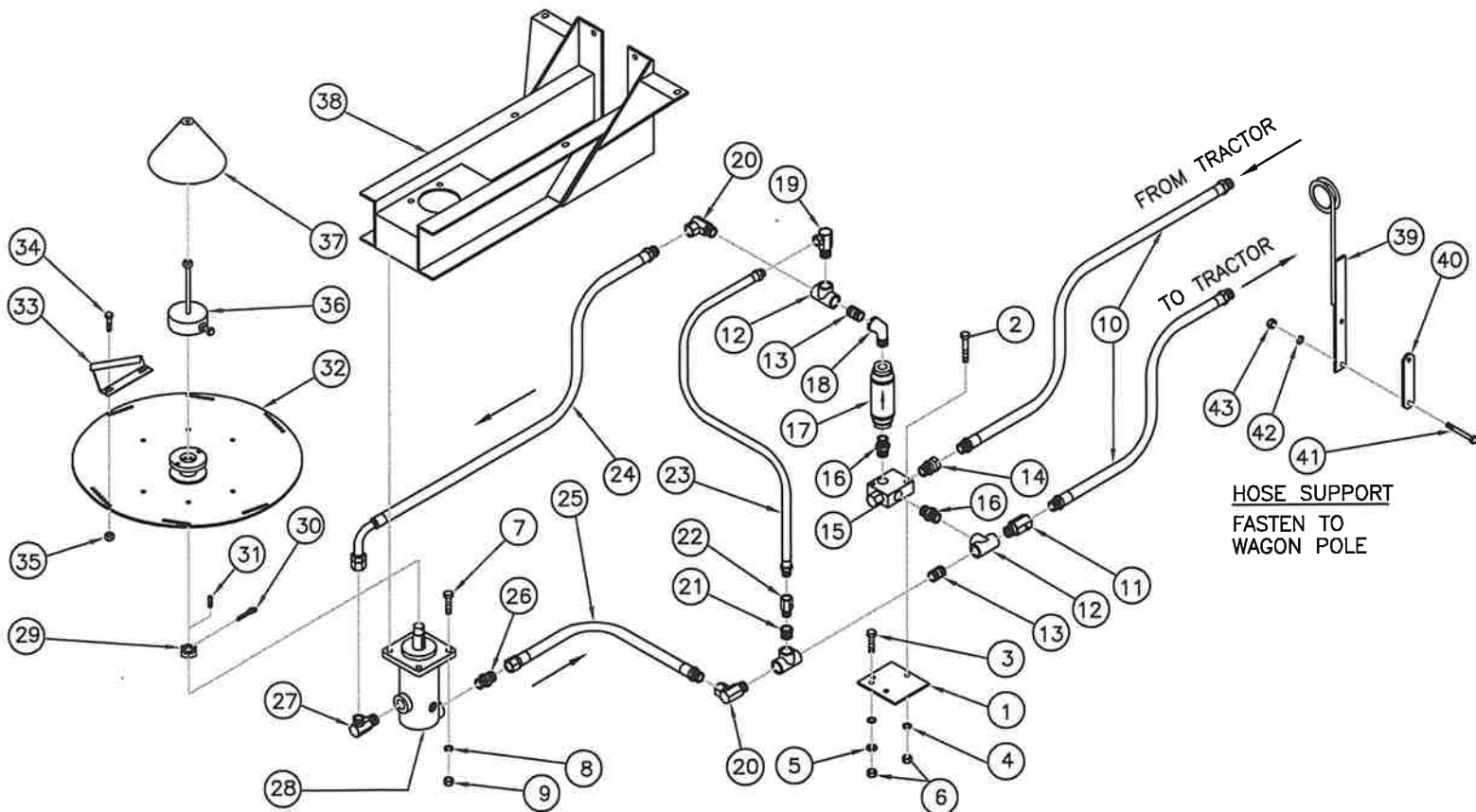
ON TRACTORS WITH HYDRAULIC SYSTEM SPEED CONTROLS, SET THE SYSTEM FLOW RATE
AT 15 TO 15.5 GPM AT OPERATING SPEED. ON TRACTORS WITHOUT HYDRAULIC SYSTEM SPEED CONTROL
SET THE FLOW CONTROL TO 15 TO 15.5 GALLONS PER MINUTE THEN CHECK AND MARK THE FLOW
METER (ITEM 17) AT THE CORRECT AMOUNT.

IMPORTANT!

IF THE PROPER FLOW IS NOT MAINTAINED DAMAGE TO THE HYD MOTOR, OR MOTOR SEALS MAY RESULT!

ON TRACTORS WITHOUT ADJUSTABLE HYDRAULIC FLOW CONTROLS, MODIFICATIONS
MAY NEED TO BE MADE TO YOUR UNIT TO CONTROL EXCESS OIL OR DAMAGE TO THE HYD MOTOR OR SEALS MAY RESULT.

ALSO READ THE HYD DISTRIBUTOR DRIVE OPERATOR INSTRUCTIONS PAGE OF
THIS MANUAL FOR IMPORTANT ADDITIONAL INFORMATION.



DISTRIBUTORS SHOULD ROTATE AT 740 TO 750 RPM
TO OBTAIN REQUIRED SPREADER PERFORMANCE.
USE A TACHOMETER TO VERIFY ACTUAL RPMs AND
ADJUST FLOW RATE IF NEEDED TO OBTAIN DESIRED RPM.

HYDRAULIC SPREADER DRIVE

(SINGLE DISTRIBUTER 2015 AND OLDER) PARTS LIST

HYDSPDRVLST

10-21-10

COMPLETE KIT (COR916)

ITEM	PART NO.	DESCRIPTION	QTY
1	47009540	MOUNTING PLATE ALL HARDWARE IS STAINLESS STEEL	1
2	18476834	BOLT, 3/8-16NC. X 2 1/2 SS	2
3	18026824	BOLT, 3/8-16NC. X 1 1/4 SS	2
4	18881201	LOCK WASHER, 3/8 SS	4
5	18891200	FLAT WASHER, 3/8 SS	2
6	18476800	HEX. NUT, 3/8-16NC. SS	4
7	18027417	BOLT, 1/2-13NC. X 2 SS	4
8	18991400	LOCK WASHER, 1/2 SS	4
9	18477400	HEX. NUT, 1/2-16NC. SS	4
10	610096	HYD. HOSE, 3/4 X 96", 3/4 PIPE X 1/2 PIPE ENDS	2
11	LT-75-00N	CHECK VALVE, 3/4 MPT X 3/4 FPT	1
12	72212	PIPE TEE, 3/4 FPT	3
13	72200	CLOSE NIPPLE, 3/4 MPT	2
14	6900-12-12	SWIVEL ADAPTER, #12 O-RING X 3/4 PIPE	1
15	02139	FLOW CONTROL VALVE, (SEE ILLUSTRATION FOR SETTING INFO)	1
16	6401-12-12	ADAPTER, #12 O-RING X 3/4 PIPE	2
17	701-020	FLOW METER, (SEE ILLUSTRATION FOR SETTING INFO)	1
18	72229	STREET ELBOW, 3/4 MPT X 3/4 FPT	1
19	1501-12-8	SWIVEL ADAPTER, 3/4 FPT X 1/2 FPT 90 DEG.	1
20	1501-12-12	SWIVEL ADAPTER, 3/4 FPT X 3/4 FPT 90 DEG.	2
21	72218	PIPE BUSHING, 1/2 FPT X 3/4 MPT	1
22	LT-50-0W	CHECK VALVE, 1/2 FPT X 1/2 MPT	1
23	609024	HYD. HOSE, 1/2 X 24", 1/2 PIPE EACH END	1
24	610162	HYD. HOSE, 3/4 X 162", 3/4 PIPE X #12 X 90 DEG. JICFS ENDS	1
25	611162	HYD. HOSE, 3/4 X 162", 3/4 PIPE X #12 JICFS ENDS	1
26	6400-12	CONNECTOR, #12 O-RING X #12 MJIC STRAIGHT	1
27	6801-12	CONNECTOR, #12 O-RING X #12 MJIC 90 DEG.	1
28	51959	HYDRAULIC MOTOR, INCLUDES ITEMS 29, 30 AND 31 (SEE ILLUSTRATION FOR SETTING INFO)	1
	94021	SEAL KIT FOR MOTOR,	OPT.
29	BN95501	SLOTTED HEX. JAM NUT, 1-14NF.	1
30	50603	COTTER PIN, 1/8 X 1 1/2	1
31	47019574	DRIVE KEY, 5/16 SQ. X 1	1
32	05819	DISTRIBUTER DISK	1
33	31366	DISTRIBUTER BLADE, HIGH LIFT	6
34	18706421	BOLT, TRUSS HD. 5/16-18NC. X 3/4 S.S.	12
35	18476350	HEX. NUT, 5/16-18NC. S.S.	12
36	02295	CAP ASSEMBLY, COMPLETE (02295 OR 05820B ACCEPTABLE)	1
37	36378	CENTER CONE	1
38	47009425	DISTRIBUTOR MOUNT FRAME	1
39	47019995	HOSE SUPPORT, (PIGTAIL)	1
40	47008463	MOUNTING STRAP	1
41	18056850	BOLT, 3/8-16NC. X 4 GR5 ZC	2
42	18891200	LOCK WASHER, 3/8 ZC	2
43	18436800	HEX. NUT, 3/8-16NC. ZC	2
	607916	HYD HOSE KIT (HYD SPINNER DRIVE) INCLUDES ITEMS 10, 23, 24, AND 25	
	607917	HYD FITTING PKG (SINGLE HYD SPINNER DRIVE) TOMPKINS FITTINGS INCLUDES ITEMS 14, 16, 19, 20, 26, & 27	

SINGLE DISTRIBUTOR (2016 AND NEWER)

HYDSPDRV16
REV 02/01/24

HYDRAULIC DRIVE PLUMBING FOR AGX10, AG800, AG600 AND AG500

HYDRAULIC DRIVE KIT (COR917) HYDRAULIC SPINNER KIT (48010809)

HYDRAULIC SETTING SPECIFICATIONS:
2250 PSI MAXIMUM SYSTEM RELIEF SETTING
15 GALLONS PER MINUTE MIN/ 15.5 GPM MAX HYD FLOW AT OPERATING SPEED

INSTRUCTIONS FOR SETTING DISTRIBUTOR SPINNER SPEED

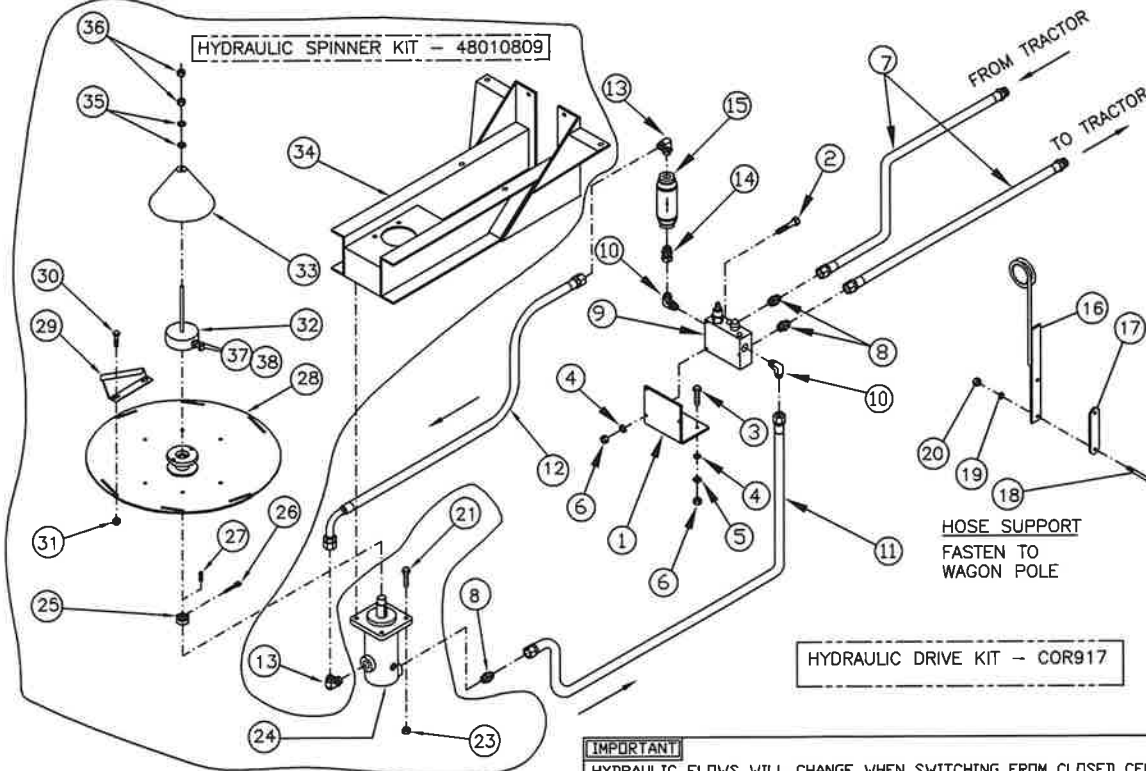
A PROPER AMOUNT OF OIL FLOW IS REQUIRED TO OPERATE THE HYDRAULIC MOTOR AT 740 TO 750 RPM. THIS SHOULD TAKE 15 TO 15.5 GALLONS PER MINUTE FLOW RATE.

ON TRACTORS WITH HYDRAULIC SYSTEM SPEED CONTROLS, SET THE SYSTEM FLOW RATE AT 15 TO 15.5 GPM AT OPERATING SPEED. ON TRACTORS WITHOUT HYDRAULIC SYSTEM SPEED CONTROL SET THE FLOW CONTROL TO 15 TO 15.5 GALLONS PER MINUTE THEN CHECK AND MARK THE FLOW METER (ITEM 17) AT THE CORRECT AMOUNT.

IMPORTANT!
IF THE PROPER FLOW IS NOT MAINTAINED DAMAGE TO THE HYD MOTOR, OR MOTOR SEALS MAY RESULT!

ON TRACTORS WITHOUT ADJUSTABLE HYDRAULIC FLOW CONTROLS, MODIFICATIONS MAY NEED TO BE MADE TO YOUR UNIT TO CONTROL EXCESS OIL OR DAMAGE TO THE HYD MOTOR OR SEALS MAY RESULT.

ALSO READ THE HYD DISTRIBUTOR DRIVE OPERATOR INSTRUCTIONS PAGE OF THIS MANUAL FOR IMPORTANT ADDITIONAL INFORMATION.



DISTRIBUTORS SHOULD ROTATE AT 740 TO 750 RPM TO OBTAIN REQUIRED SPREADER PERFORMANCE. USE A TACHOMETER TO VERIFY ACTUAL RPMS AND ADJUST FLOW RATE IF NEEDED TO OBTAIN DESIRED RPM.

IMPORTANT!
HYDRAULIC FLOWS WILL CHANGE WHEN SWITCHING FROM CLOSED CENTER SYSTEM TO OPEN CENTER SYSTEM. IT IS IMPORTANT TO ADJUST YOUR FLOW CONTROL TO CORRECT FLOWS WHEN YOU SWITCH FROM ONE TRACTOR TO ANOTHER, IF NEEDED

CLOSED CENTER HYDRAULIC SYSTEM:

FOR NEWER TRACTORS, THE FLOW CONTROL VALVE MUST BE SET TO CLOSED THIS ALLOWS THE USER TO SET THE HYDRAULIC FLOW AND WILL NOT LET EXTRA OIL PASS THRU.

OPEN CENTER HYDRAULIC SYSTEM:

FOR OLDER TRACTORS, THE FLOW CONTROL VALVE MUST BE SET TO OPEN. THIS WILL ALLOW EXTRA OIL TO BE PUMPED BACK TO THE TANK AT TANK PRESSURE WITHOUT DAMAGING THE VALVE/TRACTOR

HYDRAULIC SPREADER DRIVE
(SINGLE DISTRIBUTOR 2016 AND NEWER) PARTS LIST

HYDSPDRVLST16
09/30/24

HYDRAULIC DRIVE KIT (COR917)

ITEM	PART NO.	DESCRIPTION	QTY
1	47017824	MOUNTING PLATE ALL HARDWARE IS STAINLESS STEEL	1
2	18470400	BOLT, 3/8-16NC. X 4 SS	3
3	18026824	BOLT, 3/8-16NC. X 1 1/4 SS	2
4	18881201	LOCK WASHER, 3/8 SS	5
5	18991200	FLAT WASHER, 3/8 SS	2
6	18476800	HEX. NUT, 3/8-16NC. SS	5
7	612096	HYD. HOSE, 3/4 X 96", #12 JICFS X 1/2 PIPE ENDS	2
8	6400-12-12	ADAPTER, #12 MJIC X #12 O-RING	3
9	02138	FLOW CONTROL VALVE, (SEE ILLUSTRATION FOR SETTING INFO)	1
10	6801-12-10	90° ELBOW, #12 MJIC X #10 O-RING	2
11	610178	HYD. HOSE, 3/4 X 178", #12 JICFS BOTH ENDS	1
12	611178	HYD. HOSE, 3/4 X 178", #12 JICFS X #12 JICFS 90°	1
13	445001	90° ELBOW, #12 MJIC X #12 O-RING	2
14	6402-12-12	ADAPTER, #12 JICFS X #12 O-RING	1
15	701-019	FLOW METER, (SEE ILLUSTRATION FOR SETTING INFO)	1
16	47019995	HOSE SUPPORT, (PIGTAIL)	1
17	47008463	MOUNTING STRAP	1
18	18056850	BOLT, 3/8-16NC. X 4 GR5 ZC	2
19	18891200	LOCK WASHER, 3/8 ZC	2
20	18436800	HEX. NUT, 3/8-16NC. ZC	2
	607916B	HYD HOSE KIT (HYD SPINNER DRIVE) INCLUDES ITEMS 7, 11, & 12	
	607917C	HYD FITTING PKG (SINGLE HYD SPINNER DRIVE) TOMPKINS FITTINGS INCLUDES ITEMS 8, 10, 13, & 14	

HYDRAULIC SPINNER KIT (48010809)

ITEM	PART NO.	DESCRIPTION	QTY
21	18027417	BOLT, 1/2-13NC. X 2 SS	4
22	--	--	--
23	18567400	NUT, NYLOCK 1/2-13 SS	4
24	51959	HYDRAULIC MOTOR (SEE ILLUSTRATION FOR SETTING INFO)	1
	94021	SEAL KIT FOR MOTOR,	OPT.
25	BN95501	SLOTTED HEX. JAM NUT, 1-14NF.	1
26	50603	COTTER PIN, 1/8 X 1 1/2	1
27	47019574	DRIVE KEY, 5/16 SQ. X 1	1
28	05819	DISTRIBUTER DISK	1
29	31366	DISTRIBUTER BLADE, HIGH LIFT	6
30	18706421	BOLT, TRUSS HD. 5/16-18NC. X 3/4 S.S.	12
31	18476350	HEX. NUT, 5/16-18NC. S.S.	12
32	02295	CAP ASSEMBLY, COMPLETE (02295 OR 05820B ACCEPTABLE)	1
33	36378	CENTER CONE	1
34	47009425	DISTRIBUTOR MOUNT FRAME	1
35	18991200	FLAT WASHER, 3/8 SS	2
36	18476800	HEX. NUT, 3/8-16NC. SS	2
37	18566400	NUT, SS NYLOCK 3/8	3
38	18026824	BOLT HX SS 3/8 X 1 1/4	3

ALSO INCLUDES ITEMS 2-16 FROM PGS. 27 AND 28 OF THE MANUAL

DUAL DISTRIBUTOR (2015 AND OLDER)

HYDRAULIC DRIVE PLUMBING FOR AG800, AG600 AND AG500 (COMPLETE KIT COR916A)

800DDHYDPLBG
01-15-10

HYDRAULIC SETTING SPECIFICATIONS:
2250 PSI MAXIMUM SYSTEM RELIEF SETTING
8 GALLONS PER MINUTE MIN/ 8.5 GPM MAX HYD FLOW AT OPERATING SPEED

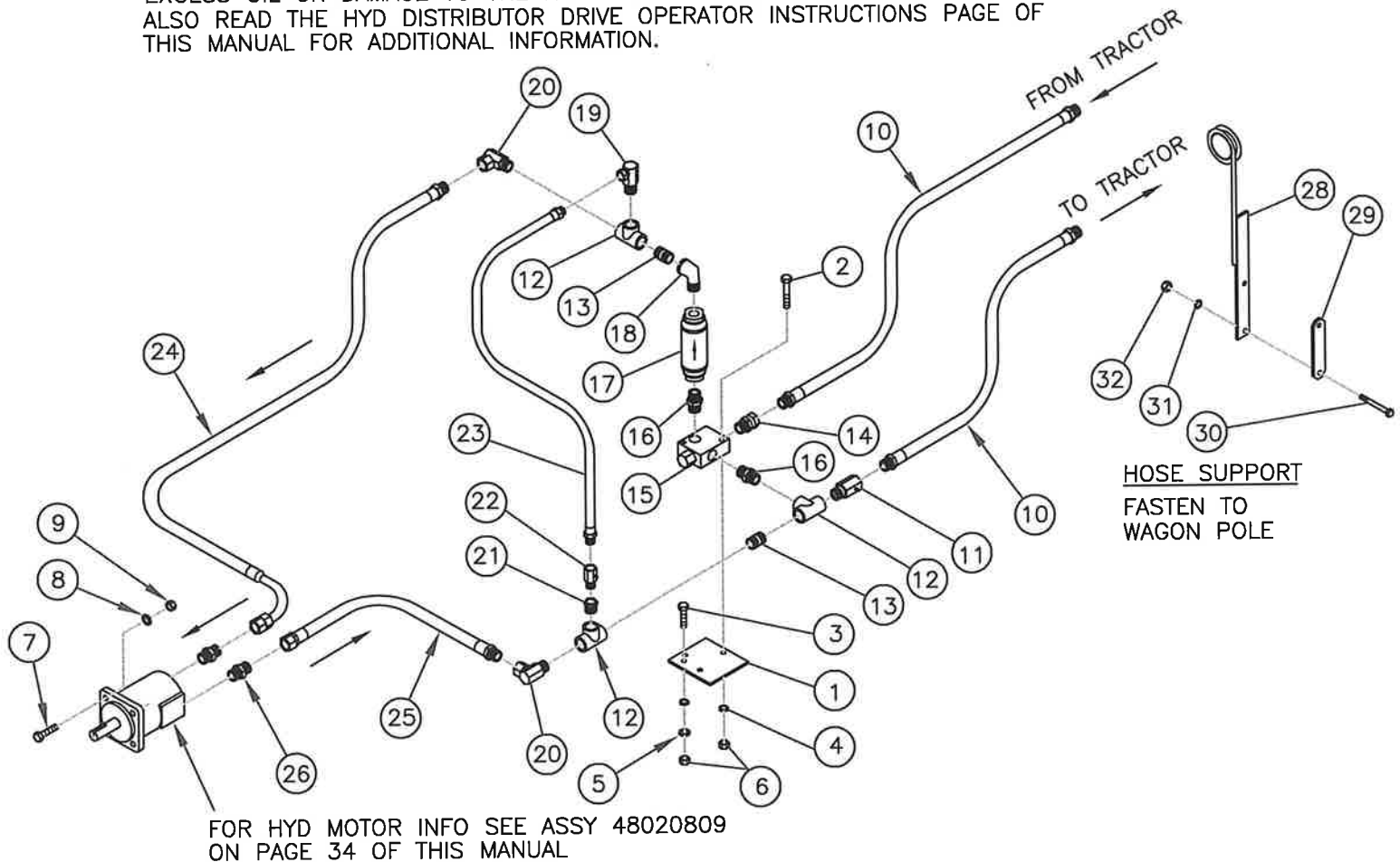
INSTRUCTIONS FOR SETTING DISTRIBUTOR SPINNER SPEED

A PROPER AMOUNT OF OIL FLOW IS REQUIRED TO OPERATE THE HYDRAULIC MOTOR AT 740 TO 750 RPM. THIS SHOULD TAKE 8 TO 8.5 GALLONS PER MINUTE FLOW RATE. ON TRACTORS WITH HYDRAULIC SYSTEM SPEED CONTROLS, SET THE SYSTEM FLOW RATE TO 8 TO 8.5 GPM AT OPERATING SPEED. ON TRACTORS WITHOUT HYDRAULIC SYSTEM SPEED CONTROL THE SET THE FLOW CONTROL TO 8 TO 8.5 GALLONS PER MINUTE THEN CHECK AND MARK THE FLOW METER (ITEM 17) AT THE CORRECT AMOUNT.

IMPORTANT!

IF THE PROPER FLOW IS NOT MAINTAINED DAMAGE TO THE HYD MOTOR, OR MOTOR SEALS MAY RESULT!

ON TRACTORS WITHOUT ADJUSTABLE HYDRAULIC FLOW CONTROLS, A CASE DRAIN RETURN LINE MAY NEED TO BE ADDED TO YOUR UNIT TO CONTROL EXCESS OIL OR DAMAGE TO THE HYD MOTOR OR SEALS MAY RESULT. ALSO READ THE HYD DISTRIBUTOR DRIVE OPERATOR INSTRUCTIONS PAGE OF THIS MANUAL FOR ADDITIONAL INFORMATION.



DISTRIBUTORS SHOULD ROTATE AT 740 TO 750 RPM TO OBTAIN REQUIRED SPREADER PERFORMANCE. USE A TACHOMETER TO VERIFY ACTUAL RPMS AND ADJUST FLOW RATE IF NEEDED TO OBTAIN DESIRED RPM.

