



ANHYDROUS AMMONIA WAGONS

2026 & NEWER

OWNERS MANUAL
SAFETY AND
MAINTENANCE INSTRUCTIONS
OM-NH3

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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TO THE OWNER

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

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

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

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

Heartland Ag Systems reserves the right to make improvements and modifications on equipment without obligation to change previously built equipment. All prices are subject to change without notice.

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 Agriculture, LLC



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.



Heartland Agriculture, LLC



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

TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND SAFETY OF OTHER. FAILURE TO FOLLOW THESE INSTRUCTION CAN RESULT IN INJURY OR DEATH.



**THIS SYMBOL MEANS
ATTENTION
BECOME ALERT
YOUR SAFETY IS INVOLVED!**

SIGNAL WORDS

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

DANGER:

Indicates an imminently hazardous situation that, if not avoided, will result in serious injury or death. This signal word is to be limited to most extreme situations typically for machine components which, for functional purposes, cannot be guarded.

WARNING:

Indicates a potentially hazardous situation that, if not avoided, could result in serious injury or death, and includes hazards that are exposed when guard are removed. It may also be used to alert against unsafe practices.

CAUTION:

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.



EQUIPMENT SAFETY GUIDELINES

Every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing and following precautions in this section. To avoid personal injury, study the following precautions and insist those working with you, or you yourself, follow them.

In order to provide a better view, certain illustrations in this manual may show an assembly with a safety shield removed. However, equipment should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace shield prior to use.

Replace any caution, warning, danger or instruction safety decal that is not readable or is missing. Location of such decals is indicated in this manual.

Do not attempt to operate this equipment under the influence of alcohol or drugs.

Review safety instructions with all users.

Operator should be a responsible adult. **DO NOT ALLOW PERSONS TO OPERATE OR ASSEMBLE THIS UNIT UNTIL THEY HAVE A DEVELOPED A THOROUGH UNDERSTANDING OF SAFETY PRECAUTIONS AND HOW IT WORKS.**

Do not paint over, remove or deface any safety signs or warning decals on your equipment. Observe all safety signs and practice instruction on them.

Never exceed limits of a piece of machinery. If its ability to do a job, or to do so safely is in question-**DON'T TRY IT.**



REMEMBER

Your best assurance against accidents is a careful and responsible operator. If there is any portion of this manual or function you do not understand, contact your local authorized dealer or manufacturer.



SAFETY SIGN CARE

- Keep safety signs clean and legible at all times
- Replace safety signs that are missing or have become illegible.
- Replacement parts that displayed a safety sign should also display safety sign.
- Safety signs are available from your distributor, dealer parts department, or factory.

How to install safety signs:

- Be sure that installation area is clean and dry.
- Decide on exact position before you remove backing paper.
- Remove smallest portion of split backing paper.
- Align decal over specified area and carefully press small portion with exposed sticky backing in place.
- Slowly peel back remaining paper and carefully smooth remaining portion of decal into place.
- Small air pockets can be pierced with a pin and smoothed out using piece of decal backing paper.



BEFORE OPERATION

- Carefully study and understand this manual
- Always wear protective clothing and substantial shoes.
- Give equipment a visual inspection for any loose bolts, worn parts, or cracked welds, and make necessary repairs. Follow maintenance safety instructions included in this manual.

- Be sure there are no tools lying on or in equipment.
- Do not use equipment until you are sure that area is clear, especially around children and animals.
- Don't hurry learning process or take equipment for granted. Ease into it and become familiar with your new equipment.
- Practice operation of your equipment and its attachments. Completely familiarize yourself and other operators with its operation before using.
- Make sure that brakes are evenly adjusted.
- Make sure tow rating on vehicle is high enough for what it is towing.
- Do not allow anyone to stand between tongue or hitch and towing vehicle when backing up to equipment.
- Securely attach to towing vehicle. Use appropriately sized hitch ball and/or hitch pin with a mechanical retainer and attach safety chains.
- Criss cross chains under tongue and secure to draw bar cage, mounting loops, or bumper frame.



DURING OPERATION

- **SAFETY CHAINS** If equipment is going to be transported on a public highway, safety chains should be obtained and installed. Always follow state and local regulations regarding safety chains and auxiliary lighting when towing equipment on a public highway. Be sure to check with local law enforcement agencies for your own particular regulations. Only safety chains (not elastic or nylon/plastic tow straps) should be used to retain connection between towing and towed equipment in event of separation of primary attaching system.
- Install safety chains by crisscrossing chains under tongue and secure to draw bar cage, mounting loops or bumper frame.
- When attaching the emergency cable allow adequate slack to keep from activating brakes due to interference from parts of the coupler or other attachments on the towing vehicle. Each vehicle tongue configuration is different and therefore each should be handled individually to keep the routing free from entanglements and securely attached to perform as designed in case of emergency disconnection from the towing vehicle.
- Beware of bystanders, **PARTICULARLY CHILDREN!** Always look around to make sure it is safe to start engine of towing vehicle or move equipment. This is particularly important with higher noise levels, as you may not hear people shouting
- **NO PASSENGERS ALLOWED-** Do not carry passengers anywhere on or in equipment.
- Do not clean, lubricate, or adjust your equipment while it is moving.
- When halting operation, even periodically, set towing vehicles parking brake, shut off engine, and **remove the ignition key.**

- Be extra careful when using on inclines.
- **MANUEVER TOWING UNIT AT SAFE SPEEDS.**
- Avoid loose gravel, rocks, and holes, they can be dangerous for equipment operation or movement.
- Allow for overall length when making turns.
- Keep all bystanders and pets clear of work area.
- Operate towing vehicle from operators' seat only.
- Never leave running equipment attachments unattended.
- As a precaution, always recheck hardware on equipment following every 100 hours or 50 miles. Correct all problems. Follow maintenance safety procedures.



FOLLOWING OPERATION

- Following operation, or when unhitching, stop towing vehicle, set brakes, shut off the engine and **remove the ignition key.**
- Store unit in an area away from human activity.
- Do not permit children to play on or around stored unit.
- Make sure all parked units are on a hard, level surface and engage all safety devices
- Wheel chocks may be needed to prevent unit from rolling.



HIGHWAY AND TRANSPORT OPERATIONS

- Adopt safe driving practices
 - Always drive at a safe speed relative to local conditions and ensure that your speed is low enough for an emergency stop.
 - Reduce speed prior to turns to avoid risk of overturning.
 - Always keep towing vehicle in gear to provide engine braking when going downhill. Do not coast.
 - Do not drink and drive!
- Comply with state and local laws governing highway safety on public roads.
- Use approved accessory lighting, flags and necessary warning devices to protect operators of other vehicles on highway during transport. Various safety lights and devices are available from your dealer.
- Local laws should be checked for all highway lighting and marking requirements.
- Plan your route to avoid heavy traffic.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.

- Be observant of bridge loading ratings. Do not cross bridges rated lower than the gross weight at which you are operating.
- Watch for obstructions overhead and side to side while transporting.
- Always operate equipment in a position to provide maximum visibility at all times. Make allowances for increased length and weight of equipment when making turns and/or stopping.



PERFORMING MAINTENANCE

- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- Make sure there is plenty of ventilation. Never operate engine or towing vehicle in a closed building. Exhaust fumes may cause asphyxiation.
- Before working on this unit, stop towing vehicle, set parking brakes, shut off engine and **remove ignition key**.
- Be certain all moving parts and attachments have come to a complete stop before attempting to perform maintenance.
- Always use safety supports and block wheels. Never use a jack to support unit.
- Always use proper tools or equipment for job at hand.
- Use extreme caution when making adjustments.
- Follow torque chart in this manual when tightening bolts and nuts.
- Openings in skin and minor cuts are susceptible to infection from brake fluid. **Without immediate medical treatment, serious infection and reactions can occur.**
- Replace all shields and guards after servicing and before moving.
- After servicing, be sure all tools, parts and service equipment are removed.
- Do not allow grease or oil to build up on the actuator.
- When replacing bolts, refer to owner's manual.
- Refer to bolt torque chart for head identification marking.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. Manufacturer will not claim responsibility for use of unapproved parts or accessories and other damages as a result of their use.
- If equipment has been altered in any way from original design, manufacturer does not accept any liability for injury or warranty.
- A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this equipment.

BOLT TORQUE

TORQUE DATA FOR STANDARD NUTS, BOLTS, AND CAPSCREWS.

Tighten all bolts to torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt chart as guide. Replace hardware with same grade bolt.

NOTE: Unless otherwise specified, high-strength Grade 5 hex bolts are used throughout assembly of equipment.

Bolt Torque for Standard bolts *



Torque Specifications

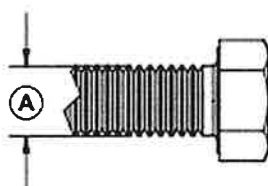
"A"	GRADE 2		GRADE 5		GRADE 8	
	lb-ft	(N.m)	lb-ft	(N.m)	lb-ft	(N.m)
1/4"	6	(8)	9	(12)	12	(16)
5/16"	10	(13)	18	(25)	25	(35)
3/8"	20	(27)	30	(40)	45	(60)
7/16"	30	(40)	50	(70)	80	(110)
1/2"	45	(60)	75	(100)	115	(155)
9/16"	70	(95)	115	(155)	165	(220)
5/8"	95	(130)	150	(200)	225	(300)
3/4"	165	(225)	290	(390)	400	(540)
7/8"	170	(230)	420	(570)	650	(880)
1"	225	(300)	630	(850)	970	(1310)

Bolt Torque for Metric bolts *

"A"	CLASS 8.8		CLASS 9.8		CLASS 10.9	
	lb-ft	(N.m)	lb-ft	(N.m)	lb-ft	(N.m)
6	9	(13)	10	(14)	13	(17)
7	15	(21)	18	(24)	21	(29)
8	23	(31)	25	(34)	31	(42)
10	45	(61)	50	(68)	61	(83)
12	78	(106)	88	(118)	106	(144)
14	125	(169)	140	(189)	170	(230)
16	194	(263)	216	(293)	263	(357)
18	268	(363)	--	--	364	(493)
20	378	(513)	--	--	515	(689)
22	516	(699)	--	--	702	(952)
24	654	(886)	--	--	890	(1206)

Torque figures indicated are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

* GRADE or CLASS value for bolts and capscrews are identified by their head markings.



GRADE-2



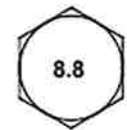
GRADE-5



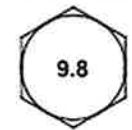
GRADE-8



CLASS 8.8



CLASS 9.8



CLASS 10.9



Torque Requirements

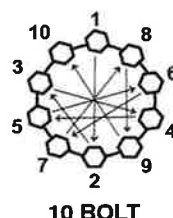
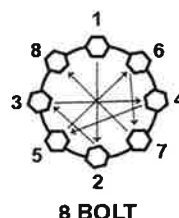
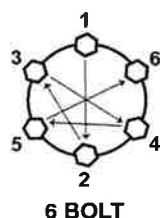
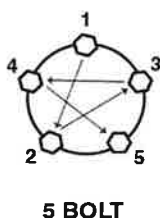
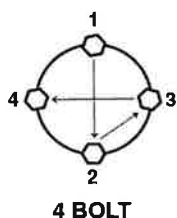
It is extremely important to apply and maintain proper wheel mounting torque on your trailer axle. Torque wrenches are the recommended method to assure the proper amount of torque is being applied to a fastener.

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. Initially snug (10ft-lbs) the nuts/bolts to align and seat the wheel to the hub in the order described in the torque sequence diagram below.
3. Tightening of fasteners should be performed in stages per the recommended sequence.
 - a. 1st stage – 1/3 of final torque.
 - b. 2nd stage – 2/3 of final torque.
 - c. 3rd stage – Final torque



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

Fastener Diameter -Thread Pitch	Type	Grade	Minimum Torque ft. lbs.	Maximum Torque ft. lbs.
1/2" - 20	Bolt	5	60	70
1/2" - 20	Cone Nut	5	80	90
9/16" - 18	Bolt	5	90	100
9/16" - 18	Cone Nut	5	115	130
5/8" - 18	Cone Nut	5	165	185
3/4" - 16	Bud Nut	8	415	460
3/4" - 16	Flange Nut	8	415	460
7/8" - 14	Flange Nut	8	660	735

MAINTENANCE SCHEDULE CHECK LIST

ITEM	FUNCTION REQUIRED	WEEKLY	EVERY 3 MONTHS OR 3,000 MILES	6 MONTHS OR 6,000 MILES	12 MONTHS OR 12,000 MILES
WHEEL TORQUE	CHECK AT 50 MILES				
BRAKES	TEST THAT THEY ARE OPERATIONAL	AT EVERY USE			
BRAKE ADJUSTMENT	ADJUST TO PROPER OPERATING CLEARANCE				
BRAKE MAGNETS	INSPECT FOR WEAR AND CURRENT DRAW				
BRAKE LININGS	INSPECT FOR WEAR OR CONTAMINATION				
BRAKE CONTROLLER	CHECK FOR CORRECT AMPERAGE & MODULATION				
BRAKE CYLINDERS	CHECK FOR LEAKS, STICKING				
BRAKE LINES	INSPECT FOR CRACKS, LEAKS, KINKS				
TRAILER BRAKE WIRING	INSPECT WIRING FOR BARE SPOTS, FRAY, ETC				
BREAKAWAY SYSTEM	CHECK BATTERY CHARGE AND SWITCH OPERATION	AFTER EVERY USE			
HUB/DRUM	INSPECT FOR ABNORMAL WEAR OR SCORING				
WHEEL BEARING & CUPS	INSPECT FOR CORROSION OR WEAR. CLEAN & REPACK				
SEALS	INSPECT FOR LEAKAGE. REPLACE IF REMOVED.				
SPRINGS	INSPECT FOR WEAR, LOSS OF ARCH				
SUSPENSION PARTS	INSPECT FO BENDING, LOOSE FASTENERS, WEAR				
HANGERS	INSPECT WELDS				
WHEEL NUTS AND BOLTS	TIGHTEN TO SPECIFIED TORQUE VALUES				
WHEELS	INSPECT FOR CRACKS, DENTS OR DISTORTION.				
TIRE INFLATION PRESSURE	INFLATE TIRES TO MANUFACTURERS SPECS				
TIRE CONDITION	INSPECT FOR CUTS, WEAR, BULGING, ETC.				

SERVICE RECORD

See Lubrication and Maintenance sections for details of service. Copy this page to continue record.

ACTION CODE: L - LUBRICATE CL - CLEAN R - REPACK

HOURS SERVICED BY MAINTENANCE																			
Weekly or 40 Hours																			
L 5th Wheel Pivot (3)																			
Bi-Annually																			
R Wheel Bearings																			
CL Entire Unit																			

It is recommended that a separate service record be kept for each unit in your fleet.

See Lubrication and Maintenance sections for details of service. Copy this page to continue record.

ACTION CODE: L - LUBRICATE CL - CLEAN R - REPACK

HOURS SERVICED BY MAINTENANCE																			
Weekly or 40 Hours																			
L 5th Wheel Pivot (3)																			
Bi-Annually																			
R Wheel Bearings																			
CL Entire Unit																			

It is recommended that a separate service record be kept for each unit in your fleet.

GENERAL WAGON ASSEMBLY

OPERATION AND MAINTENANCE SUMMARY

1. Assemble your wagon per the appropriate parts illustration (line drawing). Make sure all hardware is securely tightened. Generously grease all the pivot points indicated on the assembled wagon illustrations.
2. Bolts securely tightened at assembly may loosen under loaded operation. Within the first hour of loaded operation, check the wheel bolts for tightness. Retighten with a torque wrench. (*See BOLT TORQUE data sheet in this manual for specific torque requirements.*) Then check the tire pressure with an air gauge. Inflate tires as required to the recommended level.
3. After every 50 hours of operation, check the bolts that secure the reach pipe to the front and rear axle.
4. After every 100 hours of operation, check all assembly and mounting bolts for tightness. Grease the fifth wheel pivot point. It is recommended that this be done when the tank is empty so that you move the wagon tongue left and right to distribute the grease between the pivot plates. Grease all pivot points shown on the assembled wagon illustrations. If your wagon is equipped with brakes, check the brake fluid level and check the brake lines for leaks.
5. Visually inspect tire pressure daily. After every 100 hours check the pressure with an air gauge. (*See TIRE data sheet in this manual for the specific air pressure required for your specific tire size and load.*) Check the wheel bolts with a torque wrench. (*see BOLT TORQUE data sheet in this manual for specifications.*)
6. **TOWING ON PUBLIC ROAD.** Do not connect two wagons together. Do not exceed 20 MPH. It is recommended that a $\frac{3}{4}$ ton truck or larger be used when towing wagons up to 16,000# G.V.W.R. A one ton or larger truck should be used when towing wagons of greater than 16,000# G.V.W.R.
7. **FRONT WHEEL TOE-IN.** The toe-in and camber of the wheels is permanently set at the factory.

For winter storage:

Thoroughly wash the unit using a pressure washer. Grease the fifth wheel pivot point. Apply oil to the pull collar and reach pipe at the rear axle. Inspect the wheel bearings and repack with grease as required. If your wagon is equipped with brakes, check the brake shoe wear and brake fluid leaks. Make sure the brake fluid reservoir is full. Touch up all paint knicks and scratches.

WARNING! Check Lug Nuts For Tightness and Tire Pressure Daily

TIRE/RIM MOUNTED	WAGON & MISC TIRE CHART TIRE SIZE & BOLT PATTERN	WHEEL OFFSET	TIRE PRESS/ MAX SPEED	LOAD CAPACITY	TIRE P/N	RIM P/N	STEM P/N
40003	11L X 15 (8 PLY) ON 15 X 8 (6 ON 6)	+ 1 1/8	36 PSI / 30 MPH	2540 LBS	10261	47005589	20120012
40004	12.5L X 15 (10 PLY) ON 10 X 15 (6 ON 6)	+ 1 1/8	44 PSI / 30 MPH	3420 LBS	20121215	47005809	20120012
40007	12.5L X 16 (12 PLY) ON 10 X 16 (8 ON 8)	- 1 1/2	52 PSI / 30 MPH	3860 LBS	339490	47001016	20120012
40008	14L X 16.1 (8 PLY) ON 11C X 16.1 (6 ON 6)	+ 1 1/8	32 PSI / 30 MPH	3820 LBS	20121416	47005819	20120012
40009	14L X 16.1 (8 PLY) ON 11C X 16.1 (8 ON 8)	- 1 1/2	32 PSI / 30 MPH	3820 LBS	20121416	47005816	20120012
40010A	16.5 X 16.1 (10 PLY) ON 11C X 16.1 (6 ON 6)	+ 1 1/8	36 PSI / 30 MPH	5200 LBS	32297	47005819	20120012
40013	16.5L X 16.1 (10 PLY) ON 14C X 16.1 (8 ON 8)	- 1 1/2	36 PSI / 30 MPH	5200 LBS	32297	47009814	20120012
40037	USED 425/65R22.5 ON 22.5 X 11.75 (8 ON 8) AVAILABLE ON AG207 ONLY FRONT TIRES 45 PSI / 30 MPH REAR TIRES 55 PSI / 30 MPH	- 1 1/2	45 PSI / 30 MPH	4880 LBS	425652225U	47009835	20120022
			55 PSI / 30 MPH	5965 LBS			
			70 PSI / 30 MPH	7590 LBS			
			90 PSI / 30 MPH	9100 LBS			
40039	USED 385/65R22.5 ON 22.5 X 11.75 (8 ON 8) (8K CAP) PROPER TIRE PRESSURE FOR AG206 & 207 ONLY FRONT TIRES 45 PSI / 30 MPH REAR TIRES 55 PSI / 30 MPH	- 1 1/2	45 PSI / 30 MPH	4100 LBS	385652225U	47071322	20120022
			55 PSI / 30 MPH	5013 LBS			
			65 PSI / 30 MPH	5925 LBS			
			70 PSI / 30 MPH	6380 LBS			
			90 PSI / 30 MPH	7650 LBS			

IMPROPER TIRE PRESSURES MAY LEAD TO PREMATURE TIRE FAILURE AND WAGON FATIGUE

WAGON	WHEEL OPTIONS
AG82	40007 / 40009 / 40039
AG86	40004 / 40008 / 40010A
AG106	40003 / 40004
AG206	40013 / 40039
AG207	40013 / 40037 / 40039

SPECIFICATIONS FOR LUBRICATING AND ASSEMBLING HUBS FOR FARM EQUIPMENT

TYPE OF GREASE

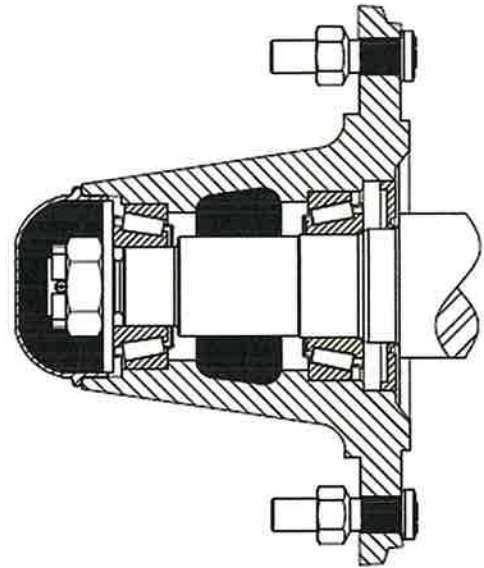
- Lithium Base
- ASTM Worked penetration of 284
- Drop point 368 degrees F

EXAMPLES

- *Shell Alvina EP2*
- *Mobilux EP2*

HUB AND SPINDLE ASSEMBLY PROCEDURE

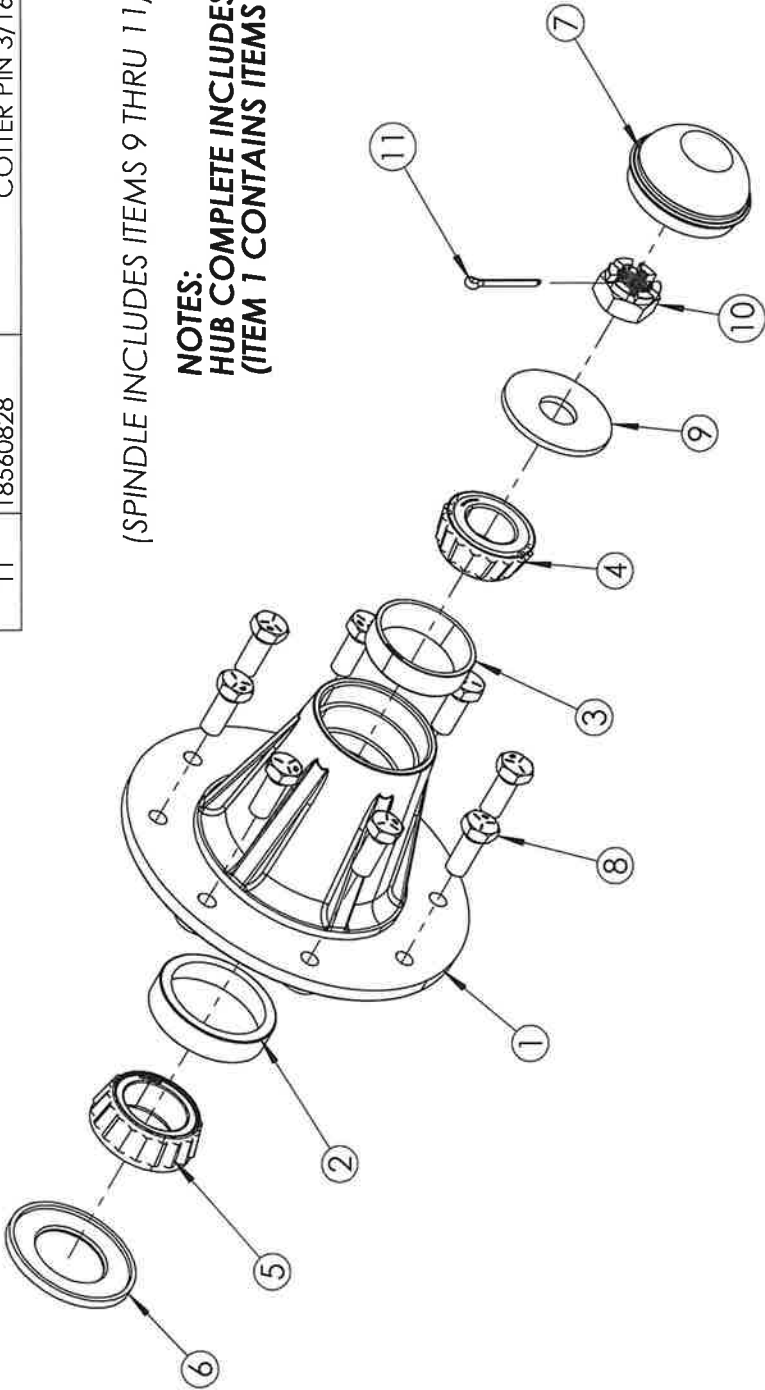
- Inspect the hub/cup assembly to assure the cups are seated against shoulders on the hubs.
- Grease the inner cone and place it into the cup.
MAKE SURE IT IS STRAIGHT.
- Install the grease seal. Use a plug to place pressure evenly against the seal, **SO THAT YOU DON'T** bend the case during installation.
- Pump grease into the hub cavity as indicated above. **DO NOT OVERFILL.** Too much grease can cause the seal to fail or the dust cap to pop loose.
- Use grease to lubricate the seal lip and place the hub onto the spindle. Rotate the hub while installing to the spindle so the seal doesn't "roll under". As the spindle goes into the inner cone, try to feel that the cone is not cocked and is properly seated on the spindle.
- Grease the outer cone and place it over the spindle and into the cup.
- Assemble the washer and nut to the spindle. Using an air wrench to bring the nut down to the cone is not recommended. The washer **MUST NOT CONTACT THE CONE** under power. A torque wrench must be used to make first contact to a torque reading of 15 ft/lbs. **ROTATE THE HUB WHILE TIGHTENING THE NUT.** Then back off the nut until it just becomes loose.
- While rotating the hub, retighten the nut to finger tight. Line up the cotter pin hole in the spindle with the slot in the nut. Insert the cotter pin and bend it.
- Fill the hub cap with grease and install.
- Check the seal for a "turned under" lip. Check the hub for excessive end play. Check the hub for free rotation and any indication of roughness, which may indicate mis alignment. If any roughness is noted, disassemble the hub and check the inner cup for any small nicks. If a nick is found, place the hub aside for rework.



8 BOLT HUB ASSY

P/N: 47008811

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47008811A	HUB WITH RACES	1
2	47005520	INNER BEARING CUP	1
3	25821	OUTER BEARING RACE	1
4	25877	OUTER BEARING CONE	1
5	25590	INNER BEARING CONE	1
6	47006016	GREASE SEAL	1
7	47005917	DUST CAP	1
8	47005012	LUG BOLT 9/16-18 X 1 1/4 LG	8
9	18000017	SPINDLE WASHER 1 X .187	1
10	18489100	SLOTTED NUT	1
11	18560828	COTTER PIN 3/16 X 1 3/4	1

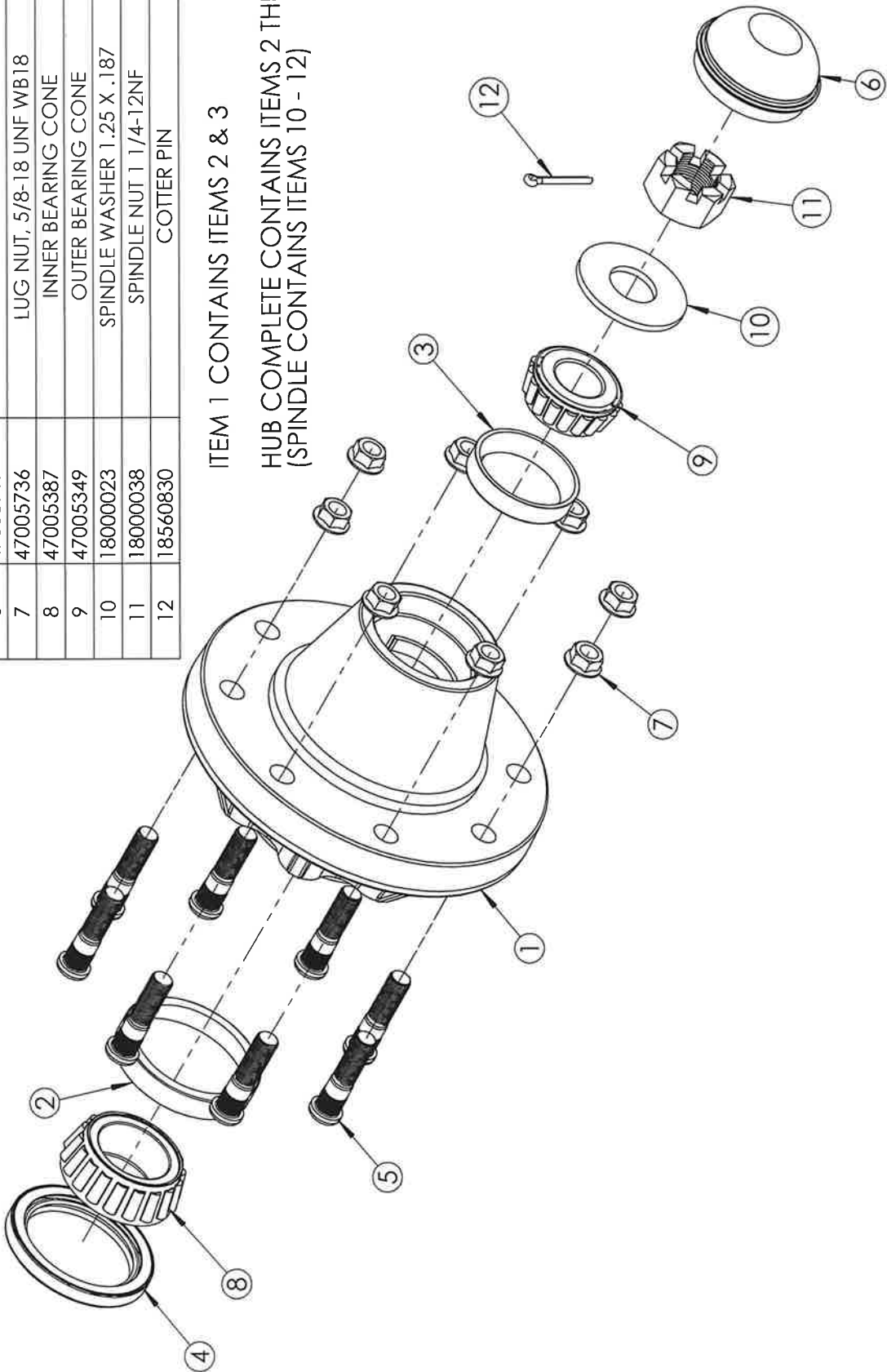


(SPINDLE INCLUDES ITEMS 9 THRU 11)

NOTES:
HUB COMPLETE INCLUDES ITEMS 1 THRU 8
(ITEM 1 CONTAINS ITEMS 2 & 3)

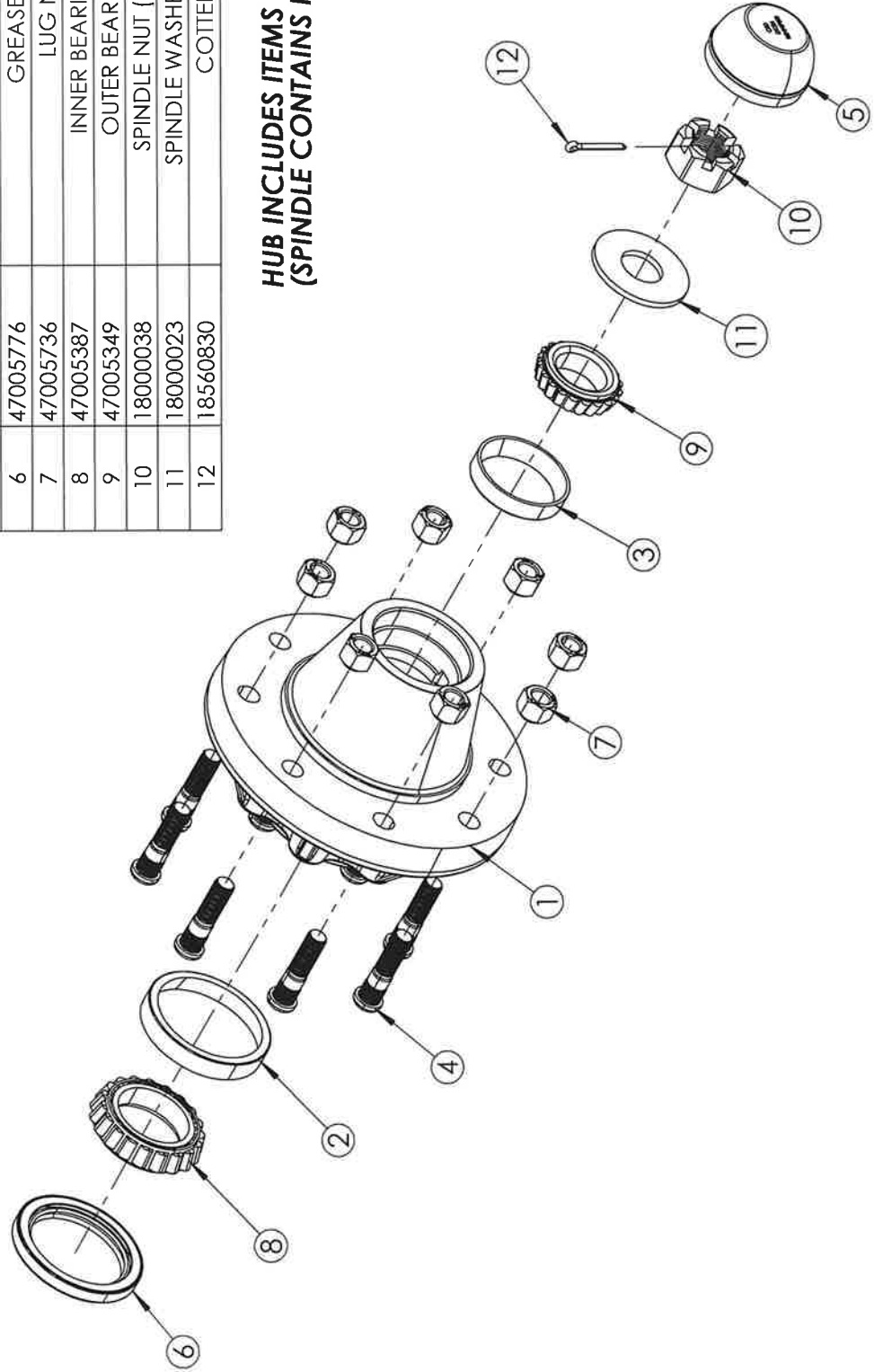
8 BOLT HUB (7500# CAP) **P/N: 47009114**

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 1/4-12NF	1
12	18560830	COTTER PIN	1



8 BOLT HUB ASSY

[7500#]
P/N: 470091115

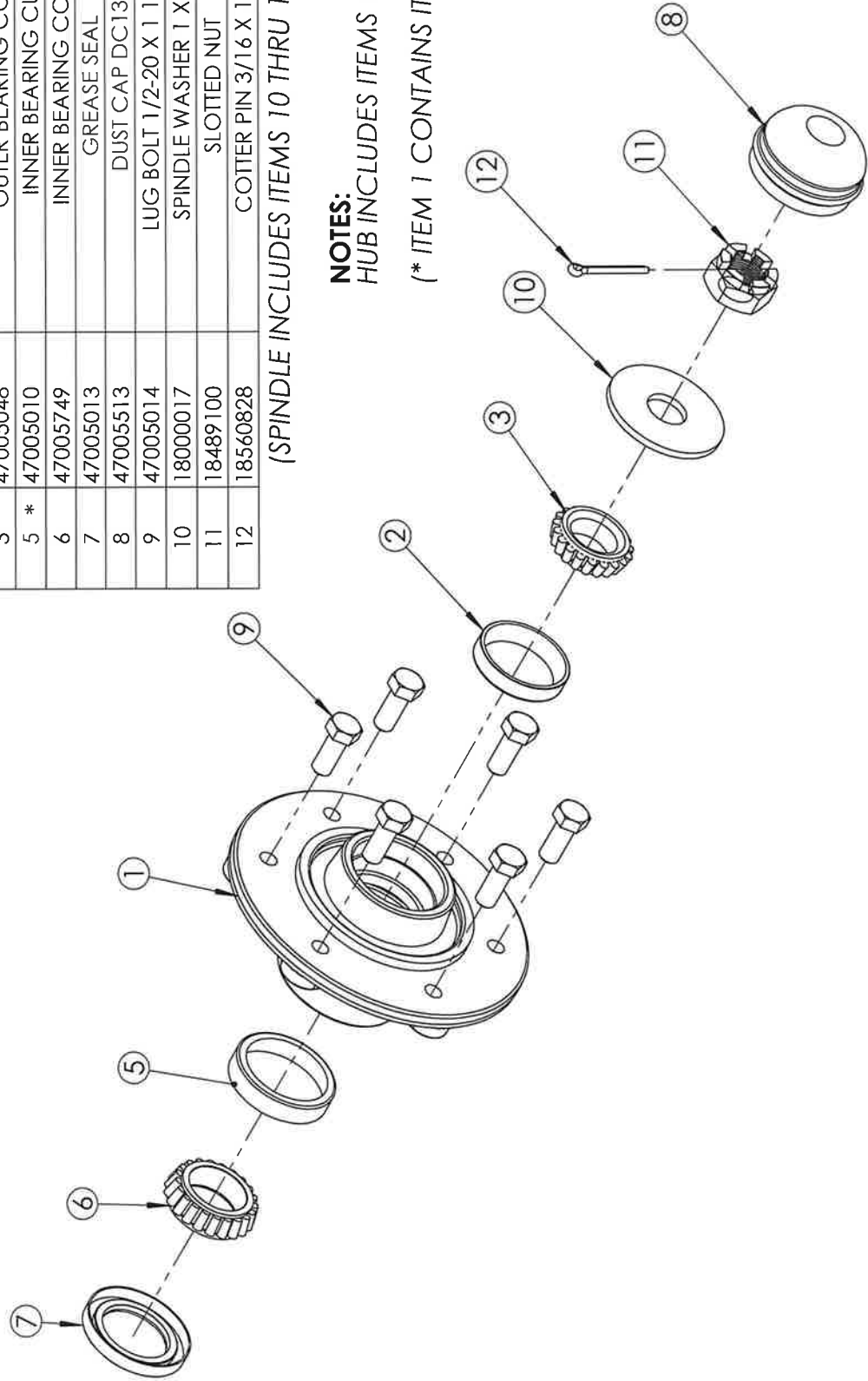


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47005115	HUB WITH RACES (INCLUDES ITEMS 2 & 3)	1
2	47005328	INNER BEARING RACE	1
3	47005131	OUTER BEARING RACE	1
4	47005735	PRESS IN LUG	8
5	47005212	DUST CAP	1
6	47005776	GREASE SEAL	1
7	47005736	LUG NUT	8
8	47005387	INNER BEARING CONE	1
9	47005349	OUTER BEARING CONE	1
10	18000038	SPINDLE NUT (1 1/4-12 NF)	1
11	18000023	SPINDLE WASHER 1.25 X .187	1
12	18560830	COTTER PIN	1

HUB INCLUDES ITEMS 1 THRU 9
(SPINDLE CONTAINS ITEMS 10-12)

6 BOLT HUB ASSY

[611 HUB]
P/N: 47009611



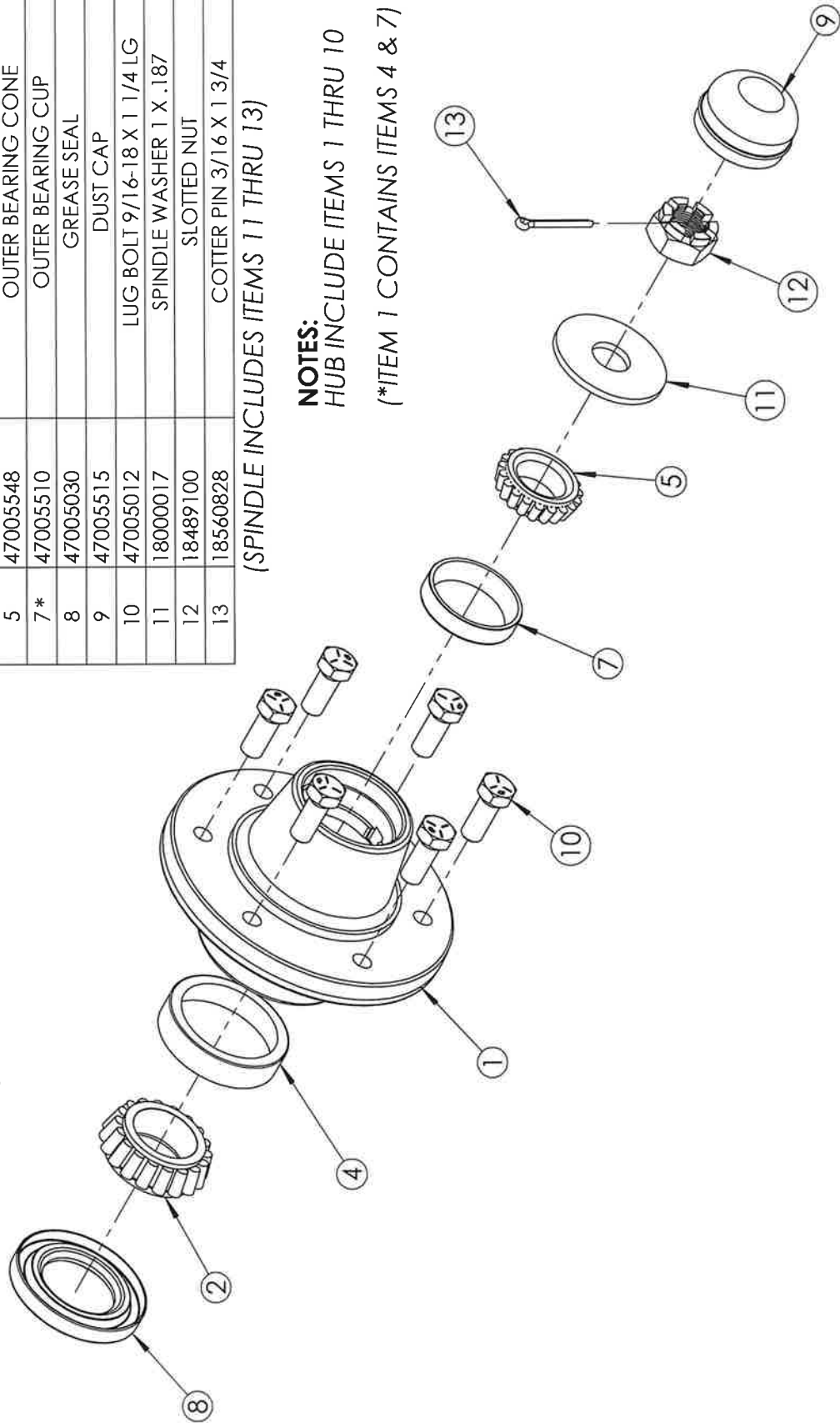
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1 *	47005511	HUB WITH CUPS ONLY	1
2 *	47005710	OUTER BEARING CUP	1
3	47005048	OUTER BEARING CONE	1
5 *	47005010	INNER BEARING CUP	1
6	47005749	INNER BEARING CONE	1
7	47005013	GREASE SEAL	1
8	47005513	DUST CAP DC13	1
9	47005014	LUG BOLT 1/2-20 X 1 1/4 LG	6
10	18000017	SPINDLE WASHER 1 X .187	1
11	18489100	SLOTTED NUT	1
12	18560828	COTTER PIN 3/16 X 1 3/4	1

