

Heartland
AG SYSTEMS
EQUIPMENT

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

**SINGLE AND DUAL SPINNERS
2026 & NEWER**

**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	_____

PLEASE FILL OUT THIS SHEET AND RETURN TO HEARTLAND AG SYSTEMS

1180 State Highway 7 East Hutchinson, MN 55350

www.heartlandag.com | Heartland Agriculture, LLC dba Heartland AG Systems

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INTRODUCTION

Important: Please read this manual thoroughly before operating or servicing the Machine.

It contains essential instructions to ensure safe and proper use. Failure to follow these guidelines may result in personal injury and/or damage to the equipment.

Machine Orientation Reference:

The terms *right-hand* and *left-hand* sides of the machine are defined from the operator's perspective when standing behind the machine, facing the direction it travels when moving forward.

Warranty Information

Warranty coverage applies only to customers who operate and maintain their equipment in accordance with the instructions provided in this manual. To activate the warranty, the dealer must complete the **Warranty Registration Form** and submit it, along with a copy of the dealer's invoice, to **Heartland Ag Systems**. It is in your best interest to confirm that this registration process has been completed.

Exclusions from Warranty Coverage

The warranty does **not** cover the following:

1. Costs associated with cleaning, transportation, mailing, or service calls.
2. Depreciation or damage resulting from normal wear, accidents, inadequate protection, or improper use of the equipment.

See complete WARRANTY for details

Machine Identification

Record your machine's model and serial number in the space provided below. Your dealer will need this information to provide prompt and efficient service when ordering 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 anything other than genuine Heartland AG Systems Equipment 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 AG-X10 HC, AG-800 HC, AG-600 HC

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 10-ton, 8-ton, or 6-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 Heartland AG Systems Equipment 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. Distributor chute settings are shown on the Parts Listing/Illustration pages for the specific type of distributor chute either single or dual.

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 Heartland AG Systems Equipment distributor or Heartland AG Systems Equipment service department.

Single / Dual Distributor Units:
Standard Rate Decal – Part No. 30909B

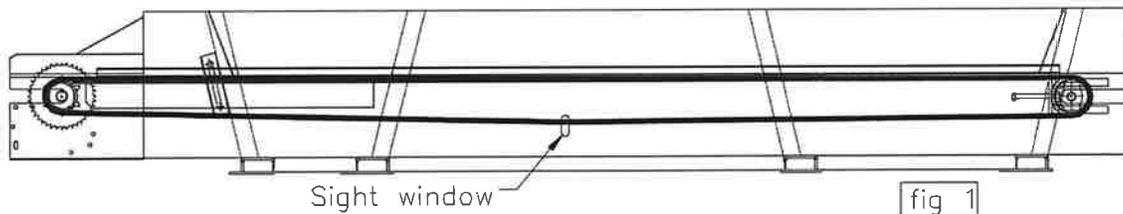
The distributors should be run @ 750 rpm.

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 equal 1/10 of an acre. For instance – if you have accumulated 11 pounds 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 PTO 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 ensure 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:

TIRE/RIM	TIRE SIZE	OFFSET	TIRE PRESSURE (PSI)	LOAD CAPACITY (LBS)
40014HD	320/85 R38	+1 1/8	52 PSI / 30 MPH	6000 LBS @ 30 MPH
			52 PSI / 10 MPH	7980 LBS @10 MPH
40014RHD	320/85 R38	+1 1/8	52 PSI / 30 MPH	6000 LBS @ 30 MPH
			52 PSI / 10 MPH	7980 LBS @10 MPH
40031	380/90 R46	0	49 PSI / 30 MPH	8800 LBS @ 30 MPH
			49 PSI / 10 MPH	11,704 LBS @10 MPH
40031R	380/90 R46	0	49 PSI / 30 MPH	8800 LBS @ 30 MPH
			49 PSI / 10 MPH	11,704 LBS @10 MPH
44105519	16.5 X 6.5 X 8	0	25 PSI	

Also see Wheel and Rim Torque Requirements page of this owner’s 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 that 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).

FIELD DEMONSTRATION SPREAD PATTERN TEST PROCEDURE

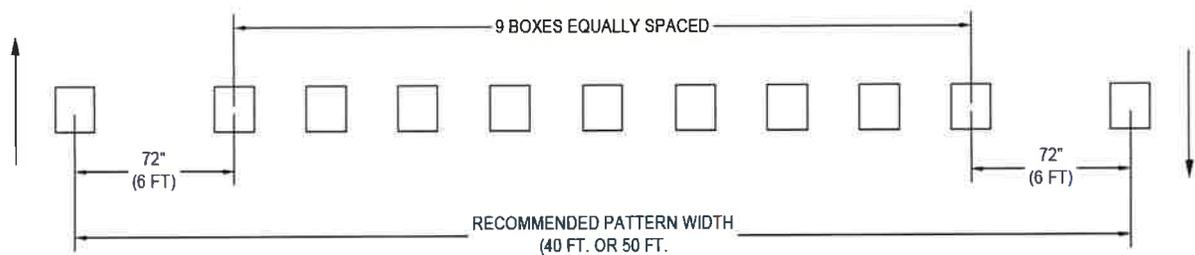
Check List

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

Spread Pattern Test – Overlap Pass

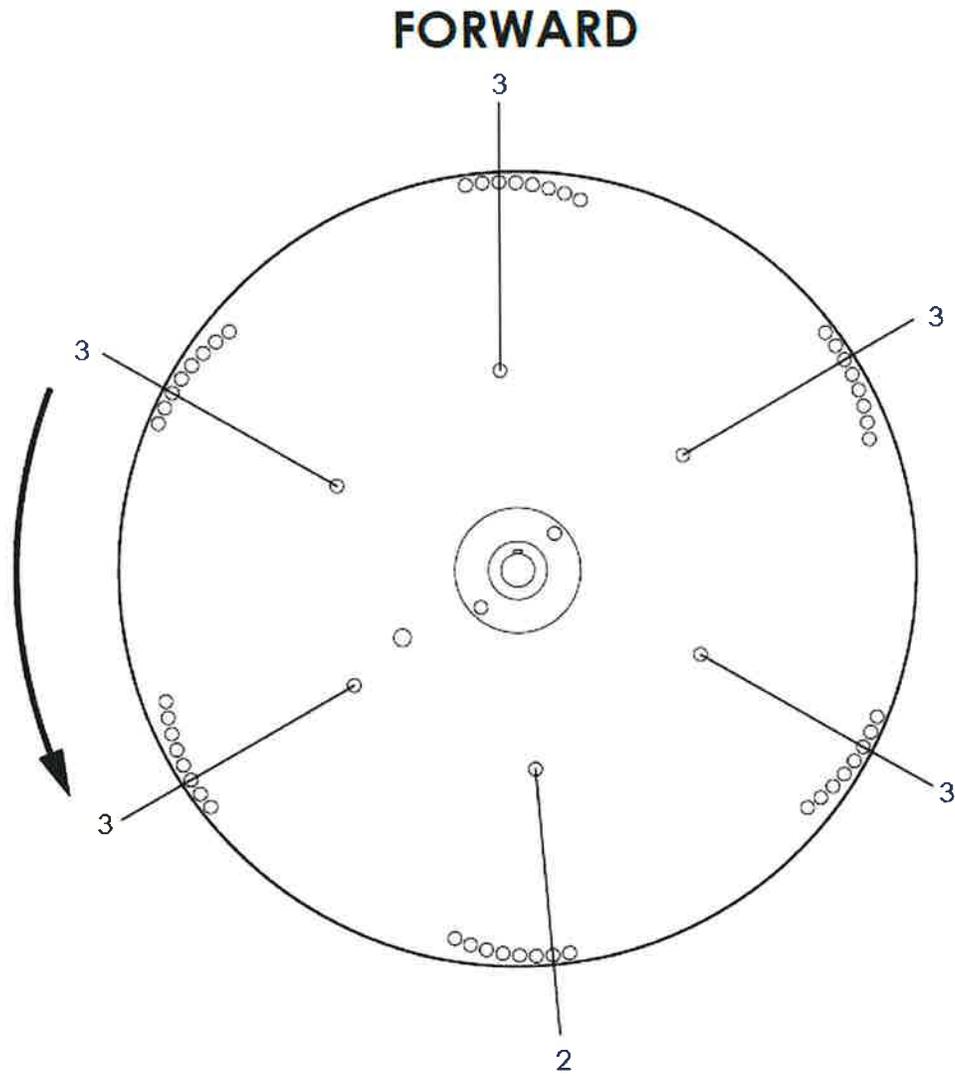
Set boxes in a straight line on smooth, level ground, per graph below:

Vehicle travel and/or opposite



Recommended pattern width

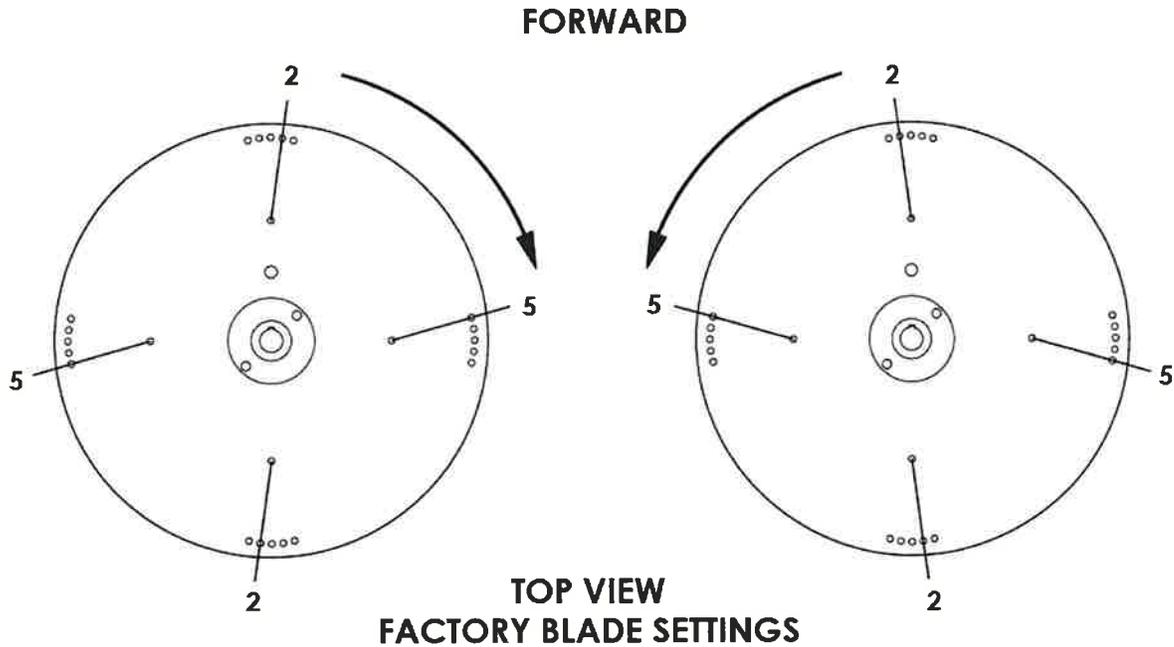
- (a) Set boxes so test can be run driving directly into the wind.
- (b) Drive over boxes as shown. (right hand overlap pattern shown – left hand opposite).
- (c) For low rates per acre, run at least two passes.
- (d) Ideal pattern would be a pattern that has an equal amount of fertilizer in each tube.



**TOP VIEW
FACTORY BLADE SETTINGS**

SINGLE DISTRIBUTOR SPREADERS

This factory blade setting is five (5) blades on 3rd hold back from the rotation of distributor, and one (1) blade on 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 factory blade settings are as outlined above, 5th holes and 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 distributor) 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 effectively be 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 pellet size, etc.). Spread pattern testing the unit will determine the most effective width. This may be in the area of 30 – 36 feet. It may be necessary to make blade adjustments 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 desired 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.

P/N: 10346B

540 RPM (PTO)

- THIS UNIT IS EQUIPPED FOR 540 RPM PTO HOOK-UP
- THE TRACTOR DRAWBAR AND PTO MUST CONFORM TO A.S.A.E. SPECIFICATIONS (SEE ILLUSTRATION) FOR PROPER PTO OPERATION
- USE PROPER DRAWBAR ARRANGEMENTS PROVIDED BY THE TRACTOR MANUFACTURER FOR USE WITH STANDARD AGRICULTURAL PTO DRIVEN EQUIPMENT
- ALWAYS LOCK THE DRAWBAR SECURELY TO AVOID PTO DAMAGE.

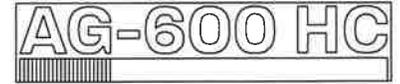
DRIVER SIDE

P/N: 71606

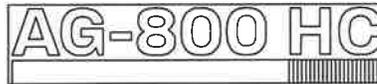


DITCH SIDE

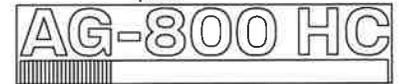
P/N: 71605



P/N: 71608



P/N: 71607



P/N: 71610



P/N: 71609



P/N: 699107L

**DECALS
NOT TO
SCALE**

P/N: 54135



P/N: 10163A

OPERATING INSTRUCTIONS

CAUTION: Be sure drawbar is strong enough to support the load and that the PTO shaft is in approximately the one-half extended position when the spreader is attached to the tractor. Use a swinging drawbar or a plate to accomplish this.

Before operating this machine, check and tighten set screws on all bearings and pulleys. Tighten all bolts. Check conveyor belt for proper tension. After a load or two of material has been spread, a slight stretch in the conveyor will be observed. It is important that this be checked and taken up at once. Thereafter follow a systematic check on this point. Check all belts for proper tension. These belts govern the spread pattern and attention on these details will insure efficient spreading.

CAUTION: Do not operate the spreader with a metering gate opening of less than 1 inch or material may compact on the floor and at the gate, causing excessive strain on the conveyor. Should spreader stand loaded overnight or be subjected to rain or high humidity, move the conveyor in the proper direction by means of the small drive wheel, by hand, to insure free movement of the conveyor. Do not back up the machine unnecessarily, with the drive mechanism engaged.

Operate the tractor at full throttle to provide approximately 540 RPM at the power take off. This will insure the best performance and maximum speed.

Clean spreader blades periodically. do not over-grease sealed fittings.

At regular intervals, brush roller chains with mixture of lube oil and furnace oil.

For short layups or seasonal storage, brush the vulnerable points with a light oil mixture.

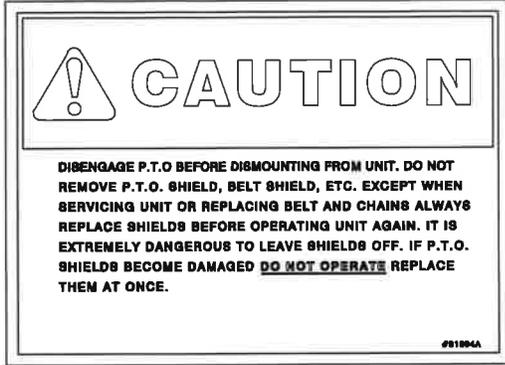
This machine was designed to operate with a minimum of maintenance and will do so, if, after the break-in period, these simple instructions are carried out.

Check lug nuts before spreading first load - check daily thereafter

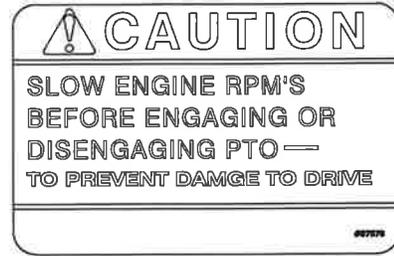
CAUTION: Stand Clear of Distributor Discs When Machine is in Motion.

#10163 A

P/N: 31894A



P/N: 37578



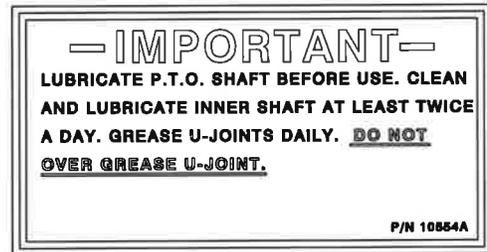
P/N: 12182B



P/N: 12181A



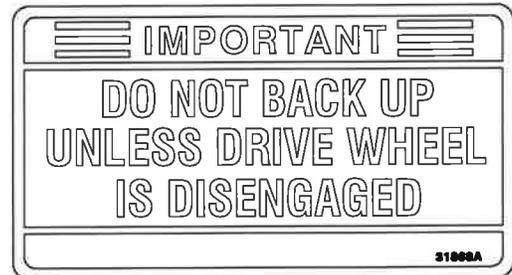
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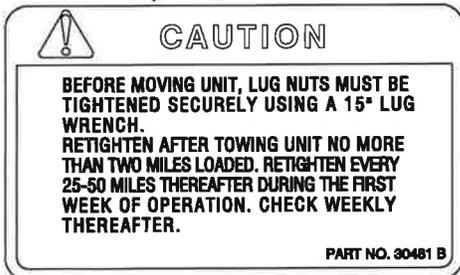
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P/N: 31868A



P/N: 30481B



P/N: USA



P/N: 70930

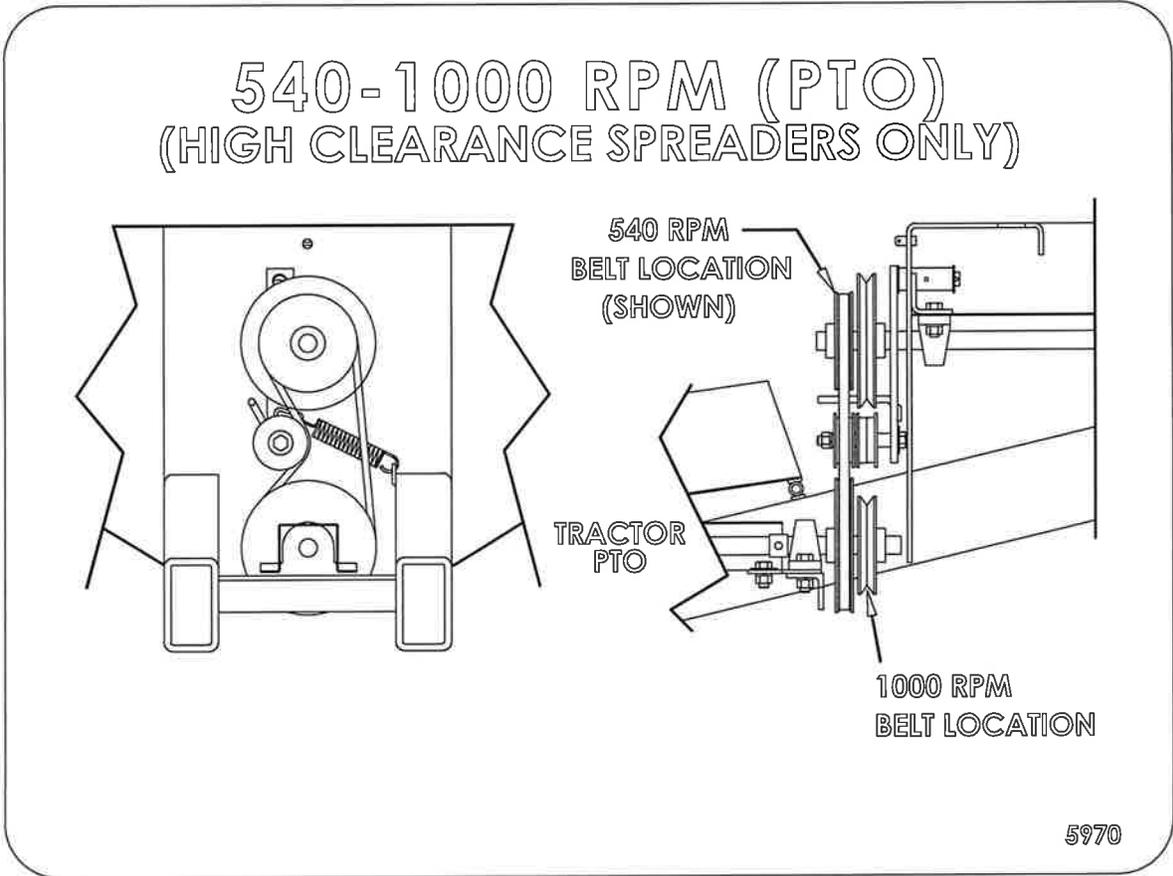


RATE DECAL - STANDARD 60 FOOT PATTERN FERTILIZER

Gate Opening	MATERIAL WEIGHT PER CUBIC FOOT														
	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
	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
	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
	137	155	159	167	173	178	188	191	197	203	210	216	222	228	234
4	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
4 1/2	299	332	345	359	373	385	399	412	425	438	452	465	478	491	505
	175	194	201	210	217	225	233	240	248	257	264	272	280	287	295
5	333	370	384	400	415	428	444	459	473	487	503	518	532	547	563
	193	214	222	231	240	248	257	266	275	283	291	300	308	317	326
5 1/2	367	408	424	441	457	473	490	506	523	539	554	572	588	604	621
	212	235	245	254	263	272	282	292	301	311	320	329	338	348	357
6	402	447	465	482	500	518	536	554	572	590	608	626	644	662	680
	230	256	266	276	286	297	307	317	328	338	348	358	368	379	388
6 1/2	438	488	507	527	545	565	585	604	624	644	662	682	702	723	741
	247	274	285	296	307	318	329	339	351	362	373	383	394	406	417
7	471	523	545	565	586	607	627	648	670	690	711	733	753	774	796

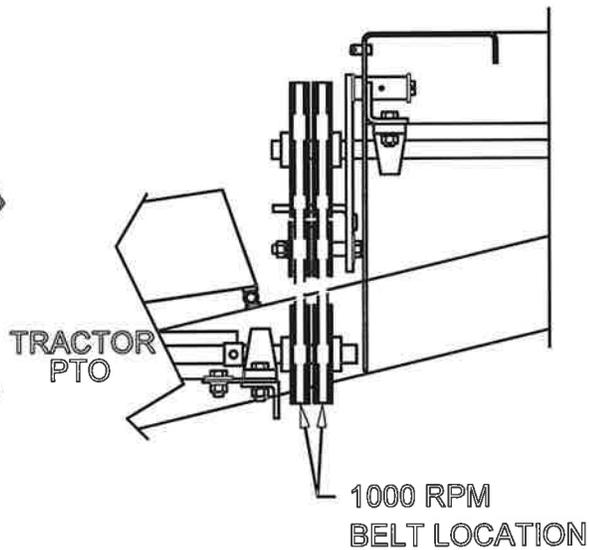
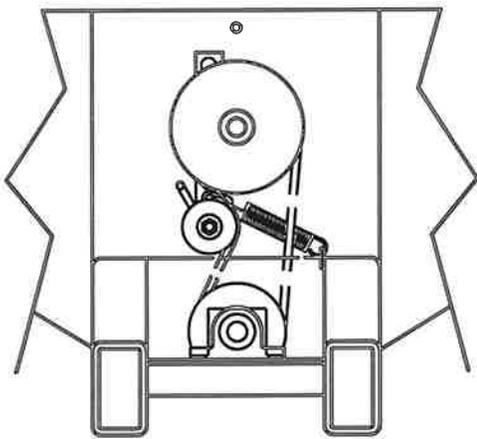
LOW RANGE -- Using 15 tooth to 96 tooth sprockets -- For rate per acre use top number in box
 HIGH RANGE -- Using 25 tooth to 84 tooth sprockets -- For rate per acre use bottom number in box

**DECAL USED FOR 540-1000 RPM
PTO CONVERSIONS ONLY, TO
POSITION DRIVE BELTS.**



**DECAL USED FOR 1000 RPM PTO ONLY,
TO POSITION DRIVE BELTS.**

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



5970-1K

HIGH CLEARANCE SPREADER BOX PART LISTING

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SEE LIST	FERTILIZER BOX	1
2	18987900 ***	NUT SER FLG SS 3/8	27
3	18706621 ***	SCREW, SLOTTED TRUSS HEAD 3/8 X 3/4 SS	10
4	03301B	DRIVE ROLLER ASSEMBLY	1
5	30708	FLANGE BEARING, 2 HOLE-1 1/4" DIA	2
6	18026824	BOLT HX SS 3/8 X 1 1/4	4
7	18881201	LOCKWASHER, 3/8 SS	4
8	18476800	NUT 3/8 SS	4
9	47006519	KEY, SQUARE (1/4 X 1 1/2)	1
10	31440	DRIVE SPROCKET #50 X 40 TOOTH	1
11	18767451	SEISCREW, 5/16 X 1 1/4 SQHD	2
12	10113	CHAIN TIGHTENER BLOCK	1
13	18476834	BOLT CAP SS 3/8 X 2 1/2	1
14	18991200	WASHER FLAT 3/8 SS	17
15	47008956	BUMPER, BOLT ON	1
16	47008962	SHIELD	1
17	47008961	BUMPER BRACE	2
18	18026822	BOLT, HEX HD 3/8 X 1 NC SS	16
19	03005	FRONT ROLLER, CONVEYOR	1
20	10024	TAKEUP BEARING W/ BEARING	2
21	18997400	HEX NUT, 1/2-13 UNC SS	4
22	18058430	BOLT HX 3/4 X 2 GR 5 NC ZC	4
23	18811800	WASHER FLAT USS ZC 3/4	4
24	18891800	WASHER LOCK 3/4 ZC	4
25	18418400	NUT HX 3/4 NC ZC	4
26	47003947	SIGHTGLASS WINDOW PANE	1
27	47003946	SIGHTGLASS WINDOW FRAME	1
28	18026418	BOLT CAP SS 5/16 X 3/4	10
29	18476351	NUT HX SS 5/16 SELF LOCK	8
30	41859	CLAMP VINYL COVERED 9/16 .343 HOLE	4
31	18476350	NUT HX 5/16 SS	2
32	30934	CONVEYOR CHAIN, 21 FT 8 1/2 IN	1
33	01055	TAKE UP BOLT	2
34	10275 *	SPLICE PIN W/ NUT	1
35	70520 ***	ROLL TARP BOW MOUNT BRACKET	4
36	71964	CONVEYOR DRIVE CHAIN	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
37	47005864	GATE WELDMENT, HC	1
38	312994	HC SCREW JACK ASSY	1
39	47005868 ****	GATE BRACKET WELDMENT	1
40	47005872	REAR GATE CRANK	1
41	47005871	GUIDE WELDMENT, GATE CRANK	1
42	85002-2 **	U-JOINT MOUNT	2
43	85002-1 **	U-JOINT PIVOT	1
44	18977400	FLANGE NUT, 1/2 NC SS	2
45	18006000	SPRING PIN SS 3/16 X 1	2
46	18997446	BOLT 1/2NC X 4 LG SS	1
47	18567400	NUT SS NYLOCK 1/2	1
48	18476833	BOLT, HEX HD 3/8NC X 3.00 SS	1
49	18566400	NUT SS NYLOCK 3/8	1
50	47005978	GATE CRANK BASE	1
51	47005979	GATE CRANK BRACE BASE	1
52	47993619	HC DEFLECTOR SHIELD KIT	1

NOTES:

* - 10275 IS INCLUDED WITH 30934 (SHOWN FOR REF. ONLY)

** - ITEMS 42 & 43 ARE ACTUALLY QTY 1 P/N: 85002

*** - **AG-X10 ONLY** DOES NOT INCLUDE P/N: 70520 / THE QTY OF

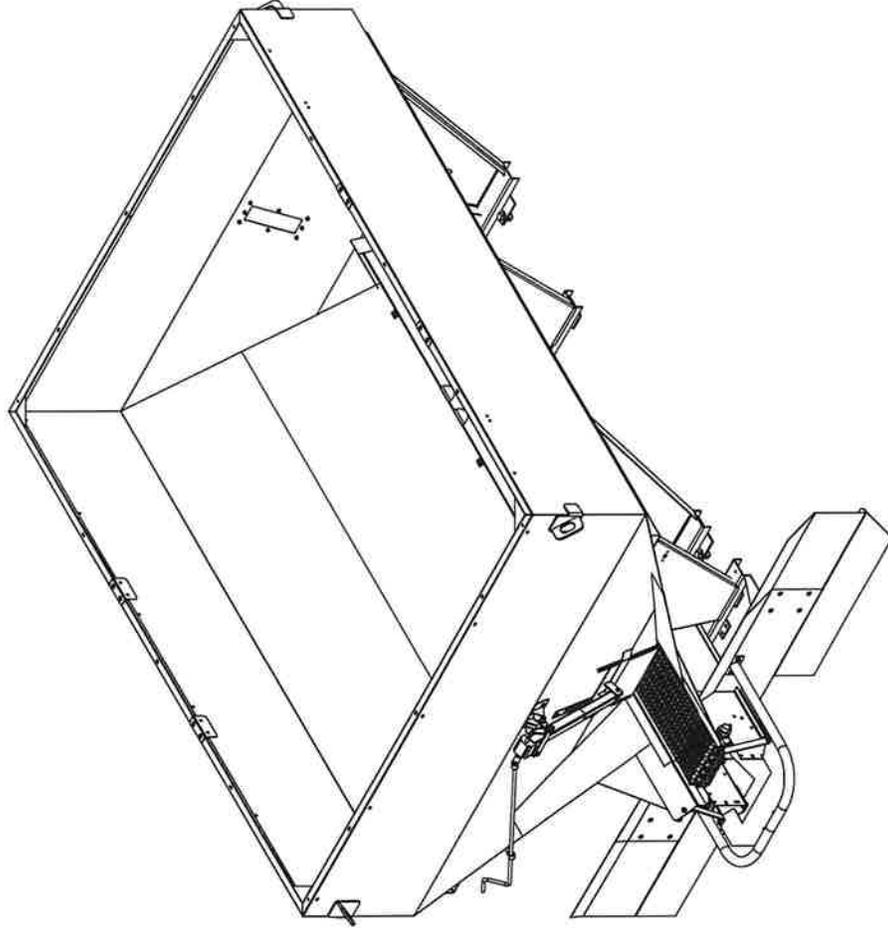
ITEM 2 P/N: 18987900 IS 19 / THE QTY OF ITEM 3 P/N: 18706621 IS 2

**** - **AG-600 ONLY** ITEM 39 IS P/N: 47005867 INSTEAD OF 47005868

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	47003610	FERTILIZER BOX 10 TON (AG-X10)	1
	47009000	FERTILIZER BOX 8 TON (AG-800)	1
	47609039	FERTILIZER BOX 6 TON (AG-600)	1

CONVEYOR HOOD P/N: 47019019 IS INCLUDED WITH BOX

HIGH CLEARANCE SPREADER BOX PART LISTING

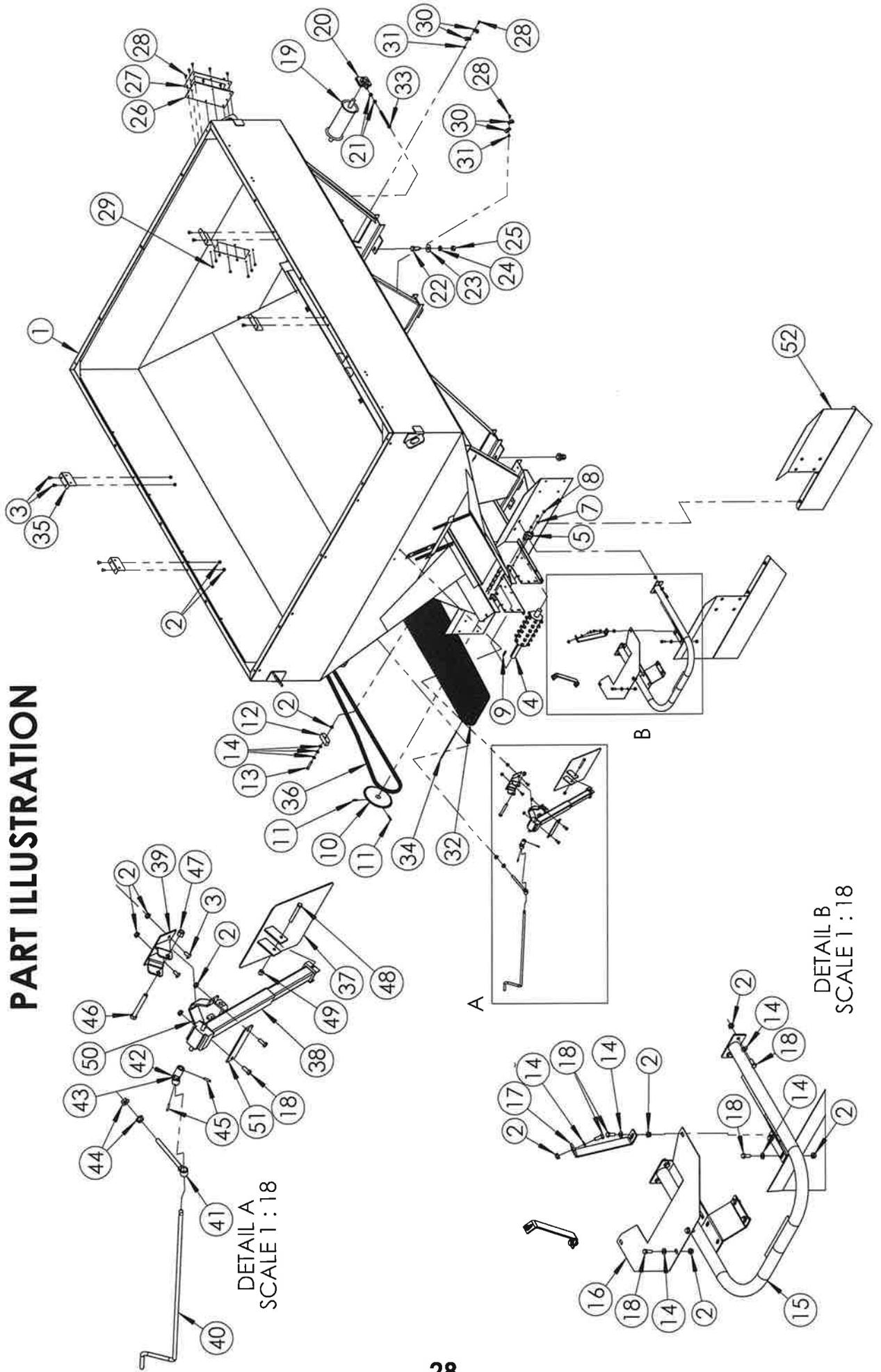


COMPLETE BOX	
PART NUMBER	DESCRIPTION
41100100	FERTILIZER BOX 10 TON (AG-X10)
47999000	FERTILIZER BOX 8 TON (AG-800)
47999039	FERTILIZER BOX 6 TON (AG-600)

ALSO INCLUDED BUT NOT SHOWN		
PART NUMBER	DESCRIPTION	QTY
OM-HCPTS	OWNER'S MANUAL	1
48030801	DECAL KIT	1
54135	HEARTLAND DECAL	2
70930	60' PATTERN DECAL	1

ID DECAL PART NUMBERS (SPECIFIC MODEL)			
	AG-600 HC	AG-800 HC	AG-X10 HC
DRIVER SIDE	71606	71608	71610
DITCH SIDE	71605	71607	71609

