



# **XT3 Type III A<sup>2</sup> Operator's/Parts Manual**

UNIT SERIAL NUMBER \_\_\_\_\_

MANUAL NUMBER: 314210-D

EFFECTIVE 10/2022



1330 76TH AVE SW  
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**NOTE:**

This manual incorporates several interactive features to provide supplemental information and ease of navigation. The information below is to aid in the identification and use of these features.

## Hyperlinks

Hyperlinks provide direct access to a specific destination when clicked. The entire Table of Contents of this manual is hyperlinked to provide quick access to all sections of this manual when viewing the electronic version.

Hyperlinks within the content are denoted by [blue, bold underlined text](#). Electronic format viewers can click these links for direct access to New Leader online features. Internet access is required.

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Insert Current HI-WAY Warranty



## **PLEASE ! ALWAYS THINK SAFETY FIRST !!**

The purpose of this manual is to familiarize the person (or persons) using this unit with the information necessary to properly install, operate, and maintain this system. The safety instructions indicated by the safety alert symbol in the following pages supersede the general safety rules. These instructions cannot replace the following: the fundamental knowledge that must be possessed by the installer or operator, the knowledge of a qualified person, or the clear thinking necessary to install and operate this equipment. Since the life of any machine depends largely upon the care it is given, we require that this manual be read thoroughly and referred to frequently. If for any reason you do not understand the instructions, please call your authorized dealer or our Product Sales and Support Department at 1-888-363-8006.

It has been our experience that by following these installation instructions, and by observing the operation of the spreader, you will have sufficient understanding of the machine enabling you to troubleshoot and correct all normal problems that you may encounter. Again, we urge you to call your authorized dealer or our Product Sales and Support Department if you find the unit is not operating properly, or if you are having trouble with repairs, installation, or removal of this unit.

We urge you to protect your investment by using genuine NLM parts and our authorized dealers for all work other than routine care and adjustments.

New Leader Manufacturing reserves the right to make alterations or modifications to this equipment at any time. The manufacturer shall not be obligated to make such changes to machines already in the field.

This Safety Section should be read thoroughly and referred to frequently.

**ACCIDENTS HURT !!!**

**ACCIDENTS COST !!!**

**ACCIDENTS CAN BE AVOIDED !!!**



## Important Safety Information

### **⚠ WARNING**

Before using this equipment, read, understand and follow all instructions in the Operator's Manual provided with this equipment. If the user and/or assistants cannot read or understand the warnings and instructions, the employer of the user and/or assistants must provide adequate and necessary training to ensure proper operation and compliance with all safety procedures pertaining to this equipment. If Operator's Manual has been lost, visit [www.newleader.com](http://www.newleader.com) or call your authorized dealer or our Product Sales & Support Department at (800) 363-1771 for replacements. Serious injury or death can result from the failure to read, understand, and follow instructions provided in this manual.

Figure 1.1 - The need for safety cannot be stressed strongly enough in this manual. At New Leader Manufacturing, we urge you to make safety your top priority when operating any equipment. We firmly advise that anyone allowed to operate this machine carefully read, learn and understand all messages and information in this manual and on machine's safety decals before operating machine, as well as familiarize themselves with the location and function of all machine controls.

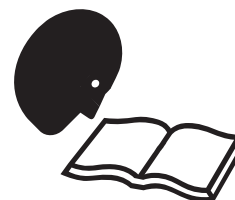


Figure 1.1

The following guidelines are intended to cover general usage and to assist you in avoiding accidents. There will be times when you will run into situations that are not covered in this section. At those times the best standard to use is common sense. If, at any time, you have a question concerning these guidelines, please call your authorized dealer or our Product Sales & Support Department at (800) 363-1771.

## Safety Alert Symbols



Take note! This safety alert symbol found throughout this manual is used to call your attention to instructions involving your personal safety and that of others. Failure to follow these instructions can result in injury or death.

In this manual and on the safety signs placed on the unit, the words "DANGER," "WARNING," "CAUTION," and "NOTICE" are used to indicate the following:



DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



NOTICE is used to address practices not related to physical injury.

### **NOTE:**

Provides additional information to simplify a procedure or clarify a process.

**Operations****PREPARE FOR EMERGENCIES**

Figure 1.2 - Be prepared if a fire starts. Keep a fully charged fire extinguisher and first aid kit in accessible place on the vehicle at all times.

Fire extinguisher must be Type ABC or Type BC.

Keep emergency numbers for doctors, ambulance service, hospital and fire department available at all times.

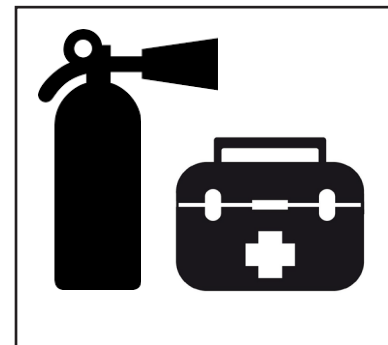


Figure 1.2

**INSPECT HARDWARE BEFORE USE**

Figure 1.3 - Inspect all bolts, screws, fasteners, keys, chain drives, body mounts and other attachments periodically. Immediately replace any missing or damaged parts with NLM specified parts.

Inspect spinner fins, spinner frame mounting and spinner fin hardware daily. Look for missing or loose fasteners, wear and cracks. Replace immediately with NLM specified parts.

Tighten all bolts, nuts and screws to specified torques. Refer to "Standard Torques" in Maintenance section of this manual.

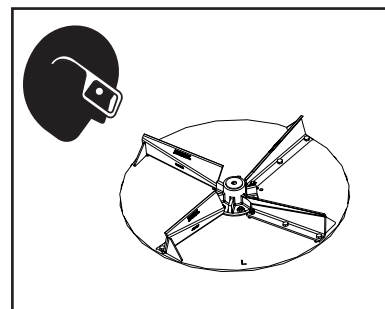


Figure 1.3

**HANDLE FLAMMABLE MATERIALS SAFELY**

Figure 1.4 - Handle fuel and hydraulic oil with care. They are highly flammable.

Exposure to toxic fluids or fumes may occur during the normal operation of this system. Before attempting to fill, use, or service this system, read Safety Data Sheets (SDS) to know the specific hazards of the fluids you are using. Always use proper Personal Protective Equipment when attempting to fill, use, or service this system.

Always stop engine before refueling machine or filling hydraulic reservoir.

Never smoke while adding fuel or oil to machine. Add fluids in a safe place away from open flame and sparks.

Do not allow overflow. Clean up spilled fuel and oil immediately.

Always have a multipurpose dry chemical fire extinguisher filled and available during machine operation and when adding fuel. Know how to use it.

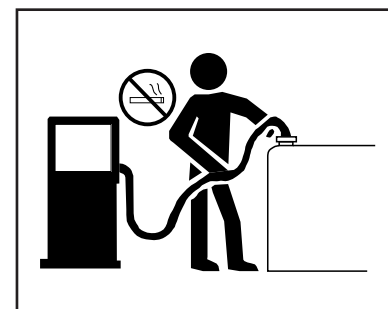


Figure 1.4

## General Safety Rules

### Operations

#### HANDLE HAZARDOUS MATERIALS SAFELY

Figure 1.5 - Materials to spread can be dangerous.

Improper selection, application, use or handling may be a hazard to persons, animals, plants, crops or other property.

A Safety Data Sheet (SDS) provides specific details on chemical products: physical and health hazards, safety procedures and emergency response techniques.

Check all SDS's before starting any job using a hazardous material. Follow all instructions and precautions given by the material manufacturer.



Figure 1.5

#### WORK IN WELL-VENTILATED AREAS

<b>⚠ WARNING</b>	Never run machine engine inside a building unless adequate ventilation is provided to safely and properly remove exhaust fumes. Failure to comply with this requirement could result in death or serious injury.
------------------	--

Figure 1.6 - Always work in a properly ventilated area.

Engine exhaust fumes can cause sickness or death. If it is necessary to run an engine in an enclosed area, use proper equipment to safely remove exhaust fumes from the working area.

Open building doors and get fresh air into the working area whenever possible.



Figure 1.6

#### PROTECT AGAINST NOISE

Figure 1.7 - Long periods of exposure to high decibels or loud noise can cause hearing impairment or loss.

Wear proper hearing protection such as earmuffs or earplugs during periods of exposure to high decibels or loud noise.

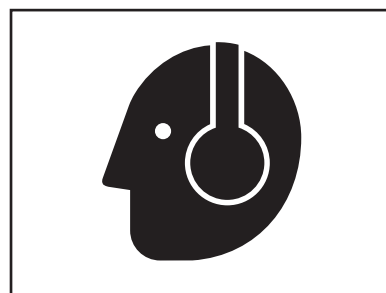


Figure 1.7

## Operations

### AVOID MOVING PART HAZARDS

Figure 1.8 - Entanglement in rotating drive lines or moving parts will cause serious injury or death.

Stay clear of all moving parts, such as shafts, couplings and universal joints.

Make sure all personnel are clear of machine before starting.



Figure 1.8

Figure 1.9 - Do not operate machine without all guards and shields closed and secured.

Disconnect and lock out power source before removing guards.

Disconnect and lock out power source before adjusting or servicing.

Keep hands, feet, hair and clothing away from moving parts.

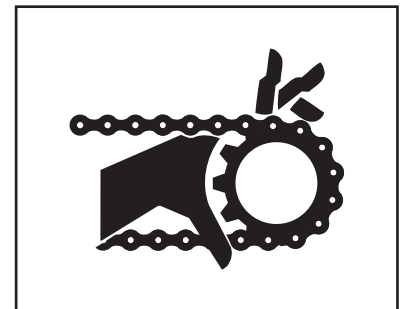


Figure 1.9

Figure 1.10 - Keep away from spinners while they are turning.

Rocks, scrap metal and other material can be thrown from the spinners violently. Stay away from discharge area.

Stop machine before servicing or adjusting. Wear eye protection.

Make sure discharge area is clear before spreading.

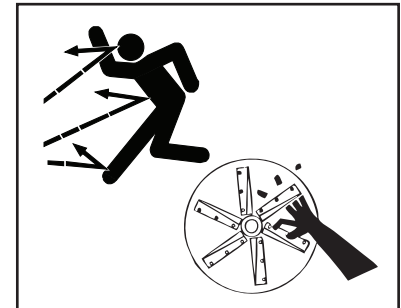


Figure 1.10

Figure 1.11 - Stay out of spreader.