(SPINDLE INCLUDES ITEMS 10 THRU 12)

NOTES:
HUB INCLUDES ITEMS 1 THRU 9
(* ITEM 1 CONTAINS ITEMS 2 & 5)

6 BOLT HUB ASSY

618 HUB
P/N: 47009618



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1*	47005618	HUB WITH CUPS ONLY	1
2	47005580	INNER BEARING CONE	1
4*	47005520	INNER BEARING CUP	1
5	47005548	OUTER BEARING CONE	1
7*	47005510	OUTER BEARING CUP	1
8	47005030	GREASE SEAL	1
9	47005515	DUST CAP	1
10	47005012	LUG BOLT 9/16-18 X 1 1/4 LG	6
11	18000017	SPINDLE WASHER 1 X .187	1
12	18489100	SLOTTED NUT	1
13	18560828	COTTER PIN 3/16 X 1 3/4	1

(SPINDLE INCLUDES ITEMS 11 THRU 13)

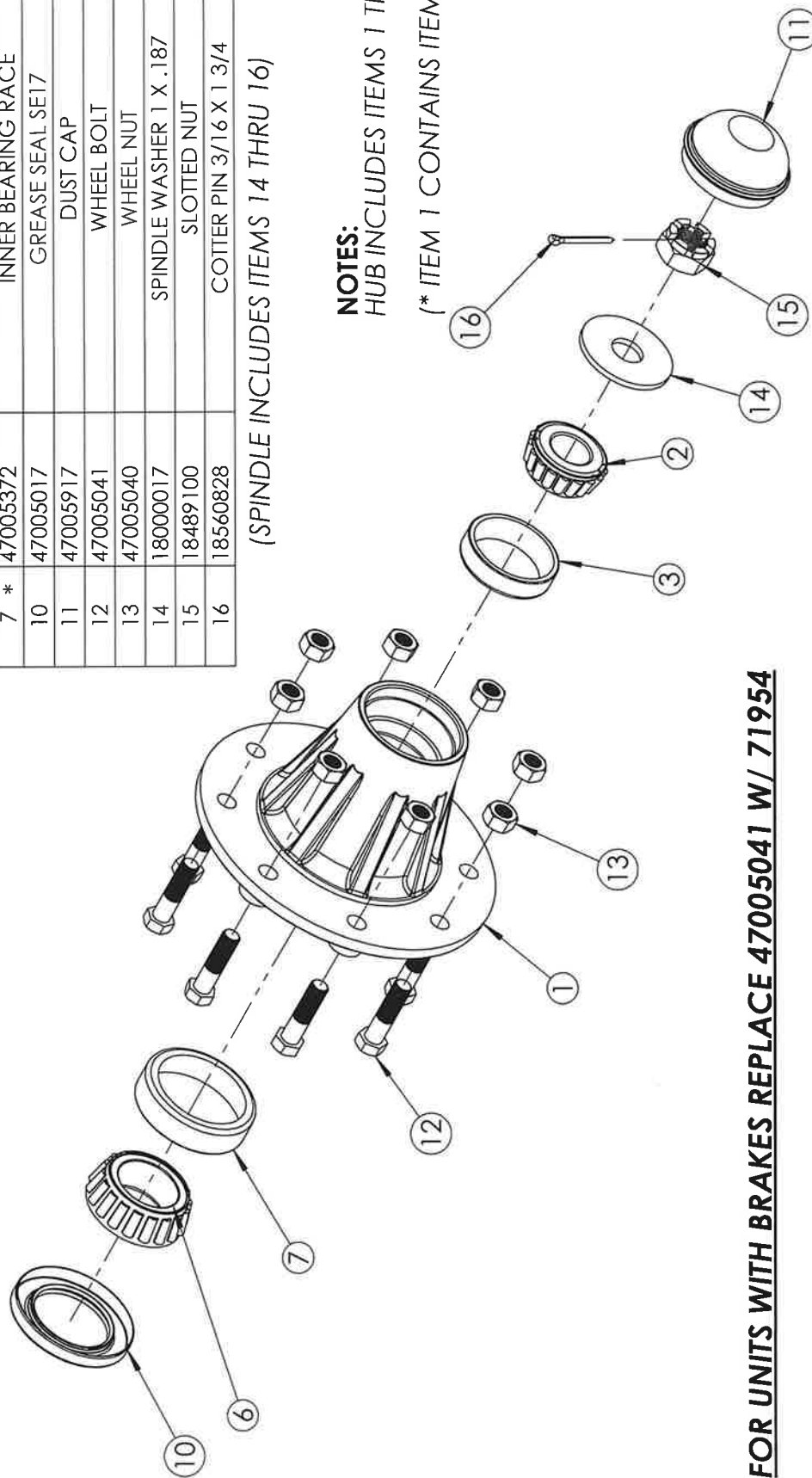
NOTES:
HUB INCLUDE ITEMS 1 THRU 10
(*ITEM 1 CONTAINS ITEMS 4 & 7)

8 BOLT HUB ASSY

[6000#]
P/N: 47009712

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1 *	47005712	HUB W/ RACES	1
2	47005279	OUTER BEARING CONE	1
3 *	47005272	OUTER BEARING RACE	1
6	47005378	INNER BEARING CONE	1
7 *	47005372	INNER BEARING RACE	1
10	47005017	GREASE SEAL SE17	1
11	47005917	DUST CAP	1
12	47005041	WHEEL BOLT	8
13	47005040	WHEEL NUT	8
14	18000017	SPINDLE WASHER 1 X .187	1
15	18489100	SLOTTED NUT	1
16	18560828	COTTER PIN 3/16 X 1 3/4	1

(SPINDLE INCLUDES ITEMS 14 THRU 16)



NOTES:
HUB INCLUDES ITEMS 1 THRU 13
(* ITEM 1 CONTAINS ITEMS 3 & 7)

FOR UNITS WITH BRAKES REPLACE 47005041 W/ 71954

8 BOLT HUB ASSY

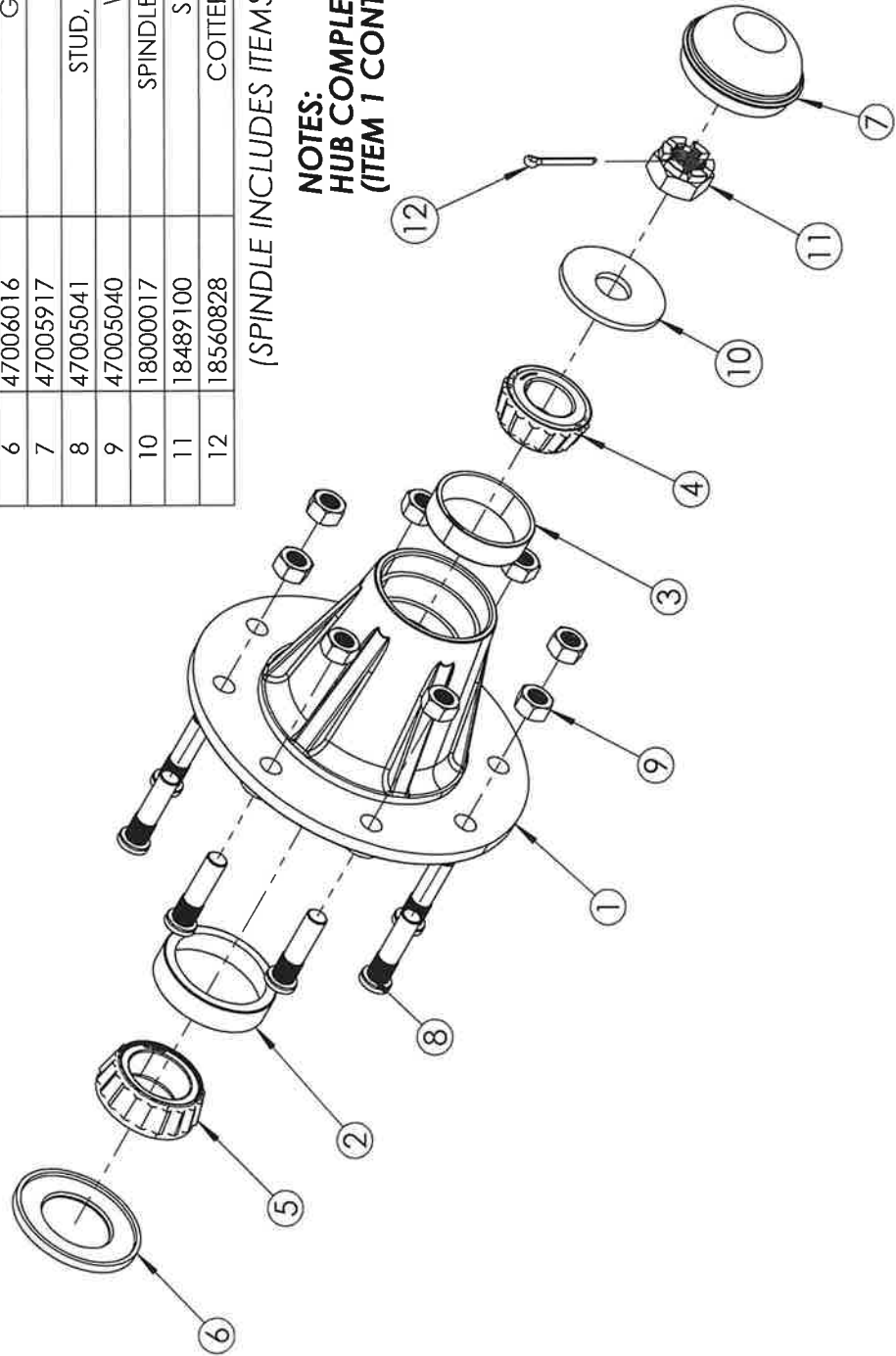
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P/N: 47009811

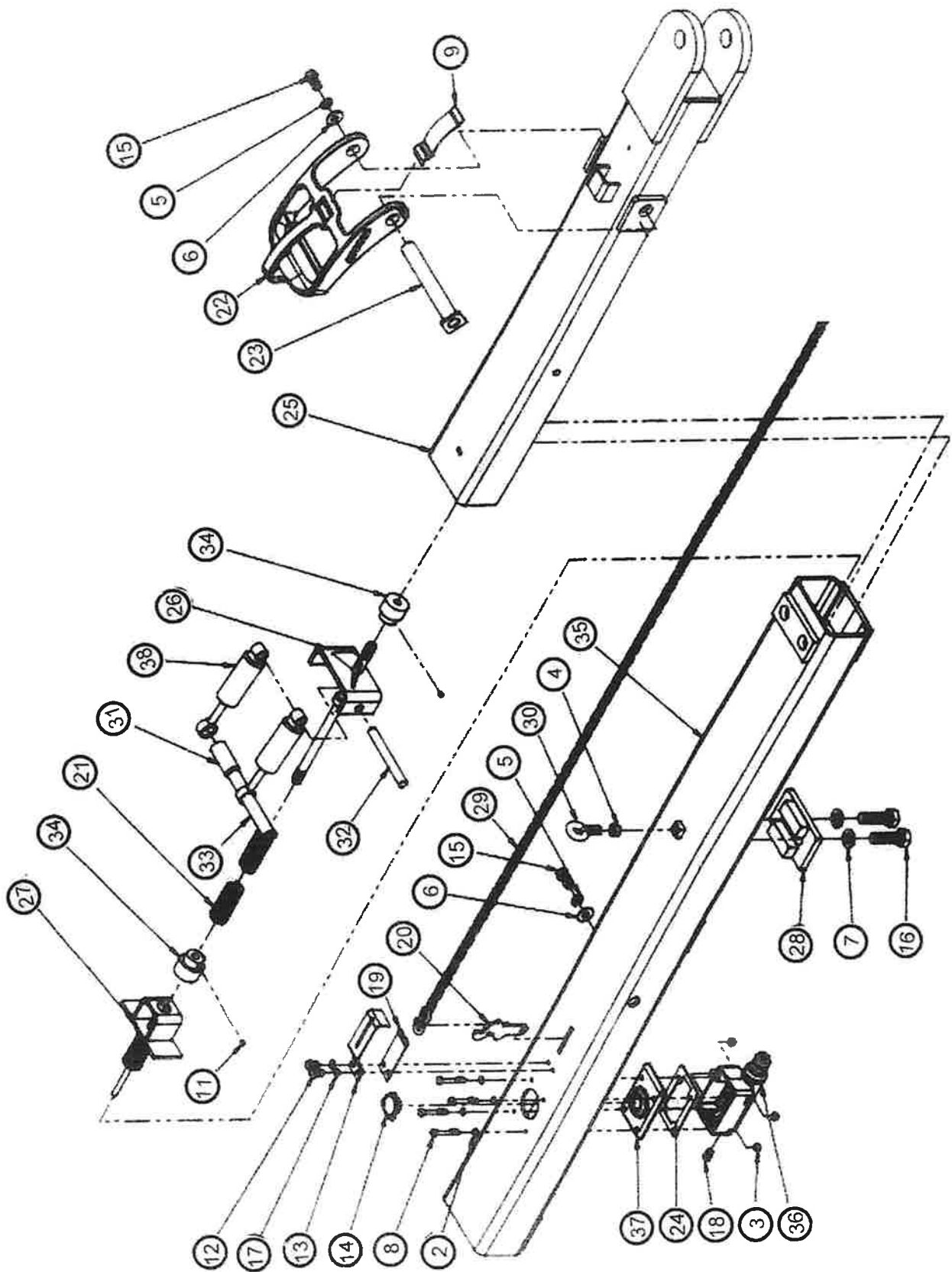
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1 *	47009811A	HUB WITH RACES	1
2 *	47005520	INNER BEARING CUP	1
3 *	25821	OUTER BEARING RACE	1
4	25877	OUTER BEARING CONE	1
5	25590	INNER BEARING CONE	1
6	47006016	GREASE SEAL	1
7	47005917	DUST CAP	1
8	47005041	STUD, PRESS IN 9/16-18	8
9	47005040	WHEEL NUT	8
10	18000017	SPINDLE WASHER 1 X .187	1
11	18489100	SLOTTED NUT	1
12	18560828	COTTER PIN 3/16 X 1 3/4	1

(SPINDLE INCLUDES ITEMS 10 THRU 12)

NOTES:
HUB COMPLETE INCLUDES ITEMS 1 THRU 9
(ITEM 1 CONTAINS ITEMS 2 & 3)



5597 BRAKE TONGUE ASSEMBLY



5597 PARTS BREAKDOWN

REF #	PART #	QTY	DESCRIPTION
1	00036	1	5/16" SPRING LOCK WASHER
2	00057	4	1/4" SPRING LOCK WASHER
3	00062	4	1/4" NC HEX NUT
4	00083	1	1/2" NC HEX NUT
5	00084	2	1/2" LOCK WASHER
6	00085	2	1/2" FLAT WASHER
7	00254	2	3/4" LOCK WASHER
8	00618	4	1/4" NC X 2" GR. 5 HEX HEAD BOLT
9	01158-95	1	TONGUE LATCH SPRING
10	01263	1	5/16" X 3/4" GR. 5 HEX HEAD BOLT
11	01923	2	1/4-20 UNC X 1/4" SOCKET HEAD SET SCREW
12	02196	2	5/16" SELF TAPPING SCREW
13	03866-95	1	EMERGENCY LEVER GUIDE
14	03876	1	MASTER CYLINDER CAP ASSEMBLY
15	04795	2	1/2" NC X 1" GR. 5 HEX HEAD BOLT
16	05047	2	3/4" NC X 2 1/2" GR. 5 HEX HEAD BOLT
17	05424	2	5/16" EXTERNAL TOOTH LOCK WASHER
18	05679	1	BRAKE FITTING 1/8" FULL FLOW
19	05693-95	1	SAFETY LEVER SPRING
20	05951	1	EMERGENCY LEVER
21	05952	2	SPRING PUSH ROD
22	15920-30	1	TONGUE LATCH
23	07521-95	1	LATCH PIN
24	09153	1	CORK GASKET F/MASTER CYLINDER

REF #	PART #	QTY	DESCRIPTION
25	09293	1	MALE TONGUE
26	09305	1	PUSH OFF ASSEMBLY
27	09307-81	1	PUSH PLATE ASSEMBLY
28	09308-30	1	STOP BLOCK F/BRAKE TONGUE
29	09309	1	72" ACTUATOR CHAIN/HOOK ASSEMBLY
30	09317	1	1/2" NC X 2" EYE BOLT
31	09323-95	1	REAR SHOCK PIN SPACER
32	09324-95	1	FRONT SHOCK PIN
33	09325-95	1	REAR SHOCK PIN
34	09337-95	2	ADJUSTMENT SPUD
35	10050	1	FEMALE TONGUE HITCH
36	10616	1	MASTER CYLINDER COMPOSITE DRUM
37	12557	1	CAP F/MASTER CYLINDER
38	SB12426	2	DAMPER SHOCK

BRAKE TONGUE MAINTENANCE AND ADJUSTMENT



WARNING Review all of the following instructions before installation and use of the hydraulic brake tongue. Dealers or Distributors must review these instructions with the ultimate user. Failure to follow these instructions, or failure to properly maintain the braking system after installation, can result in loss of braking action which could cause severe property damage, personal injury and/or death

DISASSEMBLY AND ASSEMBLY

1. The brake tongue is assembled and adjusted at the factory:



CAUTION Do Not Disassemble or Attempt to Adjust The Tongue Push-Rod Assembly (#27)

To disassemble 5597 tongue:

- A. Remove 3/4" bolts (#16), remove stop block (#28), and pull male tongue (#25) out of female tongue (#35).
- B. Remove 1/2" bolt (#15), pin (#33), and spacer (#31)
- C. Remove set screw (#11) from adjustment spud (#34B), unthread and remove adjustment spud (#34B).
- D. Remove push-off assembly (#26), pin (#32), two shocks (#38), and two springs (#21).
- E. To remove tongue push-rod assembly (#27), master cylinder (#36), emergency lever (#20), spring (#19), and guide (#13), refer to section a & b of "Servicing the Emergency Lever" on this page.

To reassemble 5597 tongue:

- A. Replace 2 shocks (#38) into yoke (#26), with pin (#32).
 - B. Place 2 springs (#21), onto shaft of push-off assembly (#26), and insert shaft into female tongue (#35), through hole in plate.
 - C. Thread adjustment spud (34B) onto rear threaded portion of push-rod assembly (#26), until the 2 springs (#21) compress to a length of 6-1/2". Install and tighten set screw (#11), using Loctite, into one of the threaded holes of the spud (34B).
 - D. Insert pin (#33) into hole in tongue, through 1 shock (#38), through the spacer (#31), and through the other shock (#38) and tongue. Install and tighten 1/2" bolt, lockwasher, and washer (#15, 5, 6).
 - E. Install master cylinder (#36), (refer to c-f of "Servicing Emergency Lever" section on this page).
 - F. Thread adjust spud (34A) onto front threaded portion of push-rod assembly (#26). Insert male tongue (#25), (with latch installed as shown), into female tongue (#35). Install stop block (#28), using 3/4" bolts and lockwashers (#16, #7). Pull male tongue (#25) forward to latched position and adjust spud (34A) until there is a 3/16" gap between spud (34A) and rear stop surface of male tongue (#25).
 - G. Tighten set screw (#11), using Loctite, into hole in spud (34A).
2. Connect and tighten all brake lines.
 3. Fill the Master Cylinder (#36) with DOT 3 or 4 brake fluid.
 4. Bleed the brake system using a pressure-type brake bleeder or manually, as follows:
 - a. Raise tongue to level or up in front.
 - a. Remove the two Self-Tapping Screws (#12) and LockWashers (#17) that hold the Lever Guide (#13) and the flat Emergency Lever Spring (#19). Remove the Lever Guide and the Emergency Lever Spring. Using short strokes, pull forward on the Emergency Lever (#20), pumping the Master Cylinder until the brake fluid within the Master Cylinder stops bubbling.
 - b. Attach a bleeder hose to the bleeder valve on one of

the wheels (always begin with wheel farthest from the master cylinder and move toward it). Immerse the other end of the hose into a clean, transparent container partially filled with brake fluid. Loosen the bleeder valve one turn and, watching the hose in the transparent container, use the Emergency Lever to pump the Master Cylinder as long as air bubbles continue to leave the hose. When the bubbles stop, close the bleeder valve, move to the next wheel, and repeat the process until all the brakes have been bled. (Note: Check the fluid level in the Master Cylinder frequently while bleeding the brakes (every 4 or 5 strokes). Refill as necessary to keep the level above half full.)

5. Once bleeding is completed, refill the Master Cylinder and attach the Cap (#14) securely. Replace Emergency Lever Spring, Lever Guide, with Lock Washers and Self-Tapping Screws.
6. Test the brakes by pulling the Emergency Lever (#20) forward until it locks into position. (The lever should be approximately straight up.) Attempt to rotate the wheels in a forward direction. If any of the wheels rotate, the brakes must be adjusted on that wheel. To adjust the brakes, release the Emergency Lever from its locked position and set the wheel brake adjustment up 2 or 3 notches. Repeat the test procedure as necessary.

MAINTENANCE

1. Frequently check the brake fluid level. (Fluid must be approved, clean and uncontaminated.)
2. Inspect the brake tongue and brakes and replace bent, worn or damaged parts.
3. Be constantly aware of the system's braking quality and make periodic checks. Consult a certified brake specialist to make the necessary adjustments and/or repairs. Failure to do so could result in loss of braking.

SERVICING THE EMERGENCY LEVER

If the Emergency Lever (#20) of the tongue is applied, it can be disengaged by using a screwdriver to lift upward on the front of the flat Emergency Lever Spring (#19) while pulling the lever forward until it releases. A thorough inspection of the Emergency Lever, Emergency Lever Spring, and the Chain with S-Hooks is required and all damaged parts must be replaced as follows:

- a. Remove the Master Cylinder (#24) and the Push Plate Assembly (#27). Be careful not to get dirt into the Master Cylinder. (A new Master Cylinder Gasket (#24) should be used when reinstalling.)
- b. Remove the Safety Chain from the Emergency Lever (#20), Emergency Lever Guide (#13), and flat Emergency Lever Spring (#19), then pull the lever out of the tongue (#35) from the bottom.
- c. Install the new Emergency Lever from the bottom of, and up through the slot in, the tongue. Attach the new Emergency Lever Spring, and the Emergency Lever Guide.
- d. Install a new Master Cylinder Gasket to the Master Cylinder and put the Push Plate Assembly and Master Cylinder back into the inside of the tongue.
- e. Squeeze shut the S-Hook of the Emergency Chain (#14) onto the Emergency Lever (#20).
- f. Add adequate brake fluid to the Master Cylinder and bleed the brake system per instructions 4-6 in the disassembly and reassembly section.

ACTUATOR TROUBLE SHOOTING GUIDE

SYMPTOMS	POSSIBLE SOLUTIONS
<u>BRAKES LOCKING UP</u>	
EMERGENCY LEVER PARTIALLY PULLED	RELEASE EMERGENCY LEVER
	(LEVER MUST BE IN GREEN ZONE)
	(EMERGENCY CABLE MUST HAVE SLACK)
DEBRIS IN MASTER CYLINDER ORIFICE	CLEAN/FLUSH OR REPLACE ORIFICE
DEBRIS IN MASTER CYLINDER	CLEAN/FLUSH OR REPLACE MASTER CYLINDER
PINCHED BRAKE LINE OR HOSE	REPLACE BRAKE LINE OR HOSE
BRAKE CLUSTER HANGING UP	INSPECT WHEEL CYLINDER FOR RUST AND PROPER FUNCTION
	CHECK FOR BROKEN SPRINGS
	CHECK SHOE ADJUSTMENT (TOO TIGHT)
	CLUSTER MOUNTING BRACKET BENT
DEBRIS WEDGED IN SLIDE TUBE	CHECK/CLEAN SLIDE TUBE AREA
<u>MASTER CYLINDER NOT PRIMING</u>	
MASTER CYLINDER LEVER WILL NOT PUMP FLUID	SLIDE TUBE MUST BE COMPLETELY EXTENDED
	CHECK FLUID LEVEL
MASTER CYLINDER ORIFICE PLUGGED	CLEAN/FLUSH OR REPLACE MASTER CYLINDER
BRAKE FLUID DOES NOT COME OUT OF ORIFICE	CLEAN/FLUSH OR REPLACE ORIFICE
BRAKE FLUID DOES NOT COME OUT OF BRAKE LINE	INSPECT LINE/HOSES FOR BLOCKAGES
AIR IN BRAKE LINES	CHECK ALL LINE CONNECTIONS FOR AIR LEAKS
	CHECK FLUID LEVEL AND BLEED BRAKES
<u>LEAKING MASTER CYLINDER</u>	
BRAKE FLUID LEAKING OUT OF PUSHROD AREA	REPAIR OR REPLACE MASTER CYLINDER
BRAKE FLUID LEAKS OUT OF GASKET AREA	DAMAGED GASKET. REPLACE GASKET
	TIGHTEN MASTER CYLINDER BOLTS IN AN ALTERNATING SEQUENCE
	MASTER CYLINDER TIGHTENED UNEVENLY
	REPLACE GASKET AND TIGHTEN BOLTS IN AN ALTERNATING SEQUENCE
	DO NOT OVERFILL MASTER CYLINDER
BRAKE FLUID LEAKS AROUND ORIFICE	TIGHTEN ORIFICE (DO NOT OVER TIGHTEN)
	WHEN ATTACHING BRAKE LINE USE 2 WRENCHES
<u>BRAKE TESTING</u>	
JACK TRAILER WHEELS UP OFF GROUND.	
SPIN WHEEL/WHEELS. WHEELS SHOULD SPIN FREELY.	
PULL EMERGENCY LEVER TO FIRST NOTCH.	
LEVER IN FIRST NOTCH, WHEELS SHOULD DRAG.	
LEVER IN SECOND NOTCH, SHOULD NOT TURN WHEELS BY HAND.	
RELEASE EMERGENCY LEVER.	
WHEELS SHOULD SPIN FORWARD WITHOUT RESISTANCE.	

BRAKE CLUSTER SETUP, ADJUSTMENT & BLEEDING

Your brake cluster was centered to the spindled rum 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/lbs. Then reinstall the hub.

WARNING!

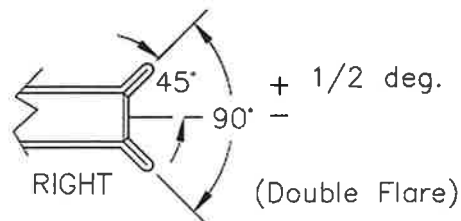
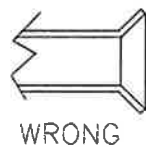
Saltwater, granular fertilizer and other corrosive materials are destructive to metal. To prolong the life of a braking system used under corrosive conditions we recommend that the actuator be flushed periodically with a high pressure water hose. Be sure to regrease bearings and oil all moving parts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

1. INITIAL BRAKE CLUSTER SETUP & ADJUSTMENT

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

2. BRAKE LINES

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



3. BLEEDING THE SYSTEM

The first requirement for safe, sure hydraulic braking is the use of quality brake fluid. Use only DOT-3 or DOT-4 brake fluid from a sealed container. If pressure bleeding equipment is available, follow the manufacturer's instructions for bleeding the systems.

IF SYSTEM MUST BE BLED MANUALLY, PROCEED AS FOLLOWS:

Fill master cylinder with fluid. Install the bleeder hose on the first wheel cylinder to be bled. *(If tandem axle trailer, bleed rear axle first.)* Have the loose end of the hose submerged in brake fluid in a glass container to observe bubbling. By loosening the bleeder screw located in the wheel cylinder one turn, the system is open to the atmosphere through the passage drilled in the screw. Pump the actuator with long steady strokes. The bleeding operation is completed when bubbles no longer rise to the surface of the fluid. **BE SURE TO CLOSE THE BLEEDER SCREW SECURELY.** Repeat bleeding operation at each wheel cylinder. During bleeding process, replenish the brake fluid so the level does not fall below the half full level in the master cylinder reservoir. After bleeding is completed, make sure the master cylinder reservoir is filled and the filler cap is securely in place. After the bleeding operation is completed, apply pressure to the system and check the entire brake system for leaks.

4. ADJUSTING THE BRAKES (AFTER BLEEDING BRAKES)

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

WARNING!

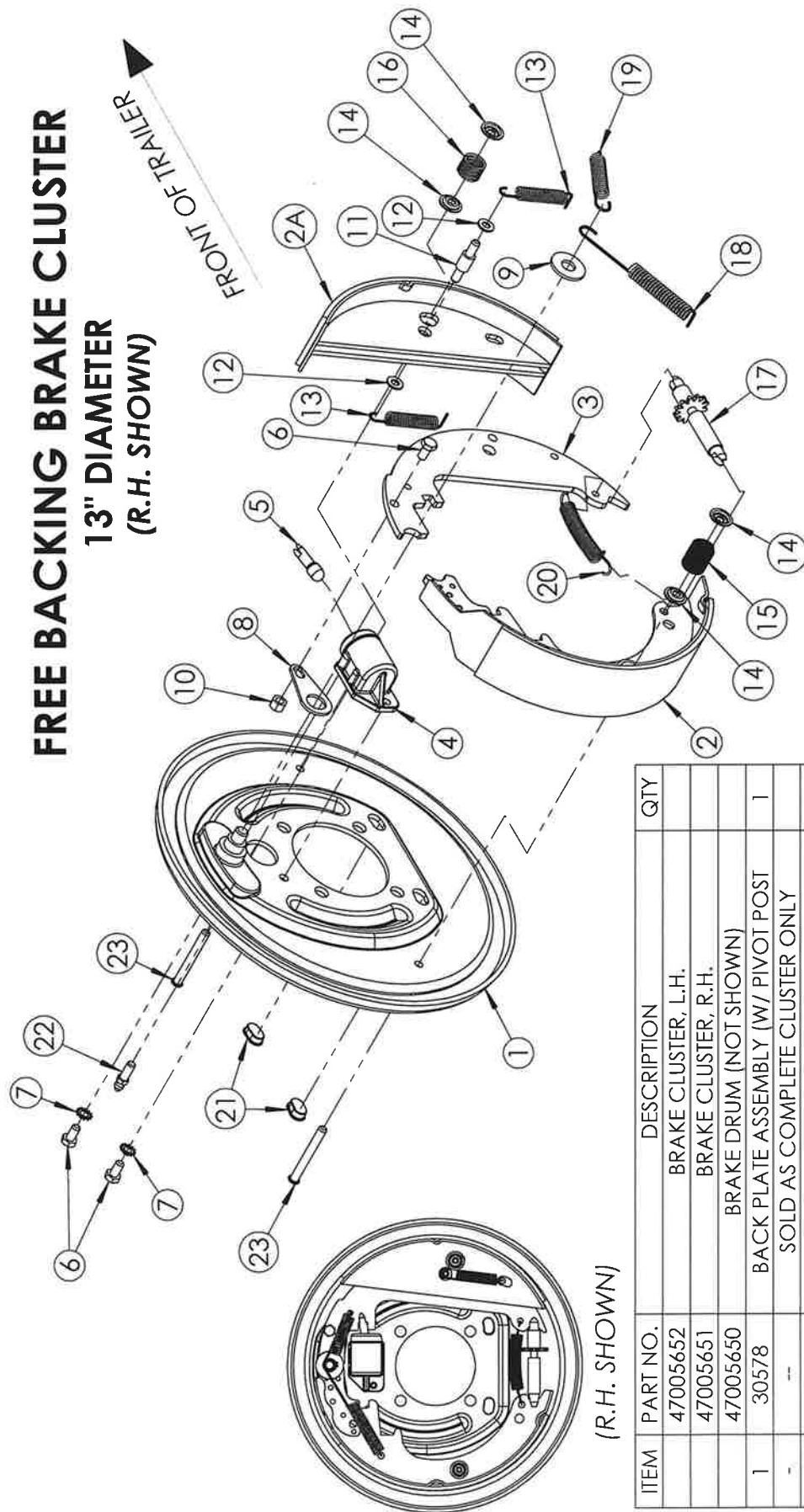
FAILURE TO FOLLOW THESE INSTRUCTIONS, OR FAILURE TO PROPERLY MAINTAIN BRAKES AFTER INSTALLATION CAN RESULT IN LOSS OF BRAKING ACTION, WHICH CAN CAUSE PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE. ONLY A CERTIFIED PROFESSIONAL MECHANIC SHOULD INSTALL BRAKE CLUSTERS.

HAVE YOUR BRAKES INSPECTED BY A CERTIFIED PROFESSIONAL MECHANIC AND ANNUALLY AFTER INSTALLATION.

FREE BACKING BRAKE CLUSTER

13" DIAMETER

(R.H. SHOWN)



(R.H. SHOWN)

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

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

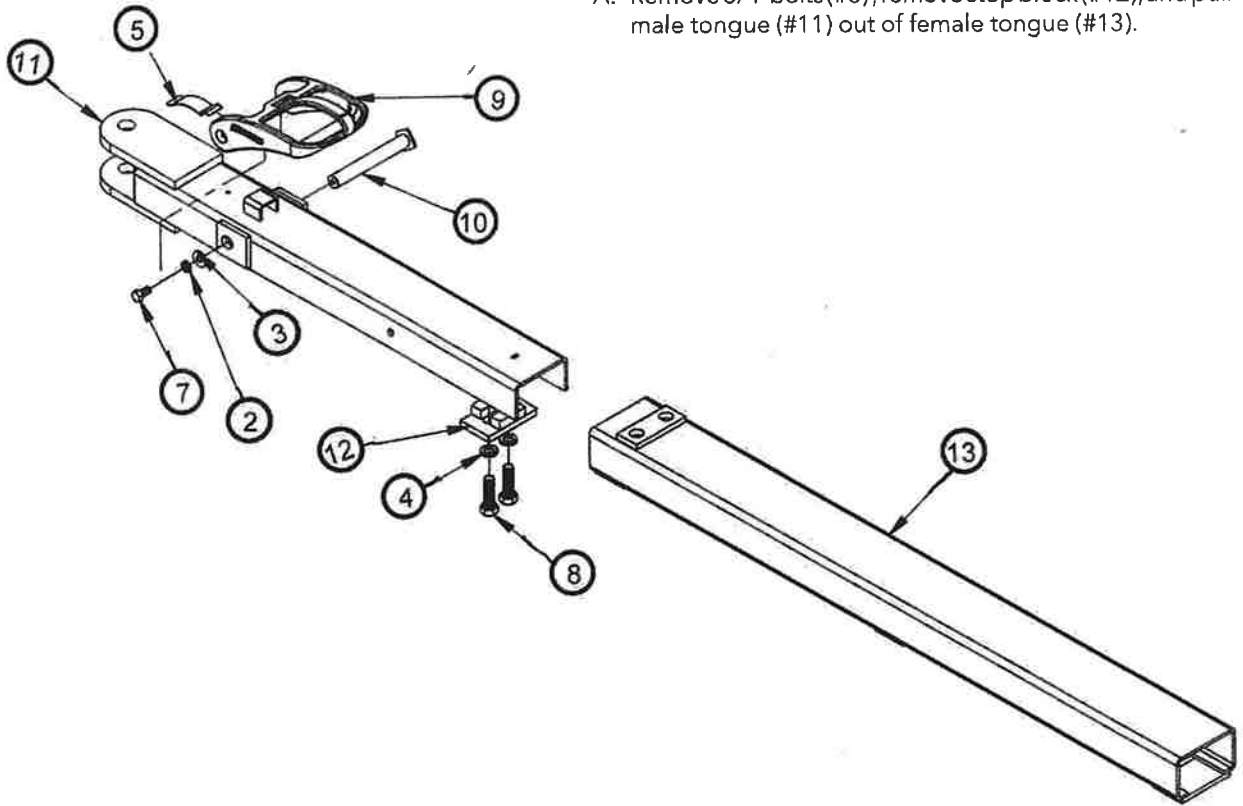
5730 TONGUE ASSEMBLY

DISASSEMBLY AND ASSEMBLY

1. The 5730 tongue is assembled at the factory:

To disassemble 5730 tongue: (refer to illustration on page)

A. Remove 3/4" bolts (#8), remove stop block (#12), and pull male tongue (#11) out of female tongue (#13).



REF #	PART#	QTY	DESCRIPTION
1.	00036	1	5/16" Spring Lockwasher
2.	00084	1	1/2" Lockwasher
3.	00085	1	1/2" Flatwasher
4.	00254	2	3/4" Lockwasher
5.	01158-95	1	Tongue Latch Spring
6.	01263	1	5/16" x 3/4" Gr.5 Bolt
7.	04795	1	1/2"NC x 1" Gr.5 Hex Head Bolt
8.	05047	2	3/4"NC x 2-1/2" Gr.5 Hex Bolt
9.	07517-30	1	Tongue Latch
10.	07521-95	1	Latch Pin
11.	09293	1	Male Tongue
12.	09308-30	1	Stop Block f/Male Tongue
13.	11555	1	Female Tongue w/o Brakes

NH3 TROUBLE SHOOTING

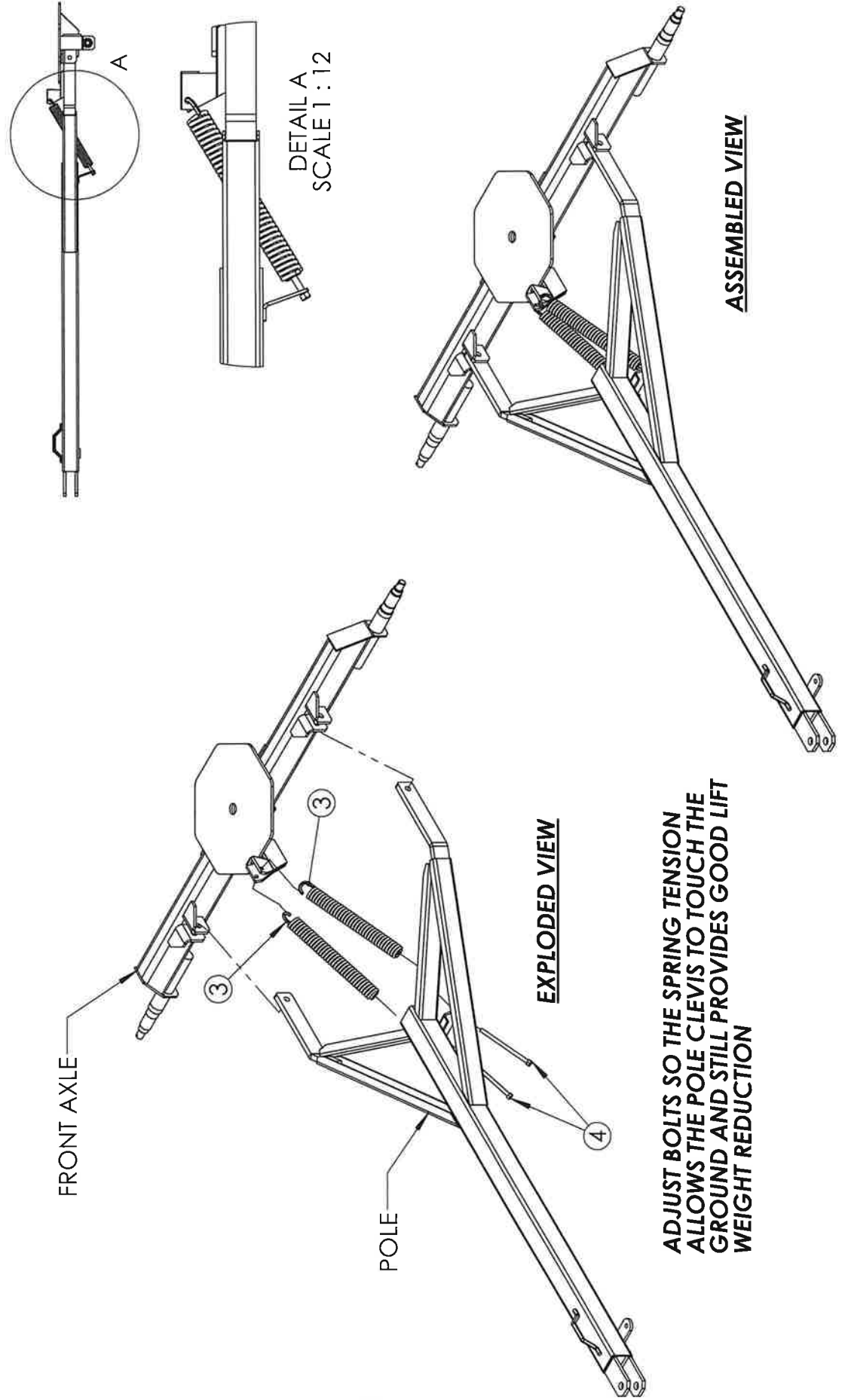
READ THROUGH THIS TROUBLE SHOOTING PAGE.

If you have a problem that is difficult to solve, please contact your local Heartland Ag Systems dealer or distributor. Before you call, please have this Operator's Manual ready.