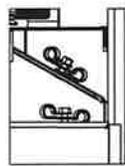
HIGH CLEARANCE SPREADER BOX PART ILLUSTRATION



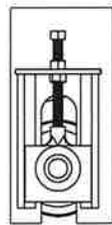
DETAIL A
SCALE 1 : 18

DETAIL B
SCALE 1 : 18

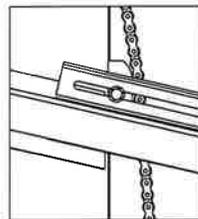
HIGH CLEARANCE SPREADER BOX PART ILLUSTRATION



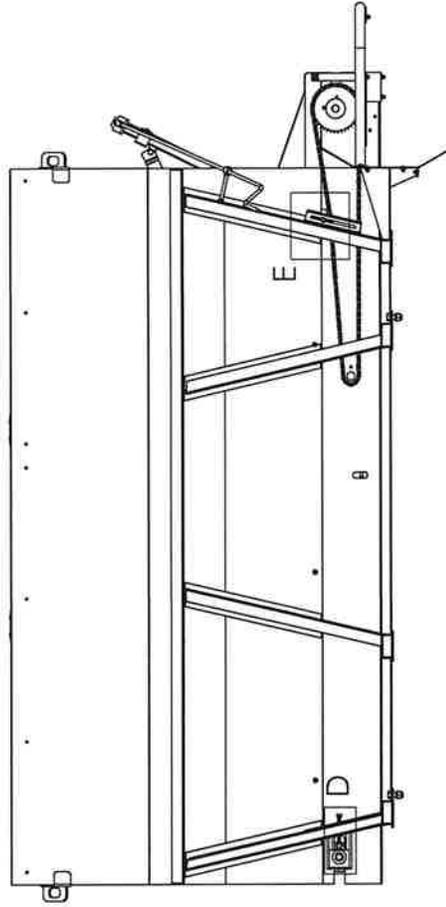
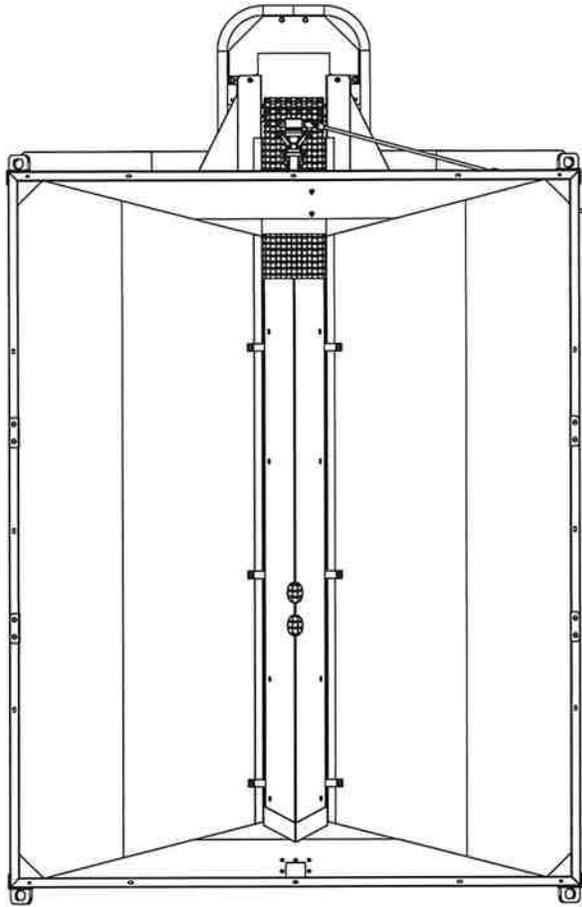
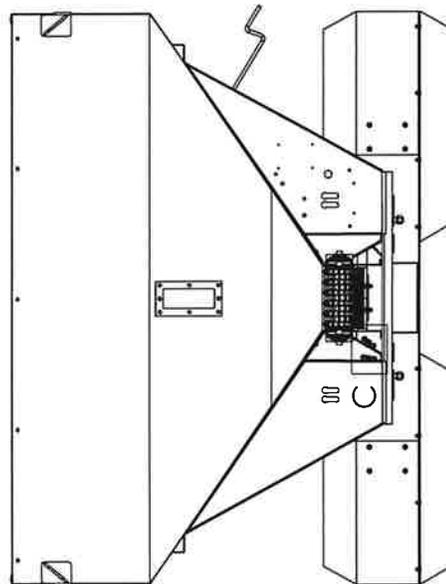
DETAIL C
SCALE 1 : 10



DETAIL D
SCALE 1 : 10



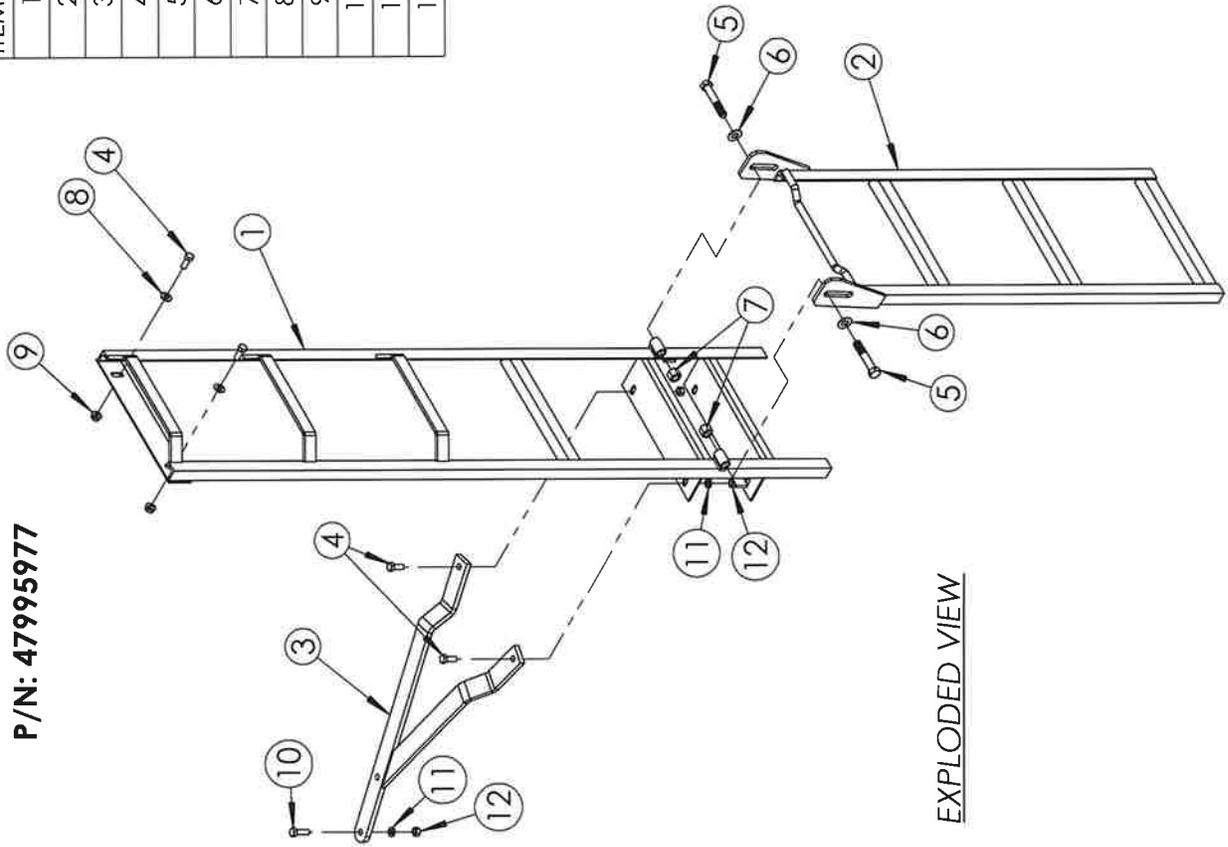
DETAIL E
SCALE 1 : 10



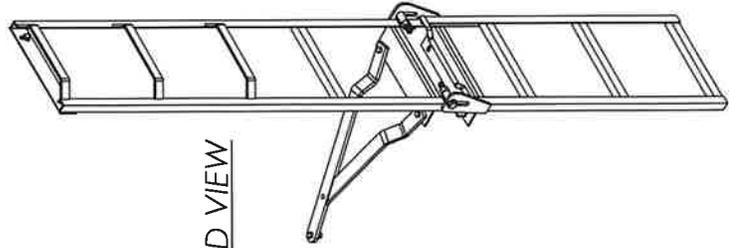
LADDER MOUNT KIT

P/N: 47995977

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	28124A	LADDER, UPPER	1
2	28125	LADDER, EXTENSION	1
3	47005977	LADDER BRACKET WELDMENT	1
4	18026822	BOLT, HEX HD 3/8 X 1 NC SS	4
5	18027438	BOLT, HEX 1/2 X 3 SS	2
6	18824800	WASHER FLAT 1/2 SS	2
7	18567400	NUT SS NYLOCK 1/2	2
8	18991200	WASHER FLAT 3/8 SS	2
9	18987900	NUT SER FLG SS 3/8	2
10	18026824	BOLT HX SS 3/8 X 1 1/4	1
11	18881201	LOCKWASHER, 3/8 SS	3
12	18476800	NUT 3/8 SS	3



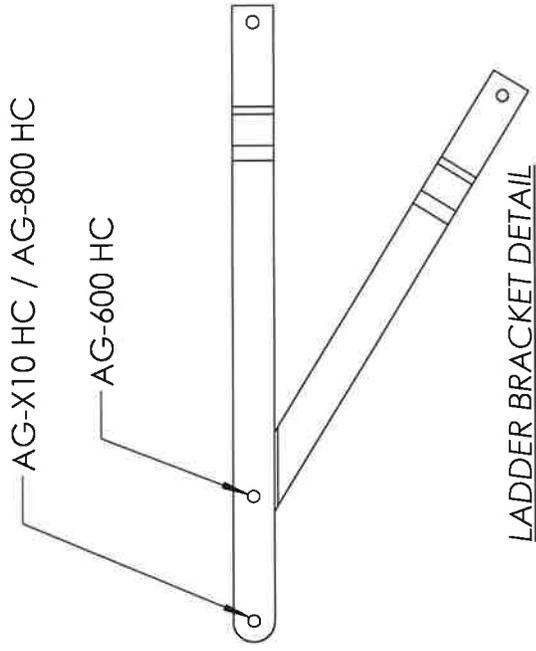
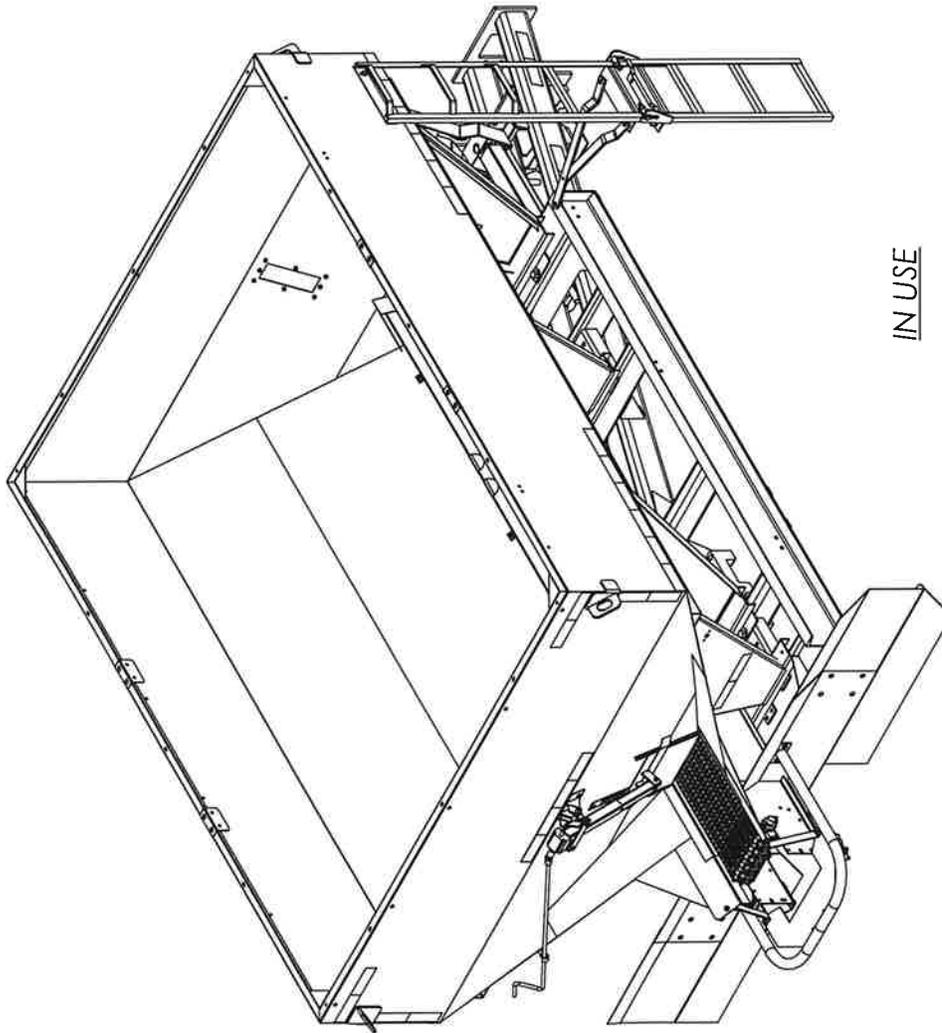
EXPLODED VIEW



ASSEMBLED VIEW

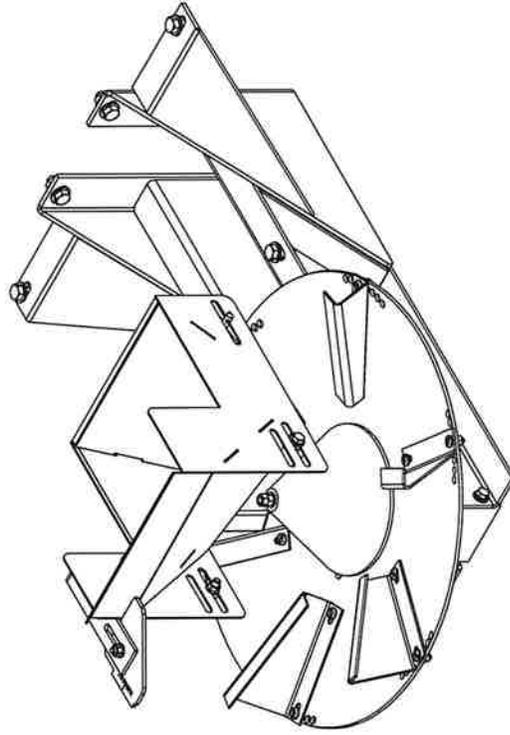
LADDER MOUNT KIT

P/N: 47995977



(FOR UNITS EQUIPPED W/ SCALE PACKAGE LADDER BRACKET MUST BE MOUNTED TO THE BOX, NOT ON THE FRAME)

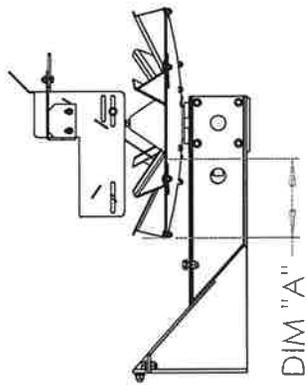
SINGLE DISTRIBUTOR ASSEMBLY
AG-X10 HC/ AG-800 HC / AG-600 HC
 (MECHANICAL OR PTO DRIVE)
P/N: 48010801



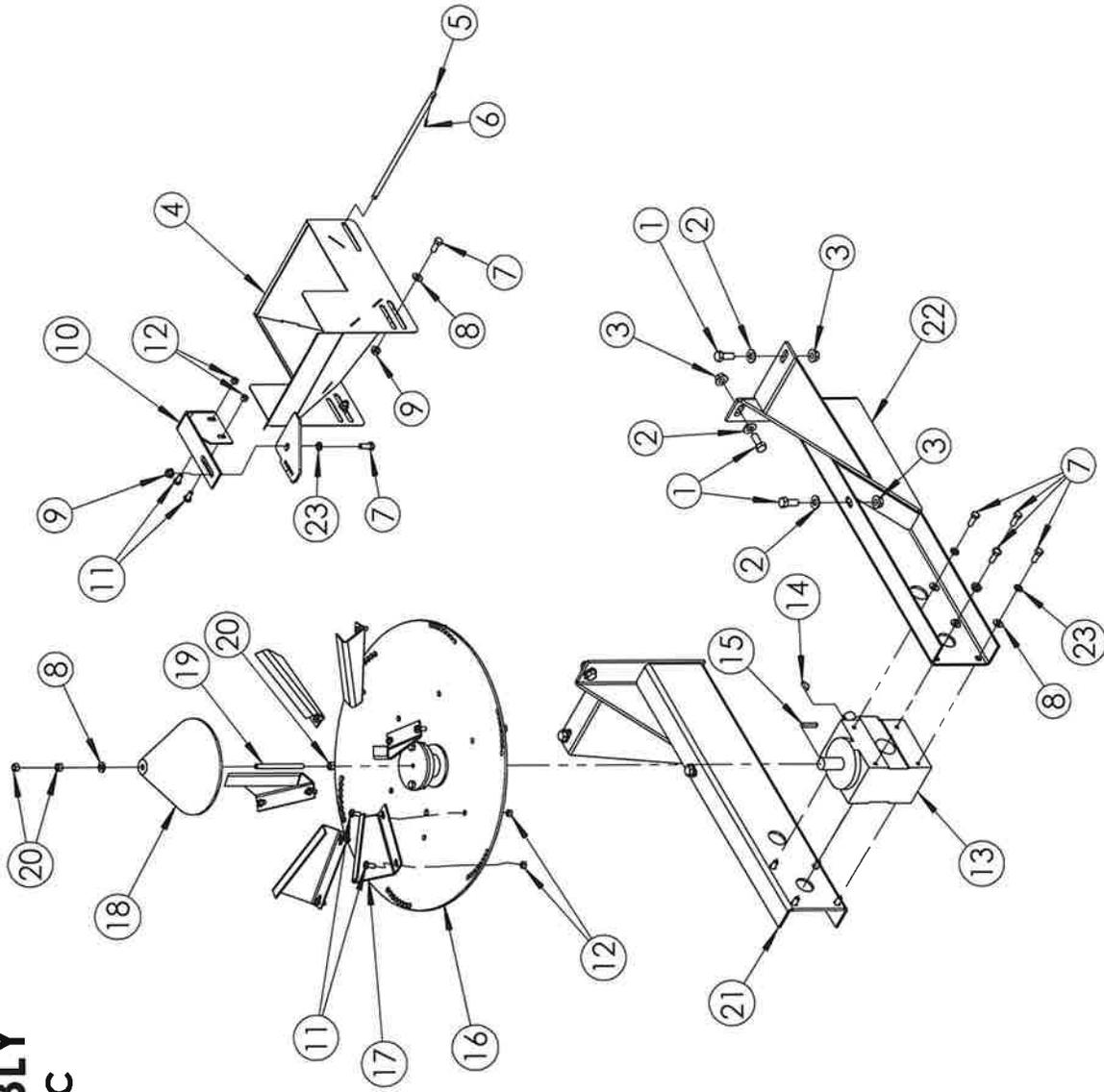
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	18475240	BOLT HX CAP 1/2-13 X 1 1/4 LG SS	6
2	18824800	WASHER FLAT 1/2 SS	6
3	18977400	FLANGE NUT, 1/2 NC SS	6
4	02298	FERTILIZER CHUTE	1
5	37036	FRONT SLIDE BAR, CHUTE	1
6	18660622	PIN COTTER SS 1/8 X 1	2
7	18026822	BOLT, HEX HD 3/8 X 1 NC SS	11
8	18991200	WASHER FLAT 3/8 SS	11
9	18987900	NUT SER FLG SS 3/8	3
10	47019398	CHUTE LOCK BRACKET	1
11	18706421	BOLT, TRUSS 5/16-18 X 3/4 LG SS	14
12	18476350	NUT HX 5/16 SS	14
13	05359	GEARBOX-90 DEG SINGLE OUTPUT	1
14	30977	WOODRUFF KEY (HALF MOON) 1/4 X 7/8	1
15	47006519	KEY, SQUARE (1/4 X 1 1/2)	1
16	05157A	DISTRIBUTOR DISK ASSEMBLY	1
17	31366	SPINNER BLADE, HI LIFT RH	6
18	36378	CENTER CONE	1
19	37037	HOLD-DOWN BOLT, CONE	1
20	18476800	NUT 3/8 SS	3
21	47008950	DISTRIBUTOR MOUNT LH	1
22	47018950	DISTRIBUTOR MOUNT RH	1
23	18881201	LOCKWASHER, 3/8 SS	9

ALSO INCLUDED BUT NOT SHOWN		
PART NUMBER	DESCRIPTION	QTY
30909B	DECAL, RATE CHART (60')	1
1050	GEAR LUBE (QUART)	1

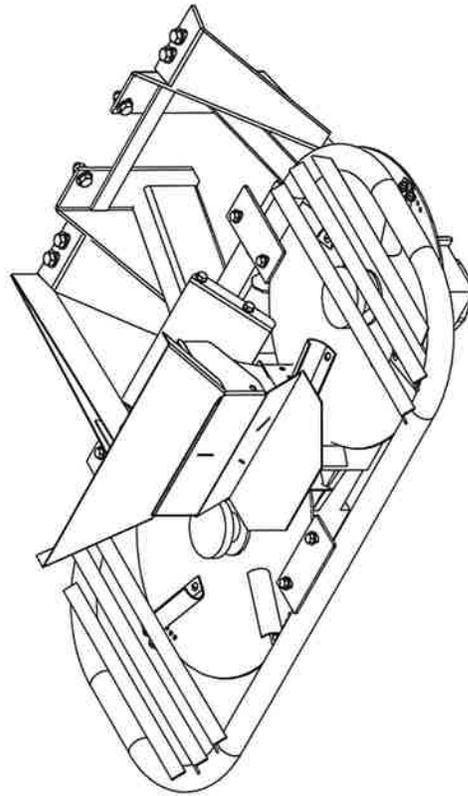
SINGLE DISTRIBUTOR ASSEMBLY
AG-X10 HC / AG-800 HC / AG-600 HC
 (MECHANICAL OR PTO DRIVE)
P/N: 48010801



RECOMMENDED CHUTE ADJUSTMENT	
MATERIAL WEIGHT	CHUTE (DIM "A")
50 LBS	8"
54 LBS	7 1/2"
60 LBS	7 1/4"
70 LBS	7"



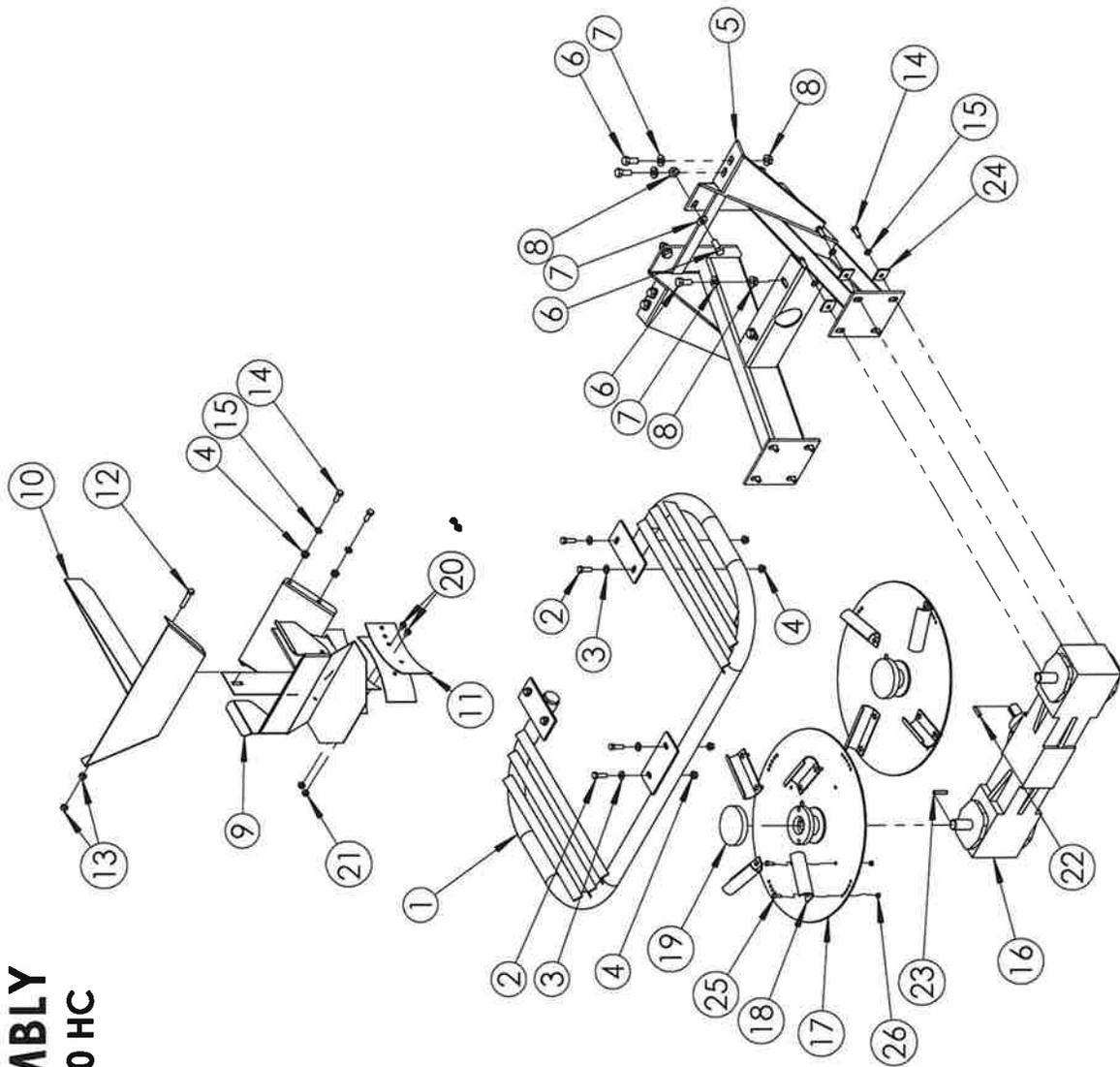
DUAL DISTRIBUTOR ASSEMBLY
AG-X10 HC / AG-800 HC / AG-600 HC
 (MECHANICAL DRIVE)
P/N: 48020801



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	05936	BUMPER	1
2	18026824	BOLT HX SS 3/8 X 1 1/4	6
3	18991200	WASHER FLAT 3/8 SS	6
4	18987900	NUT SER FLG SS 3/8	10
5	47008967	DUAL GEAR BOX MOUNT	1
6	18475240	BOLT HX CAP 1/2-13 X 1 1/4 LG SS	8
7	18824800	WASHER FLAT 1/2 SS	8
8	18977400	FLANGE NUT, 1/2 NC SS	8
9	03334	FERTILIZER CHUTE	1
10	03336	UPPER DIVIDER	1
11	30308	DEFLECTOR EXTENSION (304 SS)	2
12	18026830	BOLT, CAP, 3/8 X 2, SS	1
13	18476800	NUT 3/8 SS	2
14	18026822	BOLT, HEX HD 3/8 X 1 NC SS	12
15	18881201	LOCKWASHER, 3/8 SS	12
16	05350A	GEAR BOX, DUAL DISTRIBUTOR	1
17	03380C	DISTRIBUTOR DISC ASSEMBLY (DUAL)	2
18	31365	DISTRIBUTOR BLADE	8
19	34664	VINYL SHAFT COVER	2
20	18706427	BOLT, TRUSS HD 5/16-18 X 3/4 LG SS	4
21	18987700	NUT 5/16 SERR FLG SS	4
22	47009654	KEY, SQUARE (1/4 X 1 1/4)	1
23	47006519	KEY, SQUARE (1/4 X 1 1/2)	2
24	2-8983	JACK LUG	8
25	18706423	SCREW, SLOTTED TRUSS HEAD 1/4 X 3/4 SS	16
26	18475700	HEX NUT 1/4 SS	16

ALSO INCLUDED BUT NOT SHOWN		
PART NUMBER	DESCRIPTION	QTY
30909B	DECAL, RATE CHART (60')	1
1050	GEAR LUBE (QUART)	1

DUAL DISTRIBUTOR ASSEMBLY
AG-X10 HC / AG-800 HC / AG-600 HC
(MECHANICAL DRIVE)
P/N: 48020801



SINGLE DISTRIBUTOR (HYDRAULIC)

AG-X10 HC / AG-800 HC / AG-600 HC

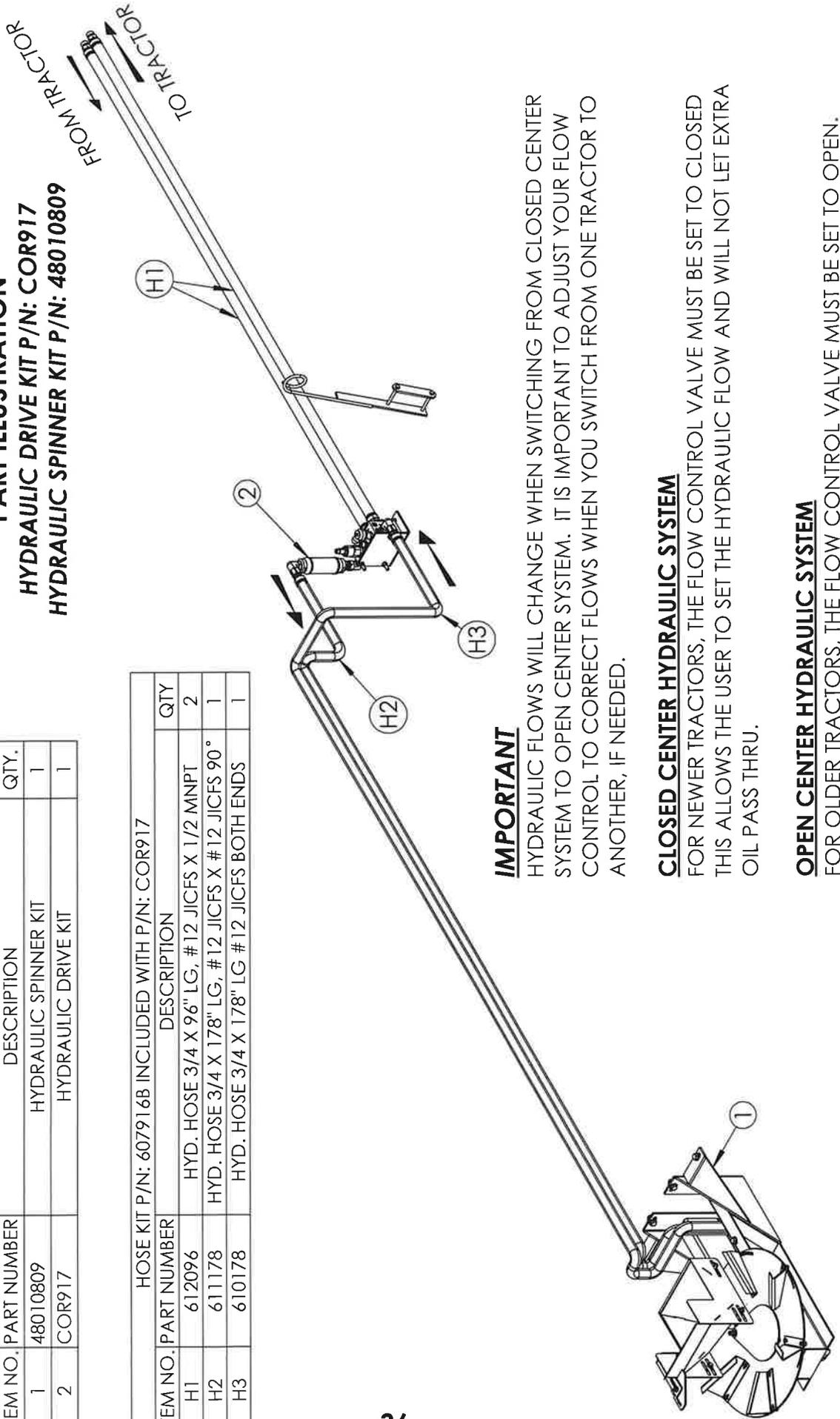
PART ILLUSTRATION

HYDRAULIC DRIVE KIT P/N: COR917

HYDRAULIC SPINNER KIT P/N: 48010809

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	48010809	HYDRAULIC SPINNER KIT	1
2	COR917	HYDRAULIC DRIVE KIT	1

HOSE KIT P/N: 607916B INCLUDED WITH P/N: COR917			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY
H1	612096	HYD. HOSE 3/4 X 96" LG, #12 JICFS X 1/2 MNPT	2
H2	611178	HYD. HOSE 3/4 X 178" LG, #12 JICFS X #12 JICFS 90°	1
H3	610178	HYD. HOSE 3/4 X 178" LG #12 JICFS BOTH ENDS	1



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.

SINGLE DISTRIBUTOR (HYDRAULIC)

AG-X10 HC / AG-800 HC / AG-600 HC
INSTRUCTIONS

HYDRAULIC DRIVE KIT P/N: COR917

HYDRAULIC SPINNER KIT P/N: 48010809

**HYDRAULIC SETTING SPECIFICATIONS:
2250 PSI MAXIMUM 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 HYDRAULIC MOTOR AT 740 RPM 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 (P/N: 701-019) AT THE CORRECT AMOUNT.

37

IMPORTANT!

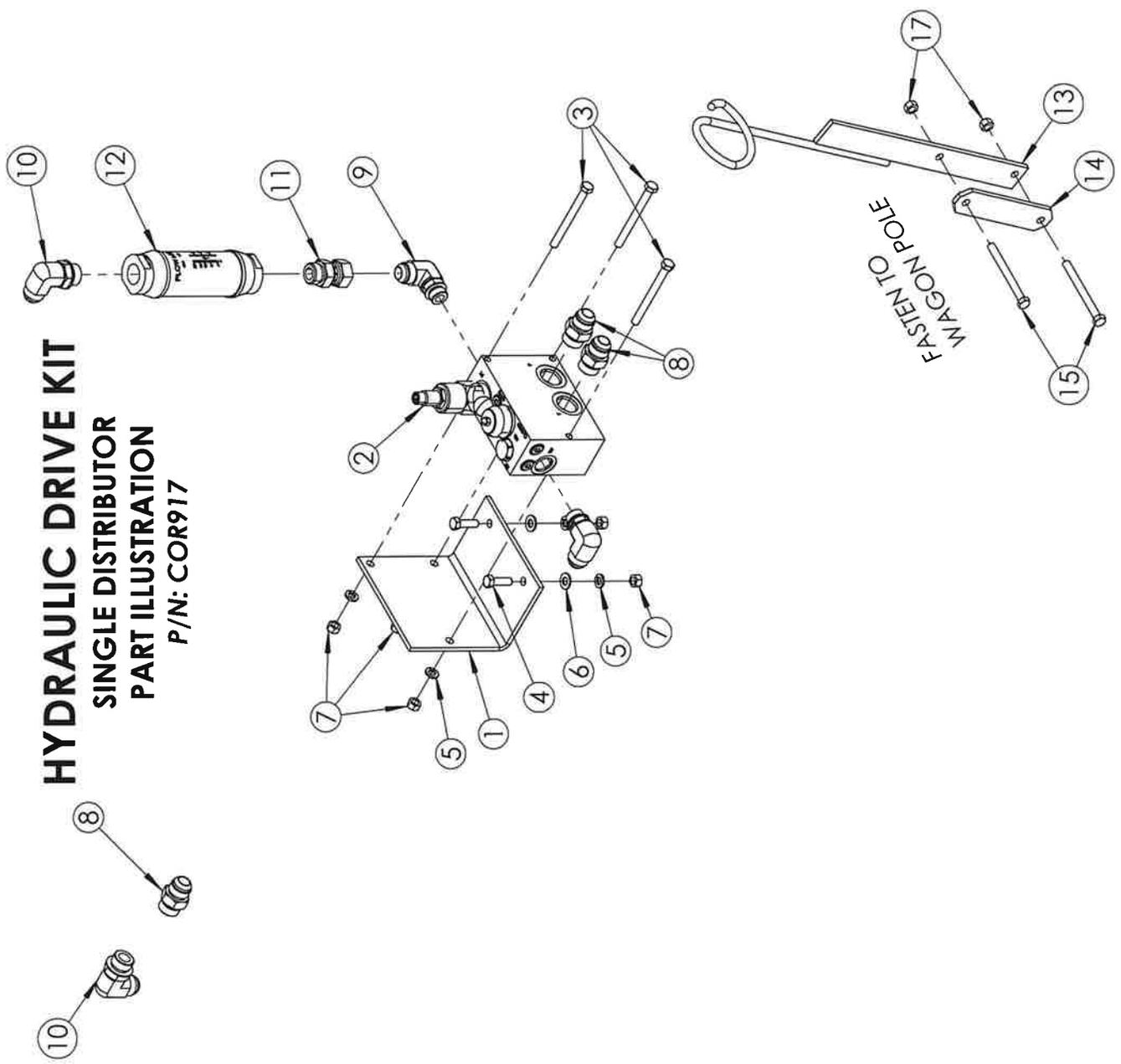
IF THE PROPER FLOW IS NOT MAINTAINED, DAMAGE TO THE HYD. MOTOR, OR MOTOR SEALS MAY RESULT!