HYDRAULIC SPREADER DRIVE DUAL DISTRIBUTOR 2015 AND OLDER (COMPLETE KIT COR916A)

800DDHYDPLBGLST

01-15-10

PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY
1	47009540	MOUNTING PLATE	1
2	18476834	BOLT, 3/8-16NC. X 2 1/2 SS	2
3	18026824	BOLT, 3/8-16NC. X 1 1/4 SS	2
4	18881201	LOCK WASHER, 3/8 SS	4
5	18991200	FLAT WASHER, 3/8 SS	2
6	18476800	HEX. NUT, 3/8-16NC. SS	4
7	18027417	BOLT, 1/2-13NC. X 2 SS	4
8	18991400	LOCK WASHER, 1/2 SS	4
9	18477400	HEX. NUT, 1/2-16NC. SS	4
10	610096	HYD. HOSE, 3/4 X 96", 3/4 PIPE X 1/2 PIPE ENDS	2
11	LT-75-00N	CHECK VALVE, 3/4 MPT X 3/4 FPT	1
12	72212	PIPE TEE, 3/4 FPT	3
13	72200	CLOSE NIPPLE, 3/4 MPT	2
14	6900-12-12	SWIVEL ADAPTER, #12 O-RING X 3/4 PIPE	1
15	02139	FLOW CONTROL VALVE, (SEE ILLUSTRATION FOR SETTING INFO)	1
16	6401-12-12	ADAPTER, #12 O-RING X 3/4 PIPE	2
17	701-020	FLOW METER, (SEE ILLUSTRATION FOR SETTING INFO)	1
18	72229	STREET ELBOW, 3/4 MPT X 3/4 FPT	1
19	1501-12-8	SWIVEL ADAPTER, 3/4 FPT X 1/2 FPT 90 DEG.	1
20	1501-12-12	SWIVEL ADAPTER, 3/4 FPT X 3/4 FPT 90 DEG.	2
21	72218	PIPE BUSHING, 1/2 FPT X 3/4 MPT	1
22	LT-50-0W	CHECK VALVE, 1/2 FPT X 1/2 MPT	1
23	609024	HYD. HOSE, 1/2 X 24", 1/2 PIPE EACH END	1
24	610162	HYD. HOSE, 3/4 X 162", 3/4 PIPE X #12 X 90 DEG. JICFS ENDS	1
25	611162	HYD. HOSE, 3/4 X 162", 3/4 PIPE X #12 JICFS ENDS	1
26	2404-12-12	ADAPTER, 3/4 NPT X #12 MJIC STRAIGHT	2
		HYDRAULIC MOTOR, DOUBLE ROTATION, (SEE KIT 48020809 ON PAGE 34 OF THIS MANUAL)	
	BN92392	REPLACEMENT SEAL KIT (FOR 02183 HYDRAULIC MOTOR)	OPTIONAL
28	47019995	HOSE SUPPORT (PIGTAIL)	1
29	47008463	MOUNTING STRAP	1
30	18056850	BOLT, HEX HEAD 3/8-16NC X 4 ZC	2
31	18891200	LOCKWASHER, 3/8 ZC	2
32	18436800	HEXNUT, 3/8-16 NC ZC	2
	607916	HYD HOSE KIT (HYD. SPINNER DRIVE) INCLUDES ITEMS 10, 23, 24, AND 25	
	607917A	FITTING PACKAGE (HYD. DUAL SPINNER DRIVE) TOMPKINS FITTINGS INCLUDES ITEMS 14, 16, 19, 20 AND 26	

800DDHYDPLB16
rev 02/02/24

INSTRUCTIONS FOR SETTING DISTRIBUTOR SPINNER SPEED

IMPORTANT!
IF THE PROPER FLOW IS NOT MAINTAINED DAMAGE TO THE HYD MOTOR,
OR MOTOR SEALS MAY RESULT!

EXCESS OIL OR DAMAGE TO THE TRACTOR. ALSO READ THE HYD DISTRIBUTOR DRIVE OPERATOR INSTRUCTIONS PAGE OF THIS MANUAL FOR ADDITIONAL INFORMATION.

TO B-PORT ON MOTOR

FROM A-PORT ON MOTOR

FROM TRACTOR

TO TRACTOR

HOSE SUPPORT
FASTEN TO
WAGON POLE

IMPORTANT

HYDRAULIC FLOWS WILL CHANGE WHEN SWITCHING FROM CLOSED CENTER SYSTEM TO OPEN CENTER SYSTEM. IT IS IMPORTANT TO ADJUST FLOW CONTROL TO CORRECT FLOWS WHEN YOU SWITCH FROM ONE SYSTEM TO ANOTHER, IF NEEDED

CLOSED CENTER HYDRAULIC SYSTEM:

FOR NEWER TRACTORS, THE FLOW CONTROL VALVE MUST BE ADJUSTED. THIS ALLOWS THE USER TO SET THE HYDRAULIC FLOW AND PRESSURE. SEE THE FLOW CONTROL VALVE INSTRUCTIONS FOR MORE INFORMATION.

IMPORTANT

HYDRAULIC FLOWS WILL CHANGE WHEN SWITCHING FROM CLOSED CENTER SYSTEM TO OPEN CENTER SYSTEM. IT IS IMPORTANT TO ADJUST YOUR FLOW CONTROL TO CORRECT FLOWS WHEN YOU SWITCH FROM ONE TRACTOR TO ANOTHER, IF NEEDED

CLOSED CENTER HYDRAULIC SYSTEM:

FOR NEWER TRACTORS, THE FLOW CONTROL VALVE MUST BE SET TO CLOSED
THIS ALLOWS THE USER TO SET THE HYDRAULIC FLOW AND WILL NOT LET
EXTRA OIL PASS THRU.

OPEN CENTER HYDRAULIC SYSTEM:

FOR OLDER TRACTORS, THE FLOW CONTROL VALVE MUST BE SET TO OPEN. THIS WILL ALLOW EXTRA OIL TO BE PUMPED BACK TO THE TANK AT TANK PRESSURE WITHOUT DAMAGING THE VALVE/TRACTOR

HYDRAULIC SPREADER DRIVE
DUAL DISTRIBUTOR 2016 AND NEWER
(COMPLETE KIT COR917A)

800DDHYDPLBGLST16
02/02/24

PARTS LIST			
ITEM	PART NO.	DESCRIPTION	QTY
1	47017824	MOUNTING PLATE	1
2	18470400	BOLT, 3/8-16NC. X 4 SS	3
3	18026824	BOLT, 3/8-16NC. X 1 1/4 SS	2
4	18881201	LOCK WASHER, 3/8 SS	5
5	18991200	FLAT WASHER, 3/8 SS	2
6	18476800	HEX. NUT, 3/8-16NC. SS	5
7	18022026	BOLT, 1/2-13NC. X 1 1/2 SS	2
8	--	--	--
9	18567400	NUT SS NYLOCK 1/2	2
10	612096	HYD. HOSE, 3/4 X 96", #12 JICFS X 1/2 PIPE ENDS	2
11	6400-12-12	ADAPTER, #12 MJIC X #12 O-RING	2
12	02138	FLOW CONTROL VALVE, (SEE ILLUSTRATION FOR SETTING INFO)	1
13	6801-12-10	90 DEG. ELBOW, #12 MJIC X #10 O-RING	3
14	611178	HYD. HOSE, 3/4 X 178", #12 JICFS X #12 JICFS X 90°	1
15	6400-12-10	ADAPTER, #12 MJIC X #10 O-RING	1
16	610178	HYD. HOSE, 3/4 X 178", #12 JICFS BOTH ENDS	1
17	6402-12-12	ADAPTER, #12 JICFS X #12 O-RING	1
18	701-019	FLOW METER, (SEE ILLUSTRATION FOR SETTING INFO)	1
19	445001	90 DEG. ELBOW, #12 MJIC X #12 O-RING	1
20	02182	HYD. MOTOR, (TF0080WB080AAAB) [NOT INCLUDED, SEE NOTE]	1
21	47019995	HOSE SUPPORT (PIGTAIL)	1
22	47008463	MOUNTING STRAP	1
23	18056850	BOLT, HEX HEAD 3/8-16NC X 4 ZC	2
24	18891200	LOCKWASHER, 3/8 ZC	2
25	18436800	HEXNUT, 3/8-16NC ZC	2
	607916B	HYD HOSE KIT (INCLUDES ITEM 10, 14, AND 16)	
	607917B	HYD FITTING PKG (INCLUDES ITEMS 11, 13, 15, 17, AND 19)	

NOTE:
ITEMS 7, 9, & 20 -- ARE INCLUDED WITH DRIVE ASSEMBLY #48020809

HYDRAULIC DISTRIBUTOR DRIVE OPERATING **INSTRUCTIONS for AGX10, 800, 600 & 500 spreaders**

TRACTOR/SPREADER HYDRAULIC SYSTEM SPECIFICATIONS

Spreader distributor/spinner speed: 750 RPM

Tractor hydraulic system: 2250 psi maximum system relief setting

Single distributor units: 15 GPM to 15.5 GPM (gallons per minute) at operating speed.

Dual distributor units (2015 and older) 8 GPM to 8.5 GPM at operating speed

Dual distributor units (2016 and newer): 15 to 15.5 GPM at operating speed

Single Distributor Units all models / Dual Distributor units (2016 and newer)

If outlets on the tractor hydraulic have a speed control, set the flow rate at 15 to 15.5 GPM, then set the flow regulator on the spreader to maximum speed (flow) to reduce heat buildup in the hydraulic system.

If the tractor does not have hydraulic system speed control set the flow regulator on the spreader at 15 GPM

Dual Distributor Units Only (2015 and older)

If outlets on the tractor hydraulic system have a speed control, set the flow rate at 8 to 8.5 GPM, then set the flow regulator on the spreader to maximum speed (flow) to reduce heat buildup in the hydraulic system.

If the tractor does not have hydraulic system speed control set the flow regulator on the spreader at 8GPM

(A case drain return line may need to be added to your unit to control excess oil flow or damage to the hyd. motor or seals may result.)

IF YOUR DUAL DISTRIBUTOR IS 2015 AND OLDER, AND YOU HAVE HAD ISSUES WITH BLOWN SEALS BECAUSE OF EXCESS OIL FLOW, IT IS RECOMMENDED TO UPGRADE THE MOTOR TO P/N: 02182, AND MOUNTING FRAME P/N: 47009650, TO PREVENT FURTHER DAMAGE.

OPERATING INSTRUCTIONS

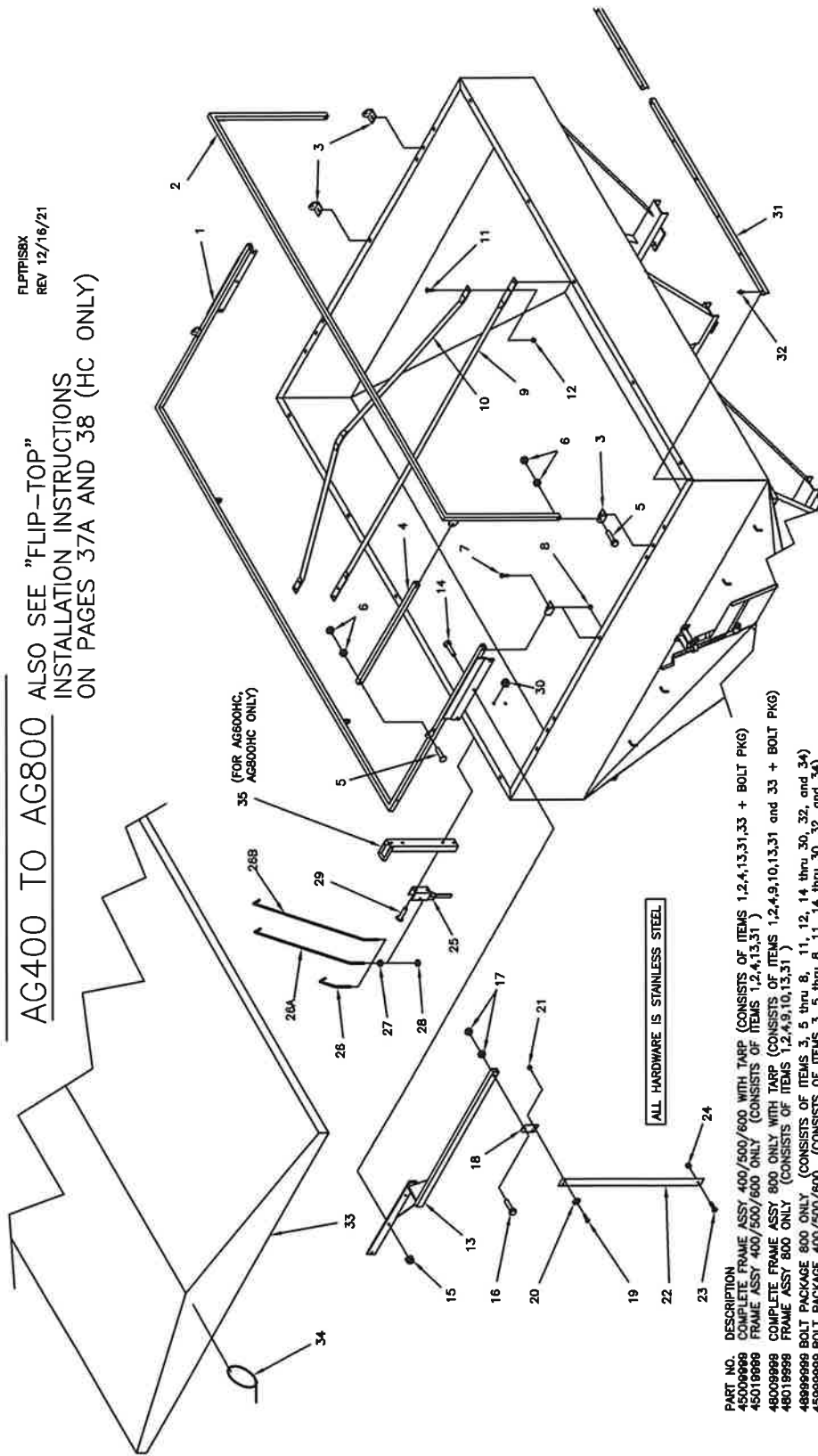
1. Connect hydraulic lines to the tractor hydraulic system. If lines are connected backwards, the spinners will not turn, or turn backwards slowly.
2. Engage distributor drive
 - a. Reduce engine speed as slow as operating conditions allow. *(This will help minimize high pressure surges in the spreader & tractor hyd. systems.)*
 - b. Engage hydraulic valve control lever slowly.
 - c. Check flow meter for hydraulic oil flow to distributors. If no flow is indicated, the hyd. lines are connected backwards or the hydraulic valve lever was engaged in the wrong direction.
3. Disengaging distributor drive
 - a. Reduce engine speed if possible
 - b. Move hydraulic valve control lever to neutral position slowly. Do not move control lever past neutral as reverse flow could generate excessively high back pressure and damage motor seals

Note: Hydraulic systems temperature must be monitored during operation. If temperature exceeds the maximum operating temperature rating for your tractor
DO NOT OPERATE!

FLIP-TOP TARP

FLTP/ISBX
REV 12/16/21

ALSO SEE "FLIP-TOP"
INSTALLATION INSTRUCTIONS
ON PAGES 37A AND 38 (HC ONLY)

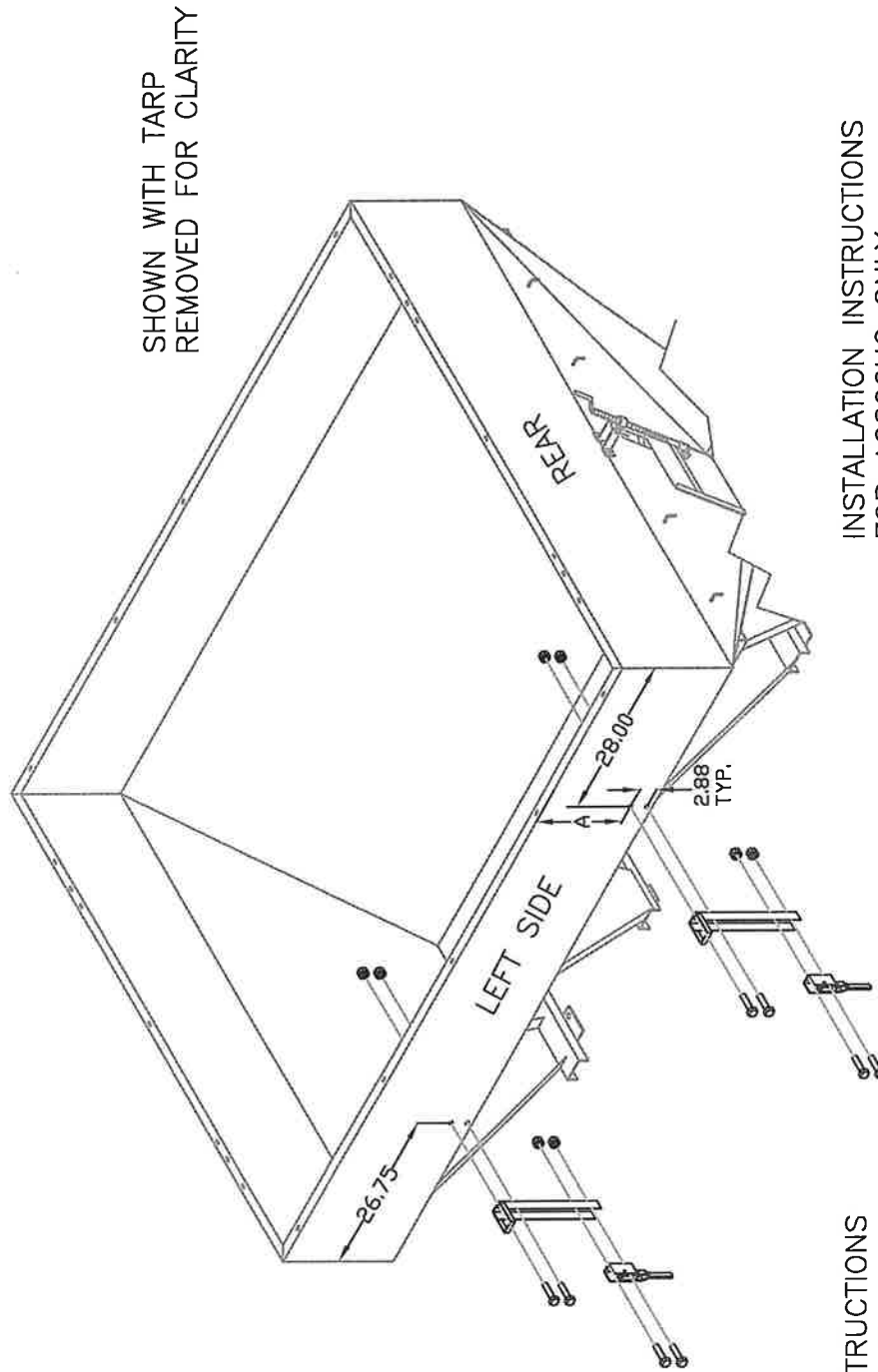


PART NO. DESCRIPTION
45009988 COMPLETE FRAME ASSY 400/500/600 WITH TARP (CONSISTS OF ITEMS 1,2,4,13,31,33 + BOLT PKG)
45019988 FRAME ASSY 400/500/600 ONLY (CONSISTS OF ITEMS 1,2,4,13,31)
45009988 COMPLETE FRAME ASSY 800 ONLY WITH TARP (CONSISTS OF ITEMS 1,2,4,9,10,13,31 and 33 + BOLT PKG)
45019988 FRAME ASSY 800 ONLY (CONSISTS OF ITEMS 1,2,4,9,10,13,31)
45009988 BOLT PACKAGE 800 ONLY (CONSISTS OF ITEMS 3, 5 thru 8, 11, 12, 14 thru 30, 32, and 34)
45009988 BOLT PACKAGE 400/500/600 (CONSISTS OF ITEMS 3, 5 thru 8, 11, 12, 14 thru 30, 32, and 34)

ITEM	PART NO.	DESCRIPTION	QTY
1	47037686	FOLDING FRAME, OUTSIDE AG800 ONLY	1
2	47037477	FOLDING FRAME, OUTSIDE AG800, AG500 AND AG400 ONLY	1
3	47037480	FOLDING FRAME, CENTER AG800, AG500 AND AG400	4
4	47037345	PIVOT BRACKET	2
5	470372926	PIVOT TUBE, (28 5/16")	2
6	18035912	HEX. NUT, 5/16-18NC	8
7	18078800	HEX. NUT, 3/8-16NC	16
8	18078800	FLANGE NUT, 3/8-16NC	16
9	470371867	CROSSMEMBER, CENTER	1
10	47037476	TARP SUPPORT	1
11	18076622	BOLT, 3/8-16NC X 1	4
12	18078900	FLANGE NUT, 3/8-16NC	4
13	47005502	TARP HANDLE, (AG800, AG500 & AG400)	1
14	18078900	FLANGE NUT, 3/8-16NC	1
15	18078900	FLANGE NUT, 3/8-16NC	1
16	18078900	FLANGE NUT, 3/8-16NC	1
17	18078900	FLANGE NUT, 3/8-16NC	1
18	18078900	FLANGE NUT, 3/8-16NC	1
19	18078900	FLANGE NUT, 3/8-16NC	1
20	18078900	FLANGE NUT, 3/8-16NC	1
21	18078900	FLANGE NUT, 3/8-16NC	1
22	18078900	FLANGE NUT, 3/8-16NC	1
23	18078900	FLANGE NUT, 3/8-16NC	1
24	18078900	FLANGE NUT, 3/8-16NC	1
25	18078900	FLANGE NUT, 3/8-16NC	1
26	18078900	FLANGE NUT, 3/8-16NC	1
27	18078900	FLANGE NUT, 3/8-16NC	1
28	18078900	FLANGE NUT, 3/8-16NC	1
29	18078900	FLANGE NUT, 3/8-16NC	1
30	18078900	FLANGE NUT, 3/8-16NC	1
31	18078900	FLANGE NUT, 3/8-16NC	1
32	18078900	FLANGE NUT, 3/8-16NC	1
33	18078900	FLANGE NUT, 3/8-16NC	1
34	18078900	FLANGE NUT, 3/8-16NC	1
35	18078900	FLANGE NUT, 3/8-16NC	1

INSTALLATION INSTRUCTIONS FOR FLIPTOP LATCH BRACKET ON AG600HC AND AG800HC

FLIPTPIS8XLATCH
08/30/18



SHOWN WITH TARP
REMOVED FOR CLARITY

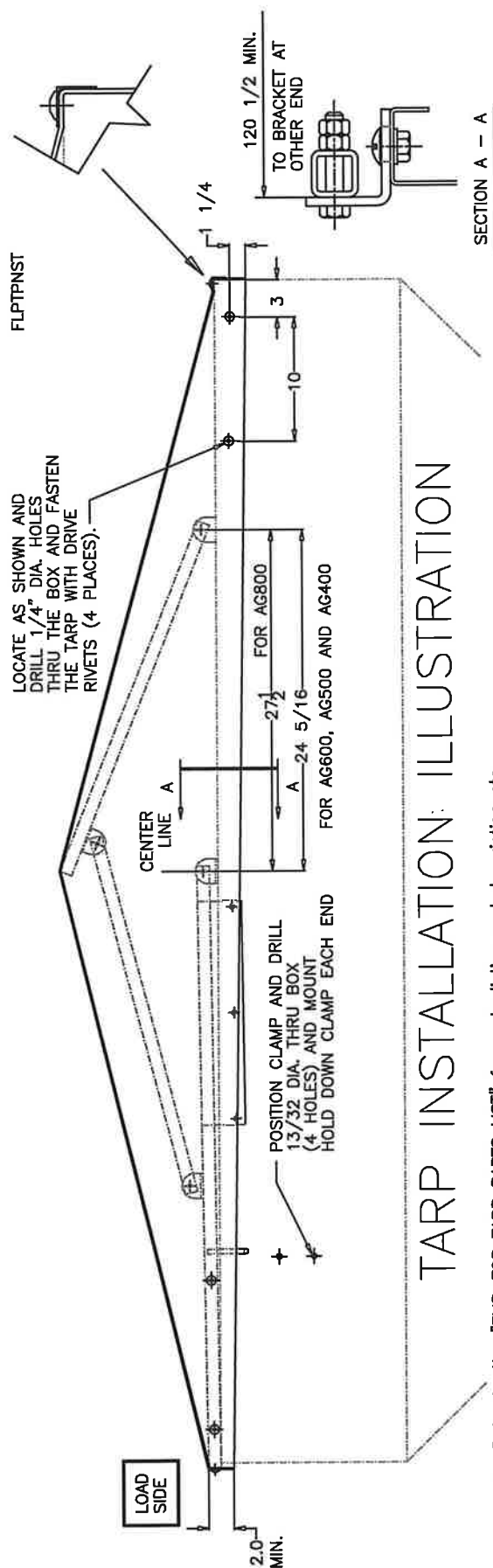
INSTALLATION INSTRUCTIONS FOR AG600HC ONLY A=10.81

ALL HOLES NEED TO BE .44 INCHES IN DIAMETER. ALL HOLES ARE DIMENSIONED TO THE CENTER OF THE HOLE. DRILL 2 SETS OF 2 HOLES ON THE LEFT SIDE OF THE BOX. 1 SET OF HOLES IS LOCATED 26.75 INCHES FROM THE FRONT END OF THE BOX AND THE OTHER SET OF HOLES IS LOCATED 28 INCHES FROM THE REAR END OF THE BOX. THE CENTER OF THE TOP HOLES NEED TO BE LOCATED 10.81 INCHES FROM THE TOP OF THE BOX. THE CENTER OF THE BOTTOM HOLES NEED TO BE LOCATED 2.88 INCHES DOWN FROM THE CENTER OF THE TOP HOLES.