PROBLEM	CAUSE	SOLUTION
Wagon doesn't track through field.	Poor wheel spacing.	Set wheels in center of crop row.
	Bent reach pole.	Replace.
	Loose wheel strut clamp.	Replace.
		Realign wheel and tighten.
Wagon sways on road.	Fifth wheel worn.	Replace.
	Dry 5th wheel assembly.	Lubricate.
	Tire pressure too low.	Inflate to proper pressure.
	Traveling too fast.	Slow down to 20 mph.
	Bent axle or spindle.	Replace.
	Loose wheel bolts.	Tighten to specified torque.
	Loose or worn wheel bearings.	Tighten or replace.
	Bent reach pole.	Replace.
	Pulling more than one unit.	Pull only one unit.
Wagon pulls to one side.	Uneven tire pressure.	Inflate to proper pressure.
	One brake is dragging.	Adjust brakes. Replace shoes if worn.
Tire wobbles.	Bent wheel.	Replace.
	Loose wheel bolts.	Tighten to specified torque.
	Loose or worn wheel bearings.	Tighten or replace.
	Loose spindle nut.	Snug appropriately and replace cotter pin.
Excessive bearing wear.	Lack of lubrication.	Lubricate.
	Spindle nut too loose or too tight.	Snug appropriately and replace cotter pin.
	Bent spindle.	Replace.
	Dirt inside hub.	Replace seal and inspect dust cap.
	Moisture inside hub.	Use lithium based grease.
Trouble stopping.	Traveling too fast.	Slow down to 20 mph.
	Pulling vehicle too light.	Use one ton truck or larger.
	Brakes not working.	Adjust or replace.
Bad tire wear.	Axle bent or out of line.	Replace or repair.
	Bent spindle.	Replace.
	Bent wheel.	Replace.
	Traveling too fast.	Slow down to 20 mph.

OPTIONAL POLE ASSIST KIT **P/N: 47005671**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
3	00306-30	LIFT SPRING W/ INSERT	2
4	47009910	SPRING BOLT	2



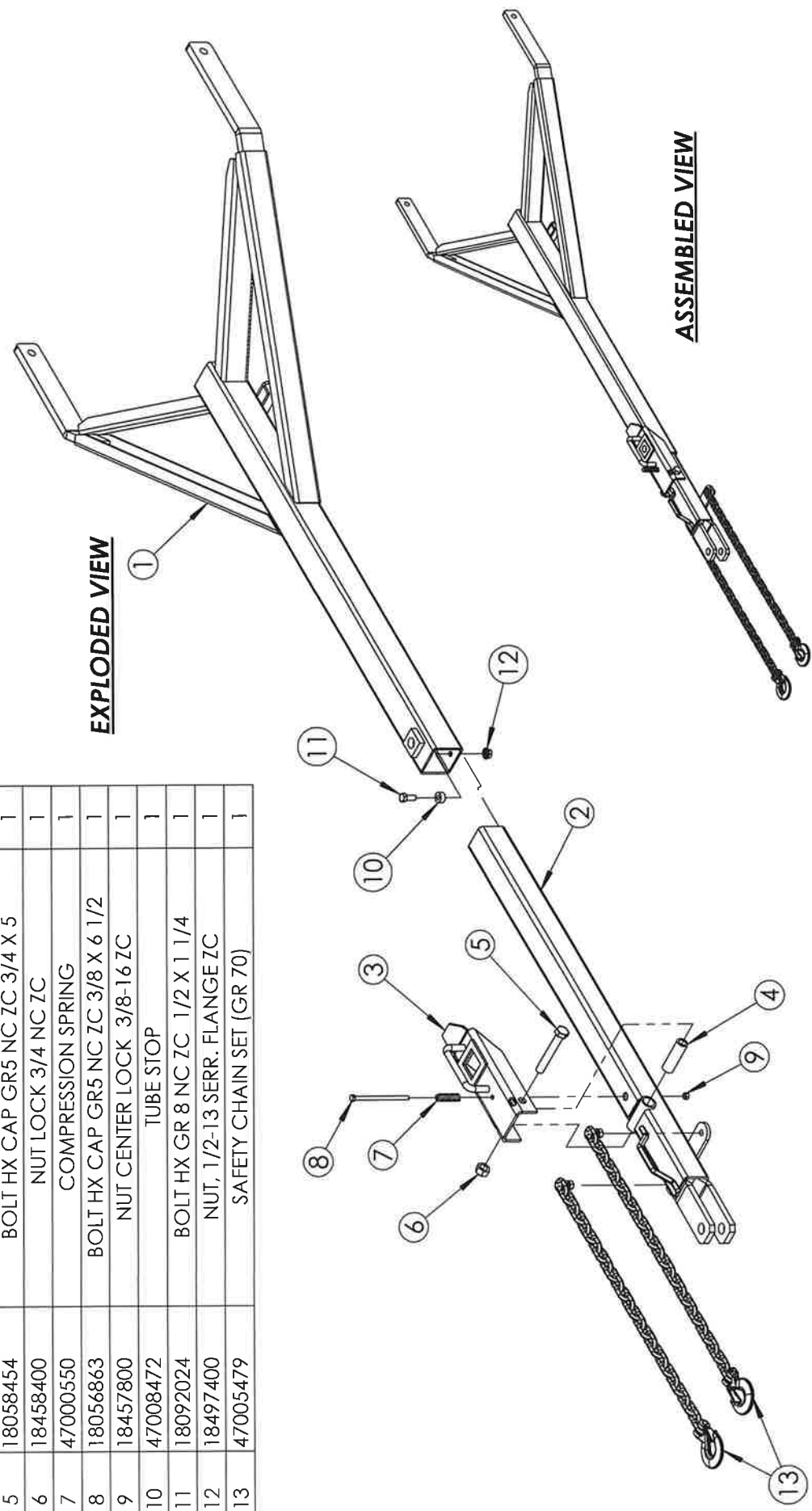
**ADJUST BOLTS SO THE SPRING TENSION
 ALLOWS THE POLE CLEVIS TO TOUCH THE
 GROUND AND STILL PROVIDES GOOD LIFT
 WEIGHT REDUCTION**

TELESCOPING POLE W/O BRAKES

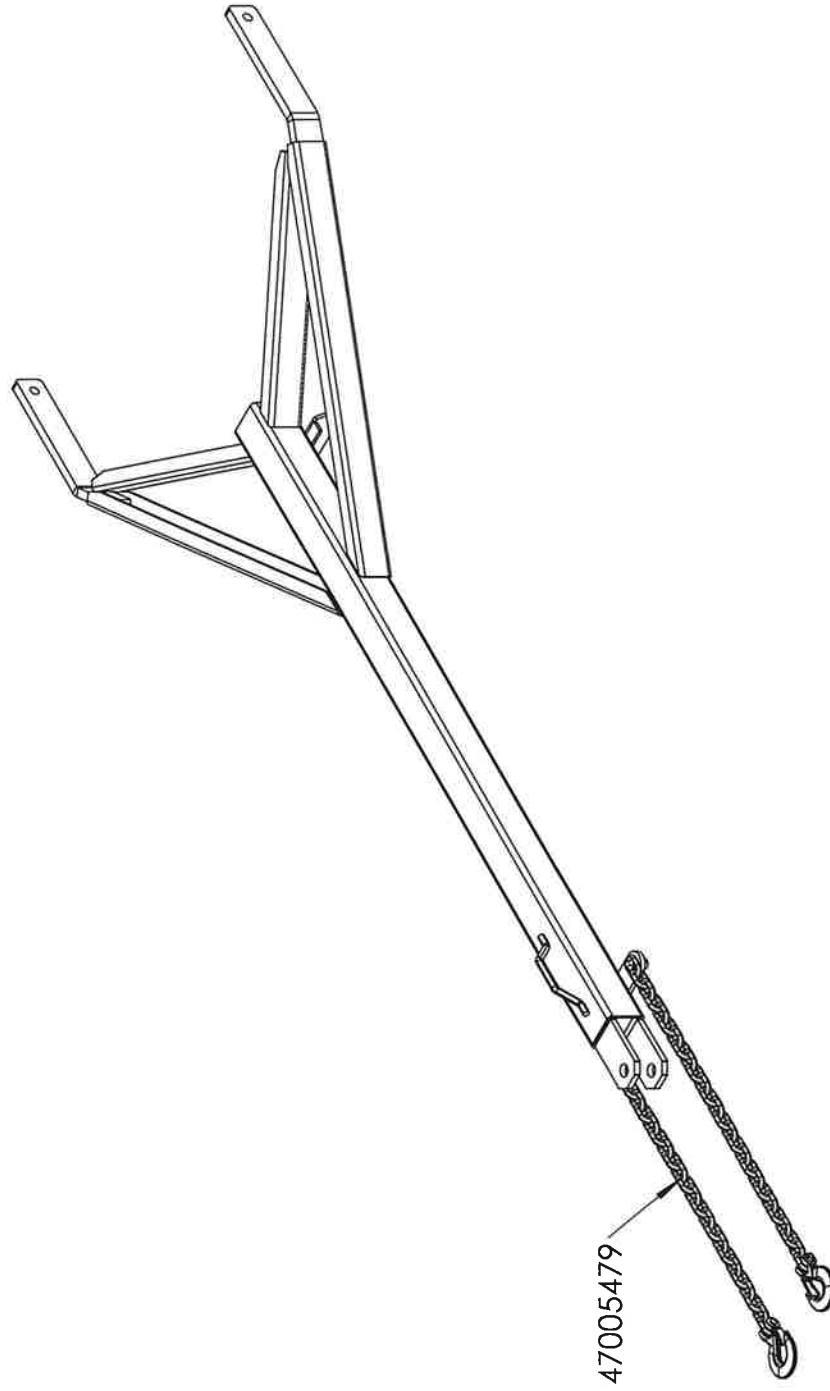
(AG82 / AG86 / AG106)

P/N: 40300003

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47008483	WAGON POLE TELESCOPING	1
2	47008470	INNER POLE	1
3	47008477	LATCH ASSEMBLY	1
4	47008473	INNER BUSHING	1
5	18058454	BOLT HX CAP GR5 NC ZC 3/4 X 5	1
6	18458400	NUT LOCK 3/4 NC ZC	1
7	47000550	COMPRESSION SPRING	1
8	18056863	BOLT HX CAP GR5 NC ZC 3/8 X 6 1/2	1
9	18457800	NUT CENTER LOCK 3/8-16 ZC	1
10	47008472	TUBE STOP	1
11	18092024	BOLT HX GR 8 NC ZC 1/2 X 1 1/4	1
12	18497400	NUT, 1/2-13 SERR. FLANGE ZC	1
13	47005479	SAFETY CHAIN SET (GR 70)	1

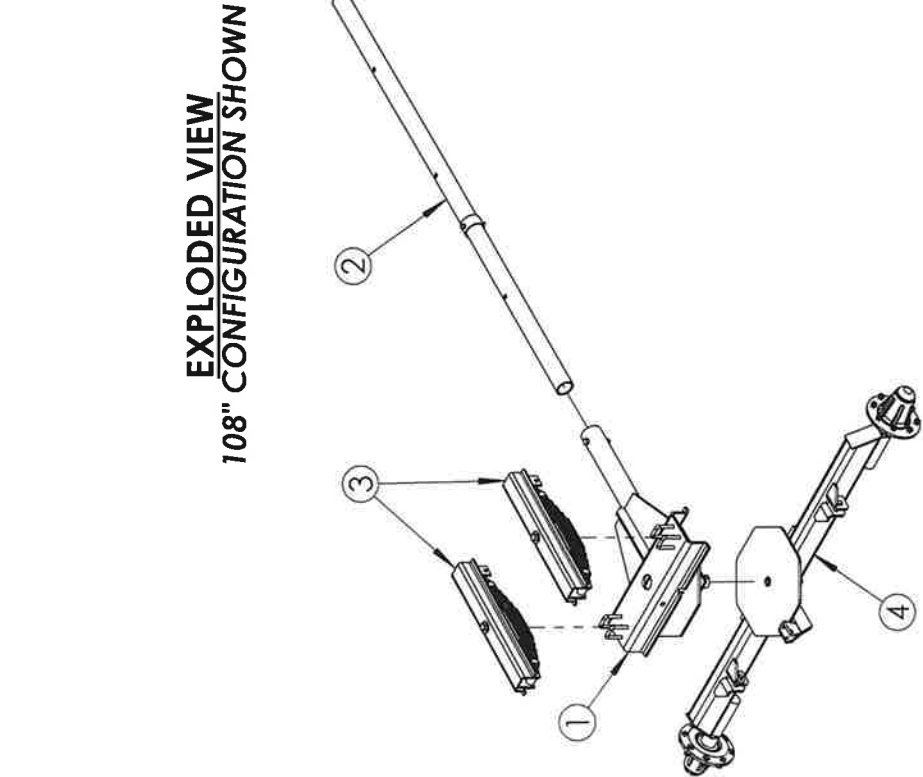


SOLID WAGON POLE
(AG82 / AG86 / AG106)
P/N: 40300006



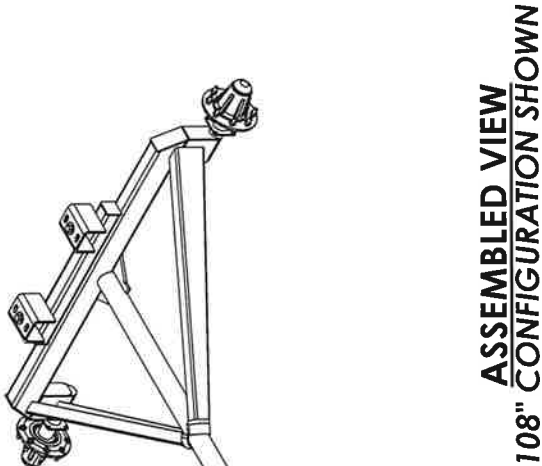
AG82 WAGON **P/N: 40820003**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009021	REACH ASSEMBLY, COMPLETE	1
2	47009022	REACH PIPE ASSEMBLY, COMPLETE	1
3	47009102	BOLSTER ASSEMBLY	2
4	47015514	FRONT COMPLETE	1
5	47015508	REAR AXLE COMPLETE	1



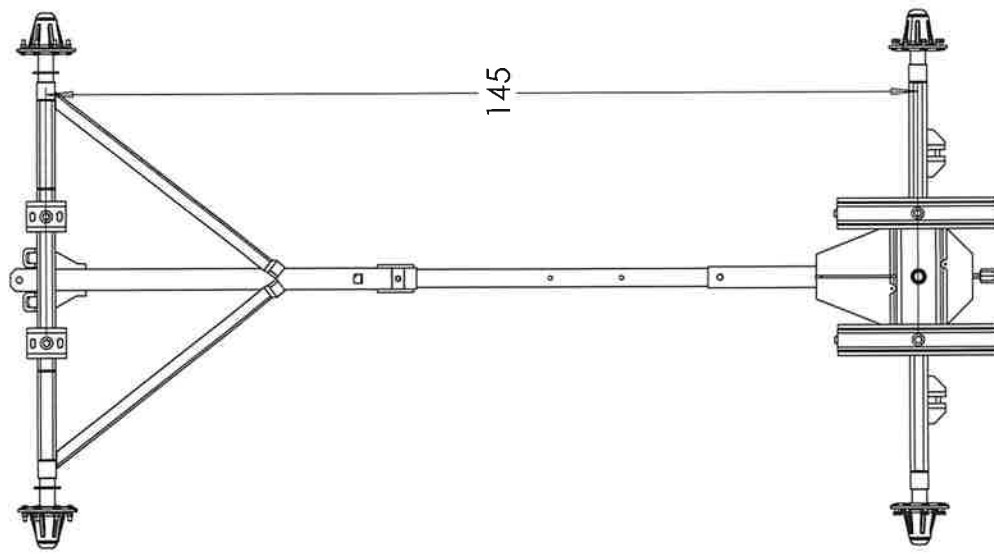
EXPLODED VIEW
108" CONFIGURATION SHOWN

ALSO INCLUDED BUT NOT SHOWN
 24-4 - REFLECTIVE TAPE QTY 1

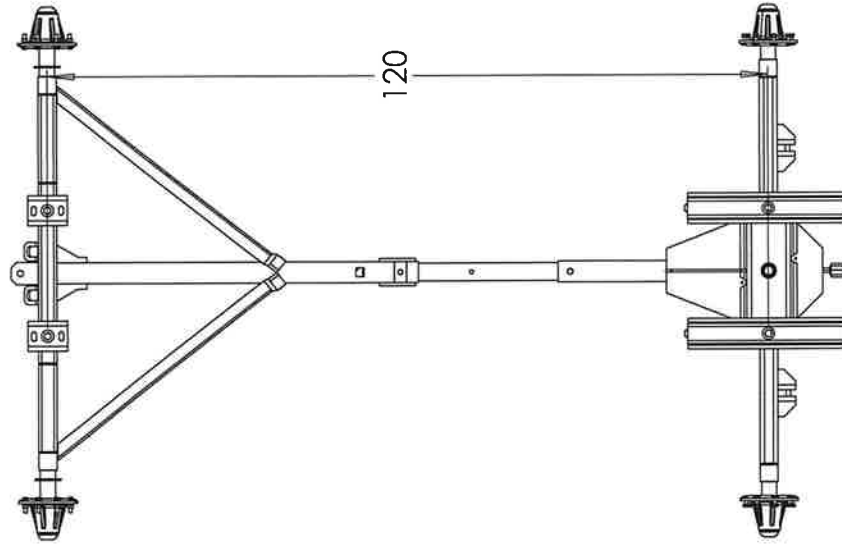


ASSEMBLED VIEW
108" CONFIGURATION SHOWN

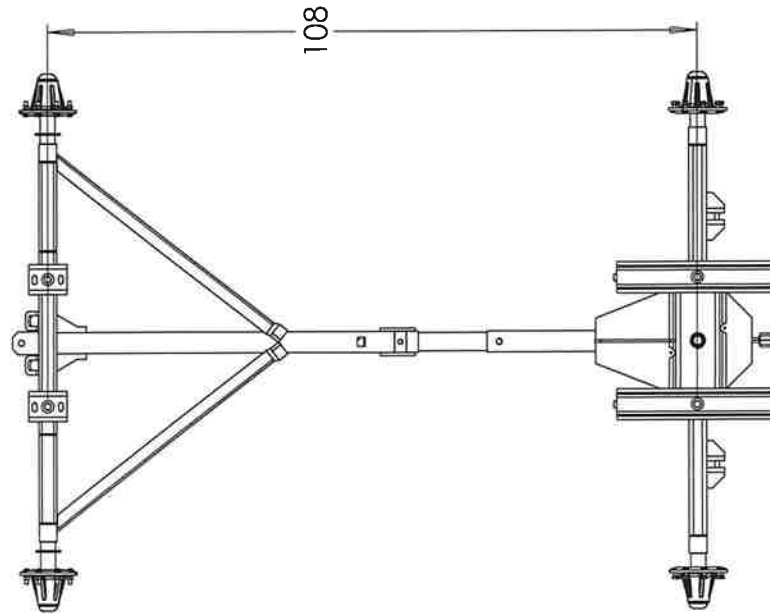
AG82 WAGON **P/N: 40820003**



145" CONFIGURATION

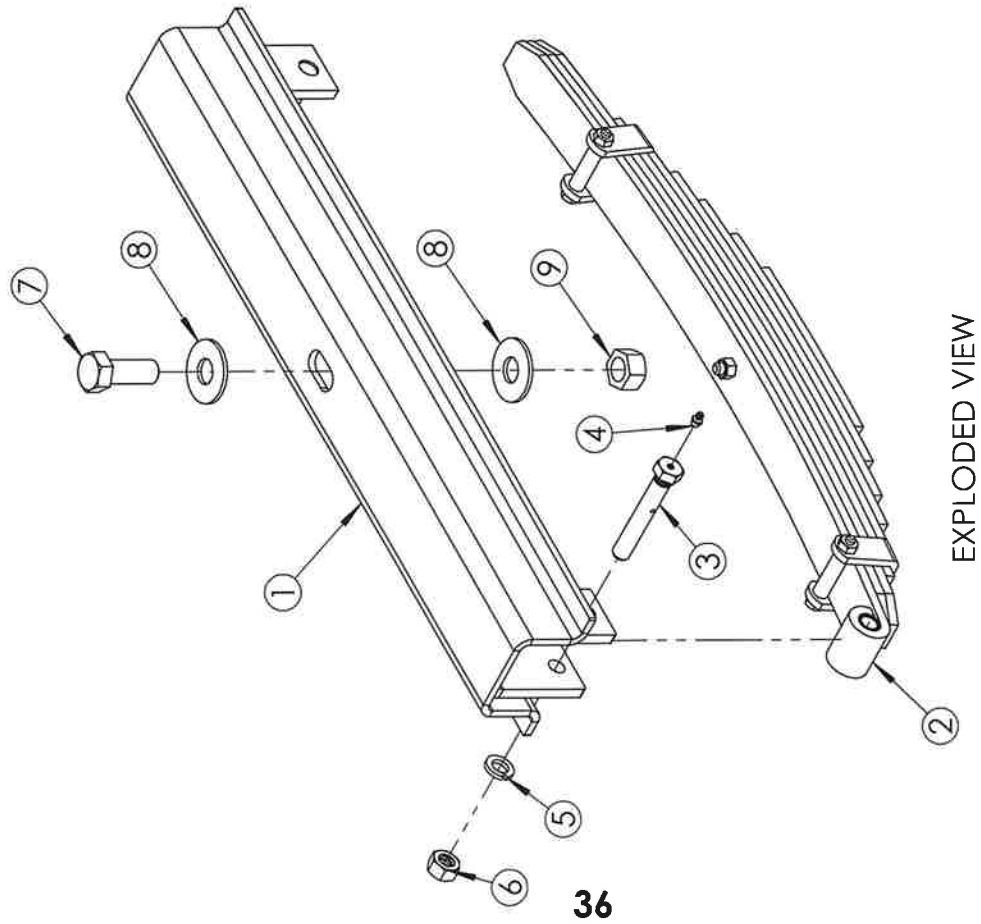


120" CONFIGURATION

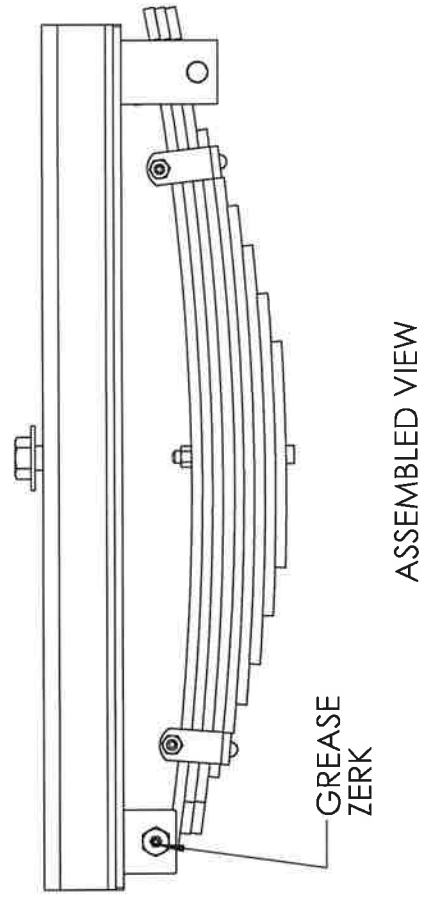


108" CONFIGURATION

AG82 / AG86 BOLSTER ASSEMBLY **P/N: 47009102**

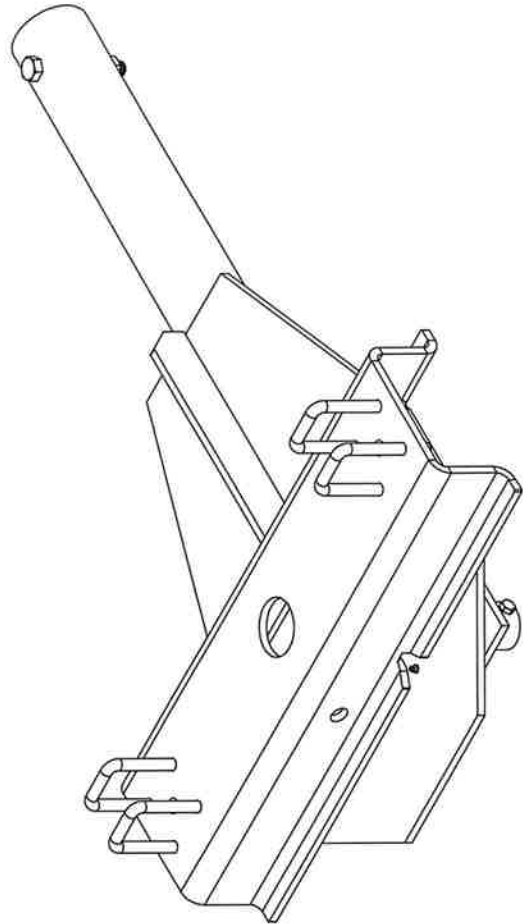
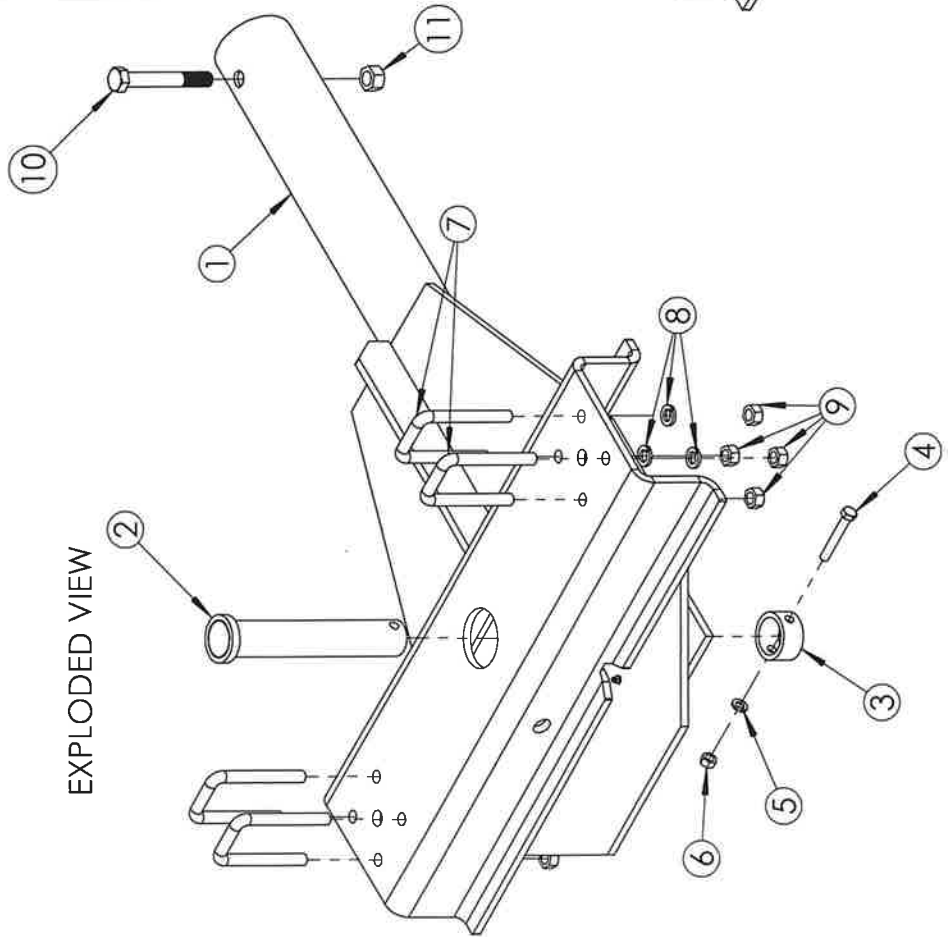


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009290	BOLSTER WELDMENT	1
2	47002117	9 LEAF WAGON SPRING	1
3	47001365	BOLT, SPRING SHACKLE	1
4	18901805	GREASE ZERK, 1/4-28, STRAIGHT	1
5	18891500	9/16 LOCK WASHER	1
6	18417600	HEX NUT 9/16-12 GR 5 ZC	1
7	18058430	BOLT HX 3/4 X 2 GR 5 NC ZC	1
8	18811800	WASHER FLAT USS ZC 3/4	2
9	18458400	NUT LOCK 3/4 NC ZC	1



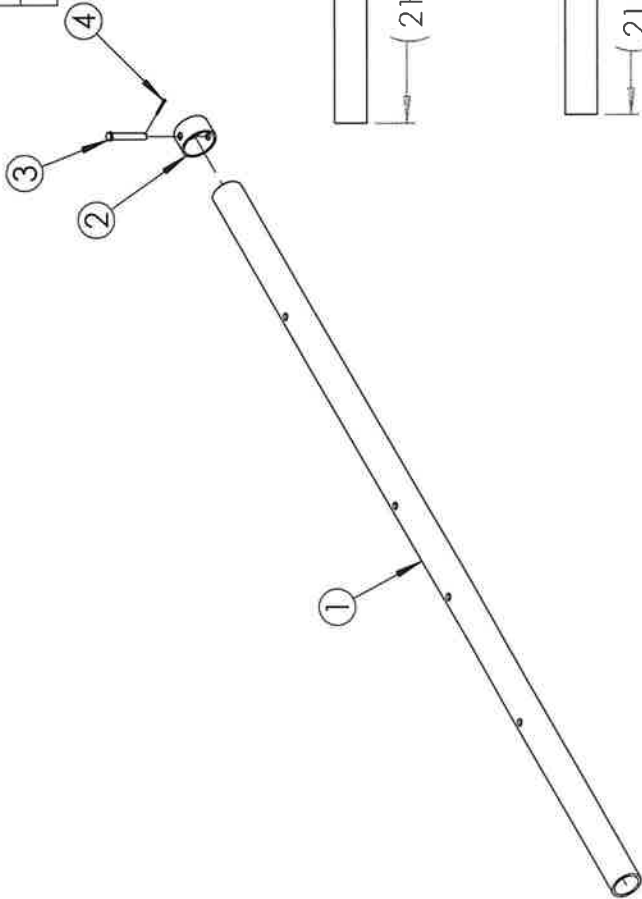
AG82 REACH ASSEMBLY P/N: 47009021

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009321	REACH ASSEMBLY	1
2	47009167	PIVOT PIN	1
3	47001168	COLLAR, BOLSTER PIN	1
4	18056834	BOLT, HEX 3/8-16 X 2 1/2 NC ZC	1
5	18891200	LOCKWASHER, 3/8 ZC	1
6	18436800	NUT 3/8 NCZC	1
7	47001364	U-BOLT, 1/2-13	4
8	18891400	WASHER, 1/2 LOCK ZC	8
9	18417400	NUT, HX 1/2 NC ZC	8
10	18057950	BOLT, HX, 5/8 X 4-1/2	1
11	18457900	NUT, LOCK 5/8 NC	1

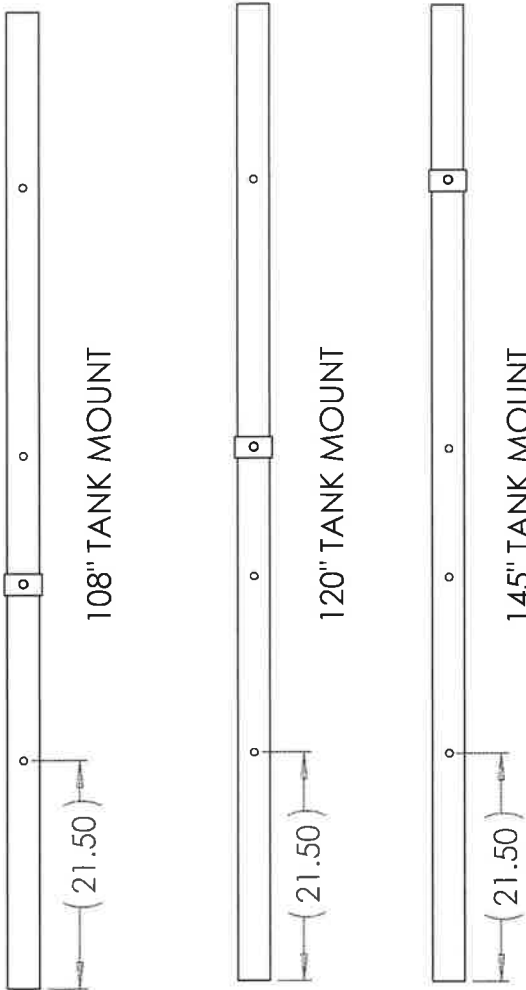


AG82 REACH PIPE ASSEMBLY P/N: 47009022

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47002190A	REACH PIPE, AG82	1
2	47003155	PULL COLLAR, W/HOLE	1
3	18541646	CLEVIS PIN 5/8 X 4	1
4	18560726	COTTER PIN, 5/32 X 1 1/2	1

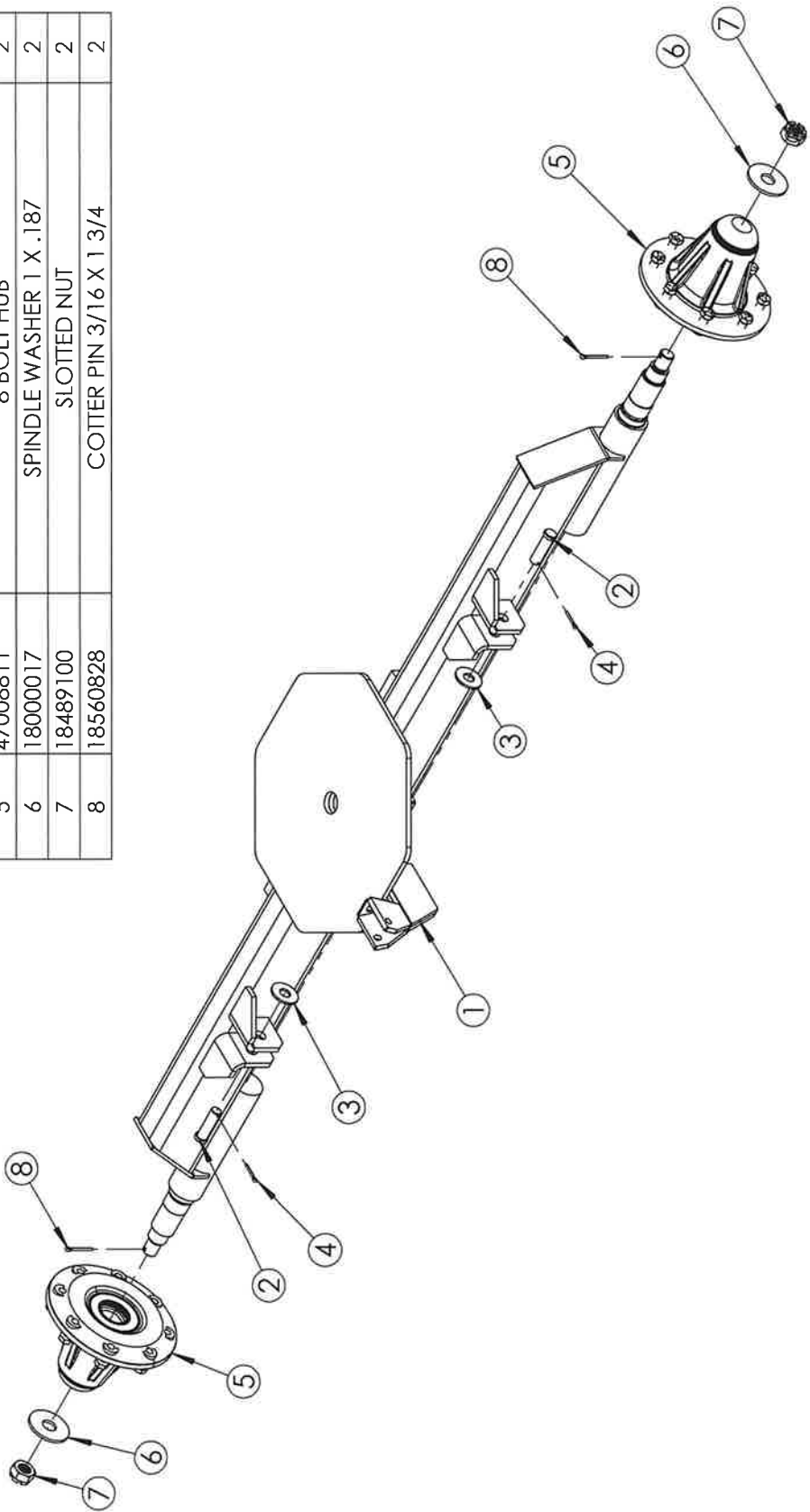


TANK MOUNT CONFIGURATIONS



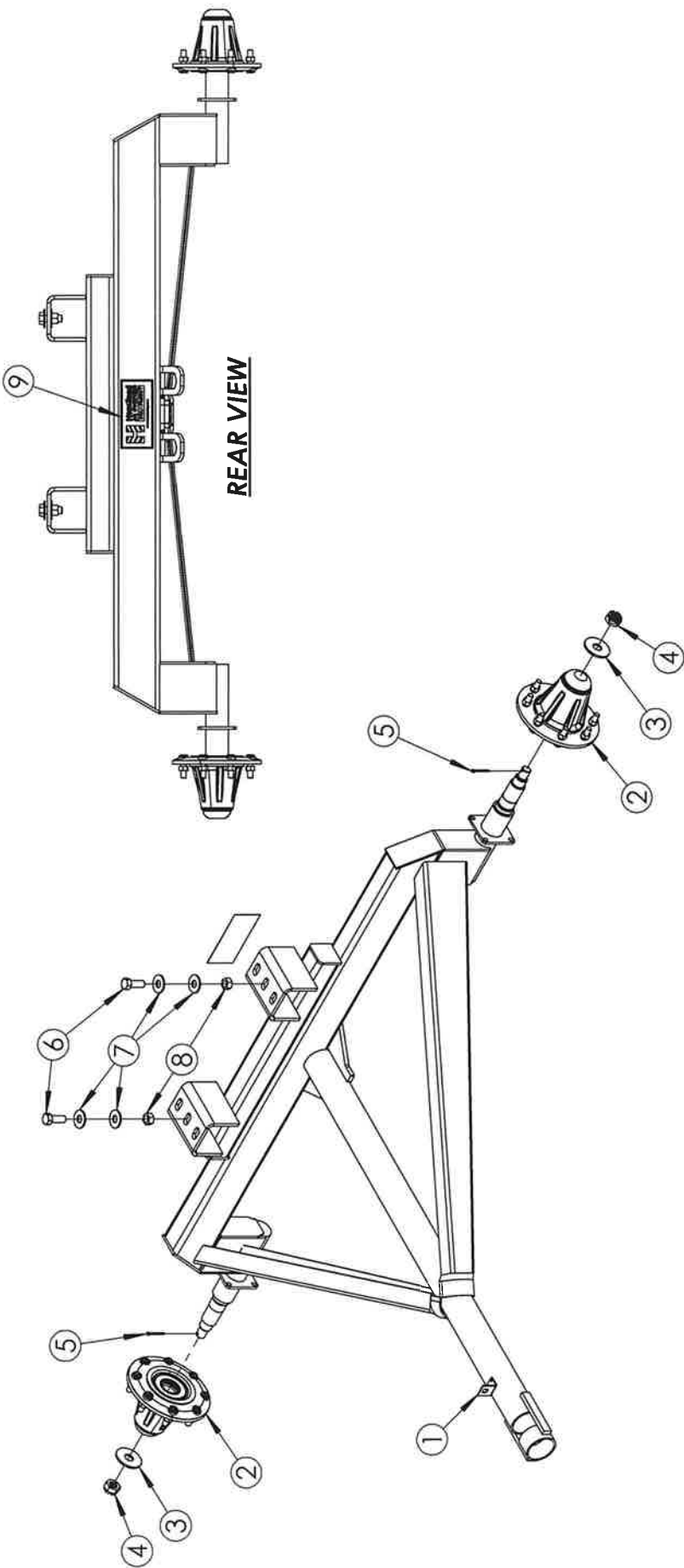
AG82 FRONT AXLE **P/N: 47015514**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47005514	FRONT AXLE WELDMENT	1
2	18541835	CLEVIS PIN 3/4 X 2 1/2	2
3	18841800	WASHER FLAT 3/4 SAE SC	2
4	18560722	5/32" X 1" COTTER PIN	2
5	47008811	8 BOLT HUB	2
6	18000017	SPINDLE WASHER 1 X .187	2
7	18489100	SLOTTED NUT	2
8	18560828	COTTER PIN 3/16 X 1 3/4	2



AG82 REAR AXLE **P/N: 47015508**

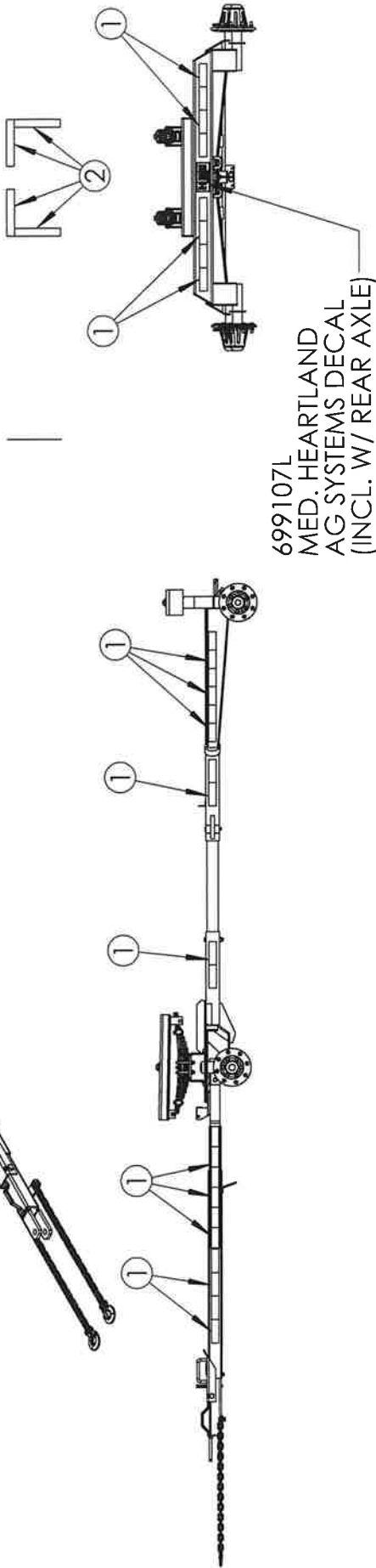
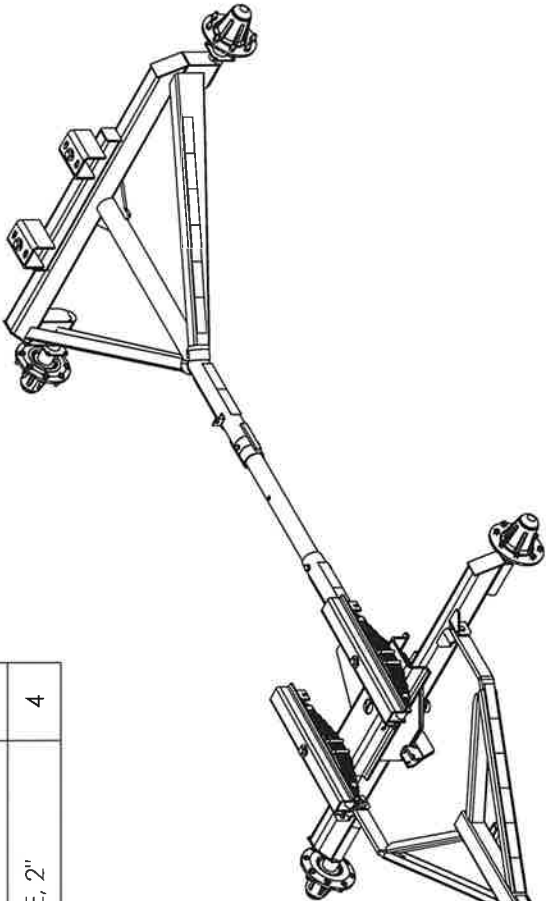
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47005508	REAR AXLE WELDMENT	1
2	47009811	8 BOLT HUB	2
3	18000017	SPINDLE WASHER 1 X .187	2
4	18489100	SLOTTED NUT	2
5	18560828	COTTER PIN 3/16 X 1 3/4	2
6	18058430	BOLT HX 3/4 X 2 GR 5 NC ZC	2
7	18811800	WASHER FLAT USS ZC 3/4	4
8	18458400	NUT LOCK 3/4 NC ZC	2
9	699107L	HEARTLAND AG SYSTEMS DECAL (MEDIUM)	1