ON TRACTORS WITHOUT ADJUSTABLE HYDRAULIC FLOW CONTROL 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 DRIVE KIT
SINGLE DISTRIBUTOR
PART ILLUSTRATION
P/N: COR917



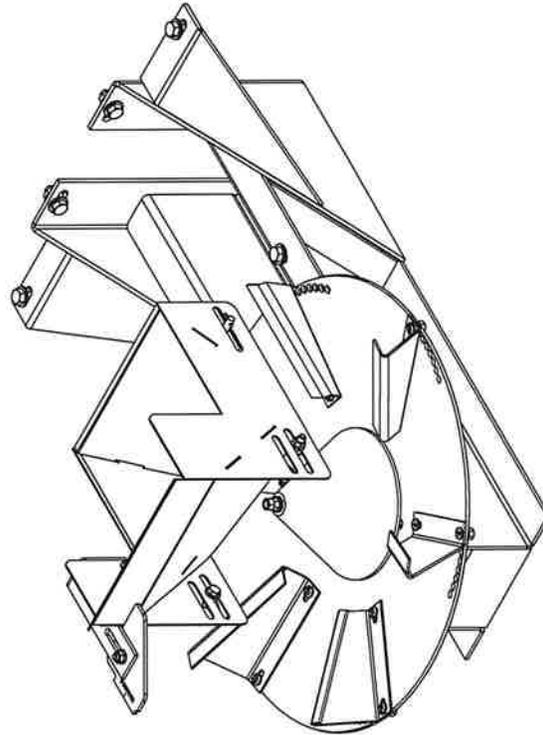
**HYDRAULIC DRIVE KIT
SINGLE DISTRIBUTOR
PART LISTING
P/N: COR917**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47017824	MOUNTING PLATE	1
2	02138	FLOW CONTROL VALVE	1
3	18470400	BOLT CAP SS 3/8 X 4	3
4	18026824	BOLT HX SS 3/8 X 1 1/4	2
5	18881201	LOCKWASHER, 3/8 SS	5
6	18991200	WASHER FLAT 3/8 SS	2
7	18476800	NUT 3/8 SS	5
8	6400-12-12	ADAPTER #12 MJIC TO #12 MORB	3
9	6801-12-10	ELBOW 90 DEG #12 MJIC X #10 MORB	2
10	445001	ELBOW #12 MJIC X #12 M O-RING (6801-12-12)	2
11	6402-12-12	ADAPTER #12 JICFS X # 12 MALE O-RING	1
12	701-019	FLOW METER	1
13	47019995	HOSE SUPPORT (PIG TAIL)	1
14	47008463	MOUNTING STRAP	1
15	18056850	BOLT, 3/8-16NC X 4	2
16	18891200	LOCKWASHER, 3/8 ZC	2
17	18436800	NUT 3/8 NCZC	2
18	607916B	HOSE KIT (HYD SPINNER DRIVE)	1

NOTES:

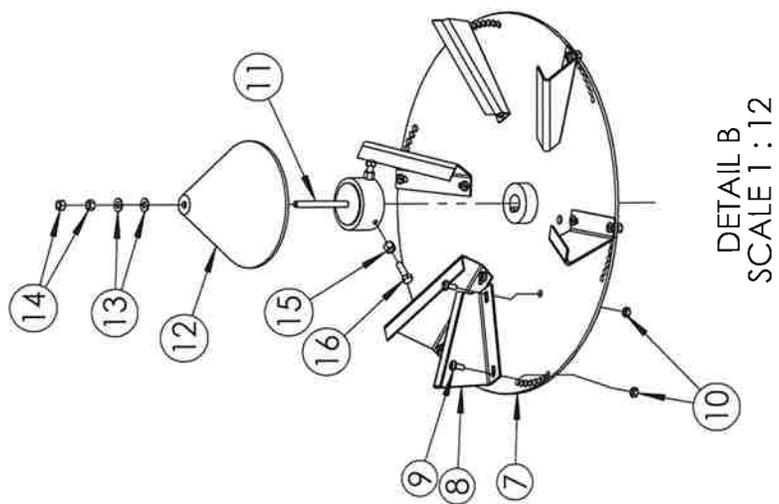
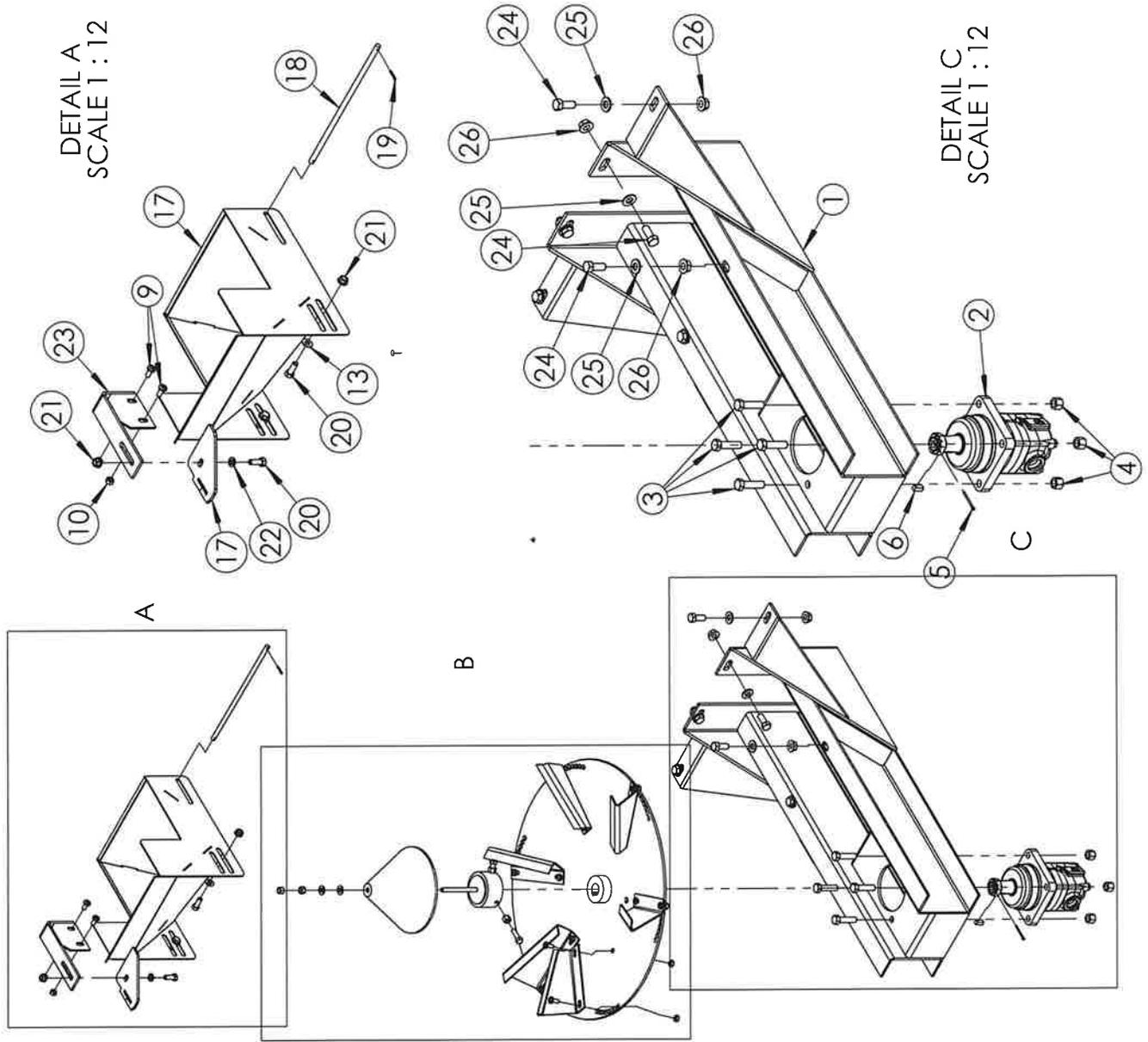
1. ITEMS 8 THRU 11 ARE INCLUDED IN **FITTING KIT P/N: 607917C**
2. ITEM 18 IS NOT SHOWN FOR CLARITY

HYDRAULIC SPINNER KIT
SINGLE DISTRIBUTOR
PART LISTING
P/N: 48010809



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009425	DISTRIBUTOR MOUNT	1
2	51959	HYDRAULIC MOTOR	1
3	18027417	BOLT HX SS NC 1/2 X 2	4
4	18567400	NUT SS NYLOCK 1/2	4
5	50603	COTTER PIN 1/8 X 1 1/2	1
6	47019574	DRIVE KEY	1
7	05819	DISTRIBUTOR DISK WELDMNT	1
8	31366	SPINNER BLADE, HI LIFT RH	6
9	18706421	BOLT, TRUSS 5/16-18 X 3/4 LG SS	14
10	18476350	NUT HX 5/16 SS	14
11	02295	CAP ASSEMBLY	1
12	36378	CENTER CONE	1
13	18991200	WASHER FLAT 3/8 SS	4
14	18476800	NUT 3/8 SS	2
15	18566400	NUT SS NYLOCK 3/8	3
16	18026824	BOLT HX SS 3/8 X 1 1/4	3
17	02298	FERTILIZER CHUTE	1
18	37036	FRONT SLIDE BAR, CHUTE	1
19	18660622	PIN COTTER SS 1/8 X 1	2
20	18026822	BOLT, HEX HD 3/8 X 1 NC SS	3
21	18987900	NUT SER FLG SS 3/8	3
22	18881201	LOCKWASHER, 3/8 SS	1
23	47019398	CHUTE LOCK BRACKET	1
24	18475240	BOLT HX CAP 1/2-13 X 1 1/4 LG SS	6
25	18824800	WASHER FLAT 1/2 SS	6
26	18977400	FLANGE NUT, 1/2 NC SS	6

HYDRAULIC SPINNER KIT
SINGLE DISTRIBUTOR
PART ILLUSTRATION
P/N: 48010809



DETAIL B
 SCALE 1:12

DUAL DISTRIBUTOR (HYDRAULIC)

AG-X10 HC / AG-800 HC / AG-600 HC

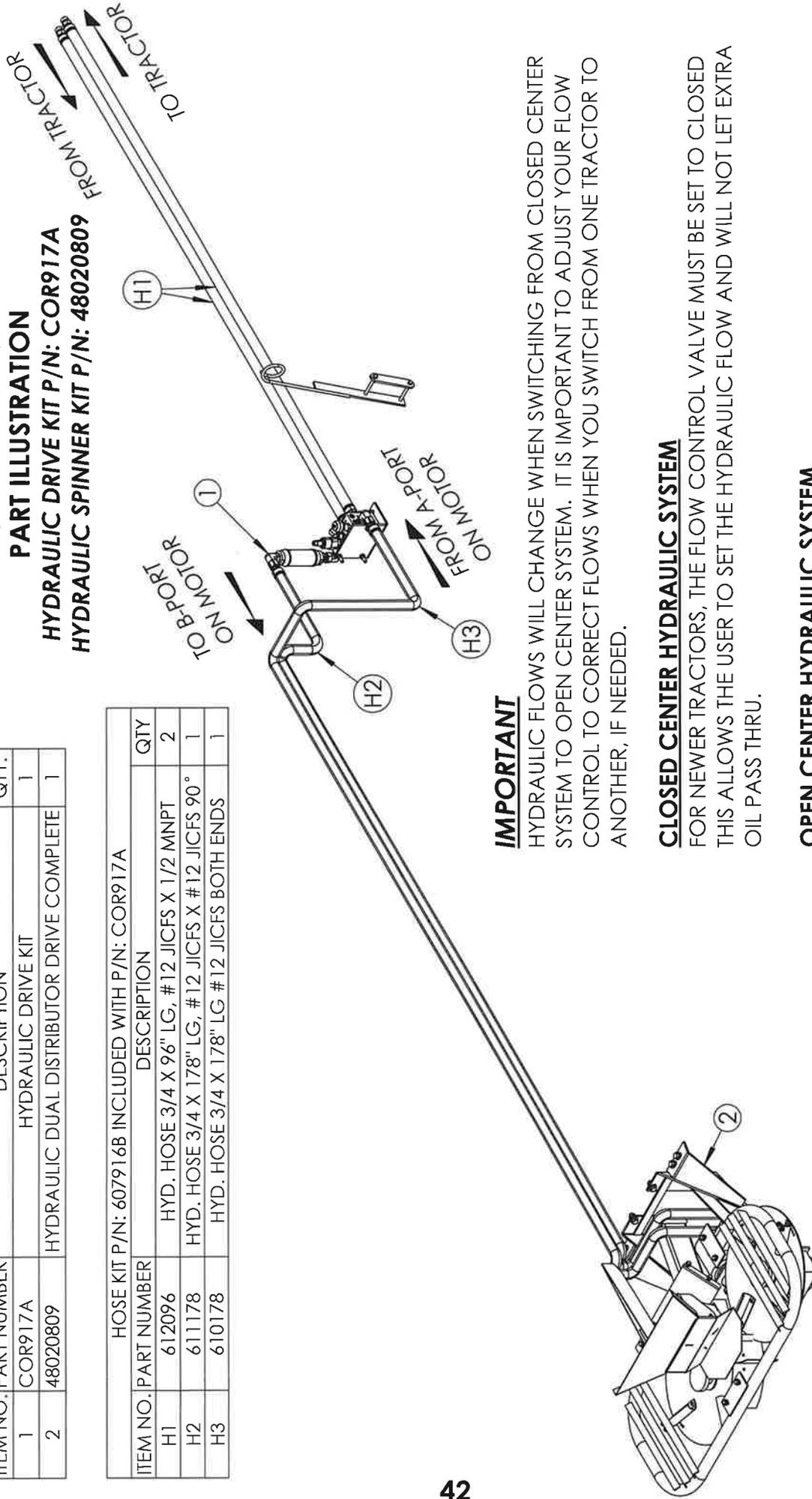
PART ILLUSTRATION

HYDRAULIC DRIVE KIT P/N: COR917A

HYDRAULIC SPINNER KIT P/N: 48020809

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	COR917A	HYDRAULIC DRIVE KIT	1
2	48020809	HYDRAULIC DUAL DISTRIBUTOR DRIVE COMPLETE	1

HOSE KIT P/N: 607916B INCLUDED WITH P/N: COR917A			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY
H1	612096	HYD. HOSE 3/4 X 96" LG. #12 JICFS X 1/2 MNPT	2
H2	611178	HYD. HOSE 3/4 X 178" LG. #12 JICFS X #12 JICFS 90°	1
H3	610178	HYD. HOSE 3/4 X 178" LG #12 JICFS BOTH ENDS	1



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.

DUAL DISTRIBUTOR (HYDRAULIC)

AG-X10 HC / AG-800 HC / AG-600 HC

INSTRUCTIONS

HYDRAULIC DRIVE KIT P/N: COR917A

HYDRAULIC SPINNER KIT P/N: 48020809

HYDRAULIC SETTING SPECIFICATIONS:

2250 PSI MAXIMUM 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 HYDRAULIC MOTOR AT 740 RPM 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 (P/N: 701-019) 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 CONTROL, 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 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.

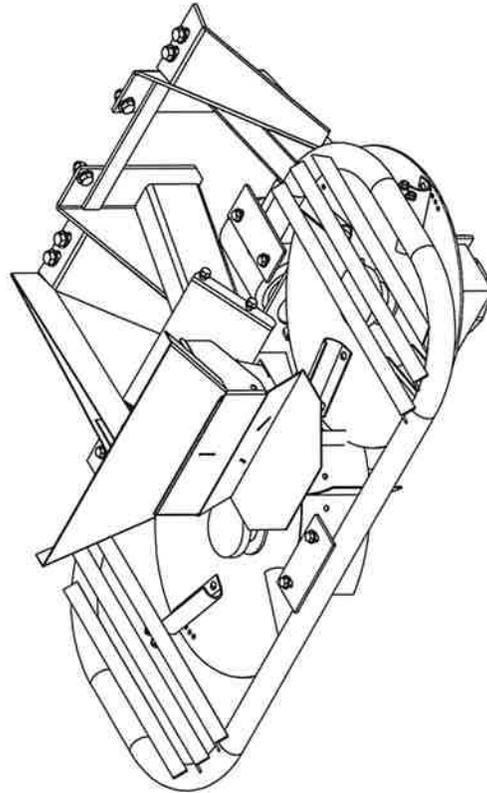
HYDRAULIC DRIVE KIT
DUAL DISTRIBUTOR
PART LISTING
P/N: COR917A

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47017824	MOUNTING PLATE	1
2	02138	FLOW CONTROL VALVE	1
3	18470400	BOLT CAP SS 3/8 X 4	3
4	18026824	BOLT HX SS 3/8 X 1 1/4	2
5	18881201	LOCKWASHER, 3/8 SS	5
6	18991200	WASHER FLAT 3/8 SS	2
7	18476800	NUT 3/8 SS	5
8	6400-12-12	ADAPTER #12 MJIC TO #12 MORB	2
9	6801-12-10	ELBOW 90 DEG #12 MJIC X #10 MORB	3
10	445001	ELBOW #12 MJIC X #12 M O-RING (6801-12-12)	1
11	6402-12-12	ADAPTER #12 JICFS X #12 MALE O-RING	1
12	701-019	FLOW METER	1
13	47019995	HOSE SUPPORT (PIG TAIL)	1
14	47008463	MOUNTING STRAP	1
15	18056850	BOLT, 3/8-16NC X 4	2
16	18891200	LOCKWASHER, 3/8 ZC	2
17	18436800	NUT 3/8 NCZC	2
18	607916B	HOSE KIT (HYD SPINNER DRIVE)	1
19	6400-12-10	ADAPTER #12 MJIC X #10 MORB	1

NOTES:

1. ITEMS 8 THRU 11 AND ITEM 19 ARE INCLUDED IN **FITTING KIT P/N: 607917B**
2. ITEM 18 IS NOT SHOWN FOR CLARITY

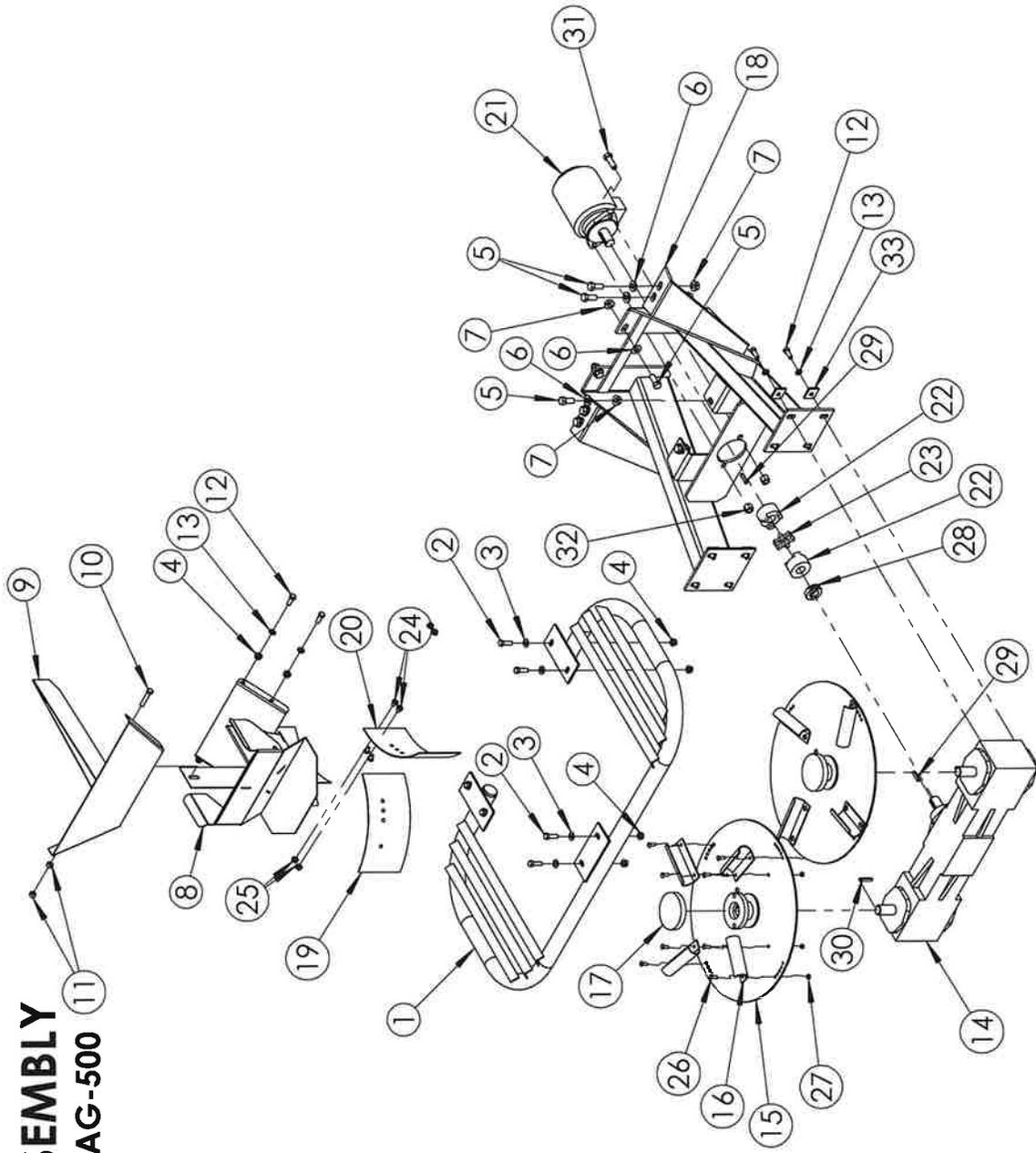
DUAL DISTRIBUTOR ASSEMBLY
AG-X10 HC / AG-800 HC / AG-600 HC
 (HYDRAULIC DRIVE)
P/N: 48020809



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	05936	BUMPER	1
2	18026824	BOLT HX SS 3/8 X 1 1/4	6
3	18991200	WASHER FLAT 3/8 SS	6
4	18987900	NUT SER FLG SS 3/8	10
5	18475240	BOLT HX CAP 1/2-13 X 1 1/4 LG SS	8
6	18824800	WASHER FLAT 1/2 SS	8
7	18977400	FLANGE NUT, 1/2 NC SS	8
8	03334	FERTILIZER CHUTE	1
9	03336	UPPER DIVIDER	1
10	18026830	BOLT, CAP, 3/8 X 2, SS	1
11	18476800	NUT 3/8 SS	2
12	18026822	BOLT, HEX HD 3/8 X 1 NC SS	12
13	18881201	LOCKWASHER, 3/8 SS	12
14	05350A	GEAR BOX, DUAL DISTRIBUTOR	1
15	03380C	DISTRIBUTOR DISC ASSEMBLY (DUAL)	2
16	31365	DISTRIBUTOR BLADE	8
17	34664	VINYL SHAFT COVER	2
18	47009650	DUAL GEAR BOX MOUNT	1
19	47009655	DEFLECTOR EXTENSION LH	1
20	47009656	DEFLECTOR EXTENSION RH	1
21	02182	HYDRAULIC MOTOR (DUAL SPINNER)	1
22	32197	FLEXIBLE COUPLING COMPLETE	1
23	95036	RUBBER SPIDER (REPLACEMENT)	1
24	18706427	BOLT, TRUSS HD 5/16-18 X 3/4 LG SS	4
25	18987700	NUT 5/16 SERR FLG SS	4
26	18706423	SCREW, SLOTTED TRUSS HEAD 1/4 X 3/4 SS	16
27	18475700	HEX NUT 1/4 SS	16
28	2380K26	CLAMPING TWO-PIECE SHAFT COLLAR	1
29	47009654	KEY, SQUARE (1/4 X 1 1/4)	2
30	47006519	KEY, SQUARE (1/4 X 1 1/2)	2
31	18022026	BOLT SS HX 1/2 X 1 1/2	2
32	18567400	NUT SS NYLOCK 1/2	2
33	2-8983	JACK LUG	8

ALSO INCLUDED BUT NOT SHOWN	
PART NUMBER	DESCRIPTION
30909B	DECAL - RATE 60' PATTERN
1050	GEAR LUBE (QUART)
	QTY
	1
	1

DUAL DISTRIBUTOR ASSEMBLY
AG-X10 / AG-800 / AG-600 / AG-500
 (HYDRAULIC DRIVE)
P/N: 48020809



**HYDRAULIC DISTRIBUTOR DRIVE OPERATING
INSTRUCTIONS FOR AG-X10 / AG-800 / AG-600 / AG-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 (2016 and newer): 15 GPM to 15.5 GPM at operating speed

Single Distributor Units all models / Dual Distributors 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.

OPERATING INSTRUCTIONS

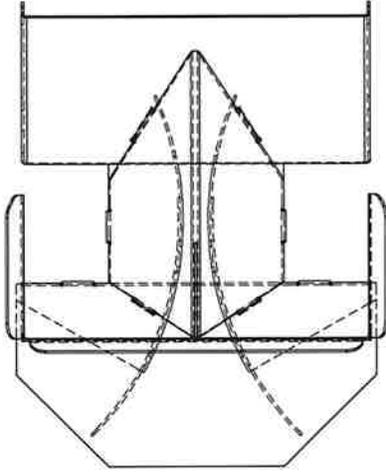
1. Connect hydraulic lines to the tractor hydraulic system. If lines are connected backwards, the spinners will not turn, or turn backwards slowly.
2. Engage distributor drive
 - a. Reduce the engine speed as low as operating conditions allow. (*This will help minimize high pressure surges in the spreader & tractor hydraulic systems.*)
 - b. Engage hydraulic valve control lever slowly.
 - c. Check the flow meter for hydraulic oil flow to distributors. If no flow is indicated, the hydraulic 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!**

DUAL DISTRIBUTOR CHUTE DEFLECTOR SETTINGS

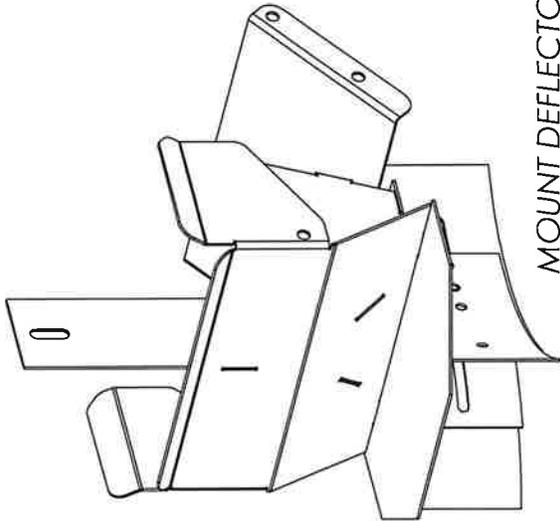
60 FOOT PATTERN

FOR APPLICATION RATE
SEE DECAL P/N: 30909B

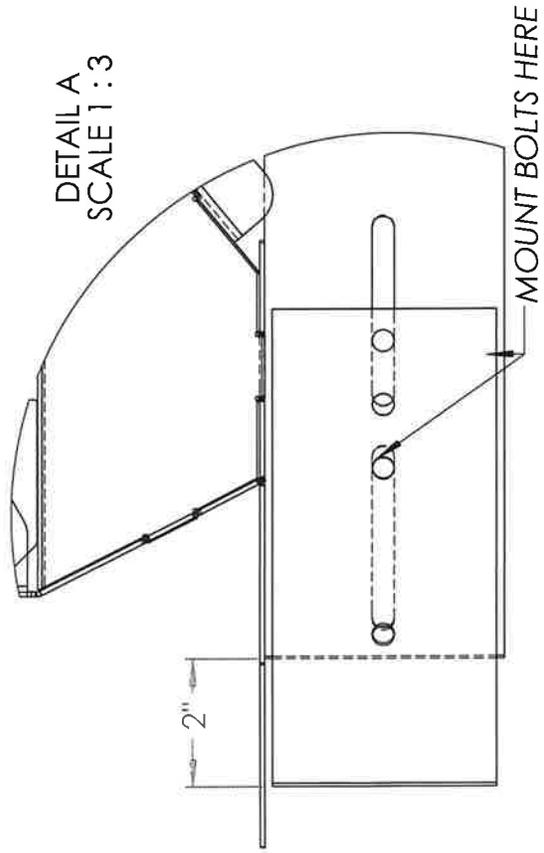


TOP VIEW

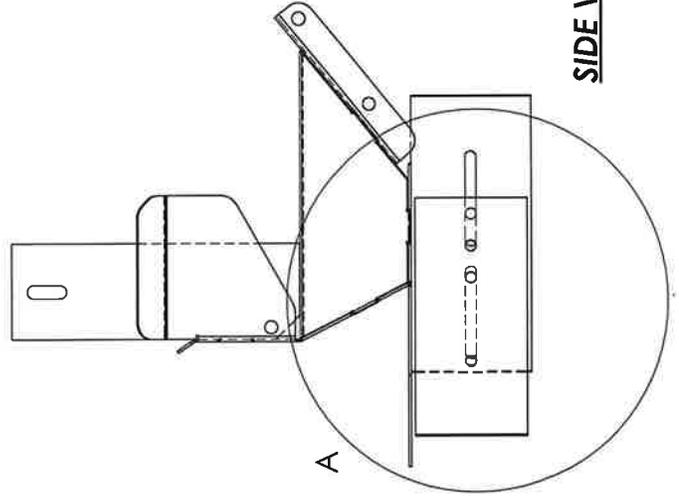
MOUNT DEFLECTORS ON THE OUTSIDE



DETAIL A
SCALE 1 : 3

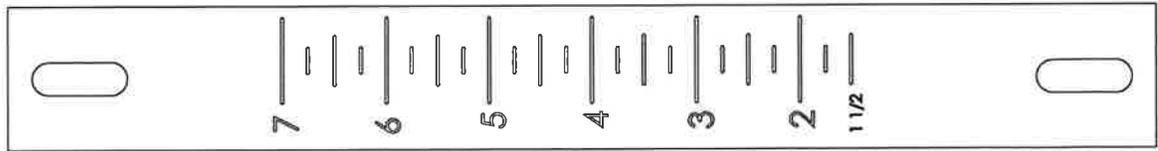


MOUNT DEFLECTORS ON THE OUTSIDE



SIDE VIEW

ADJUSTED RULER INCREMENTS FOR INCLINED MEASUREMENT
 TO ENSURE ACCURATE MEASUREMENTS ALONG A SLOPED SURFACE, THE RULER INCREMENTS HAVE BEEN RECALIBRATED TO REFLECT THE ANGLE OF THE BOX. THIS ADJUSTMENT ACCOUNTS FOR THE INCLINE.



Gate Calibration Procedure

1. Measure Gate Height

Using a tape measure or steel ruler, measure vertically from the **bottom edge of the gate** to the **pan surface**. **DO NOT** measure to the top of the apron chain.

2. Verify Ruler Scale Alignment

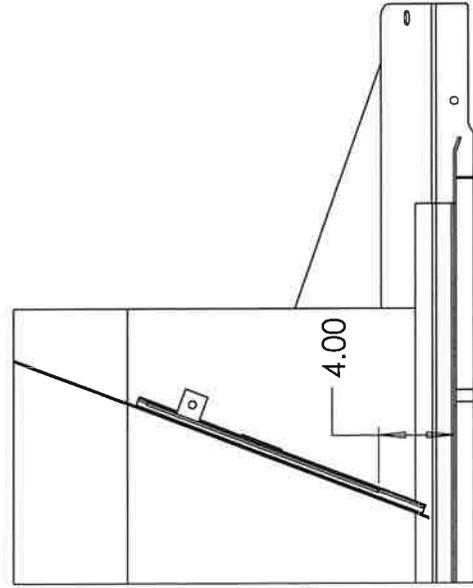
Confirm that the ruler scale reading matches the measured gate height.

3. Adjust Ruler Scale (if necessary)

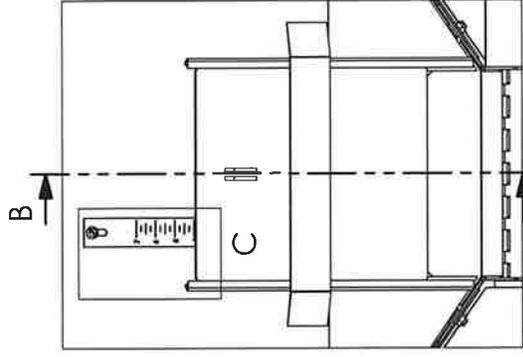
- Loosen the two nuts located inside the bin using a 1/2" socket.
- Slide the ruler scale **up or down** within the slot until the scale reading aligns with the actual measurement.
- Re-tighten the nuts securely.

4. Confirm Calibration

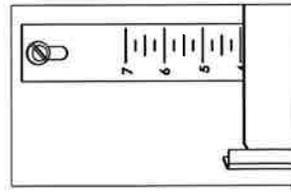
Check that the gate height and ruler scale readings match at **multiple gate positions** to ensure consistent calibration.