If necessary to enter the spreader, return to shop, empty body, turn off all power, engage brakes, shut down engine and remove keys before entering.

Tag all controls to prohibit operation. Tags should be placed, and removed, by the person working in the body.

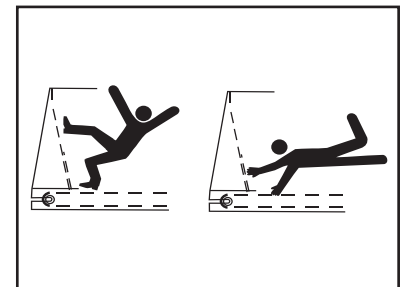


Figure 1.11

## General Safety Rules

### Operations

#### DO NOT CLIMB OR STAND ON MACHINE

Figure 1.12 - Never allow any personnel to ride in or on the machine.

Use inspection ladder or portable ladder to view the unit. Use caution when getting on and off the ladder, especially in wet, icy, snowy or muddy conditions. Clean mud, snow and ice from steps and footwear.

Always maintain three-point contact with steps, ladders and handholds. Face the machine when mounting and dismounting inspection ladder. Do not jump off machine.



Figure 1.12

#### OPERATE MACHINE SAFELY

Always walk around and visually inspect machine before using. Check the immediate vicinity of machine for people and obstructions. Ensure adequate visibility.

Avoid distractions such as reading, eating or operating personal electronics while operating machine. Never operate the machine under the influence of alcohol, drugs or while otherwise impaired.

Always come to a complete stop before reversing. Be sure that all personnel are clear of machine path. Turn around and look directly for best visibility. Ensure all rear view mirrors are properly installed and adjusted. Use a signal person when backing if view is obstructed or when in close quarters.

Always disengage hydraulics before shutting down engine. DO NOT start engine with hydraulics engaged.

**Transportation & Handling****TRAVELING & TRANSPORTING ON PUBLIC ROADS**

Always walk around and visually inspect the machine before traveling on public roads. Check for damage and/or faulty components that can fail and create a hazard or unsafe condition. Make sure all machine systems operate properly, including but not limited to: headlights, tail and brake lights, hazard warning lights, turn indicators, parking brake, horn and rear view mirrors. Repair or replace any component that is not in proper working order.

Never drive machine at a speed that causes it to bounce or cause loss of control.

Obey all traffic safety laws and regulations. Operate the machine with hazard warning lights on, unless prohibited by law. It is the operator's responsibility to activate and use road lights properly while traveling on public roads.

Cover all loads that may spill or blow away. Environmental damage may result. Do not spread dusty materials where dust may create pollution, visibility issues or interfere with traffic on public roads.

When transporting equipment or machine on a trailer, ensure it is properly secured. Be sure that SMV signs on equipment or machine are covered while in transport on a trailer.

Be aware of overhead structures and power lines. Make sure machine can safely pass under. Refer to "Dimensions & Capacities" pages in the Operations section of this manual.

**NAVIGATING ROUGH & UNEVEN TERRAIN**

Figure 2.1 - Turn slowly and be careful when traveling on rough surfaces and side slopes. Avoid holes, ditches and obstructions that may cause machine to roll over, especially with a loaded spreader.

Never drive near the edge of a gully or steep embankment.

Load may shift, causing vehicle to tip.

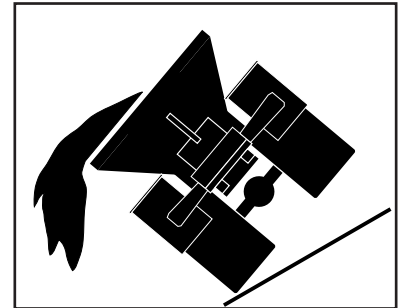


Figure 2.1

## General Safety Rules

### Maintenance

#### READ AND UNDERSTAND MAINTENANCE PROCEDURES

Figure 3.1 - Read the maintenance and safety instructions and understand them before performing any maintenance procedure.

Never perform any maintenance procedure or repair if the instructions and safety procedures are not fully understood. Only trained and qualified personnel should perform any maintenance procedure or repair.

Never modify any equipment or add attachments not approved by New Leader Manufacturing.

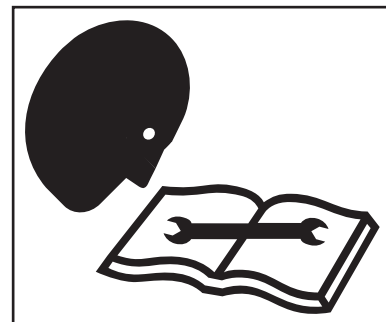


Figure 3.1

#### DO NOT SERVICE OR ADJUST MACHINE WHILE IN MOTION

Figure 3.2 - Never lubricate, service or adjust the machine or any of its components while they are moving.

Never wear loose clothing or jewelry when working near machine tools or moving parts.

Remove rings and other jewelry to prevent electrical shorts and other personal injury when in contact with machine tools or moving parts.

Close and secure all guards removed for service. Check all screws, bolts, nuts and fasteners for proper torques before operating machine.

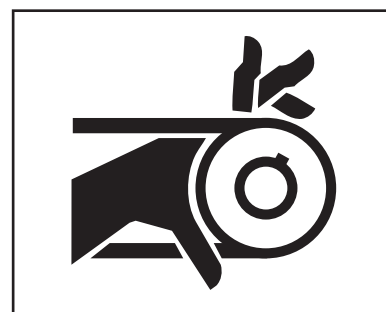


Figure 3.2

#### WEAR PROPER PROTECTIVE EQUIPMENT

Figure 3.3 - Wear close-fitting clothing and proper safety equipment for the job.

Always wear eye protection when working on or around the machine.

Wear a suitable hearing protection device such as earmuffs or earplugs to protect against high decibels or loud noises.

Prolonged exposure to high decibels or loud noise can cause hearing impairment or loss of hearing.

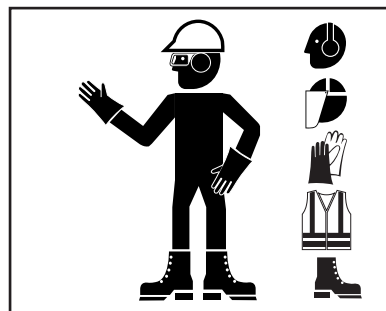


Figure 3.3

Wear protective gloves to protect hands from cuts, abrasions and minor burns.

**Maintenance****HANDLE FLAMMABLE SOLVENTS SAFELY**

Figure 3.4 - Never use diesel fuel, kerosene, gasoline or any flammable solvents for cleaning.

Exposure to toxic fluids or fumes may occur during the normal operation of this system. Before attempting to fill, use, or service this system, read Safety Data Sheets (SDS) to know the specific hazards of the fluids you are using. Always use proper Personal Protective Equipment when attempting to fill, use, or service this system.

Perform work using flammable fluids and solvents in a safe place away from open flame and sparks. Do not smoke.

Do not weld, grind or flame cut on any tank containing oil, fuel, fumes or any other flammable material, or any container that contents or previous contents are unknown. Move all flammable materials and containers away from work area.

Clean up spilled fuel and oil immediately.

Always have a multipurpose dry chemical fire extinguisher filled and available. Know how to use it.



Figure 3.4

**USE PROPER LIFTING EQUIPMENT**

Figure 3.5 - Use only lifting devices that meet or exceed OSHA standard 1910.184 or ASME B30.20-2013.

Never lift equipment over people.

Never lift a loaded unit. Never lift unit with any loose objects or persons in the body. Loads may shift or fall if improperly supported, causing death, serious injury or machine damage.

Before unfastening heavy parts or assemblies, support with adequate hoist or other device to prevent falling, tipping, swinging or any other movement that may cause injury or damage.



Figure 3.5

**USE PROPER TOOLS FOR THE JOB**

Figure 3.6 - Use of improper tools (such as a screwdriver instead of a pry bar, pliers instead of a wrench, a wrench instead of a hammer) can cause serious injuries or machine damage.

Use power tools only to loosen threaded parts and fasteners. Using power tools to tighten may cause over-tightening and component damage.

Use only service parts meeting New Leader specifications.

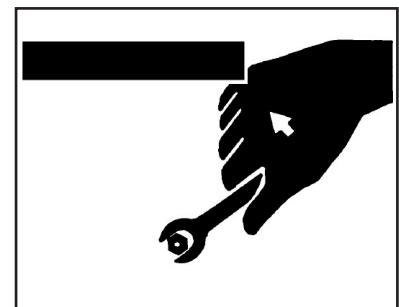


Figure 3.6



## General Safety Rules

### Maintenance

#### HIGH PRESSURE FLUID HAZARDS

Figure 3.7 - Escaping fluid under pressure can penetrate the skin causing serious injury.

Always stop machine, allow to cool and relieve pressure before servicing hydraulic system. Never open hydraulic lines under pressure. Make sure all connections are tight and all hoses are in good condition before pressurizing system.

Always use a piece of cardboard or wood to search for leaks instead of hand. Wear impervious gloves and eye protection when servicing system.

Seek medical attention immediately if fluid penetrates your skin. Gangrene may result if wound is left untreated.



Figure 3.7

#### AVOID HEATING NEAR HIGH PRESSURE FLUID LINES

Figure 3.8 - Flammable spray can be generated by heating near pressurized fluid lines, resulting in burns to yourself and bystanders.

Do not heat by welding, soldering or using a torch near pressurized fluid lines or other flammable materials.

Pressure lines can suddenly burst when heat goes beyond the immediate flame area.

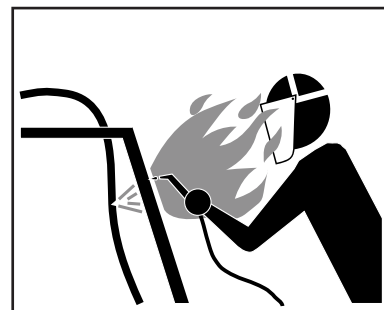


Figure 3.8

#### AVOID TOXIC FUMES & DUST

Figure 3.9 - Hazardous fumes can be generated when paint is heated from welding, soldering or using a torch.