INSTALLATION INSTRUCTIONS FOR AG800HC ONLY A=19.38

ALL HOLES NEED TO BE .44 INCHES IN DIAMETER. ALL HOLES ARE DIMENSIONED TO THE CENTER OF THE HOLE. DRILL 2 SETS OF 2 HOLES ON THE LEFT SIDE OF THE BOX. 1 SET OF HOLES IS LOCATED 26.75 INCHES FROM THE FRONT END OF THE BOX AND THE OTHER SET OF HOLES IS LOCATED 28 INCHES FROM THE REAR END OF THE BOX. THE CENTER OF THE TOP HOLES NEED TO BE LOCATED 19.38 INCHES FROM THE TOP OF THE BOX. THE CENTER OF THE BOTTOM HOLES NEED TO BE LOCATED 2.88 INCHES DOWN FROM THE CENTER OF THE TOP HOLES.

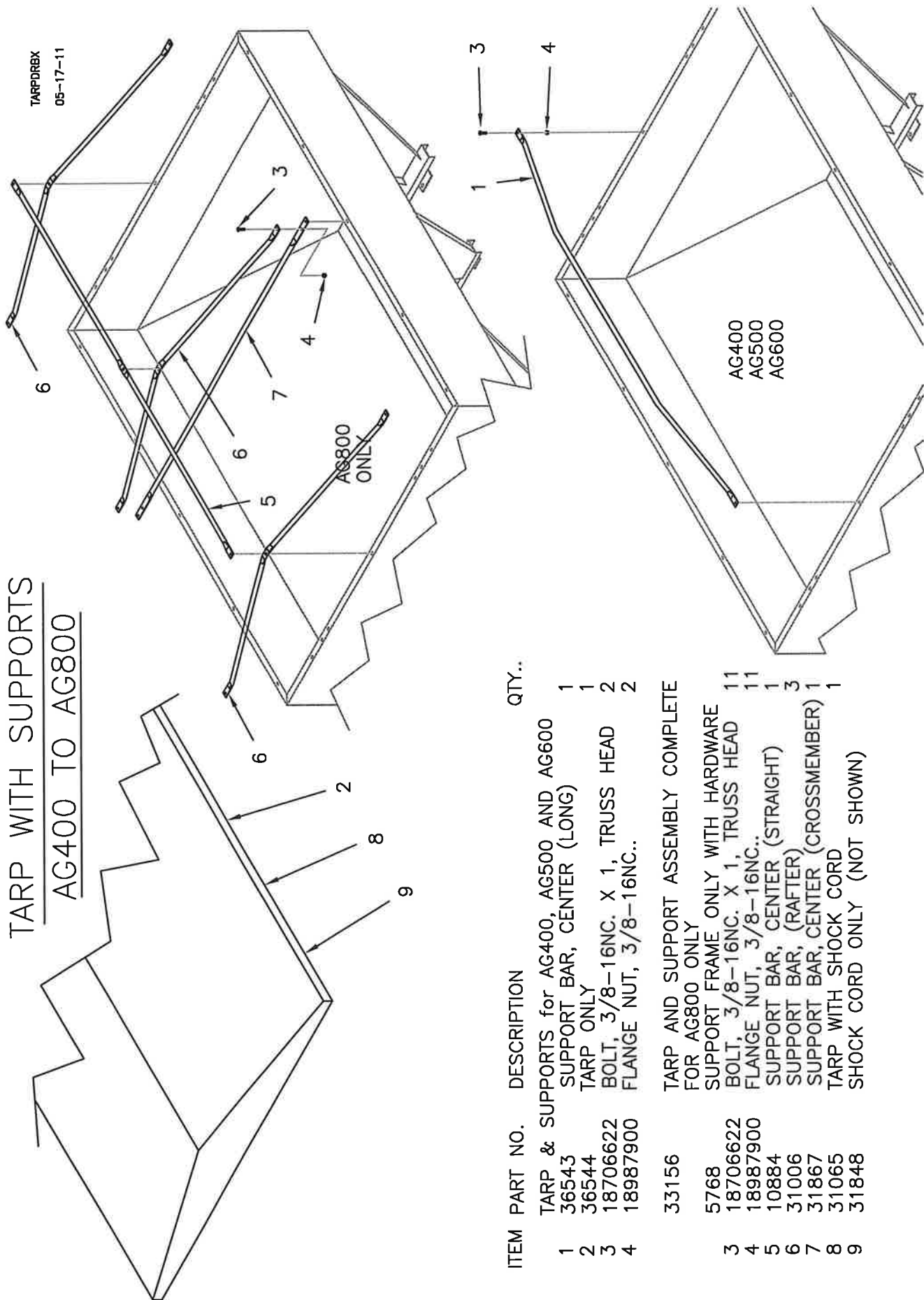
SEE PAGE 38 FOR TARP
INSTALLATION.
FOR HOLD-DOWN ROD
ASSEMBLY SEE PAGE 37.
(HOOKS ON HOLD-DOWN
RODS ENGAGE WITH HOOKS
ON FOLDING FRAME.)



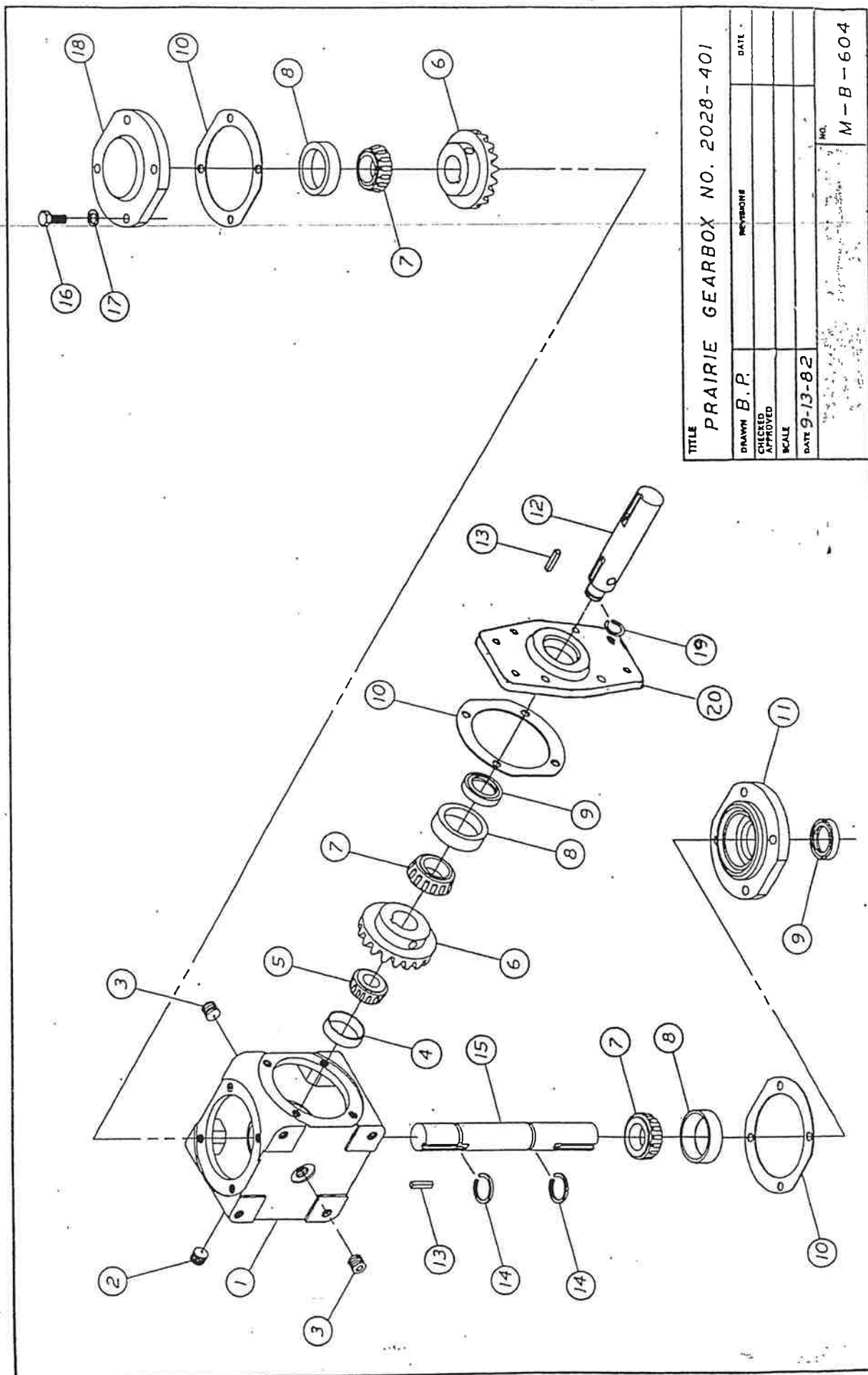
TARP INSTALLATION ILLUSTRATION

1. Refer to the "FLIP-TOP TARP PARTS LIST" for parts listing and description etc..
2. For AG800 only. Install the "crossmembers" items 9 and 10 with hardware items 11 and 12 (4 bolts and 4 flange nuts).
3. Fasten the "pivot brackets" item 3 to the top flange of the box with hardware items 7 and 8 (4 bolts & 4 flange nuts). Locate as shown above.
4. Assemble the "folding frames" items 1 and 2 to the "pivot brackets" with the hardware items 5 and 6 (4 bolts and 8 hex. nuts).
5. Assemble the "pivot tubes" item 4 to the "folding frames" with the hardware items 5 and 6 (4 bolts and 8 hex. nuts).
6. Drape the "tarp" item 32 over the "folding frames" and attach to the center folding frame with the "cable ties" item 34.
7. Standing on the "load side" stretch the tarp evenly along the side maintaining a minimum of 2" of overhang as shown. Note: there should be a 2" overhang on the opposite side also. If there is a 2" overhang on one side and a 3" overhang on the other side, split the difference by using a 2 1/2" overhang on each side. Check the overhang on the ends and maintain an equal overhang on each end.
8. With the overhang properly measured, locate and punch holes thru the tarp corresponding with the 1/4" holes the "outside folding frame" item 1 (12 places only). DO NOT PUNCH HOLES FOR THE ENDS AT THIS TIME. Fasten the tarp using the "drive rivets" item 32 (12) places.
Note: start at the center and work towards the ends.
9. On the opposite side, stretch the tarp evenly along the side of the box and punch holes thru the tarp corresponding with the 1/4" holes in the top flange of the box. Place the edge support angle item 31 over the tarp and the top flange of the box. Sandwich the tarp between the frame and the support angle and fasten with (6) "drive rivets" item 32 in each angle. Note: start in the center and work towards the ends.
10. Locate and drill 1/4" diameter holes in the ends of the box using the 3" and 10" dimensions. Fasten with (4) "drive rivets" item 32. Maintain an equal overhang each end.
11. Locate and punch holes thru the tarp corresponding with the 1/4" holes in the ends of the "folding frame" item 1. Fasten with (4) "drive rivets" item 32. DO NOT STRETCH THE TARP TIGHT AROUND THE FRAMEWORK CORNERS.
12. Attach the "handle" item 13 to the folding frame with the hardware items 14 and 15 (3 hx. hd. bolts and 3 flange nuts). Assemble the "strap" item 22 and the "end bracket" item 18 with hardware items 19, 20 and 21 and assemble to the handle with hardware items 16 and 17. Fasten the other end at a convenient place on the box with hardware items 23 and 24.
13. Assemble the "hold-down clamp" parts item 25 to 28. Position the clamp assembly with the hook on the folding frame and mark and drill 13/32" diameter holes in the ends of the box. Mount the clamp assembly with hardware items 29 and 30.
14. Adjust the "hold-down rod" item 26 in the clamp assembly to get the desired locking effect.

TARP WITH SUPPORTS AG400 TO AG800



ITEM	PART NO.	DESCRIPTION	QTY..
		TARP & SUPPORTS for AG400, AG500 AND AG600	1
1	36543	SUPPORT BAR, CENTER (LONG)	1
2	36544	TARP ONLY	2
3	18706622	BOLT, 3/8-16NC. X 1, TRUSS HEAD	2
4	18987900	FLANGE NUT, 3/8-16NC..	2
		TARP AND SUPPORT ASSEMBLY COMPLETE FOR AG800 ONLY	
3	5768	SUPPORT FRAME ONLY WITH HARDWARE	11
4	18706622	BOLT, 3/8-16NC. X 1, TRUSS HEAD	11
5	18987900	FLANGE NUT, 3/8-16NC..	11
6	10884	SUPPORT BAR, CENTER (STRAIGHT)	1
7	31006	SUPPORT BAR, (RAFTER)	3
8	31867	SUPPORT BAR, CENTER (CROSSMEMBER)	1
9	31065	TARP WITH SHOCK CORD	1
	31848	SHOCK CORD ONLY (NOT SHOWN)	



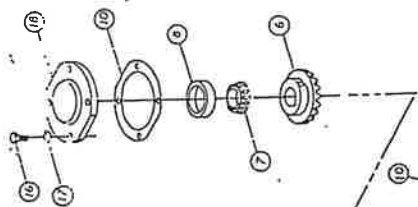
PRAIRIE GEAR BOX

(1 TO 1 RATIO) SINGLE SPINNER

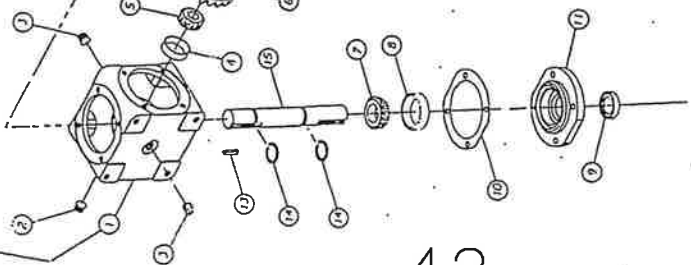
AG400 TO AGX10

REF. DRAWING M-B-604

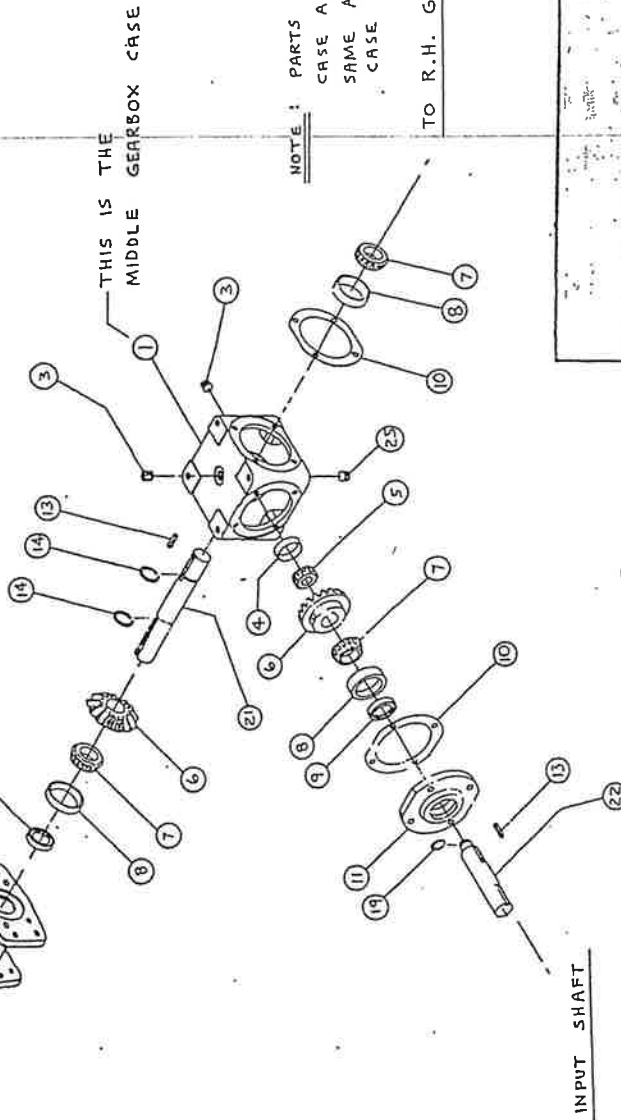
ITEM	PART NO.	DESCRIPTION	QTY
	5359A	PRAIRIE GEARBOX COMPLETE	
1	95282	CASE	1
2	11106	PIPE PLUG, VENTED	1
3	11105	PIPE PLUG	1
4	11096	BEARING CUP	1
5	11095	BEARING CONE	1
6	11098	GEAR	2
7	10659	BEARING CUP	3
8	10658	BEARING CONE	3
9	11099	SEAL	2
10	11103	GASKET, .005	?
	95283	GASKET, .020	?
	95284	GASKET, .0075	?
11	11091	CAP	1
12	11092B	SHAFT	1
13	11101	KEY	2
14	95285	RETAINING RING	2
15	95265	SHAFT	1
16	50232	CAP SCREW, 5/16-18NC X 1 S.S.	12
17	50144	LOCKWASHER, 5/16 S.S.	12
18	95287	CAP	1
19	95286	RETAINING RING	1
20	98376	COVER, ADAPTER	1



L.H. GEAR BOX.
CASE (SHOWN)



OUTPUT SHAFT



THIS IS THE
MIDDLE GEARBOX CASE

THIS DUAL GEARBOX
IS VIEWED FROM
THE BOTTOM

INPUT SHAFT

NOTE: PARTS FOR R.H.
CASE ARE THE
SAME AS L.H.
CASE

TO R.H. GEARBOX

TITLE DUAL GEARBOX - PRAIRIE

PART NO.

M-C-820

SIZE

A

DATE

12-29-92

DRAWN

D.W.V.

M-C-820

PRAIRIE GEAR BOX

(1 TO 1 RATIO) DUAL SPINNER

AG400 TO AGX10

REF. DRAWING M-C-820

ITEM	PART NO.	DESCRIPTION	QTY
	5350A	PRAIRIE GEARBOX COMPLETE	
1	98377	CASE	3
2	11106	PIPE PLUG, VENTED	2
3	11105	PIPE PLUG	6
4	11096	BEARING CUP	3
5	11095	BEARING CONE	3
6	11098	GEAR	6
7	10659	BEARING CUP	9
8	10658	BEARING CONE	9
9	11099	SEAL	7
10	11103	GASKET, .005	?
	95283	GASKET, .020	?
	95284	GASKET, .0075	?
11	11091	CAP	3
12	11092B	SHAFT	2
13	11101	KEY	6
14	95285	RETAINING RING	6
15	95265	SHAFT	2
16	50232	CAP SCREW, 5/16-18NC X 1 S.S.	28
17	50144	LOCKWASHER, 5/16 S.S.	28
18	95287	CAP	2
19	95286	RETAINING RING	3
20	98376	COVER, ADAPTER	2
21	98378	SHAFT, THRU	1
22	98379	SHAFT, INPUT	1
23	98380	HOUSING, CONNECTING	1
24	98381	COUPLING	2
25	98382	T-VENT	1

AG800HCWGN
REV 05/11/22



AG800HC/AGX10HC WAGON PARTS LIST

AG800HCLST
RV 02/11/25

PRODUCTION YEARS 2014 TO PRESENT

ITEM	PART NO.	DESCRIPTION	QTY.	ITEM	PART NO.	DESCRIPTION	QTY.
1	47003993	MAIN FRAME	1	46	OMITTED		
2	47009692	SOLID POLE ASSEMBLY (NO BRAKES)	1	47	OMITTED		
2A	FOR SURGE	POLE, SEE OPT. BRAKE PACKAGE LIST		48	18458400	LOCKNUT, CENTER 3/4 NC GR5 ZC	10
3	PPI-301V3	PERFECT HITCH	1		OMITTED		
4	PPI-206VR	PERFECT HITCH CLEVIS (1" HOLES)	1	50	18057432	BOLT, HEX GR5 1/2 NC X 2.25 ZC	4
5	18058452	BOLT, 3/4-10NC. X 5, GR. 8	1	51	OMITTED		
5A	18458452	LOCKNUT, 3/4-10NC. GR. 8	1	52	18497400	NUT, SER. FLG 1/2 NC ZC	4
5B	600182	HITCH PIN, 1 X 6	2	53	18058434	BOLT, HEX 3/4 NC X 2 1/2 GR5 ZC3	3
				54	18891800	LOCKWASHER, 3/4 ZC	3
				55	18418400	NUT, 3/4 ZC	3
6	18057930	BOLT, 5/8-11NC. X 2	8	**ITEMS 50, & 52 THRU 55 INCLUDED WITH 48000024**			
7	18891600	LOCKWASHER, 5/8	8				
8	18417900	HEX. NUT, 5/8-11NC	8	56	HA-1010-3	HUB ASSY, 15,000 LB (10 BOLT) STD (MACHINED FOR BRAKES) SEE OPTIONAL BRAKE PACKAGE BELOW	2
9	70924	JACK COMPLETE, (FINISH PAINTED)	1				
10	SEE BELOW 01041 71961	PTO SHAFT, COMPLETE PRE 2025 2025 & NEWER	1	57	47000200	WHEEL RIM, 46 X W12A (10 HOLE)	2
11	18056836	BOLT, 3/8-16NC. X 2 3/4	1	58	20120022	VALVE STEM	2
12	18459200	HEX. NUT (NYLOK) 3/8-16NC.	1	59	20100380	TIRE ONLY, 380/90R46	2
13	47009315	PTO STAND	1	60	40031R	TIRE AND WHEEL RIM ASSEMBLY RH	1
14	47007146	PTO PIN ASSEMBLY (INCLUDED W ITEM 13)	1	61	40031	TIRE AND WHEEL RIM ASSEMBLY LH	1
15	47003992	PTO SHIELD FOR HC SPREADERS	1	62	4700WB52	WHEEL NUT, FLANGED	20
16	47025843	PTO SHAFT, 1 X 39	1				
17	18590091	PIN, (#107 HAIRPIN TYPE)	1	63	01340	U-JOINT COUPLING	2
18	47006359	SQUARE KEY, 1/4 X 3	1	64	47006639	SPINNER DRIVE SHAFT, 1"DIA X 16 1/2	1
19	47001785	SPACER, BEARING BLOCK	1	65	47006519	SQUARE KEY, 1/4 X 1 1/2 LG.	3
20	05239	PILLOW BLOCK, W/ ROLLER BEARING	2	66	18056826	BOLT, 3/8-16NC. X 1 1/2	8
21	18056828	BOLT, 3/8-16NC. X 1 3/4	4	67	18496800	FLANGE NUT, 3/8-16NC.	8
22	18811200	FLATWASHER, 3/8	4	68	47019624	LINE SHAFT SHIELD HC ONLY	1
23	18496800	FLANGE NUT, 3/8-16NC.	4	69	05239	PILLOW BLOCK, W/ ROLLER BEARING	4
24	18056822	BOLT, 3/8-16NC. X 1	4	70	47025842	DRIVE SHAFT, 1 X 104	1
25	18811200	FLATWASHER, 3/8	4	71	47006359	SQUARE KEY, 1/4 X 3 LG.	1
26	18496800	FLANGE NUT, 3/8-16NC.	4	72	47006631	SHIM (.075) FOR PILLOW BLOCK	0-4
27	10093	PULLEY, 7.4 PITCH DIA.	2		47006632	SHIM (.250) FOR PILLOW BLOCK	0-4
28	18767450	SQ. HD. SET SCREW, 5/16-18NC. X 3/4	4	73	10328	PULLEY, 5.4 PITCH DIA.	2
29	31208	BELT, B43 (46" OUTSIDE)	2	74	18767450	SQ. HD. SET SCREW, 5/16-18NC. X 3/4	4
30	71403	PULLEY, FLAT IDLER	2	74A	18706422	BOLT, 5/16-16NC. X 1	S.S. 2
30A	47005954	BELT TIGHTENER ARM WELD'T	1	74B	41859	9/16 CLAMP, .343 HOLE	2
30B	18560723	COTTER PIN, 5/32 X 1 1/2	1	74C	18476350	HEX. NUT, 5/16-16NC.	S.S. 2
30C	18851600	FLATWASHER, 3/4 ZC	1				
31	47001799	SPACER, PULLEY - 3/4 LONG	1	OPTIONAL BRAKE PACKAGE			
31A	2-9207	SPACER, PULLEY - 1/2 LONG	1	47005862	BRAKE PACKAGE COMPLETE INCLUDES ALL ITEMS LISTED BELOW		
32	71134	EXTENSION SPRING	1	47015050	"DICO" SURGE POLE for PERFECT HITCH	1	
33	18057450	BOLT, 1/2-13NC. X 4 1/2	1	75	07324	BRAKE DRUM, (13") 8 1/4" BC	2
34	18811400	FLATWASHER, 1/2	1	76	47005652	BRAKE CLUSTER, L.H. (13")	1
35	18891400	LOCKWASHER, 1/2	1		47005651	BRAKE CLUSTER, R.H. (13")	1
36	18417400	HEX. NUT, 1/2-13NC.	1	77	18057522	BOLT, 1/2-20NF. X 1	20
37	47005882	SHIELD, PULLEY (HC SPREADERS)	1	78	18891400	LOCKWASHER, 1/2	8
38	18590916	PIN, H BRIDGE #11	1		47005663	HOSE BRACKET	3
39	18057434	BOLT, HEX HD 1/2-13 X 2.50 ZP	2		47005664	HOSE CLIP	3
40	18457650	LOCKNUT, CTR LOCK 1/2-13 ZP	2		47005666	LINE CLIP	10
					18721018	SCREW, #10 X 3/4, SELF-TAP	10
41	47005834	AXLE WELDMENT, LH	1		18715718	SCREW, 1/4 X 3/4, SELF-TAP	3
41A	47007834	AXLE WELDMENT, LH (144" MAX WTR) OPT			47005685	UNION TEE	1
42	47005833	AXLE WELDMENT, RH (GWD SIDE)	1		47005660	UNION	2
42A	47007833	AXLE WELDMENT, RH (144" MAX WTR) OPT			47005682	TUBE, BRAKE LINE 4"	1
43	47003982	AXLE AXLE CLAMP BAR, LONG	2		47005686	TUBE, BRAKE LINE 8"	1
44	47003983	AXLE AXLE CLAMP BAR, SHORT	2		47005668	BRAKE HOSE 12"	1
45	18098478	BOLT, HEX GR8 3/4-10 X 10 ZC	10		47005665	BRAKE HOSE 18"	3
45A	18098480	BOLT, HEX GR8 3/4-10 X 12 ZC	10		47006652	BRAKE HOSE 52"	2
					47005688	TUBE, BRAKE LINE 60"	2