DETAIL B



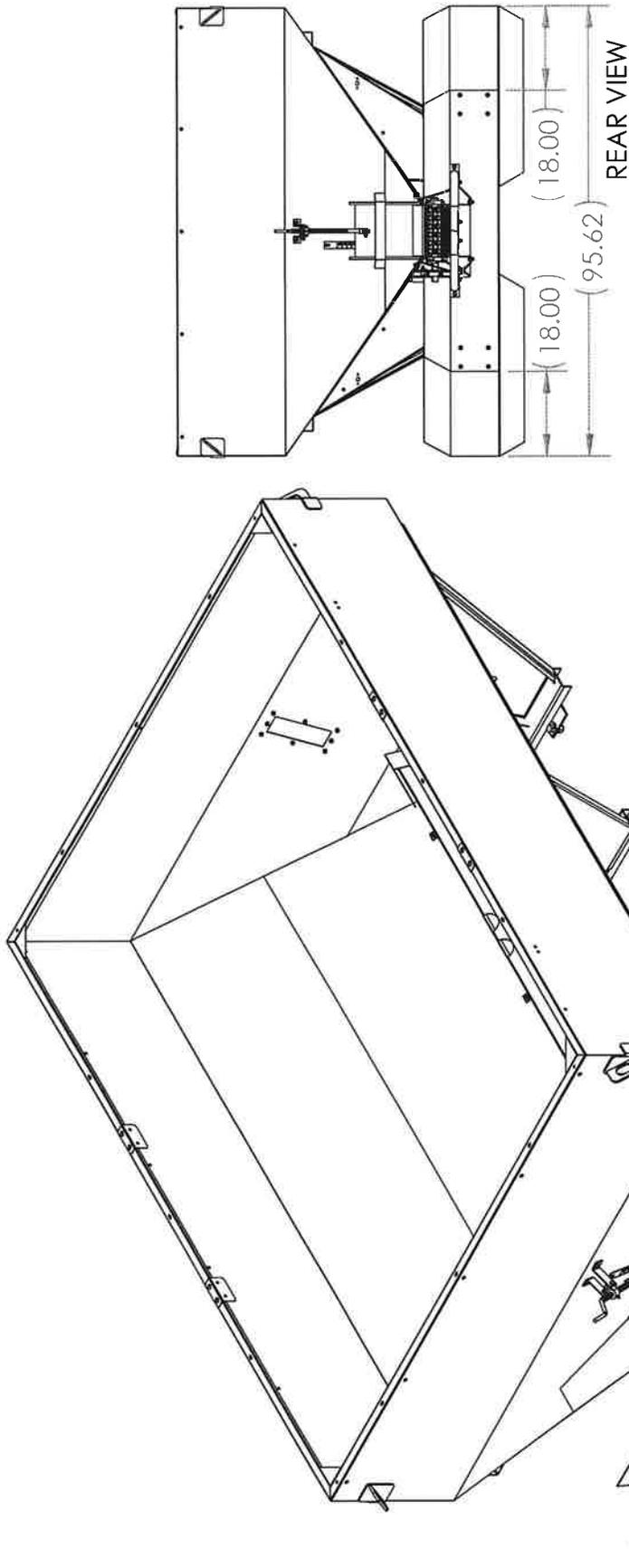
DETAIL A



DETAIL C
 SCALE 1 : 5

EXAMPLE: GATE SET AT 4" OPENING

HIGH CLEARANCE DEFLECTOR SHIELD EXTENSION



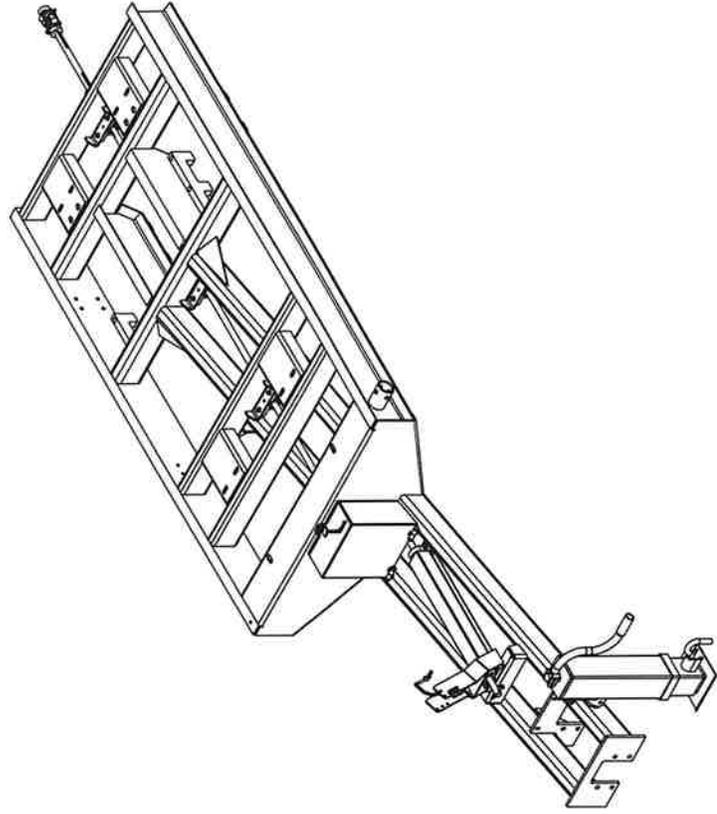
PART #:47993619 - DEFLECTOR SHIELD UPDATE KIT
 INCLUDED STANDARD ON 2019 UNITS
 (INCLUDES ITEMS 2 -6)

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

HIGH CLEARANCE FRAME (MECHANICAL / PTO DRIVE) PART LISTING P/N: 48000022

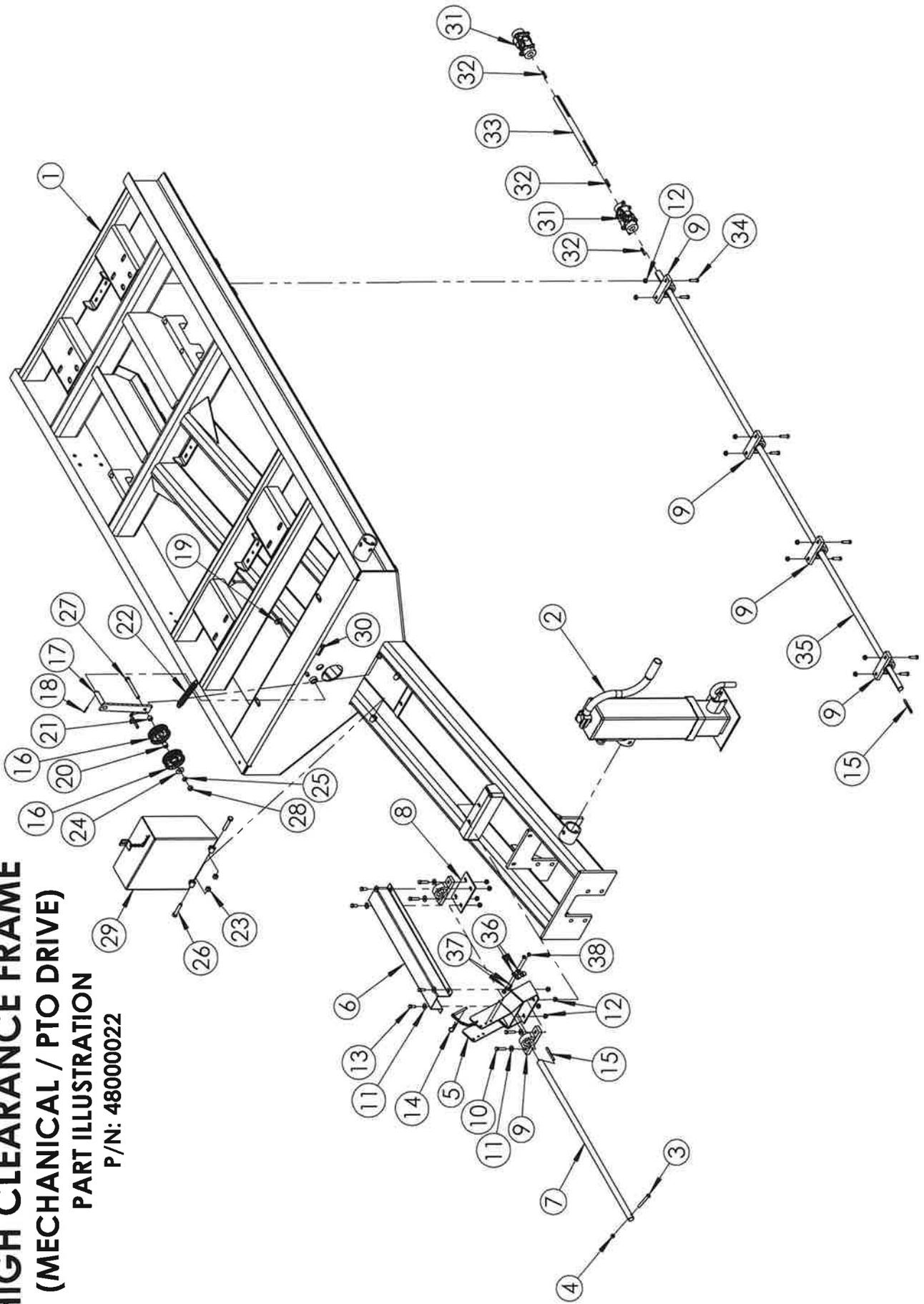
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47003993	HC SPREADER MAINFRAME	1
2	70924	COMPLETE JACK ASSEMBLY	1
3	18056836	BOLT, HEX 3/8-16 X 2 3/4 NC ZC	1
4	18459200	NUT 3/8 NYLOCK	1
5	47009315	PTO STAND WELDMENT	1
6	47003992	PTO SHIELD FOR HC SPREADERS	1
7	47025843	SHAFT, PTO	1
8	47001785	PLATE, SPACER-BEARING	1
9	05239	PILLOW BLOCK W/ ROLLER BEARING	6
10	18056828	BOLT, 3/8-16NC X 1 3/4	4
11	18811200	WASHER FLAT USS ZC 3/8	8
12	18496800	FLANGE NUT, 3/8-16 NC	16
13	18056822	BOLT HX CAP G5NCZC 3/8 X 1	4
14	18590091	HAIRPIN BRIDGE #7 .091 X 2 3/8	1
15	47006359	SQUARE KEY 1/4 X 3	2
16	71403	PULLEY, FLAT IDLER	2
17	47005954	BELT TIGHTENER ARM WELDMENT	1
18	18560722	5/32" X 1" COTTER PIN	1
19	18851600	WASHER, FLAT 5/8 SAE	1
20	47001799	SPACER, PULLEY	1
21	2-9207	HINGE BUSHING	1
22	71134	TENSION SPRING	1
23	18457650	NUT CTR LOCK 1/2 ZP ZC	2
24	18811400	WASHER, FLAT 1/2 ZC USS	1
25	18891400	WASHER, 1/2 LOCK ZC	1
26	18057434	BOLT, HX CAP 1/2-13 X 2 1/2 LG	2
27	18057450	BOLT, 1/2-13 X 4 1/2 LG	1
28	18417400	NUT, HX 1/2 NC ZC	1
29	47005882	PULLEY SHIELD WELDMENT	1
30	18590916	#11 HAIRPIN BRIDGE CLIP	1
31	01340	U-JOINT COUPLING	2
32	47006519	KEY, SQUARE (1/4 X 1 1/2)	3
33	47006639	SPINNER SHAFT	1
34	18056826	BOLT HX CAP G5 NC ZC 3/8 X 1 1/2 LG	8

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
35	47025842	SHAFT, LINE	1
36	41859	CLAMP VINYL COVERED 9/16 .343 HOLE	2
37	18706422	SCREW MACH SL TR SS 5/16 X 1	2
38	18476350	NUT HX 5/16 SS	2
INCLUDED BUT NOT SHOWN			
HEARTLAND AG DECAL			2



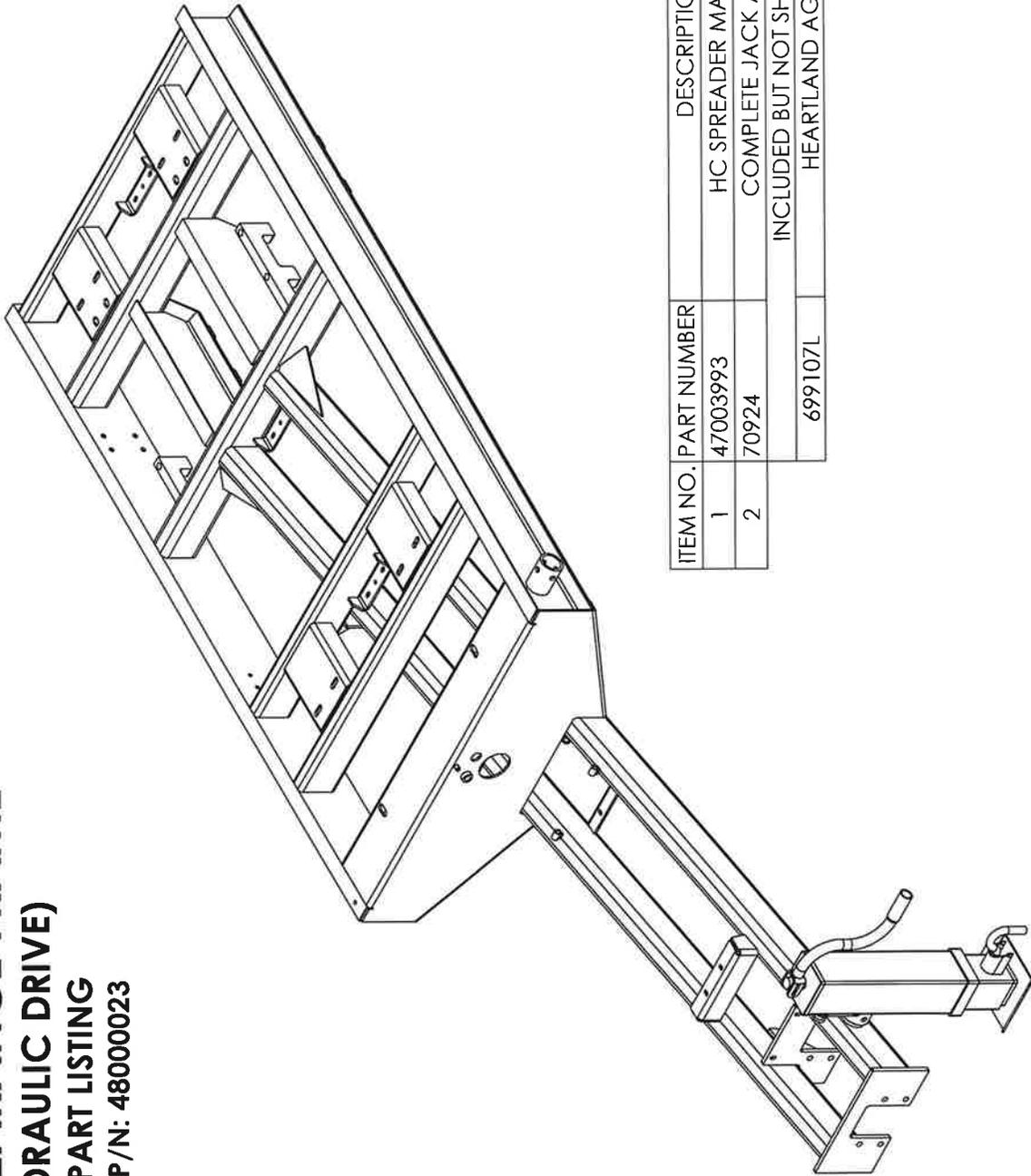
**HIGH CLEARANCE FRAME
(MECHANICAL / PTO DRIVE)
PART ILLUSTRATION**

P/N: 48000022



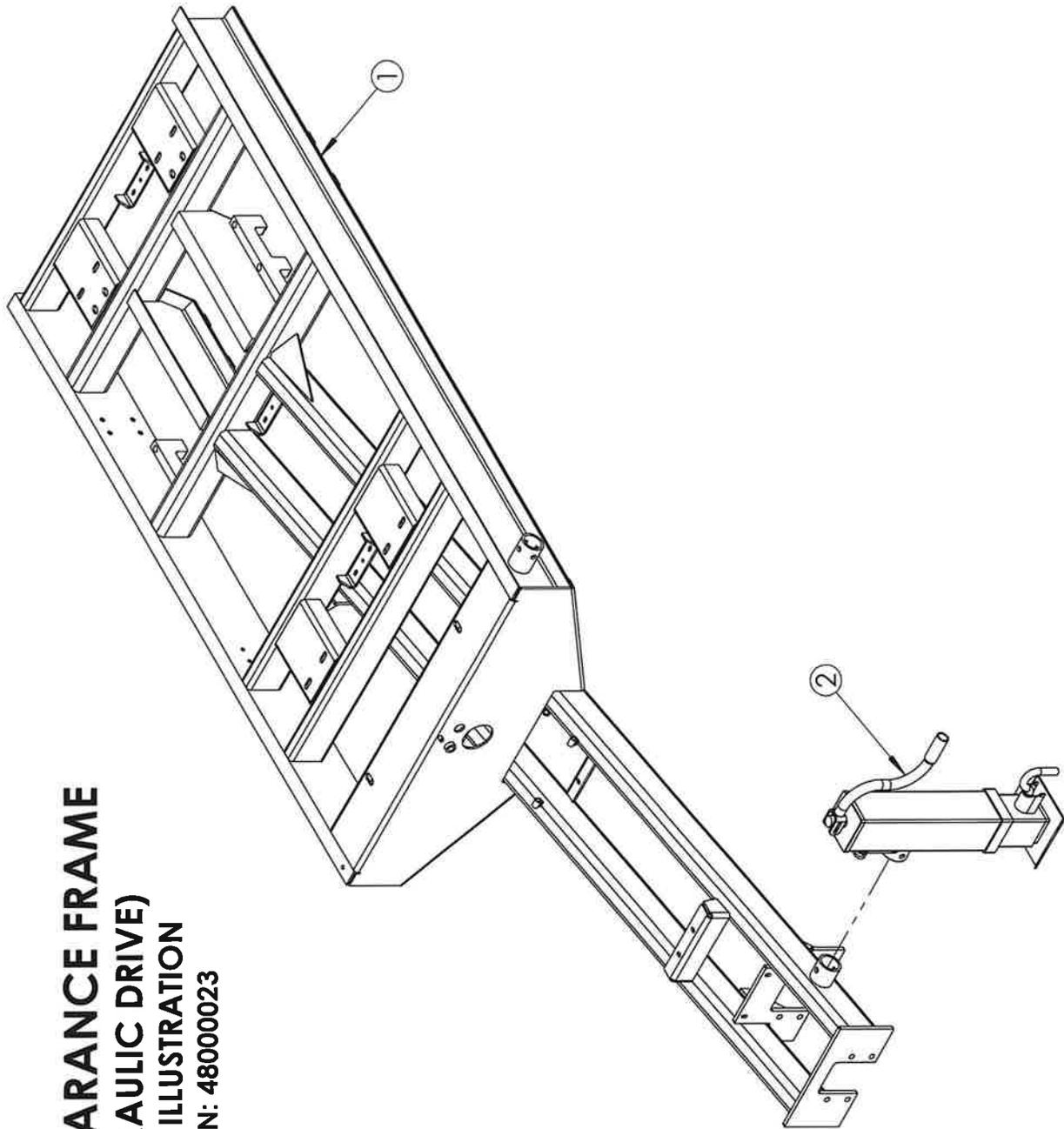
HIGH CLEARANCE FRAME (HYDRAULIC DRIVE)

PART LISTING
P/N: 48000023



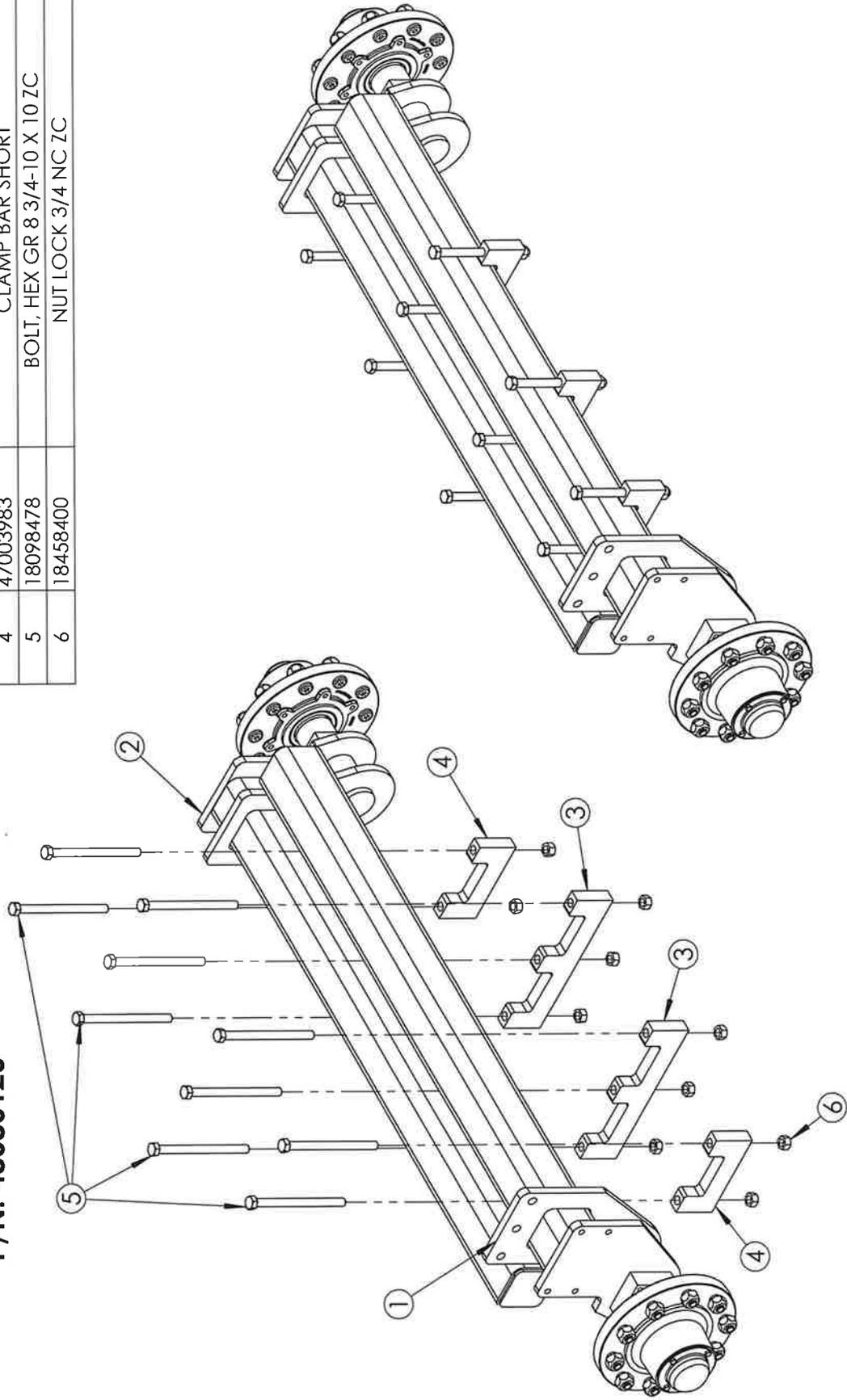
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47003993	HC SPREADER MAINFRAME	1
2	70924	COMPLETE JACK ASSEMBLY	1
	699107L	INCLUDED BUT NOT SHOWN	
		HEARTLAND AG DECAL	2

**HIGH CLEARANCE FRAME
(HYDRAULIC DRIVE)
PART ILLUSTRATION
P/N: 48000023**

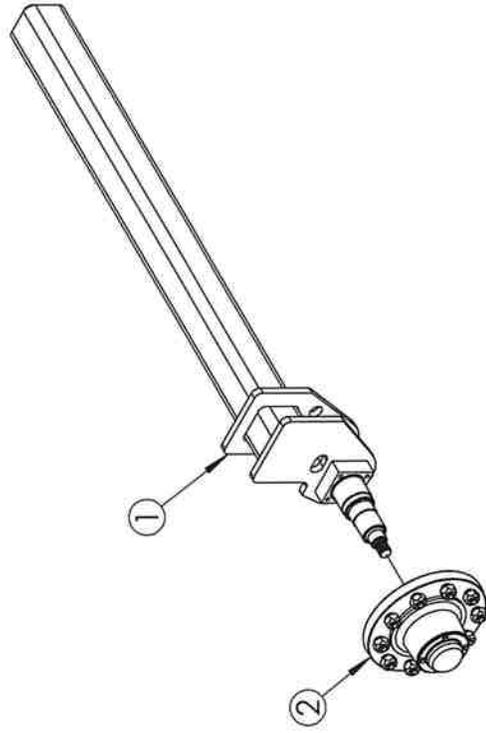


AG-X10 HC / AG-800 HC AXLE
80" TO 120" CENTER TO CENTER
P/N: 48080120

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47995833	AXLE RH AG-800 HC W/HUB	1
2	47995834	AXLE LH AG-800 HC W/HUB	1
3	47003982	AXLE CLAMP BAR LONG	2
4	47003983	CLAMP BAR SHORT	2
5	18098478	BOLT, HEX GR 8 3/4-10 X 10 ZC	10
6	18458400	NUT LOCK 3/4 NC ZC	10

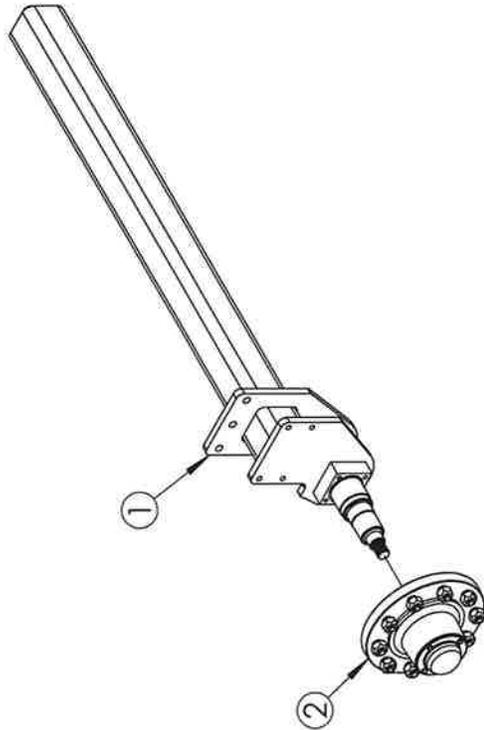


AXLE LH W/ HUB
AG-X10 HC / AG-800 HC STD
P/N: 47995834



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47005834	AXLE WELDMENT LH	1
2	HA1010-3	HUB ASSY, 15000 LB (10 BOLT)	1

AXLE RH W/ HUB
AG-X10 HC / AG-800 HC STD
P/N: 47995833

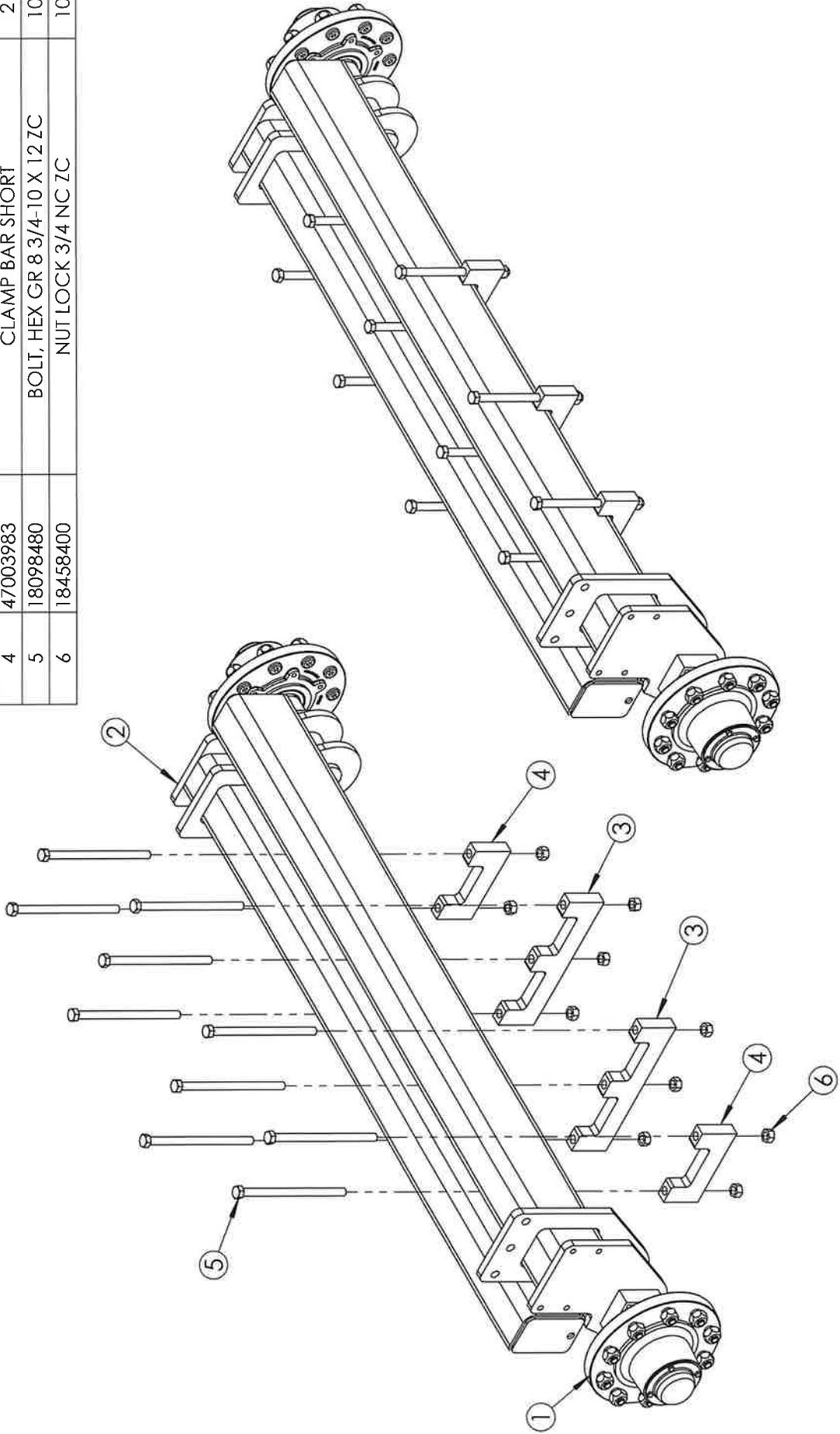


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47005833	AXLE WELDMENT RH	1
2	HA1010-3	HUB ASSY, 15000 LB (10 BOLT)	1

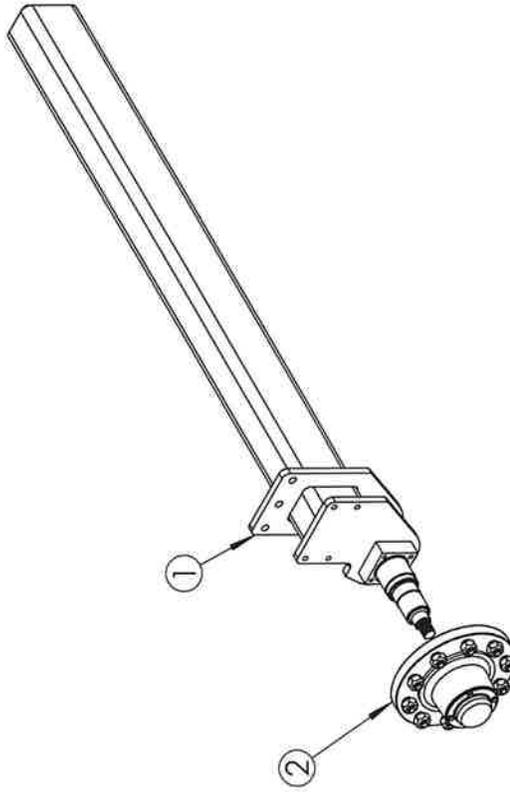
AG-X10 HC / AG-800 HC AXLE 88" TO 144" CENTER TO CENTER

P/N: 48080144

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47997833	AXLE RH AG-800 HC W/HUB, 144" TRACK OPT.	1
2	47997834	AXLE LH AG-800 HC W/HUB, 144" TRACK OPT.	1
3	47003982	AXLE CLAMP BAR LONG	2
4	47003983	CLAMP BAR SHORT	2
5	18098480	BOLT, HEX GR 8 3/4-10 X 12 ZC	10
6	18458400	NUT LOCK 3/4 NC ZC	10

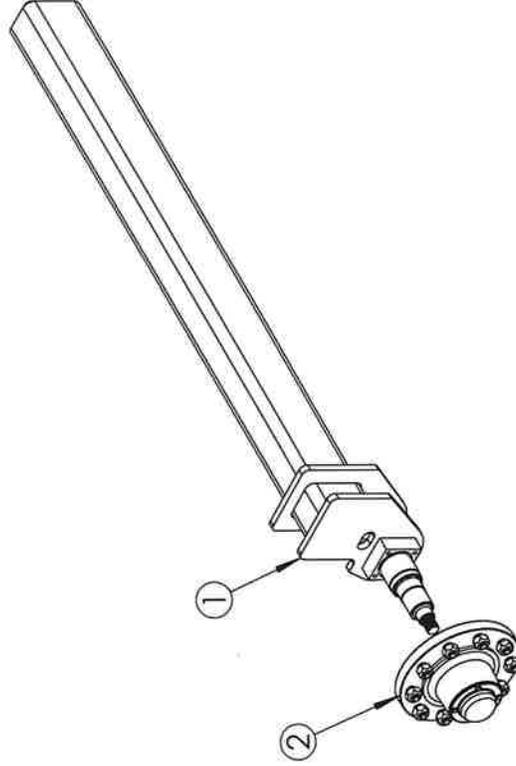


**AXLE RH W/ HUB
AG-X10 HC / AG-800 HC EXT
P/N: 47997833**



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47007833	RH AXLE WELDMENT	1
2	HA1010-3	HUB ASSY, 15000 LB (10 BOLT)	1

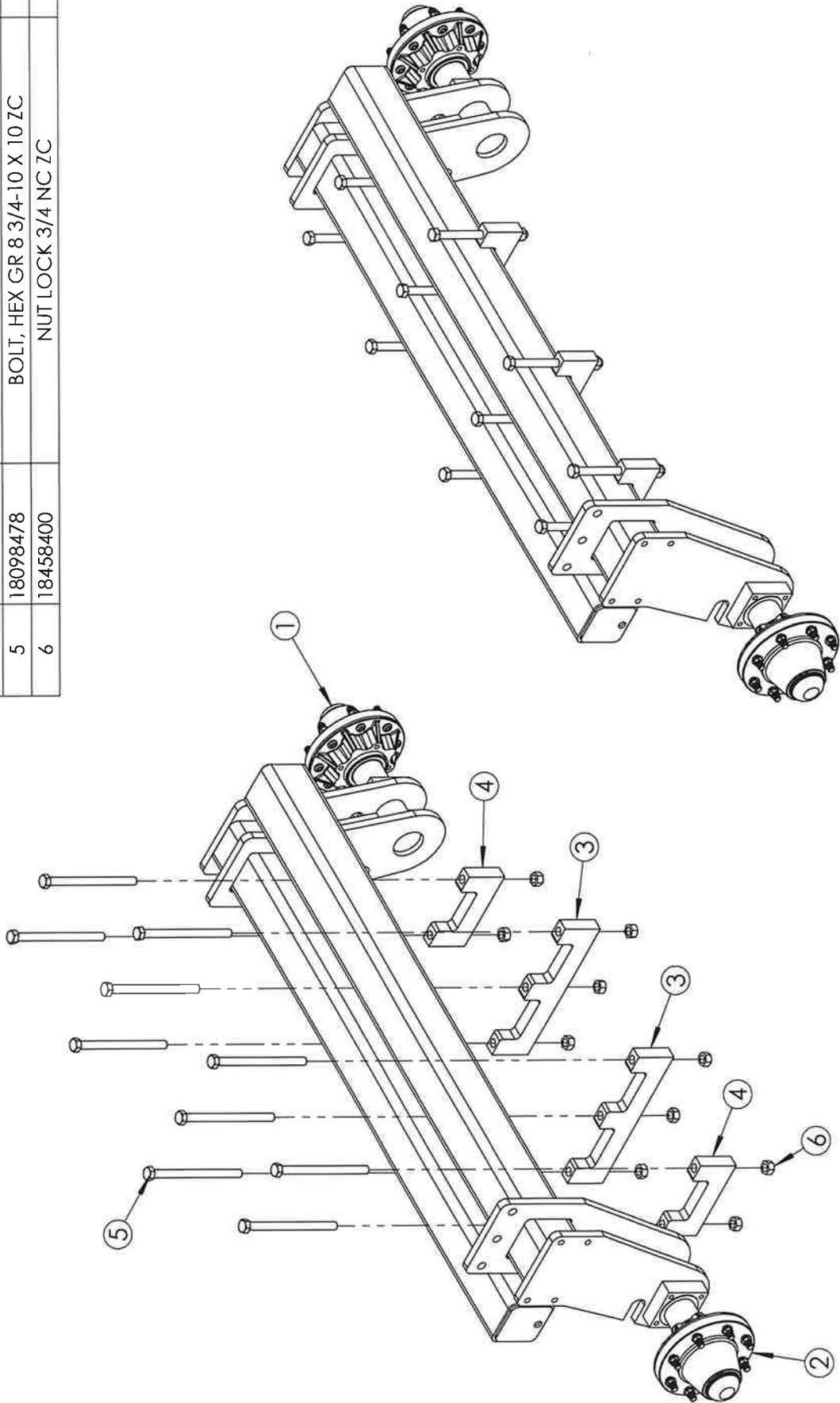
**AXLE LH W/ HUB
AG-X10 HC / AG-800 HC EXT
P/N: 47997834**



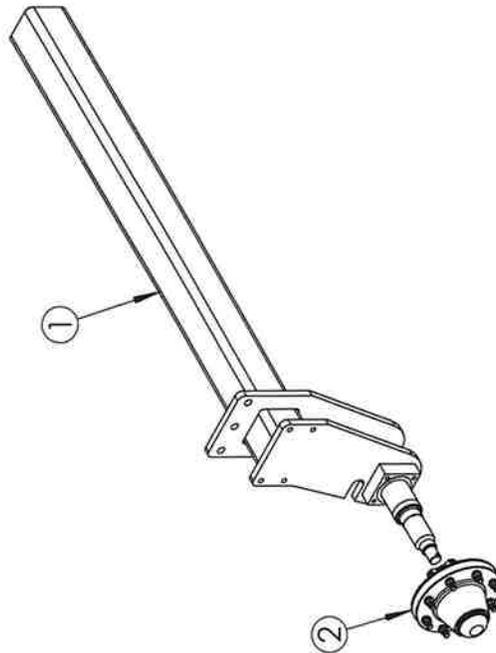
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47007834	LH AXLE WELDMENT	1
2	HA1010-3	HUB ASSY, 15000 LB (10 BOLT)	1

**AG-600 HC AXLE
80" TO 120" CENTER TO CENTER
P/N: 46080120**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47995824	AXLE LH AG-600 HC W/HUB	1
2	47995823	AXLE RH AG-600 HC W/HUB	1
3	47003982	AXLE CLAMP BAR LONG	2
4	47003983	CLAMP BAR SHORT	2
5	18098478	BOLT, HEX GR 8 3/4-10 X 10 ZC	10
6	18458400	NUT LOCK 3/4 NC ZC	10