Remove paint before heating:

- Remove a minimum of 4 in (100 mm) from area to be affected by heating. If paint cannot be removed, wear an approved respirator while heating or welding.
- Avoid breathing dust from sanding or grinding on paint.
- If a solvent or paint stripper is used, wash stripper away with soap and water before heating or welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse for at least 15 minutes before heating or welding.

Do not use chlorinated solvents in areas where welding will take place.

Perform all work in a well-ventilated area that will carry all toxic fumes and dust away.



Figure 3.9

## Maintenance

### CLEAN MACHINE OF HAZARDOUS CHEMICALS

#### CAUTION

During application of hazardous chemicals, residue can build up on the inside or outside of the vehicle. Clean vehicle according to use instructions of hazardous chemical. Failure to comply with this requirement may result in minor or moderate injury.

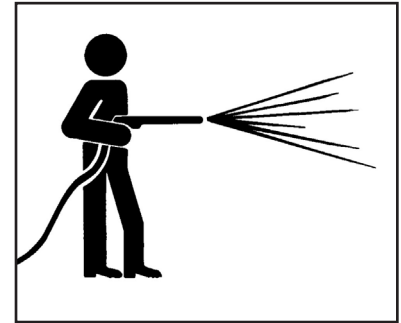


Figure 3.10

Figure 3.10 - When exposed to hazardous chemicals, clean exterior and interior of vehicle daily to keep free of the accumulation of visible dirt and contamination.

1. Clean operator's station to maintain unobstructed visibility of all windows and mirrors, and safe operation of all controls.

#### NOTICE

Directing pressurized water at electronic/ electrical components, bearings and hydraulic seals or other sensitive parts and components may cause product malfunctions. Reduce pressure and spray at 45 to 90 degree angles.

2. Wash entire exterior of vehicle.
3. Dispose of any wash water with hazardous concentrations of active or non-active ingredients according to published regulations or directives.

### HANDLE BATTERIES SAFELY

#### WARNING

Sulfuric acid in battery electrolyte is poisonous. It can burn skin, eat holes in clothing, and cause blindness if it contacts eyes. Keep sparks and flame away from batteries. Wear proper safety equipment. Failure to comply with this requirement could result in death or serious injury.

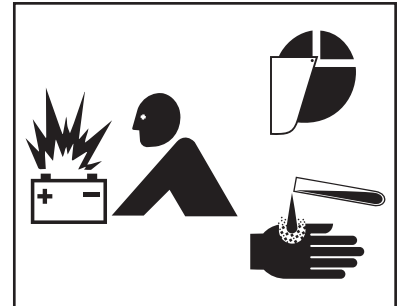


Figure 3.11

Figure 3.11 - Lead acid batteries generate flammable and explosive gases. Keep sparks and flame away from batteries. Do not smoke.

If acid contacts eyes, skin or clothing, flush with water immediately. Seek immediate medical attention if acid contacts eyes.

### PROPER TIRE MAINTENANCE

Figure 3.12 - Never weld on a wheel or rim that has a tire on it.

Never attempt to mount or remove a tire unless using the proper equipment, tire safety cage, instructions, training, and you are qualified to perform the work safely. Failure to follow the correct procedures when mounting a tire on a wheel or rim can cause an explosion and serious injury.

Tire service procedures must be performed by trained and qualified personnel.



Figure 3.12

## General Safety Rules

### Storage

#### PARK VEHICLE SAFELY

Figure 4.1 - When leaving the vehicle unattended for any reason, be sure to:

- Shut down PTO.
- Shut off vehicle's engine, and unit's engine if applicable.
- Place vehicle transmission in "Neutral" or "Park".
- Set parking brake firmly.
- Remove ignition key and take it with you.
- Block wheels.

These actions are recommended to avoid unauthorized use, runaway, vandalism, theft and unexpected operation during startup.

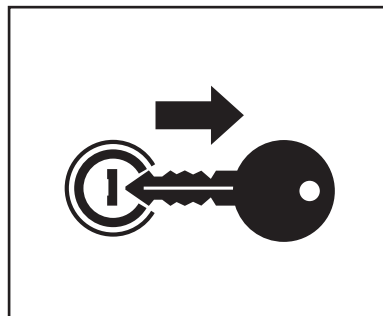


Figure 4.1

#### SUPPORT MACHINE PROPERLY

Figure 4.2 - When machine is removed from vehicle, always store on adequate supports on a firm level surface. Improper supporting or storage of spreader may cause machine to fall, resulting in serious injury or death.

Never use lifting device to free machine from a chassis, storage stands or frozen ground, or to lift the chassis in any way. Shock loading is prohibited and sudden accelerations must be avoided. Lifting in such a manner could result in injury or machine damage.



Figure 4.2

#### DISPOSE OF WASTE PROPERLY

Figure 4.3 - Improper disposal of waste can threaten the environment and ecology. Potentially harmful waste used with equipment include items such as fuel, oil, filters and batteries.

Use leakproof containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them. Do not pour waste onto the ground, down a drain, or into any water source.

Comply with all OSHA, local, City, State, Province, Country and jurisdiction regulations, ordinances and standards, related to your particular work area and environment. Inquire on proper disposal methods from your local environmental or recycling center, or from your local dealer.

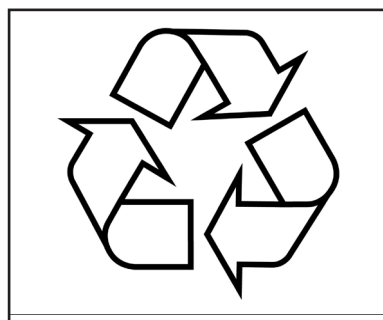


Figure 4.3

## **Safety Decal Maintenance**

Keep safety decals and signs clean and legible at all times.

Replace safety decals and signs that are missing or have become illegible.

Replaced parts that displayed a safety sign should also display the current sign.

Safety decals or signs are available from your dealer's Parts Department or from New Leader Manufacturing by calling (800) 363-1771.

## **Safety Decal Installation**

### **Clean Surface**

Wash the installation surface with a synthetic, free-rinsing detergent. Avoid washing the surface with a soap containing creams or lotion. Allow to dry.

### **Position Safety Decal**

Decide on the exact position before application. Application marks may be made on the top or side edge of the substrate with a lead pencil, marking pen, or small pieces of masking tape. NOTE: Do not use chalk line, china marker, or grease pencil. Safety decals will not adhere to these.

### **Remove the Liner**

A small bend at the corner or edge will cause the liner to separate from the decal. Pull the liner away in a continuous motion at a 180-degree angle. If the liner is scored, bend at score and remove.

### **Apply Safety Decal**

Tack decal in place with thumb pressure in upper corners. Using firm initial squeegee pressure, begin at the center of the decal and work outward in all directions with overlapping strokes. NOTE: Keep squeegee blade even—nicked edges will leave application bubbles. Pull up tack points before squeegeeing over them to avoid wrinkles.

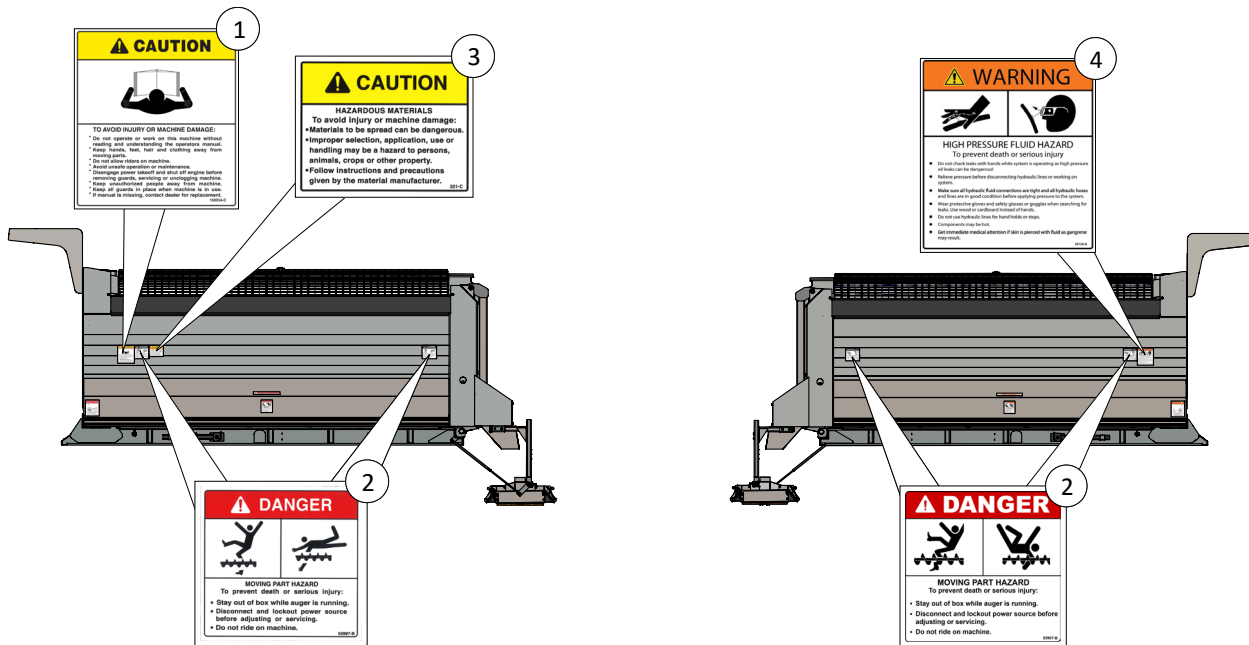
### **Remove Pre-mask**

If safety decal has a pre-mask cover remove it at this time by pulling it away from the decal at a 180 degree angle. NOTE: It is important that the pre-mask covering is removed before the decal is exposed to sunlight to avoid the pre-mask from permanently adhering to the decal.

### **Remove Air Pockets**

Inspect the decal in the flat areas for bubbles. To eliminate the bubbles, puncture the decal at one end of the bubble with a pin (never a razor blade) and press out entrapped air with thumb moving toward the puncture.

### **Re-Squeegee All Edges**



## 1. CAUTION: TO AVOID INJURY OR MACHINE DAMAGE:

- Do not operate or work on this machine without reading and understanding the operator's manual.
- Keep hands, feet, hair and clothing away from moving parts.
- Do not allow riders on machine.
- Avoid unsafe operation or maintenance.
- Disengage power takeoff and shut off engine before removing guards, servicing or unclogging machine.
- Keep unauthorized people away from machine.
- Keep all guards in place when machine is in use.
- If manual is missing, contact dealer for replacement.