48000022 AG-800 HC / AG-X10 HC FRAME COMPLETE
CONTAINS ITEMS 1, 9, 11 THRU 26, 30 THRU 40, 63 THRU 67, 69 THRU 71 & 74A-74C

48100540 540 RPM PTO DRIVE PACKAGE
CONTAINS ITEMS 10, 27 THRU 29, 68, 73 & 74

48101000 1000 RPM PTO DRIVE PACKAGE
CONTAINS PTO SHAFT P/N 93-24309 PRE 2025/ P/N:71962 2025 & NEWER, 27 THRU 29, 68, 73 & 74

48080120 80-120" WHEEL TRACK AXLE PACKAGE
CONTAINS ITEMS 41, 42, 43, 44, 45, 48 & 56

47995834	CONTAINS ITEMS 41 & 56
47995833	CONTAINS ITEMS 42 & 56

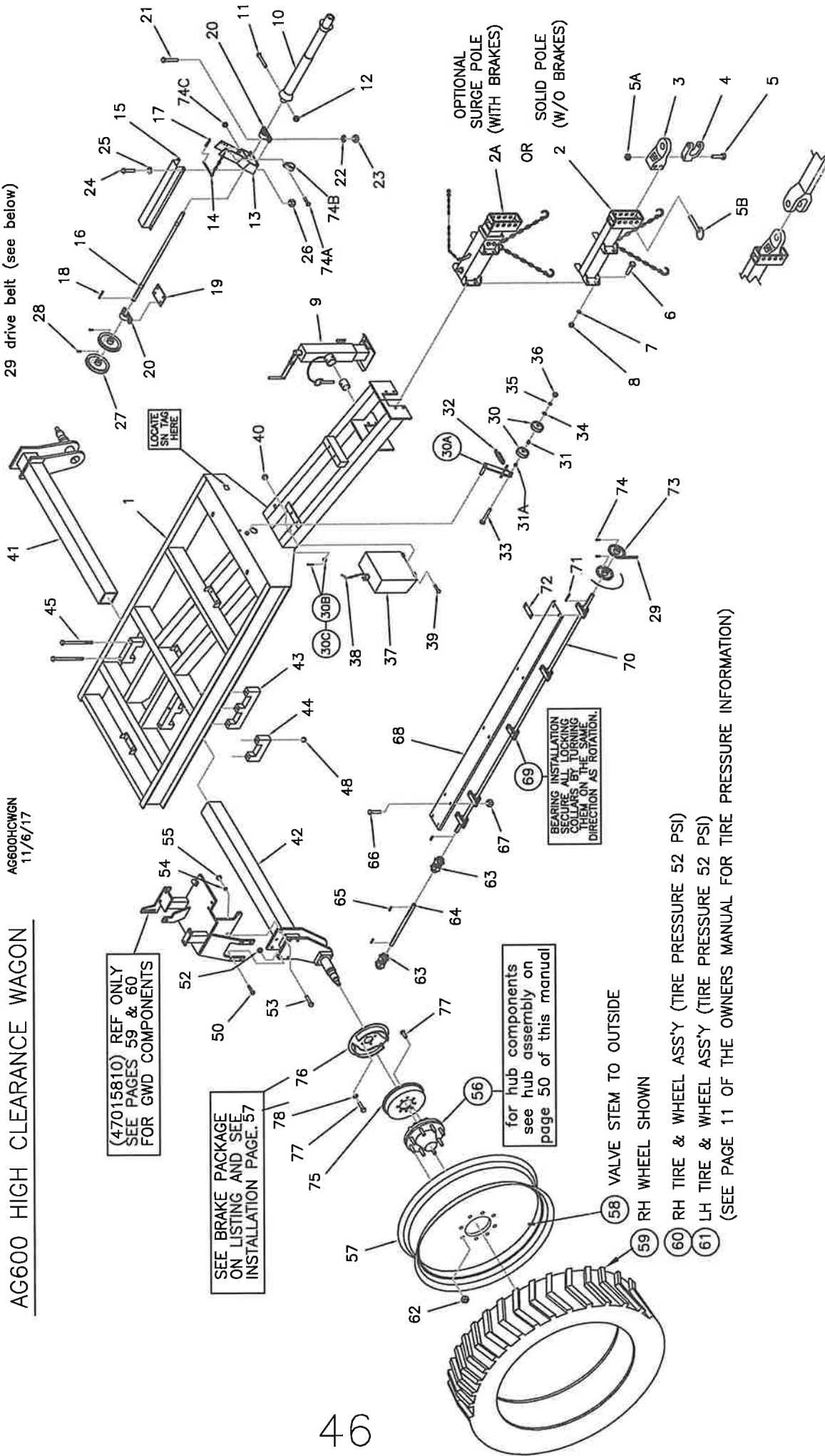
48080144 88-144" WHEEL TRACK AXLE PACKAGE
CONTAINS ITEMS 41A, 42A, 43, 44, 45A, 48, 56

47997834	CONTAINS ITEMS 41A & 56
47997833	CONTAINS ITEMS 42A & 56

AG600 HIGH CLEARANCE WAGON

AG600HCWGN
11/6/17

29 drive belt (see below)



FOR TRACTORS WITH
"CLEVIS TYPE" DRAWBARS
ATTACH DRAWBAR TO THE
PERFECT HITCH MAIN BODY.
(ITEM X)

(SEE PAGE 11 OF THE OWNERS MANUAL FOR TIRE PRESSURE INFORMATION)

AG600HC WAGON PARTS LIST

AG600HCLST

02/11/25

PRODUCTION YEARS 2014 TO PRESENT

ITEM	PART NO.	DESCRIPTION	QTY.	ITEM	PART NO.	DESCRIPTION	QTY.
1	47003993	MAIN FRAME	1	46	OMITTED		
2	47009692	SOLID POLE ASSEMBLY (NO BRAKES)	1	47	OMITTED		
2A	FOR SURGE	POLE, SEE OPT. BRAKE PACKAGE LIST		48	18458400	LOCKNUT, CENTER 3/4 NC GR5 ZC	10
3	PPI-301V3	PERFECT HITCH	1		OMITTED		
4	PPI-206VR	PERFECT HITCH CLEVIS (1" HOLES)	1	50	18057432	BOLT, HEX GR5 1/2 NC X 2.25 ZC	4
5	18058452	BOLT, 3/4-10NC. X 5, GR. 8	1	51	18497400	NUT, 1/2 SER FLG	4
5A	18458452	LOCKNUT, 3/4-10NC. GR. 8	1	52	OMITTED		
5B	600182	HITCH PIN, 1 X 6	2	53	18058434	BOLT, HEX 3/4 NC X 2 1/2 GR5 ZC3	
				54	18891800	LOCKWASHER, 3/4 ZC	3
6	18057930	BOLT, 5/8-11NC. X 2	8	55	18418400	NUT, 3/4 ZC	3
7	18891600	LOCKWASHER, 5/8	8	56	47009114	HUB ASSY, H817-1 (8 BOLT)	2
8	18417900	HEX. NUT, 5/8-11NC	8		(MACHINED FOR BRAKES)		
9	70924	JACK COMPLETE, (FINISH PAINTED)	1		SEE	OPTIONAL BRAKE PACKAGE BELOW	
10	SEE BELOW	PTO SHAFT, COMPLETE	1	57	47002600	WHEEL RIM, 38 X W10 (8 HOLE)	2
	01041	PRE 2025		58	20120022	VALVE STEM	2
	71961	2025 & NEWER		59	470545	TIRE ONLY, 320/85 R38	2
				60	40014R	TIRE AND WHEEL RIM ASSEMBLY RH	1
				61	40014	TIRE AND WHEEL RIM ASSEMBLY LH	1
				62	47005736	WHEEL NUT, FLANGED	16
11	18056836	BOLT, 3/8-16NC. X 2 3/4	1	63	01340	U-JOINT COUPLING	2
12	18459200	HEX. NUT (NYLOK) 3/8-16NC.	1	64	47006639	SPINNER DRIVE SHAFT, 1" DIA X 16 1/2	1
13	47009315	PTO STAND	1	65	47006519	SQUARE KEY, 1/4 X 1 1/2 LG.	3
14	47007146	PTO PIN ASSEMBLY (INCLUDED W ITEM 15)	1	66	18056826	BOLT, 3/8-16NC. X 1 1/2	8
15	47003992	PTO SHIELD FOR HC SPREADERS	1	67	18496800	FLANGE NUT, 3/8-16NC.	8
16	47025843	PTO SHAFT, 1 X 39	1	68	47019624	LINE SHAFT SHIELD HC ONLY	1
17	18590091	PIN, (#107 HAIRPIN TYPE)	1	69	05239	PILLOW BLOCK, W/ ROLLER BEARING	4
18	47006359	SQUARE KEY, 1/4 X 3	1	70	47025842	DRIVE SHAFT, 1 X 104	1
19	47001785	SPACER, BEARING BLOCK	1	71	47006359	SQUARE KEY, 1/4 X 3 LG.	1
20	05239	PILLOW BLOCK, W/ ROLLER BEARING	2	72	47006631	SHIM (.075) FOR PILLOW BLOCK	0-4
21	18056828	BOLT, 3/8-16NC. X 1 3/4	4		47006632	SHIM (.250) FOR PILLOW BLOCK	0-4
22	18811200	FLATWASHER, 3/8	4	73	10328	PULLEY, 5.4 PITCH DIA.	2
23	18496800	FLANGE NUT, 3/8-16NC.	4	74	18767450	SQ. HD. SET SCREW, 5/16-18NC. X 3/4	4
24	18056822	BOLT, 3/8-16NC. X 1	4	74A	18706422	SCREW MACH SL TR SS 5/16 X 1	2
25	18811200	FLATWASHER, 3/8	4	74B	181859	9/16 CLAMP, .343 HOLE	2
26	18496800	FLANGE NUT, 3/8-16NC.	4	74C	18476350	HEX. NUT, 5/16-16NC.	S.S. 2
27	10093	PULLEY, 7.4 PITCH DIA.	2				
28	18767450	SQ. HD. SET SCREW, 5/16-18NC. X 3/4	4				
29	31208	BELT, B43 (46" OUTSIDE)	2				
30	71403	PULLEY, FLAT IDLER	2				
30A	47005954	BELT TIGHTENER ARM WELDMENT	1				
30B	18560723	COTTER PIN, 5/32 X 1 1/2 ZC	1				
30C	18851600	FLATWASHER, 3/4 ZC	1				
31	47001799	SPACER, PULLEY - 3/4 LONG	1				
31A	2-9207	SPACER, PULLEY - 1/2 LONG	1				
32	71134	EXTENSION SPRING	1				
33	18057450	BOLT, 1/2-13NC. X 4 1/2	1				
34	18811400	FLATWASHER, 1/2	1				
35	18891400	LOCKWASHER, 1/2	1				
36	18417400	HEX. NUT, 1/2-13NC.	1				
37	47005882	SHIELD, PULLEY (HC SPREADERS)	1				
38	18590916	PIN, H BRIDGE #11	1				
39	18057434	BOLT, HEX HD 1/2-13 X 2.50 ZP	2				
40	18457650	LOCKNUT, CTR LOCK 1/2-13 ZP	2				
*							
41	47015824	AXLE WELDMENT, LH 600	1				
42	47015823	AXLE WELDMENT, RH 600(GWD SIDE)	1				
43	47003982	AXLE AXLE CLAMP BAR, LONG	2				
44	47003983	AXLE AXLE CLAMP BAR, SHORT	2				
45	18098478	BOLT, HEX GR8 3/4-10 X 10 ZC	10				

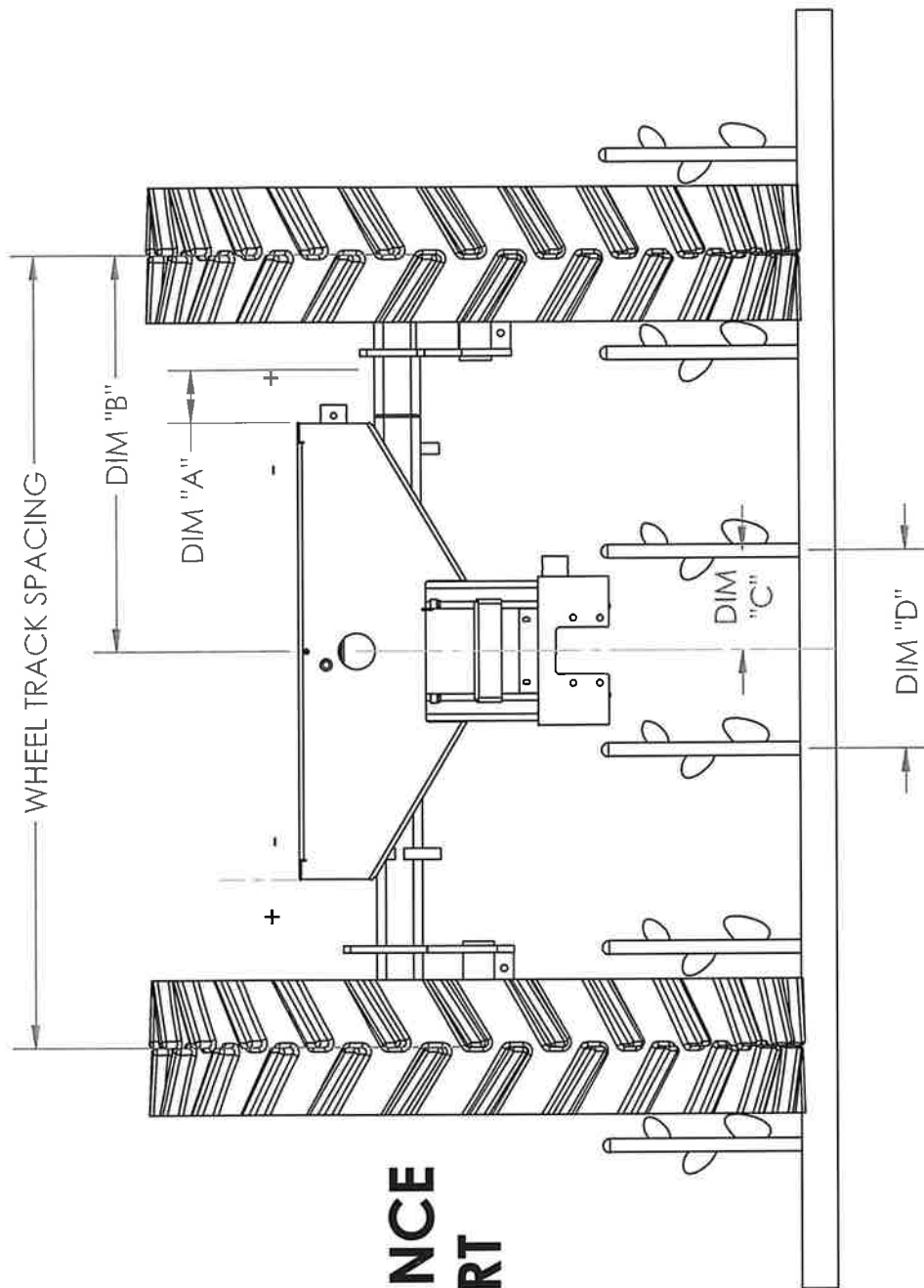
48000022 HC AXLE FRAME COMPLETE
CONTAINS ITEMS 1, 9, 11 THRU 26, 30 THRU 40, 63 THRU 67, 69 THRU 71 & 74A-74C

46080120 80" - 120" WHEEL TRACK AXLE PACKAGE
CONTAINS ITEMS 41 THRU 45, 48, & 56

ITEMS 50-51 & 53-55 ARE INCLUDED WITH 46000024

47995824 CONTAINS ITEMS 41 & 56

47995823 CONTAINS ITEMS 42 & 56



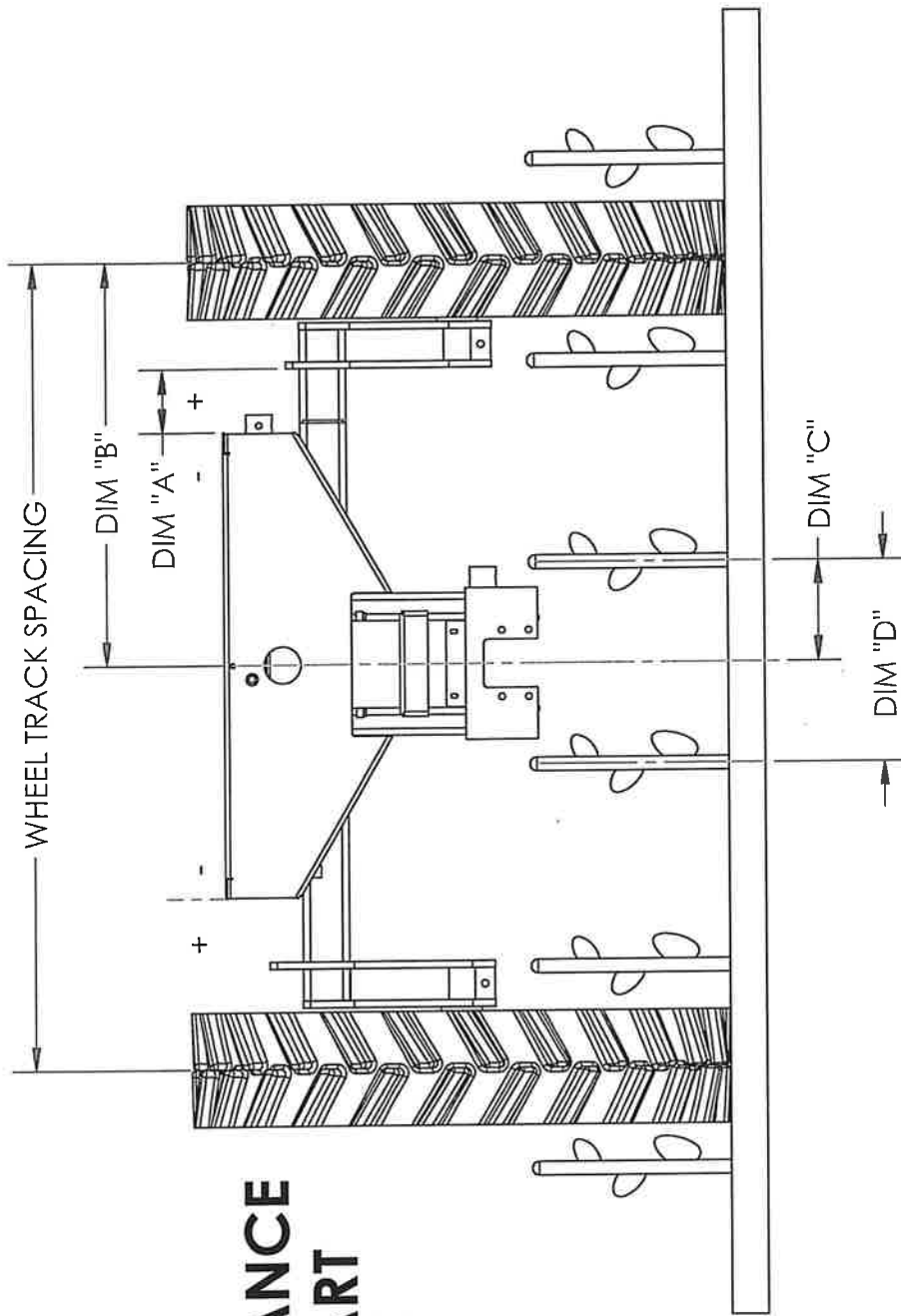
**AG800 HIGH CLEARANCE
AXLE LAYOUT CHART**
(BOX NOT SHOWN FOR CLARITY)

47A

WHEEL TRACK SPACING	DIM "A"	DIM "B"	CROP ROW SPACING (FOR REFERENCE ONLY)	
			DIM "C" (HALF)	DIM "D" (FULL)
80"	+3 1/2"	40"	10"	20"
88"	+7 1/2"	44"	11"	22"
120"	+23 1/2"	60"	15"	30"

AG600 HIGH CLEARANCE AXLE LAYOUT CHART

(BOX NOT SHOWN FOR CLARITY)

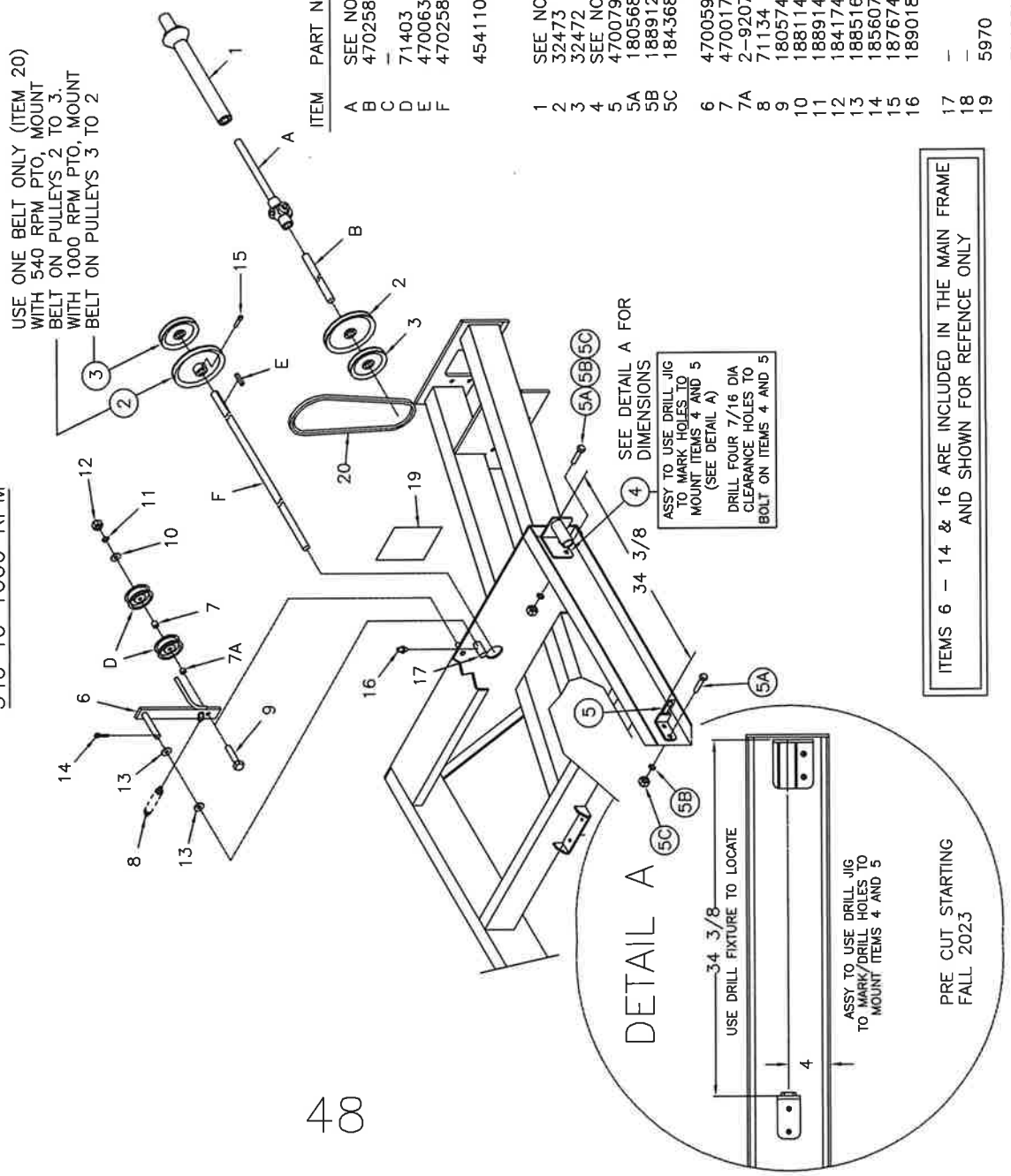


WHEEL TRACK SPACING	DIM "A"	DIM "B"	CROP ROW SPACING (FOR REFERENCE ONLY)	
			DIM "C" (HALF)	DIM "D" (FULL)
80"	+3"	40"	10"	20"
88"	+7"	44"	11"	22"
120"	+23"	60"	15"	30"

HIGH CLEARANCE PTO CONVERSION

540 TO 1000 RPM

PTOCONVHCBOLT-ON
RV 02/11/25



ITEM	PART NUMBER	PART NUMBER
A	PRE 2025	2025 & NEWER
1	01041	71961
4	93-24309	71962
4	47007907	72265

400

ITEM	DESCRIPTION	QTY
A	PTO SHAFT, COMPLETE	1
B	JACK SHAFT, 1 X 39	EXISTING
C	FLAT IDLER PULLEY	EXISTING
D	SQUARE KEY, 1/4 X 3	EXISTING
E	DRIVE LINE SHAFT, 1 X 104	EXISTING
F	PTO CONVERSION COMPLETE	1
1	INCLUDES ITEMS A, 1 THRU 5C, 15, 19 & 20	1
2	PTO SHAFT (HALF) 1000 RPM.	1
3	PULLEY, 7.4 P.D.	2
4	PULLEY, 5.4 P.D.	2
5	REAR SUPPORT, PTO (BOLT-ON)	1
5A	FRONT SUPPORT, PTO (BOLT-ON)	1
5B	BOLT, HEX 3/8-16NC X 1" ZC	4
5C	LOCKWASHER, 3/8"	4
6	NUT, HEX 3/8-16NC ZC	4
7	BRACKET, IDLER PULLEY	1
7A	SPACER, IDLER PULLEY 3/4 LG	1
8	SPACER, IDLER PULLEY 1/2 LG	1
9	EXTENSION SPRING	1
10	1/2-13 NC. X 4 1/2 BOLT	1
11	1/2 FLATWASHER	1
12	1/2 LOCKWASHER	1
13	1/2-13 NC. HEX. NUT	1
14	5/8 FLATWASHER, SAE	2
15	COTTER PIN, 5/32 X 1	1
16	SET SCREW, 5/16-18 NC. X 3/4"	8
17	GREASE ZERK, STRAIGHT	1
18	---	---
19	DECAL, 540-1000 HC PTO	1
20	V - BELT (REPLACES 31208)	1
	ALSO INCLUDED BUT NOT SHOWN	
	47019624 SS LINE SHAFT SHIELD	1

ITEMS 6 - 14 & 16 ARE INCLUDED IN THE MAIN FRAME
AND SHOWN FOR REFERENCE ONLY

PRE CUT STARTING
FALL 2023

Torque Requirements

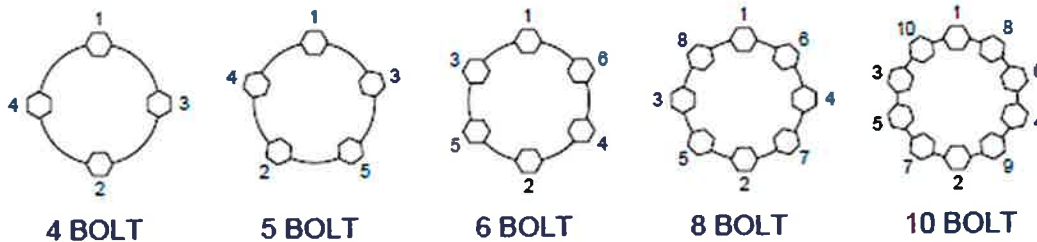
It is extremely important to apply and maintain proper wheel mounting torque on your trailer axle. Torque is a measure of the amount of tightening applied to a fastener (nut or bolt) and is expressed as length times force. For example, a force of 90 pounds applied at the end of a wrench one foot long will yield 90 lbs./ft of torque. Torque wrenches are the best method to assure the proper amount of torque is being applied to a fastener.