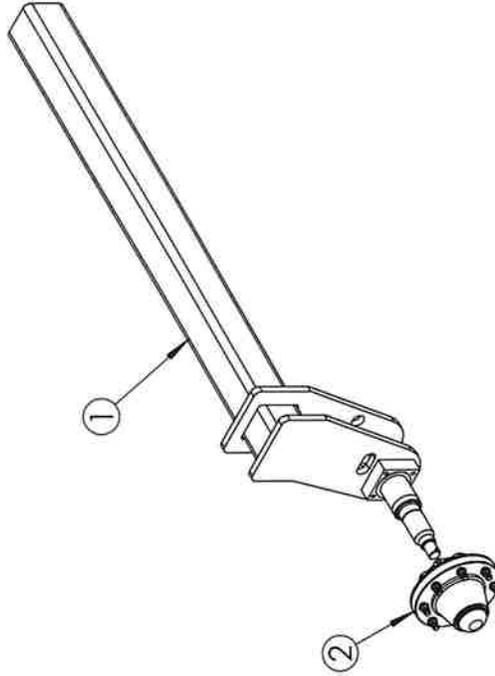


**AXLE RH W/ HUB
AG-600 HC
P/N: 47995823**

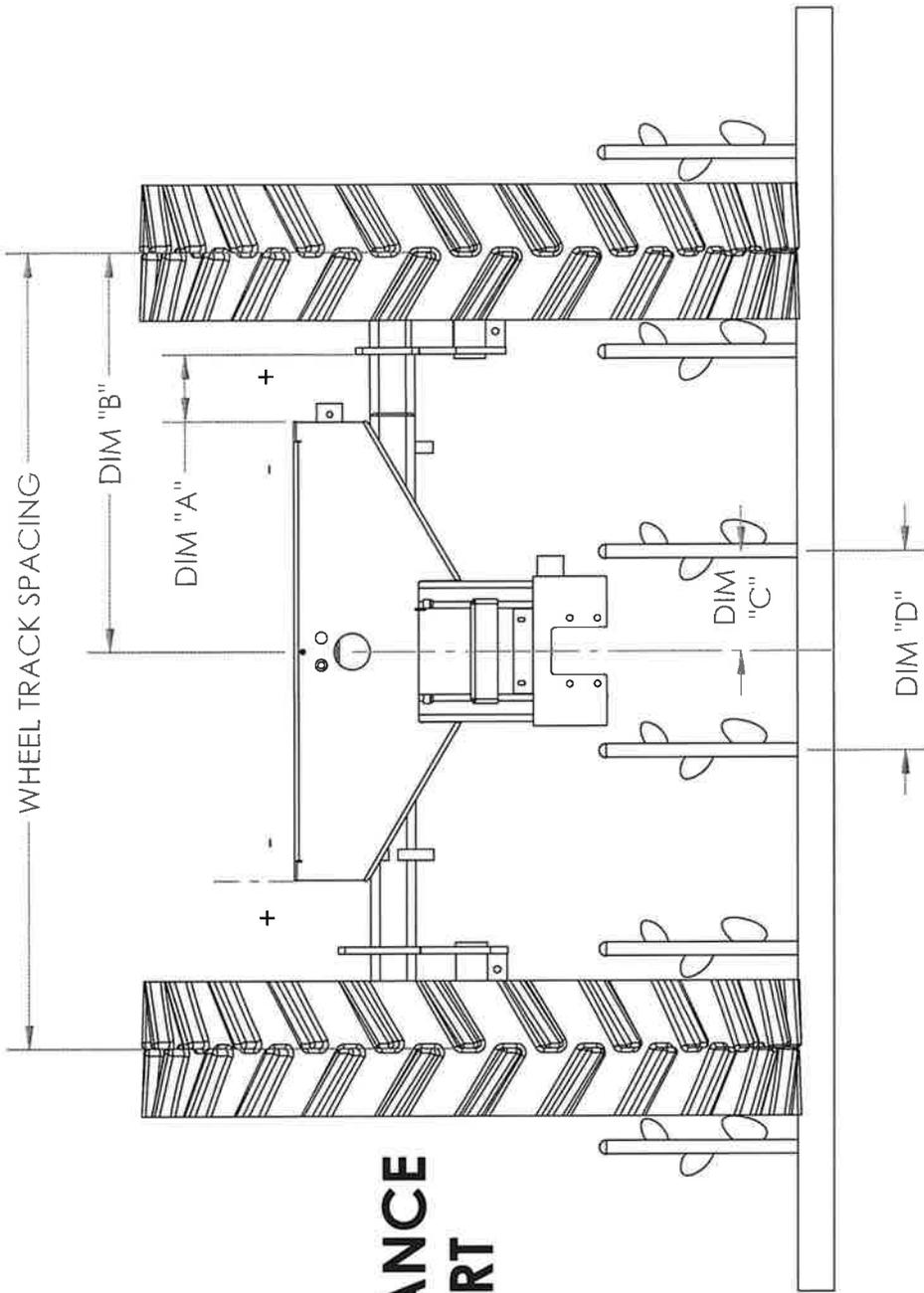


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47015823	RH AXLE WELDMENT	1
2	47009114	HUB ASSEMBLY MACHINED FOR BRAKES	1

**AXLE LH W/ HUB
AG-600 HC
P/N: 47995824**



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47015824	LH AXLE WELDMENT	1
2	47009114	HUB ASSEMBLY MACHINED FOR BRAKES	1



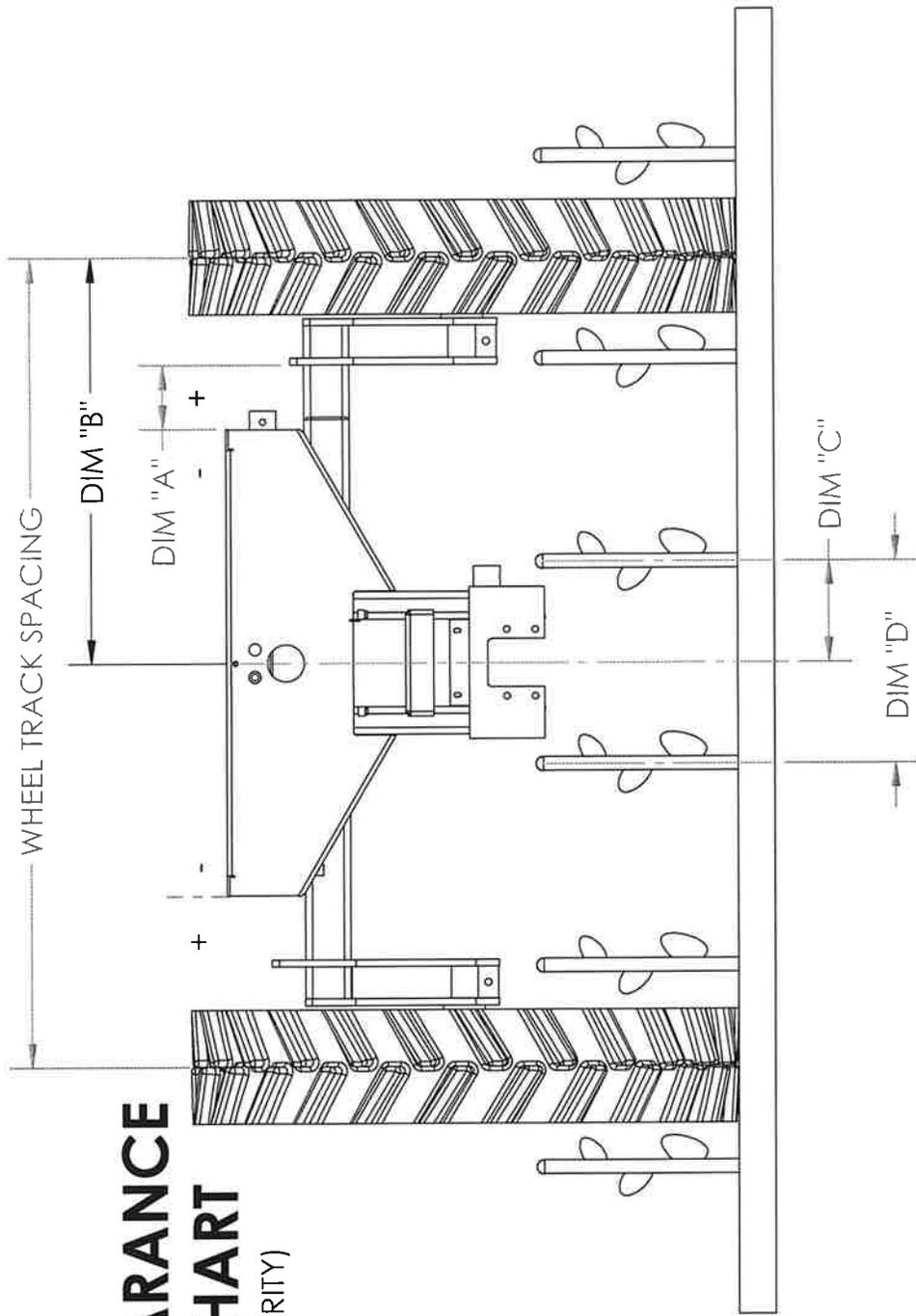
AG-800 HIGH CLEARANCE AXLE LAYOUT CHART

(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 1/2"	40"	10"	20"
88"	+7 1/2"	44"	11"	22"
120"	+23 1/2"	60"	15"	30"

AG-600 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"

Torque Requirements

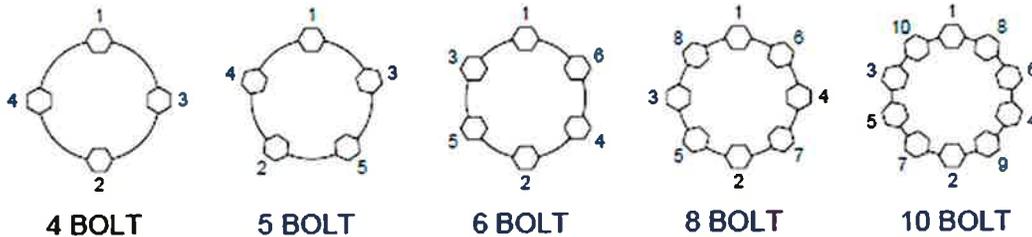
It is extremely important to apply and maintain proper wheel mounting torque on your trailer axle. Torque is a measure of the amount of tightening applied to a fastener (nut or bolt) and is expressed as length times force. For example, a force of 90 pounds applied at the end of a wrench one foot long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

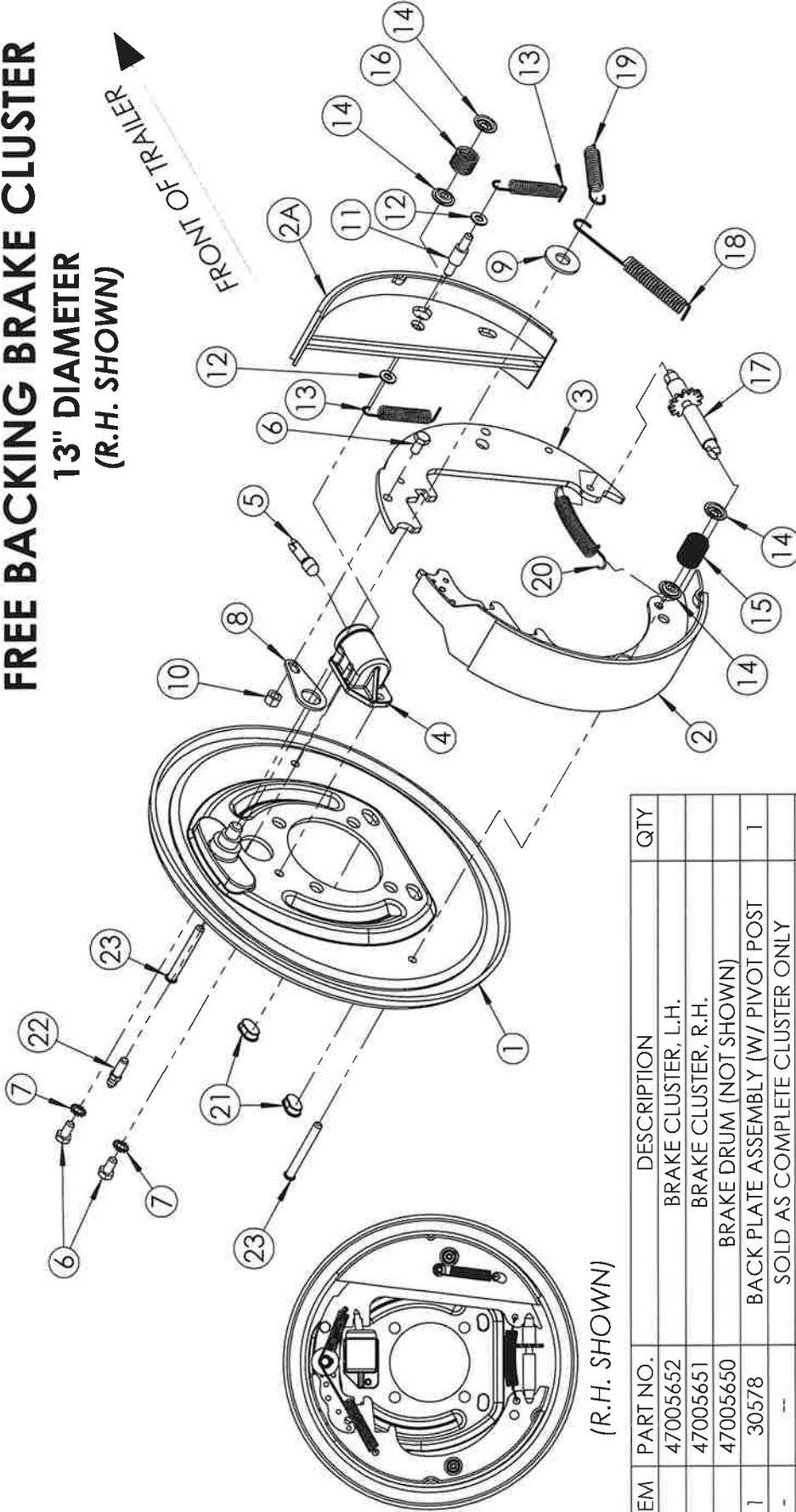


4. Wheel nuts/bolts should be torqued before first road use and after each wheel removal. Check and re-torque after the first 50 miles and again at 100 miles. Check periodically thereafter.

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

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



(R.H. SHOWN)

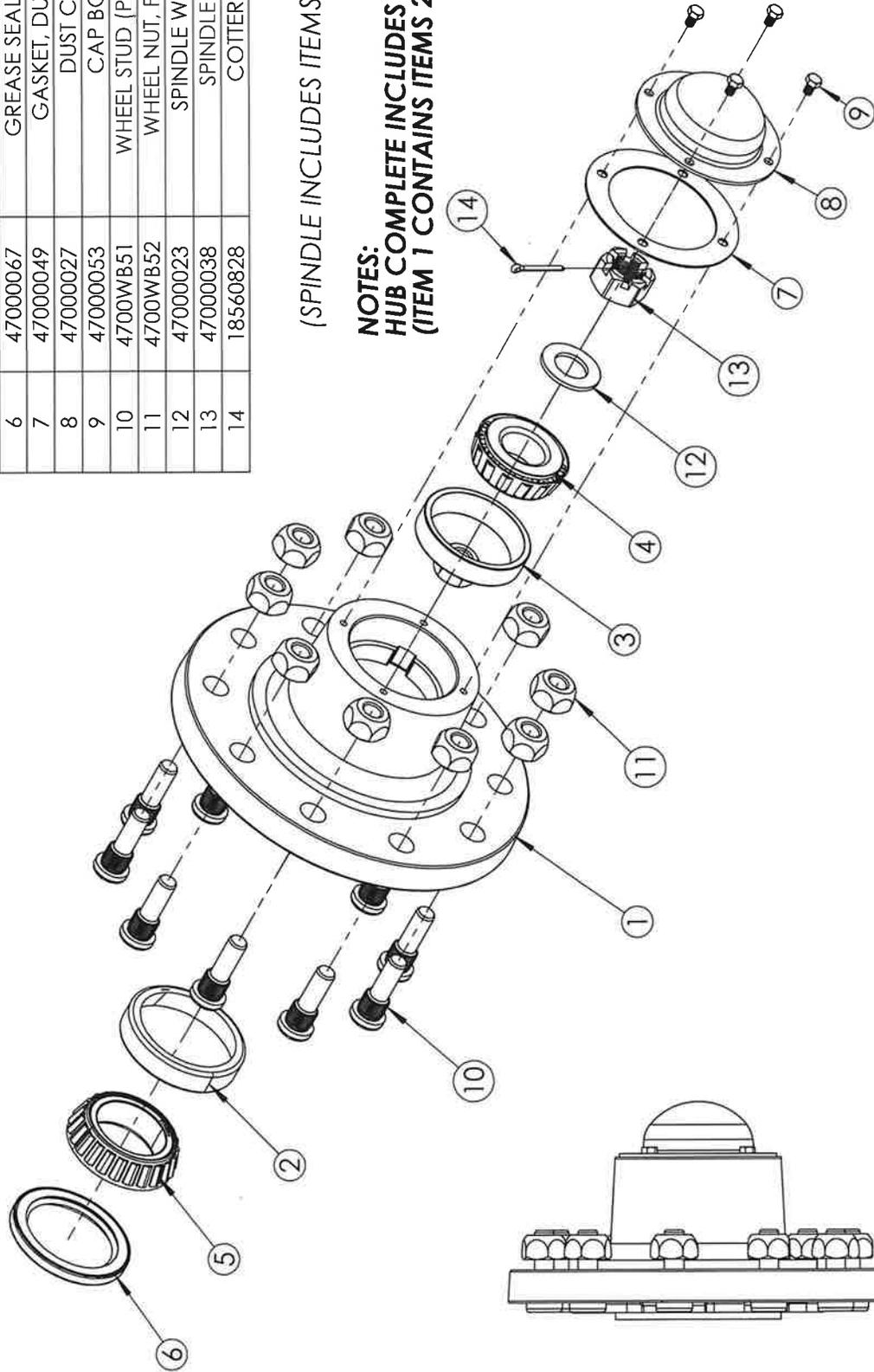
ITEM	PART NO.	DESCRIPTION	QTY
	47005652	BRAKE CLUSTER, L.H.	
	47005651	BRAKE CLUSTER, R.H.	
	47005650	BRAKE DRUM (NOT SHOWN)	
1	30578	BACK PLATE ASSEMBLY (W/ PIVOT POST SOLD AS COMPLETE CLUSTER ONLY)	1
-	--		
2	03184	BRAKE SHOE (BACK)	1
2A	03183	BRAKE SHOE (FRONT)	1
3	30594	SHOE LEVER	1
4	30582	WHEEL 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
		WHEEL CYLINDER REPAIR KIT	
	94005	INCLUDES (1 EACH) SPRING, CUP, AND BOOT	

10 BOLT HUB (15000# CAP)

P/N: HA1010-3

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	47003011	HUB WITH RACES (W/ BRAKES)	1
2	47033462	INNER BEARING CUP	1
3	47000453	OUTER BEARING CUP	1
4	47000460	OUTER BEARING CONE	1
5	47033275	INNER BEARING CONE (Ø2.75 ID)	1
6	47000067	GREASE SEAL (Ø4.62)	1
7	47000049	GASKET, DUST CAP	1
8	47000027	DUST CAP	1
9	47000053	CAP BOLT	4
10	4700WB51	WHEEL STUD (PRESSED IN)	10
11	4700WB52	WHEEL NUT, FLANGED	10
12	47000023	SPINDLE WASHER	1
13	47000038	SPINDLE NUT	1
14	18560828	COTTER PIN	1



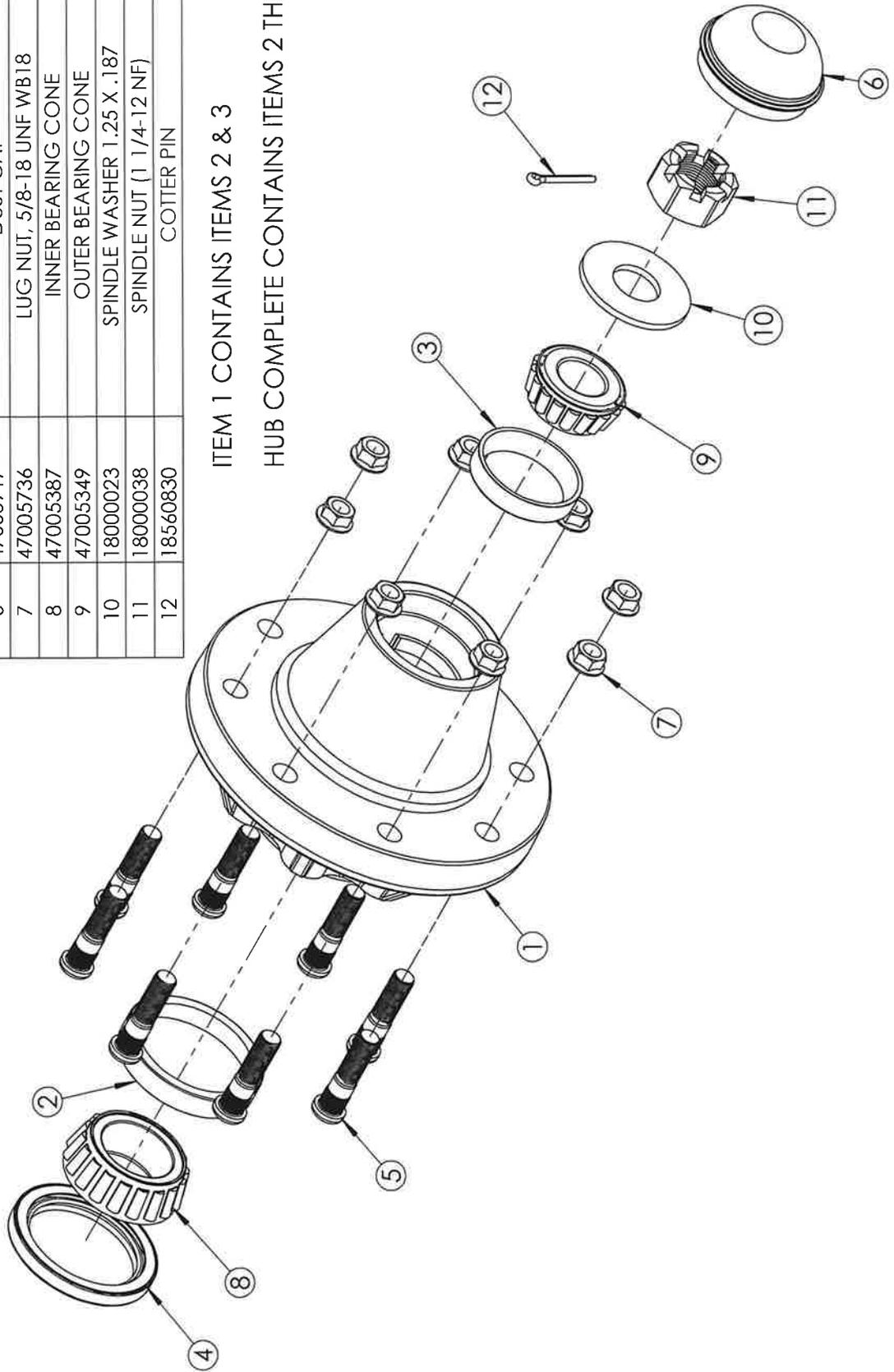
(SPINDLE INCLUDES ITEMS 12-14)

NOTES:
HUB COMPLETE INCLUDES ITEMS 1 THRU 11
(ITEM 1 CONTAINS ITEMS 2 & 3)

8 BOLT HUB (7500# CAP)

P/N: 47009114

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47005114*	HUB WITH RACES	1
2	47005328	INNER BEARING RACE	1
3	47005131	OUTER BEARING RACE	1
4	47005776	GREASE SEAL SE-42	1
5	47005735	LUG BOLT, 5/8 X 2 1/2" WB46	8
6	47005917	DUST CAP	1
7	47005736	LUG NUT, 5/8-18 UNF WB18	8
8	47005387	INNER BEARING CONE	1
9	47005349	OUTER BEARING CONE	1
10	18000023	SPINDLE WASHER 1.25 X .187	1
11	18000038	SPINDLE NUT (1 1/4-12 NF)	1
12	18560830	COTTER PIN	1



ITEM 1 CONTAINS ITEMS 2 & 3

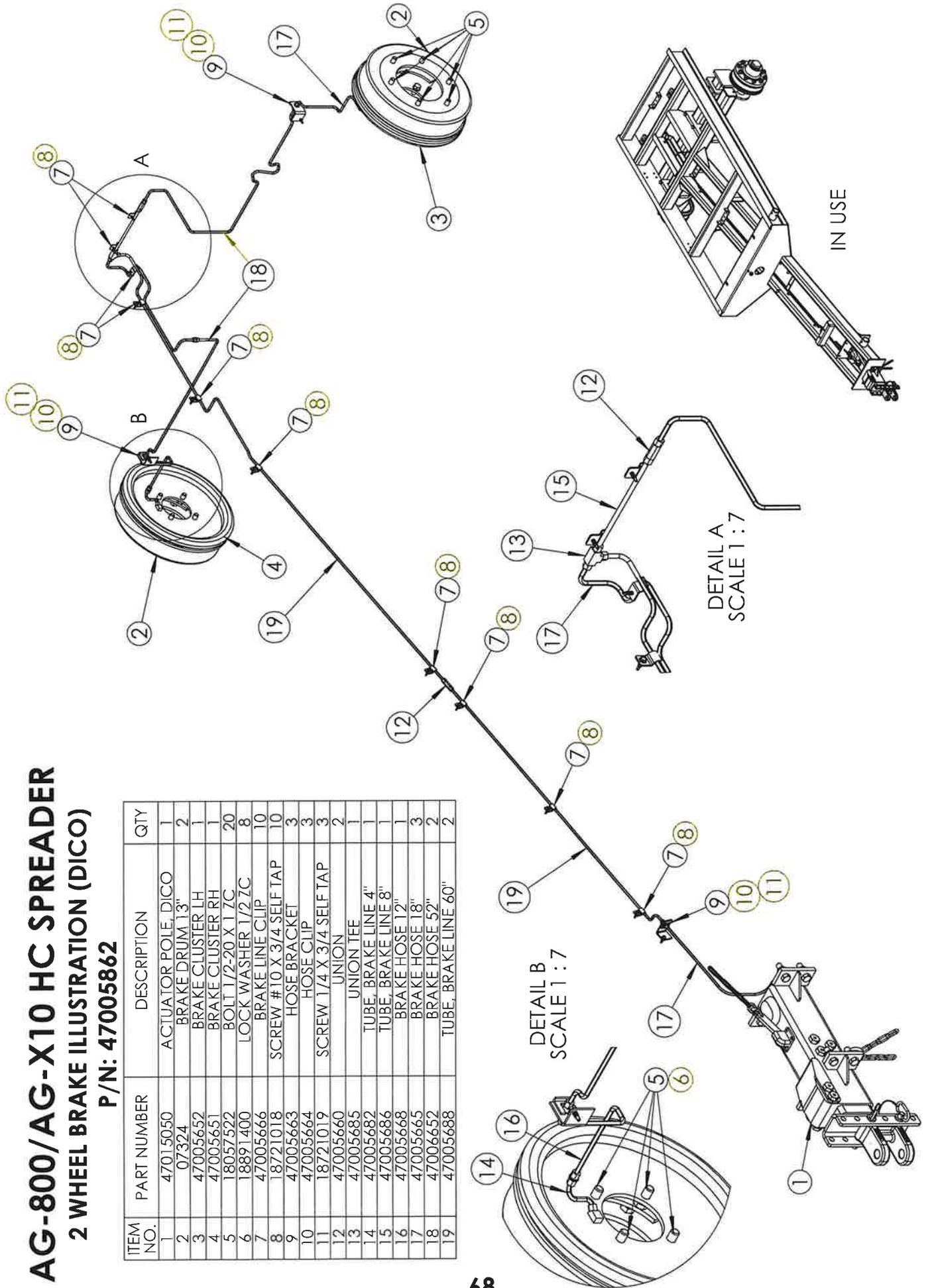
HUB COMPLETE CONTAINS ITEMS 2 THRU 9

AG-800/AG-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 ZC	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

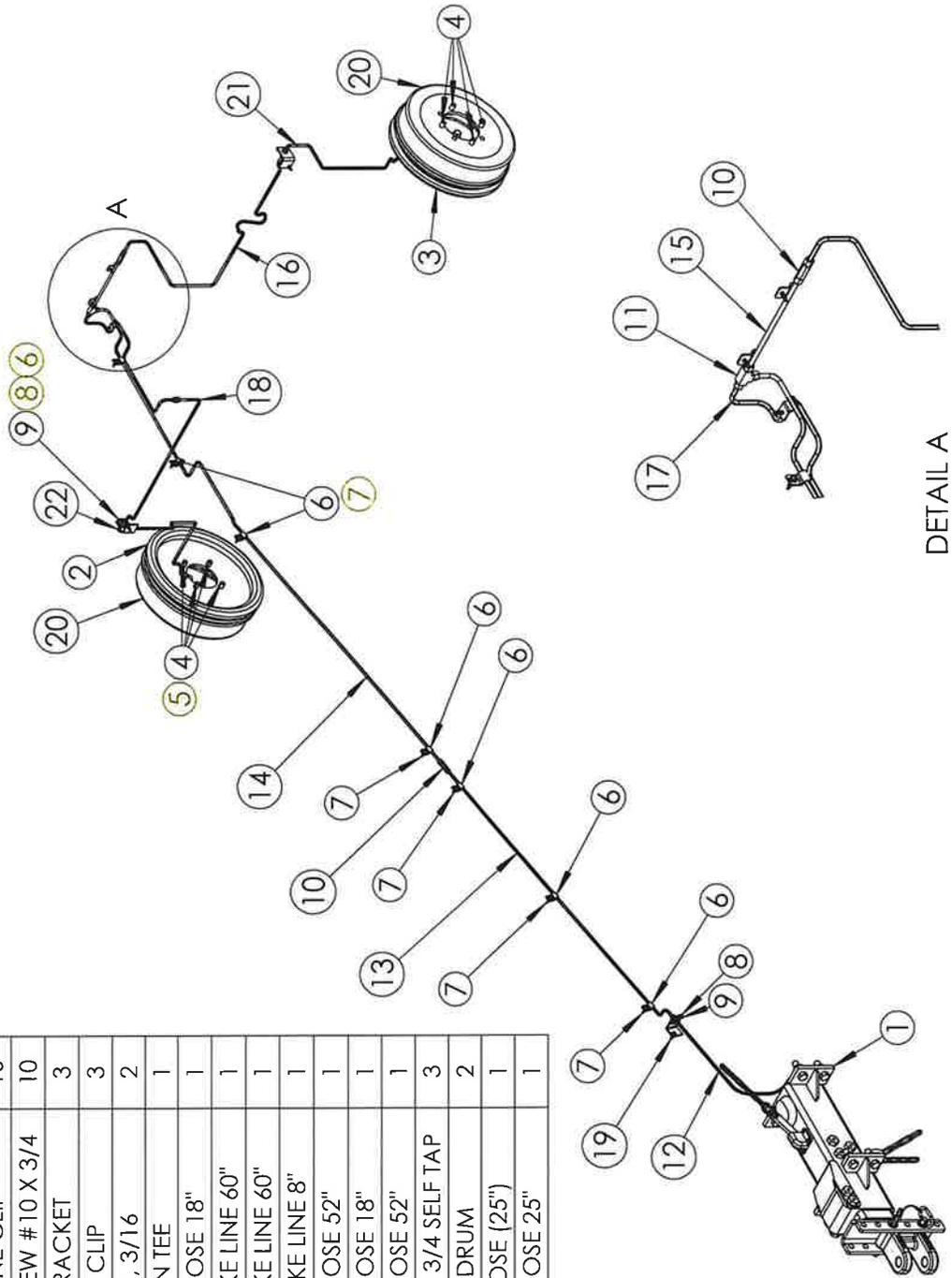


AG600 HC SPREADER

2 WHEEL BRAKE ILLUSTRATION (DICO)

P/N: 47005861

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	72473	DEXTER HITCH W/ BRAKES	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	SELF TAP SCREW #10 X 3/4	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



DETAIL A
SCALE 1 : 10

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!