## 2. DANGER: MOVING PART HAZARD

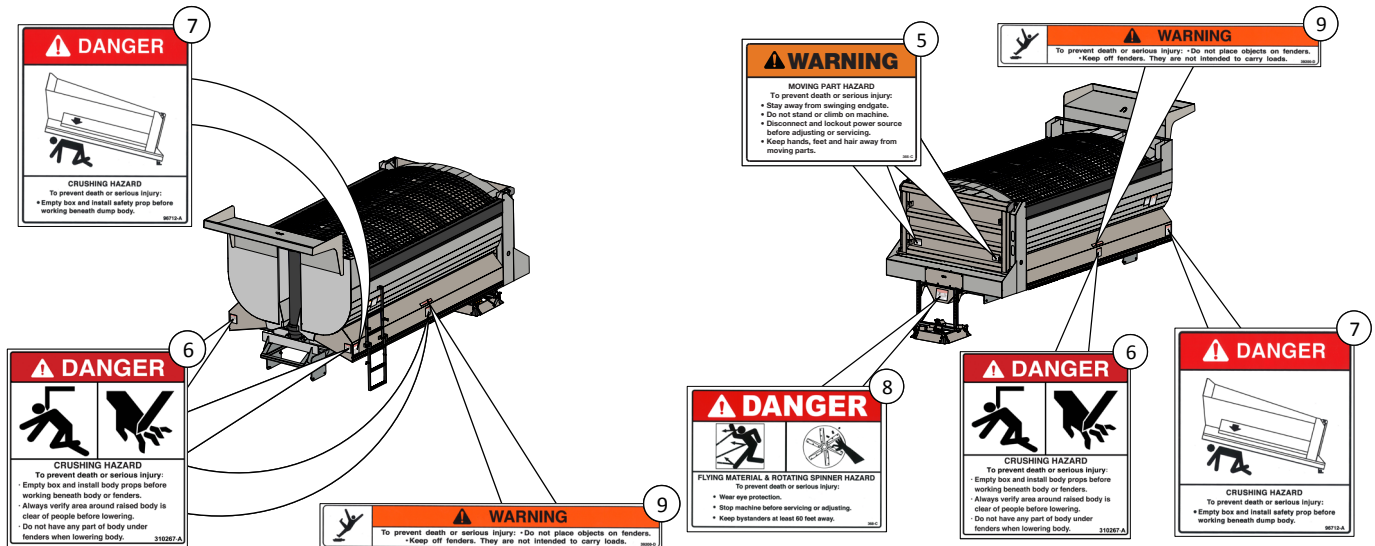
### To prevent death or serious injury:

- Stay out of box while auger is running.
- Disconnect and lock out power source before adjusting or servicing.
- Do not ride on machine.

## 3. CAUTION: HAZARDOUS MATERIALS

### To avoid injury or machine damage:

- Materials to be spread can be dangerous.
- Improper selection, application, use or handling may be hazardous to persons, animals, crops or other property.
- Follow instructions and precautions given by material manufacturer.



## 4. WARNING: HIGH-PRESSURE FLUID HAZARD

### To prevent death or serious injury:

- Do not check leaks with hands while system is operating as high pressure oil leaks can be dangerous!
- Relieve pressure before disconnecting hydraulic lines or working on system.
- Make sure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system.
- Wear protective gloves and safety glasses or goggles when searching for leaks. Use wood or cardboard instead of hands.
- Do not use hydraulic lines for hand holds or steps.
- Components may be hot.
- Get immediate medical attention if skin is pierced with fluid as gangrene may result.

## 5. WARNING: MOVING PART HAZARD

### To prevent death or serious injury:

- Stay away from swinging endgate.
- Do not stand or climb on machine.
- Disconnect and lockout power source before adjusting or servicing.
- Keep hands, feet and hair away from moving parts.

## 6. DANGER: CRUSHING HAZARD

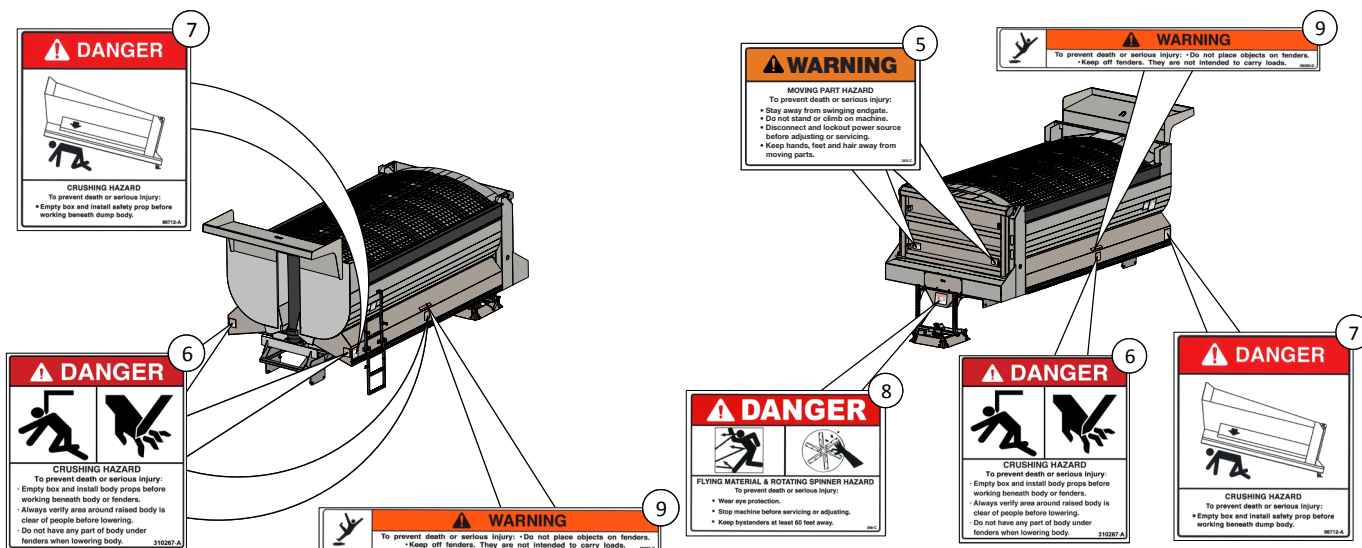
### To prevent death or serious injury:

- Empty box and install body props before working beneath body or fenders.
- Always verify area around raised body is clear of people before lowering.
- Do not have any part of body under fenders when lowering body.

## 7. DANGER: CRUSHING HAZARD

### To prevent death or serious injury:

- Empty box and install safety prop before working beneath dump body.



### 8. DANGER: FLYING MATERIAL AND ROTATING SPINNER HAZARD

**To prevent death or serious injury:**

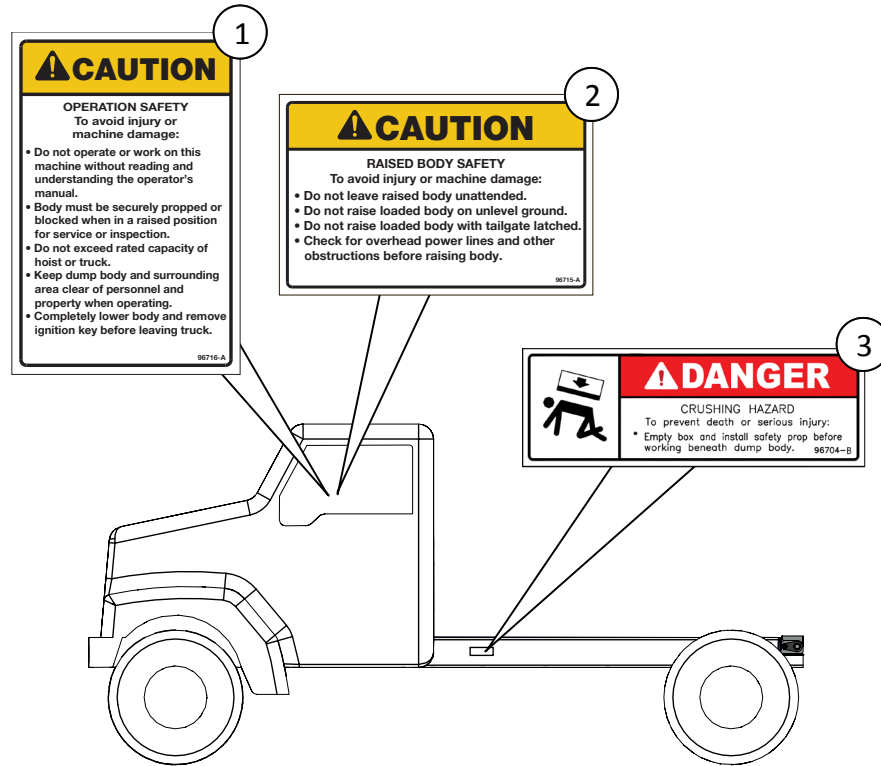
- Wear eye protection.
- Stop machine before servicing or adjusting.
- Keep bystanders at least 60 feet away.

### 9. WARNING: FALLING HAZARD

**To prevent death or serious injury:**

- Do not place objects on fenders.
- Keep off fenders. They are not intended to carry loads.





NOTE: Apply decals 1 and 2 in a conspicuous location in the cab of the truck. Apply Decal 3 in a conspicuous location on the truck frame, behind the cab.

## 1. CAUTION: OPERATION SAFETY

### To avoid injury or machine damage:

- Do not operate or work on this machine without reading and understanding the operator's manual.
- Body must be securely propped or blocked when in a raised position for service or inspection.
- Do not exceed rated capacity of hoist or truck.
- Keep dump body and surrounding area clear of personnel and property when operating.
- Completely lower body and remove ignition key before leaving truck.

## 2. CAUTION: RAISED BODY SAFETY

### To avoid injury or machine damage:

- Do not leave raised body unattended.
- Do not raise loaded body on unlevel ground.
- Do not raise loaded body with tailgate latched.
- Check for overhead power lines and other obstructions before raising body.

## 3. DANGER: CRUSHING HAZARD

### To prevent death or serious injury:

- Empty box and install safety prop before working beneath dump body.