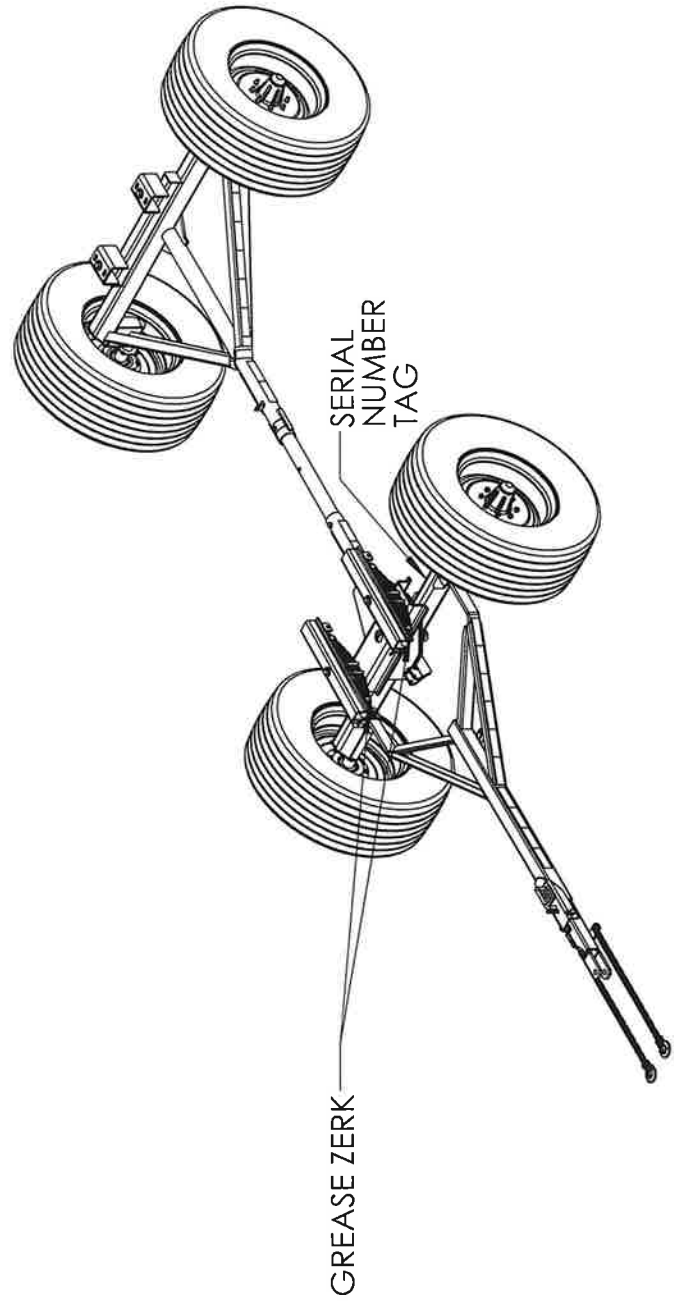
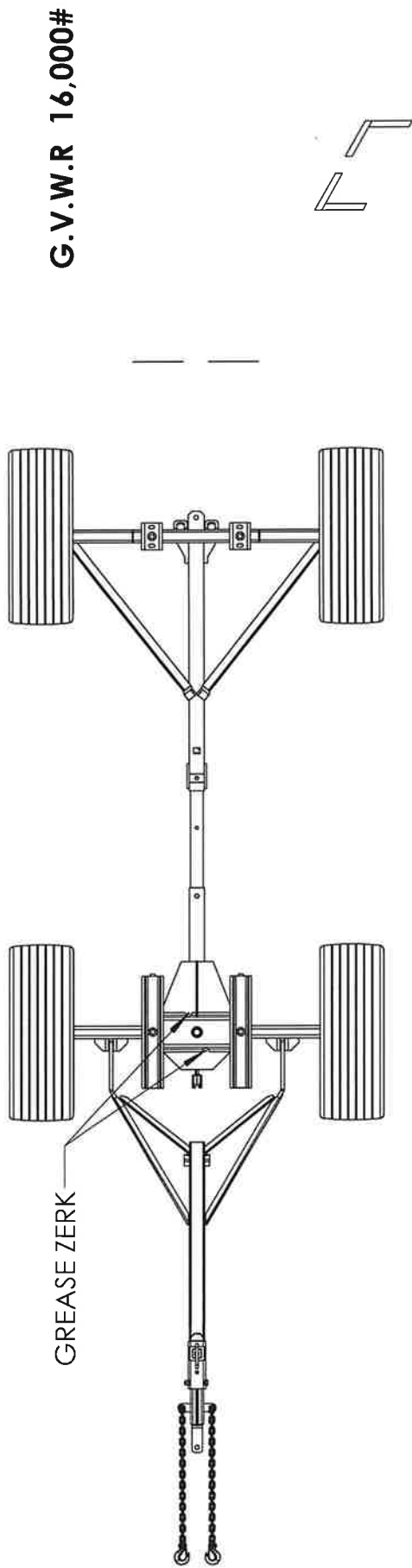
AG82 DECAL LAYOUT

P/N: 24-4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	980-3262	REFLECTIVE DOT TAPE, 2"	24
2	980-102	REFLECTIVE TAPE, WHITE, 2"	4



AG82 WAGON GREASE ZERK/ SERIAL TAG LOCATOR



LIGHT KIT **P/N: 20110011**

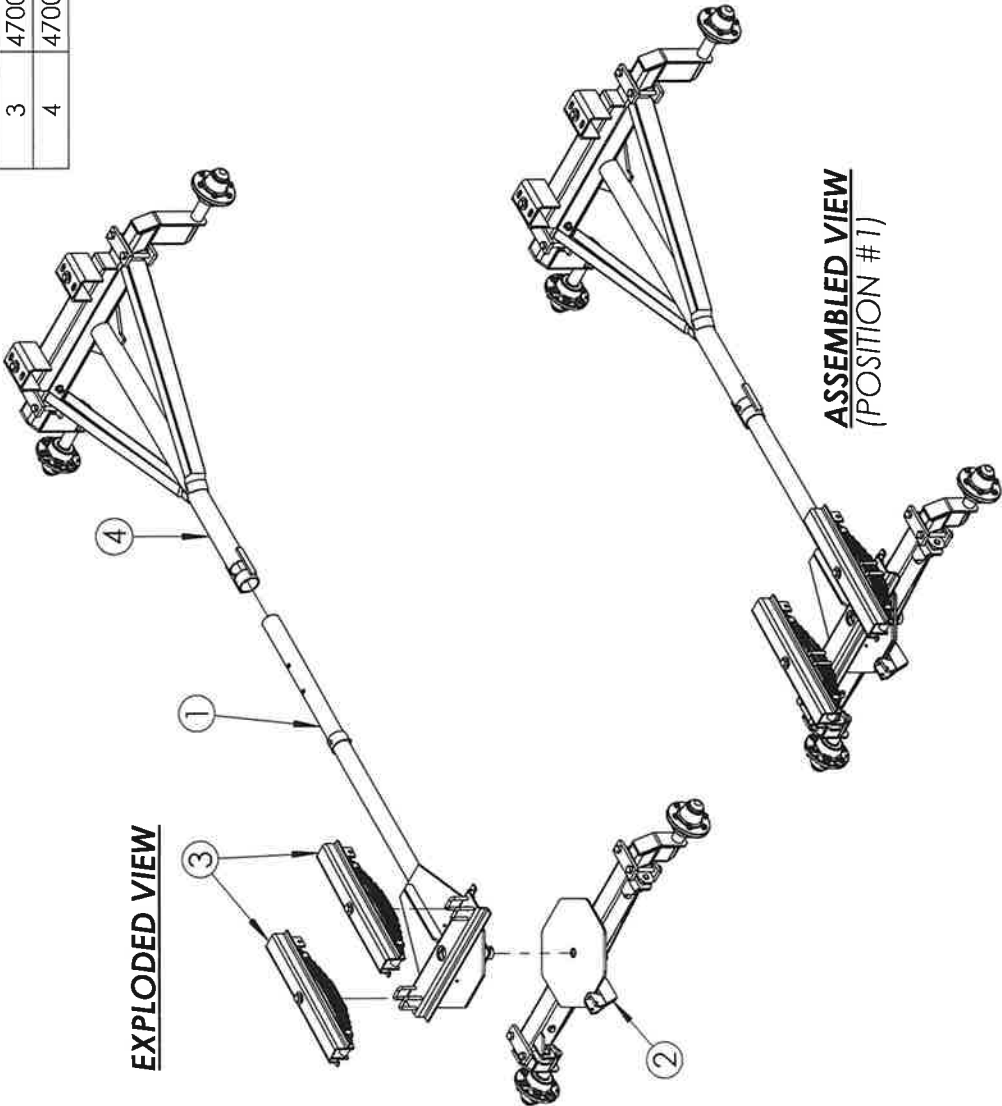
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47007356S	LIGHT BRACKET	2
2	01829	TAIL LIGHT LH	1
3	01836	TAIL LIGHT RH	1
4	MSB3440Y	WIRE 40' 4 POLE FLAT	1
5	1700400	3/8 HEX HEAD SELF THREAD SCREW	4
6	73012	7-WAY TO 4 FLAT PLUG ADAPTER	1



AG86 WAGON **P/N: 40860002**

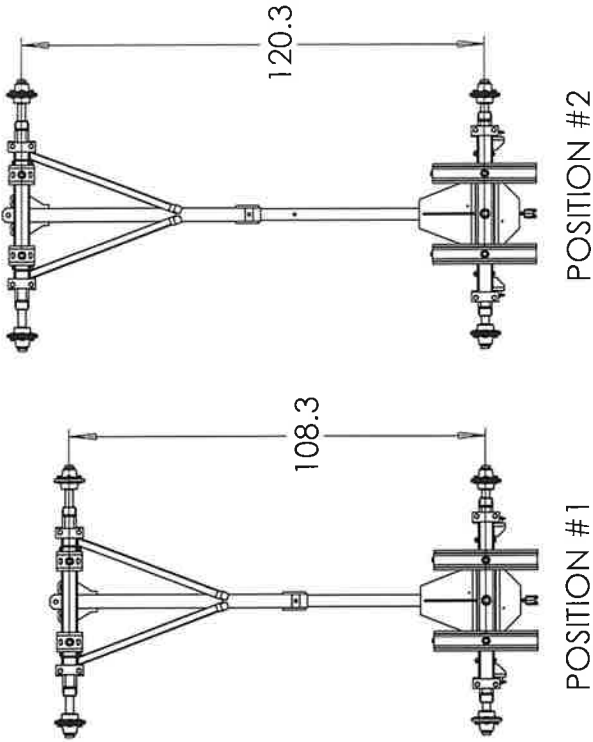
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009025	REACH COMPLETE	1
2	47009205	FRONT AXLE COMPLETE	1
3	47009102	BOLSTER ASSEMBLY	2
4	47009343	REAR AXLE COMPLETE	1

EXPLODED VIEW

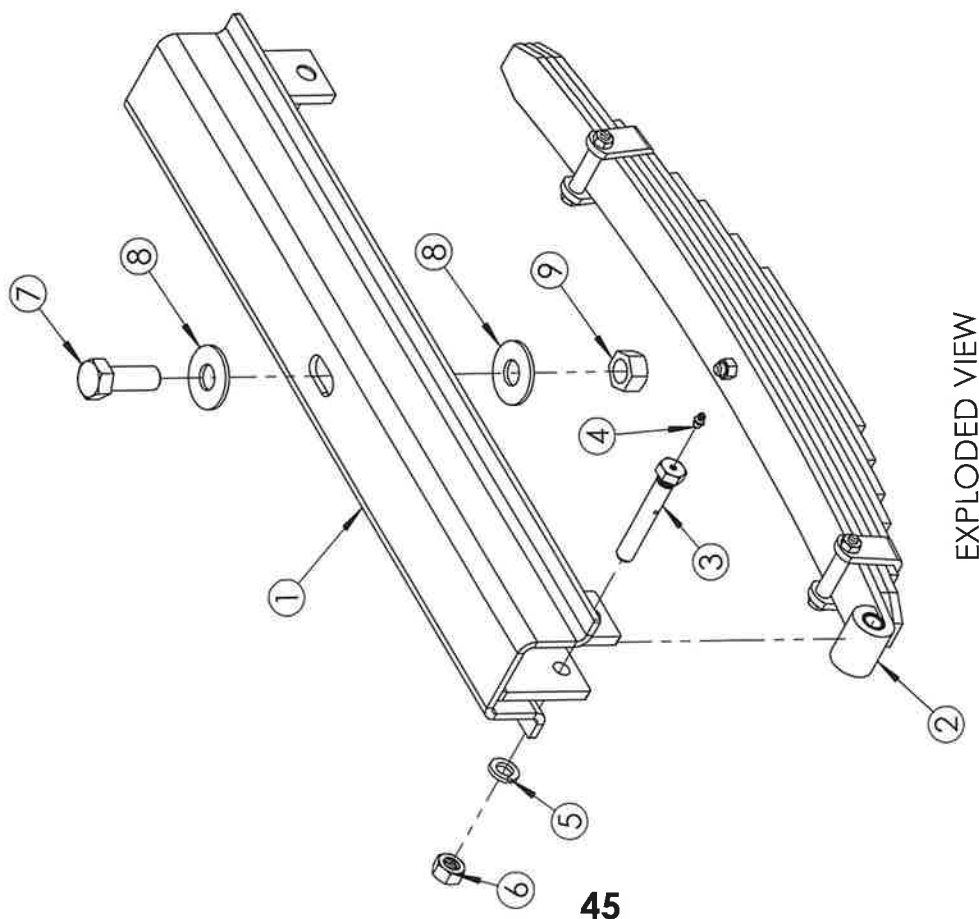


ALSO INCLUDED BUT NOT SHOWN
 24-4 - REFLECTIVE TAPE QTY 1

ASSEMBLED VIEW
 (POSITION #1)

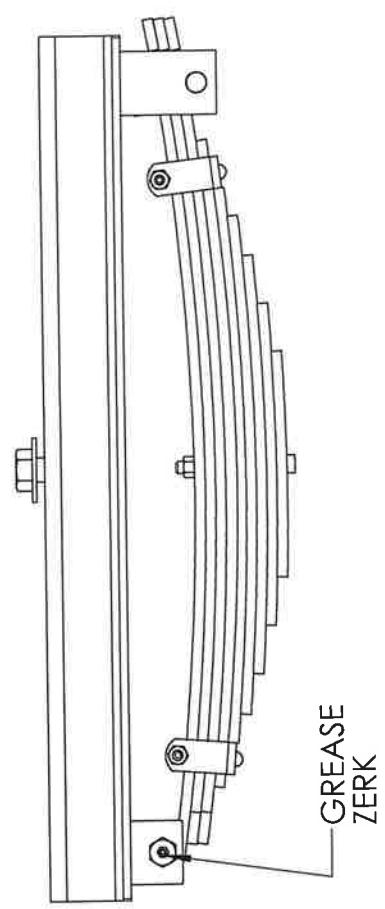


AG82 / AG86 BOLSTER ASSEMBLY P/N: 47009102



EXPLODED VIEW

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009290	BOLSTER WELDMENT	1
2	47002117	9 LEAF WAGON SPRING	1
3	47001365	BOLT, SPRING SHACKLE	1
4	18901805	GREASE ZERK, 1/4-28, STRAIGHT	1
5	18891500	9/16 LOCK WASHER	1
6	18417600	HEX NUT 9/16-12 GR 5 ZC	1
7	18058430	BOLT HX 3/4 X 2 GR 5 NC ZC	1
8	18811800	WASHER FLAT USS ZC 3/4	2
9	18458400	NUT LOCK 3/4 NC ZC	1

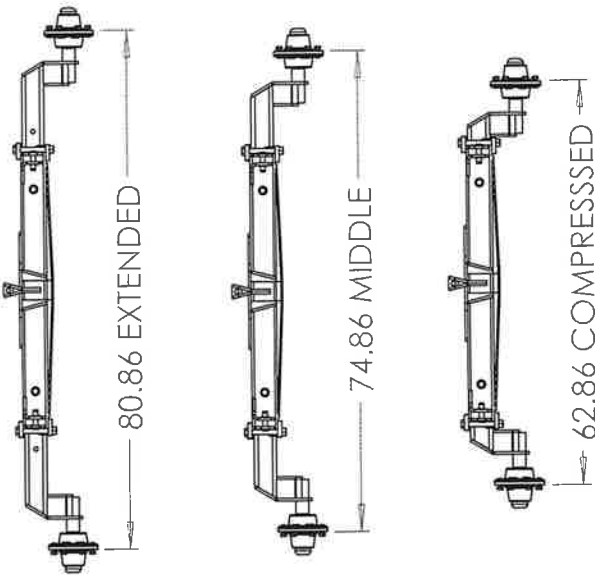
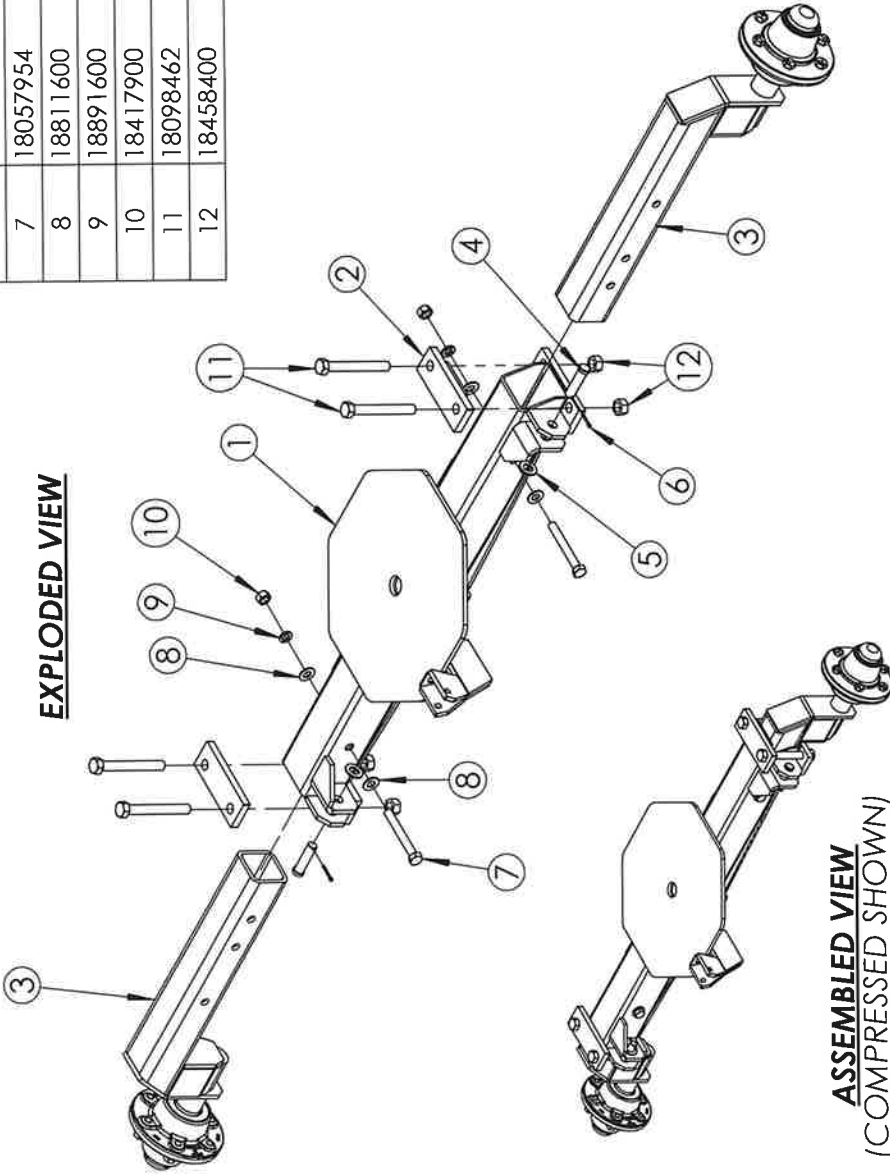


ASSEMBLED VIEW

AG86 FRONT AXLE **P/N: 47009205**

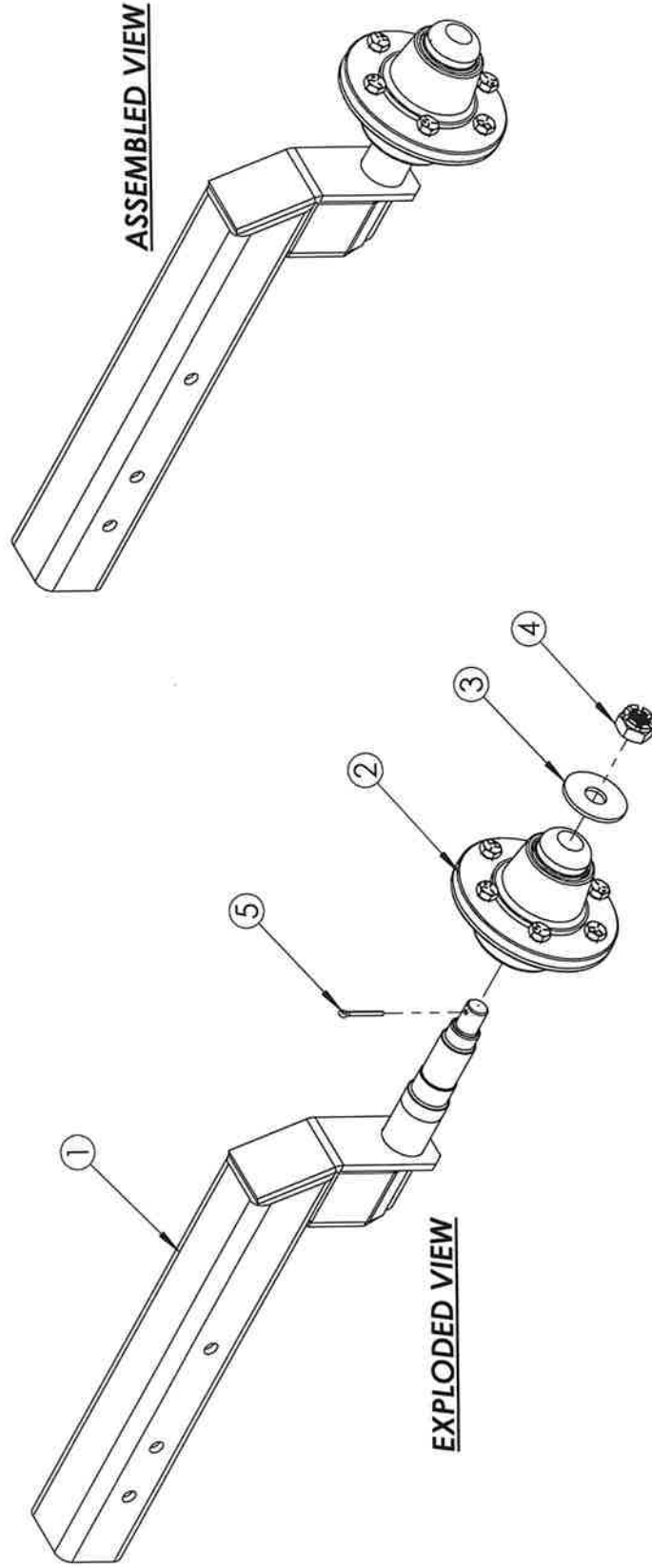
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47004325	FRONT AXLE, ADJ	1
2	47009404	AXLE CLAMP	2
3	47009652	FRONT STUB COMPLETE	2
4	18541835	CLEVIS PIN, 3/4 X 2-1/2	2
5	18851800	WASHER, FLAT 3/4 SAE ZC	2
6	18560722	5/32" X 1" COTTER PIN	2
7	18057954	BOLT HX CAP G5NCZC 5/8 X 5	2
8	18811600	WASHER, FLAT 5/8 ZC	4
9	18891600	WASHER. LOCK 5/8 ZC	2
10	18417900	NUT, 5/8 NC	2
11	18098462	BOLT 3/4-10 X 6	4
12	18458400	NUT LOCK 3/4 NC ZC	4

EXPLODED VIEW

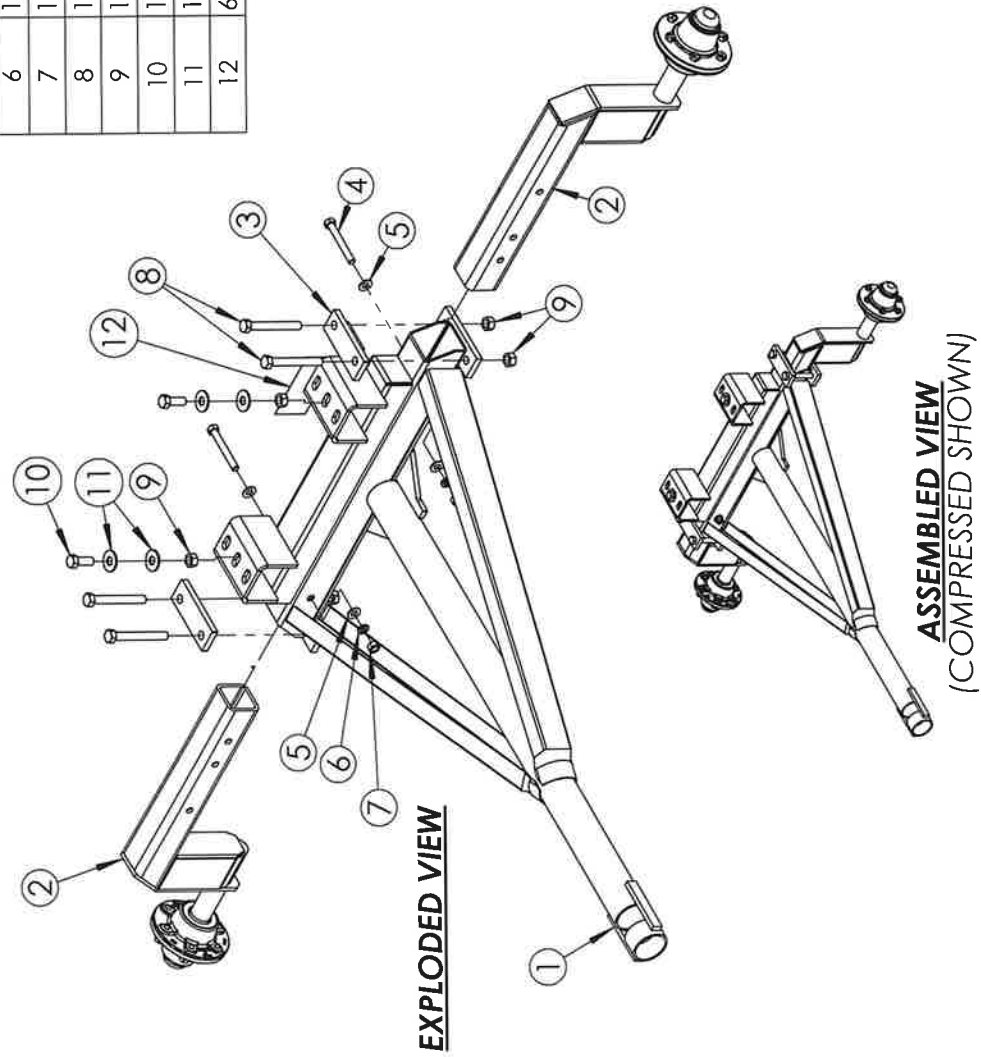


AG86 FRONT STUB AXLE **P/N: 47009652**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009552	FRONT STUB AXLE WELDMENT	1
2	47009618	HUB COMPLETE (W/O BRAKES)	1
3	18000017	SPINDLE WASHER 1 X .187	1
4	18489100	SLOTTED NUT	1
5	18560828	COTTER PIN 3/16 X 1 3/4	1



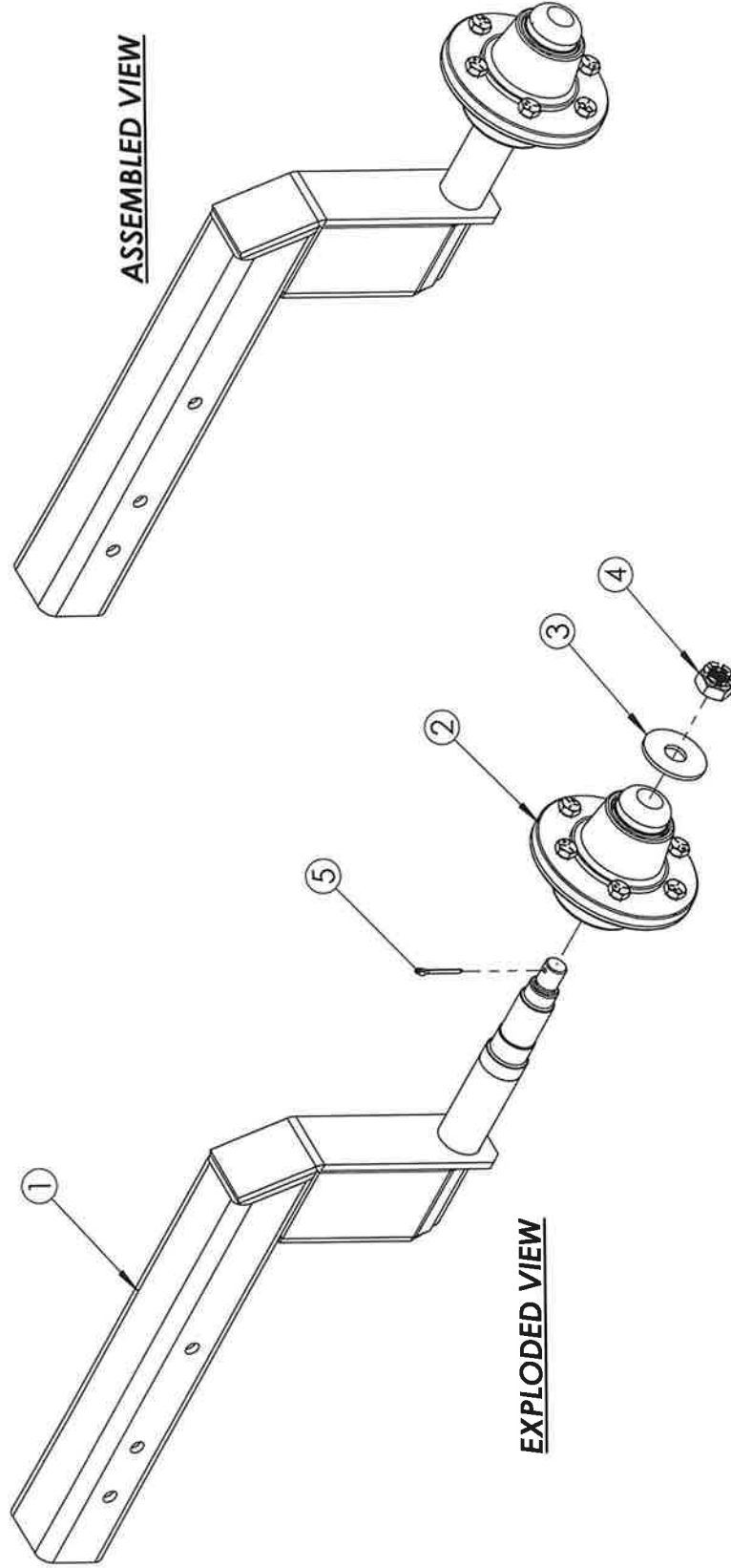
AG86 REAR AXLE P/N: 47009343



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009243	REAR AXLE, ADJUSTABLE	1
2	47009653	REAR STUB COMPLETE	2
3	47009404	AXLE CLAMP	2
4	18057954	BOLT HX CAP G5NCZC 5/8 X 5	2
5	18811600	WASHER, FLAT 5/8 ZC	4
6	18891600	WASHER, LOCK 5/8 ZC	2
7	18417900	NUT, 5/8 NC	2
8	18098462	BOLT 3/4-10 X 6	4
9	18458400	NUT LOCK 3/4 NC ZC	6
10	18058430	BOLT HX 3/4 X 2 GR 5 NC ZC	2
11	18811800	WASHER FLAT USS ZC 3/4	4
12	699107L	HEARTLAND AG SYSTEMS DECAL (MEDIUM)	1

AG86 REAR STUB AXLE **P/N: 47009653**

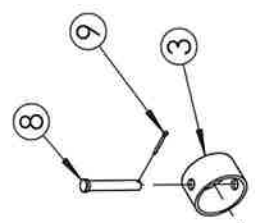
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009553	REAR STUB AXLE WELDMENT	1
2	47009618	HUB COMPLETE (W/O BRAKES)	1
3	18000017	SPINDLE WASHER 1 X .187	1
4	18489100	SLOTTED NUT	1
5	18560828	COTTER PIN 3/16 X 1 3/4	1



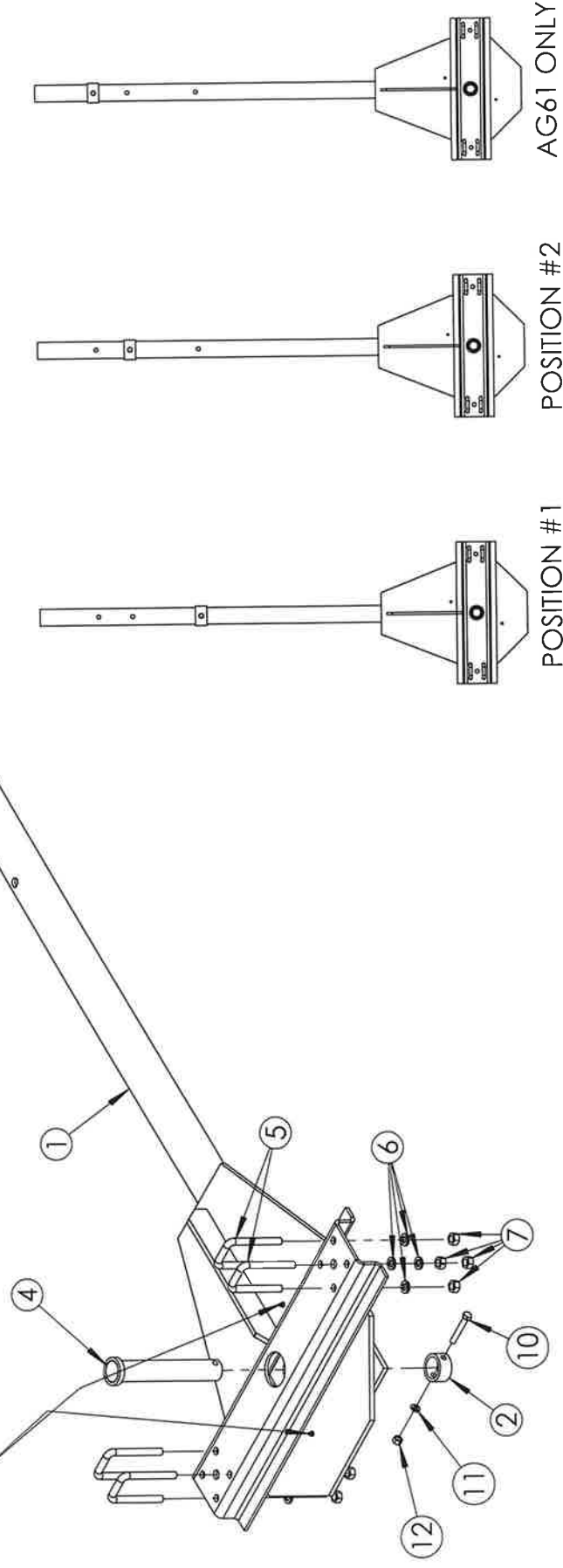
AG86 REACH

P/N: 47009025

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009421	REACH ASSEMBLY	1
2	47001168	COLLAR, BOLSTER PIN	1
3	47003155	PULL COLLAR, W/HOLE	1
4	47009167	PIVOT PIN	1
5	47001364	U-BOLT, 1/2-13	4
6	18891400	WASHER, 1/2 LOCK ZC	8
7	18417400	NUT, HX 1/2 NC ZC	8
8	18541646	CLEVIS PIN 5/8 X 4	1
9	18560726	COTTER PIN, 5/32 X 1 1/2	1
10	18056834	BOLT, HEX 3/8-16 X 2 1/2 NC ZC	1
11	18891200	LOCKWASHER, 3/8 ZC	1
12	18436800	NUT 3/8 NCZC	1



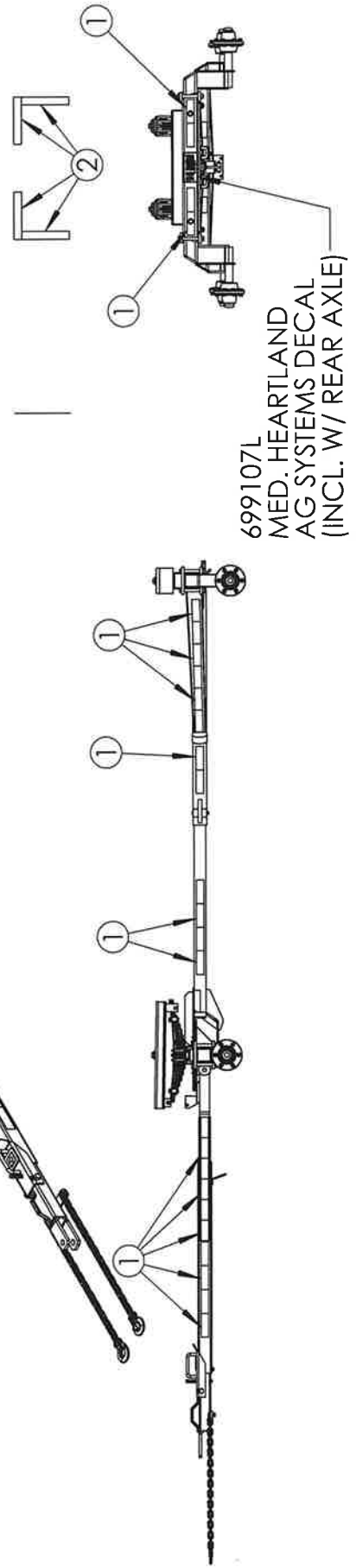
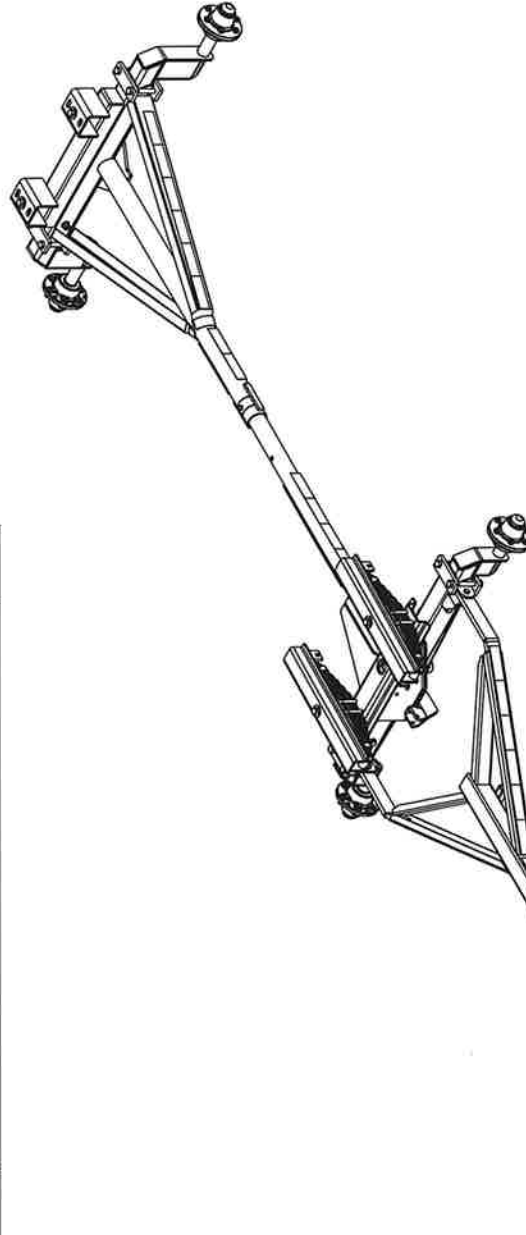
GREASE
ZERKS