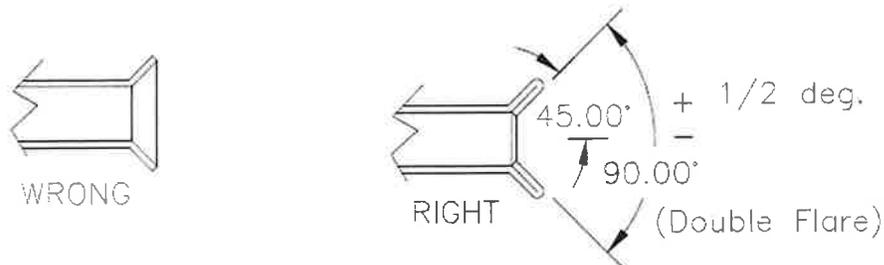
Saltwater, granular fertilizer and other corrosive materials are destructive to metal. To prolong the life of a braking system used under corrosive conditions we recommend that the actuator be flushed periodically with a high pressure water hose. Be sure to regrease bearings and oil all moving parts 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 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" between the brake shoe and the brake drum. **AT ALL TIMES** during the setup and adjustment the brake drum needs to be rotated in the forward direction because these are 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 baking is the use of quality brake fluid. Use only **DOT-3** or **DOT-4** brake fluid form a sealed container. If pressure bleeding equipment is available, follow the manufacturer'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 THE BRAKES)

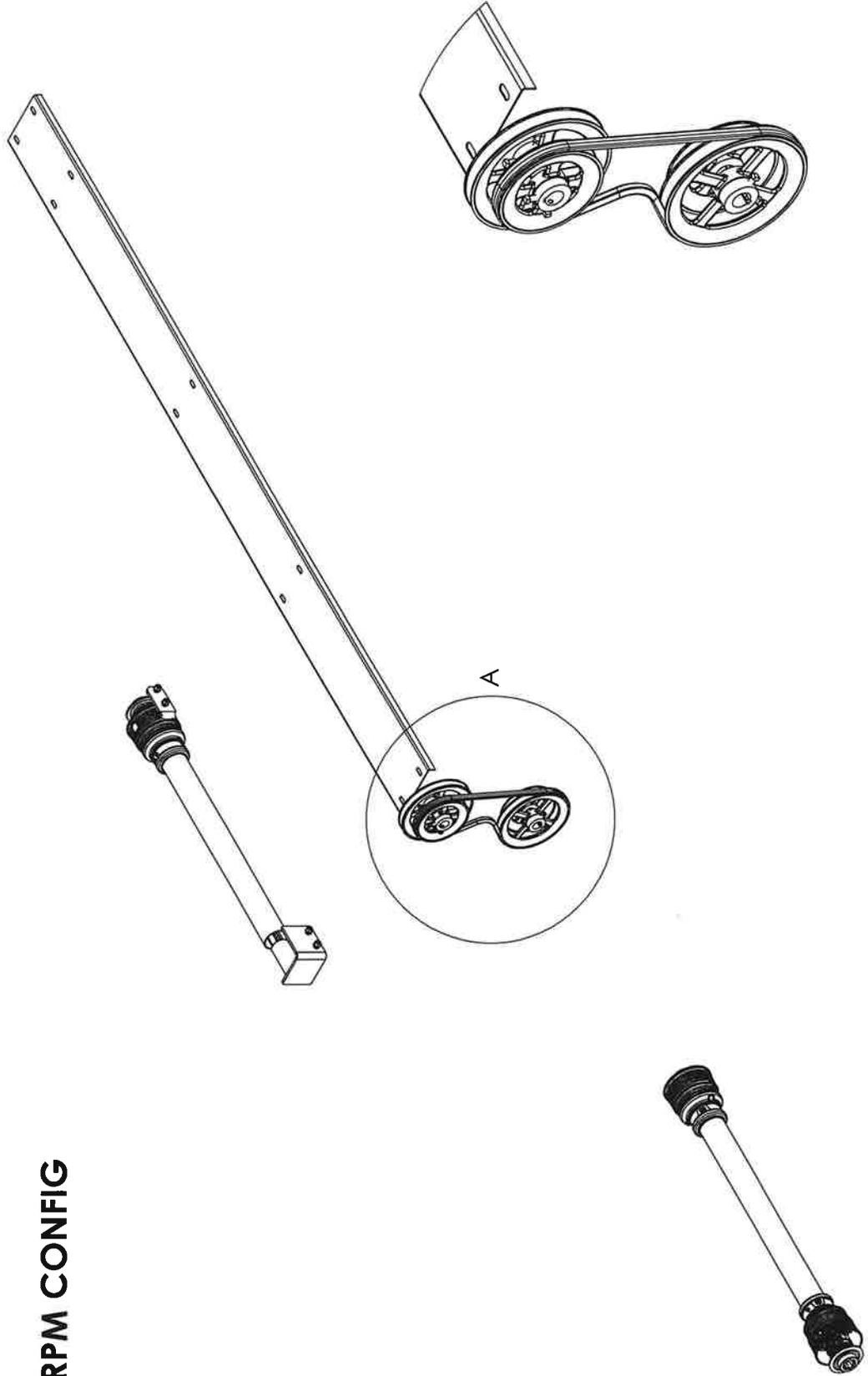
On new spreaders or tandems with brakes, trip the emergency brake and check and adjust shoes accordingly to be free and that they hold properly when activated. (*See initial brake cluster & adjustment section above for setup information.*) Check that the brakes function properly when applied and that 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 CETIFIED PROFESSIONAL MECHANIC SHOULD INSTALL BRAKE CLUSTERS. HAVE YOUR BRAKES INSPECTED BY A CERTIFIED PROFESSIONAL MECHANIC AND ANNUALLY AFTER INSTALLATION

HC PTO CONVERSION 540 - 1000 RPM
P/N: 45411000

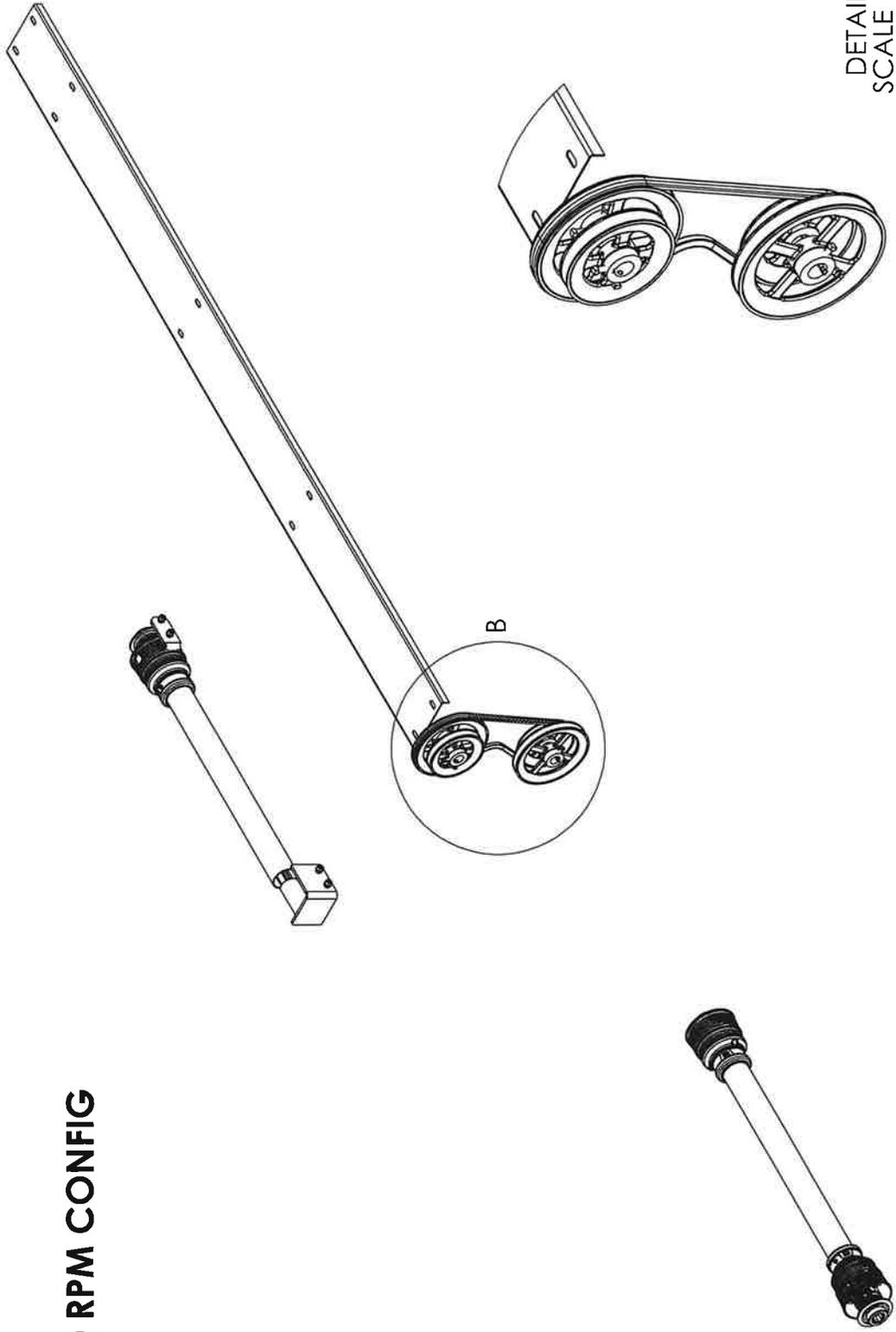
540 RPM CONFIG



DETAIL A
SCALE 1 : 8

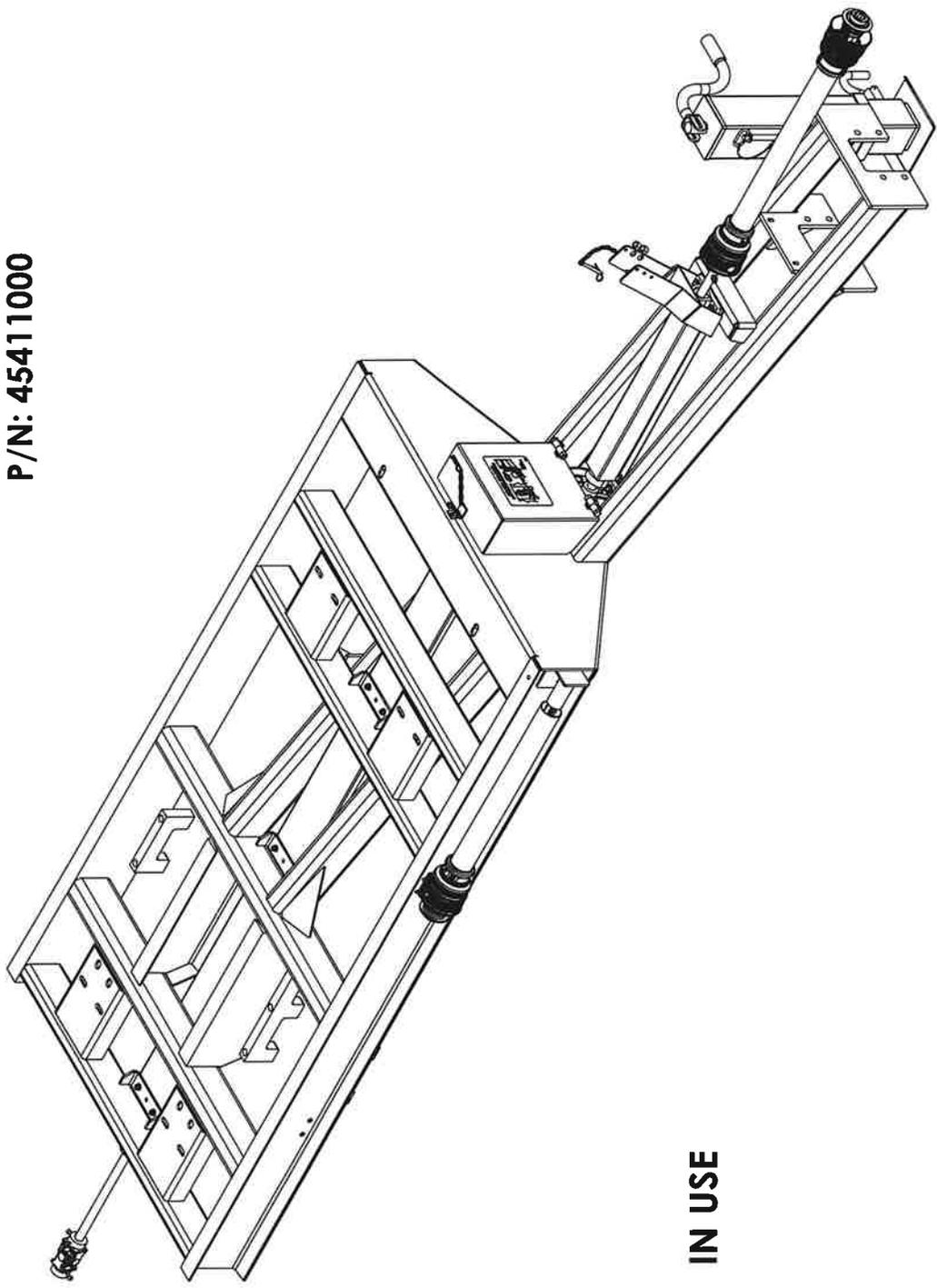
HC PTO CONVERSION 540 - 1000 RPM
P/N: 45411000

1000 RPM CONFIG



DETAIL B
SCALE 1 : 8

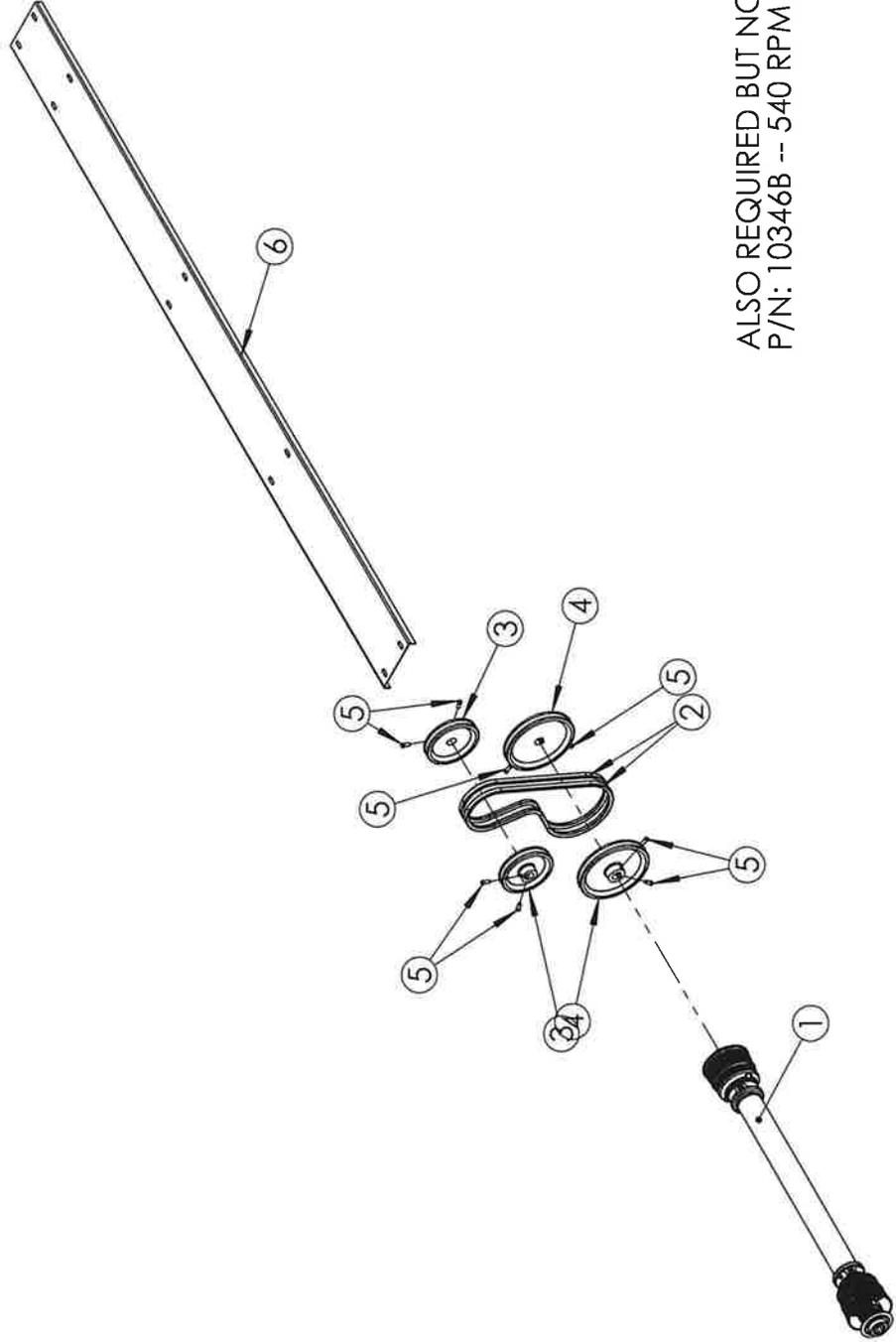
HC PTO CONVERSION 540 - 1000 RPM
P/N: 45411000



IN USE

**540 RPM PTO SPREADER
(HIGH CLEARANCE)
(OPTIONAL)
P/N: 48100540**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71961	PTO SHAFT ASSEMBLY, 540 RPM	1
2	31208	BELT, B43 (46" OUTSIDE)	2
3	10328	PULLEY, 5.4 PITCH DIA	2
4	10093	PULLEY, 7.4 PITCH DIA	2
5	18767450	SETScrew, 5/16 X 3/4 SQHD	8
6	47019624	SHIELD, LINE SHAFT (HC SPREADERS)	1

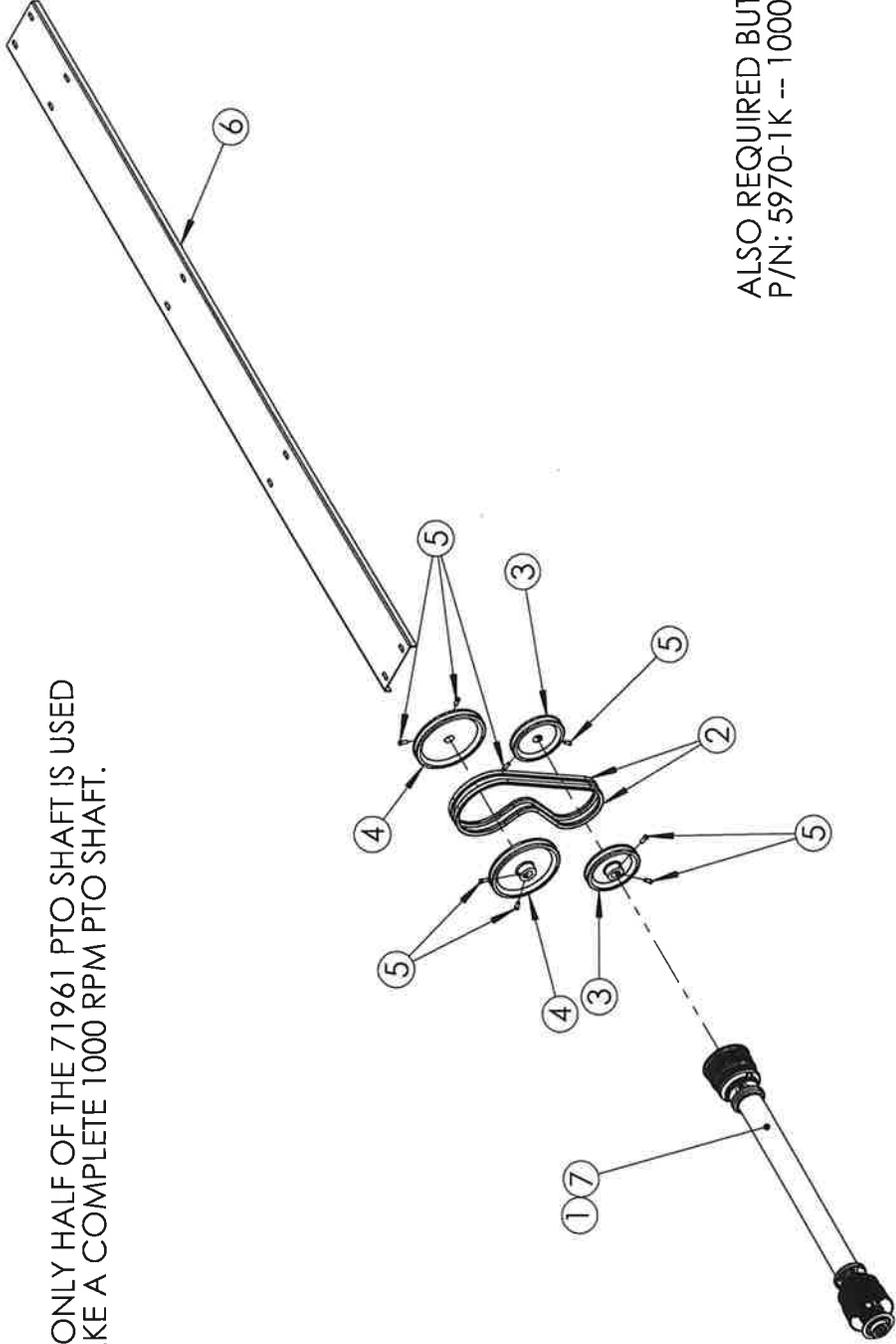


ALSO REQUIRED BUT NOT SHOWN:
P/N: 10346B -- 540 RPM DECAL -- QTY 1

1000 RPM PTO SPREADER (HIGH CLEARANCE) (OPTIONAL) P/N: 48101000

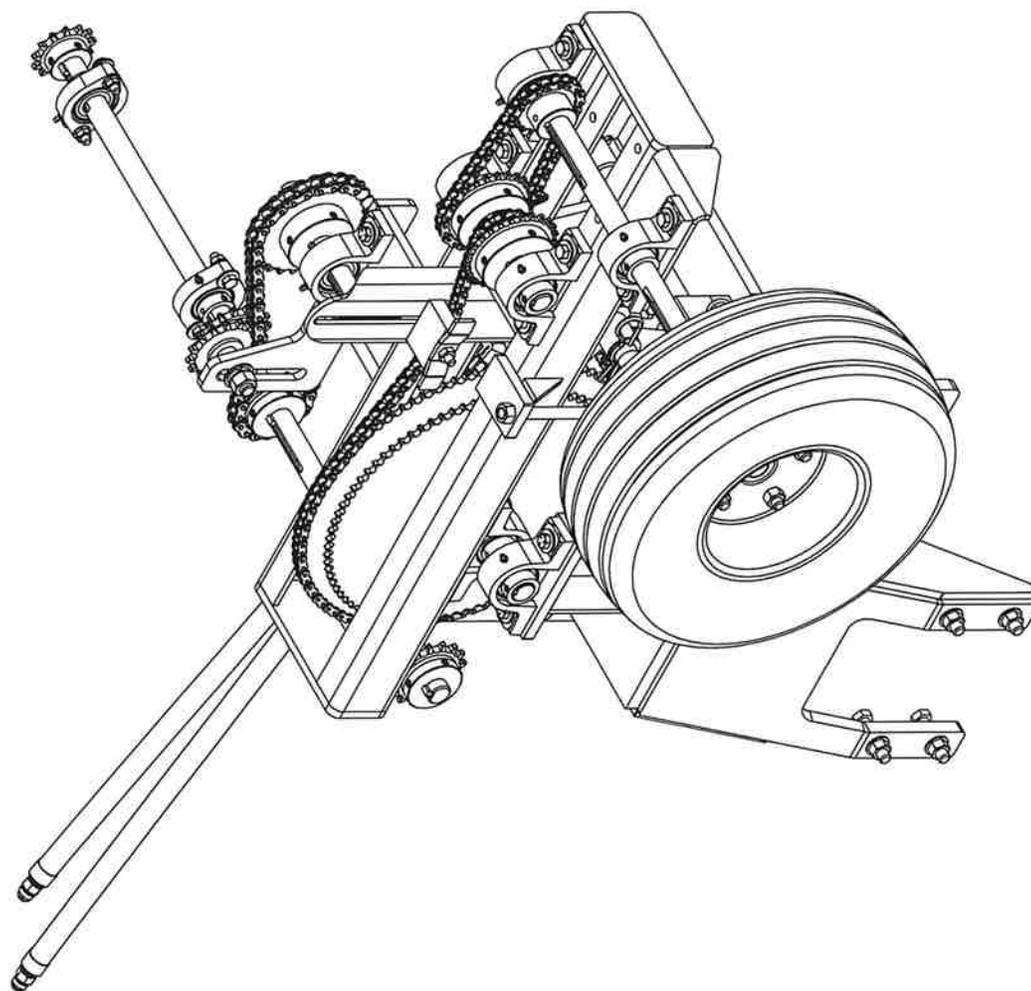
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71961	PTO SHAFT ASSEMBLY, 540 RPM	1
2	31208	BELT, B43 (46" OUTSIDE)	2
3	10328	PULLEY, 5.4 PITCH DIA	2
4	10093	PULLEY, 7.4 PITCH DIA	2
5	18767450	SETSCREW, 5/16 X 3/4 SQHD	8
6	47019624	SHIELD, LINE SHAFT (HC SPREADERS)	1
7	71962	PTO SHAFT, 1000 RPM HALF	1

NOTE: ONLY HALF OF THE 71961 PTO SHAFT IS USED TO MAKE A COMPLETE 1000 RPM PTO SHAFT.



ALSO REQUIRED BUT NOT SHOWN:
P/N: 5970-1K -- 1000 RPM DECAL -- QTY 1

HYDRAULIC APRON DRIVE ASSEMBLY
AG-X10 HC / AG-800 HC
P/N: 48000024



HYDRAULIC APRON DRIVE ASSEMBLY

AG-X10 HC / AG-800 HC

P/N: 48000024

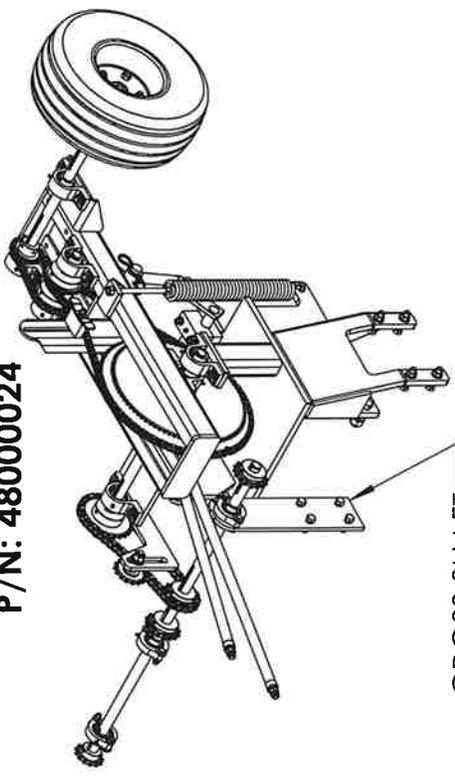
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47015810	GWD BRACKET WELDMENT	1
2	47005873	UPPER FRAME, APRON DRIVE	1
3	47005955	HIGHWAY SUPPORT LOCK WELDMENT	1
4	47006105	SHAFT, GROUND WHEEL DRIVE	2
5	47003722	WHEEL HUB WELDT, HC SPREADERS	1
6	44105519	WHEEL ASSEMBLY	1
7	47007573	SPROCKET, #50 X 26T W/ 1" SHAFT	1
8	47006519	KEY, SQUARE (1/4 X 1 1/2)	5
9	47007579	SPROCKET WELDT (40-18T)	1
10	47009800	JACK SHAFT	1
11	47009029	ADJUSTING BOLT, FEMALE	1
12	47009026	ADJUSTING BOLT	1
13	47009038	CHAIN TIGHTENER BOLT	1
14	47009589	WING NUT WELDMENT	1
15	47007958	SPACER, PULLEY	1
16	47009910	SPRING BOLT	1
17	47003049	LIFT ARM	1
18	47009958	CYLINDER ARM WELDMENT	1
19	47005437	CYLINDER 1.5 X 4	1
20	47007574	SPROCKET	3
21	47025841	SHAFT, SPREADER BOX CROSSOVER	1
22	47005840	CROSS-SHAFT MOUNT BAR	1
23	05239	PILLOW BLOCK 1" BEARING	8
24	18051628	BOLT HX 3/8 X 1-3/4	4
25	18811200	WASHER FLAT USS ZC 3/8	22
26	18496800	FLANGE NUT, 3/8-16 NC	24
27	18056826	BOLT HX CAP G5 NC ZC 3/8 X 1 1/2 LG	18
28	18057938	BOLT, HEX HD 5/8 X 3 ZC	2
29	18407900	NUT, HX, 5/8 NCSC G5	2
30	18572000	PIN, D-RING 5/16 DIA X 1 3/4 LG	1
31	18901805	GREASE ZERK, 1/4-28, STRAIGHT	4
32	31515	DRIVE SPROCKET, CONVEYOR	1
33	10106	SPROCKET, 50B13	1
34	34307	SPROCKET, 40B15	1
35	30894	SPROCKET, 40B25	2
36	34318	SPROCKET, #50 IDLER 15T	1
37	18851600	WASHER, FLAT 5/8 SAE	3
38	18891600	WASHER. LOCK 5/8 ZC	1
39	2-6640	DRIVE KEY 1/4 X 2 1/2	5

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
40	34325	WOOD BLOCK, CHAIN TIGHTENER	1
41	18057426	BOLT, HX CAP 1/2-13 X 1 1/2 LG	4
42	18497400	NUT, 1/2-13 SERR. FLANGE ZC	8
43	10500	BEARING, 2 HOLE FOR 1" SHAFT	3
44	18300322	WASHER N.R. MACH 14 GA X 1	3
45	36995	BEARING, WOOD (UPPER HALF)	1
46		BEARING, WOOD (LOWER HALF)	
47	18056850	BOLT, 3/8-16NC X 4	2
48	18541642	CLEVIS PIN, 5/8 X 2 1/2	2
49	18560622	COTTER PIN, 1/8 X 1	2
50	00306-30	LIFT SPRING W/ INSERT	1
51	18560826	COTTER PIN 3/16 X 1 1/2	1
52	18590148	HAIR PIN #9, .148 X 3	1
53	18590094	HAIRPIN BRIDGE #8	1
54	2501-06-06	ELBOW 90 DEG SWIVEL	2
55	604204	HYD. HOSE 1/4 X 204' #6 JICFS X 1/2 MPT	2
56	30925	ROLLER CHAIN #40 SS (64" LG)	5.4'
57	30925	ROLLER CHAIN NO. 40 SS (22 7/8" LG)	2'
58	31028	CONNECTOR LINK, #40 SS	2
59	31029	OFFSET LINK, #40 SS	2
60	31027	ROLLER CHAIN #50 SS (36 1/2" LG)	3.1'
61	31212	CONNECTOR LINK #50 SS	1
62	31213	OFFSET LINK, #50 SS	1
63	18057432A	BOLT HX CAP GR5 NC ZC 12 X 2 1/4	4
64	18058434	BOLT, HX CAP 3/4 X 2 1/2 GR 5 NC ZC	3
65	18891800	WASHER LOCK 3/4 ZC	3
66	18418400	NUT HX 3/4 NC ZC	3

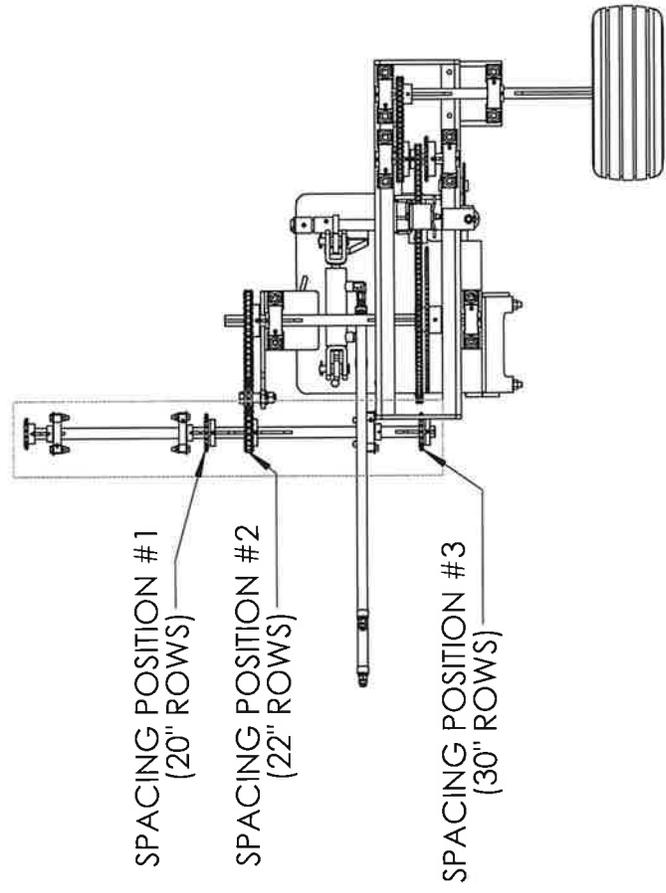
HYDRAULIC APRON DRIVE ASSEMBLY

AG-X10 HC / AG-800 HC

P/N: 48000024



CROSS SHAFT
MOUNT BAR
P/N: 47005840 (STANDARD)
P/N: 47003255 (WEIGHFRAME)

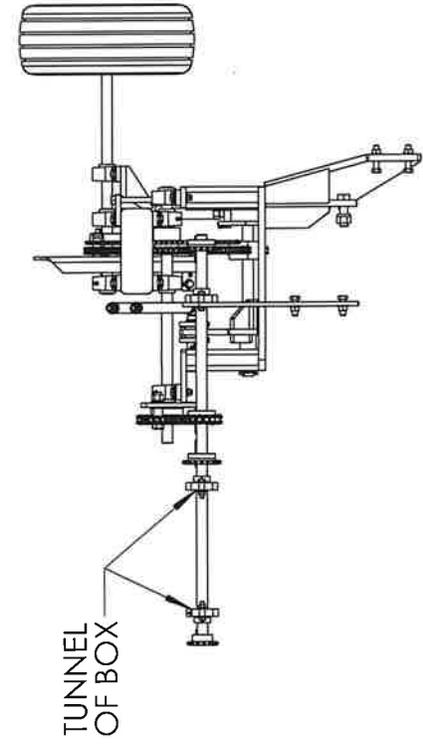


SPACING POSITION #1
(20" ROWS)

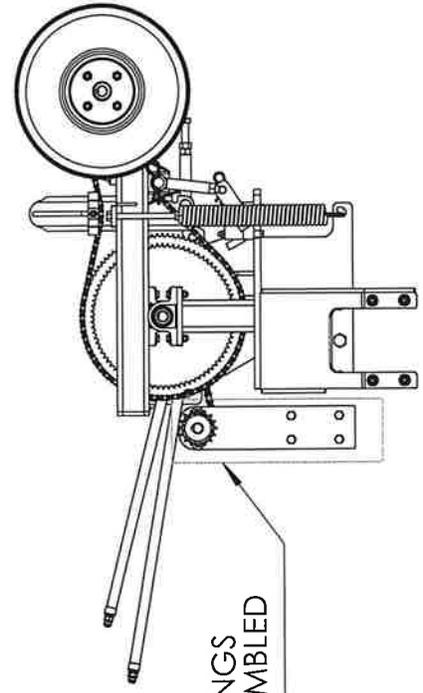
SPACING POSITION #2
(22" ROWS)

SPACING POSITION #3
(30" ROWS)

ALL P/N: 05239 BEARINGS POINT AWAY
FROM DOUBLE SPROCKET P/N: 31515



TUNNEL
OF BOX

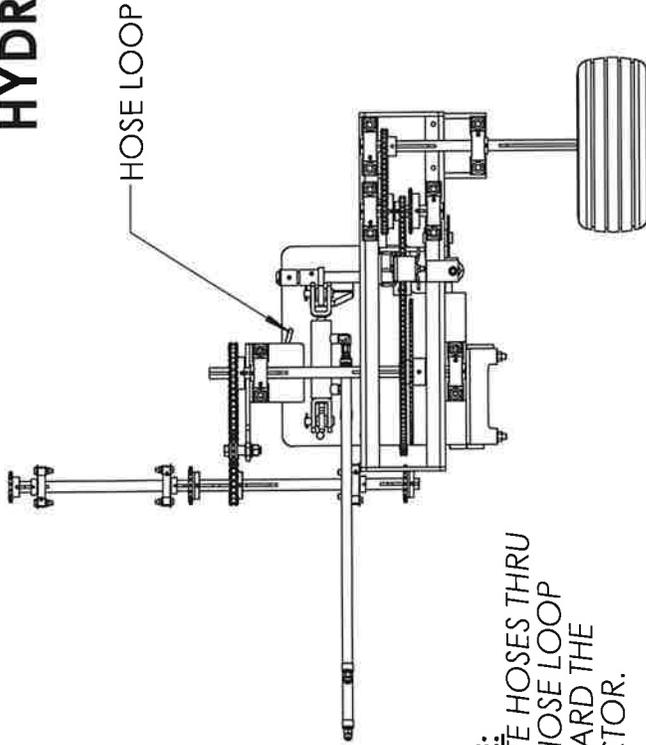


SHAFT/SPROCKET/BEARINGS
THRU TUNNELS ARE ASSEMBLED
AT FINAL ASSEMBLY

HYDRAULIC APRON DRIVE ASSEMBLY

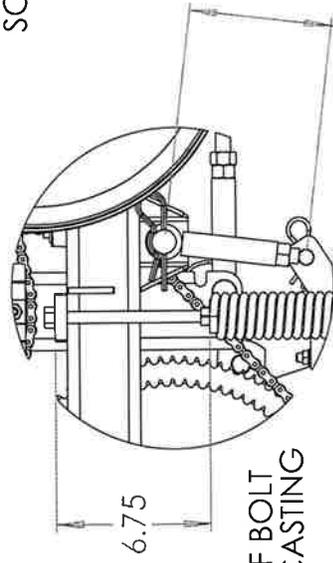
AG-X10 HC / AG-800 HC

P/N: 48000024



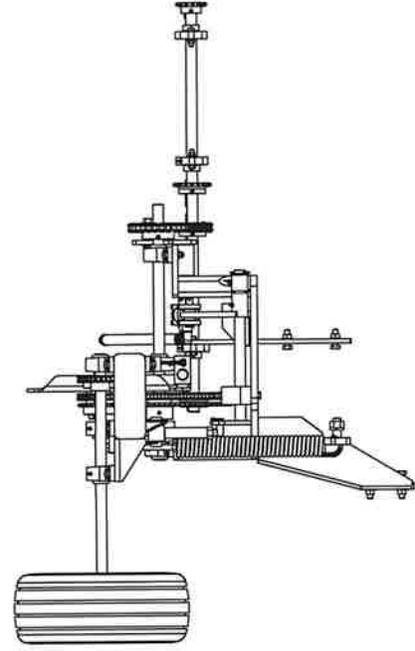
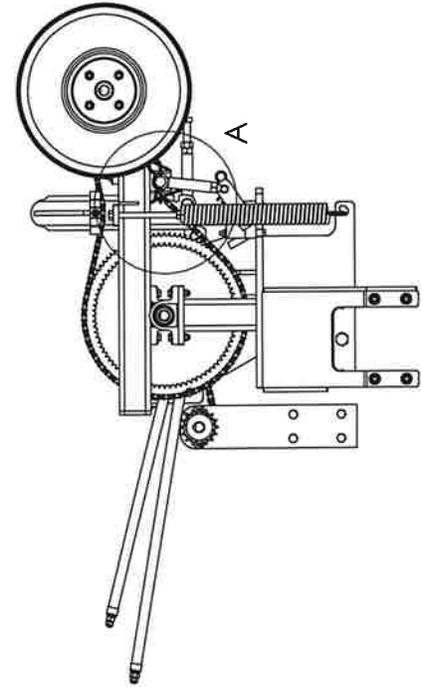
NOTE:
ROUTE HOSES THRU
THE HOSE LOOP
TOWARD THE
TRACTOR.