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## INSTALLATION

Recommended sequence of installation:

1. Tailgate
2. Hinge
3. Mounting Pads
4. Body Props
5. Cradle & Hoist Cylinder
6. Decals
7. Cross Conveyor, if applicable
8. Spinner, if applicable
9. Other Options
10. Hydraulics
11. Lights

## Tailgate

Install provided chains from the tailgate chain hooks to the rear bolster chain hooks to limit tailgate opening.

## Mounting of XT3

Make sure the truck's CA/CT (Cab to Axle/Cab to Tandem) dimension and Frame Length are correct for the length of the dump body. See the Dimensions & Specifications chart to match dump body with truck.

Make sure the GAWR (Gross Axle Weight Rating) and GVWR (Gross Vehicle Weight Rating) are adequate to carry the fully loaded dump body. Your Hi-Way dealer can help calculate the weight distribution on each axle and the total loaded vehicle weight.

## Hinge

### NOTICE

Connect arc welder's ground directly to one of the two items being welded before using welder on anything connected to the vehicle.

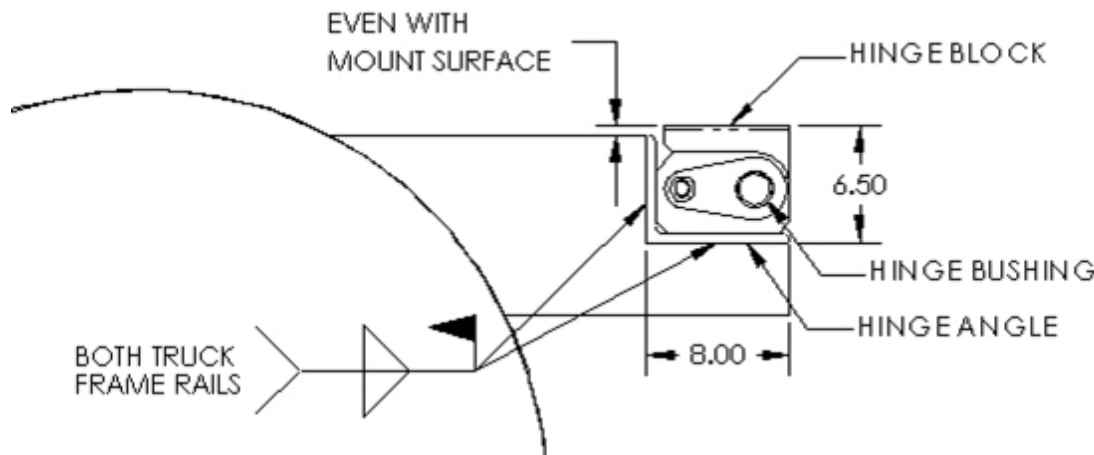


Figure 1 – Hinge Installation

### NOTICE

Do not exceed 300° F (148.9° C) at the Hinge Bushings. Heat can distort the Hinge Bushings. Contact Hi-Way Genuine Parts dealer for replacements if Bushings are damaged

1. Measure from front of unit to rear of bottom sill and add three inches. This is the distance from the cab to the rear of the hinge.
2. Mark this distance on truck frame rail.
3. Cut truck frame so Hinge Block will be even with the rear and level with the mounting surface as shown in Figure 1.
4. Place Hinge Angle in cutout and center from side-to-side.
5. Make sure top of Hinge Block will be level with top of Mount Pads (1, Figure 2) or truck frame if mounting direct to frame.
6. Tack weld the Hinge Angle to both truck frame rails.

## XT3 Mounting

1. Cover both truck frame rails completely with Mount Pads (1) as shown in Figure 2, from the front of the rear hinge to the front of the XT3 sill, and cut to length as needed. This will provide even contact with the truck frame and reduce high wear points.
2. Drill or cut Mount Pads to make clearance for rivets, bolts or other obstructions so Pads lay flat.

### NOTICE

Do not weld Mount Pads directly to truck frame. Such welding could lead to fatigue cracking and must be avoided.

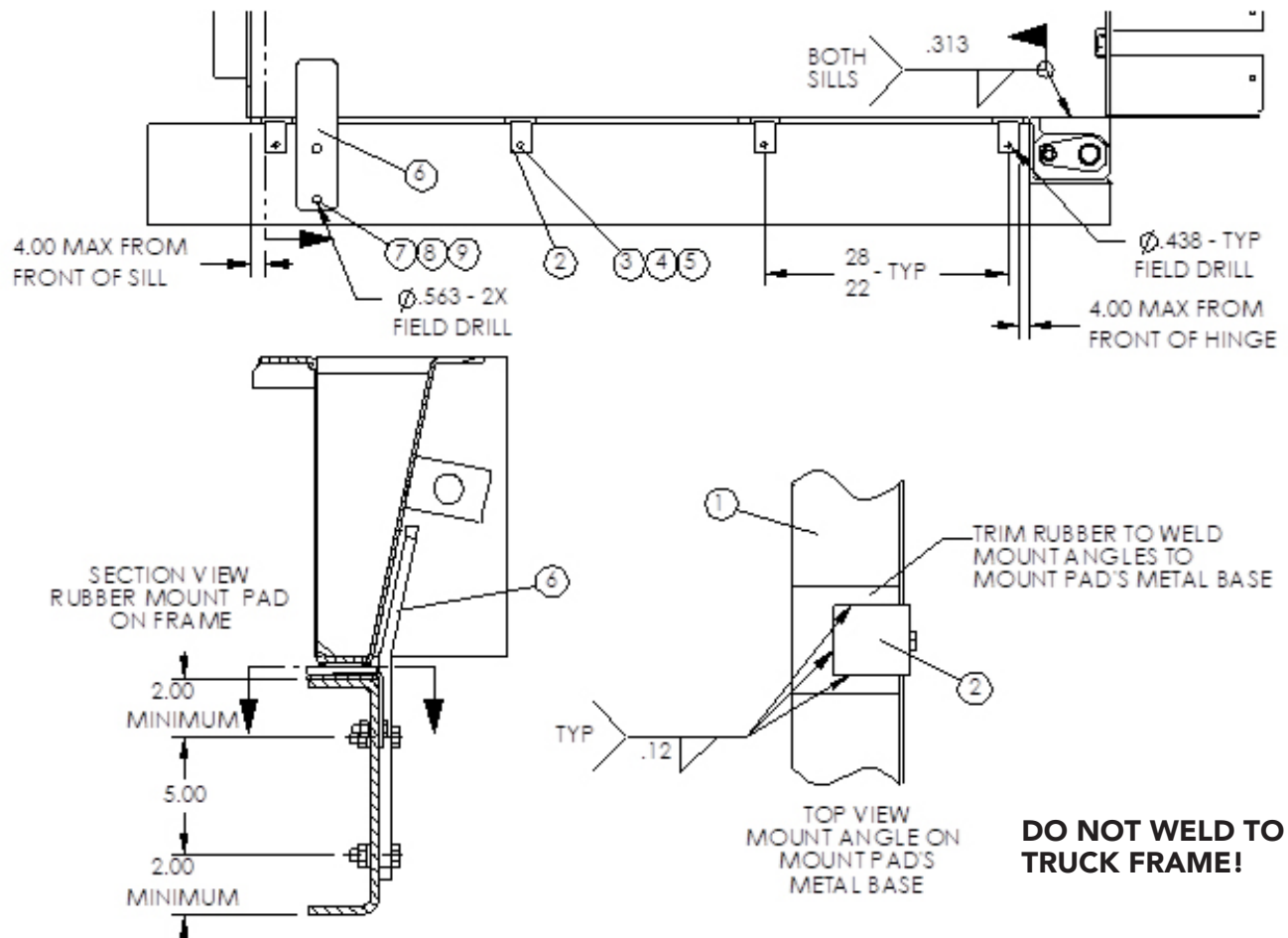


Figure 2 – Mounting

## NOTICE

DO NOT PUT HOLES IN TOP OR BOTTOM FLANGES—to do so may void truck manufacturer's warranty. Drill only through vertical web portions of truck frame, a minimum of 2.00" (5.08 cm) from the top or bottom flanges.

### Parts needed:

ITEM	DESCRIPTION	QTY
1	Mount Pad	AR
2	Mount Angle	AR
3	Cap Screw – 3/8 x 1-1/4	AR
4	Lock Washer – 3/8	AR
5	Hex Nut – 3/8	AR
6	Guide, Body Down	2
7	Cap Screw – 1/2 x 1-3/4 GR 8	4
8	Lock Washer – 1/2	4
9	Hex Nut – 1/2	4

AR – As Required

- Trim rubber from Mount Pads (1) so Mount Angles (2) can be welded on without damaging rubber.
- Position Mount Angles (2) on Mount Pads (1) as shown in Figure 2 and mark hole locations on truck frame.

NOTE: The rear Mount Angle should be no more than 4" (10.16 cm) from the front of the rear hinge and the front Mount Angle should be no more than 4" (10.16 cm) from the front of the XT3 sill.

5. Drill 7/16" (1 cm) holes.
6. Install Mount Angles using 3/8" hardware (3, 4 & 5).
7. Weld Mount Angles (2) to metal base of Mount Pads (1) as shown in Figure 2.

**⚠ WARNING**

Lifting devices used should always meet or exceed OSHA standards. Never lift equipment over people. Never lift unit with material in the body. Loads may shift or fall if improperly supported, causing injury or damage to the unit.

8. Hoist the dump body onto the truck using the front lift hooks and rear corner bolster lift hooks shown in Figure 3. Center it from side-to-side and position the rear of the Hinge Block flush with the rear of the dump body's sills.
9. Solid weld the Hinge to the dump body (Figure 1) and both sides of the truck frame rails (Figure 2) using full fillet welds.