AG86 DECAL LAYOUT

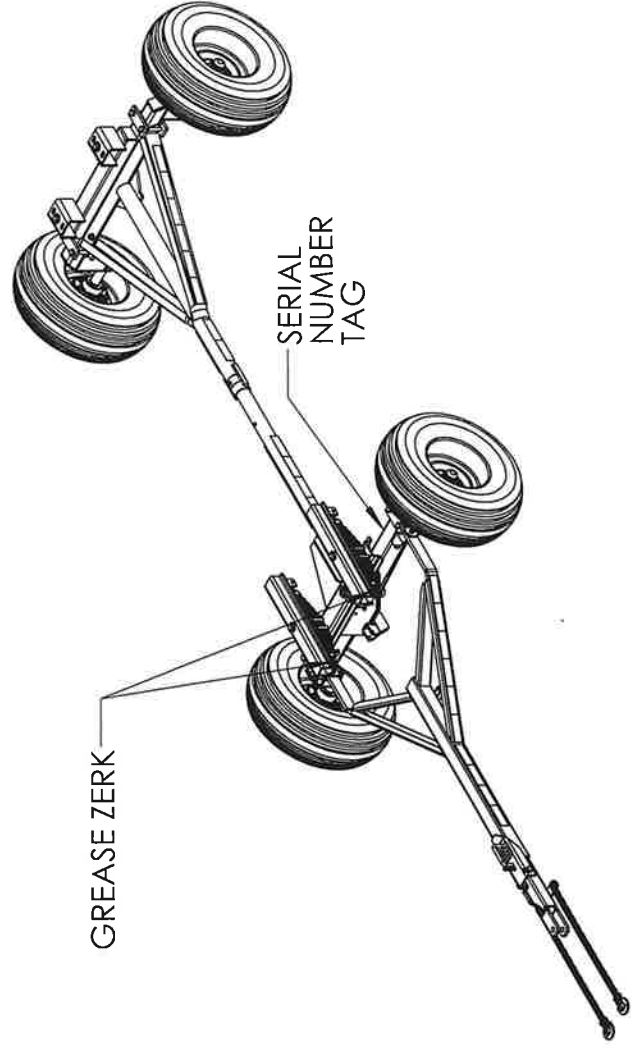
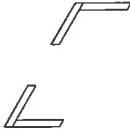
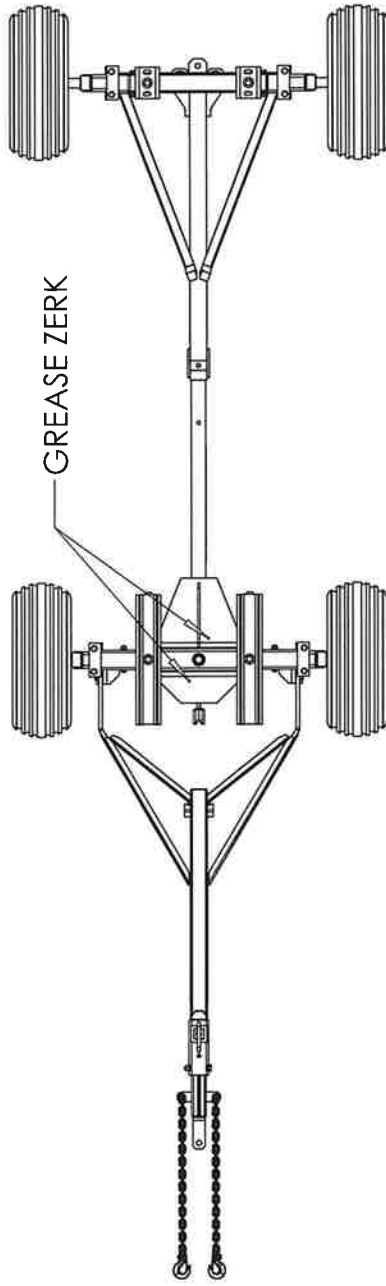
P/N: 24-4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	980-3262	REFLECTIVE DOT TAPE, 2"	24
2	980-102	REFLECTIVE TAPE, WHITE, 2"	4



AG86 WAGON GREASE ZERK/ SERIAL TAG LOCATOR

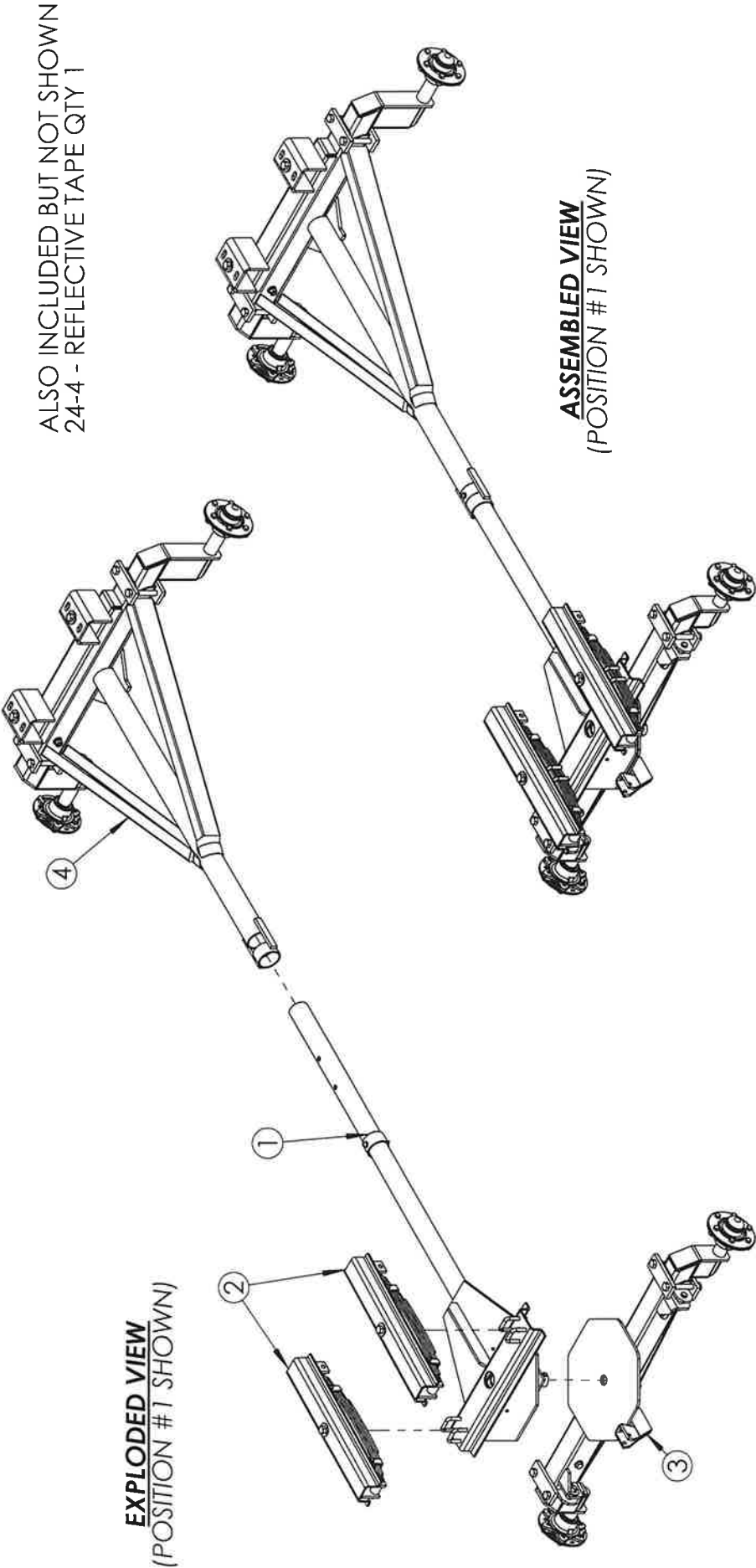
G.V.W.R 16,000#



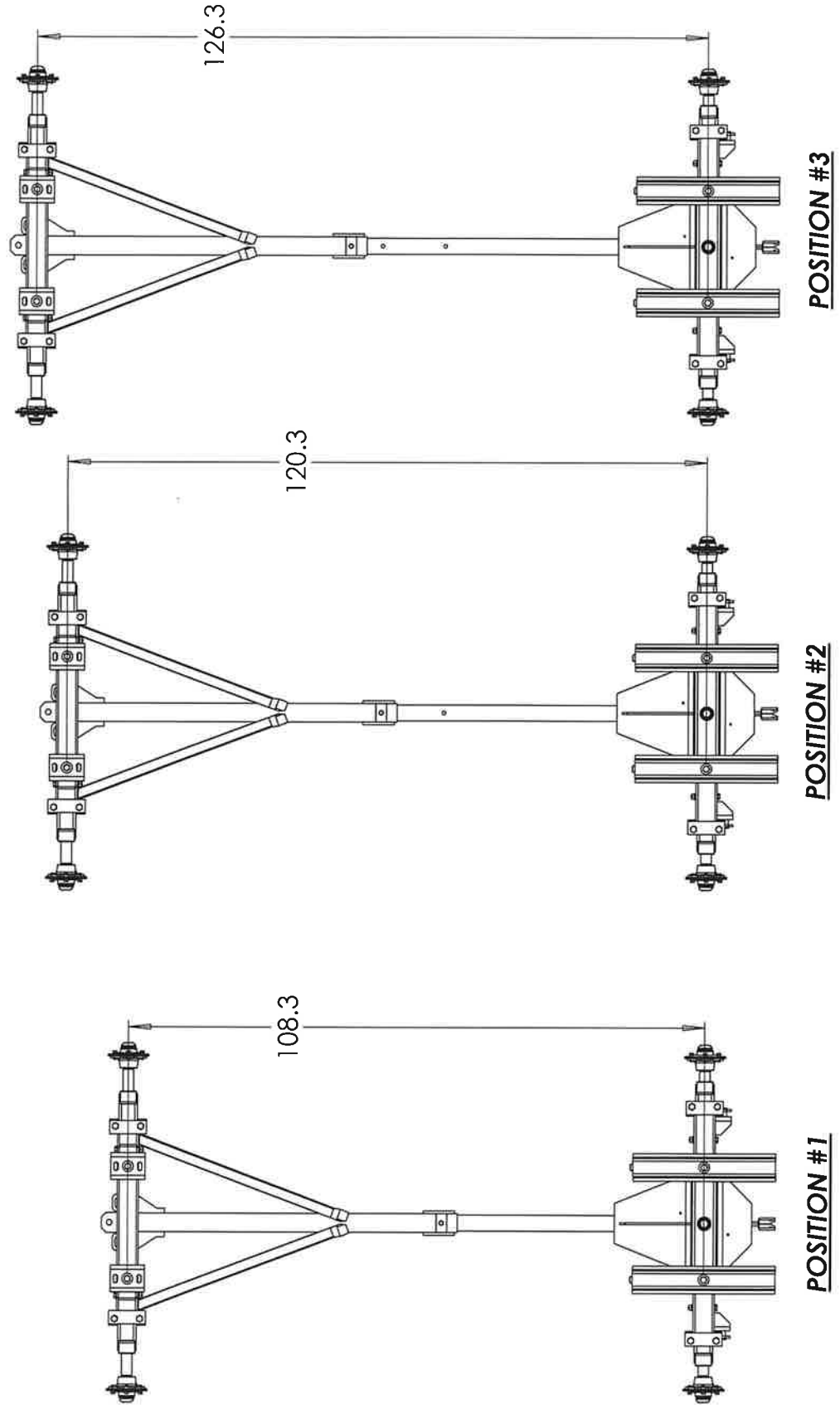
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AG106 WAGON (STD) **P/N: 41060002**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009024	REACH COMPLETE	1
2	47009202	BOLSTER ASSEMBLY	2
3	47009005	FRONT AXLE COMPLETE (STD WIDTH)	1
4	47009006	REAR AXLE COMPLETE (STD)	1

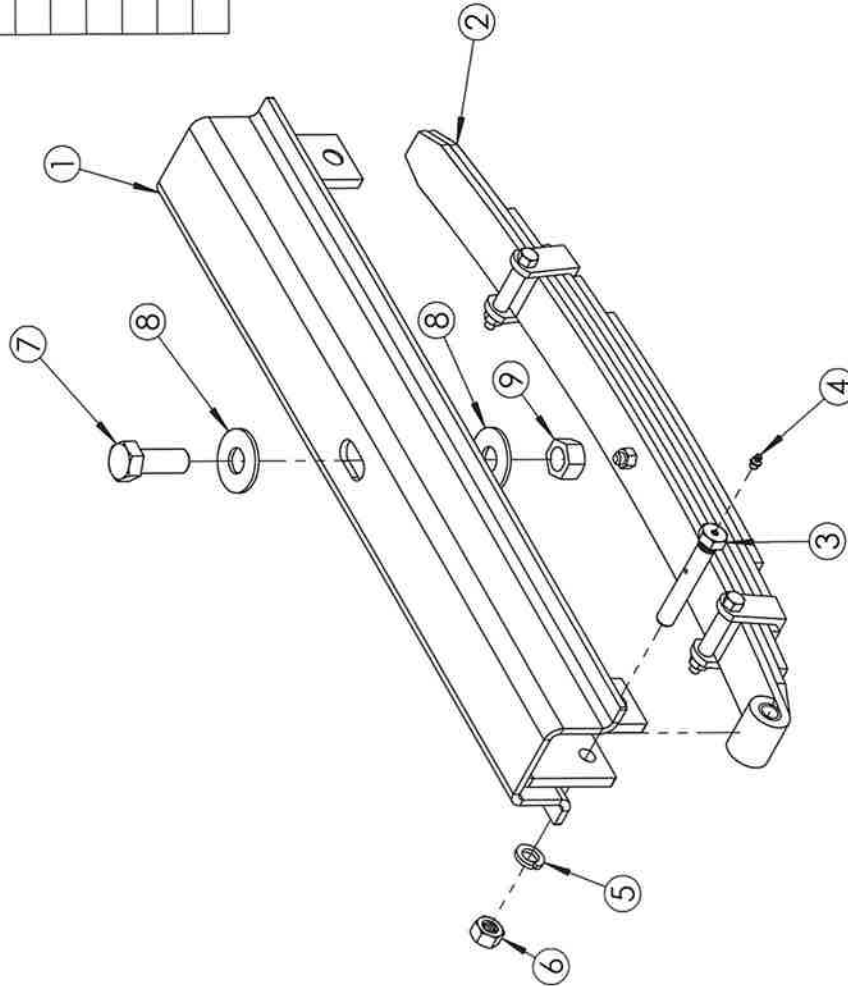


AG106 WAGON (STD) P/N: 41060002

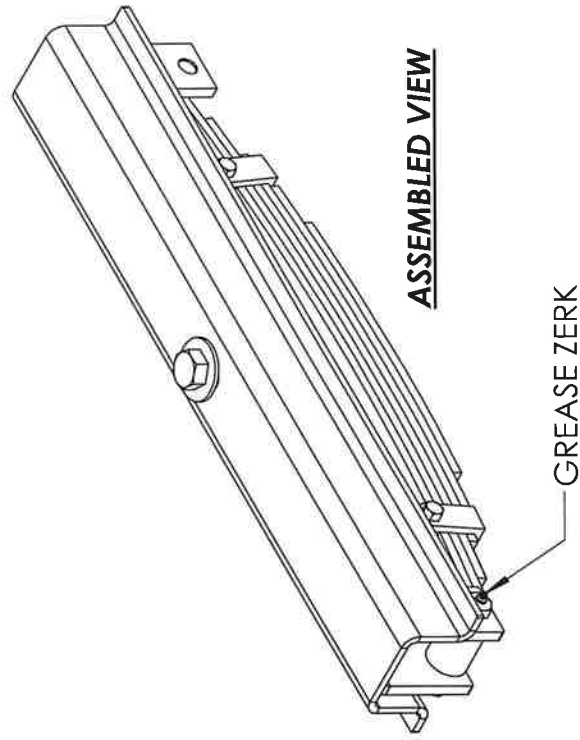


AG106 BOLSTER ASSY P/N: 47009202

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009302	BOLSTER WELDMENT	1
2	47002093	6 LEAF WAGON SPRING	1
3	47001365	BOLT, SPRING SHACKLE	1
4	18901805	GREASE ZERK, 1/4-28, STRAIGHT	1
5	18891500	9/16 LOCK WASHER	1
6	18417600	HEX NUT 9/16-12 GR 5 ZC	1
7	18058430	BOLT HX 3/4 X 2 GR 5 NC ZC	1
8	18811800	WASHER FLAT USS ZC 3/4	2
9	18458400	NUT LOCK 3/4 NC ZC	1



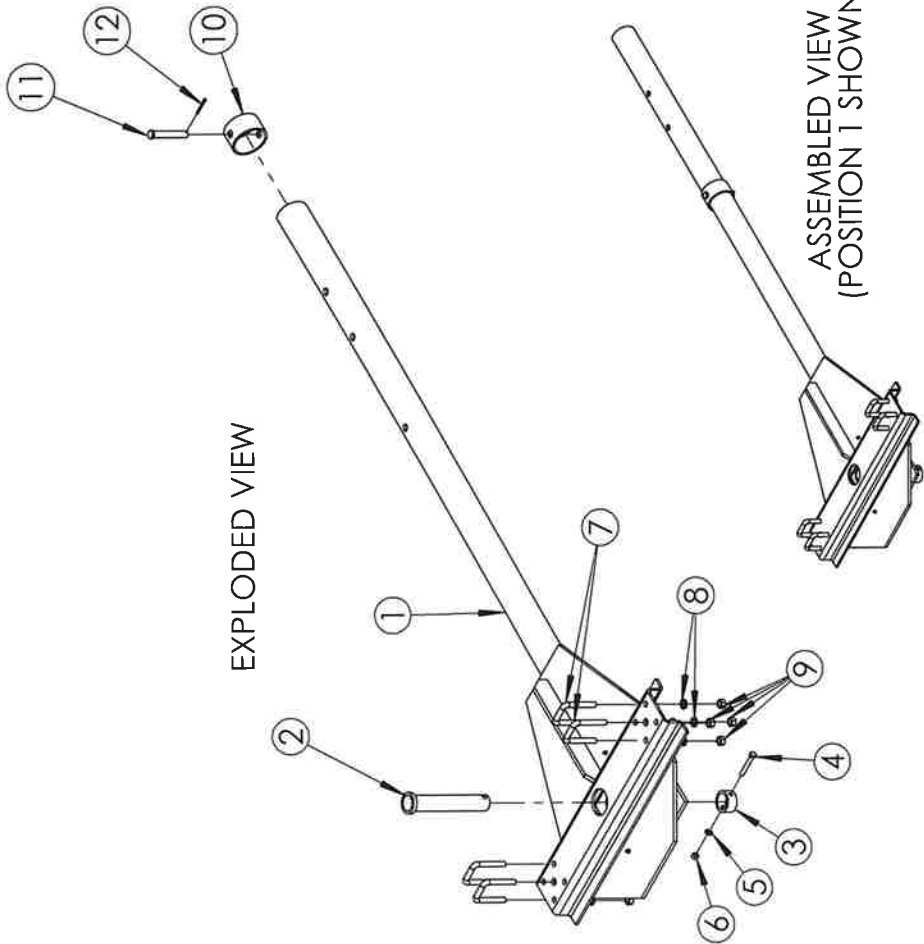
EXPLODED VIEW



ASSEMBLED VIEW

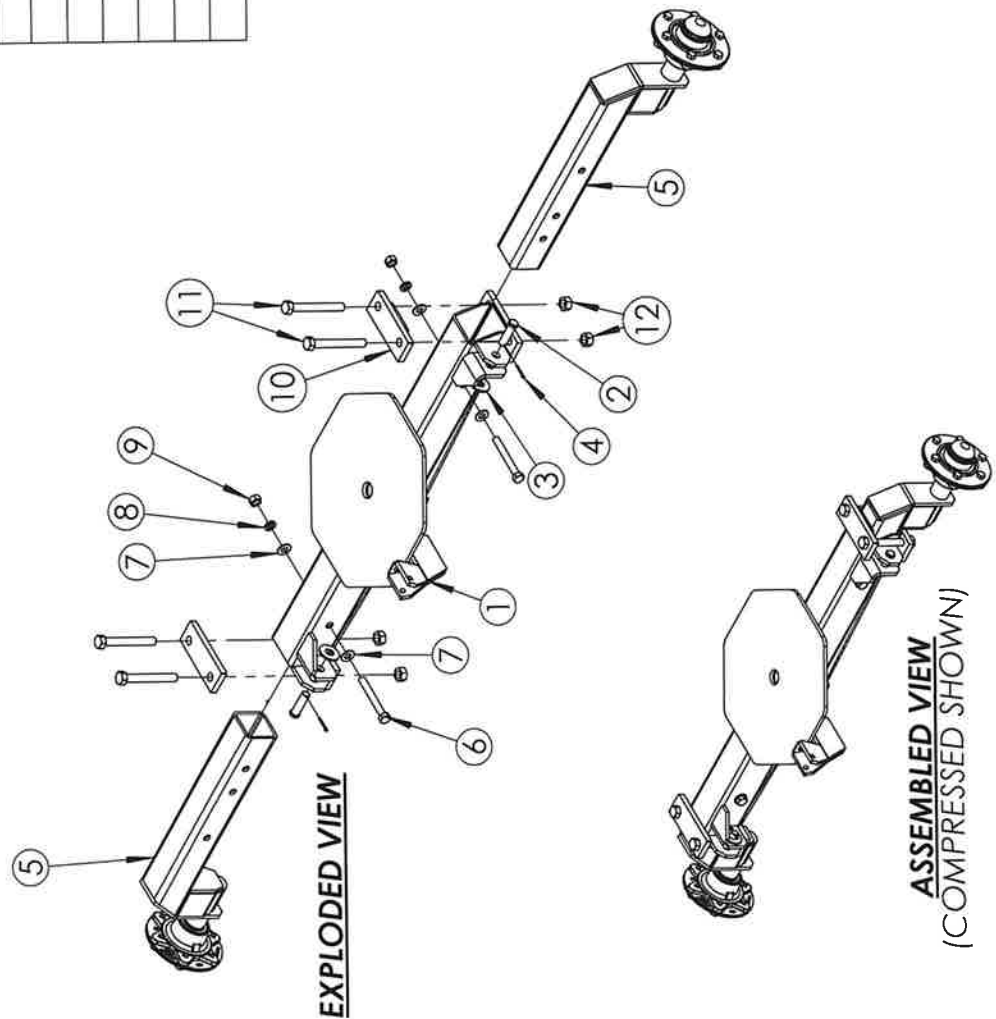
GREASE ZERK

AG106 REACH **P/N: 47009024**

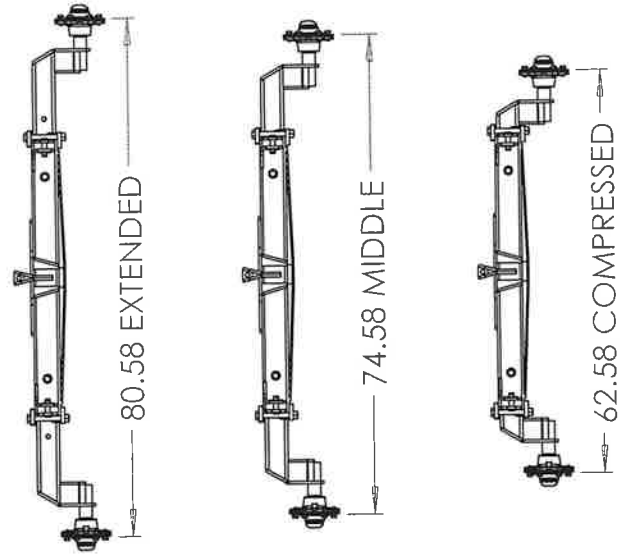


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009421	REACH ASSEMBLY	1
2	47009167	PIVOT PIN	1
3	47001168	COLLAR, BOLSTER PIN	1
4	18056834	BOLT, HEX 3/8-16 X 2 1/2 NC ZC	1
5	18891200	LOCKWASHER, 3/8 ZC	1
6	18436800	NUT 3/8 NCZC	1
7	47001366	U-BOLT, 1/2-13	4
8	18891400	WASHER, 1/2 LOCK ZC	8
9	18417400	NUT, HX 1/2 NC ZC	8
10	47003155	PULL COLLAR, W/HOLE	1
11	18541646	CLEVIS PIN 5/8 X 4	1
12	18560726	COTTER PIN, 5/32 X 1 1/2	1

AG106 FRONT AXLE (STD) **P/N: 47009005**

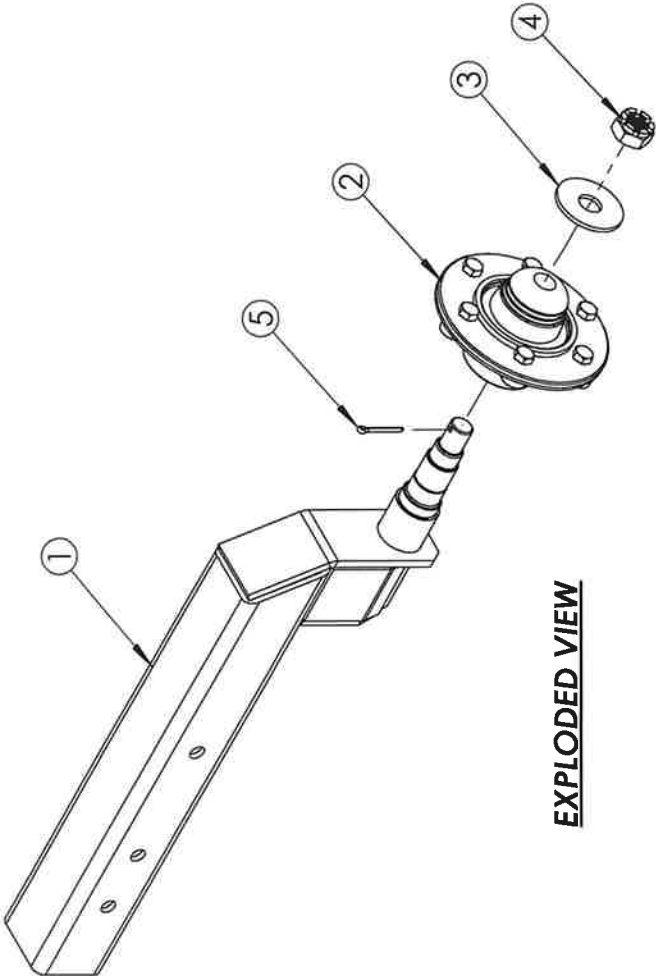


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009105	FRONT AXLE, ADJ.	1
2	18541835	CLEVIS PIN 3/4 X 2 1/2	2
3	18841800	WASHER FLAT 3/4 SAE SC	2
4	18560722	5/32" X 1" COTTER PIN	2
5	47009090	FRONT STUB AXLE COMPLETE (60-78")	2
6	18057954	BOLT HX CAP G5NCZC 5/8 X 5	2
7	18811600	WASHER, FLAT 5/8 ZC	4
8	18891600	WASHER, LOCK 5/8 ZC	2
9	18417900	NUT, 5/8 NC	2
10	47009404	AXLE CLAMP	2
11	18098462	BOLT 3/4-10 X 6	4
12	18458400	NUT LOCK 3/4 NC ZC	4

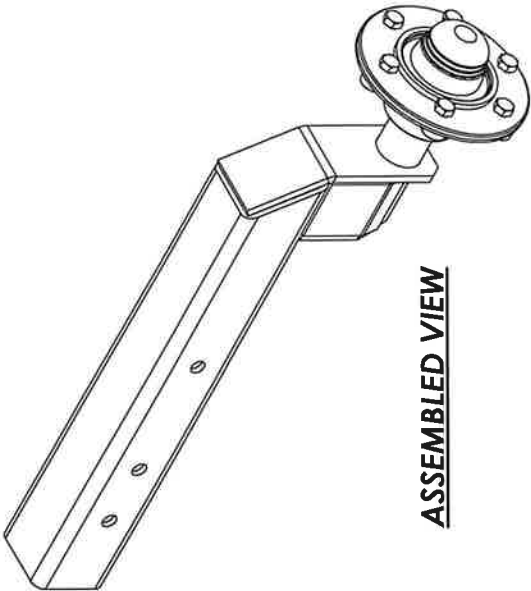


AG106 FRONT STUB AXLE (STD) **P/N: 47009090**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009190	STUB AXLE, FRONT (80")	1
2	47009611	6 BOLT HUB ASSY (611 HUB)	1
3	18000017	SPINDLE WASHER 1 X .187	1
4	18489100	SLOTTED NUT	1
5	18560828	COTTER PIN 3/16 X 1 3/4	1

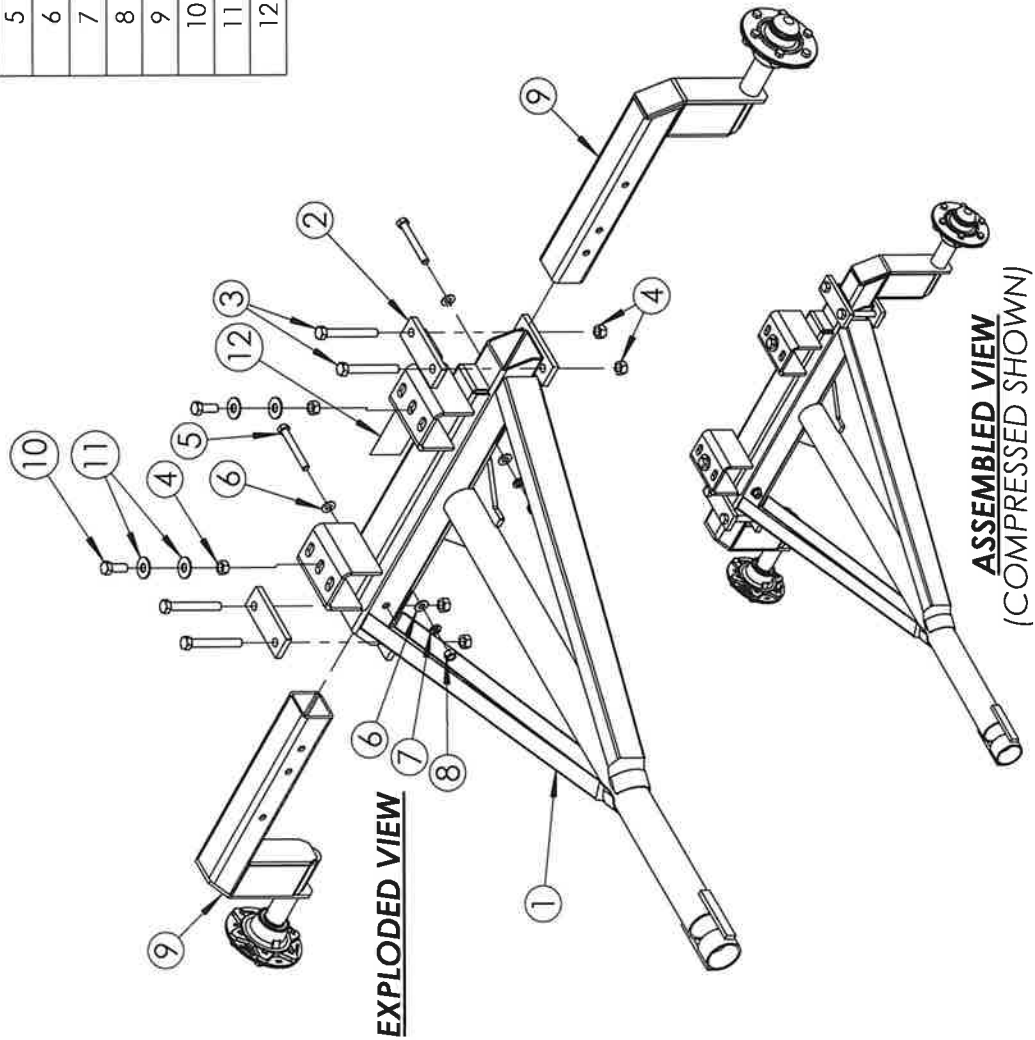


EXPLODED VIEW

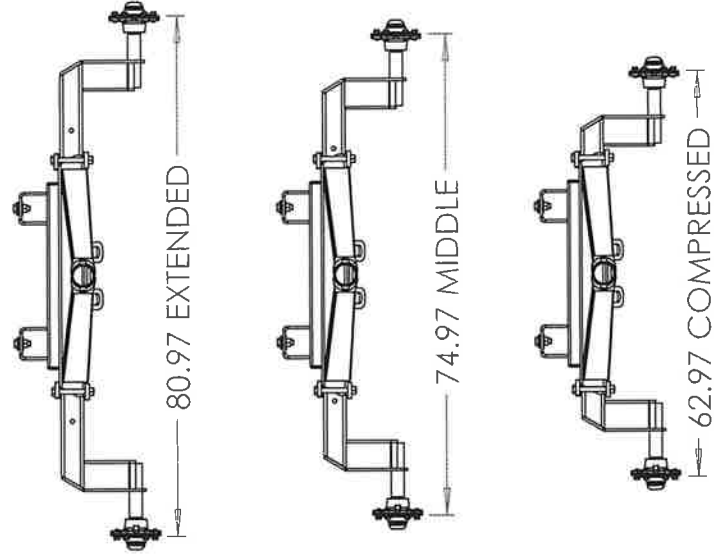


ASSEMBLED VIEW

AG106 REAR AXLE (STD) P/N: 47009006

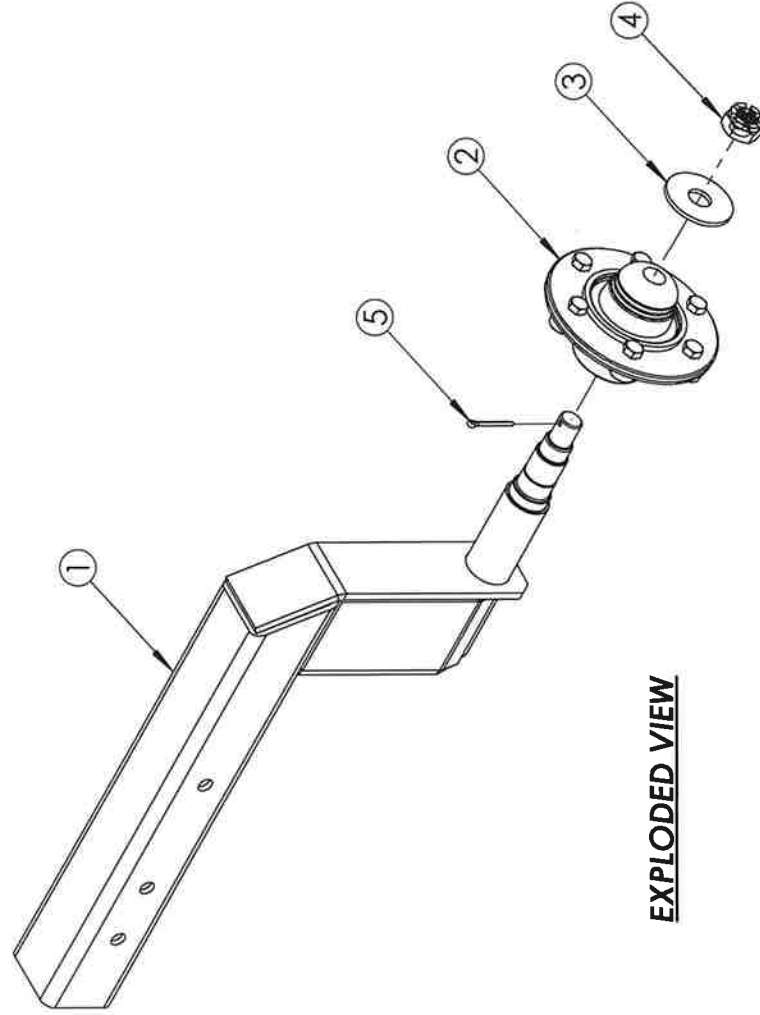


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009206	REAR AXLE, ADJUSTABLE	1
2	47009404	AXLE CLAMP	2
3	18098462	BOLT 3/4-10 X 6	4
4	18458400	NUT LOCK 3/4 NC ZC	6
5	18057954	BOLT HX CAP G5NCZC 5/8 X 5	2
6	18811600	WASHER, FLAT 5/8 ZC	4
7	18891600	WASHER, LOCK 5/8 ZC	2
8	18417900	NUT, 5/8 NC	2
9	47009065	REAR STUB AXLE COMPLETE (60-78")	2
10	18058430	BOLT HX 3/4 X 2 GR 5 NC ZC	2
11	18811800	WASHER FLAT USS ZC 3/4	4
12	699107L	HEARTLAND AG SYSTEMS DECAL (MEDIUM)	1

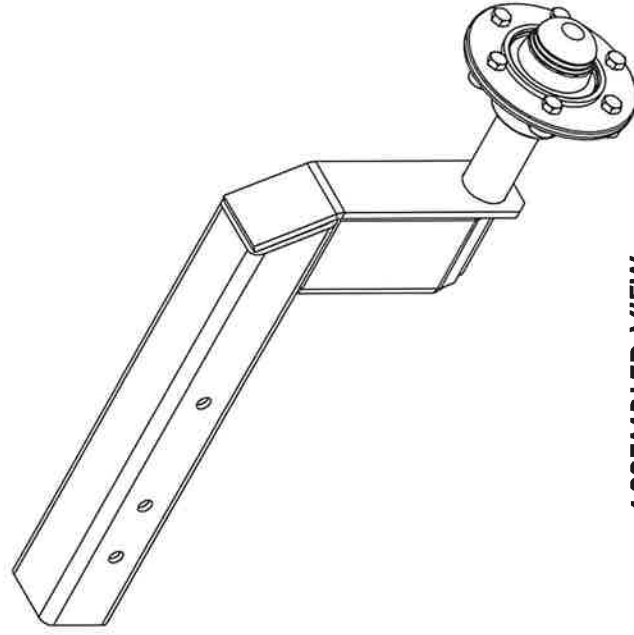


AG106 REAR STUB AXLE (STD) **P/N: 47009065**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009165	STUB AXLE, REAR (80")	1
2	47009611	6 BOLT HUB ASSY (611 HUB)	1
3	18000017	SPINDLE WASHER 1 X .187	1
4	18489100	SLOTTED NUT	1
5	18560828	COTTER PIN 3/16 X 1 3/4	1



EXPLODED VIEW

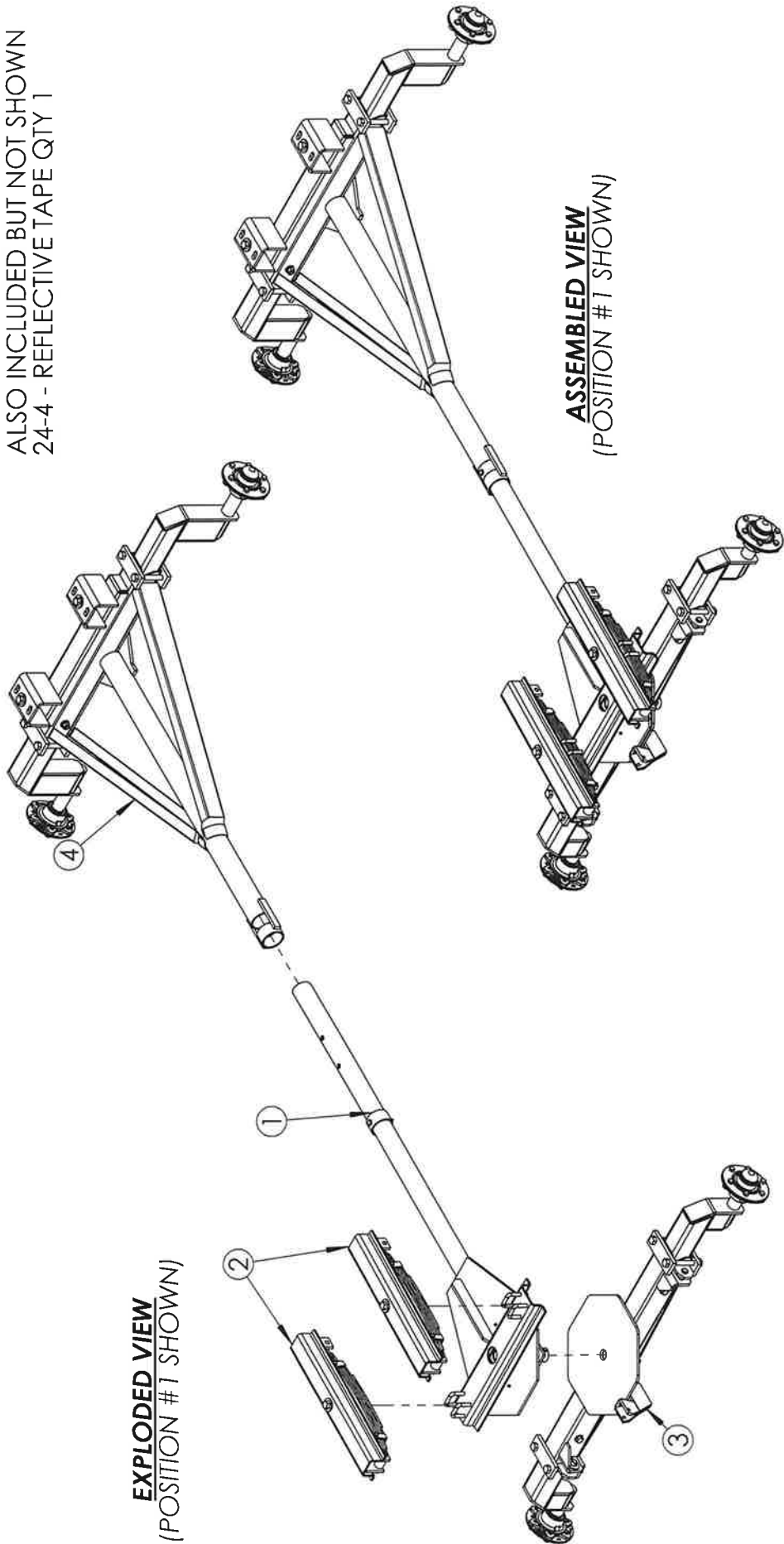


ASSEMBLED VIEW

AG106 WAGON (WIDE) P/N: 41060088

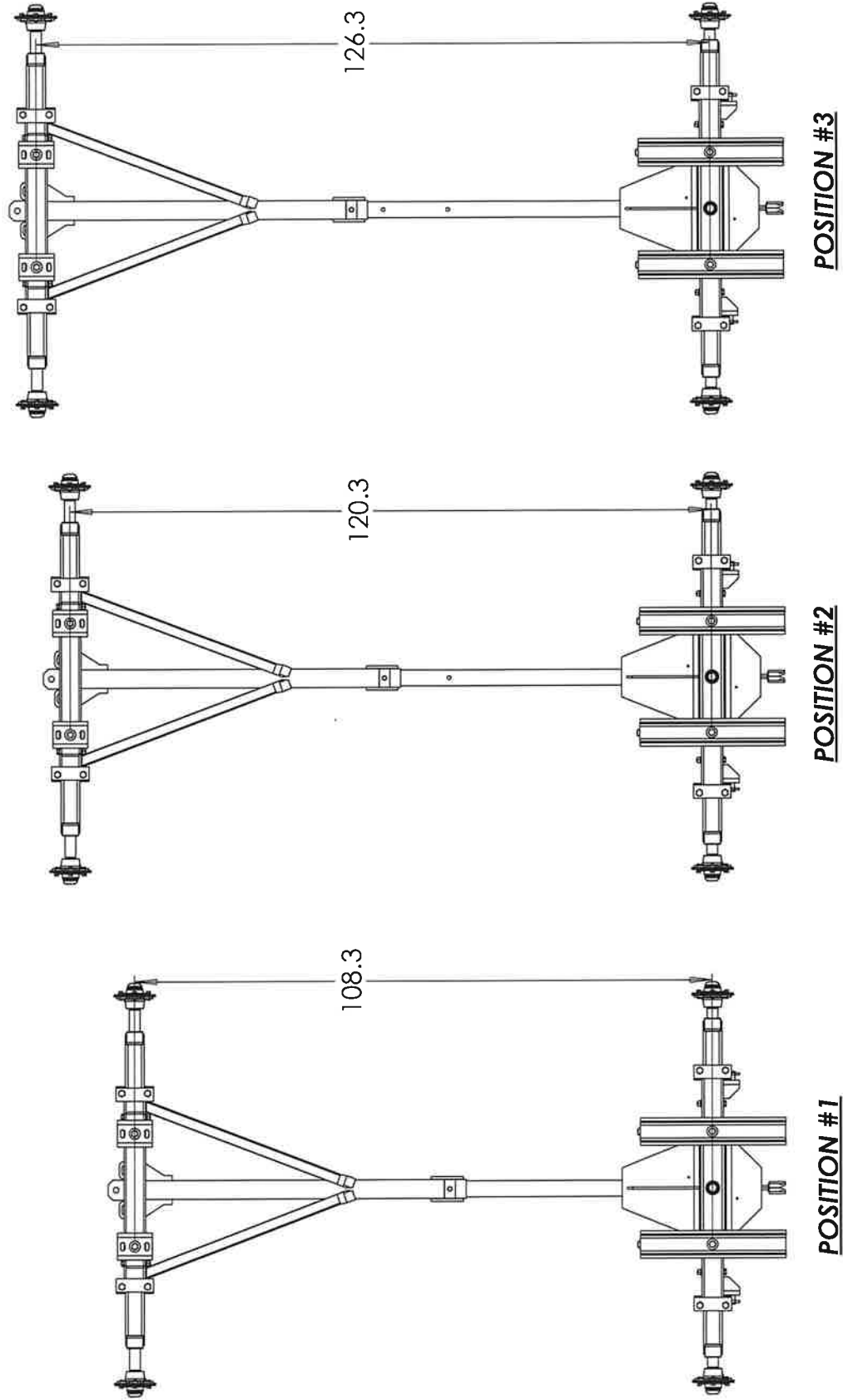
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009024	REACH COMPLETE	1
2	47009202	BOLSTER ASSEMBLY	2
3	47008588	FRONT AXLE COMPLETE (EXT WIDTH)	1
4	47009588	REAR AXLE COMPLETE (EXT)	1