DETAIL A
SCALE 1 : 8



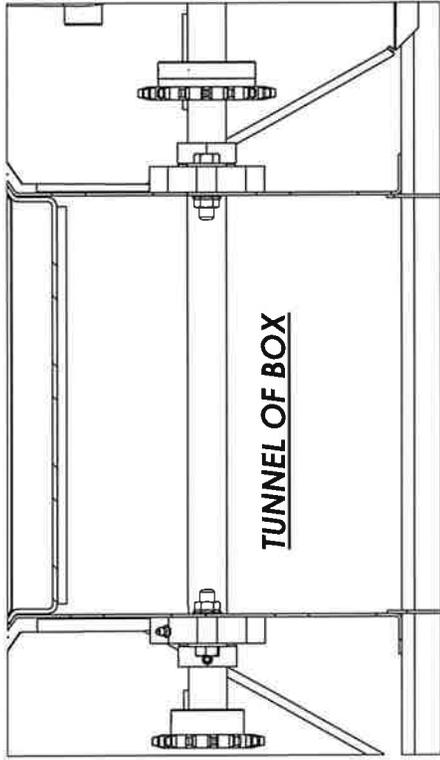
BOTTOM OF BOLT
TO TOP OF CASTING

6.00
PRESET DIM.
ADJUST AS
NEEDED

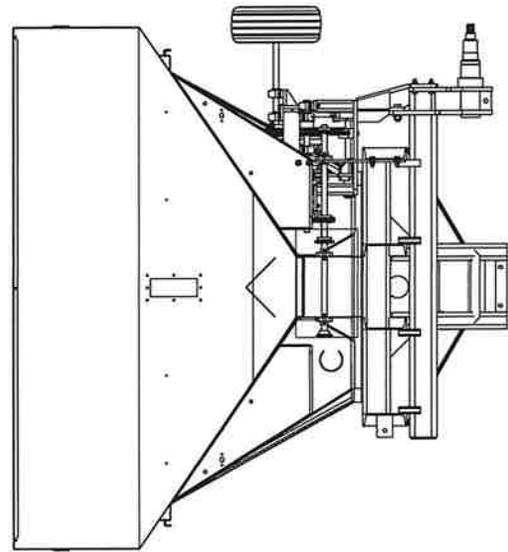
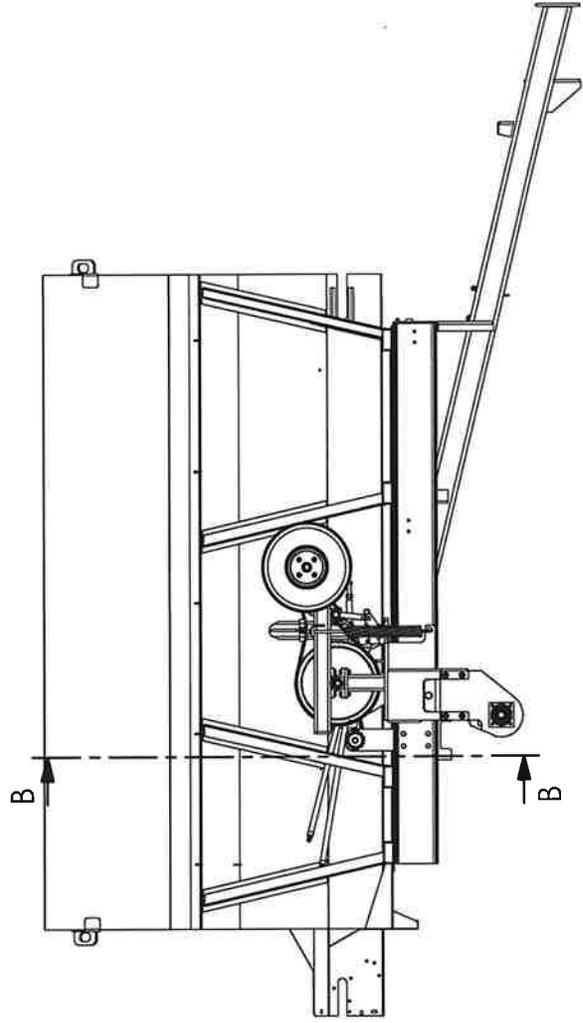


HYDRAULIC APRON DRIVE ASSEMBLY
AG-X10 HC / AG-800 HC
P/N: 48000024

PARTIALLY MOUNTED VIEW



DETAIL C
SCALE 1 : 5

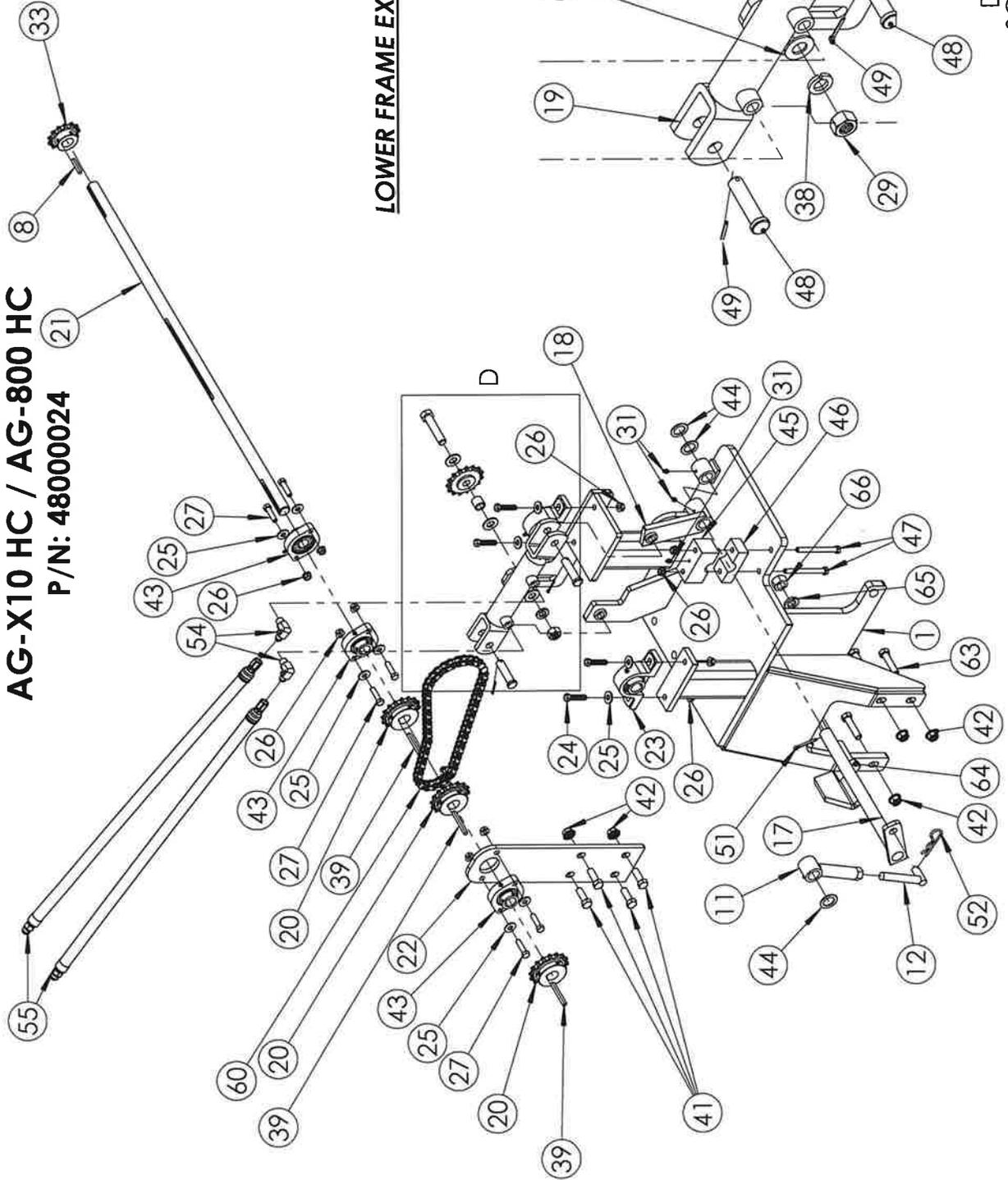


SECTION B-B

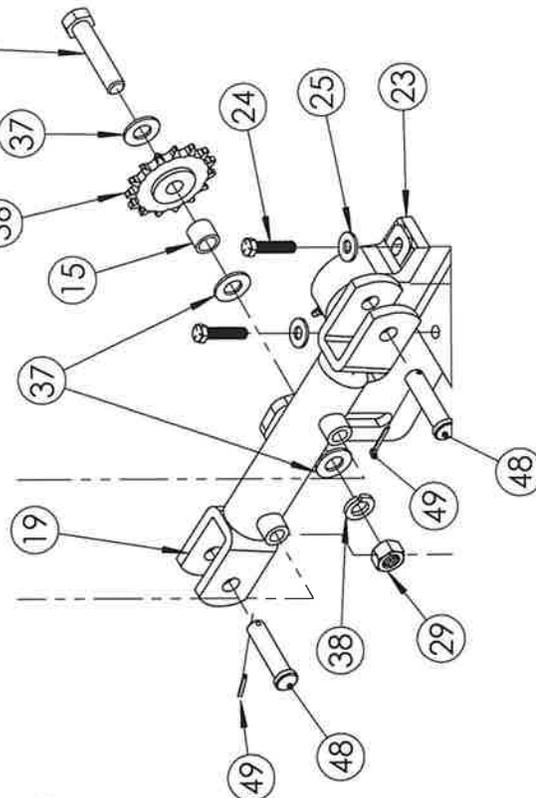
HYDRAULIC APRON DRIVE ASSEMBLY

AG-X10 HC / AG-800 HC

P/N: 48000024



LOWER FRAME EXPLODED

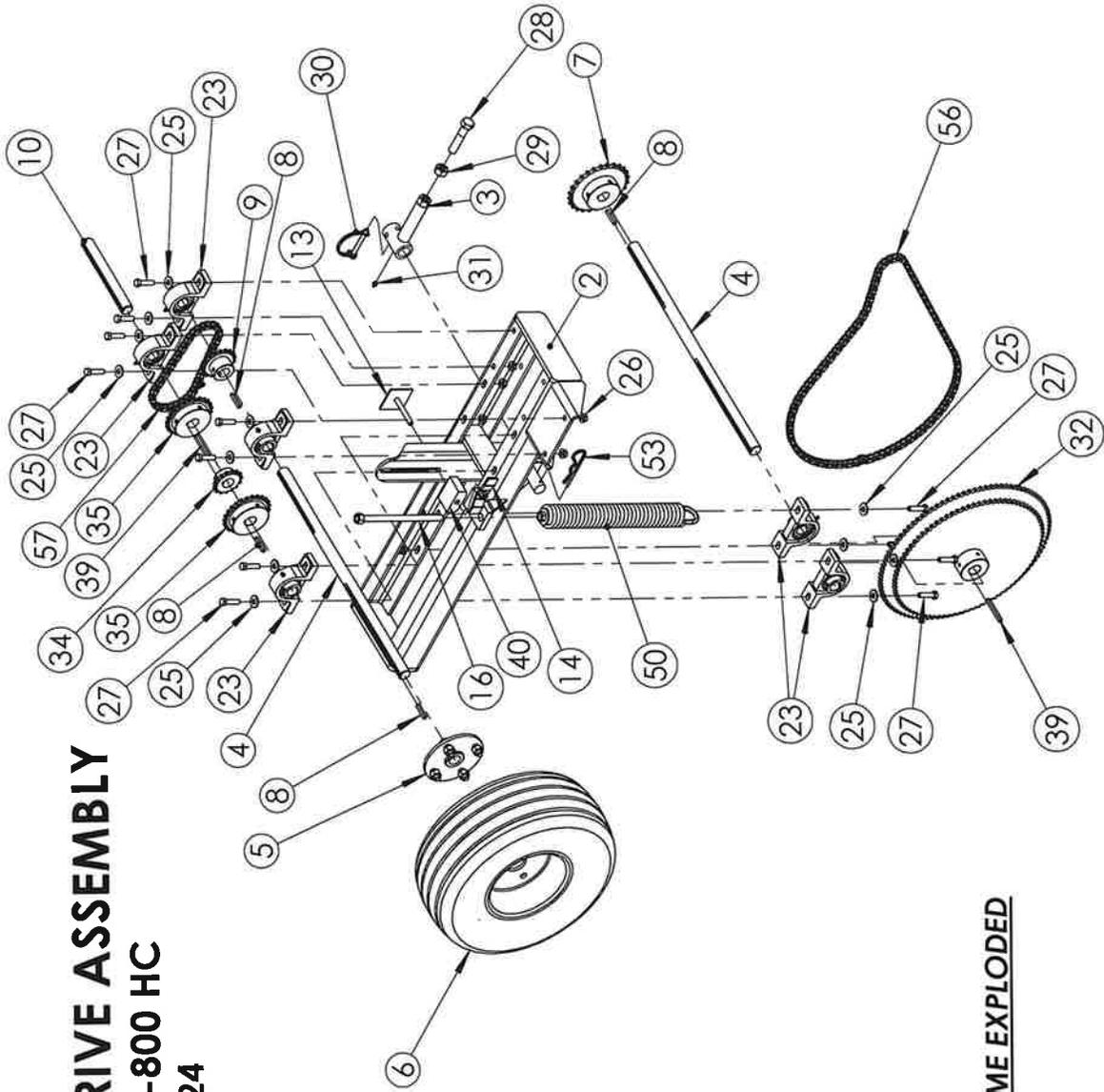


DETAIL D
SCALE 2:13

HYDRAULIC APRON DRIVE ASSEMBLY

AG-X10 HC / AG-800 HC

P/N: 48000024



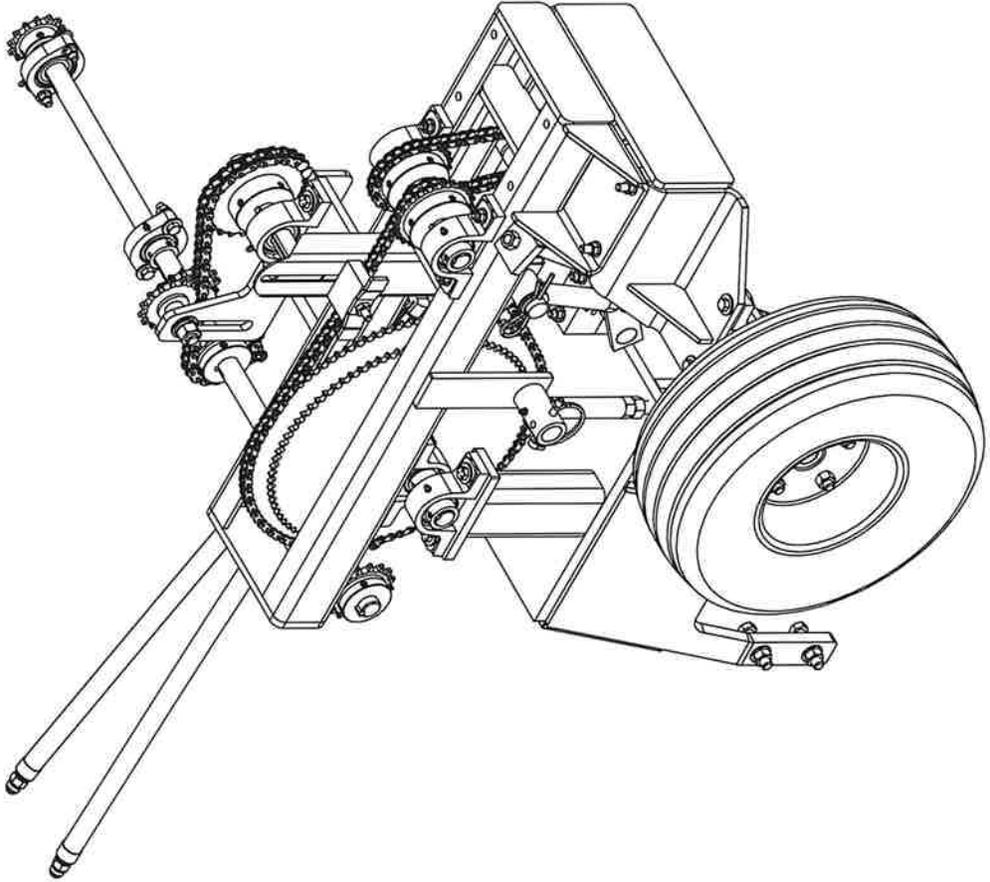
UPPER FRAME EXPLODED

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HYDRAULIC APRON DRIVE ASSEMBLY

AG-600 HC

P/N: 46000024



HYDRAULIC APRON DRIVE ASSEMBLY

AG-600 HC

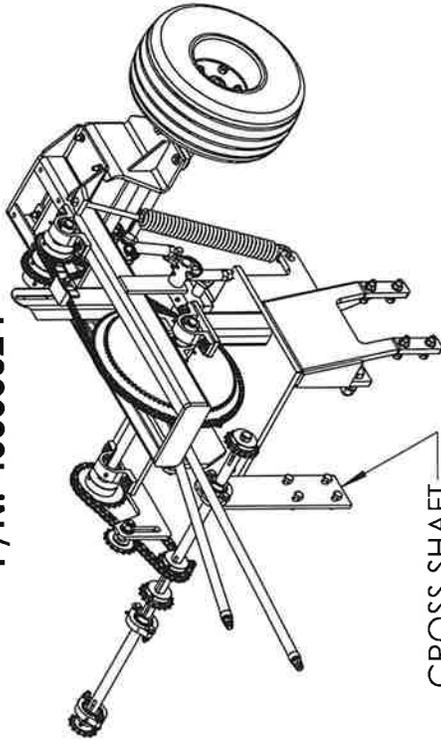
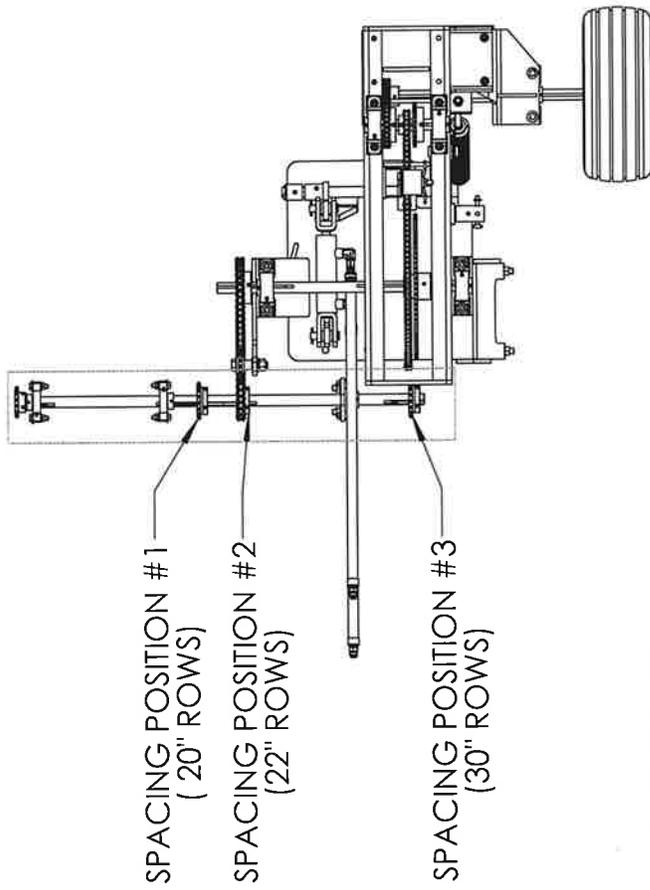
P/N: 46000024

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47015810	GWD BRACKET WELDMENT	1
2	47005848	UPPER FRAME, APRON DRIVE	1
3	47005950	APRON DRIVE MOUNT AG600HC	1
4	47005955	HIGHWAY SUPPORT LOCK WELDMENT	1
5	47006105	SHAFT, GROUND WHEEL DRIVE	2
6	47006519	KEY, SQUARE (1/4 X 1 1/2)	5
7	47007579	SPROCKET WELDT (40-18T)	1
8	47009800	JACK SHAFT	1
9	47009029	ADJUSTING BOLT, FEMALE	1
10	47009026	ADJUSTING BOLT	1
11	47009038	CHAIN TIGHTENER BOLT	1
12	47009589	WING NUT WELDMENT	1
13	47007958	SPACER, PULLEY	1
14	47009910	SPRING BOLT	1
15	47003049	LIFT ARM	1
16	47009958	CYLINDER ARM WELDMENT	1
17	47005437	CYLINDER 1.5 X 4	1
18	47007574	SPROCKET	3
19	47025841	SHAFT, SPREADER BOX CROSSOVER	1
20	47005840	CROSS-SHAFT MOUNT BAR	1
21	05239	PILLOW BLOCK 1" BEARING	8
22	18051628	BOLT HX 3/8 X 1-3/4	4
23	18811200	WASHER FLAT USS ZC 3/8	22
24	18496800	FLANGE NUT, 3/8-16 NC	28
25	18056826	BOLT HX CAP G5 NC ZC 3/8 X 1 1/2 LG	22
26	18057938	BOLT, HEX HD 5/8 X 3 ZC	2
27	18407900	NUT, HX, 5/8 NCSC G5	2
28	18572000	PIN, D-RING 5/16 DIA X 1 3/4 LG	1
29	18901805	GREASE ZERK, 1/4-28, STRAIGHT	4
30	47003722	WHEEL HUB WELDT, HC SPREADERS	1
31	44105519	WHEEL ASSEMBLY	1
32	47007573	SPROCKET, #50 X 26T W/ 1" SHAFT	1
33	18057426	BOLT, HX CAP 1/2-13 X 1 1/2 LG	4
34	18497400	NUT, 1/2-13 SERR. FLANGE ZC	8
35	10500	BEARING, 2 HOLE FOR 1" SHAFT	3
36	31515	DRIVE SPROCKET, CONVEYOR	1
37	10106	SPROCKET, 50B13	1
38	34307	SPROCKET, 40B15	1
39	30894	SPROCKET, 40B25	2
40	34318	SPROCKET, #50 IDLER 15T	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
41	18851600	WASHER, FLAT 5/8 SAE	3
42	18891600	WASHER, LOCK 5/8 ZC	1
43	2-6640	DRIVE KEY 1/4 X 2 1/2	5
44	18300322	WASHER N.R. MACH 14 GA X 1	3
45	18590094	HAIRPIN BRIDGE #8	1
46	18590148	HAIR PIN #9, .148 X 3	1
47	18560826	COTTER PIN 3/16 X 1 1/2	1
48	18541642	CLEVIS PIN, 5/8 X 2 1/2	2
49	18560722	COTTER PIN, 5/32 X 1	2
50	36995	BEARING, WOOD (UPPER HALF)	1
51		BEARING, WOOD (LOWER HALF)	
52	18056850	BOLT, 3/8-16NC X 4	2
53	2501-06-06	ELBOW 90 DEG SWIVEL	2
54	34325	WOOD BLOCK, CHAIN TIGHTENER	1
55	30925	ROLLER CHAIN #40 SS (64" LG)	5.4'
56	30925	ROLLER CHAIN NO. 40 SS (31 7/8' LG)	2.7'
57	31028	CONNECTOR LINK, #40 SS	2
58	31029	OFFSET LINK, #40 SS	2
59	31027	ROLLER CHAIN #50 SS (36 1/2" LG)	3.1'
60	31212	CONNECTOR LINK #50 SS	1
61	31213	OFFSET LINK, #50 SS	1
62	00306-30	LIFT SPRING W/ INSERT	1
63	604204	HYD. HOSE 1/4 X 204" #6 JICFS X 1/2 MPT	2
64	18057432A	BOLT HX CAP GR5 NC ZC 12 X 2 1/4	4
65	18058434	BOLT, HX CAP 3/4 X 2 1/2 GR 5 NC ZC	3
66	18891800	WASHER LOCK 3/4 ZC	3
67	18418400	NUT HX 3/4 NC ZC	3

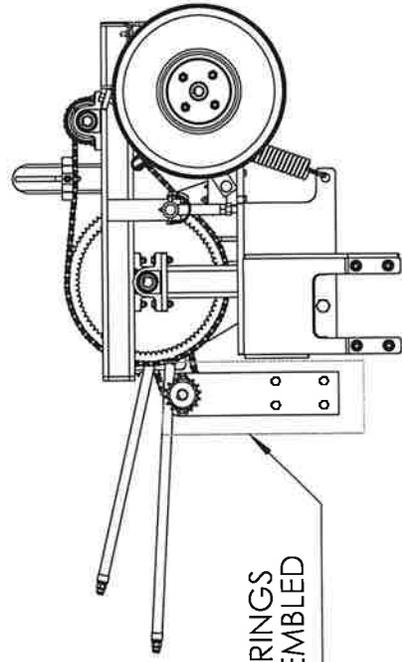
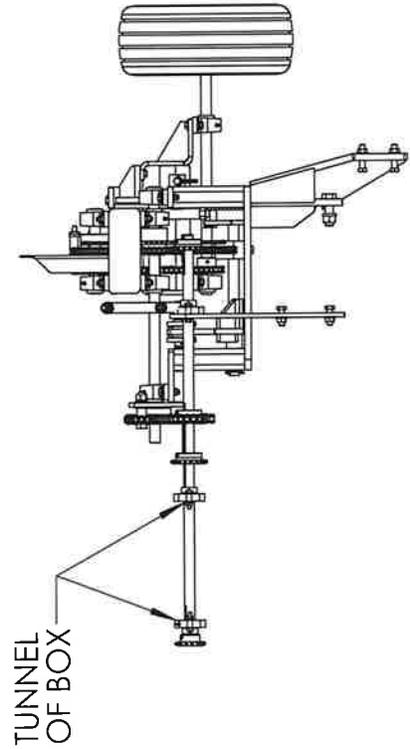
HYDRAULIC APRON DRIVE ASSEMBLY

AG-600 HC
P/N: 46000024



P/N: 47005840 (STANDARD)
P/N: 47003255 (WEIGHFRAME)

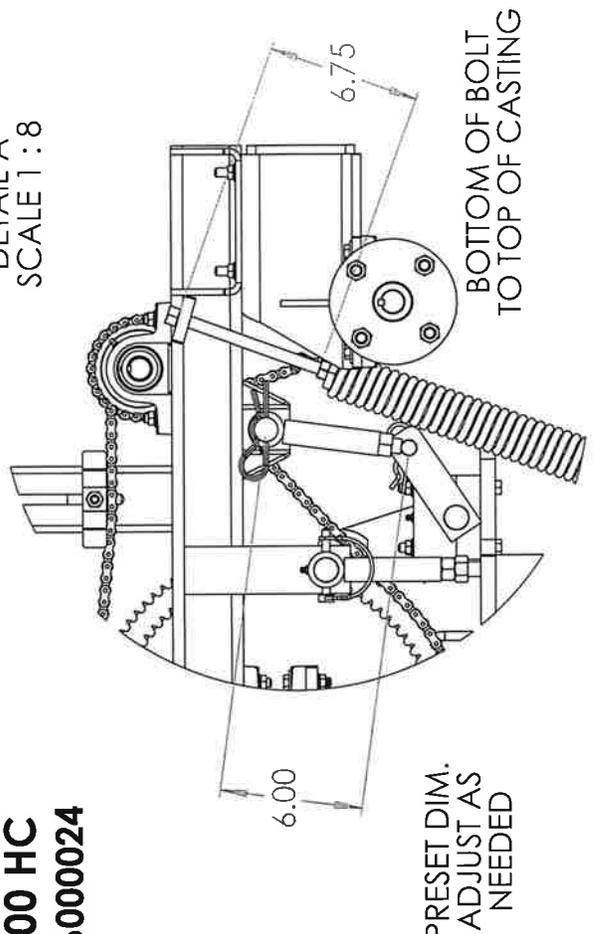
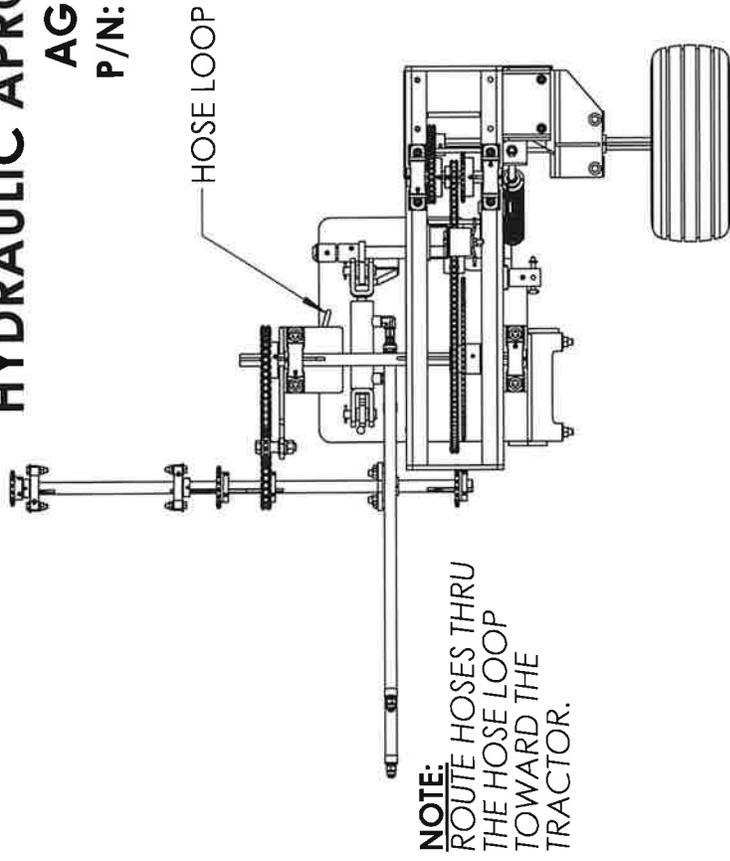
ALL P/N: 05239 BEARINGS POINT AWAY
FROM DOUBLE SPROCKET P/N: 31515



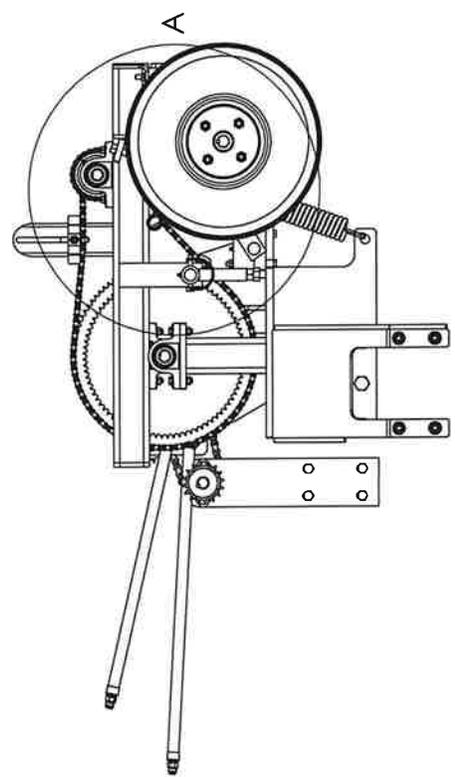
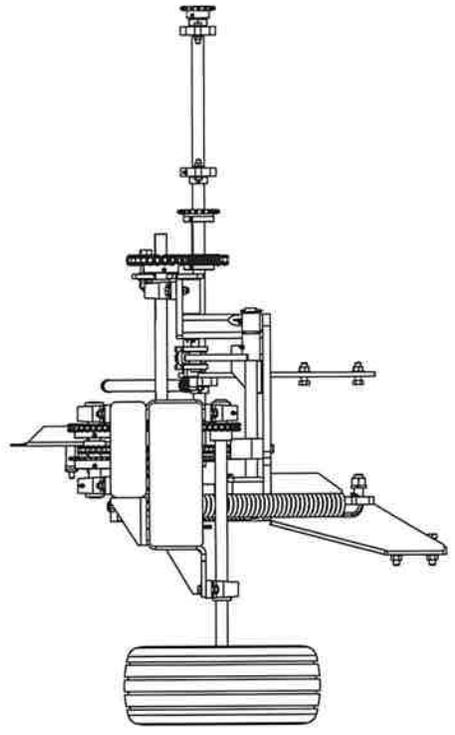
HYDRAULIC APRON DRIVE ASSEMBLY

AG-600 HC
P/N: 46000024

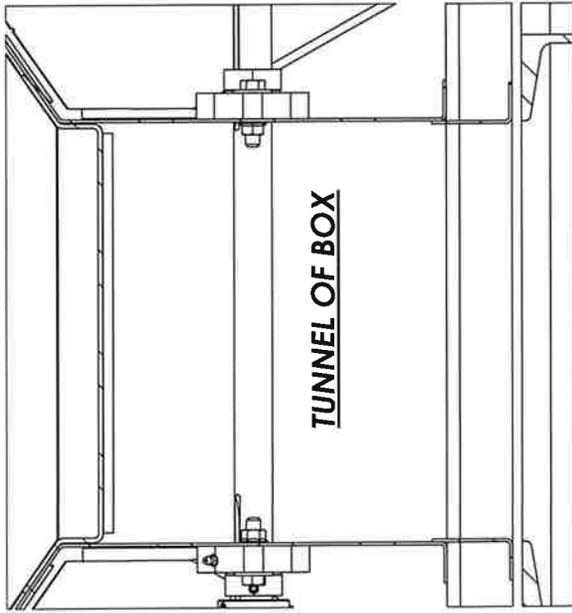
DETAIL A
SCALE 1 : 8



BOTTOM OF BOLT
TO TOP OF CASTING

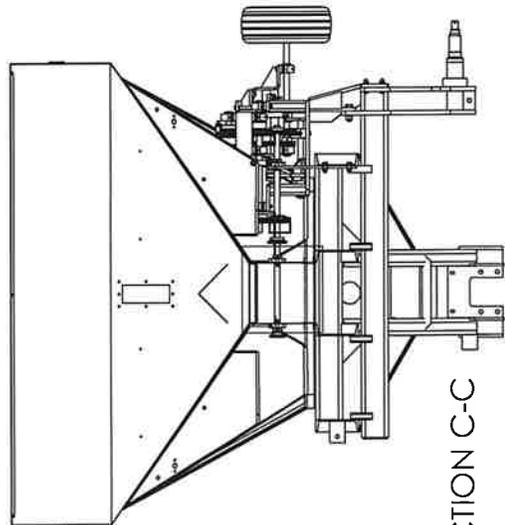
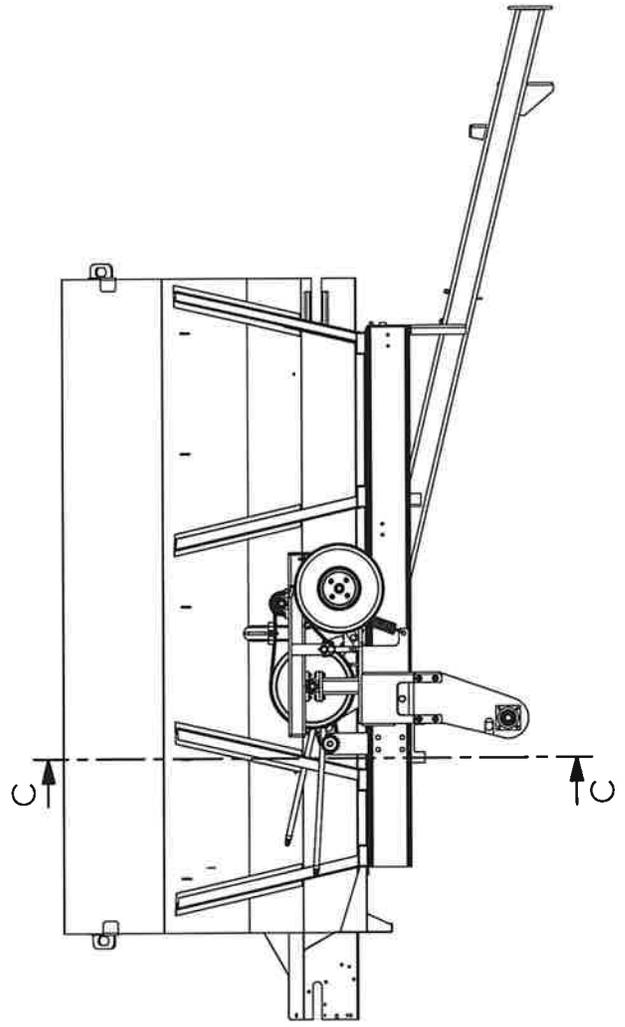