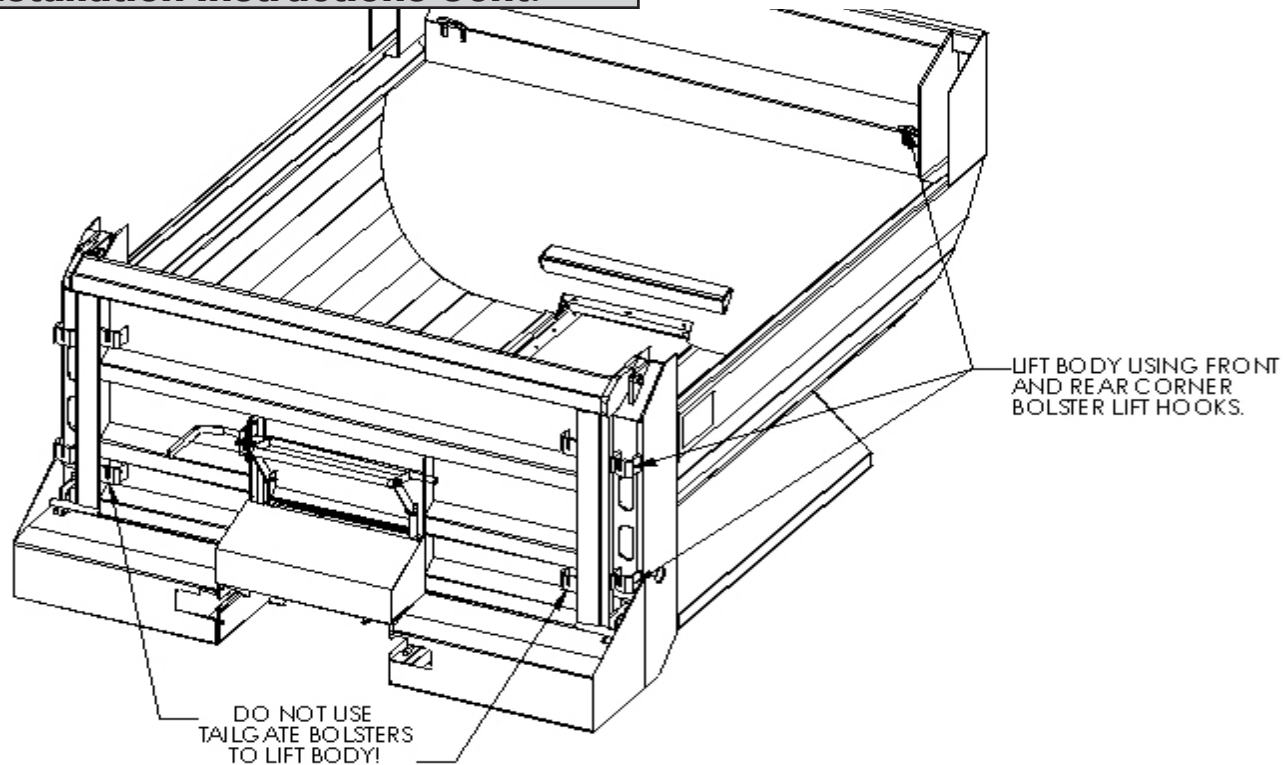
**NOTICE**

Do not exceed 300° F (148.9° C) at the Hinge Bushings. Heat can distort the Hinge Bushings. Contact Hi-Way Genuine Parts dealer for replacements if Bushings are damaged.

10. Position a Guide (6) against each truck frame rail, as far forward as practical, as shown in Figure 2 and mark hole locations.
11. Drill 9/16" (1.43 cm) holes.
12. Install Guides (6) using 1/2" Hardware (7, 8 & 9).

**⚠ CAUTION**

Do not remove lifting device until Cradle and Hoist Cylinder are installed.



**Figure 3 – Lifting XT3**

## NOTICE

Do not lift the body without the tailgate installed and locked. The rear corner bolsters need the tailgate for support.

## ! DANGER

Do not work beneath dump body without safety props in place. Serious injury or death could occur from crushing.

## Decals

Some safety decals are shipped loose and must be installed by the dealer before operation of the XT3.

## NOTICE

Install safety decals as required per "Decals" parts list and illustration in this manual. Install "Danger, Crushing Hazard" decals (11, Fig. 4, PN 96704) on front of both truck frame rails, in clear view as shown in Figure 4. Install "Caution, Operation Safety" (PN 96716) and "Caution, Raised Body" (PN 96715) decals in clear view in truck cab.

Install "Hi-Way XT3" decals on both sides at the top rear of the body. See "Decals" in parts list of this manual.



## Body Props

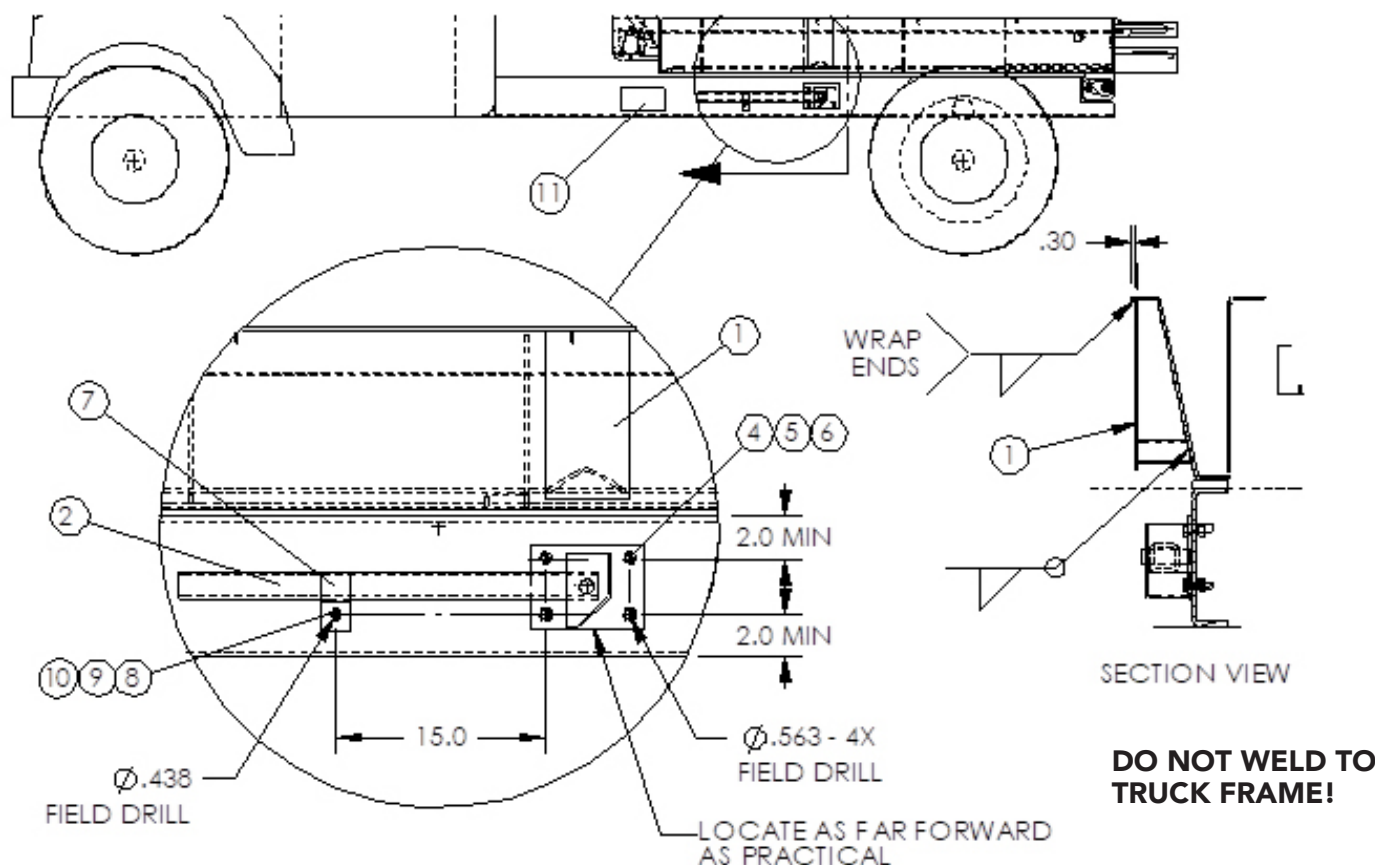


Figure 4 – Body Prop Installation

### Parts needed:

ITEM	DESCRIPTION	QTY	
1	Upper Prop	2	Place Lower Props (2 & 3) on truck frame rails as shown in Figure 4, as far forward as practical, and mark the centers of the holes. Make sure all the holes are at least two inches from the top and bottom of the rail. Drill 9/16" (1.43 cm) holes. Attach Lower Prop using 1/2" hardware (4, 5 & 6).
2	LH Lower Prop	1	
3	RH Lower Prop	1	
4	Cap Screw – 1/2 x 1-3/4 GR 8	8	
5	Lock Washer – 1/2	8	Measure about fifteen inches forward from the bottom front hole, find a clear space, and drill a 7/16" (1 cm) hole. Attach Rest Plate (7) using 3/8" hardware (8, 9 & 10).
6	Hex Nut – 1/2 GR 8	8	
7	Rest Plate	2	
8	Cap Screw – 3/8 x 1-1/2	2	
9	Lock Washer – 3/8	2	
10	Hex Nut – 3/8	2	
11	Danger Crushing Hazard Decal		

Align Upper Prop (1) over Lower Prop (2 & 3), so Upper Prop cup fits directly over Lower Prop rod when it's raised and resting against its rear edge. Tack weld to dump body and test fit to make sure Props work without assistance. Adjust if necessary and weld to dump body as shown in Figure 4.