ALSO INCLUDED BUT NOT SHOWN
24-4 - REFLECTIVE TAPE QTY 1



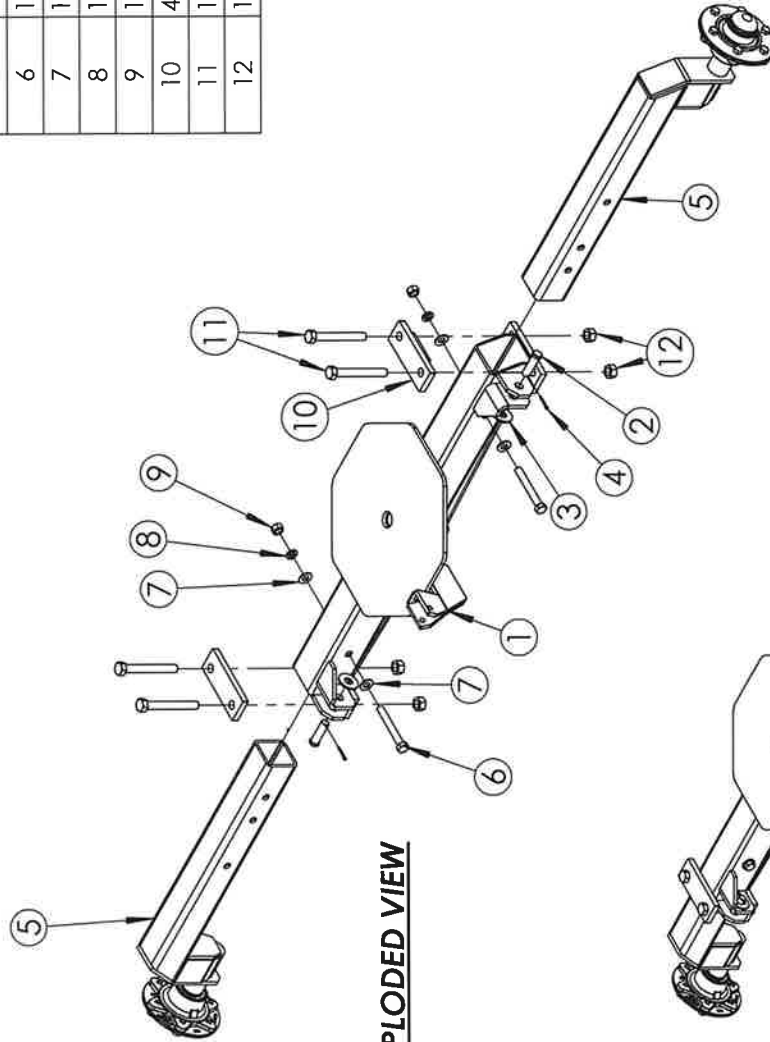
AG106 WAGON (WIDE)

P/N: 41060088

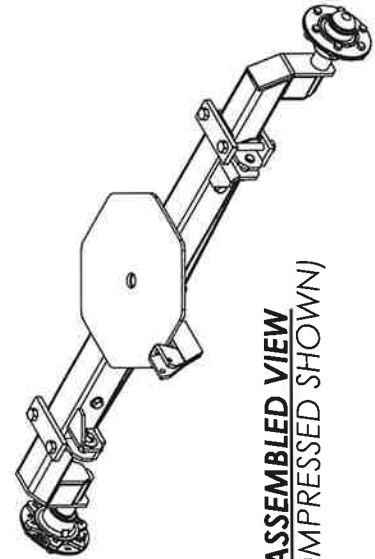


AG106 FRONT AXLE (WIDE) **P/N: 47008588**

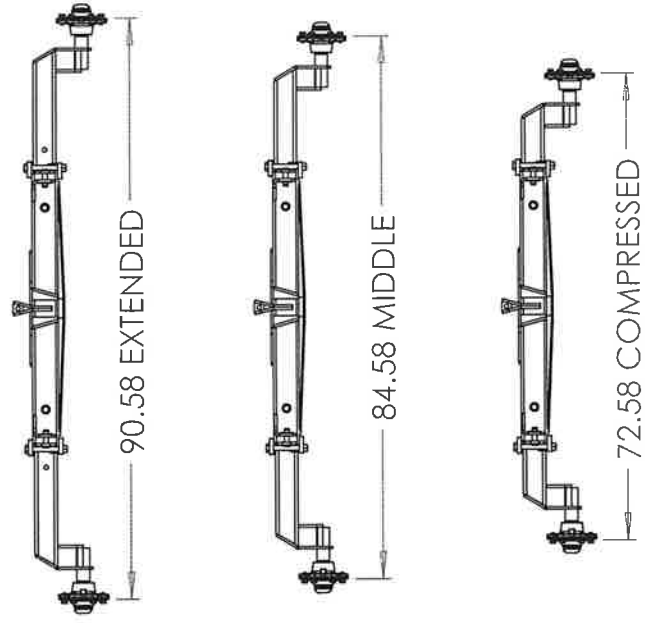
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009105	FRONT AXLE, ADJ.	1
2	18541835	CLEVIS PIN 3/4 X 2 1/2	2
3	18841800	WASHER FLAT 3/4 SAE SC	2
4	18560722	5/32" X 1" COTTER PIN	2
5	47009581	FRONT STUB AXLE COMPLETE (70-88")	2
6	18057954	BOLT HX CAP G5NC7C 5/8 X 5	2
7	18811600	WASHER, FLAT 5/8 ZC	4
8	18891600	WASHER, LOCK 5/8 ZC	2
9	18417900	NUT, 5/8 NC	2
10	47009404	AXLE CLAMP	2
11	18098462	BOLT 3/4-10 X 6	4
12	18458400	NUT LOCK 3/4 NC ZC	4



EXPLODED VIEW

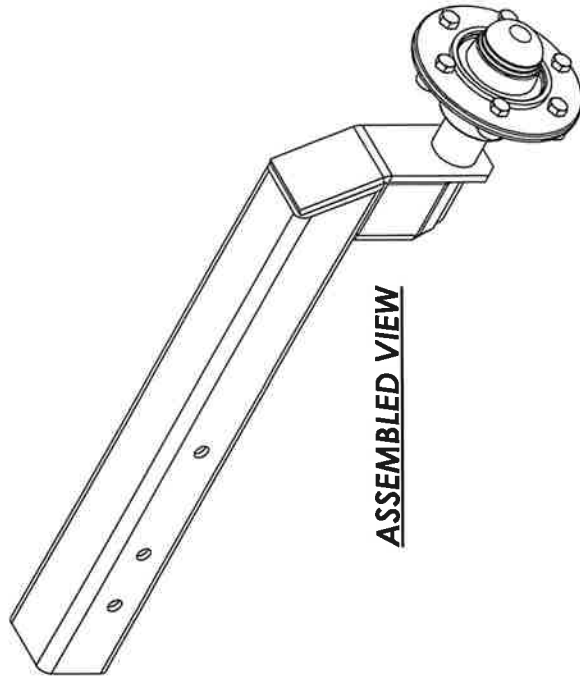
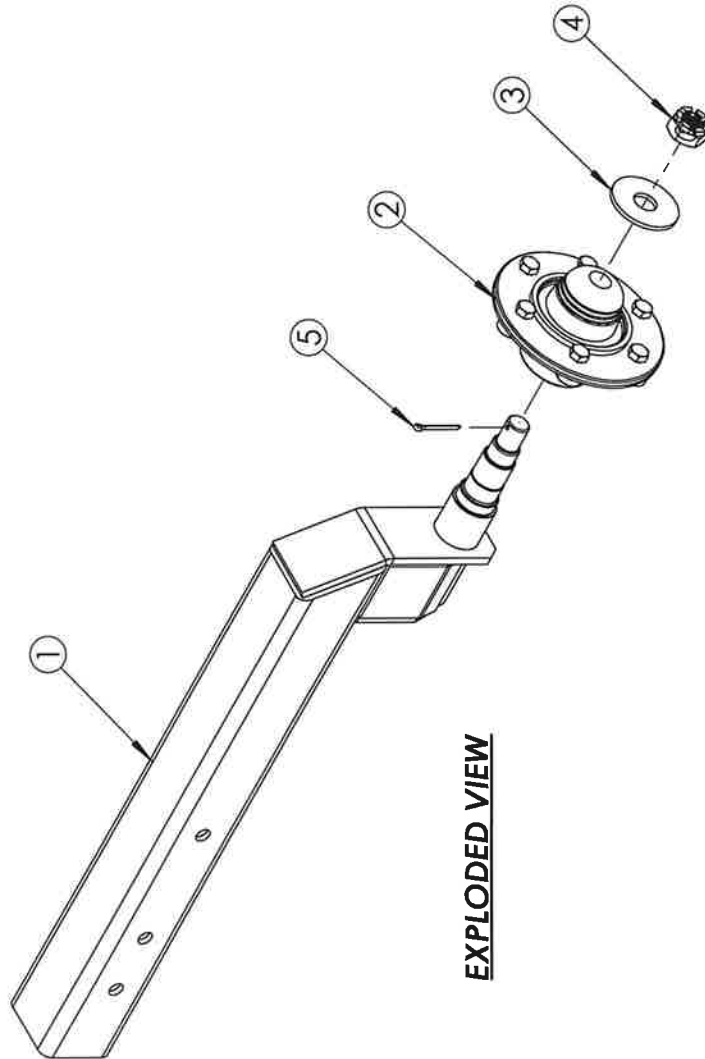


ASSEMBLED VIEW
 (COMPRESSED SHOWN)

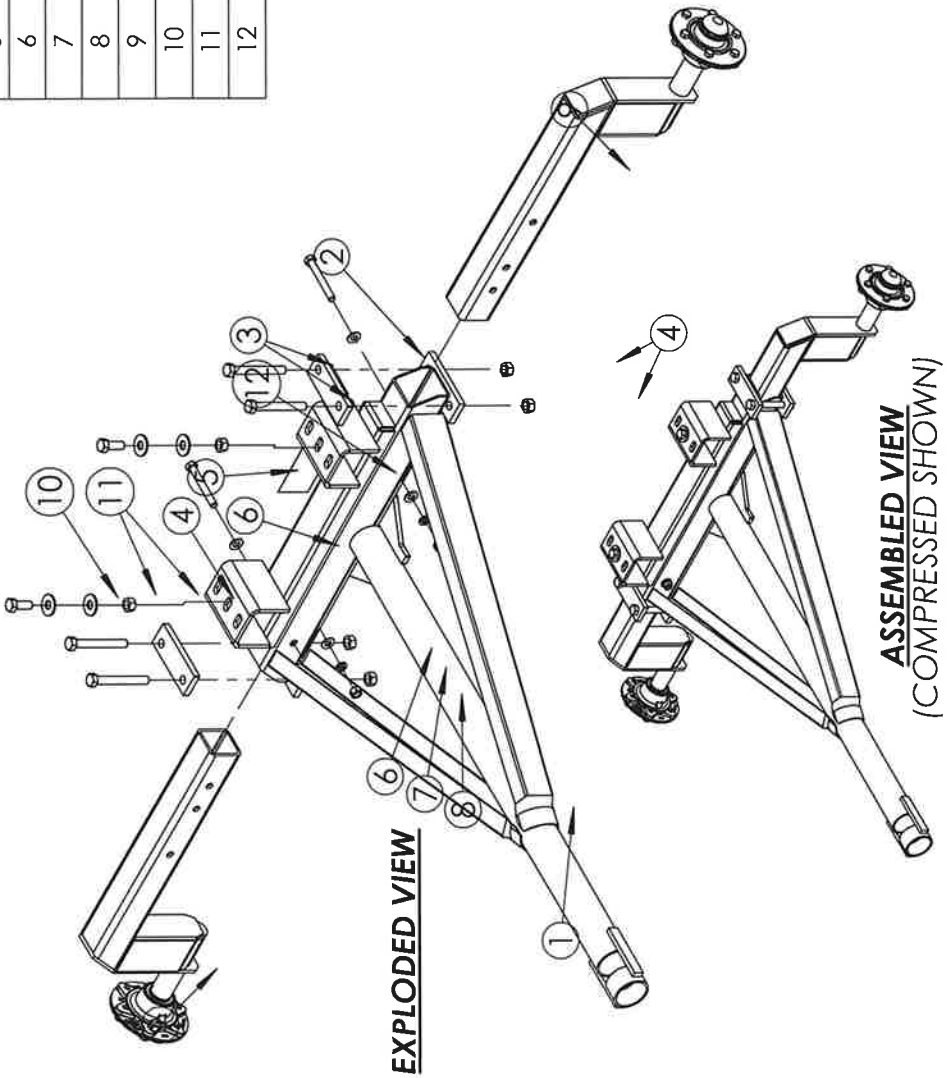


AG106 FRONT STUB AXLE (WIDE) P/N: 47009581

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47007581	STUB AXLE, FRONT (88")	1
2	47009611	6 BOLT HUB ASSY (611 HUB)	1
3	18000017	SPINDLE WASHER 1 X .187	1
4	18489100	SLOTTED NUT	1
5	18560828	COTTER PIN 3/16 X 1 3/4	1



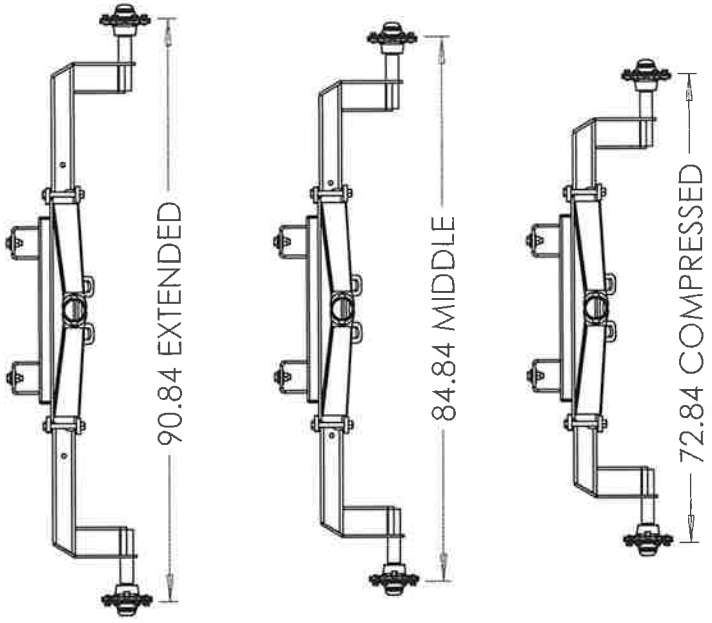
AG106 REAR AXLE (WIDE) **P/N: 47009588**



EXPLODED VIEW

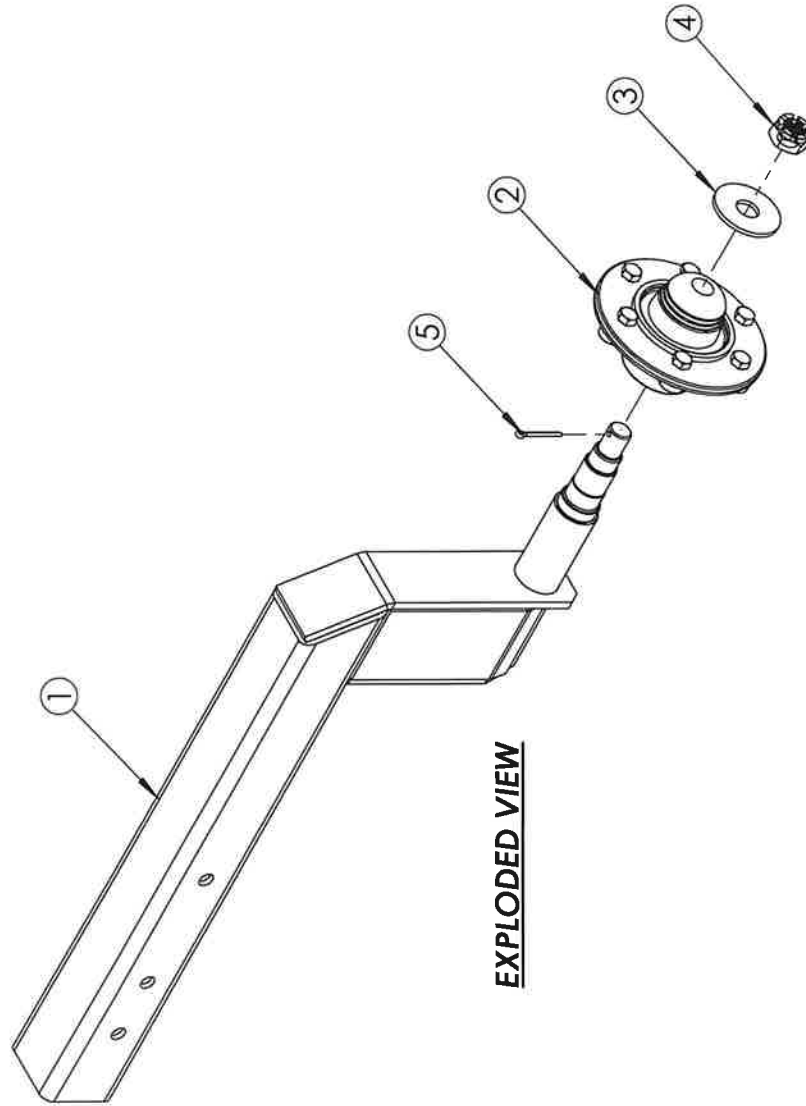
**ASSEMBLED VIEW
(COMPRESSED SHOWN)**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47009206	REAR AXLE, ADJUSTABLE	1
2	47009404	AXLE CLAMP	2
3	18098462	BOLT 3/4-10 X 6	4
4	18458400	NUT LOCK 3/4 NC ZC	6
5	18057954	BOLT HX CAP G5NCZC 5/8 X 5	2
6	18811600	WASHER, FLAT 5/8 ZC	4
7	18891600	WASHER, LOCK 5/8 ZC	2
8	18417900	NUT, 5/8 NC	2
9	47009580	REAR STUB AXLE COMPLETE (70-88")	2
10	18058430	BOLT HX 3/4 X 2 GR 5 NC ZC	2
11	18811800	WASHER FLAT USS ZC 3/4	4
12	699107L	HEARTLAND AG SYSTEMS DECAL (MEDIUM)	1

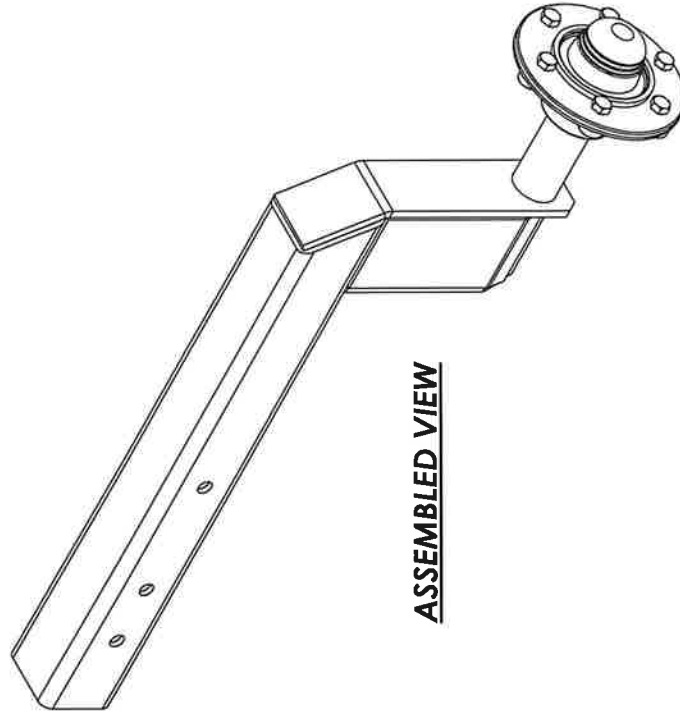


AG106 REAR STUB AXLE (WIDE) **P/N: 47009580**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47007580	STUB AXLE, REAR (88")	1
2	47009611	6 BOLT HUB ASSY (611 HUB)	1
3	18000017	SPINDLE WASHER 1 X .187	1
4	18489100	SLOTTED NUT	1
5	18560828	COTTER PIN 3/16 X 1 3/4	1



EXPLODED VIEW

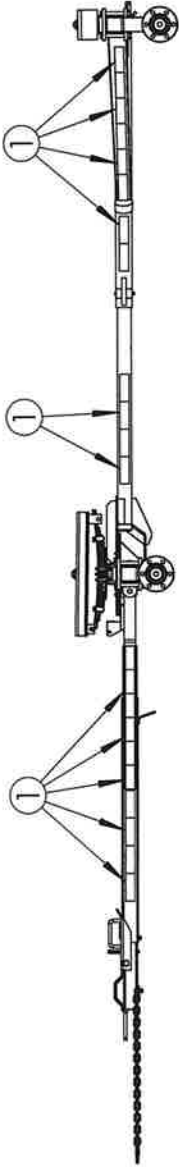
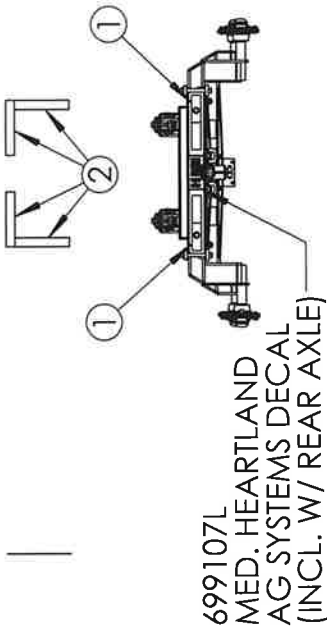
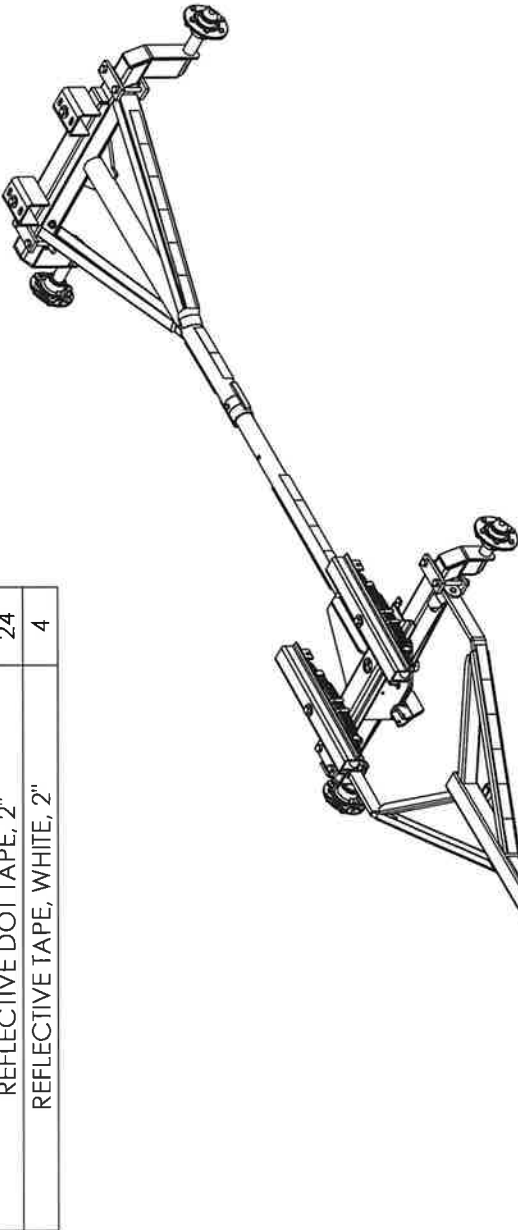


ASSEMBLED VIEW

AG106 DECAL LAYOUT

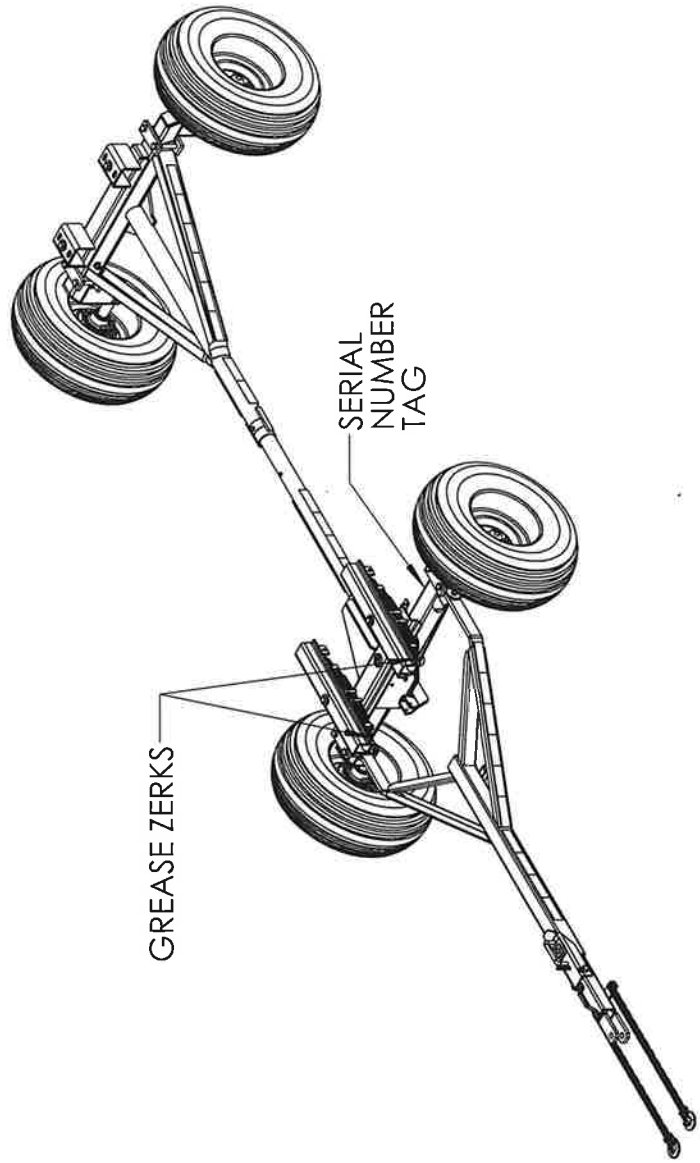
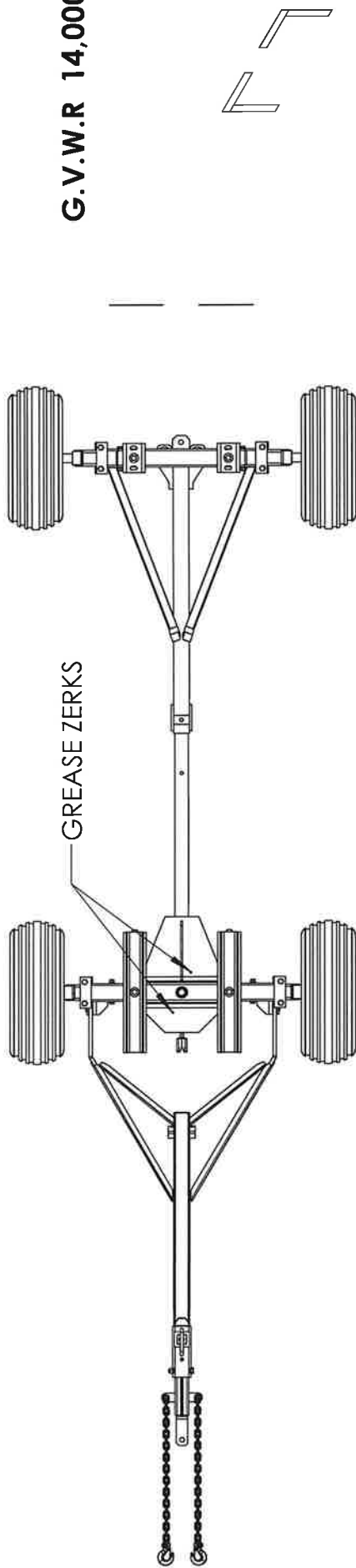
P/N: 24-4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	980-3262	REFLECTIVE DOT TAPE, 2"	24
2	980-102	REFLECTIVE TAPE, WHITE, 2"	4

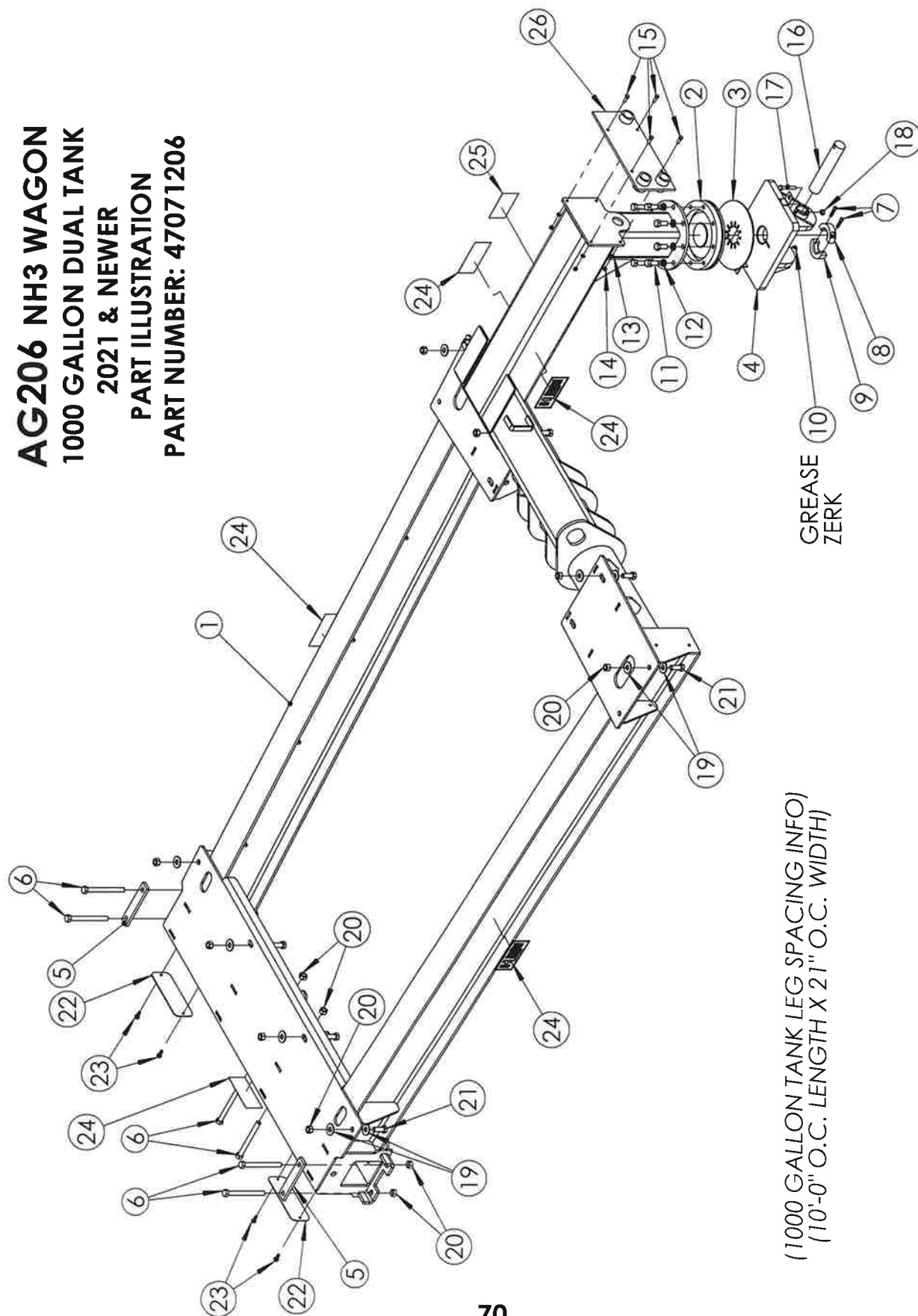


AG106 WAGON GREASE ZERK/ SERIAL TAG LOCATOR

G.V.W.R 14,000#



AG206 NH3 WAGON
1000 GALLON DUAL TANK
2021 & NEWER
PART ILLUSTRATION
PART NUMBER: 47071206



(1000 GALLON TANK LEG SPACING INFO)
 (10'-0" O.C. LENGTH X 21" O.C. WIDTH)

AG206 DUAL 1000 GALLON TANK NH3 WAGON 2021 & NEWER

PART LISTING / PART NUMBER: 47071206

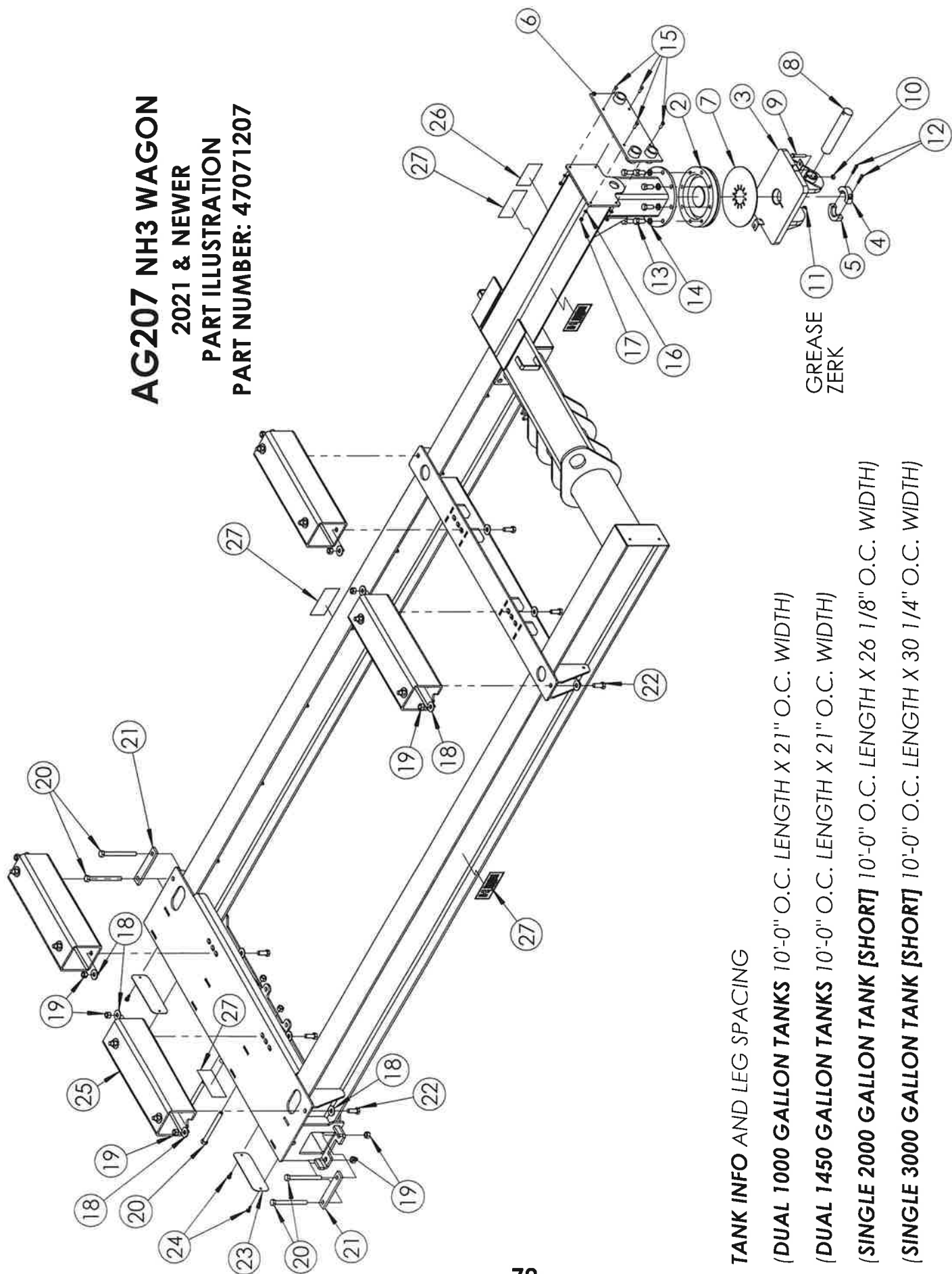
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	70972	AG206 FRAME WELDMENT	1
2	47015348	UPPER KING PIN WELDMENT	1
3	47005393	REESE 12" LUBE PLATE (83001)	1
4	47005352	SKID BASE PLATE WELDMENT	1
5	70980	AXLE TOP CLAMP	2
6	18058480	BOLT HX 3/4 X 8 GR 5 NC ZC	6
7	18178450	BOLT, SOCKET HEAD 3/8-16 X 1 3/4 LG ZC	2
8	47005360	KING PIN CLAMP FRONT	1
9	47005361	KINGPIN CLAMP, REAR	1
10	18901806	GREASE ZERK 90 DEG	1
11	18058429	BOLT HX 3/4 X 1 3/4 GR 5 NC ZC	8
12	18891800	WASHER LOCK 3/4 ZC	8
13	18891200	LOCKWASHER, 3/8 ZC	4
14	18436800	NUT 3/8 NCZC	4
15	18056824	BOLT HX ZC 3/8 X 1 1/4	4
16	47005358	CLEVIS PIN SHANK	1
17	18057438	BOLT, 1/2-13 X 3 GR5 ZP	1
18	18457650	NUT CTR LOCK 1/2 ZP ZC	1
19	18811800	WASHER FLAT USS ZC 3/4	16
20	18458452	LOCKNUT, 3/4 GR 8 ZC	14
21	18058430	BOLT HX 3/4 X 2 GR 5 NC ZC	8
22	71200	TAIL LIGHT COVER	2
23	1700400	3/8 HEX HEAD SELF THREAD SCREW	4
24	699107L	HEARTLAND AG SYSTEMS DECAL (MEDIUM)	5
25	699190	DECAL CHECK LUG NUTS	1
26	47003859	VALVE BULKHEAD WELDMENT	1

ALSO INCLUDED BUT NOT SHOWN:
DUAL SAFETY CHAIN KIT P/N 47005479
DOT REFLECTIVE TAPE PACKAGE P/N 32-4

OPTIONS LIST		
PART NUMBER	DESCRIPTION	QTY
FRONT AXLE PACKAGE		
47071294	FIXED FRONT AXLE, 60" WHEEL TRACK	1
47070989	TORSION FRONT AXLE	1
REAR AXLE PACKAGE (INCLUDES TELESCOPING POLE WITH SPRING LIFT ASSIST)		
71896	96" - 120" ADJUSTABLE HD SINGLE REAR AXLES, 2 WHEEL SURGE BRAKES	1
71895	96" - 120" ADJUSTABLE HD SINGLE REAR AXLES, NO BRAKES	1
47071295	102" - 115" ADJUSTABLE WALKING TANDEM AXLES, 4 WHEEL SURGE BRAKES	1
47071296	102"-115" ADJUSTABLE WALKING TANDEM AXLES, NO BRAKES	1
MISC. OPTIONS		
47071290	STEP KIT (2 STEPS)	1
47071300	LED LIGHT KIT	1
47071289	FRONT TONGUE HOSE HOLDER (NOT LEGAL IN ALL STATES)	1
47071324	TANK SPRING MOUNTING PACKAGE (NOT LEGAL IN ALL STATES)	1
47071322	22.5 X 11.25 RIM, 8 ON 8 FOR 385/65R22.5 TIRE, 8K CAPACITY	
40039A	USED 385/65R22.5 TRUCK TIRE ON 47071322 RIM	
47009814	14X16.1 RIM, 8 ON 8	
47009385	22.5 X 11.25 RIM, 8 ON 8 FOR 385/65R22.5 TIRE, 6K CAPACITY	
40013	16.5X16.1 10 PLY TIRE/RIM	