Note: Wheel nuts or bolts must be applied and maintained at the proper torque levels to prevent loose wheels, broken studs, and possible dangerous separation of wheels from your axle.

Be sure to use only the fasteners matched to the cone angle of your wheel (usually 60° or 90°)

The proper procedure for attaching your wheels is as follows:

1. Start all bolts or nuts by hand to prevent cross threading
2. Tighten bolts or nuts in the following sequence
3. The tightening of the fasteners should be done in stages. Following the recommended sequence, tighten fasteners per wheel torque requirements diagram



4. Wheel nuts/bolts should be torqued before first road use and after each wheel removal. Check and re-torque after the first 50 miles and again at 100 miles. Check periodically thereafter.

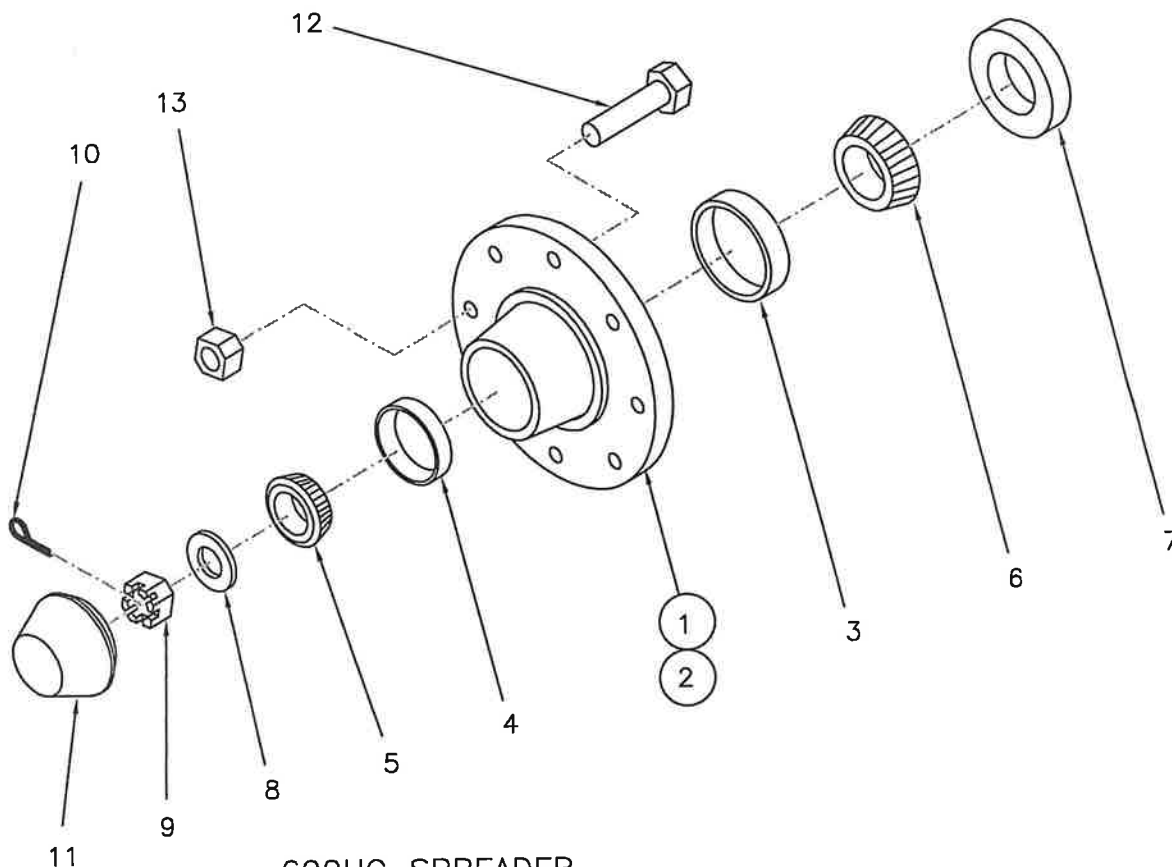
Wheel & Rim Torque Requirements

Description	Application (Steel wheels)	Minimum Torque ft/lbs.	Maximum Torque ft/lbs.
1/2" Cone nut	12"-13" Wheel	50	75
1/2" Cone nut	14"-16" Wheel	90	120
9/16" Cone nut	16" Wheel	135	175
5/8" Cone nut	Flat disc wheel	175	225
5/8" Cone nut	Clamp ring	190	210
3/4" Hex nut	Demountable	210	260
3/4" Spherical nut	Single Wheel	450	500
3/4" Spherical nut	Inner Dual	450	500
1 1/8" Spherical nut	Outer Dual	450	500
5/8" Flange nut	Wheels	275	325

600HC SPREADER HUB ASSEMBLY

600HCHUB
03-18-15

8-BOLT X 8.00 dia BC &
6.00 dia Pilot & 1.12+ Offset



600HC SPREADER 8 BOLT HUB

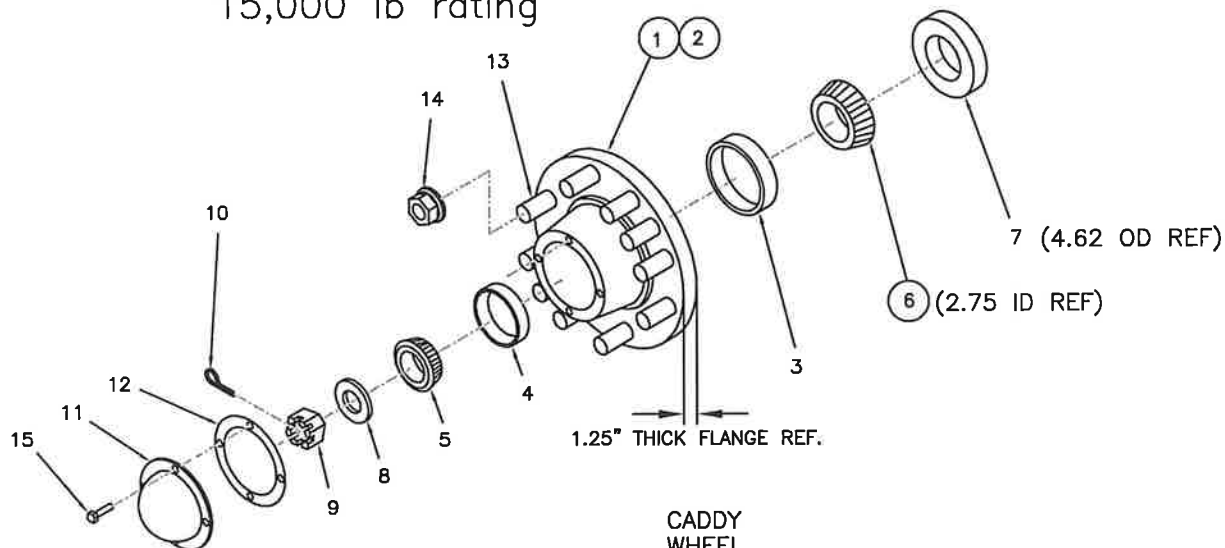
7500 lb.
CAPACITY

ITEM	DESCRIPTION	PART NO.	QTY.
1	HUB COMPLETE (MACH FOR BRAKES) MFGR. PART NUMBER INCLUDES ITEMS 2 THRU 7 AND 11 THRU 13 ONLY	47009114 H817-1	1
2	HUB WITH RACES (W BRAKES)	47005114	1
3	INNER BEARING RACE	47005328	1
4	OUTER BEARING RACE	47005131	1
5	OUTER BEARING CONE	47005349	1
6	INNER BEARING CONE	47005387	1
7	GREASE SEAL SE-42 HEAVY	47005776	1
8	SPINDLE WASHER, 1 1/4 WA23	18000023	1
9	SPINDLE NUT, 1 1/4-12 SC	18000038	1
10	COTTER PIN, 3/16 X 2 ZC	18560830	1
11	DUST CAP, DC26	47005212	1
12	LUG BOLT, 5/8 X 2 1/2 WB46	47005735	8
13	LUG NUT, 5/8-18 UNF WB18	47005736	8

800HC/AGX10HC HUB ASSEMBLY

10 BOLT HUB (zero offset)
11.25 dia BC & 8.69 dia Pilot
15,000 lb rating

800HCHUB
10/2/18



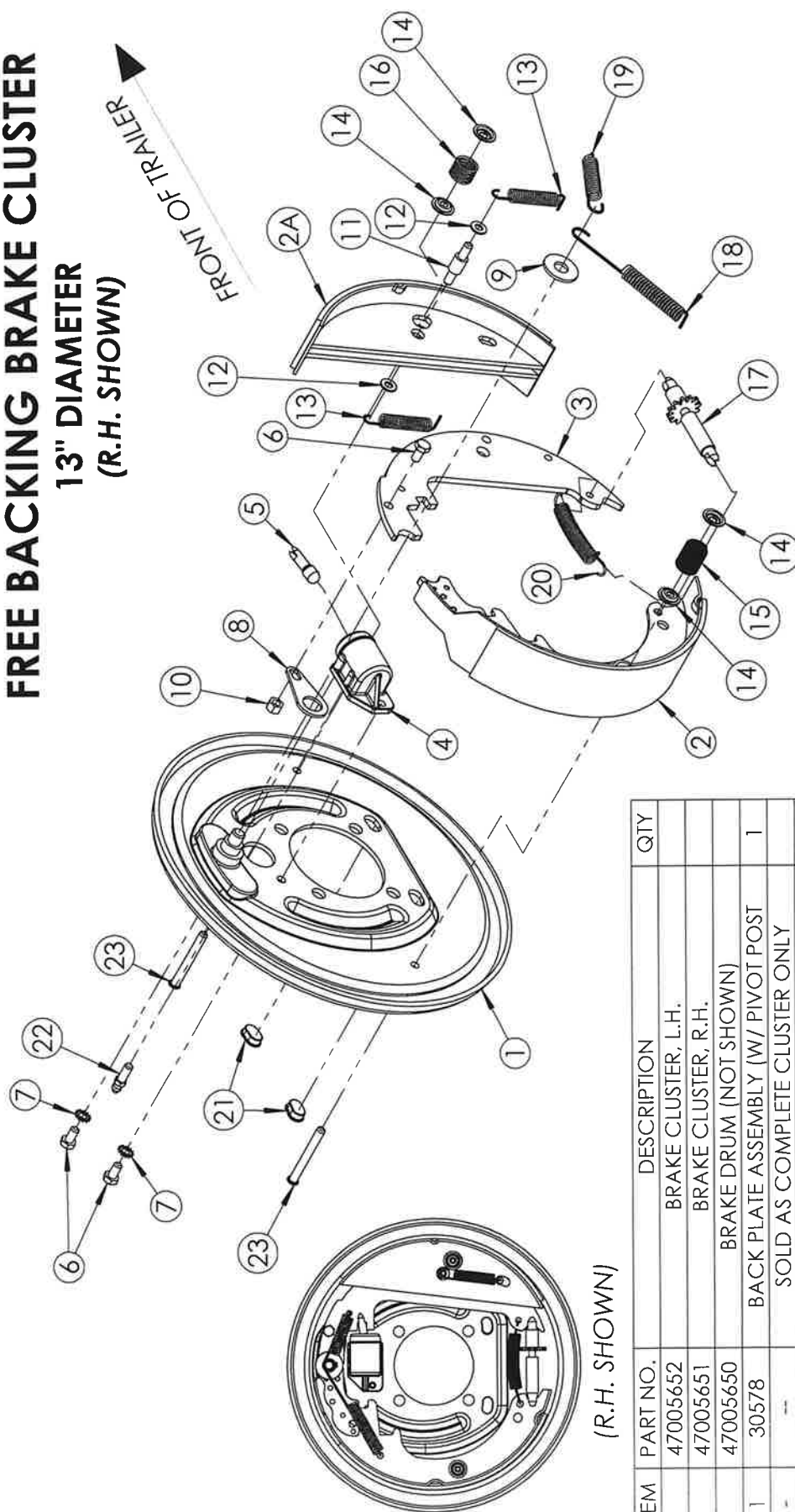
CADDY
WHEEL
10 BOLT (15,000 LB)

AG SYST
PART NO.

ITEM	DESCRIPTION	AG SYST PART NO.
1	HUB COMPLETE, (MACH. FOR BRAKES)	HA1010-3
	HUB COMPLETE (INCLUDES ITEMS 2 THRU 7 AND 11 THRU 15 ONLY)	
2	HUB WITH RACES (MACH FOR BRAKES)	47003011
3	INNER BEARING CUP	47033462
4	OUTER BEARING CUP	47000453
5	OUTER BEARING CONE	47000460
6	INNER BEARING CONE (2.75 ID REF)	47033275
7	GREASE SEAL, SE67 (4.62 OD REF)	47000067
8	SPINDLE WASHER, 1.25	47000023
9	SPINDLE NUT, 1.25-12	47000038
10	COTTER PIN 3/16 X 1 3/4 SC	18560828
11	DUST CAP, DC27	47000027
12	GASKET, DUST CAP	47000049
13	WHEEL STUD (PRESSED IN) 3/4-16	4700WB51
14	WHEEL NUT, FLANGED 3/4-16	4700WB52
15	CAP BOLT, 5/16 X 1/2 GR5 ZC	47000053

**PAGES 52-53
HAVE BEEN OMITTED**

FREE BACKING BRAKE CLUSTER 13" DIAMETER (R.H. SHOWN)



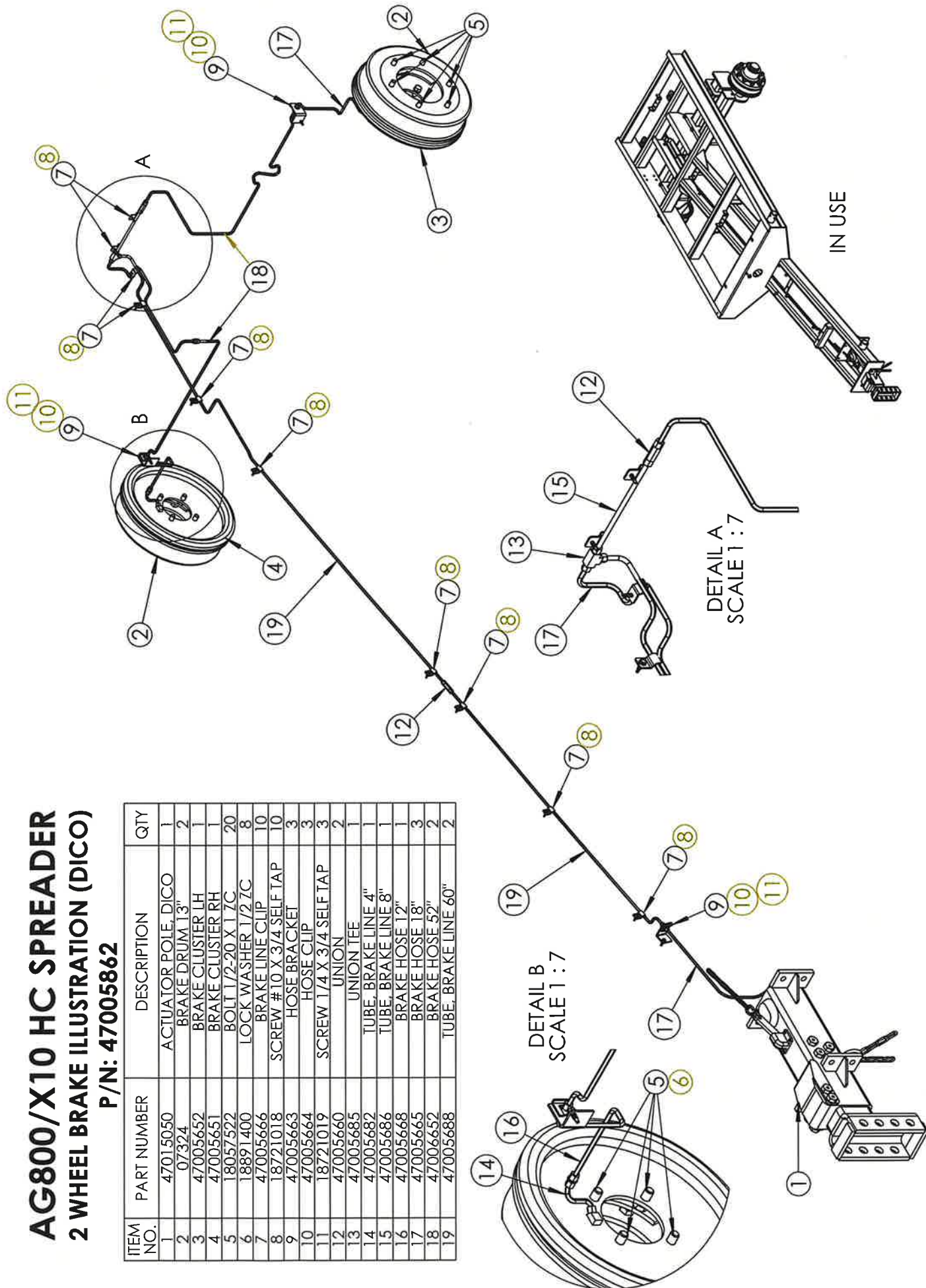
(R.H. SHOWN)

ITEM	PART NO.	DESCRIPTION	QTY
	47005652	BRAKE CLUSTER, L.H.	
	47005651	BRAKE CLUSTER, R.H.	
	47005650	BRAKE DRUM (NOT SHOWN)	
1	30578	BACK PLATE ASSEMBLY (W/ PIVOT POST)	1
-	--	SOLD AS COMPLETE CLUSTER ONLY	
2	03184	BRAKE SHOE (BACK)	1
2A	03183	BRAKE SHOE (FRONT)	1
3	30594	SHOE LEVER	1
4	30582	WHEEL CYLINDER ASSEMBLY, L.H.	1
	30581	WHEEL CYLINDER ASSEMBLY, R.H.	1
5	30587	PUSH ROD	1
6	18056416	BOLT, HEX. HD 5/16-18 UNC X 5/8	3
7	--	EXTERNAL TOOTH WASHER, 5/16	2
8	30593	TRAVEL LINK	1
9	18811400	FLATWASHER, 1/2 USS ZC	1
10	18457600	LOCKNUT, 5/16-18 UNC	1
11	30588	PIN, SPING ANCHOR	1
12	30421	RETAINING RING	2
13	30420	SPRING, SHOE RETURN	2
14	30590	CUP, SHOE HOLD DOWN	4

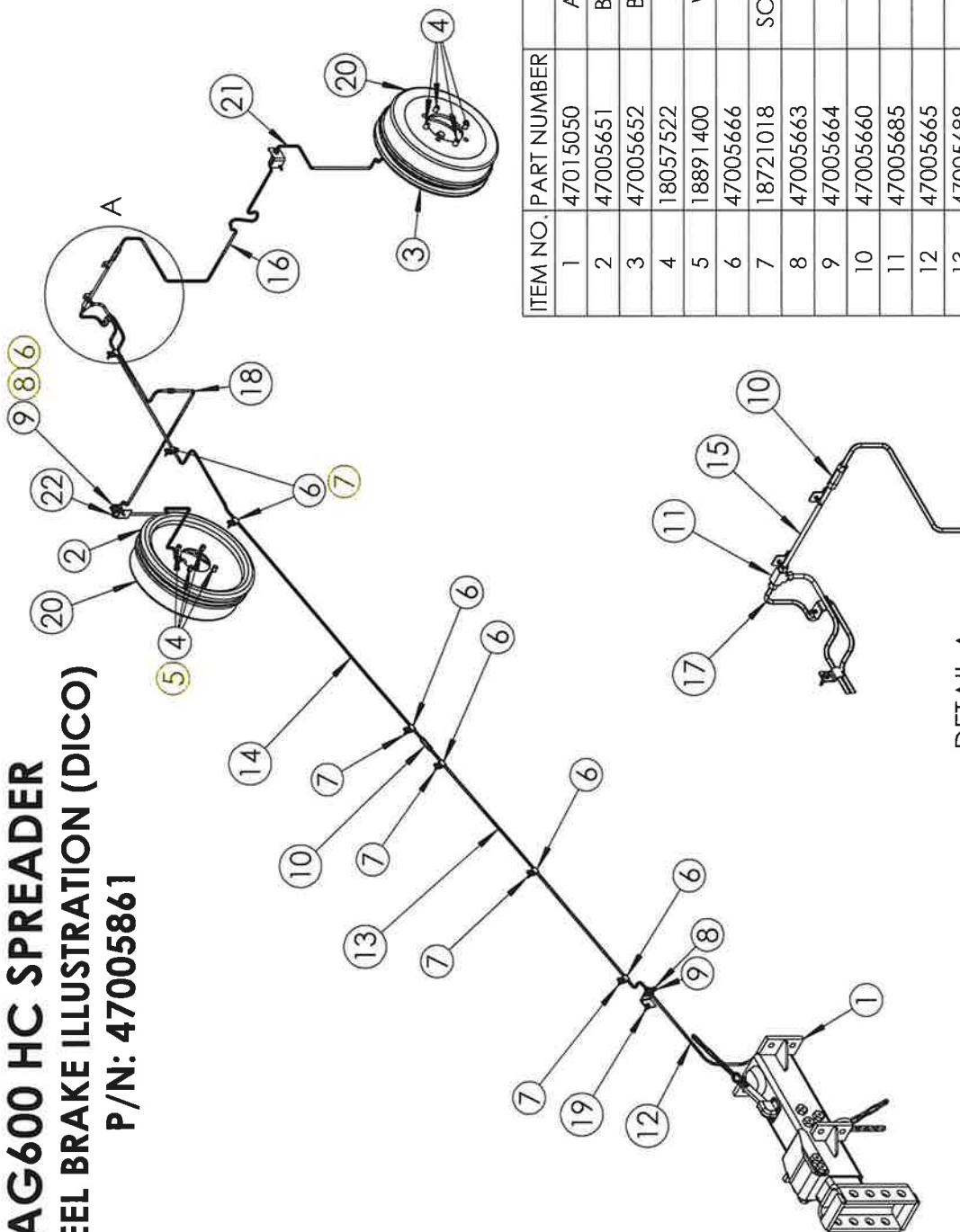
ITEM	PART NO.	DESCRIPTION	QTY
15	30601	SPRING, SHOE HOLD DOWN - BLUE	1
16	30591	SPRING, SHOE HOLD DOWN - MAROON	1
17	30598	ADJUSTING SCREW BOLT	1
	30599	ADJUSTING SCREW NUT	1
18	30595	SPRING, SHOE	1
19	30596	SPRING LEVER	1
20	30597	SPRING, ADJUSTING SCREW	1
21	92455	COVER GROMMET, ADJUSTING HOLE	2
22	30580	BLEEDER	1
23	30589	PIN, SHOE HOLD DOWN - #6	2
	94005	WHEEL CYLINDER REPAIR KIT	
		INCLUDES (1 EACH) SPRING, CUP, AND BOOT	

AG800/X10 HC SPREADER 2 WHEEL BRAKE ILLUSTRATION (DICO) P/N: 47005862

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	47015050	ACTUATOR POLE, DICO	1
2	07324	BRAKE DRUM 13"	2
3	47005652	BRAKE CLUSTER LH	1
4	47005651	BRAKE CLUSTER RH	1
5	18057522	BOLT 1/2-20 X 1 7/8	20
6	18891400	LOCK WASHER 1/2 TC	8
7	47005666	BRAKE LINE CLIP	10
8	18721018	SCREW #10 X 3/4 SELF TAP	10
9	47005663	HOSE BRACKET	3
10	47005664	HOSE CLIP	3
11	18721019	SCREW 1/4 X 3/4 SELF TAP	3
12	47005660	UNION	2
13	47005685	UNION TEE	1
14	47005682	TUBE, BRAKE LINE 4"	1
15	47005686	TUBE, BRAKE LINE 8"	1
16	47005668	BRAKE HOSE 12"	1
17	47005665	BRAKE HOSE 18"	3
18	47006652	BRAKE HOSE 52"	2
19	47005688	TUBE, BRAKE LINE 60"	2



AG600 HC SPREADER **2 WHEEL BRAKE ILLUSTRATION (DICO)** **P/N: 47005861**



DETAIL A
 SCALE 1 : 10

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47015050	ACTUATOR POLE, DICO	1
2	47005651	BRAKE CLUSTER (13") RH	1
3	47005652	BRAKE CLUSTER (13") LH	1
4	18057522	BOLT 1/2-20 X 1 ZC	16
5	18891400	WASHER, 1/2 LOCK ZC	8
6	47005666	BRAKE LINE CLIP	10
7	18721018	SCREW, #10 X 3/4 SELF TAP	10
8	47005663	HOSE BRACKET	3
9	47005664	HOSE CLIP	3
10	47005660	UNION, 3/16	2
11	47005685	UNION TEE	1
12	47005665	BRAKE HOSE 18"	1
13	47005688	TUBE, BRAKE LINE 60"	1
14	47005688	TUBE, BRAKE LINE 60"	1
15	47005686	TUBE, BRAKE LINE 8"	1
16	47006652	BRAKE HOSE 52"	1
17	47005665	BRAKE HOSE 18"	1
18	47006652	BRAKE HOSE 52"	1
19	18715718	SCREW, 1/4 X 3/4 SELF TAP	3
20	47005602	BRAKE DRUM	2
21	47005667	BRAKE HOSE (25")	1
22	47005667	BRAKE HOSE 25"	1

BRAKE CLUSTER SETUP, ADJUSTMENT, & BLEEDING

Your brake cluster was centered to the spindled drum before it was tightened to ensure proper operation. When replacing or installing new brake clusters, first finger tighten the bolts mounting the brake flange cluster so it can still float, then install the hub and drum assembly and adjust the brake shoes tight to the drum to center the cluster to the drum. Then, tighten the nuts to hold the cluster in place. Now remove the drum to allow access to the boltheads to hold and torque the nuts to 75 ft pounds. Then reinstall the hub.