HYDRAULIC APRON DRIVE ASSEMBLY
AG-600 HC
P/N: 46000024



DETAIL D
SCALE 1 : 5

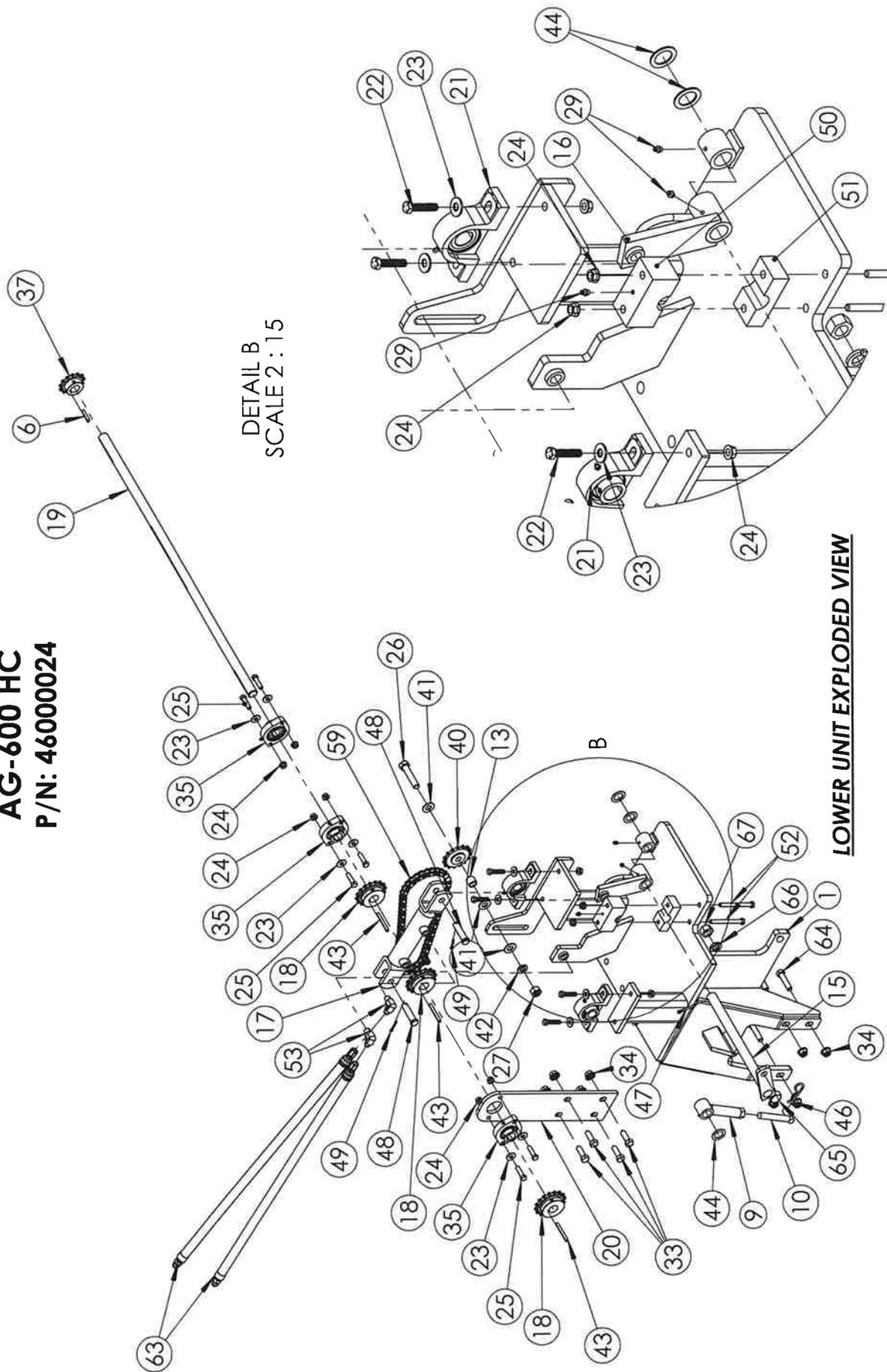
PARTIALLY MOUNTED VIEW



HYDRAULIC APRON DRIVE ASSEMBLY

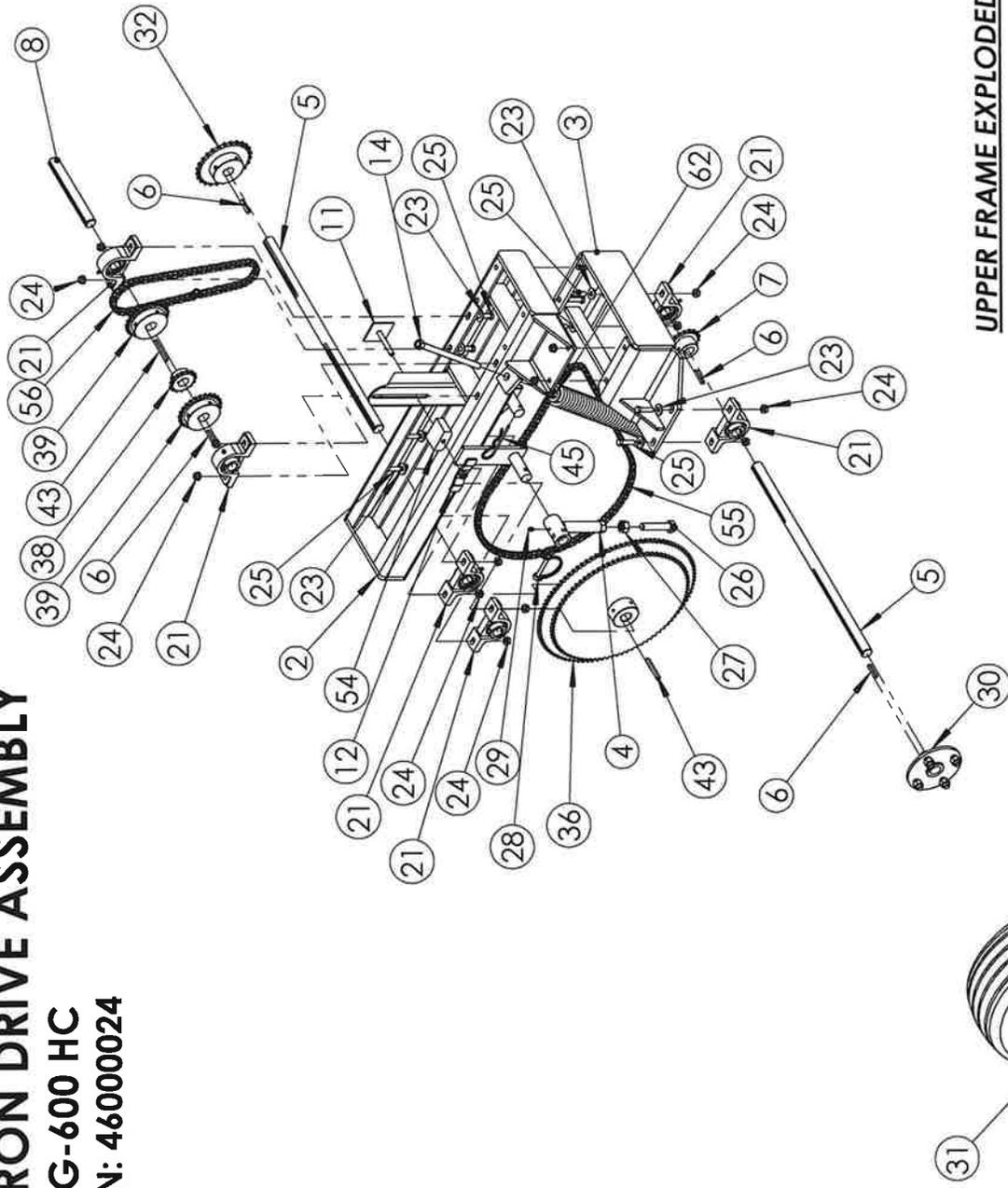
AG-600 HC

P/N: 46000024



HYDRAULIC APRON DRIVE ASSEMBLY

AG-600 HC
P/N: 46000024



UPPER FRAME EXPLODED VIEW

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HYDRAULIC APRON DRIVE W/ PWM SPEED CONTROL P/N: 48020899

NOTES:

KIT INCLUDES ITEMS 1-12, 15-18, 22-34 & 36-38

**ALSO INCLUDED BUT NOT SHOWN
QTY 1 P/N: 115-0159-0787 - FLOW CABLE 21'**

ITEM 12 IS INCLUDED WITH ITEM 11

ITEMS 19-21 ARE SHOWN FOR REFERENCE ONLY

SEE PRINT 5198 TO POSITION ITEMS 6, 15 & 17 -18

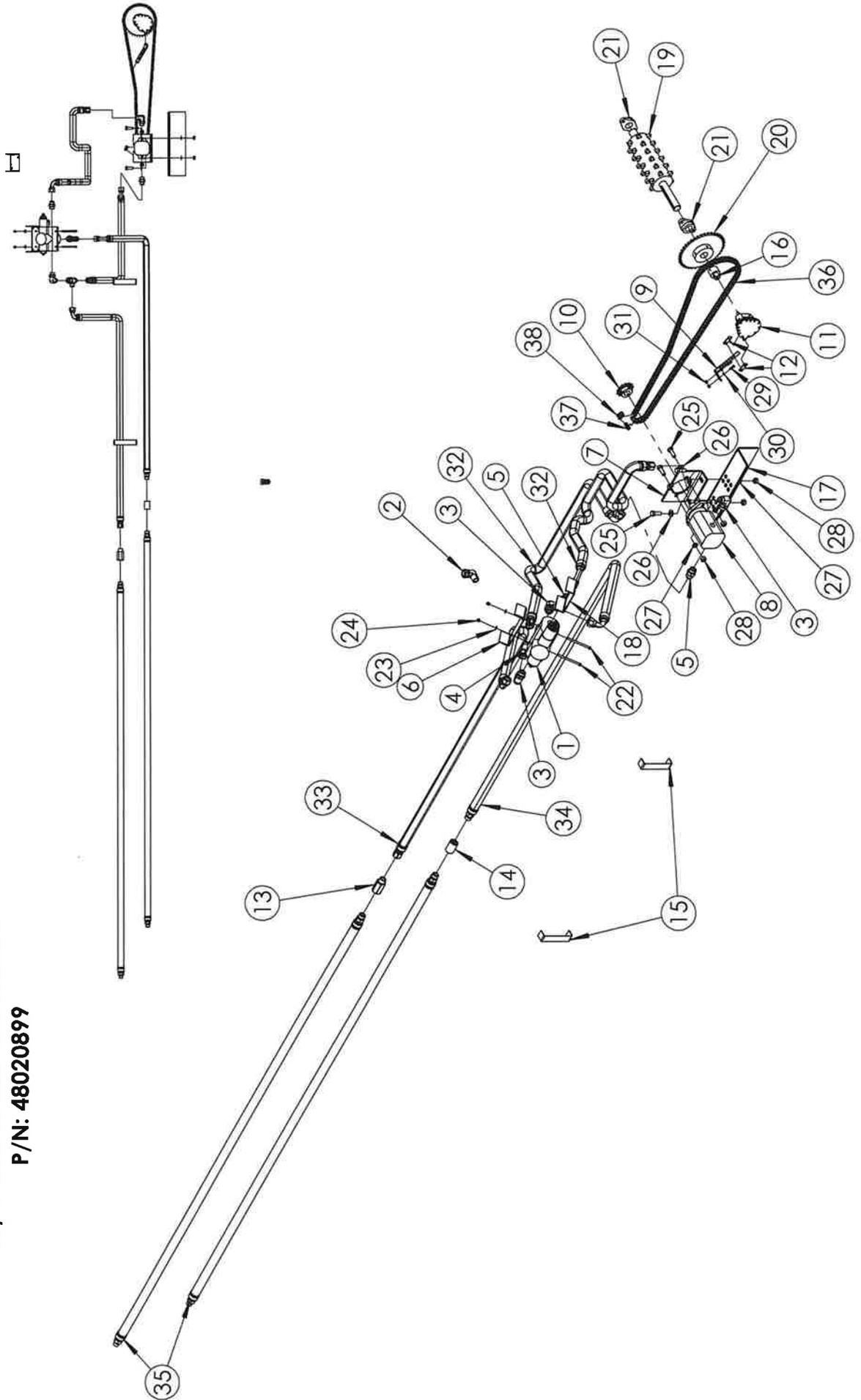
FOR UNITS 2015 & NEWER

**FOR HYD APRON DRIVE ONLY AND NO HYD
DISTRIBUTOR DRIVE USE ITEMS 13-14 & 35**

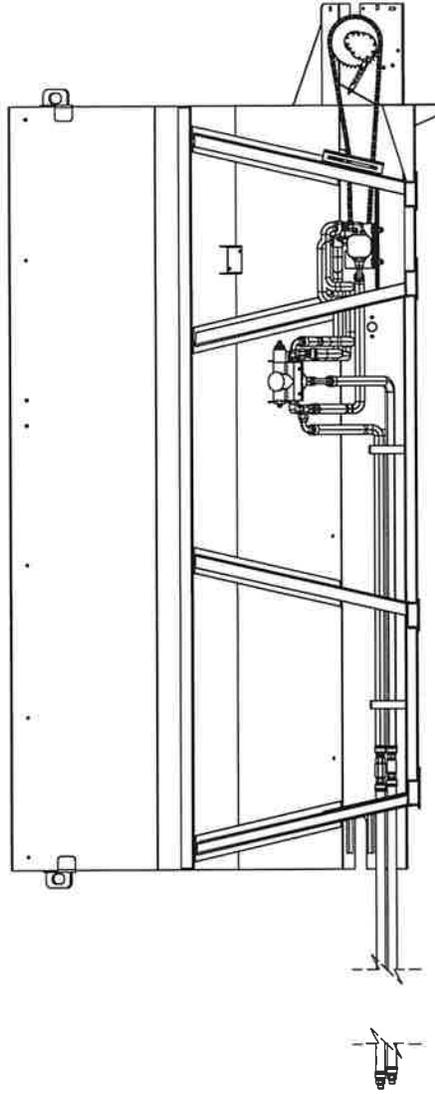
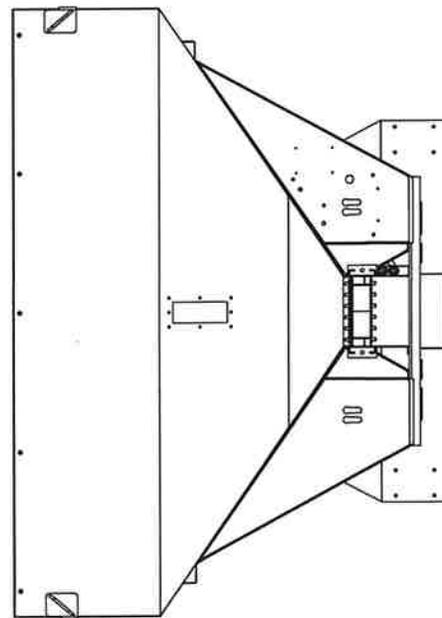
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	063-0171-843	PVM VALVE, 15 GPM	1
2	1501-12-12	MALE PIPE ELBOW SWIVEL	1
3	445001	ELBOW #12 MJIC X #12 M O-RING (6801-12-12)	3
4	6602-12-12-12	SWIVEL NUT RUN TEE	1
5	6400-12-12	ADAPTER #12 MJIC TO #12 MORB	2
6	47003853	CONVEYOR CONTROL BRACKET	1
7	47005190	CONVEYOR MOUNT BRACKET	1
8	51930	HYDRAULC MOTOR (APRON CONVEYOR)	1
9	47003903	ENCODER MOUNT BRACKET	1
10	10106	SPROCKET, 50B13	1
11	063-0171-071	ENCODER	1
12	063-0171-071R	RUBBER MTG STRIP (INC. W/ ENCODER)	2
13	LT-75-00N	CHECK VALVE	1
14	100372	HIGH-PRESSURE GALVANIZED STEEL PIPE FITTING	1
15	5197	HOSE GUIDE BRACKET	2
16	47007970	1 1/4" COUPLER (GRAN. ENCODER)	1
17	47005193	CONVEYOR MOTOR MOUNT SUPPORT	1
18	2-5192	FLOW REGULATOR MOUNT	1
19	03301B	DRIVE ROLLER ASSEMBLY	1
20	31440	DRIVE SPROCKET #50 X 40 TOOTH	1
21	30708	FLANGE BEARING, 2 HOLE-1 1/4" DIA	2
22	18474400	BOLT SS CAP 1/4-20 X 4" LG	2
23	18881001	WASHER FLAT 1/4 SS	2
24	18569200	NUT 1/4 NYLOCK SS	2
25	18022026	BOLT SS HX 1/2 X 1 1/2	4
26	18824800	WASHER FLAT 1/2 SS	4
27	18991400	WASHER LOCK 1/2 SS	4
28	18997400	NUT, HEX 1/2-13 NC SS	4
29	18025715	BOLT #10-24 X 3/4 LG SS	2
30	18812300	WASHER, FLAT #10 ZC	2
31	18987800	FLANGE NUT #10-24 SS	2

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
32	632036	HOSE 3/4 X 36, #12 JICFS 90 DEG X #12 JICFS	2
33	612108	HOSE, 3/4 X 108 #12 JICFS 90 X 3/4 F PIPE	1
34	611120	HOSE, 3/4 X 120 #12 JICFS X 3/4 M PIPE	1
35	610096	HOSE 3/4 X 96, 3/4 MNPT X 1/2 MNPT	2
36	31027	ROLLER CHAIN SS #50 X 84" LG	1
37	31212	CONNECTOR LINK #50 SS	1
38	31213	OFFSET LINK, #50 SS	1

**HYDRAULIC APRON DRIVE
W/ PWM SPEED CONTROL
P/N: 48020899**



**HYDRAULIC APRON DRIVE
W/ PWM SPEED CONTROL
P/N: 48020899**



HYDRAULIC APRON DRIVE W/ PWM SPEED CONTROL (REF. PRINT 5198)

P/N: 48020899

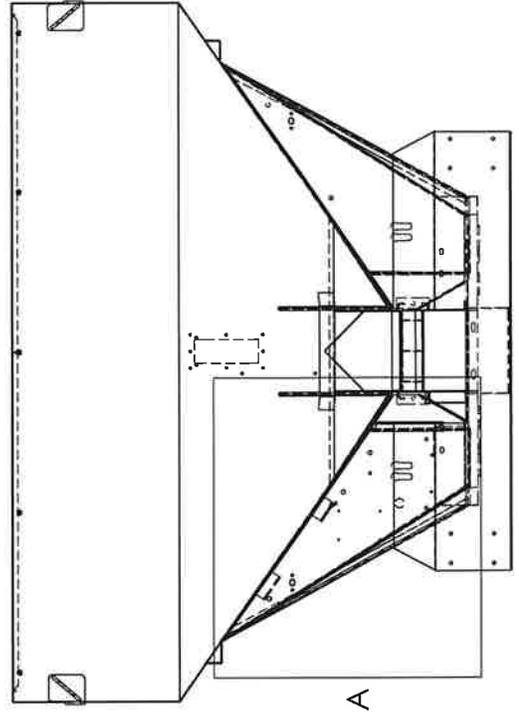
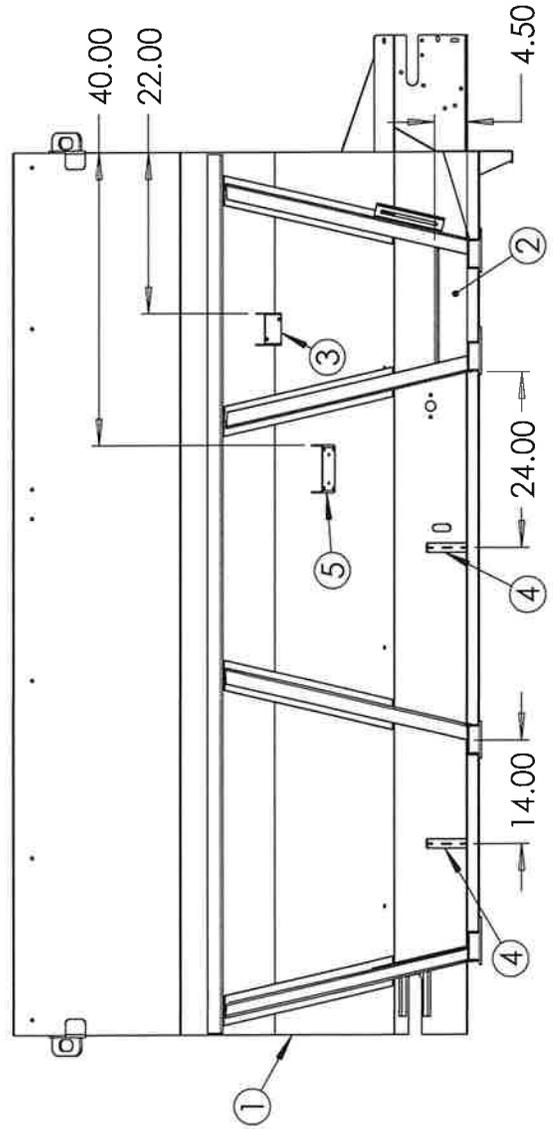
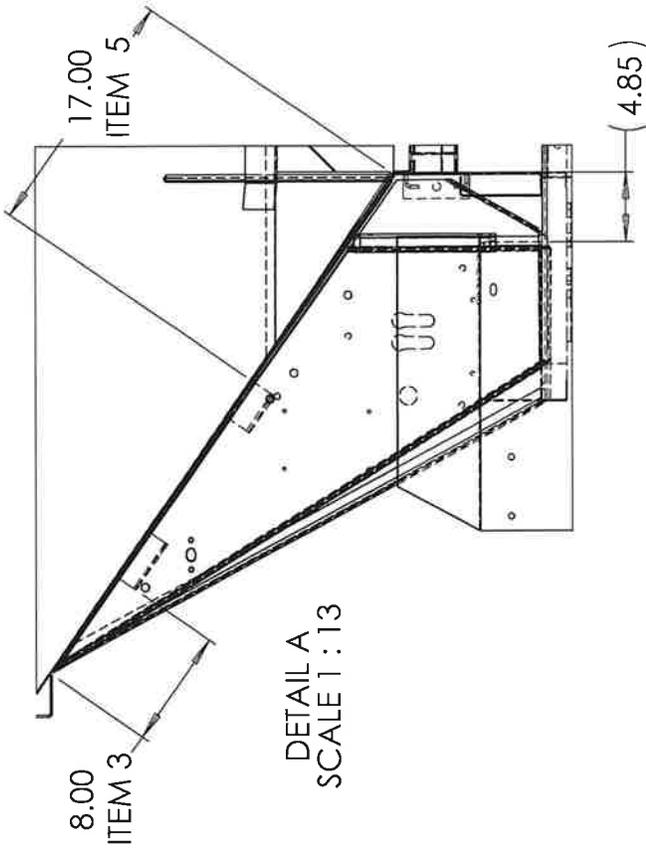
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009000 *	FERTILIZER BOX, 8 TON	1
2	47005193	CONVEYOR MOTOR MOUNT SUPPORT	1
3	2-5192	FLOW REGULATOR MOUNT	1
4	5197	HOSE GUIDE BRACKET	2
5	47003853 **	CONVEYOR CONTROL BRACKET	1

NOTES:

* **ITEM 1** SHOWN FOR REFERENCE ONLY

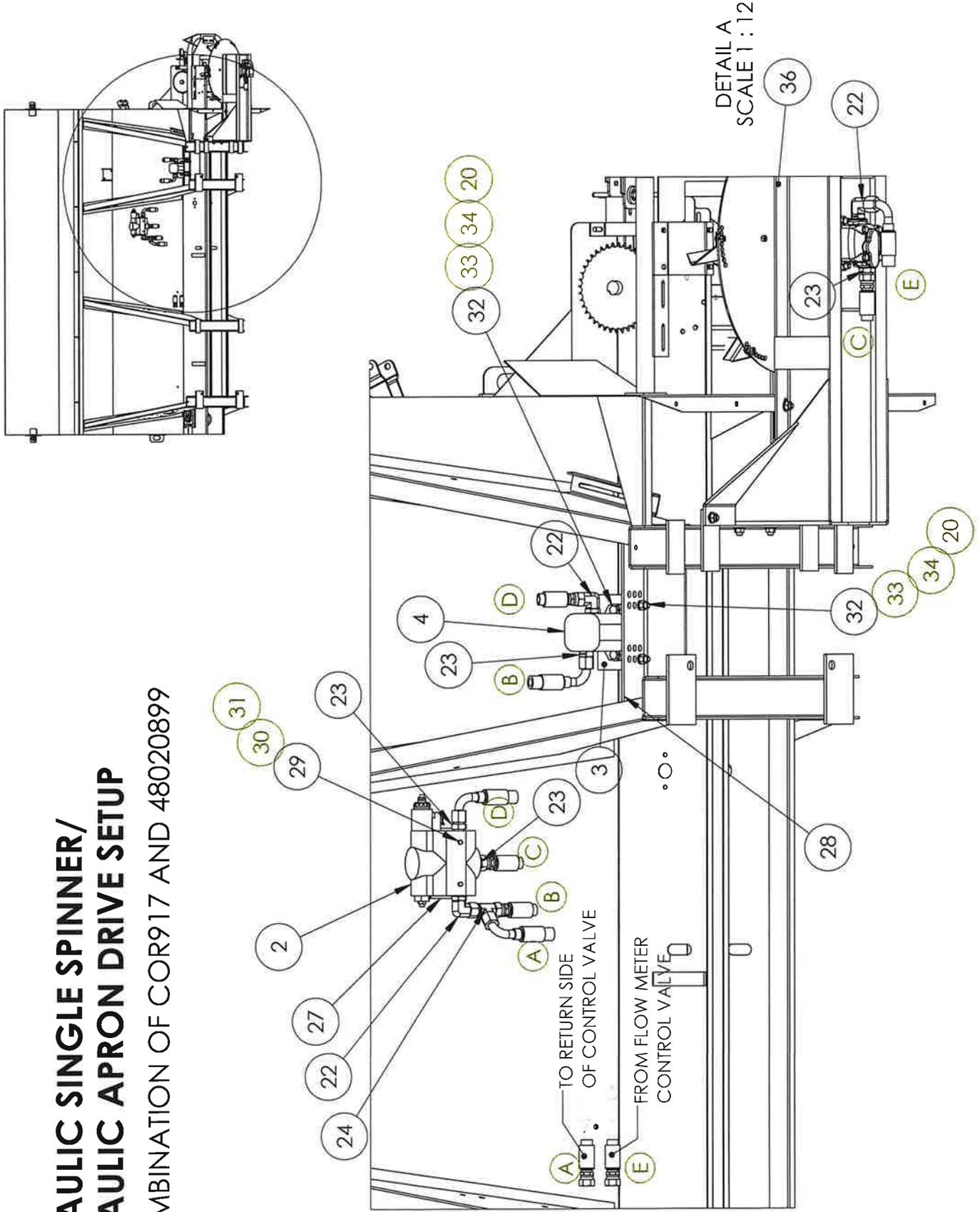
** **47003853** NEEDED ONLY FOR RAVEN HYD.

SERVO USED WITH THE APRON DRIVE HYD. SPEED CONTROL OPTION.



HYDRAULIC SINGLE SPINNER/ HYDRAULIC APRON DRIVE SETUP

COMBINATION OF COR917 AND 48020899



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°

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	HYDRAULC 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	ADAPTER #12 MJIC TO #12 MORB	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

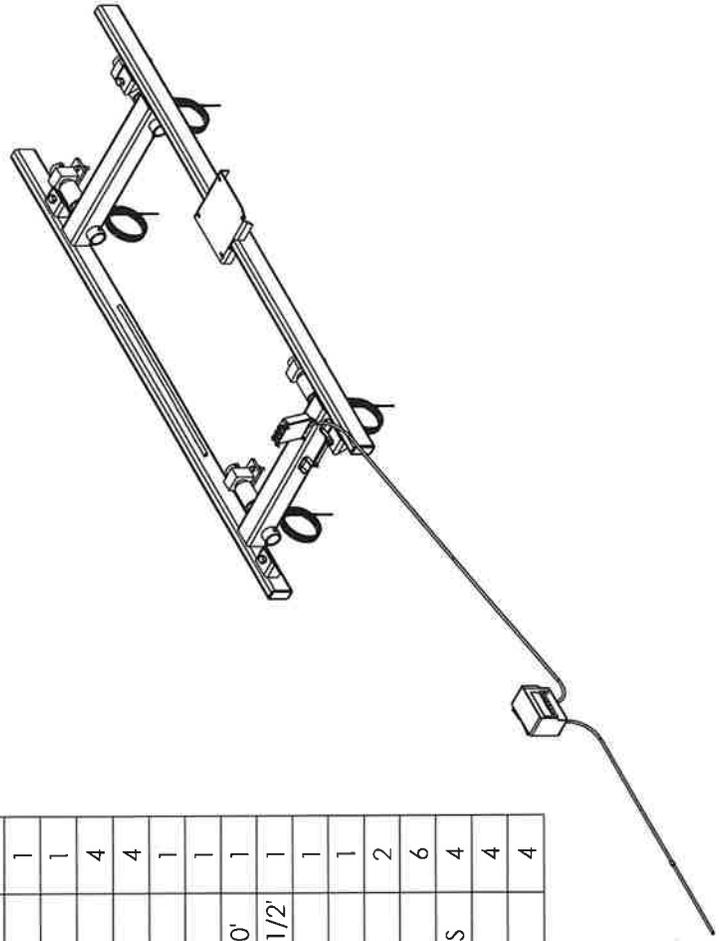
OPTIONAL SCALE PACKAGE

AG-X10 HC / AG-800 HC / AG-600 HC

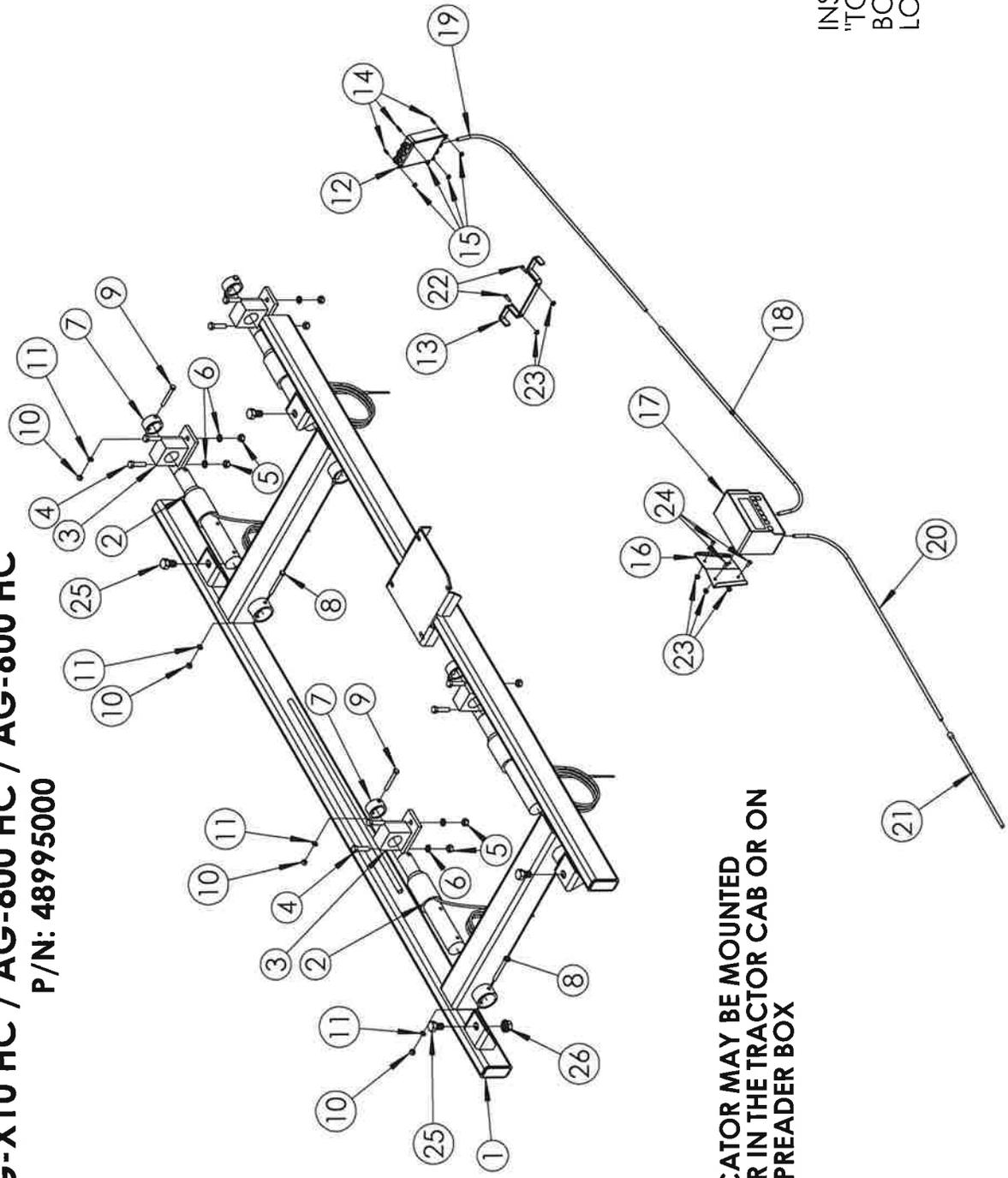
P/N: 48995000

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009718	WEIGH FRAME WELDMENT	1
2	AWT27-500229	LOAD CELL W/CABLE TO JUNCTION BOX	4
3	47009755	LOAD CELL MOUNT	4
4	18057430	BOLT, HX CAP 1/2-13 X 2 LG	8
5	18417400	NUT, HX 1/2 NC ZC	8
6	18891400	WASHER, 1/2 LOCK ZC	8
7	47009717	RETAINING COLLAR	4
8	18056842	BOLT, 3/8-16 X 3 1/2 LG ZC	4
9	18056838	BOLT, HX, 3/8-16 X 3 LONG	4
10	18436800	NUT 3/8 NCZC	8
11	18891200	LOCKWASHER, 3/8 ZC	8
12	AWT15-500067	JUNCTION BOX, WITHOUT CABLES	1
13	47009766	BRACKET, LOAD CELL CABLES	1
14	18025715	BOLT #10-24 X 3/4 LG SS	4
15	18987800	FLANGE NUT #10-24 SS	4
16	76597	SCALE HEAD PLATE	1
17	640MS5P-640M	INDICATOR 5 PIN AWT CONNECTOR	1
18	15186-0145	CABLE (INDICATOR TO JUNCTION BOX) 30'	1
19	AWT25-500186	CABLE (INDICATOR TO JUNCTION BOX) 22 1/2'	1
20	14295-0039	POWERCORD (W/EXTENSION PLUG IN)	1
21	12342-0010	POWERCORD (W/SOCKET)	1
22	18025718	BOLT CAP SS 1/4 X 3/4	2
23	18971400	NUT SER FLG SS 1/4	6
24	18706423	SCREW, SLOTTED TRUSS HEAD 1/4 X 3/4 SS	4
25	18058427	BOLT 3/4-10 X 1 1/4	4
26	18498400	FLANGE NUT 3/4-10	4

INCLUDED BUT NOT SHOWN		QTY
PART NUMBER	DESCRIPTION	
41859	CABLE SUPPORT LOOP TO TRACTOR	2
18025718	BOLT, 1/4-20 X 3/4 SS	8
18971400	FLANGE NUT 1/4-20 SS	8



OPTIONAL SCALE PACKAGE
AG-X10 HC / AG-800 HC / AG-600 HC
P/N: 48995000



LOOK FOR THE ARROWS
 ON THE END OF THE
 LOAD CELL. INSTALL
 WITH THE ARROWS
 POINTING UP

INSTALL WITH
 "TOP" LABEL ON
 BOTTOM OF
 LOAD CELL

INDICATOR MAY BE MOUNTED
 EITHER IN THE TRACTOR CAB OR ON
 THE SPREADER BOX

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.)