ITEMS 2-4 & 7-10 ARE INCLUDED IN SKID PLATE ASSEMBLY P/N: 47015352
ITEMS 5-6 & 11-25 ARE INCLUDED IN BOLT KIT P/N: 71335

AG207 NH3 WAGON
2021 & NEWER
PART ILLUSTRATION
PART NUMBER: 47071207



TANK INFO AND LEG SPACING

(DUAL 1000 GALLON TANKS 10'-0" O.C. LENGTH X 21" O.C. WIDTH)

(DUAL 1450 GALLON TANKS 10'-0" O.C. LENGTH X 21" O.C. WIDTH)

(SINGLE 2000 GALLON TANK [SHORT] 10'-0" O.C. LENGTH X 26 1/8" O.C. WIDTH)

(SINGLE 3000 GALLON TANK [SHORT] 10'-0" O.C. LENGTH X 30 1/4" O.C. WIDTH)

AG207 NH3 WAGON 2021 & NEWER

PART LISTING / PART NUMBER: 47071207

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	70977	AG207 MAIN FRAME WELDMENT	1
2	47015348	UPPER KING PIN WELDMENT	1
3	47005352	SKID BASE PLATE WELDMENT	1
4	47005360	KING PIN CLAMP FRONT	1
5	47005361	KINGPIN CLAMP, REAR	1
6	47003859	VALVE BULKHEAD WELDMENT	1
7	47005393	REESE 12" LUBE PLATE (83001)	1
8	47005358	CLEVIS PIN SHANK	1
9	18057438	BOLT, 1/2-13 X 3 GR5 ZP	1
10	18457650	NUT CTR LOCK 1/2 ZP ZC	1
11	18901806	GREASE ZERK 90 DEG	1
12	18178450	BOLT, SOCKET HEAD 3/8-16 X 1 3/4 LG ZC	2
13	18058429	BOLT HX 3/4 X 1 3/4 GR 5 NC ZC	8
14	18891800	WASHER LOCK 3/4 ZC	8
15	18056824	BOLT HX ZC 3/8 X 1 1/4	4
16	18891200	LOCKWASHER, 3/8 ZC	4
17	18436800	NUT 3/8 NCZC	4
18	18811800	WASHER FLAT USS ZC 3/4	16
19	18458452	LOCKNUT, 3/4 GR 8 ZC	14
20	18058480	BOLT HX 3/4 X 8 GR 5 NC ZC	6
21	70980	AXLE TOP CLAMP	2
22	18058430	BOLT HX 3/4 X 2 GR 5 NC ZC	8
23	71200	TAIL LIGHT COVER	2
24	1700400	3/8 HEX HEAD SELF THREAD SCREW	4
25	71422	AG 207 TANK RISER KIT	1
26	699190	DECAL CHECK LUG NUTS	1
27	699107L	HEARTLAND AG SYSTEMS DECAL (MEDIUM)	5

ITEMS 2-5, 7, & 11-12 ARE INCLUDED IN SKID PLATE ASSEMBLY
P/N: 47015352

ITEMS 8-10, 13-24, & 26-27 ARE INCLUDED IN BOLT KIT P/N: 71336

OPTIONS LIST		
PART NUMBER	DESCRIPTION	QTY
FRONT AXLE PACKAGE		
47071294	FIXED FRONT AXLE 60" WHEEL TRACK	1
47070989	TORSION AXLE	1
REAR AXLE PACKAGE (INCLUDES TELESCOPING POLE W/ SPRING LIFT ASSIST)		
71896	96" - 120" ADJUSTABLE HD SINGLE REAR AXLES, 2 WHEEL SURGE BRAKES	1
71895	96" - 120" ADJUSTABLE HD SINGLE REAR AXLES, NO BRAKES	1
47071295	102" - 115" ADJUSTABLE WALKING TANDEM AXLES, 4 WHEEL SURGE BRAKES	1
47071296	102" - 115" ADJUSTABLE WALKING TANDEM AXLES, NO BRAKES	1
MISC. OPTIONS		
47071300	LED LIGHT KIT	1
47071289	FRONT TONGUE HOSE HOLDER (NOT LEGAL IN ALL STATES)	1
47071324	TANK SPRING MOUNTING PACKAGE (NOT LEGAL IN ALL STATES)	1
40039A	USED 385/65R22.5 TRUCK TIRE ON 47071322 RIM	
47071322	22.5 X 11.25 RIM, 8 ON 8 FOR 385/65R22.5 TIRE, 8K CAPACITY	
47009814	14 X 16.1 RIM, 8 ON 8	
40013	16.5 X 16.1 10 PLY TIRE/RIM	
40037	USED 425/65R22.5 ON 22.5 RIM	
47000314	SAFETY CHAIN	
32-4	DOT REFLECTIVE TAPE PKG	

ALSO INCLUDED BUT NOT SHOWN DUAL SAFETY CHAIN KIT P/N: 71450 & 4701323 SAFETY STEP

P/N: 71422 IS ONLY NECESSARY WHEN USING 1450 DUAL TANKS

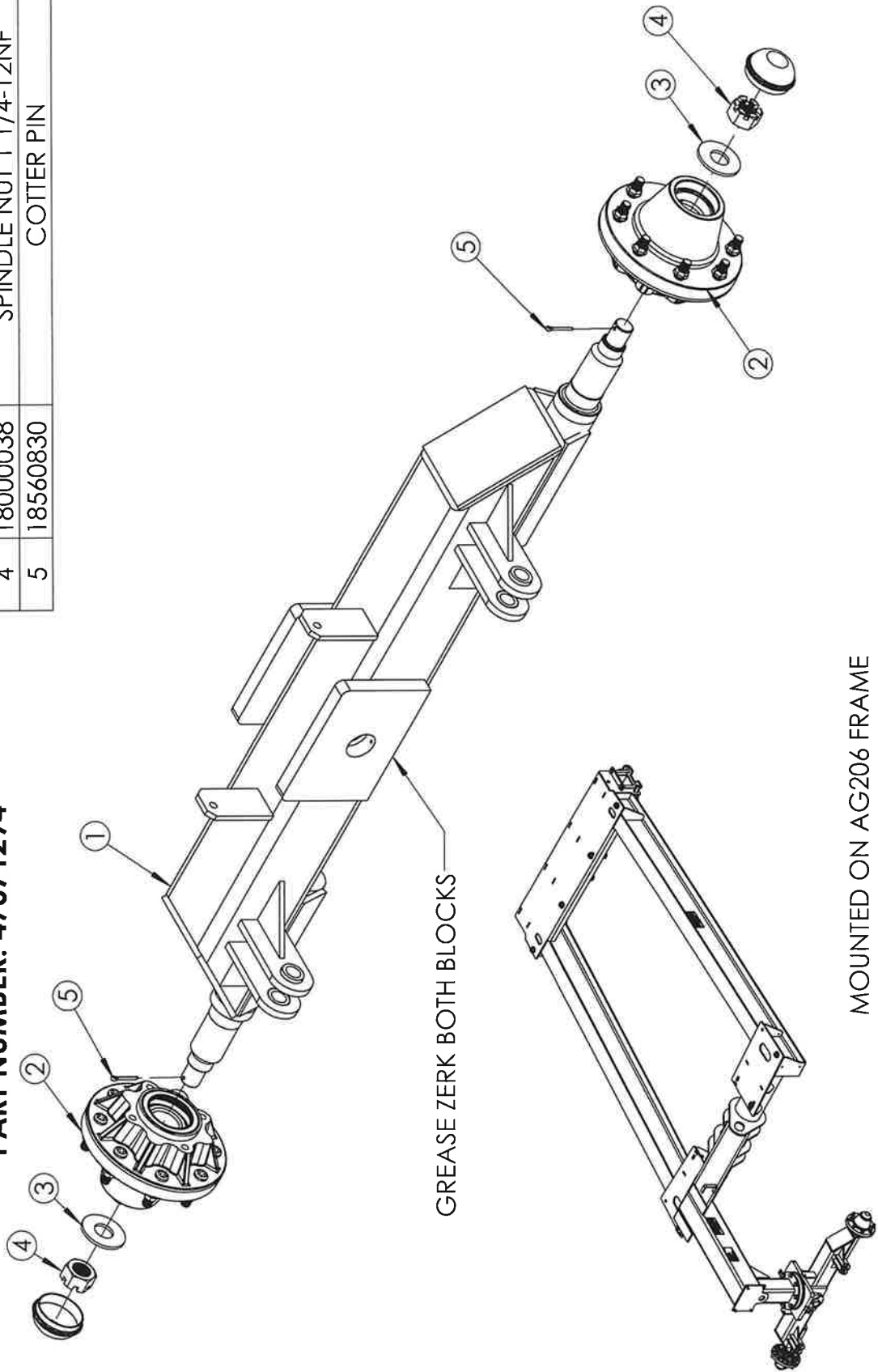
AG206 & AG207

FIXED FRONT AXLE, 60" WHEEL TRACK

2021 & NEWER

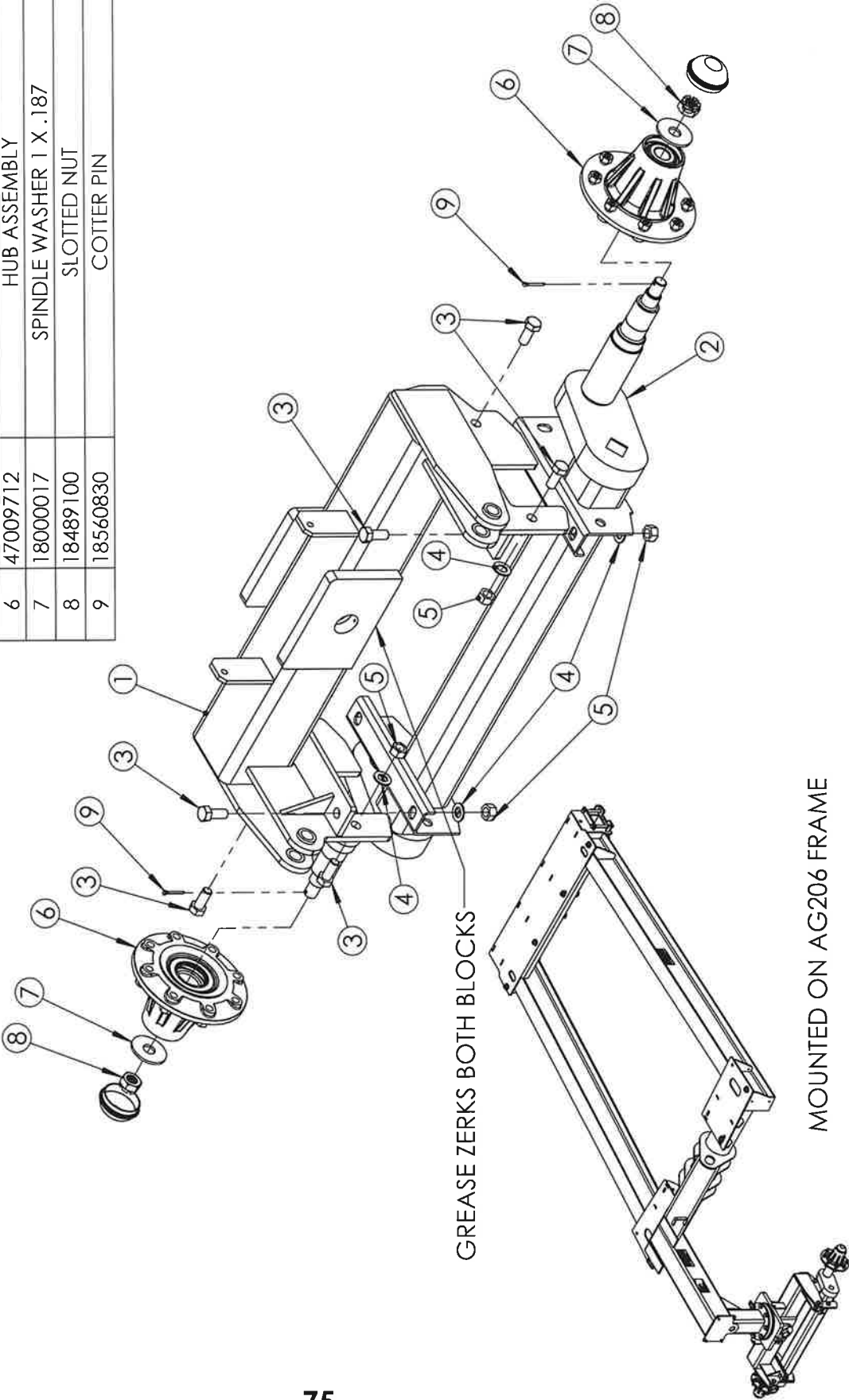
PART NUMBER: 47071294

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	70985	FRONT AXLE WELDMENT	1
2	47009115	HUB ASSEMBLY	2
3	18000023	SPINDLE WASHER 1.25 X .187	2
4	18000038	SPINDLE NUT 1 1/4-12NF	2
5	18560830	COTTER PIN	2



AG206 & AG207 **FRONT TORSION AXLE** **2021 & NEWER** **PART NUMBER: 47070989**

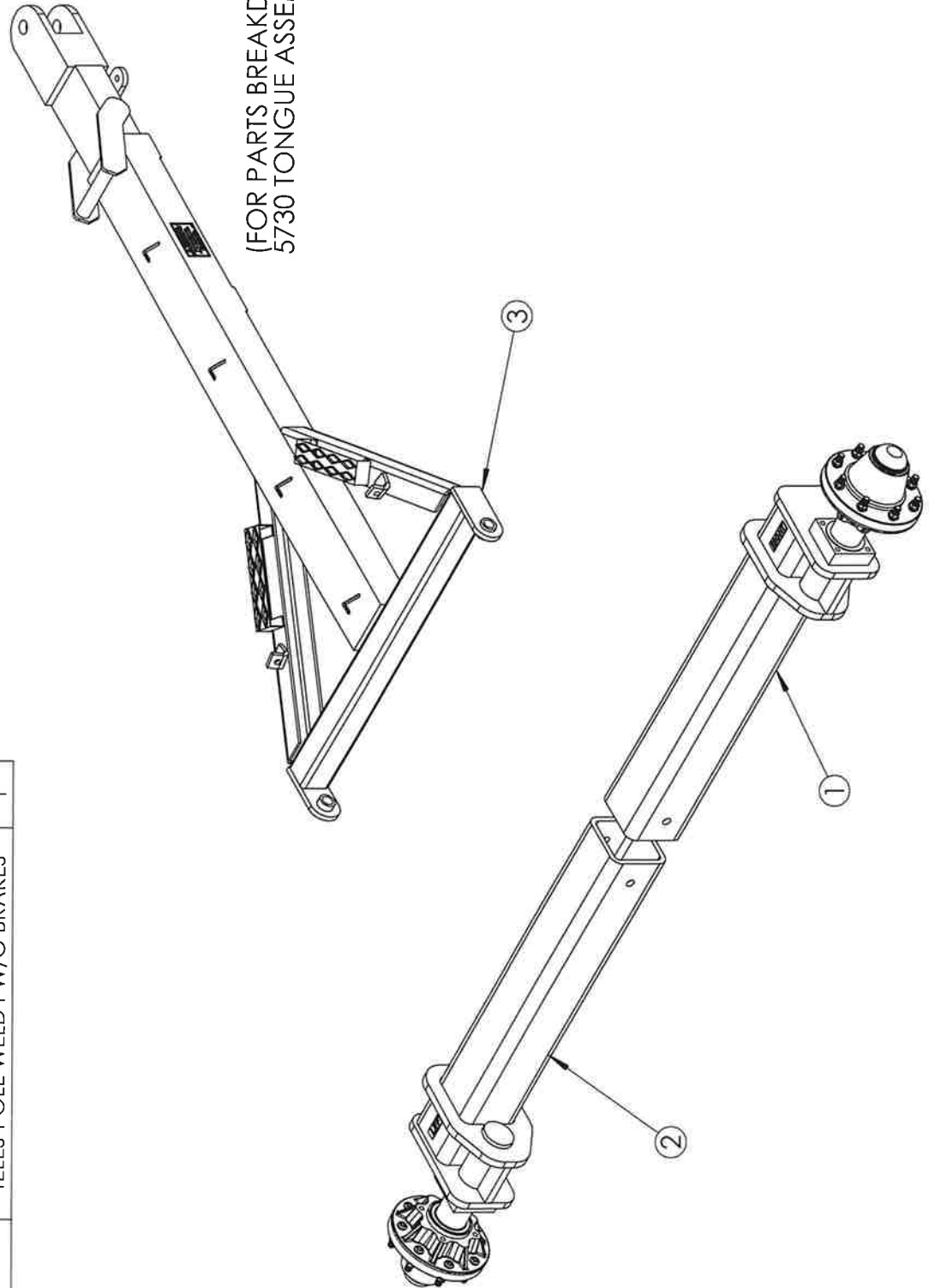
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	70990	FRONT TORSION AXLE WELDT	1
2	47005645	TORSION AXLE ASSEMBLY	1
3	18098500	BOLT, HX 3/4 X 1-3/4 NC GR 8	6
4	18851800	WASHER, FLAT 3/4 SAE ZC	6
5	18458452	LOCKNUT, 3/4 GR 8 ZC	6
6	47009712	HUB ASSEMBLY	2
7	18000017	SPINDLE WASHER 1 X .187	2
8	18489100	SLOTTED NUT	2
9	18560830	COTTER PIN	2



AG206 & AG207

ADJUSTABLE HD SINGLE REAR AXLES 2021 & NEWER
NO BRAKES (96"-120" WHEEL TRACK)
PART NUMBER: 71895

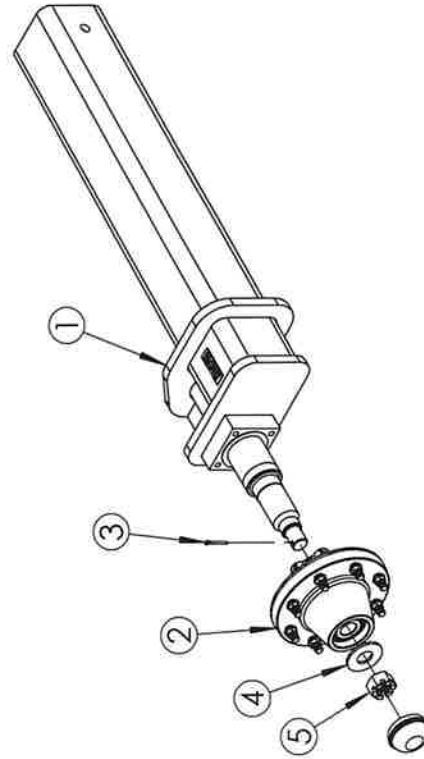
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71855	REAR STUB AXLE ASM, RIGHT	1
2	71856	REAR STUB AXLE, LEFT	1
3	71291	TELES-POLE WELD'T W/O BRAKES	1



(FOR PARTS BREAKDOWN SEE
5730 TONGUE ASSEMBLY)

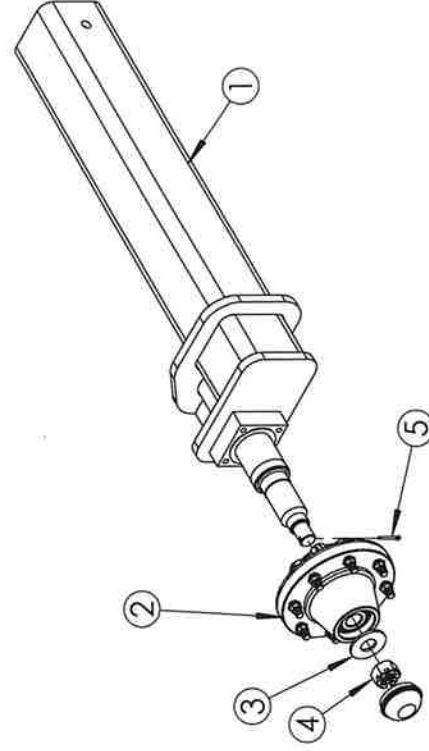
REAR STUB AXLE ASSY (RIGHT) P/N: 71855

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71847	REAR STUB AXLE, RIGHT	1
2	47009115	HUB ASSEMBLY	1
3	18560830	COTTER PIN	1
4	18000023	SPINDLE WASHER 1.25 X .187	1
5	18000038	SPINDLE NUT 1 1/4-12NF	1



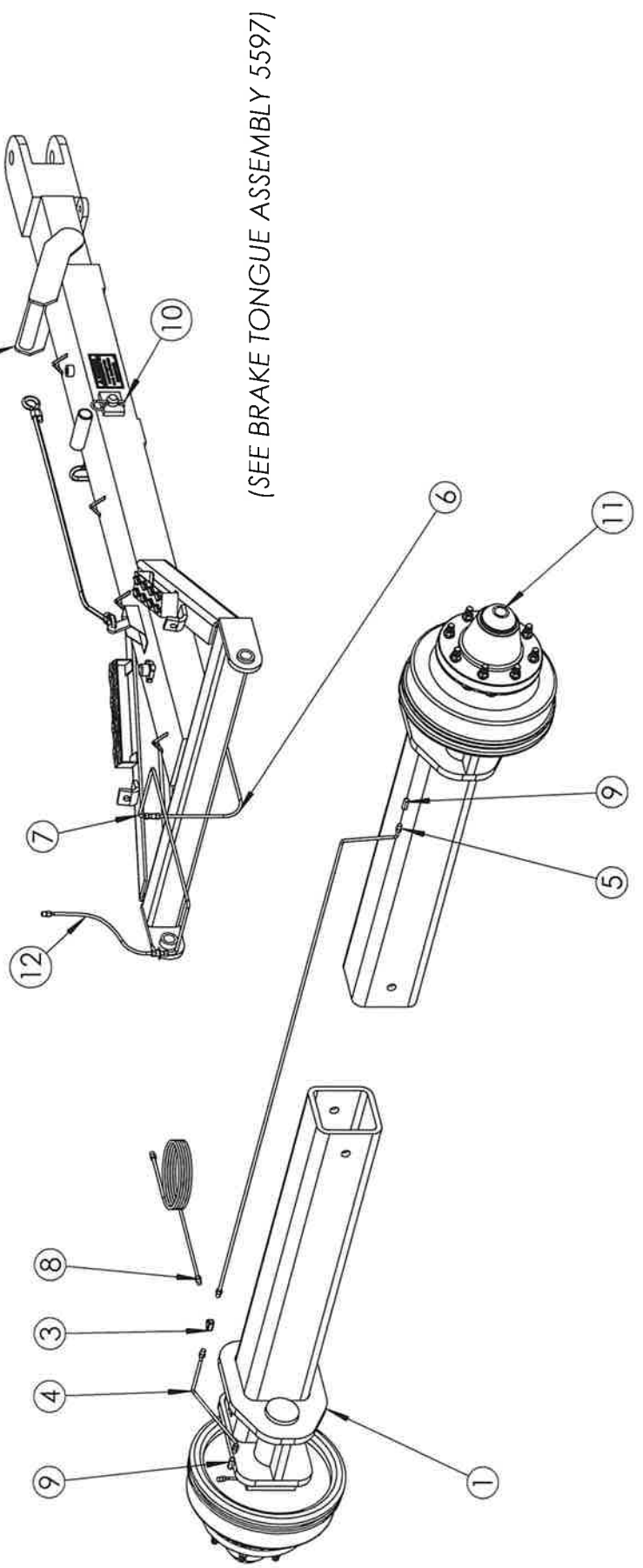
REAR STUB AXLE ASSY (LEFT) P/N: 71856

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71848	REAR STUB AXLE, LEFT	1
2	47009115	HUB ASSEMBLY	1
3	18000023	SPINDLE WASHER 1.25 X .187	1
4	18000038	SPINDLE NUT 1 1/4-12NF	1
5	18560830	COTTER PIN	1



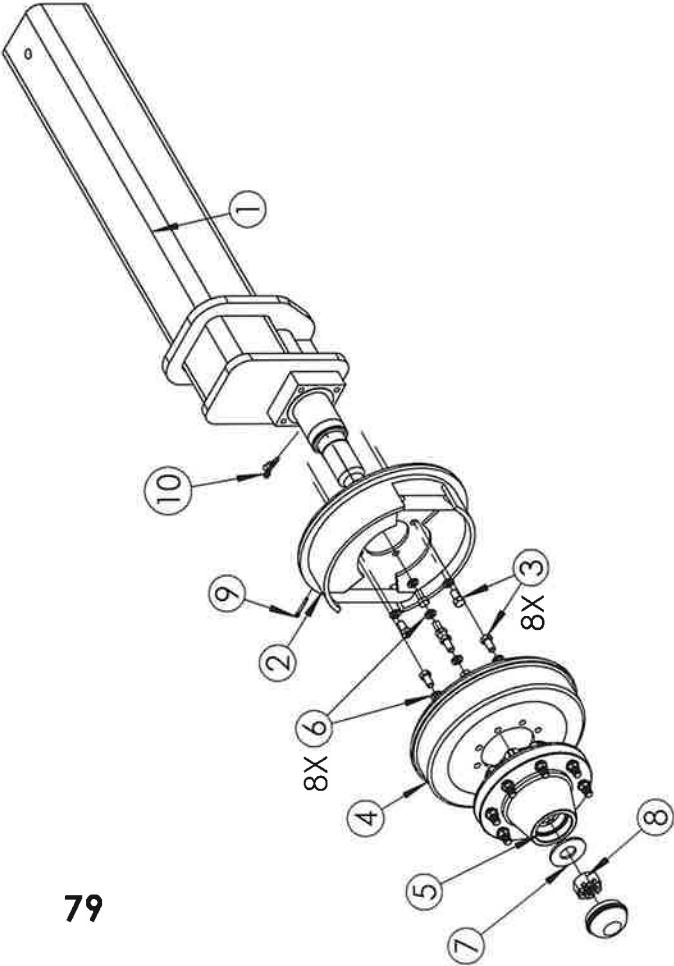
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71858	REAR STUB AXLE ASM WITH BRAKES, LEFT	1
2	71004	BRAKE LOCKOUT TELES-POLE WELD'T	1
3	47005680	TEE TRAILER BRAKE	1
4	71298	BRAKE HOSE (36")	1
5	71299	BRAKE HOSE (7FT)	1
6	47005667	BRAKE HOSE 25"	1
7	47005687	TUBE, BRAKE LINE (30")	1
8	71297	BRAKE HOSE (24FT)	1
9	47005660	UNION, 3/16	2
10	600183	LOCKOUT PIN ASSEMBLY	1
11	71857	REAR STUB AXLE ASM WITH BRAKES, RIGHT	1
12	47005665	BRAKE HOSE 18"	1

AG206 & AG207 ADJUSTABLE HD SINGLE REAR AXLES 2021& NEWER 2 WHEEL SURGE BRAKES (96"-120" WHEEL TRACK) PART LISTING PART NUMBER: 71896



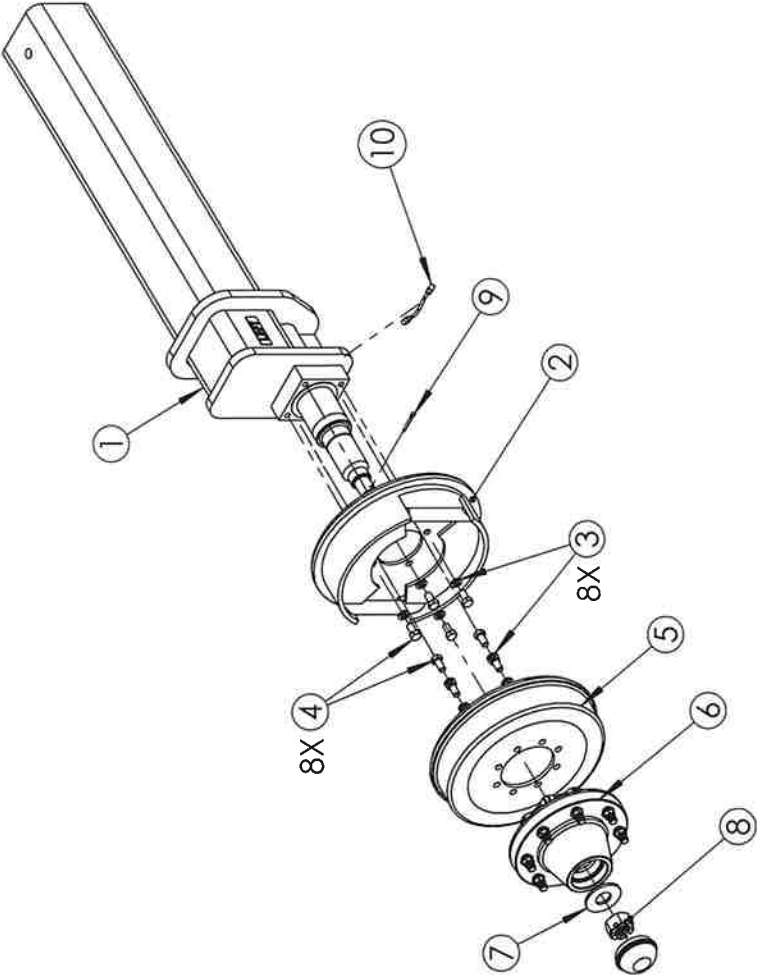
HD AXLE ASSEMBLY WITH BRAKES (RIGHT) P/N: 71857

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71847	REAR STUB AXLE, RIGHT	1
2	47005651	BRAKE CLUSTER (13") RH	1
3	18057522	BOLT 1/2-20 X 1 ZC	8
4	47005602	BRAKE DRUM	1
5	47009114	HUB ASSEMBLY MACHINED FOR BRAKES	1
6	18891400	WASHER, 1/2 LOCK ZC	8
7	18000023	SPINDLE WASHER 1.25 X .187	1
8	18000038	SPINDLE NUT 1 1/4-12NF	1
9	18560830	COTTER PIN	1
10	47005682	BRAKE LINE 1/4" X 4 1/2"	1



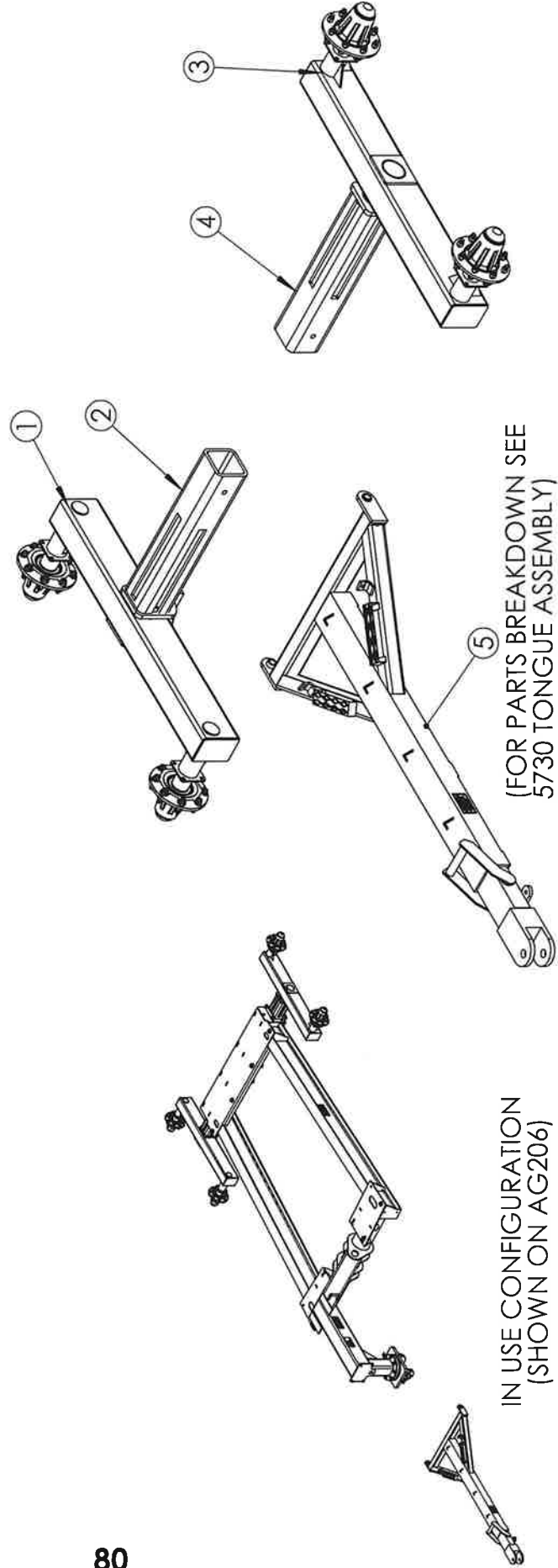
HD AXLE ASSEMBLY WITH BRAKES (LEFT) P/N: 71858

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71848	REAR STUB AXLE, LEFT	1
2	47005652	BRAKE CLUSTER (13") LH	1
3	18891400	WASHER, 1/2 LOCK ZC	8
4	18057522	BOLT 1/2-20 X 1 ZC	8
5	47005602	BRAKE DRUM	1
6	47009114	HUB ASSEMBLY MACHINED FOR BRAKES	1
7	18000023	SPINDLE WASHER 1.25 X .187	1
8	18000038	SPINDLE NUT 1 1/4-12NF	1
9	18560830	COTTER PIN	1
10	47005682	BRAKE LINE 1/4" X 4 1/2"	1



AG206 & AG207 **2021 & NEWER** **ADJUSTABLE WALKING TANDEM AXLE** **NO BRAKES (102" - 115" WHEEL TRACK)** **PART LISTING** **PART NUMBER: 47071296**

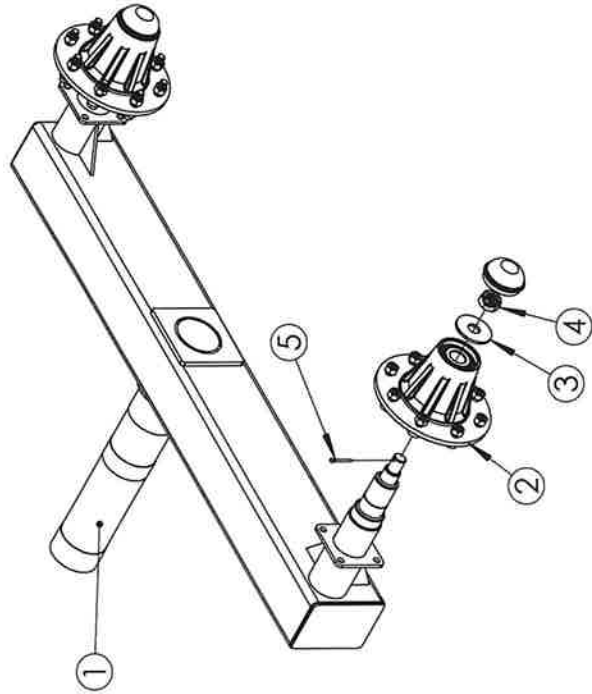
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71579	TANDEM AXLE ASSY RIGHT	1
2	71010R	REAR TANDEM AXLE TUBE WELDMENT RIGHT	1
3	71578	TANDEM AXLE ASSY LEFT	1
4	71010	REAR TANDEM AXLE TUBE WELDMENT	1
5	71291	TELES-POLE WELD'T W/O BRAKES	1



TANDEM AXLE ASSEMBLY (LEFT)

P/N: 71578

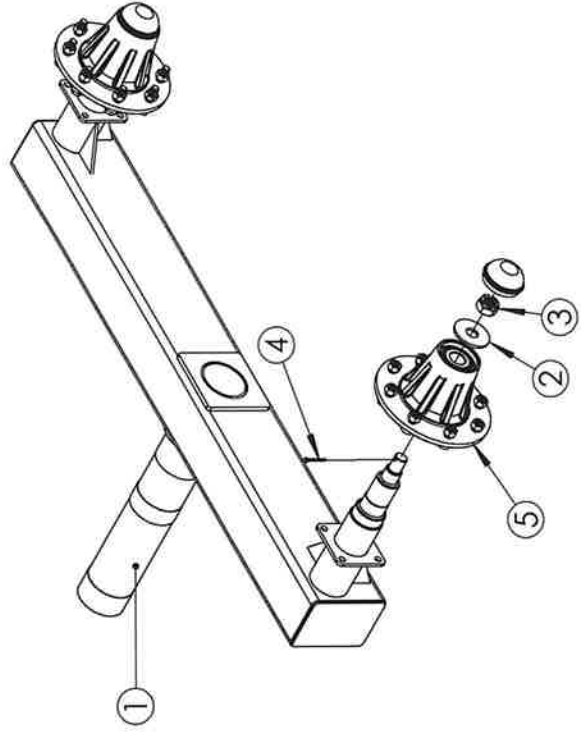
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71245	TANDEM AXLE LEFT	1
2	47009712	HUB ASSEMBLY	2
3	18000017	SPINDLE WASHER 1 X .187	2
4	18489100	SLOTTED NUT	2
5	18560830	COTTER PIN	2



TANDEM AXLE ASSEMBLY (RIGHT)

P/N: 71579

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71243	TANDEM AXLE RIGHT	1
2	18000017	SPINDLE WASHER 1 X .187	2
3	18489100	SLOTTED NUT	2
4	18560830	COTTER PIN	2
5	47009712	HUB ASSEMBLY	2



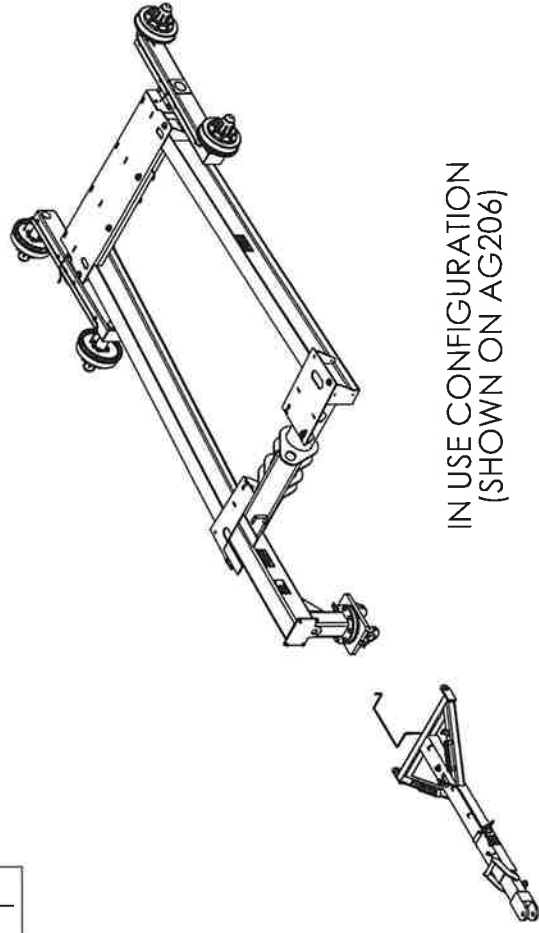
AG206 & AG207

ADJUSTABLE WALKING TANDEM AXLES 2021 & NEWER
4 WHEEL SURGE BRAKES (105" - 115" WHEEL TRACK)

PART LISTING

PART NUMBER: 47071295

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71581	TANDEM AXLE ASSY W/ BRAKES RIGHT	1
2	71010R	REAR TANDEM AXLE TUBE WELDMENT RIGHT	1
3	71580	TANDEM AXLE ASSY W/ BRAKES LEFT	1
4	71010	REAR TANDEM AXLE TUBE WELDMENT	1
5	71004	BRAKE LOCKOUT TELES-POLE WELD'T	1
6	47005680	TEE TRAILER BRAKE	3
7	47005687	TUBE, BRAKE LINE (30")	5
8	71298	BRAKE HOSE (36")	1
9	71299	BRAKE HOSE (7FT)	1
10	71297	BRAKE HOSE (24FT)	1
11	47005667	BRAKE HOSE 25"	1
12	47005660	UNION, 3/16	1
13	47005666	BRAKE LINE CLIP	8
14	18721018	SELF TAP SCREW #10 X 3/4	8
15	600183	LOCKOUT PIN ASSEMBLY	1



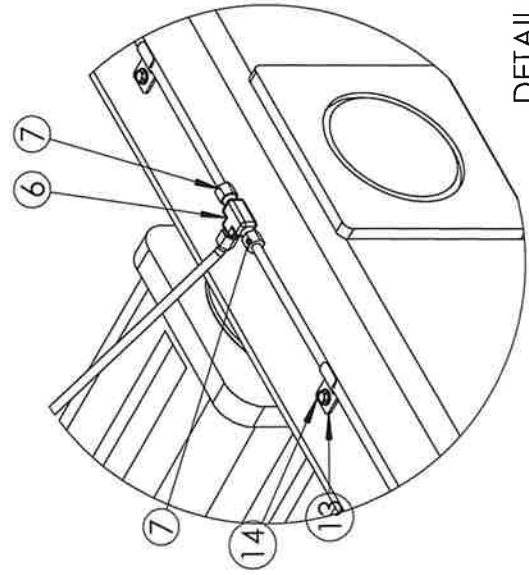
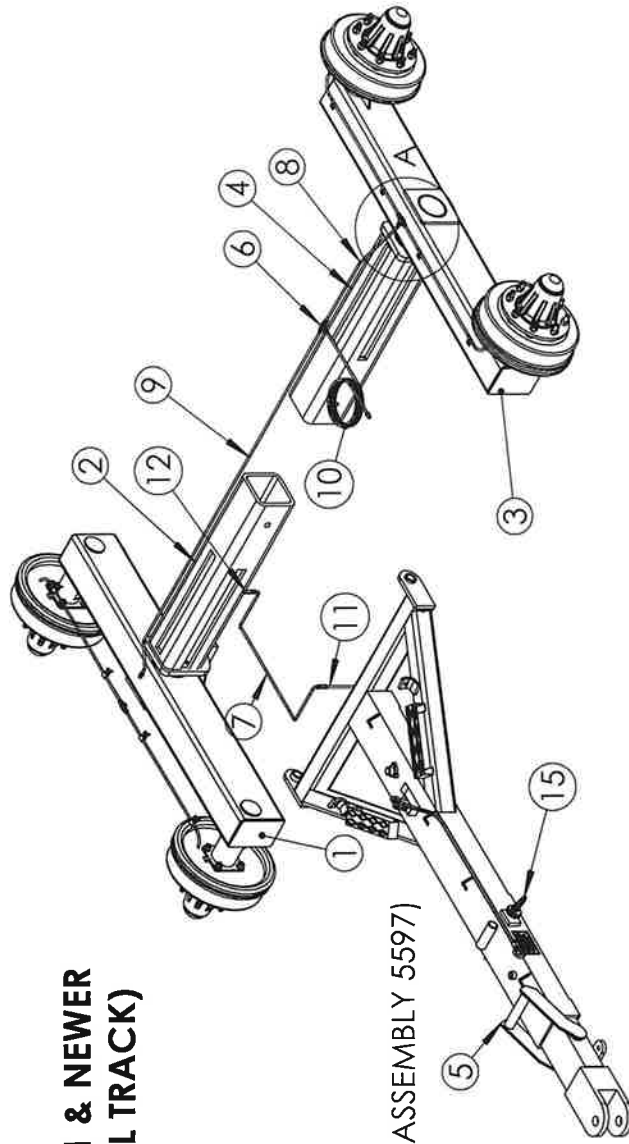
AG206 & AG207