WARNING

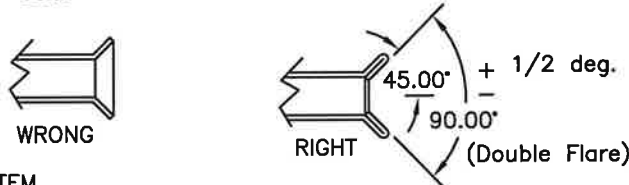
Saltwater, granular fertilizer and other corrosive materials are destructive to metal. To prolong the life of a braking system used under corrosive conditions we recommend that the actuator be flushed periodically with a high pressure water hose. Be sure to regrease bearings and oil all moving parts after the unit has dried. For "end of season" storage remove the brake drums and clean inside the brakes. Pack the wheel bearings before the drums are reinstalled.

1 INITIAL BRAKE CLUSTER SETUP & ADJUSTMENT

The brake adjustment nut is located through the slot at the bottom of the backing plate. Insert brake tool or screw driver into slotted hole with the handle up and a bit against the adjusting nut, pull down on handle and rotate the wheel tightening the nut. **ALWAYS ROTATE WHEEL IN DIRECTION OF FORWARD ROTATION ONLY!** When you can no longer rotate wheel, back off the tightener 33 clicks to obtain a desired gap of .030 inches between the brake shoe and the brake drum. **AT ALL TIMES** during the setup and adjustment the drum needs to be rotated in the forward direction of travel because Ag Systems uses free-backing type brake clusters. Check that the brakes function properly when applied and that when released, the brakes do not drag. **ONLY A CERTIFIED PROFESSIONAL MECHANIC SHOULD INSTALL BRAKE CLUSTERS.**

2 BRAKE LINES

Use care in forming tubing to avoid sharp bends or kinks. Use double flare steel tubing to assure leakproof connections. **THIS MUST BE DONE BY A CERTIFIED BRAKE SHOP!**



3 BLEEDING THE SYSTEM

The first requirement for safe, sure hydraulic braking is the use of quality brake fluid. Use only DOT-3 or DOT-4 brake fluid from a sealed container. If pressure bleeding equipment is available, follow the manufacture's instructions for bleeding the system. **IF SYSTEM MUST BE BLED MANUALLY, PROCEED AS FOLLOWS.**

Fill master cylinder with fluid. Install the bleeder hose on the first wheel cylinder to be bled. (If tandem axle trailer, bleed rear axle first.) Have the loose end of the hose submerged in brake fluid in a glass container to observe bubbling.

By loosening the bleeder screw located in the wheel cylinder one turn, the system is open to the atmosphere through the passage drilled in the screw.

Pump the actuator with long steady strokes. The bleeding operation is completed when bubbles no longer rise to the surface of the fluid.

BE SURE TO CLOSE THE BLEEDER SCREW SECURELY.

Repeat bleeding operation at each wheel cylinder. During bleeding process, replenish the brake fluid so the level does not fall below the half full level in the master cylinder reservoir. After bleeding is completed, make sure the master cylinder reservoir is filled and the filler cap is securely in place. After the bleeding operation is completed, apply pressure to the system and check the entire brake system for leaks.

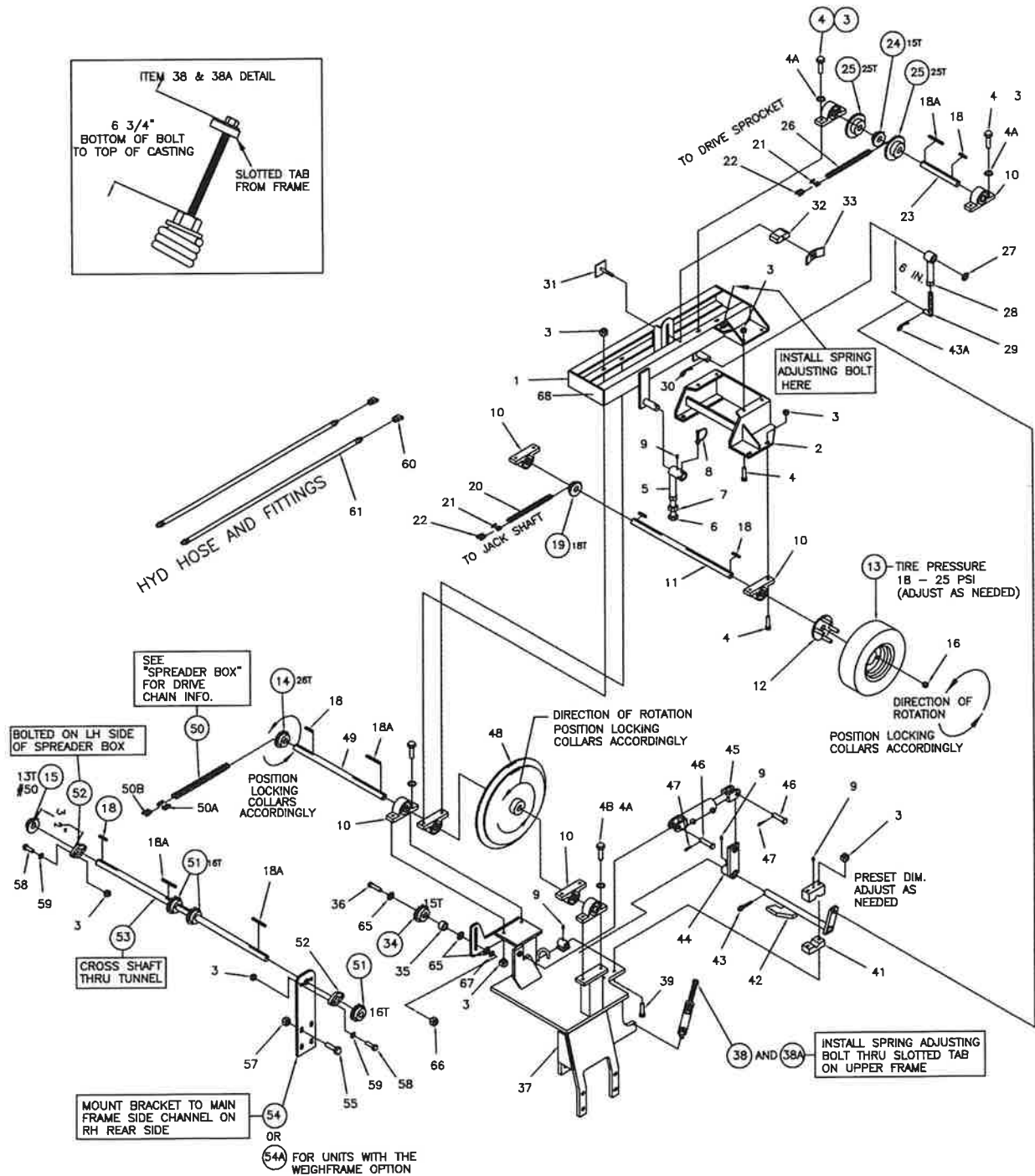
4 ADJUSTING THE BRAKES (AFTER BLEEDING BRAKES)

On new spreaders or tandems with brakes, trip the emergency brake and check and adjust shoes accordingly to be free and that they hold properly when activated. (See initial brake cluster & adjustment section above for setup information.) Check that brake function properly when applied and that when released, the brakes are releasing properly and do not significantly drag.

WARNING !

FAILURE TO FOLLOW THESE INSTRUCTIONS, OR FAILURE TO PROPERLY MAINTAIN BRAKES AFTER INSTALLATION CAN RESULT IN LOSS OF BRAKING ACTION WHICH CAN CAUSE PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE. ONLY A CERTIFIED PROFESSIONAL MECHANIC SHOULD INSTALL BRAKE CLUSTERS. HAVE YOUR BRAKES INSPECTED BY A CERTIFIED PROFESSIONAL MECHANIC AND ANNUALLY AFTER INSTALLATION.

AG600 HIGH CLEARANCE SPREADER HYDRAULIC GROUND WHEEL DRIVE



AG600 HC APRON DRIVE ASSEMBLY HYDRAULIC CONTROL

APDRVHC600LST
rev 06/04/25

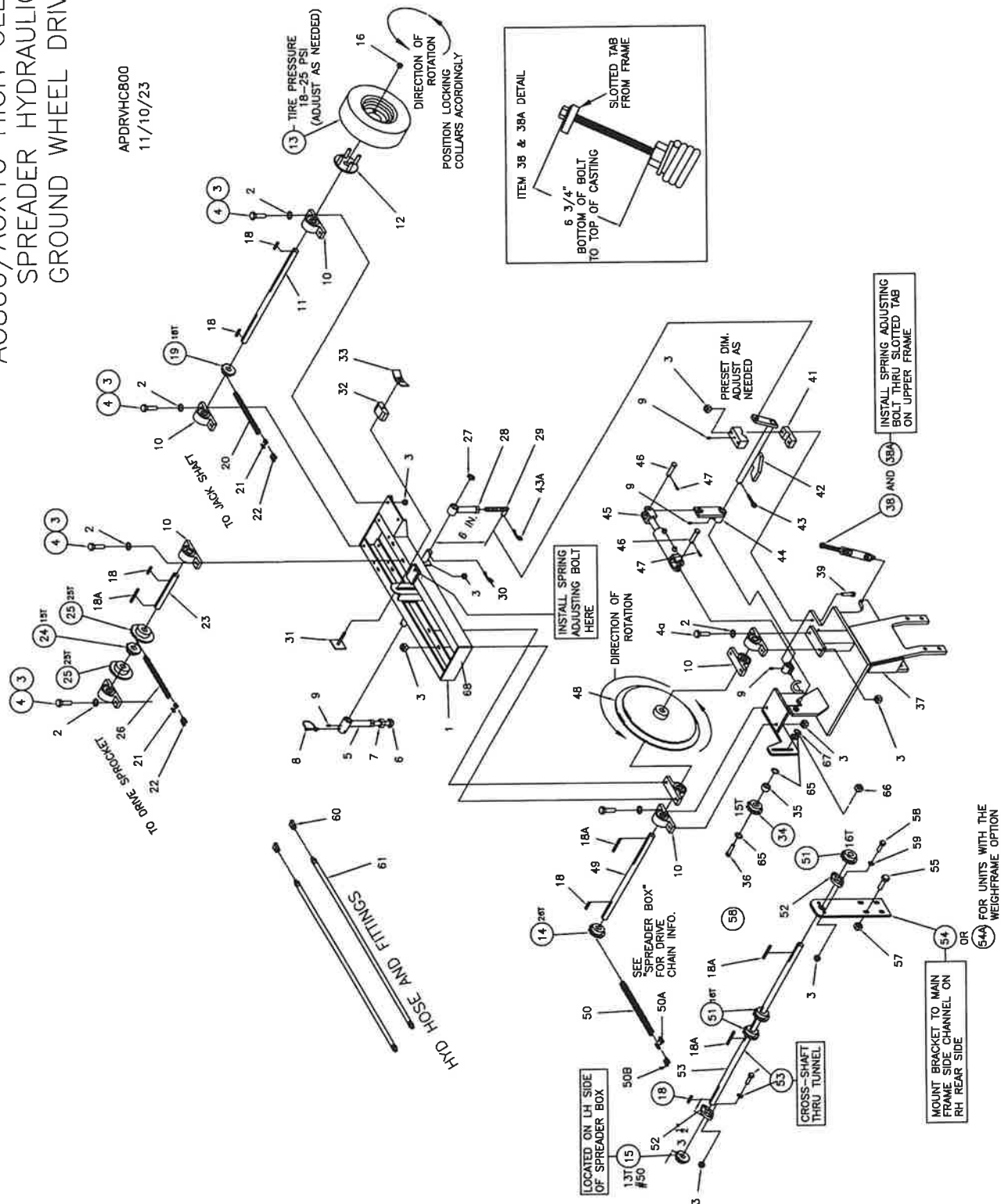
ITEM	PART NO.	DESCRIPTION	QTY.	ITEM	PART NO.	DESCRIPTION	QTY.
	46000024	STANDARD SPEED DRIVE COMPLETE		38	00306-30	LIFT SPRING W/ INSERT	1
1	47005848	UPPER FRAME, APRON DRIVE 600HC	1	38A	47009910	SPRING BOLT WELDMENT	1
2	47005950	APRON DRIVE MOUNT, 600HC	1				
3	18496800	FLANGE NUT, 3/8-16NC.	28	39	18056850	BOLT, 3/8-16NC. X 4	2
4	18056826	BOLT, 3/8-16NC. X 1 1/2	16	40		OMITTED	
4A	18811200	FLATWASHER, 3/8 ZC	16	41	36995	WOOD BEARING BLOCK, UPPER	1
4B	18051628	BOLT, 3/8-16NC. X 1 3/4	4			WOOD BEARING BLOCK, LOWER	1
5	47005955	HIGHWAY SUPPORT LOCK WELD'T	1	42	47003049	LIFT ARM WELDMENT	1
6	18057938	BOLT, HEX 5/8-11 X 3 LG GR5 ZC	1	43	18560826	COTTER PIN, 3/16 X 1 1/2	1
7	18407900	NUT, 5/8-11 NC ZC	1	43A	18590148	HAIRPIN #9, .148 X 3	1
8	18572000	PIN, D-RING 5/16 DIA X 1 3/4	1	44	47009958	CYLINDER ARM	1
9	18901805	GREASE ZERK, STRAIGHT	4				
10	05239	PILLOW BLOCK, 1" BEARING	8	45	47005437	HYDRAULIC CYLINDER, 1 1/2 X 4	1
11	47006105	SHAFT, DRIVE WHEEL, 1 X 24 (STD)	1		470AK284	CYL. REPAIR KIT (CAST CLEVIS PRE 2018)	
12	47003722	HUB, 4-BOLT, WITH LUGNUTS	1		20214	CYL. REPAIR KIT (WELDED CLEVIS POST 2018)	
13	44105519	WHEEL ASSEMBLY (INCLUDES TIRE, TUBE, RIM, AND VALVE STEM)	1	46	18541642	CLEVIS PIN, 5/8 X 2 1/2	2
14	47007573	SPROCKET, 26T 1" BORE W 1/4" KEYWY	1	46A	18541644	CLEVIS PIN, 5/8 X 3	-
15	10106	SPROCKET 13 tooth #50 chain	1	47	18560622	COTTER PIN, 1/8 X 1	2
16	47005011	WHEEL NUT, 1/2-20NF.(INC. W #12)	4	48	31515	DOUBLE SPROCKET, 40 X 84-96 X 1	1
17	omitted			49	47006105	FRONT SHAFT, 1 X 24 (STD)	1
18	47006519	DRIVE KEY, 1/4 X 1 1/2	5	50	31027	ROLLER CHAIN, #50 - 36 1/2"	1
18A	2-6640	DRIVE KEY, 1/4 X 2 1/2	5	50A	31212	CONNECTOR LINK, NO. 50 S.S.	1
19	47007579	SPROCKET, 18T 1" BORE W 1/4" KEYWY	1	50B	31213	OFFSET LINK, NO. 50 S.S.	1
20	30925	ROLLER CHAIN, NO. 40 X 31 7/8"	1	51	47007574	SPROCKET, 16T 1" BORE W 1/4" KEYWY	3
21	31028	CONNECTOR LINK, NO. 40 S.S.	2	52	10500	BEARING, 2 HOLE FOR 1" SHAFT	3
22	31029	OFFSET LINK, NO. 40 S.S.	2	53	47025841	SHAFT, SPRDR BOX CROSSOVER X 38"	1
23	47009800	JACK SHAFT, 1 X 8	1	54	47005840	CROSS-SHAFT MOUNT BAR (STD)	1
24	34307	SPROCKET, #40 X 15 TOOTH	1	54A	47003255	CROSS-SHAFT MOUNT BAR (WEIGHFRAME)	1
25	30894	SPROCKET, #40 X 25 TOOTH	2	55	18057426	BOLT, HEX 1/2 X 1 1/2 NC ZC	4
26	30925	ROLLER CHAIN, NO. 40 X 64"	1	56	--	--	--
27	18300322	WASHER, N.R. MACH. BUSH. 1 X 14 GA.	3	57	18497400	FLANGE NUT, HEX 1/2 ZC	4
28	47009029	ADJUSTING BOLT, FEMALE	1	58	18056826	BOLT, 3/8-16NC. X 1 1/2	6
29	47009026	ADJUSTING BOLT, MALE	1	59	18811200	FLATWASHER, 3/8 ZC	6
30	18590094	HAIRPIN BRIDGE, .177 DIA. NO. 8	1	60	2501-6-6	ELBOW, 90 DEG. SWIVEL	2
31	47009038	BELT TIGHTENER WELDMENT	1	61	604204	HYD. HOSE, 1/4 X 204 INCHES LG	2
32	34325	WOOD BLOCK CHAIN TIGHTENER	1	62	--	--	--
33	47009589	WING NUT ASSEMBLY	1	63	--	--	--
34	34318	SPROCKET, #50 IDLER 15T	1	64	--	--	--
35	47007958	BUSHING 5/8 ID X 3/4 LONG	1	65	18851600	FLAT WASHER, 5/8 SAE ZC	3
36	18057938	BOLT, HEX HD 5/8 X 3 ZC	1	66	18407900	NUT, HEX 5/8 ZC	1
37	47015810	GWD BRACKET WELD'T (AG600HC)	1	67	18891600	WASHER, 5/8 LOCK	1
				68	31868	DO NOT BACK UP DECAL (REF ONLY)	1

ITEM #68 IS NOT INCLUDED IN P/N 46000024, AND IS SHOWN FOR REFERENCE ONLY

SEE PGS 46-47 FOR ADDITIONAL MTG HARDWARE

PRIOR TO 2023 THERE WERE TWO SIZES OF CLEVIS PINS (ITEMS 46/46A)

AG800/AGX10 HIGH CLEARANCE SPREADER HYDRAULIC GROUND WHEEL DRIVE



AG800/AGX10 HC APRON DRIVE ASSEMBLY HYDRAULIC CONTROL

APDRVHC800LST
rev 06/04/25

ITEM	PART NO.	DESCRIPTION	QTY.	ITEM	PART NO.	DESCRIPTION	QTY.
1	48000024	STANDARD SPEED DRIVE COMPLETE	1	38	00306-30	EXTENSION SPRING, (LIFT SPRING)	1
2	47005873	UPPER FRAME, APRON DRIVE 800HC	16	38A	47009910	SPRING BOLT WELDMENT	1
3	18811200	FLATWASHER, 3/8 ZC	24	39	18056850	BOLT, 3/8-16NC. X 4	2
4	18496800	FLANGE NUT, 3/8-16NC.	12	40	---	---	---
4a	18056826	BOLT, 3/8-16NC. X 1 1/2	4	41	36995	WOOD BEARING BLOCK, UPPER	1
5	18051628	BOLT, 3/8-16NC. X 1 3/4	1	42	47003049	WOOD BEARING BLOCK, LOWER	1
6	47005955	HIGHWAY SUPPORT LOCK WELD'T	1	43	18560826	LIFT ARM WELDMENT	1
7	18057938	BOLT, HEX 5/8-11 X 3 LG GR5 ZC	1	43A	18590148	COTTER PIN, 3/16 X 1 1/2	1
8	18407900	NUT, 5/8-11 NC ZC	1	44	18590148	HAIR PIN #9, .148 X 3" LG	1
9	18572000	PIN, D-RING 5/16 DIA X 1 3/4	4	44	47009958	CYLINDER ARM	1
10	05239	GREASE ZERK, STRAIGHT	8	45	47005437	HYDRAULIC CYLINDER, 1 1/2 X 4	1
11	47006105	PILLOW BLOCK, 1" BEARING	1	470AK284	CYL. REPAIR KIT (CAST CLEVIS PRE 2018)		
12	47003722	SHAFT, DRIVE WHEEL, 1 X 24 (STD)	1	20214	CYL. REPAIR KIT (WELDED CLEVIS POST 2018)		
13	44105519	HUB, 4-BOLT, WITH LUGNUTS	1	46	18541642	CLEVIS PIN, 5/8 X 2 1/2	2
		WHEEL ASSEMBLY (INCLUDES TIRE, TUBE, RIM, AND VALVE STEM)		46A	18541644	CLEVIS PIN, 5/8 X 3	---
14	47007573	SPROCKET, 26T 1" BORE W 1/4" KEYWY	1	47	18560622	COTTER PIN, 1/8 X 1	2
15	10106	SPROCKET 13 tooth #50 chain	1	48	31515	DOUBLE SPROCKET, 40 X 84-96 X 1	1
16	47005011	WHEEL NUT, 1/2-20NF.(included w/ item 12)	4	49	47006105	FRONT SHAFT, 1 X 24 (STD)	1
17				50	31027	ROLLER CHAIN, #50 - 36 1/2"	1
18	47006519	DRIVE KEY, 1/4 X 1 1/2	5	50A	31212	CONNECTOR LINK, NO. 50 S.S.	1
18A	2-6640	DRIVE KEY, 1/4 X 2 1/2	5	50B	31213	OFFSET LINK, NO. 50 S.S.	1
19	47007579	SPROCKET, 18T 1" BORE W 1/4" KEYWY	1	51	47007574	SPROCKET, 16T 1" BORE W 1/4" KEYWY	3
20	30925	ROLLER CHAIN, NO. 40 X 22 7/8	1	52	10500	BEARING, 2 HOLE FOR 1" SHAFT	3
21	31028	CONNECTOR LINK, NO. 40 S.S.	2	53	47025841	SHAFT, SPRDR BOX CROSSEVER X 38"	1
22	31029	OFFSET LINK, NO. 40 S.S.	2	54	47005840	CROSS-SHAFT MOUNT BAR	1
23	47009800	JACK SHAFT, 1 X 8	1	54A	47003255	CROSS-SHAFT MOUNT BAR (WEIGHFRAME)	1
24	34307	SPROCKET, #40 X 15 TOOTH	1	55	18057426	BOLT, HEX 1/2 X 1 1/2 NC ZC	4
25	30894	SPROCKET, #40 X 25 TOOTH	2	56	---	---	---
26	30925	ROLLER CHAIN, NO. 40 X 64"	1	57	18497400	FLANGE NUT, HEX 1/2 ZC	4
27	18300322	WASHER, N.R. MACH. BUSH. 1 X 14 GA.	3	58	18056826	BOLT, 3/8-16NC. X 1 1/2	6
28	47009029	ADJUSTING BOLT, FEMALE	1	59	18811200	FLATWASHER, 3/8 ZC	6
29	47009026	ADJUSTING BOLT, MALE	1	60	2501-6-6	ELBOW, 90° #6 JICFS X 3/8 MPT	2
30	18590094	HAIRPIN BRIDGE, .177 DIA. NO. 8	1	61	604204	HYD. HOSE, 1/4 X 204 INCHES LG	2
31	47009038	BELT TIGHTENER WELDMENT	1	62	---	---	---
32	34325	WOOD BLOCK	1	63	---	---	---
33	47009589	WING NUT ASSEMBLY	1	64	---	---	---
34	34318	SPROCKET, #50 IDLER 15T	1	65	18851600	FLATWASHER, 5/8 SAE ZC	3
35	47007958	BUSHING, 5/8 ID X 3/4 LONG	1	66	18407900	NUT, HEX 5/8 ZC	1
36	18057938	BOLT, HEX HD 5/8 X 3 ZC	1	67	18891600	WASHER, 5/8 LOCK ZC	1
37	47015810	GWD BRACKET-WELD'T	1	68*	31868A	DO NOT BACK UP DECAL	1