## Cradle & Hoist Cylinder

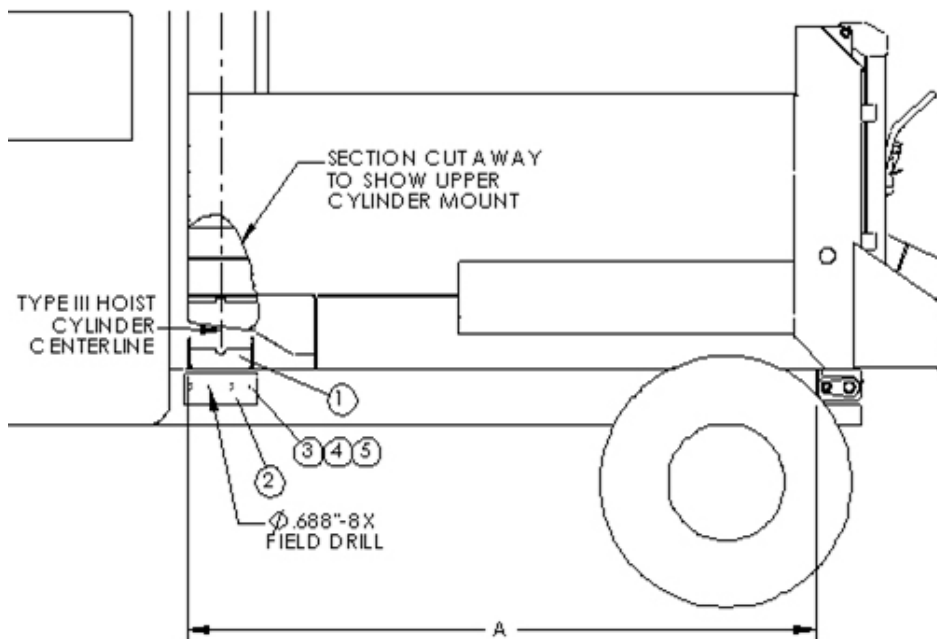


Figure 5 – Cradle Installation

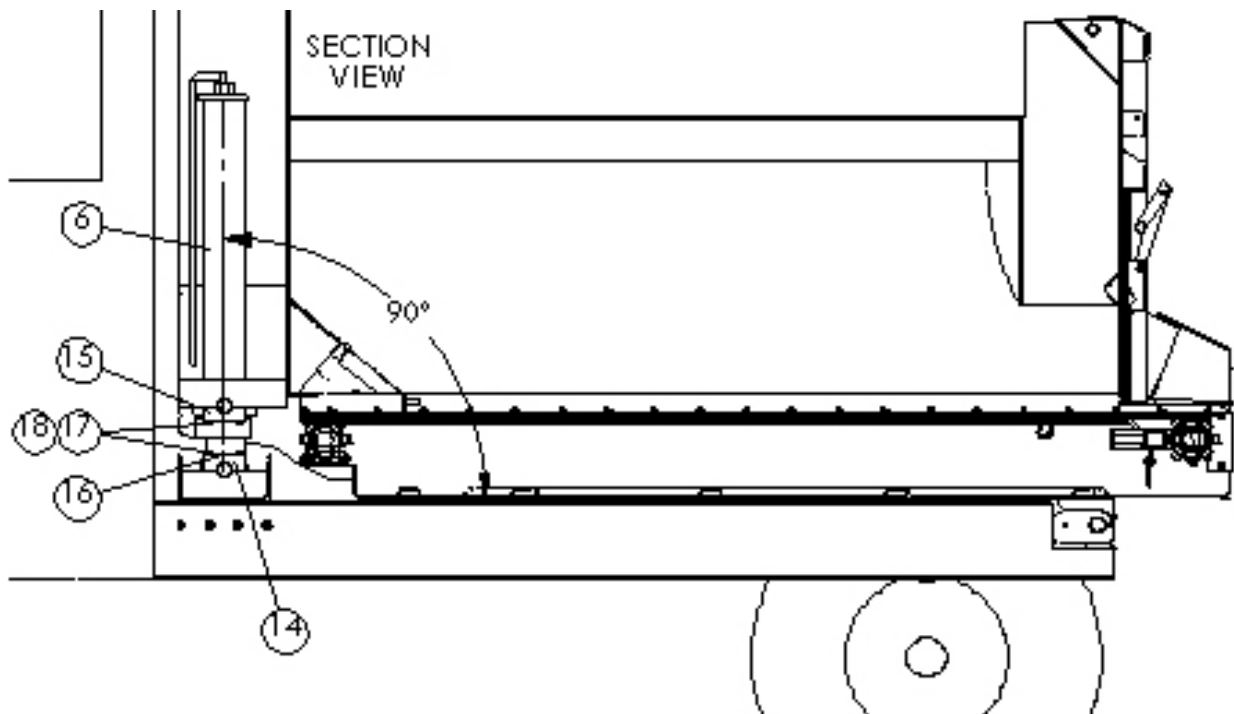


Figure 6 – Hoist Cylinder Installation

ITEM	DESCRIPTION	QTY	BODY SIZE	A (CRADLE FRONT TO HINGE FRONT)
1	Cradle	1		
2	Angle	2		
3	Cap Screw – 5/8 x 2 GR 8	8	10	112.43" (2.85 m)
4	Lock Washer – 5/8	8	11	124.43" (3.16 m)
5	Hex Nut – 5/8 GR 8	8	12	136.43" (3.45 m)
6	Hoist Cylinder	1	13	148.43" (3.77 m)
7	NOT USED	-	14	161.93" (4.11 m)
8	NOT USED	-	15	173.93" (4.42 m)
9	NOT USED	-		
10	NOT USED	-		
11	NOT USED	-	See Figure 5 for Items 1–5.	
12	NOT USED	-	See Figure 6 for Items 6–18.	
13	NOT USED	-		
14	Lower Cap Block	2		
15	Upper Cap Block	2		
16	Grease Zerk	4		
17	Cap Screw – 1/2 x 3-3/4	8		
18	Lock Washer – 1/2	8		

1. Position Cradle (1) on truck frame rails as shown in Figure 5, and distance from Hinge according to chart above.

NOTE: Notch at center of cradle is positioned to rear on Type I & II 12'/13' – 14'/15' units as shown in Figure 6. (Type I & II 9'/10' – 11'/12' and Type III units don't have notch.)

2. Center Angles (2) under Cradle and mark center of eight holes on truck rails.
3. Drill 11/16" (1.75 cm) where marked.
4. Attach Angles to truck with 5/8" hardware (3, 4 & 5).

## NOTICE

Make sure Cradle is square with truck cab and rails, and Hoist Cylinder (6) will be centered from side-to-side on truck chassis and vertical when dump body is down.

5. Tack weld Cradle to Angles as shown in Figure 6.



Do not install hoist cylinder at an angle. If the dump body is raised with the cylinder improperly installed, the truck could tip causing serious injury or death.



Do not leave raised body unattended. Do not raise body on unlevel ground. Check for overhead power lines and other obstructions before raising body.



Make sure the dump body is securely anchored and will not shift or slide off truck. Periodically check welds and mounting hardware to make sure it is secure.

1. Make sure there is adequate cab shield clearance for the cylinder. See Cab Shield Installation in "Installation Instructions" section for cutout instructions if necessary.
2. If cylinder is a type III with trunnion pins: Restrain cylinder's lower and upper trunnion pins together before lifting so cylinder will not extend. Crimped steel banding may be used.
3. Raise body and place on body props.
4. Lift Hoist Cylinder (6) with a suitable lifting device, and place in Cradle (1) with hydraulic ports facing truck cab as shown in Figure 6.
  - a. If cylinder is type I or II:  
Align Hoist Cylinder and Cradle holes and insert Pin Weldment (7). Secure Pin Weldment with 1/2" hardware (8, 9 & 10) on one side and 3/8" hardware (11 & 12) on the other.
  - b. If cylinder is type III:  
Remove trunnion restraints. Place cylinder's lower trunnion pin in cradle's cylinder block. Place Lower Cap Blocks (14) over trunnion pins and secure with 1/2" hardware (17 & 18). Torque as required. Install Grease Zerk (16).
5. Attach hydraulic hoses to Hoist Cylinder ports.
6. Carefully extend cylinder with hydraulic power.
  - a. If cylinder is type I or II:  
Align top Hoist Cylinder hole with mounting hole on dump body and insert Upper Pin (13). Secure with 3/8" hardware (11 & 12).
  - a. If cylinder is type III:  
Align top trunnion pin in unit's cylinder block. Place Upper Cap Blocks (15) over trunnion pins and secure with remaining hardware. Torque as required. Install Grease Zerk (16).
12. Lower body.
13. Make sure cylinder is completely vertical in all directions when dump body is down. Adjust if necessary. Solid weld Cradle to Angles on truck frame rails using full fillet welds as shown in Figure 6.



## Cross Conveyor (Optional)

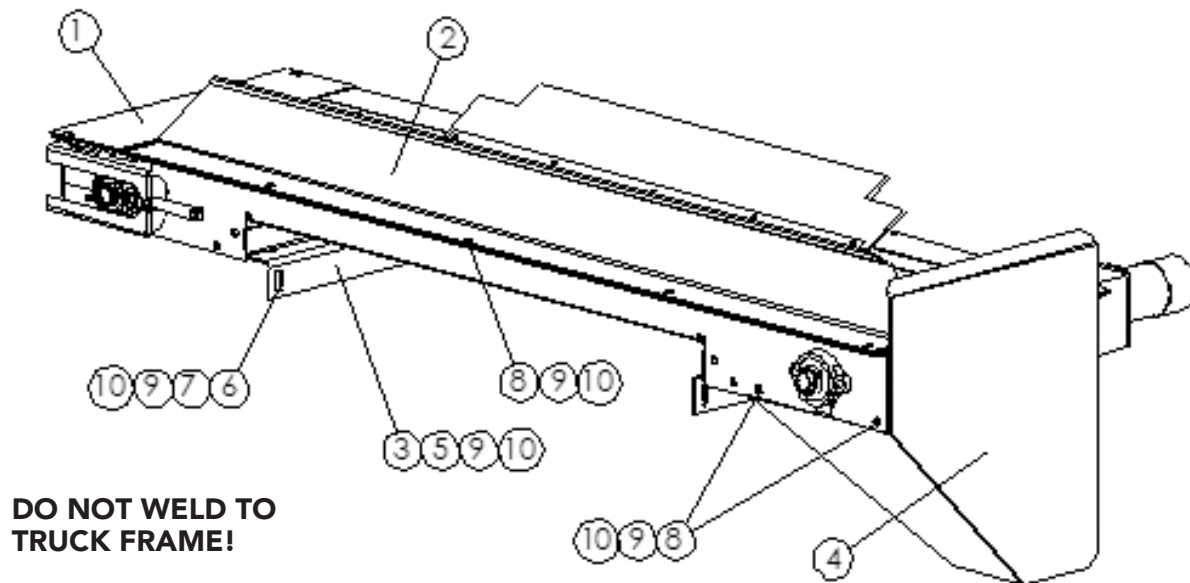


Figure 7 – Cross Conveyor Assembly

Parts needed:

ITEM	DESCRIPTION	QTY
1	Cross Conveyor	1
2	Front Shield	1
3	Mounting Angles	2
4	Chute	1
5	Carriage Bolt – 3/8 x 1	4
6	Carriage Bolt – 3/8 x 1-1/4	4
7	Flat Washer – 3/8	4
8	Cap Screw – 3/8 x 1	8
9	Lock Washer – 3/8	16
10	Hex Nut – 3/8	16

The Cross Conveyor (1) is shipped with the Front Shield (2) and Mounting Angles (3) installed backwards and the Chute (4) shipped loose. Remove the Front Shield and reinstall as shown in Figure 7 with same hardware (8, 9 & 10). Remove the Mounting Angles and reinstall as shown in Figure 7 with same hardware (5, 9 & 10), but do not tighten.