ADJUSTABLE WALKING TANDEM AXLES 2021 & NEWER

4 WHEEL SURGE BRAKES (102" - 115" WHEEL TRACK)

PART ILLUSTRATION

PART NUMBER: 47071295

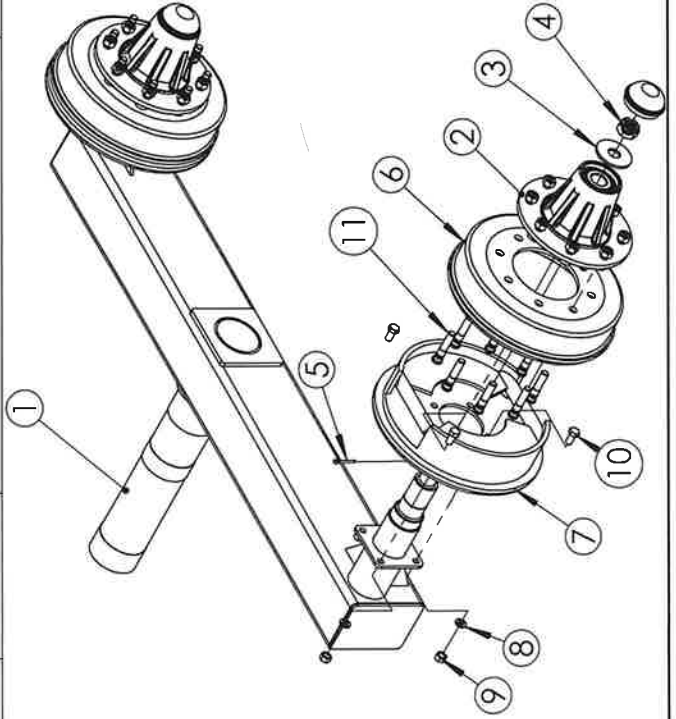


DETAIL A
SCALE 1 : 5

TANDEM AXLE ASSEMBLY W/ BRAKES (LEFT)

P/N: 71580

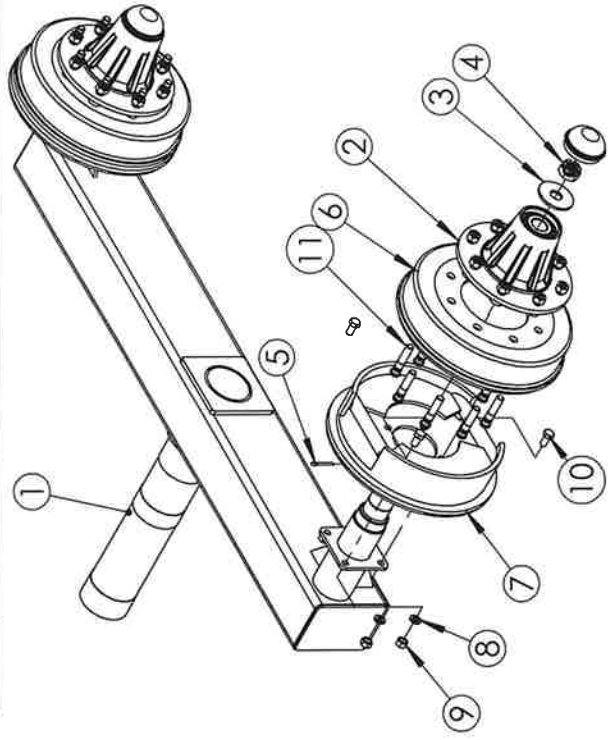
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71245	TANDEM AXLE LEFT	1
2	47009712	HUB ASSEMBLY	2
3	18000017	SPINDLE WASHER 1 X .187	2
4	18489100	SLOTTED NUT	2
5	18560830	COTTER PIN	2
6	47005650	BRAKE DRUM	2
7	47005652	BRAKE CLUSTER (13") LH	2
8	18891400	WASHER, 1/2 LOCK ZC	8
9	18437500	NUT, HEX 1/2-20	8
10	18057522	BOLT 1/2-20 X 1 ZC	8
11	71954	WHEEL STUD LONG	16



TANDEM AXLE ASSEMBLY W/ BRAKES (RIGHT)

P/N: 71581

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71243	TANDEM AXLE RIGHT	1
2	47009712	HUB ASSEMBLY	2
3	18000017	SPINDLE WASHER 1 X .187	2
4	18489100	SLOTTED NUT	2
5	18560830	COTTER PIN	2
6	47005650	BRAKE DRUM	2
7	47005651	BRAKE CLUSTER (13") RH	2
8	18891400	WASHER, 1/2 LOCK ZC	8
9	18437500	NUT, HEX 1/2-20	8
10	18057522	BOLT 1/2-20 X 1 ZC	8
11	71954	WHEEL STUD LONG	16

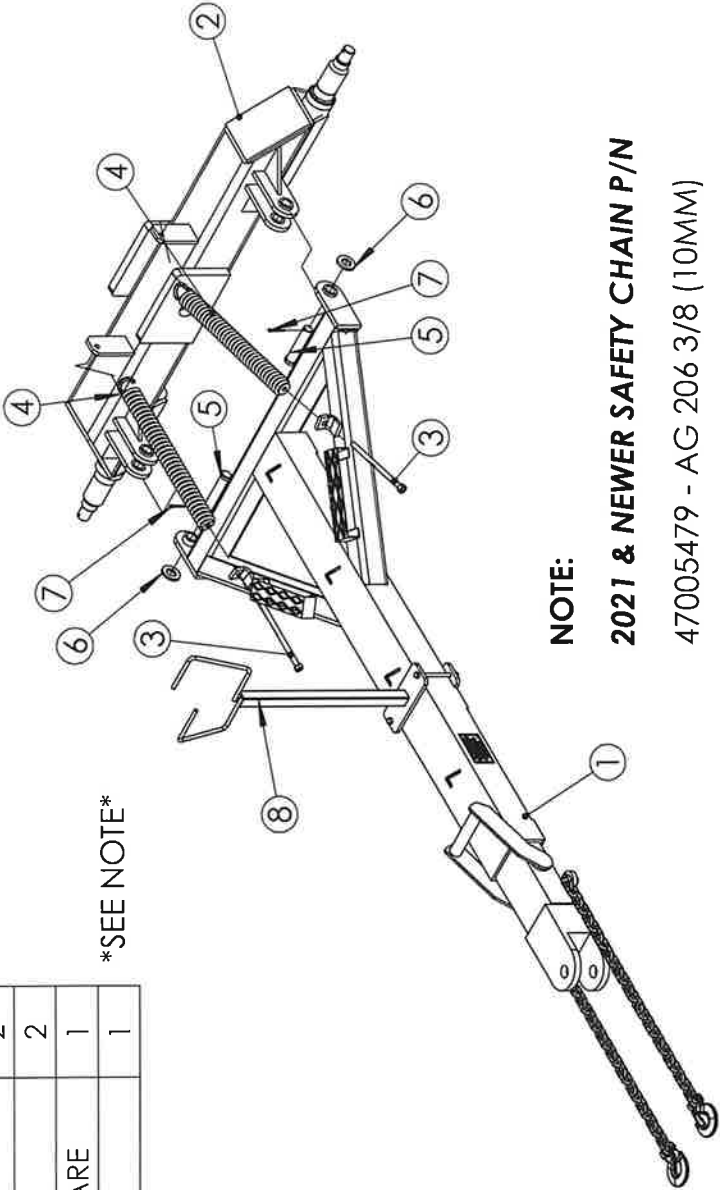


AG206 & AG207 FRONT END DETAIL 2021 & NEWER

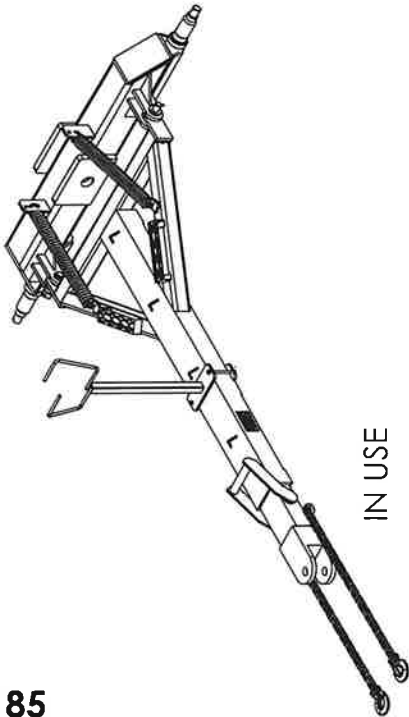
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71291	TELES-POLE WELD'T W/O BRAKES	1
2	70985	FRONT AXLE WELDMNT	1
3	47009910	SPRING BOLT	2
4	00306-30	LIFT SPRING W/ INSERT	2
5	18541551	TONGUE CLEVIS PIN, 1.00 DIA X 4.0 LG	2
6	18852200	WASHER, FLAT 1" SAE	2
7	18560826	COTTER PIN 3/16 X 1 1/2	2
8	71289	HOSE HOLDER ASSY W/HARDWARE	1
9	47005479	SAFETY CHAIN SET (GR 70)	1

ITEMS 1 & 2 ARE SHOWN FOR REFERENCE ONLY
ITEMS 3 - 7 ARE INCLUDED IN BOLT KIT 71335

SEE NOTE

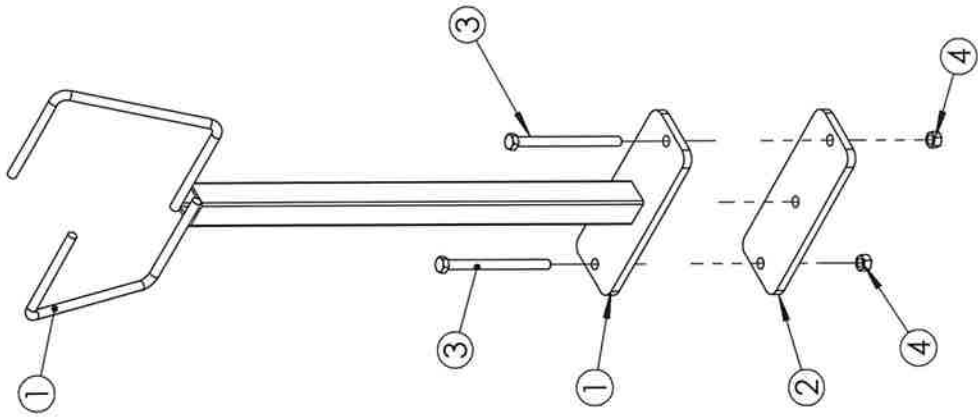
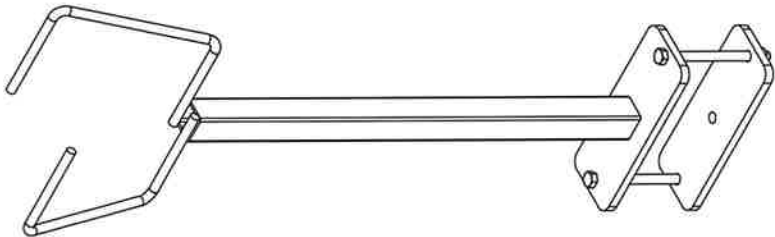


NOTE:
2021 & NEWER SAFETY CHAIN P/N
47005479 - AG 206 3/8 (10MM)
71450 - AG207 1/2 (13MM)
(SAFETY CHAINS INCLUDED W/ FRAMES)



AG206 & AG207 2021 & NEWER **FRONT TONGUE HOSE HOLDER** **PART NUMBER: 47071289**

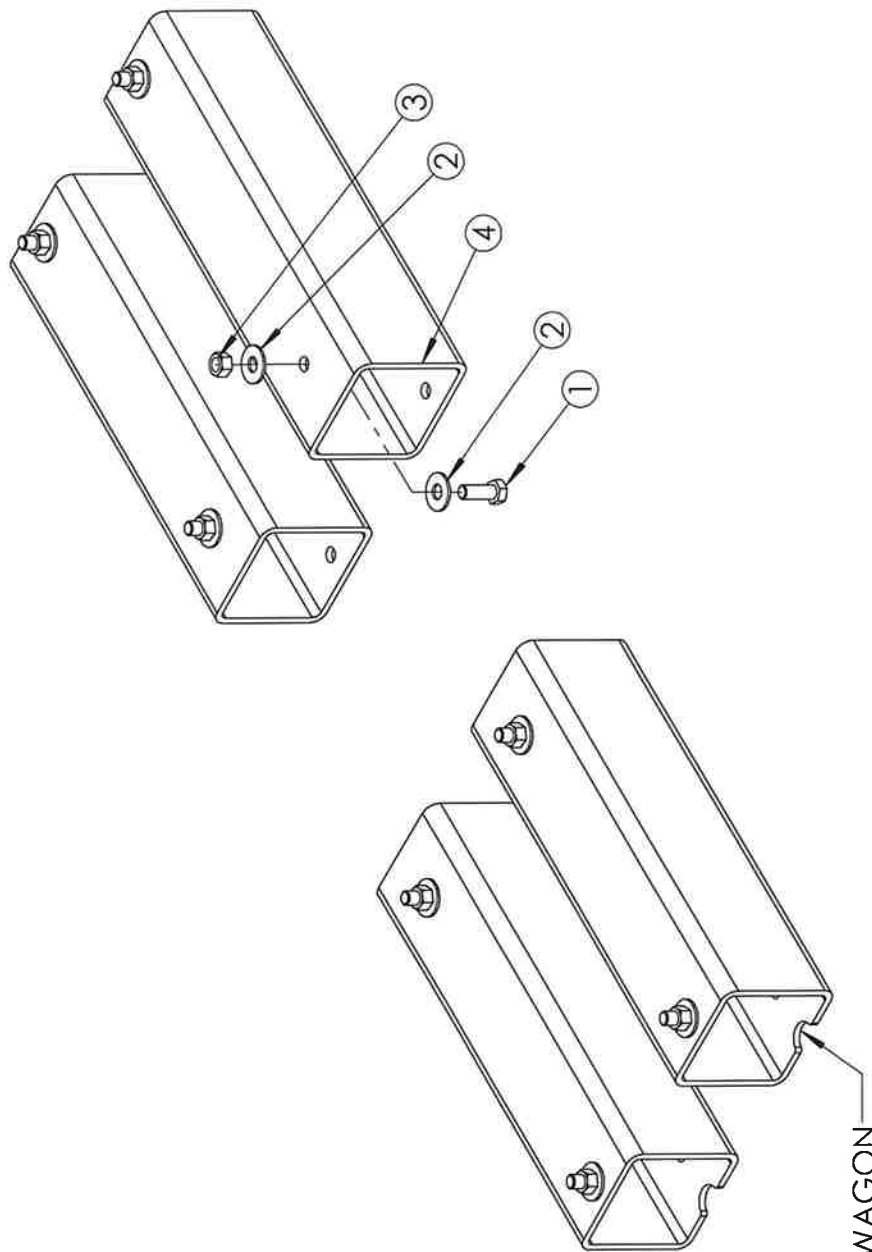
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71374	HOSE HOLDER WELDMENT	1
2	71008	HOSE HOLDER MOUNTING PLATE	1
3	18056854	BOLT HX CAP G5 NC ZC 3/8 X 5	2
4	18457800	NUT CENTER LOCK 3/8-16 ZC	2



(NOT LEGAL IN ALL STATES)

AG207 TANK RISER KIT **2021 & NEWER** **PART NUMBER: 71422**

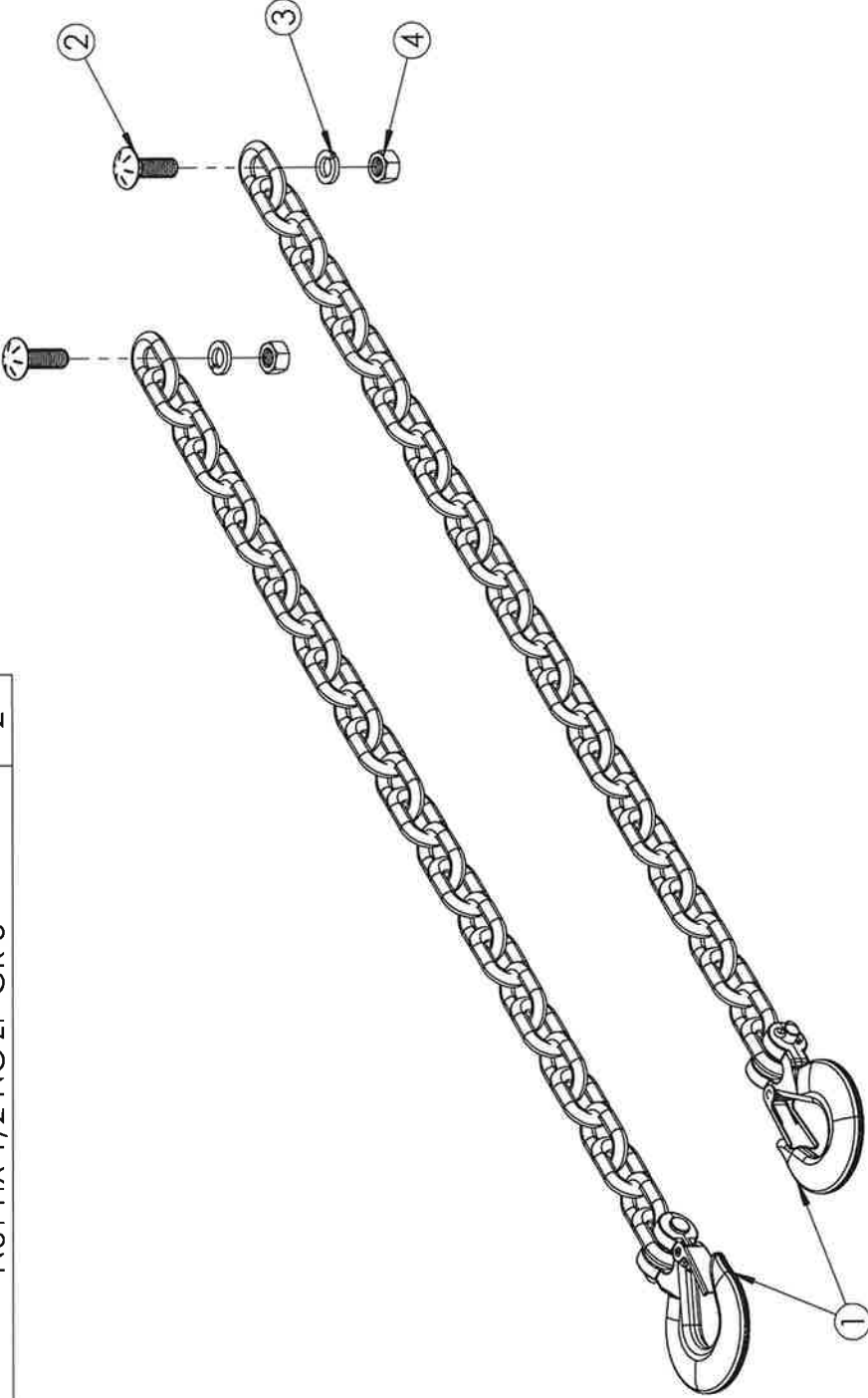
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	18058430	BOLT HX 3/4 X 2 GR 5 NC ZC	8
2	18811800	WASHER FLAT USS ZC 3/4	16
3	18458452	LOCKNUT, 3/4 GR 8 ZC	8
4	71405	7 IN TANK SPACER TUBE	4



WHEN INSTALLING:
 NOTCH IN TUBE MUST BE ORIENTED
 DOWN AND TO THE OUTSIDE OF THE WAGON

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47005480	SAFETY CHAIN ASSEMBLY	2
2	18177150	BOLT CARRIAGE G8NCZP 1/2 X 1 1/2	2
3	18901400	WASHER, 1/2 LOCK ZC GR 8	2
4	18427400	NUT HX 1/2 NC ZP GR 8	2

3/8 DUAL SAFETY CHAIN
AG206 2021 & NEWER
P/N: 47005479

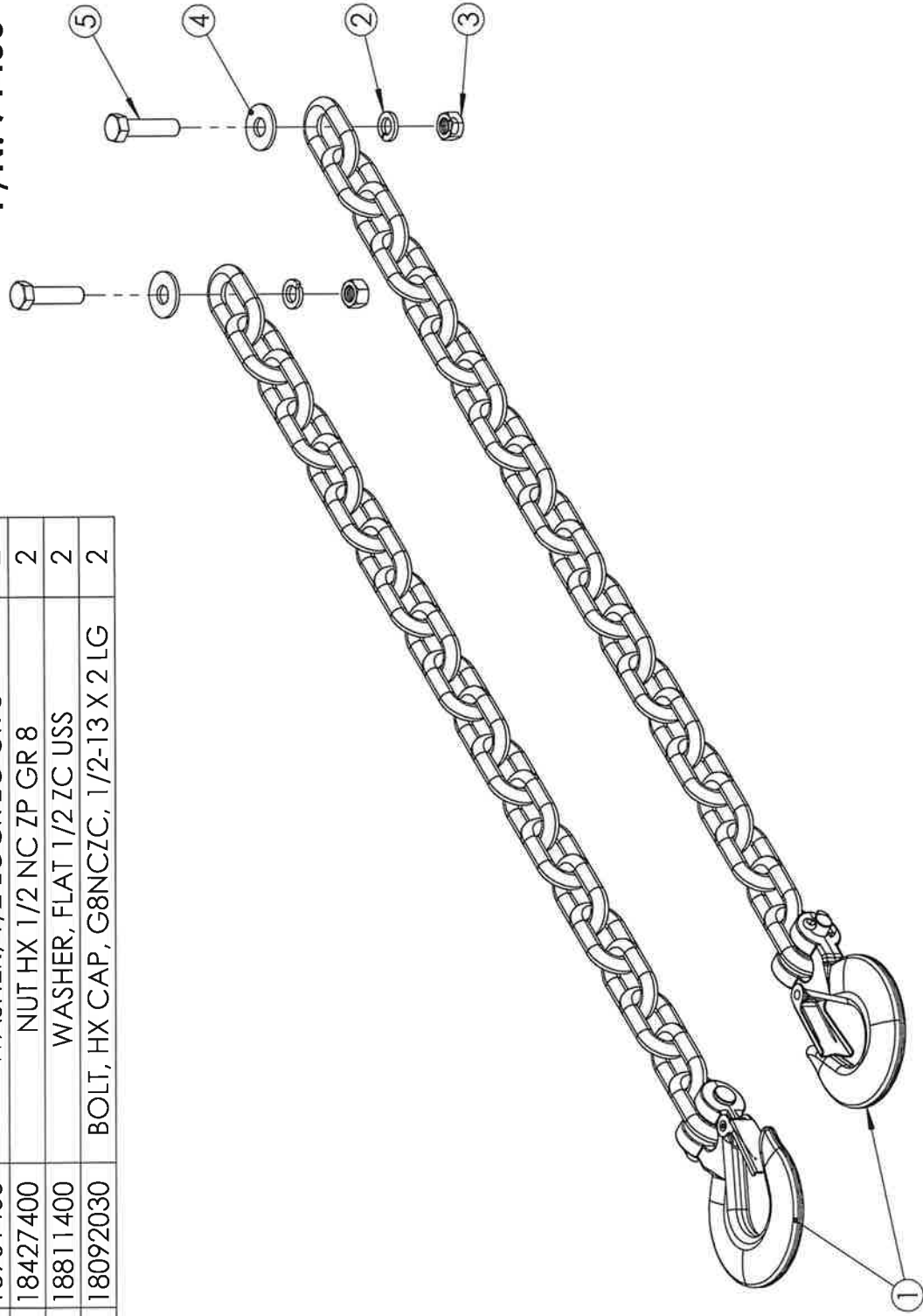


1/2 DUAL SAFETY CHAIN

AG207 2021 & NEWER

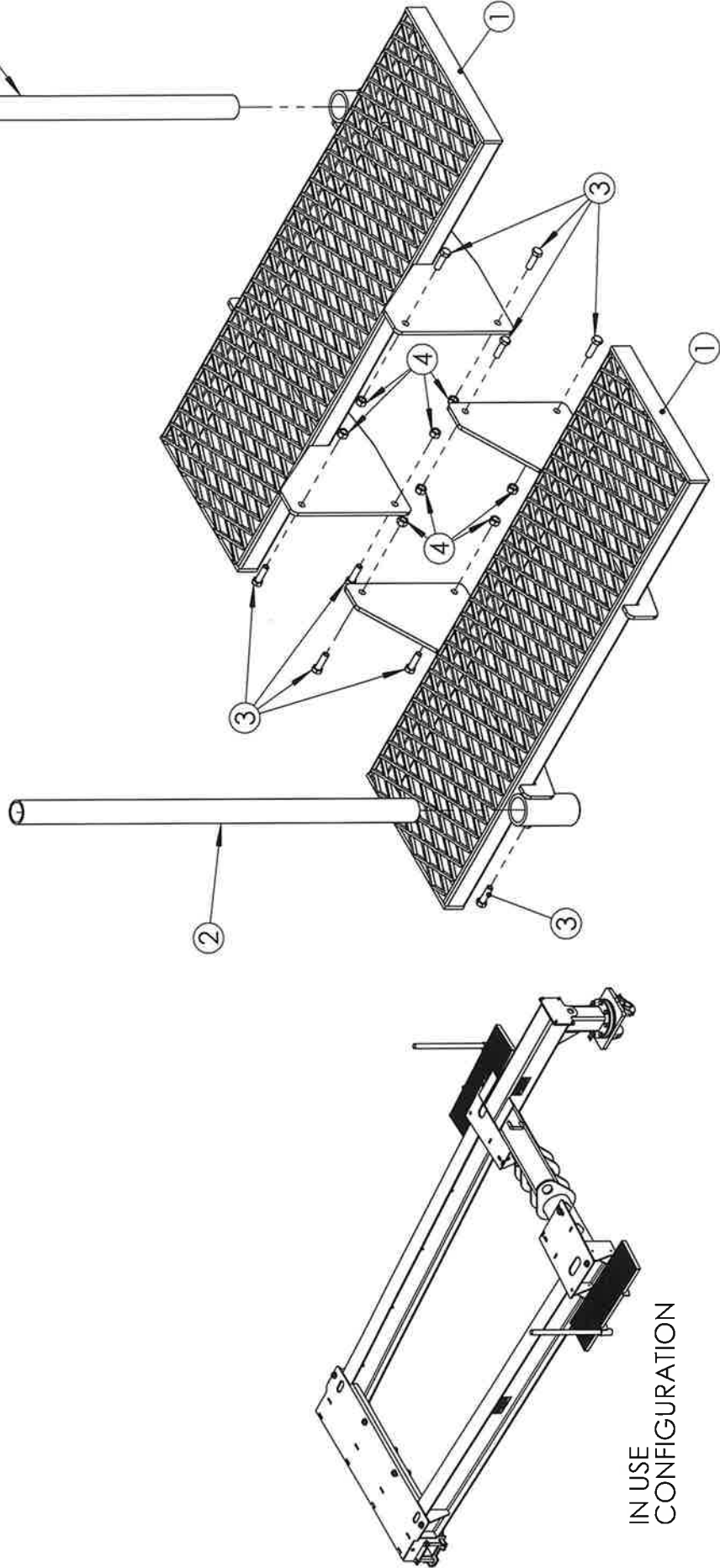
P/N: 71450

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71452	CHAIN SAFETY ASSY (13MM)	2
2	18901400	WASHER, 1/2 LOCK ZC GR 8	2
3	18427400	NUT HX 1/2 NC ZP GR 8	2
4	18811400	WASHER, FLAT 1/2 ZC USS	2
5	18092030	BOLT, HX CAP, G8NCZC, 1/2-13 X 2 LG	2



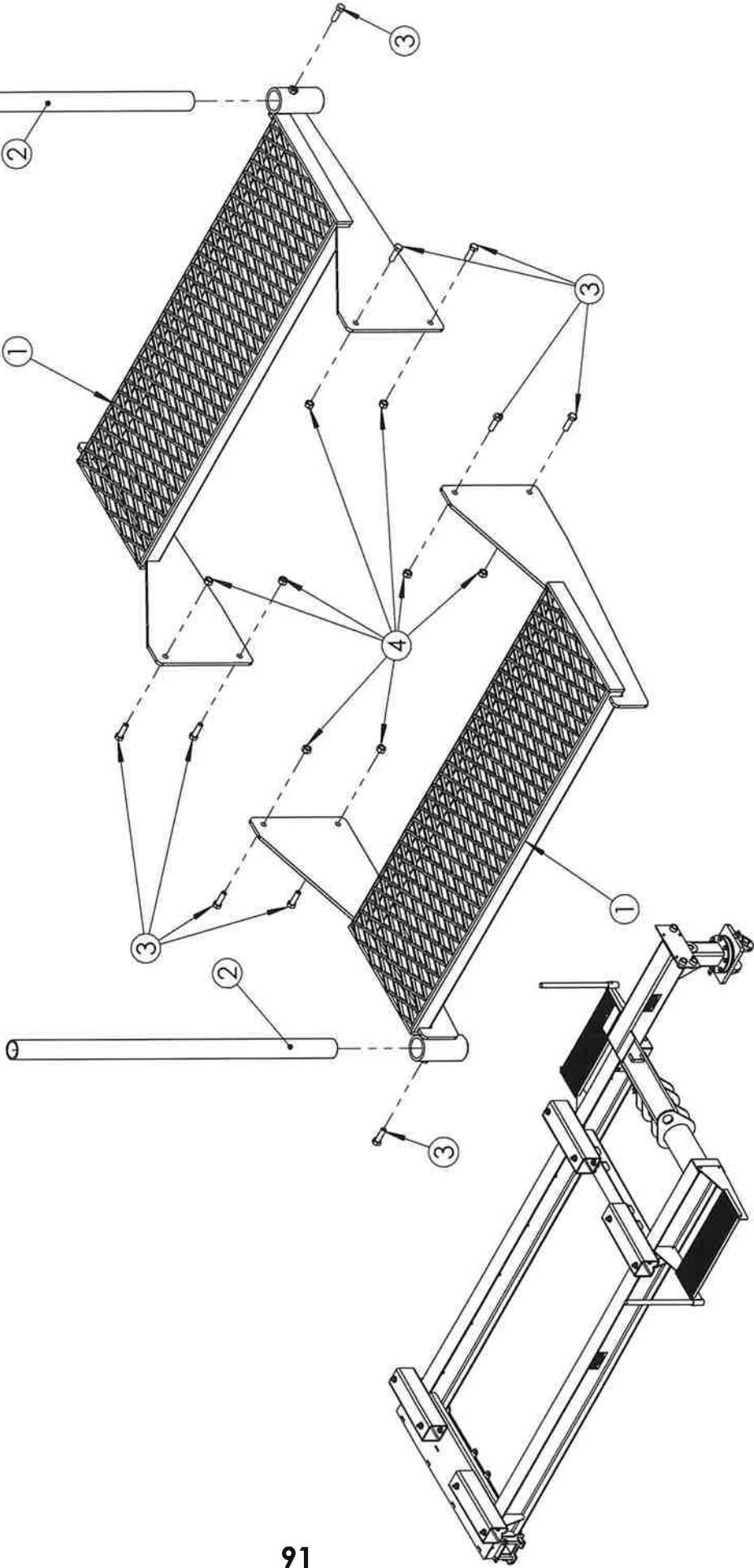
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	70981	STEP WELDMENT	2
2	70987	STEP RAIL	2
3	18056824	BOLT HX ZC 3/8 X 1 1/4	10
4	18459200	NUT 3/8 NYLOCK	8

AG206
2021 & NEWER
STEP KIT (2 STEPS)
PART NUMBER: 47071290



AG207 STEP KIT (2 STEPS)
2021 & NEWER
PART NUMBER: 47071323

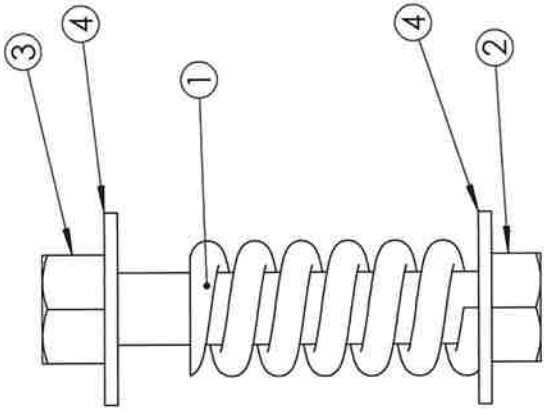
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71317	STEP WELDMENT 207	2
2	70987	STEP RAIL	2
3	18056824	BOLT HX ZC 3/8 X 1 1/4	10
4	18459200	NUT 3/8 NYLOCK	8



IN USE CONFIGURATION

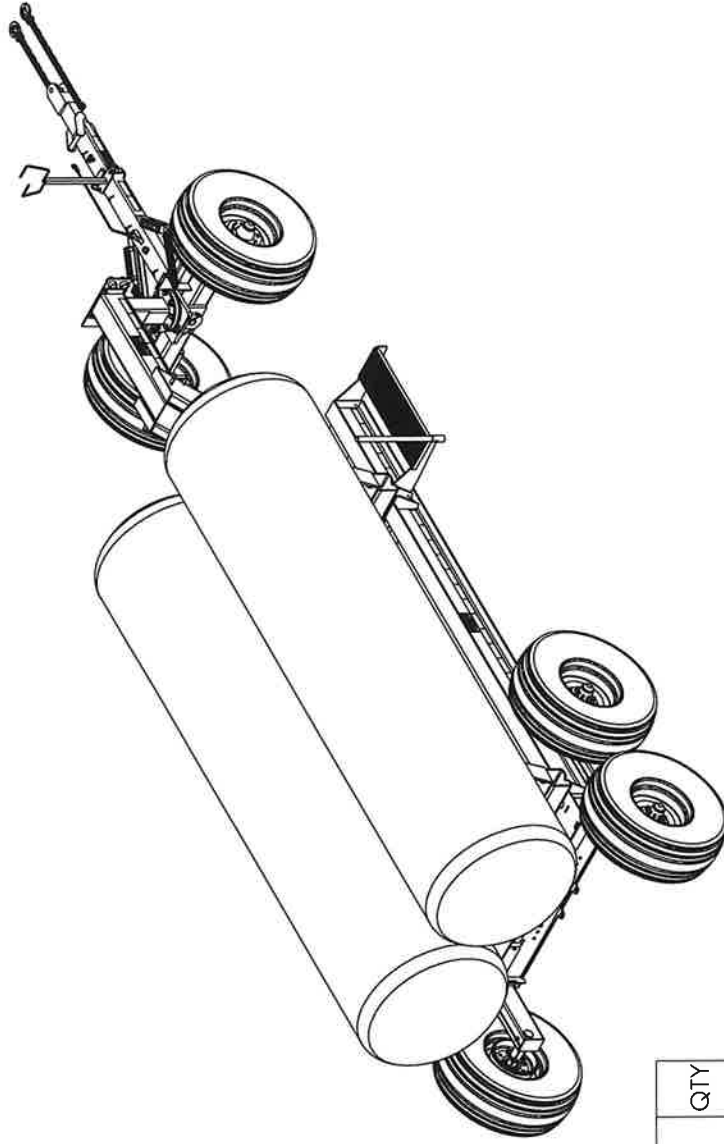
AG206 & AG207
2021 & NEWER
TANK SPRING MOUNTING PACKAGE
 (NOT LEGAL IN ALL STATES)
PART NUMBER: 47071324

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	18387	DIE SPRING	4
2	18098501	BOLT HX 3/4 X 4 1/2 GR 8 ZC	4
3	18458452	LOCKNUT, 3/4 GR 8 ZC	4
4	18811800	WASHER FLAT USS ZC 3/4	8

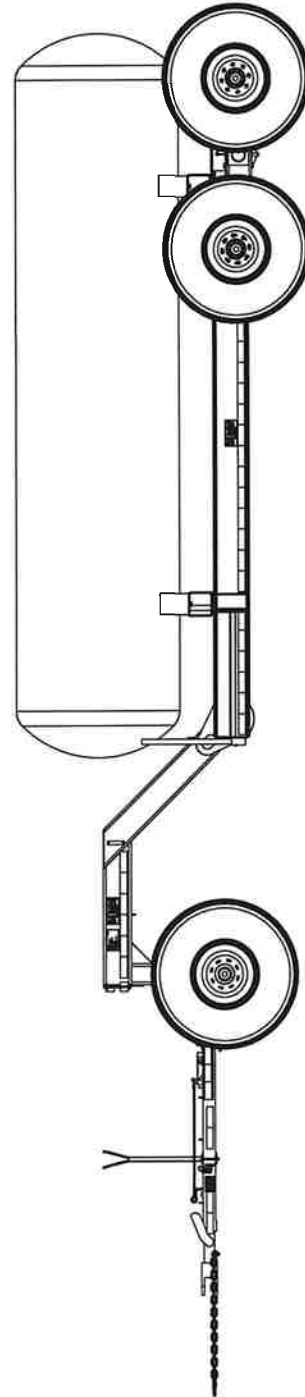
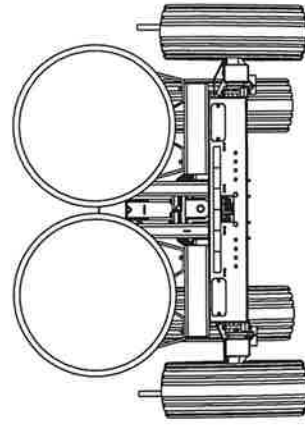


RECOMMENDED COMPRESSION:
 TIGHTEN NUT UNIL SPRING LENGTH IS 2 1/2"-2 3/4"
 ADJUST AS NEEDED

AG206 & AG207
D.O.T. REFLECTIVE TAPE KIT
2021 & NEWER
PART NUMBER 32-4
 (SHOWN ON AG207)



PART NUMBER	DESCRIPTION	QTY
980-3262	TAPE REFLECTIVE RED/WHITE 2" K/C	35'

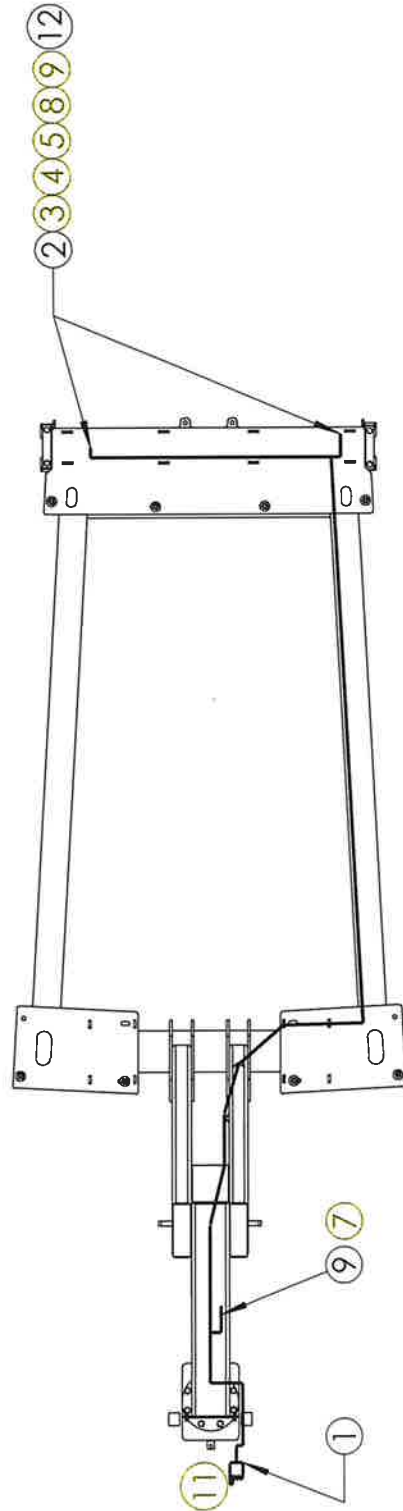


AG206 & AG207 UNIVERSAL LIGHT KIT

2021 & NEWER

PART NUMBER: 47071300
(SHOWN ON AG206)

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	71382	4 WAY TRAILER HARNESS-40'	1
2	71383	SURFACE MOUNT LIGHTS RED	2
3	71199	TAIL LIGHT PLATE	2
4	18704215	SCREW MACHINE RD #10-24 X 3/4	4
5	18997800	NUT SER FLANGE 10-24 NCZP	4
6	70676	SPLIT LOOM, 1/4" ID.	40FT
7	18721018	#10 X 3/4 SELF TAPPING SCREW	1
8	70886	SPLICE CONNECTOR 16-14 GA, HEAT SHRINK	6
9	70656	RING TERMINAL, HEAT SHRINK, 16-14 GA	3
10	70659	CABLE TIE, 7-1/2" LONG, OUTDOOR	10
11	73012	7-WAY TO 4 FLAT PLUG ADAPTER	1
12	1700400	3/8 HEX WASHER HD SELF THREADING BOLT	4



WIRING NOTES:

- 1: PULL THE HARNESS THROUGH THE WIRE LOOPS ON THE TRAILER AND GIVE ADEQUATE SLACK AROUND THE GOOSENECK AND POLE. THEN SPLIT AND TRIM WIRES TO LENGTH INSIDE THE REAR AXLE FOR BOTH SIDES.
- 2: INSTALL HEAT SHRINK CONNECTORS BETWEEN HARNESS AND LIGHTS.
- 3: SECURE WIRES WITH CABLE TIES AS NEEDED.
- 4: COVER WIRES OF TRAILER END CONNECTOR WITH SPLIT LOOM AND SECURE WITH ELECTRICAL TAPE.
- 5: GROUND TO TRAILER USING SELF TAPPING SCREW, RING TERMINALS, AND THE GROUND WIRE ON THE HARNESS. GROUND LIGHTS TO INSIDE OF TAIL LIGHT PLATE USING MOUNTING SCREWS AND RING TERMINALS.

May 18, 2026

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

Heartland Agriculture LLC, dba Heartland AG Systems