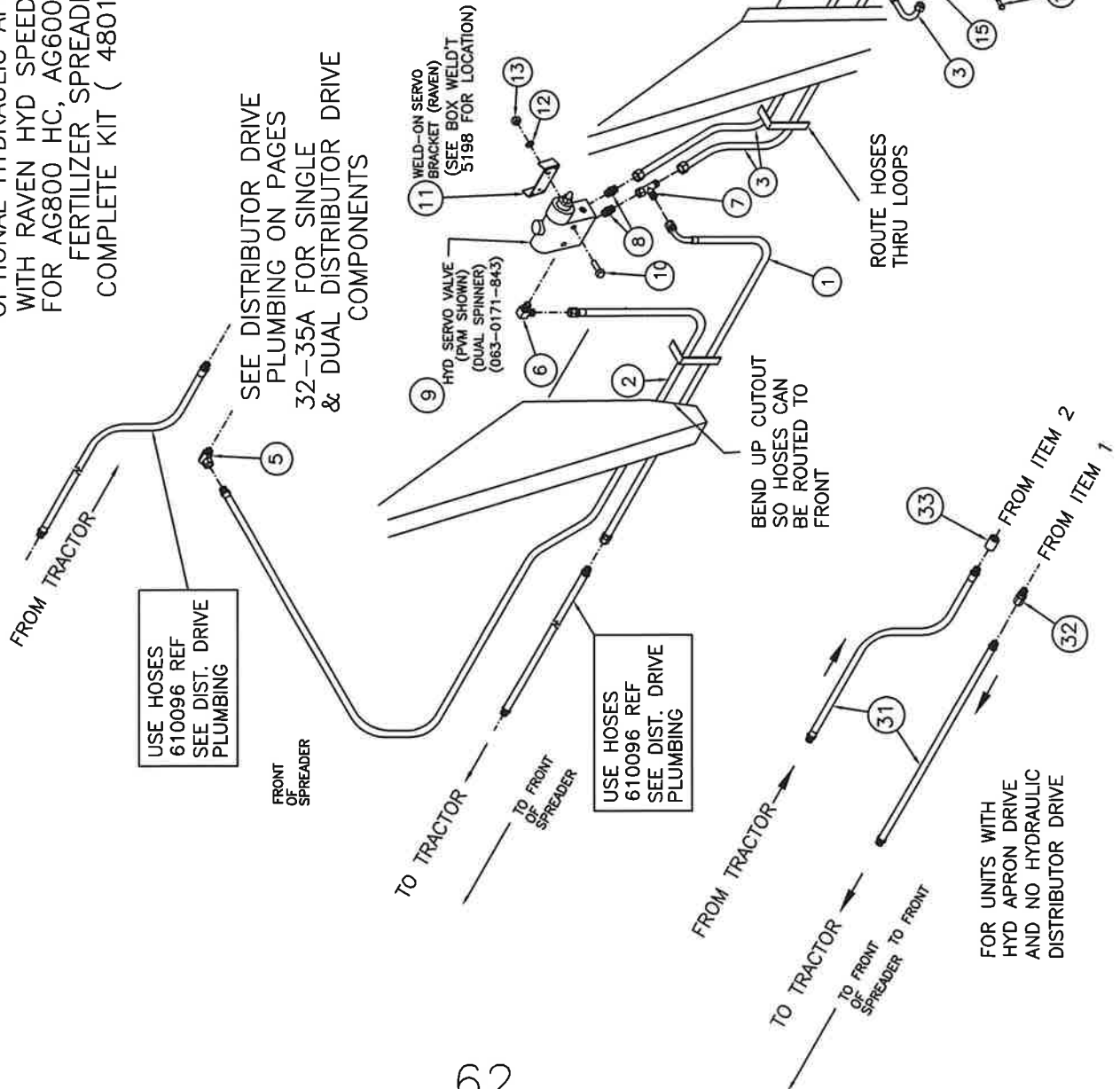
SEE PG. 44 & 45 FOR ADDITIONAL MTG HARDWARE

ITEM #68 IS NOT INCLUDED IN P/N 48000024, AND IS SHOWN FOR REFERENCE ONLY
PRIOR TO 2023 THERE WERE TWO SIZES OF CLEVIS PINS (ITEMS 46/46A)

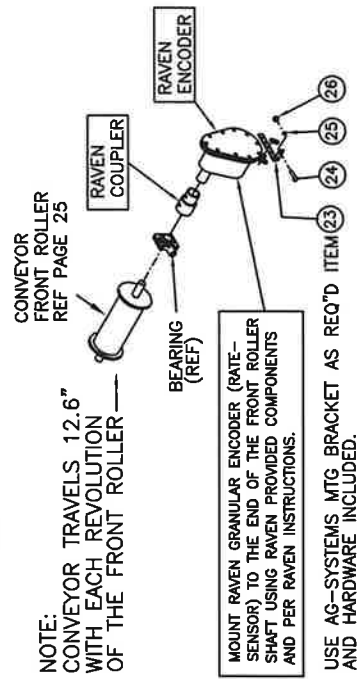
OPTIONAL HYDRAULIC APRON DRIVE
WITH RAVEN HYD SPEED CONTROL
FOR AG800 HC, AG600 HC
FERTILIZER SPREADERS
COMPLETE KIT (48010899)

HYDCVSPDRV3DHC
09/21/23

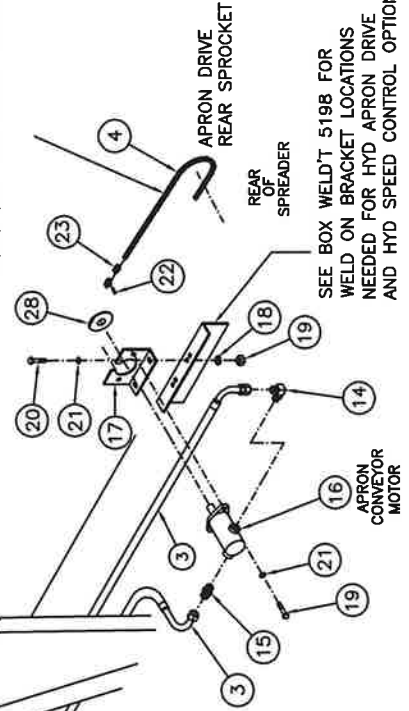
FOR 2014 and OLDER MODELS



RAVEN GRANULAR ENCODER OPTION (063-0171-071)
(MOUNT ON FRONT RH SIDE OF UNIT)



DRIVE CHAIN 84 INCHES LONG
REPLACES 104.38 INCH LONG, SEE
CHAIN REF PAGE 25 OF THIS MANUAL



A800, 600, 500

HYDCVSPRDRVLST

1/5/16

OPTIONAL HYDRAULIC APRON DRIVE
WITH RAVEN HYDRAULIC SPEED CONTROL
2014 AND OLDER MODELS

(48010899) COMPLETE KIT INCLUDES ITEMS 1 THRU 30 ONLY

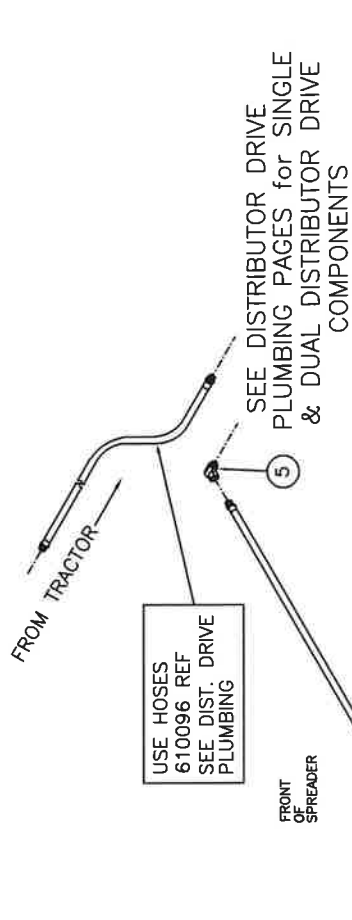
ITEM	PART NO.	DESCRIPTION	QTY.
1	612108	HOSE, 3/4 X 108, #12JICFS 90° X 3/4 FM PIPE	1
2	611120	HOSE, 3/4 X 120, #12JICFS X 3/4 MALE PIPE	1
3	632036	HOSE, 3/4 X 36, #12JICFS 90° X #12JICFS	2
4	31027	ROLLER CHAIN SS, #50 X 84.00 LONG	1
5	1501-12	MALE PIPE ELBOW SWIVEL	1
6	6801-12	STRAIGHT THREAD ELBOW	1
7	6602-12	SWIVEL NUT RUN TEE	1
8	6400-12	STRAIGHT THREAD CONNECTOR	4
9	063-0171-843	PWM VALVE, 15GPM	1
10	18056842	BOLT, 3/8 -16 X 3 1/2 LONG ZC	2
11	47003853	BRACKET, FOR RAVEN HYD SERVO	1
12	18891200	FLATWASHER, 3/8 ZC	4
13	18457800	NUT, CTR LOCK 3/8-16 NC ZC	4
14	6801-12	STRAIGHT THREAD ELBOW	1
15	6400-12	STRAIGHT THREAD CONNECTOR	1
16	51930	HYDRAULIC MOTOR	1
17	47005190	CONVEYOR MOTOR BRACKET	1
18	18824800	FLATWASHER, 1/2 SS	4
19	18997400	NUT, HEX, 1/2-13 NC SS	4
20	18022026	BOLT, 1/2-13 NC X 1 1/2 SS	4
21	18991400	LOCKWASHER, 1/2 SS	4
22	31212	CONNECTING LINK, #50 CHAIN SS	1
23	31213	OFFSET LINK, #50 CHAIN SS	1
24	47003903	ENCODER BRACKET	1
25	18025715	BOLT, HEX #10-24 X 3/4 SS	2
26	18812300	FLATWASHER, #10 ZC	2
27	18987800	NUT, FLANGE #10-24 UNC SS	2
28	10106	SPROCKET, #50 13 TOOTH X 1.00 BORE	1
29	* 063-0171-071	ENCODER	1
30	* 115-0159-787	FLOW CABLE 21'	1

(* - not shown for clarity)

FOR HYD APRON DRIVE ONLY AND
NO HYD DISTRIBUTOR DRIVE USE
ITEMS 31 THRU 33

31	610096	HYD HOSE	2
32	LT-75-00N	CHECK VALVE	1
33	100372	PIPE COUPLING, 3/4 NPT	1

OPTIONAL HYDRAULIC APRON DRIVE WITH PWM
(PULSE WIDTH MODULATED) HYD SPEED CONTROL
FOR AGX10 HC, AG800 HC, AND AG600 HC
FERTILIZER SPREADERS
COMPLETE KIT (48020899)

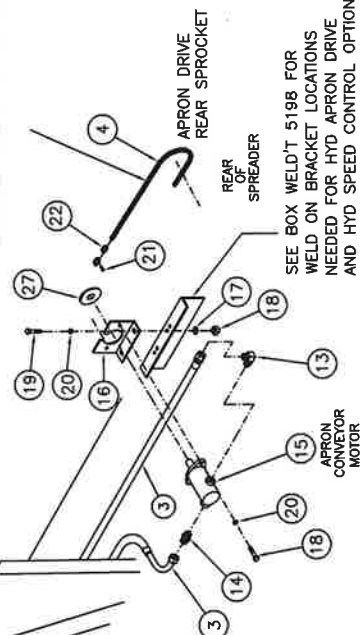


8 HYD SERVO VALVE (PWM 063-0171-843) (DUAL SPINNER)

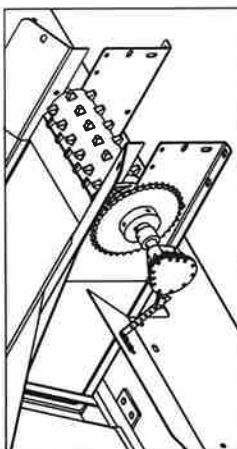
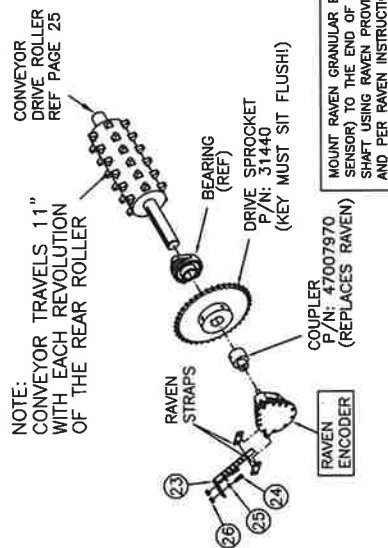
10 WELD-ON SERVO BRACKET (RAVEN & PWM) (SEE BOX WELD'T 5198 FOR LOCATION)

ASSEMBLED VIEW

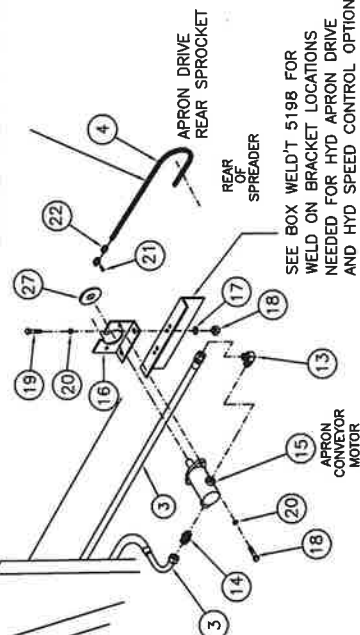
DRIVE CHAIN 84 INCHES LONG
REPLACES 104.38 INCH LONG, SEE
CHAIN REF PAGE 25 OF THIS MANUAL



RAVEN GRANULAR ENCODER OPTION (063-0171-071)
(MOUNT ON REAR LH SIDE OF UNIT)



DRIVE CHAIN 84 INCHES LONG
REPLACES 104.38 INCH LONG, SEE
CHAIN REF PAGE 25 OF THIS MANUAL



SEE BOX WELD'T 5198 FOR
WELD ON BRACKET LOCATIONS
NEEDED FOR HYD APRON DRIVE
AND HYD SPEED CONTROL OPTIONS.

AGX10, 800, 600, 500
 OPTIONAL HYDRAULIC APRON DRIVE
 WITH PWM HYDRAULIC SPEED CONTROL
 2015 AND NEWER

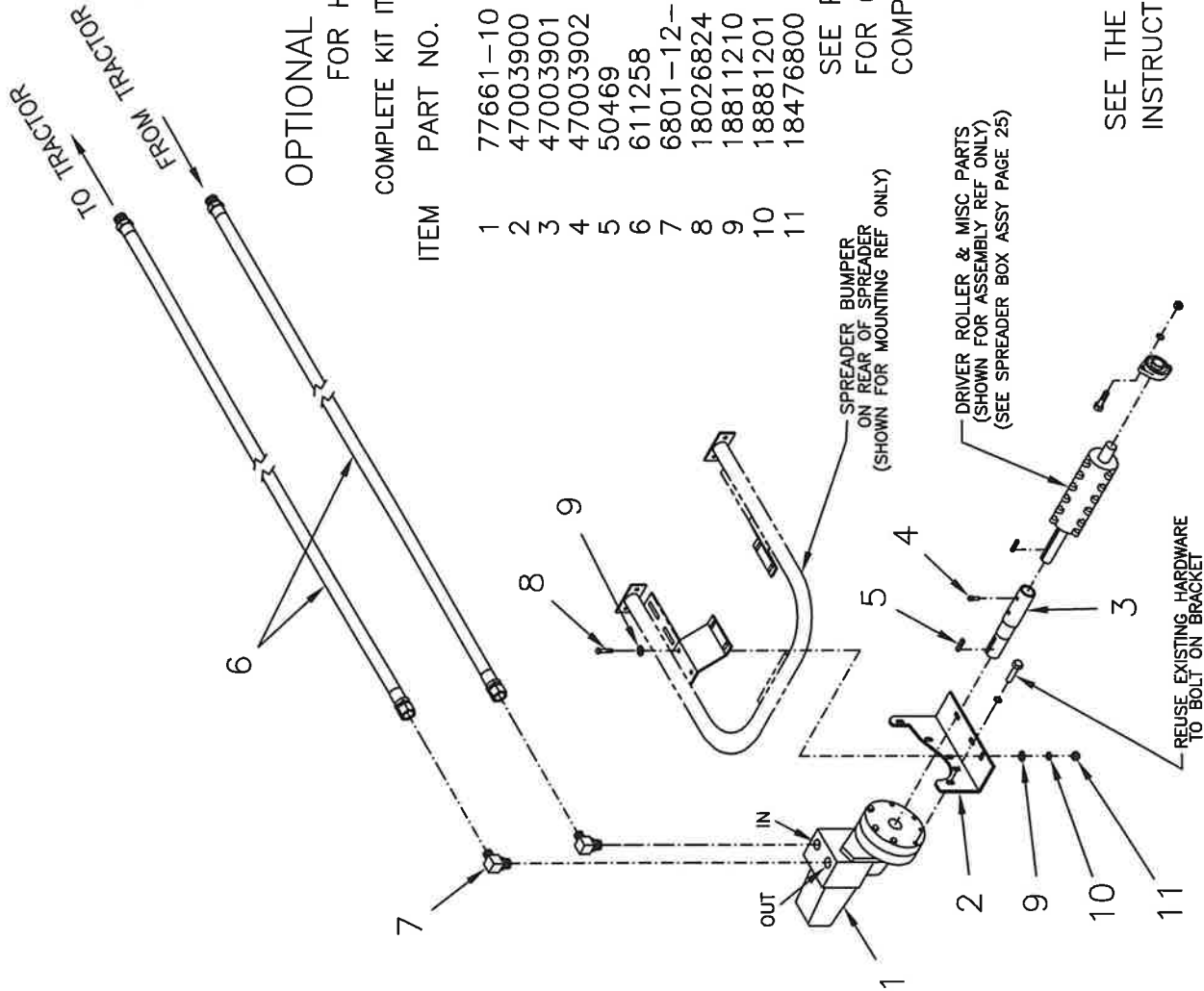
HYDPWMLST

02/11/25

(48020899) COMPLETE KIT INCLUDES ITEMS 1 THRU 29 & 33 THRU 37

ITEM	PART NO.	DESCRIPTION	QTY.
1	612108	HOSE, 3/4 X 108, #12JICFS 90° X 3/4 FM PIPE	1
2	611120	HOSE, 3/4 X 120, #12JICFS X 3/4 MALE PIPE	1
3	632036	HOSE, 3/4 X 36, #12JICFS 90° X #12JICFS	2
4	31027	ROLLER CHAIN SS, #50 X 84.00 LONG	1
5	1501-12	MALE PIPE ELBOW SWIVEL	1
6	445001	STRAIGHT THREAD 90° ELBOW	2
7	6602-12-12-12	SWIVEL NUT RUN TEE	1
8	063-0171-843	PWM VALVE, 15 GPM	1
9	18474400	BOLT, 1/4 -16 X 4 LONG SS	2
10	47003853	BRACKET, FOR RAVEN&PWM HYD SERVO	1
11	18881001	FLATWASHER, 1/4 SS	2
12	18569200	NUT, NYLOCK 1/4-20 NC SS	2
13	445001	STRAIGHT THREAD ELBOW	1
14	6400-12-12	STRAIGHT THREAD CONNECTOR	2
15	51930	HYDRAULIC MOTOR	1
16	47005190	CONVEYOR MOTOR BRACKET	1
17	18824800	FLATWASHER, 1/2 SS	4
18	18997400	NUT, HEX, 1/2-13 NC SS	4
19	18022026	BOLT, 1/2-13 NC X 1 1/2 SS	4
20	18991400	LOCKWASHER, 1/2 SS	4
21	31212	CONNECTING LINK, #50 CHAIN SS	1
22	31213	OFFSET LINK, #50 CHAIN SS	1
23	47003903	ENCODER BRACKET	1
24	18025715	BOLT, HEX #10-24 X 3/4 SS	2
25	18812300	FLATWASHER, #10 ZC	2
26	18987800	NUT, FLANGE #10-24 UNC SS	2
27	10106	SPROCKET, #50 13 TOOTH X 1.00 BORE	1
28	* 063-0171-071	ENCODER	1
29	* 115-0159-787	FLOW CABLE 21'	1
	(* - not shown for clarity)		
	FOR HYD APRON DRIVE ONLY AND		
	NO HYD DISTRIBUTOR DRIVE USE		
	ITEMS 30 THRU 32		
30	610096	HYD HOSE	2
31	LT-75-00N	CHECK VALVE	1
32	100372	PIPE COUPLING, 3/4 NPT	1
33	5197	HOSE GUIDE BRACKET	2
34	47007970	1 1/4" COUPLER (GRAN. ENCODER)	1
35	47005193	CONVEYOR MOTOR MOUNT SUPPORT	1
36	--	OMITTED	--
37	2-5192	FLOW REGULATOR MOUNT	1

SEE PRINT
5198



OPTIONAL TRIMBLE IQ RATE CONTROL KIT FOR HYD DRIVE FERTILIZER SPREADERS

COMPLETE KIT ITEMS 1 THRU 11 (47993900)

ITEM	PART NO.	DESCRIPTION	QTY
1	77661-10	TRIMBLE HYD DRIVE CONTROL KIT	1
2	47003900	FIELD IQ MOUNTING BRACKET	1
3	47003901	ADAPTER SHAFT FOR FIELD IQ UNIT	1
4	47003902	KEY, 1/2 SQ. X 2 1/4 LONG	1
5	50469	SETSCREW, 1/4-28 X 1/4	4
6	611258	HYD. HOSE WITH ENDS	2
7	6801-12-16	ELBOW, #12 JIC TO O-RING	2
8	18026824	BOLT, HEX HD 3/8-16 X 1 1/4 SS	3
9	18811210	FLATWASHER, 3/8 SS	6
10	18881201	LOCKWASHER, 3/8 SS	3
11	18476800	HEX. NUT, 3/8-16NC. SS	3

SEE PAGES 32 THRU 36 IN THIS MANUAL
FOR OTHER HYDRAULIC DRIVE OPTIONAL
COMPONENTS.

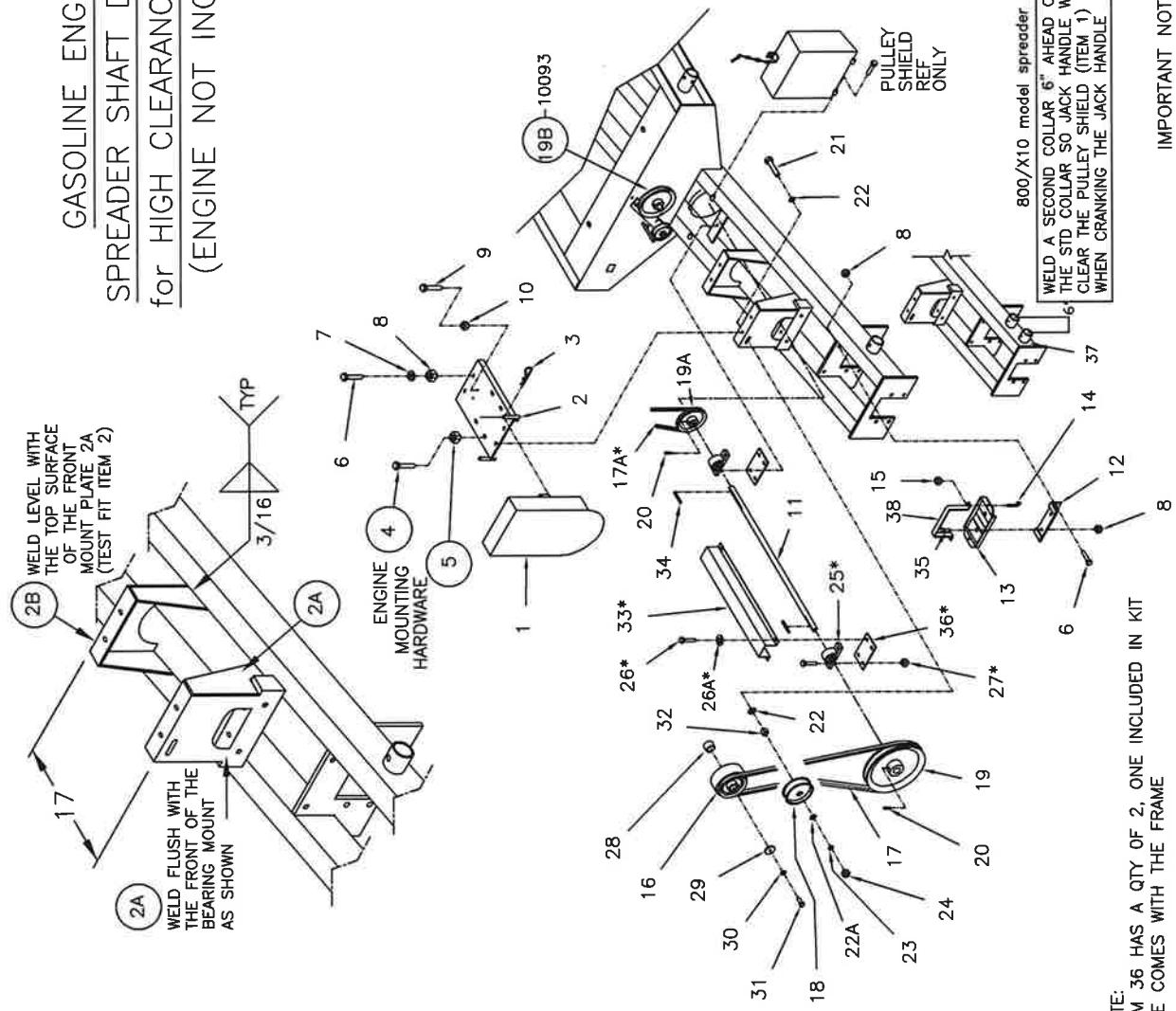
SEE THE TRIMBLE OPERATORS MANUAL FOR OPERATING
INSTRUCTIONS

GASOLINE ENGINE SPREADER SHAFT DRIVE PKG for HIGH CLEARANCE SPREADERS (ENGINE NOT INCLUDED)

GASENGDRHC
RV 10/01/24

STD. ASSEMBLY P.N. 48999511
(INCLUDES ALL ITEMS EXCEPT * ITEMS)

ITEM	PART NO.	DESCRIPTION	QTY
1	47019511	PULLEY SHIELD	1
2	47019505	ENGINE MOUNT BASE	1
2A	47003245	FRONT MOUNT PLATE WELDMENT	1
2B	47003244	REAR MOUNT PLATE WELDMENT	1
3	18590148	HAIRPIN BRIDGE	2
4	18047130	BOLT, 7/16-14NC. X 2	4
5	18496500	FLANGE NUT, 7/16-14NC.	4
6	18056822	BOLT, 3/8-16NC. X 1	6
7	18811200	FLAT WASHER, 3/8 DIA.	4
8	18496800	FLANGE NUT, 3/8-16NC.	8
9	18055722	BOLT, 1/4-20NC. X 1	2
10	18495700	FLANGE NUT, 1/4-20NC.	2
11	47025843MOD	JACK SHAFT, 39" MODIFIED (2 keyways)	1
12	47019508	BEARING SUPPORT	1
13	47009516	BATTERY TRAY	1
14	47009519	J-BOLT, 5/16-18NC.	2
15	18496400	CENTRIFUGAL CLUTCH, for 11hp Honda	2
16	160015	DRIVE BELT, (ENGINE TO JACKSHAFT)	1
17	BP45	DRIVE BELT, B43 46" (JACKSHAFT REAR)	1
17A	31208	IDLER PULLEY, 3 INCH (COMMON)	1
18	71403	JACKSHAFT PULLEY, FRONT, 9.5" PITCH DIA	1
19	BK95	JACKSHAFT PULLEY, REAR 5.4" PITCH DIA	1
19A	10328	JACKSHAFT PULLEY, FRONT, 7.4" PITCH DIA	2
19B	10093	SQ. HD. SET SCREW, 5/16-18NC. X 3/4	10
20	18767450	BOLT, 1/2-13NC. X 3 GR5 ZC	1
21	18057438	FLAT WASHER, 1/2 DIA. ZC	2
22	18811400	FLAT WASHER, 1/2 DIA. SAE ZC	1
22A	18851400	LOCK WASHER, 1/2 DIA.	1
23	18891400	HEX. NUT, 1/2-13NC.	1
24	18417400	PILLOW BLOCK, W/ROLLER BEARING	1
25	05239	BOLT, 3/8-16NC. X 1 1/2	1
26	18056826	FLAT WASHER, 3/8 DIA.	2
26A	18811200	FLANGE NUT, 3/8-16NC.	4
27	18496800	SPACER, CENTRIFUGAL CLUTCH	4
28	47009882	RETAINING CAP	1
29	47019883	LOCKWASHER, 3/8	1
30	18891200	BOLT, 3/8-24NF. X 1 (FINE THREAD)	1
31	18056820	SPACER BUSHING, (3/4"LONG)	1
32	47001799	PTO SHIELD (FOR JACKSHAFT)	1
33	47003992	SQ KEY, 1/4 X 3	1
34	47006359	BOLT, FLAT HD. SOCKET, 3/8NC X 1 1/4 BLK	2
35	18768500	SPACER, BEARING BLOCK	2
36	47001785	JACK MOUNTING COLLAR	1
36*	47010213	BATTERY RETAINER	1
37	47005963	ITEMS WITH * ARE ALREADY LISTED ON THE BILL OF MATERIAL	1
38		FOR AG600HC OR 800HC WAGONS but shown here for assembly clarity.	1



NOTE:
ITEM 36 HAS A QTY OF 2, ONE INCLUDED IN KIT
ONE COMES WITH THE FRAME

800/X10 model spreader only
WELD A SECOND COLLAR 6" AHEAD OF
THE STD COLLAR SO JACK HANDLE WILL
CLEAR THE PULLEY SHIELD (ITEM 1)
WHEN CRANKING THE JACK HANDLE

USE 13HP HONDA MOTOR P/N #GX390K1QNE2
FOR MOTOR PARTS CONTACT LOCAL HONDA DEALER

IMPORTANT NOTE:
SET ENGINE RPM AT — 2750 RPM. (9.5" PULLEY)

— TO OBTAIN A CORRECT 750 RPM DISTRIBUTOR.

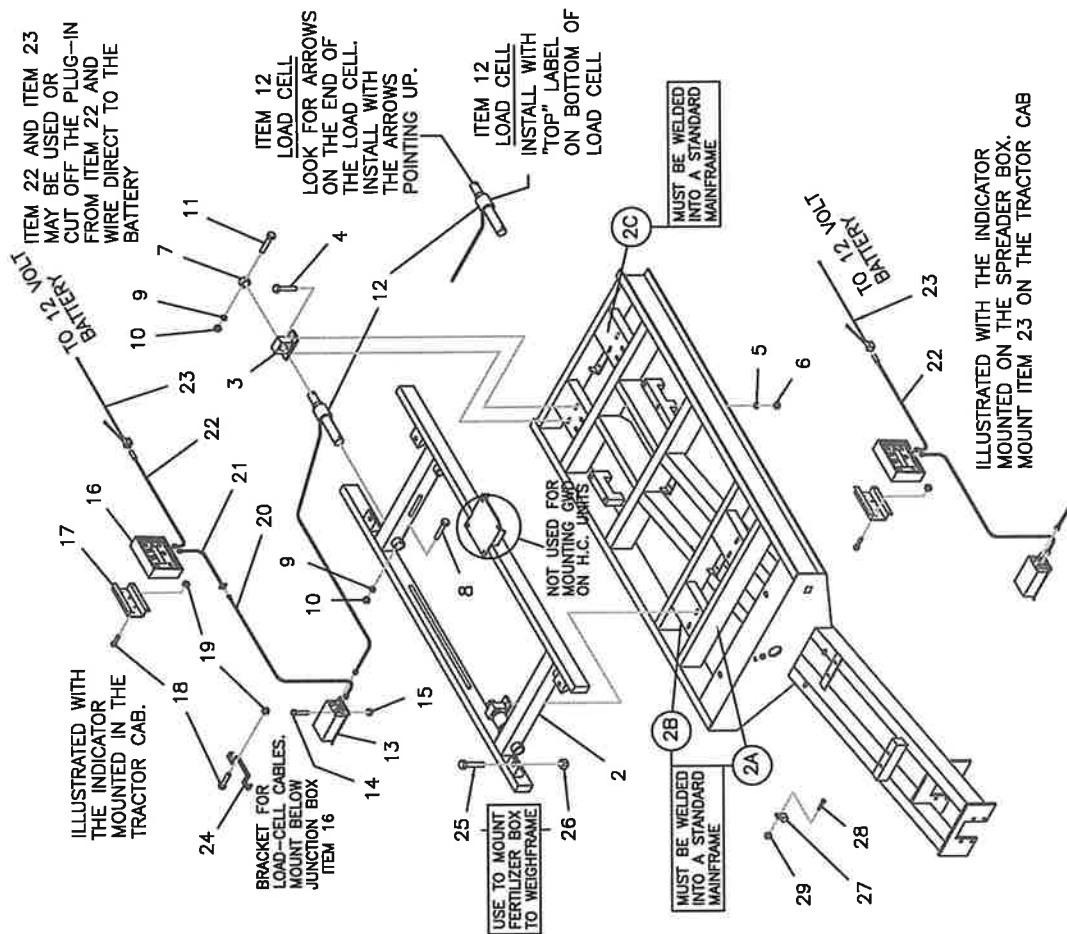
AG600/AG800 HIGH CLEARANCE SPREADER OPTIONAL WEIGH FRAME ASSEMBLY

WITH "DIGI-STAR" WEIGH SYSTEMS

(UP TO 2018)

AG800HCWFRM
03/07/18

ITEM	PART NO.	DESCRIPTION	QTY.
1	see page 44 & 45 MAIN FRAME, AG800 see page 46 & 47 MAIN FRAME, AG600		1 1
2	47009718	WEIGH FRAME, AG600 & AG800	1
2A	2-3995	ADDITIONAL CROSSTUBE	1
2B	47003253	FRONT MOUNT (FOR WEIGHFRAME)	2
2C	47003254	REAR MOUNT (FOR WEIGHFRAME)	2
3	47009755	LOAD CELL MOUNT	4
4	18057430	BOLT, 1/2-13NC. X 2	8
5	18891400	LOCK WASHER, 1/2	8
6	18417400	HEX. NUT, 1/2-13NC.	8
7	47009717	RETAINING COLLAR	4
8	18056842	BOLT, 3/8-16NC. X 3 1/2	4
9	18891200	LOCKWASHER, 3/8	8
10	18436800	HEX. NUT, 3/8-16NC.	8
11	18056838	BOLT, 3/8-16NC. X 3	4
12	143989	LOAD CELL WITH CABLE TO JCTN BOX	4
13	404254	JUNCTION BOX, WITHOUT CABLES	1
14	18025715	BOLT, #10-24 X 3/4	S.S. 6
15	18987800	FLANGE NUT, #10-24	S.S. 6
16	407093	WEIGH INDICATOR DISPLAY (2015 +)	1
17	840459	INDICATOR MOUNTING BRACKET	1
18	18025718	BOLT, 1/4-20NC. X 3/4	S.S. 8
19	18971400	FLANGE NUT, 1/4-20NC.	S.S. 8
20	824316	CABLE, (INDCTR TO JUNCT BX.) 15 FT.	1
21	141832	CABLE, (INDCTR TO JUNCT BX.) 30 FT.	1
22	146150	POWER CORD, (W/EXTENSION PLUG-IN)	1
23	141826	POWER CORD, (WITH SOCKET)	1
24	47009766	CABLE MOUNT BRACKET	1
25	18058427	BOLT, 3/4-10NC. X 1 1/4	4
26	18498400	HEX. FLANGE NUT, 3/4-10NC.	4
Ship loose the following parts to be used to secure wire harnesses to frame and route wiring to tractor.			
27	COV-101121	CABLE SUPPORT LOOP (TO TRACTOR)	2
28	18025718	BOLT, 1/4-20 NC X 3/4 SS	8
29	18971400	FLANGE NUT, 1/4-20 NC SS	8



ATTENTION

FOR UNITS REQUIRING THE WEIGH FRAME ASSEMBLY AND GROUND WHEEL DRIVE ASSEMBLY, THE MINIMUM AXLE SPACING IS 88". THE GROUND WHEEL DRIVE MOUNTS DIRECTLY TO THE AXLE, AND NOT ON THE PLATE OF THE WEIGH FRAME.

AG600/AG800/AGX10 HIGH CLEARANCE SPREADER (2018 & NEWER)

OPTIONAL WEIGH FRAME ASSEMBLY

WITH "AVERY WEIGH-TRONIX" WEIGH SYSTEMS

Avery Weigh-Tronix Shield = Orange	+ Exc = Green - Exc = Black	+ Sig = White - Sig = Red
Digi-star Shield = Clear	+ Exc = Red - Exc = Black	+ Sig = White - Sig = Green

KIT P/N: #48995000

QTY.

DESCRIPTION

ITEM PART NO.

1

see page 44 & 45 MAIN FRAME, AG800

1

see page 46 & 47 MAIN FRAME, AG600

1

WEIGH FRAME, AG600 and AG600

1

47009718

1

2

WEIGH FRAME, AG600 and AG600

2

47009718

1

1

WEIGH FRAME, AG600 and AG600

1

47009718

1

47009718

1

2A

2-3995

1

ADDITIONAL CROSSTUBE FRONT MOUNT (FOR WEIGHFRAME)

2

47003253

2

47003254

2

REAR MOUNT (FOR WEIGHFRAME)

2

2C

2C

2

REAR MOUNT (FOR WEIGHFRAME)

2

47003254

2

REAR MOUNT (FOR WEIGHFRAME)

2

47003254

2

3

47009755

4

LOAD CELL MOUNT

4

18057430

8

BOLT, 1/2-13NC. X 2

8

18891400

8

5

LOCK WASHER, 1/2

8

HEX. NUT, 1/2-13NC.

8

18417400

8

RETAINING COLLAR

4

47009717

4

7

BOLT, 3/8-16NC. X 3 1/2

4

18056842

8

LOCKWASHER, 3/8

8

HEX. NUT, 3/8-16NC.

8

18436800

8

10

BOLT, 3/8-16NC. X 3

8

HEX. NUT, 3/8-16NC.

8

18056838

8

LOAD CELL WITH CABLE TO JCTN BOX

4

AWT27-500229

4

11

AWT15-500067

1

JUNCTION BOX, WITHOUT CABLES

1

BOLT, #10-24 X 3/4

4

FLANGE NUT, #10-24

4

WEIGH INDICATOR DISPLAY

1

16

640MSP-640M

1

INDICATOR MOUNTING BRACKET

1

76597

1

BOLT, 1/4-20NC. X 3/4

2

SCREW, TRUSS SLOT 1/4 X 3/4

2

18

18025718

1

FLANGE NUT, 1/4-20NC.

4

180706423

4

CABLE, (INDCTR TO JUNCTN BX.) 22.5 FT.

1

CABLE, (INDCTR TO JUNCTN BX.) 30 FT.

1

20

AWT25-500186

1

POWER CORD, (W/EXTENSION PLUG-IN)

1

15186-0145

1

POWER CORD, (WITH SOCKET)

1

12342-0010

1

23

47009766

1

CABLE MOUNT BRACKET

1

18058427

4

BOLT, 3/4-10NC. X 1 1/4

4

HEX. FLANGE NUT, 3/4-10NC.

4

26

18498400

4

Ship loose the following parts to be used to secure wire harnesses to frame and route wiring to tractor.

2

CABLE SUPPORT LOOP (TO TRACTOR)

8

BOLT, 1/4-20 NC X 3/4 SS

8

FLANGE NUT, 1/4-20 NC SS

8

29

18971400

8

FLANGE NUT, 1/4-20 NC SS

8

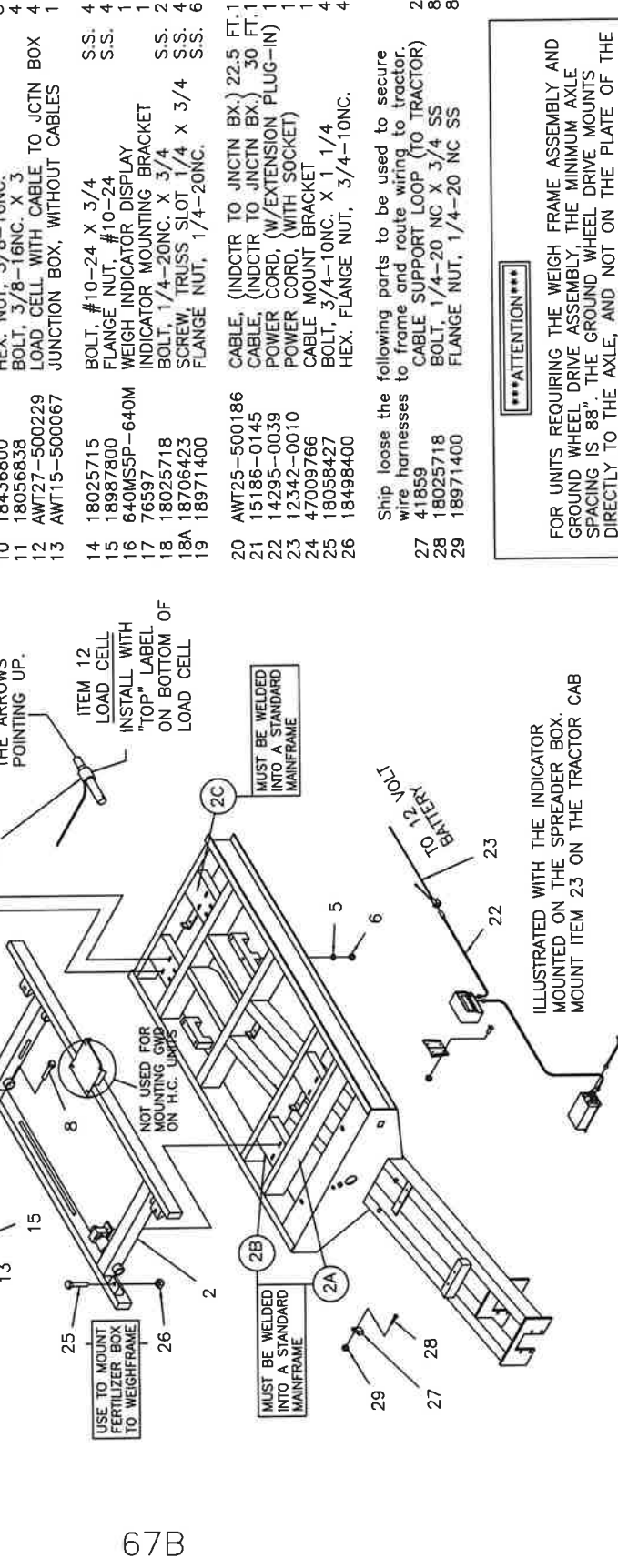
ATTENTION

FOR UNITS REQUIRING THE WEIGH FRAME ASSEMBLY AND GROUND WHEEL DRIVE ASSEMBLY, THE MINIMUM AXLE SPACING IS 88". THE GROUND WHEEL DRIVE MOUNTS DIRECTLY TO THE AXLE, AND NOT ON THE PLATE OF THE WEIGH FRAME.

1

1

1



CONFIGURE CALIBRATION NUMBER FOR MODEL 640 INDICATOR

(Information supplied by Avery Weigh-Tronix)

Procedure to configure calibration number in a 640 Series Indicator:

1. Press and hold the **HOLD/MENU** button for 3 beeps and release
2. *SET.PAS* will appear on the display
 - a. Use the **RM** and **M+** buttons to enter in the password 640 (To advance to next character press the **HOLD/MENU** button)
3. Once 640 is displayed on the display press the **PRINT SELECT** button
4. 640 will appear on the display with all annunciators one around the display
5. Press the **PRINT SELECT** button
6. *CONFIG* will appear on the display
7. Press the **PRINT SELECT** button
 - a. Use the **RM** and **M+** buttons to enter in the Config Code 98300 (To advance to next character press the **HOLD/MENU** button)
8. Once 98300 is displayed on the display press the **PRINT SELECT** button
9. *CONFIG* will appear on the display
10. Press the **HOLD/MENU** button once
11. *CUSTOM* will appear on the display
12. Press the **PRINT SELECT** button
13. Use the **RM** and **M+** buttons to enter one of the following codes (To advance to next character press the **HOLD/MENU** button)
 - a. 4 Bar System using part number AWT27-500229 (Spreaders and 6500 Applicators)
 - i. Custom Code number is 32000
 - b. 4 Bar System using part number AWT27-500205 (MT600 Tender)
 - i. Custom Code number is 36904
 - c. 6 Bar System using part number AWT27-500205 (MT900 Tender)
 - i. Custom Code number is 55356
14. Once the correct code number is displayed press the **PRINT SELECT** button once
15. *CUSTOM* will appear on the screen
16. Press the **G/N** button until display says *BUSY*
17. Your configuration is complete

It seems like a lot of steps, but this process should take less than one minute.

(For further inquiries/details, please consult your Avery Weigh-Tronix manual.)

COMBINATION OF 48020899 AND COR917A



HYD. DUAL DISTRIBUTOR & HYD. APRON DRIVE COMBO PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
2	063-0171-843	PVM VALVE, 15 GPM	1
3	47005190	CONVEYOR MOUNT BRACKET	1
4	51930	HYDRAULIC MOTOR (APRON CONVEYOR)	1
5	10106	SPROCKET #50 13 TOOTH 1" BORE	1
11	31440	DRIVE SPROCKET #50 X 40 TOOTH	1
20	02182	HYDRAULIC MOTOR (DUAL SPINNER)	1
29	18997400	NUT, HEX 1/2-13 NC SS	4
31	445001	ELBOW #12 MJIC X #12 M O-RING (6801-12-12)	3
32	6400-12-12	FITTING #12 MJIC TO #12 M O-RING	4
33	6602-12-12-12	SWIVEL NUT RUN TEE	1
36	47003853	BRACKET, FOR RAVEN & PVM HYD SERVO	1
37	47005193	CONVEYOR MOTOR MOUNT SUPPORT	1
38	18474400	BOLT SS CAP 1/4-20 X 4" LG	2
39	18881001	WASHER FLAT 1/4 SS	2
40	18569200	NUT 1/4 NYLOCK SS	2
41	18022026	BOLT SS HX 1/2 X 1 1/2	4
42	18824800	WASHER FLAT 1/2 SS	4
43	18991400	WASHER LOCK 1/2 SS	4

HOSE LIST

HOSES				
CONNECTION	PART #	SPECS	END #1	END #2
A-A	612128	3/4 X 128" LG	#12JICFS	#12JICFS X 90°
B-B	632036	3/4 X 36"	#12JICFS	#12JICFS X 90°
C-C	612075	3/4 X 75"	#12JICFS	#12JICFS X 90°
D-D	632036	3/4 X 36"	#12JICFS	#12JICFS X 90°
E-E	610178	3/4 X 178"	#12JICFS	#12JICFS

A technical line drawing of a machine frame, likely a lathe or mill. The drawing shows a vertical column with various structural members and components. A large circle is drawn around a specific area at the top of the column, highlighting a complex assembly of parts, including what appears to be a motor or actuator and various mounting brackets. The drawing is a black and white line art, typical of engineering schematics.

DETAIL A
SCALE 1:12



HYD. SINGLE DISTRIBUTOR & HYD. APRON DRIVE COMBO PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
2	063-0171-843	PVM VALVE, 15 GPM	1
3	47005190	CONVEYOR MOUNT BRACKET	1
4	51930	HYDRAULC MOTOR (APRON CONVEYOR)	1
5	10106	SPROCKET #50 13 TOOTH 1" BORE	1
11	31440	DRIVE SPROCKET #50 X 40 TOOTH	1
20	18997400	NUT, HEX 1/2-13 NC SS	4
22	445001	ELBOW #12 MJIC X #12 M O-RING (6801-12-12)	3
23	6400-12-12	FITTING #12 MJIC TO #12 M O-RING	4
24	6602-12-12-12	SWIVEL NUT RUN TEE	1
27	47003853	BRACKET, FOR RAVEN &PVM HYD SERVO	1
28	47005193	CONVEYOR MOTOR MOUNT SUPPORT	1
29	18474400	BOLT SS CAP 1/4-20 X 4" LG	2
30	18881001	WASHER FLAT 1/4 SS	2
31	18569200	NUT 1/4 NYLOCK SS	2
32	18022026	BOLT SS HX 1/2 X 1 1/2	4
33	18824800	WASHER FLAT 1/2 SS	4
34	18991400	WASHER LOCK 1/2 SS	4
36	48010809	HYDRAULIC SPINNER KIT	1

HOSE LIST

HOSES				
CONNECTION	PART #	SPECS	END #1	END#2
A-A	612128	3/4 X 128" LG	#12 JICFS	#12 JICFS X 90°
B-B	632036	3/4 X 36" LG	#12 JICFS	#12 JICFS X 90°
C-C	612075	3/4 X 83" LG	#12 JICFS	#12 JICFS
D-D	632036	3/4 X 36" LG	#12 JICFS	#12 JICFS X 90°
E-E	610178	3/4 X 178" LG	#12 JICFS	#12 JICFS x 90°

WARRANTY CLAIM FORM

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:							
Distributor Signature							
Authorized Signature				Status		Date	