Place Cross Conveyor on the truck frame rails, with the drive motor on the left-hand side of the truck. The Cross Conveyor's front sill flange should be 2.5" (6.35 cm) from the rear of the cradle as shown in Figure 8. Mark the center of the Angles' slots on each truck frame rail. Remove the Cross Conveyor and drill 7/16" (1 cm) holes. **DO NOT DRILL LESS THAN 2.00" (5.08 cm) FROM THE TOP OR BOTTOM FLANGE.** Attach Cross Conveyor to truck frame with 3/8 x 1-1/4 hardware (6, 7, 9 & 10). Tighten all mounting hardware.

Mount the Chute (4) on the Cross Conveyor (1) using 3/8 x 1 Cap Screws, Lock Washers and Nuts (8, 9 & 10) as shown in Figure 7.

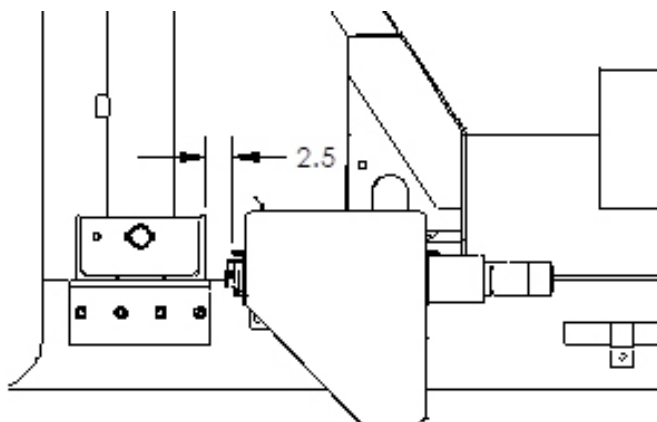


Figure 8 – Cross Conveyor Installation

**OPERATIONS  
&  
MAINTENANCE**

**General Description**

The XT3 is a multi-purpose dump body designed to haul, dump and spread. The flat dump body floor allows hauling of pallets and barrels. The front telescopic hoist provides a low center of gravity.

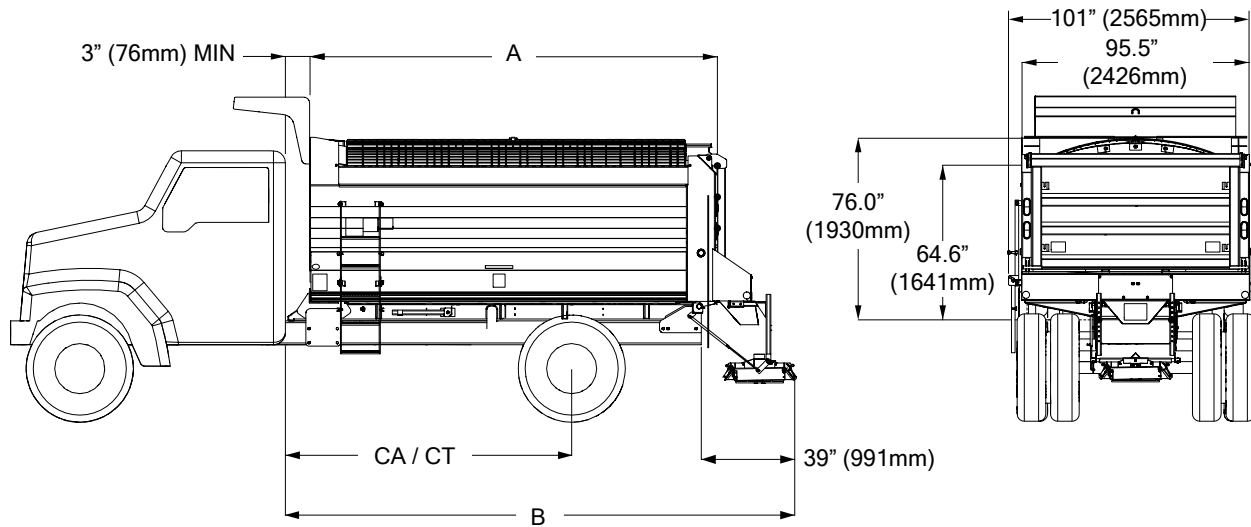
The unit is powered hydraulically by either a crankshaft-driven or PTO-driven pump. Dual seven-inch (18cm) augers run the full length of the bottom to dispense material at the rear of the body. Each auger is driven by a hydraulic motor through a planetary gearcase.

Heavy-duty 409 or 304 stainless steel inner and outer sills are fully welded to the XT3 floor to resist corrosion and improve strength. One-piece construction of the floor and sides with a radius design reduces material build-up.

The XT3 may be equipped with an optional subframe and mounted liquid tanks for prewet system. The subframe is complete with hoist and hinges.

The optional quick-detach rear spinner moves up/down, right/left and fore/aft for precise spread pattern control.

This product is intended for commercial use only.



Unit Length	Required Frame Length inches (mm)	CA/CT* inches (mm)	Inside Length A inches (mm)	Overall Length B inches (mm)	Maximum Dump Angle
10'	123.5 (3137)	84 (2134)	121" (3073)	165" (4191)	48°
11'	135.5 (3442)	96 (2438)	133" (3378)	177" (4496)	54°
12'	147.5 (3747)	108 (2743)	145" (3683)	189" (4801)	54°
13'	159.5 (4051)	108 (2743)	157" (3988)	201" (5105)	53°
14'	173.0 (4394)	120 (3048)	171" (4343)	214" (5436)	53°
15'	185.0 (4699)	132 (3353)	183" (4648)	226" (5740)	52°

**\*NOTICE!**

The Cab to Axle/Tandem dimensions are only guidelines. Consult federal, state and local weight laws and chassis manufacturer's ratings to ensure neither government weight restrictions, nor GVWR and GAWRs are exceeded.

Unit Length	Approximate Wt. Lbs (kg) Direct Chassis Mount	Struck Capacity cu ft (cu m)
10'	4300 (1950)	206 (5.8)
12'	4700 (2130)	249 (7.0)
14'	5100 (2310)	295 (8.3)

Unit Length	Liquid Capacity Gal (Liters) w/ Optional Subframe	Approximate Wt. Lbs (kg) w/ Optional Subframe	Struck Capacity cu ft (cu m)
10'	200 (757)	6400 (2900)	206 (5.8)
12'	200 (757)	7300 (3310)	249 (7.0)
14'	300 (1136)	8200 (3720)	295 (8.3)

Part (Loose)	Approximate Wt. Lbs (kg)
Tailgate	425 – 500 (193 - 227)
Hoist Cylinder	275 – 550 (125 - 250)
Rear Spinner	125 (57)
Cab Shield	150 – 275 (68-125)
Sideboards	75 – 125 (34-57)
Reservoir	275 (125)



Before taking the unit out to use, make a walk-around inspection to assure that the dump body is not damaged, that all essential parts are in place, and that all fasteners are tight and all guards are in place. Check all controls to be sure they are operating satisfactorily.

Before testing the unit, make sure the controls should be off. Do not load dump body.

1. Make sure that no loose parts or other material are in the body or on the spinner.
2. Raise feedgate until it is completely clear of conveyor.
3. Fill the hydraulic reservoir with oil. Refer to the Lubricant and Hydraulic Oil Specifications section for proper oil.
4. Start engine and engage PTO. Let engine run for a few minutes, allowing oil to circulate through the pump and back to the reservoir. In cold weather, allow more warm-up time.
5. Make sure pins are installed and jam nuts are tightened. Open spinner control and run unit until the spinner is running smoothly and air has been purged from the circuit. Close spinner control.



**WARNING** Stand clear of moving machinery. Entanglement of clothes, any part of your body or anything in your hands can cause serious injury or even death.

6. Open conveyor control and let unit run until conveyor is running smoothly. Close conveyor control. Do the same for the cross conveyor.
7. Open tailgate latch air control and make sure tailgate latch releases.
8. Make sure spinner hopper will not contact any truck frame component before lifting dump body. Open hoist control and slowly lift and lower dump body to check lift angle and range of motion. Make sure tailgate opens and closes correctly.
9. Check all connections in the hydraulic system to make sure there are no leaks.
10. Check hydraulic reservoir and refill.



**WARNING** DO NOT check leaks with hands while system is operating as high pressure oil leaks can be dangerous! If skin is pierced with hydraulic fluid at high pressure seek immediate medical attention as fluid injected into the skin could cause gangrene if left untreated. Relieve pressure before disconnecting hydraulic lines or working system. Make sure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system. Wear protective gloves and safety glasses or goggles when working with hydraulic systems.



**WARNING** DO NOT check for leaks adjacent to moving parts while system is operating as there may be danger of entanglement!



**CAUTION** Open tailgate before hoisting dump body with material in it. TRUCK COULD TIP, causing serious injury or death, if body is raised with material in it and the tailgate closed



**CAUTION** Always disengage tailgate air with body completely down and make sure latches are closed before filling dump body.



**WARNING** Tailgate latch springs must be in place during operation. Springs keep the latch closed if air pressure drops. If springs are not in place, tailgate could open inadvertently and drop load.

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## Adjustments



Tag, lock or disconnect latch from air supply to prevent operation. Keep hands clear during adjustment, especially area between yoke joint and cap screw (Figure 1, Item 5).

### Tailgate Latch

ITEM	DESCRIPTION
------	-------------

- |   |                 |
|---|-----------------|
| 1 | Spring          |
| 2 | Clevis Pin      |
| 3 | Hairpin         |
| 4 | Yoke            |
| 5 | Cap Screw       |
| 6 | Nut             |
| 7 | Eyebolt Nut     |
| 8 | 2nd Eyebolt Nut |
| 9 | Pivot Arm       |

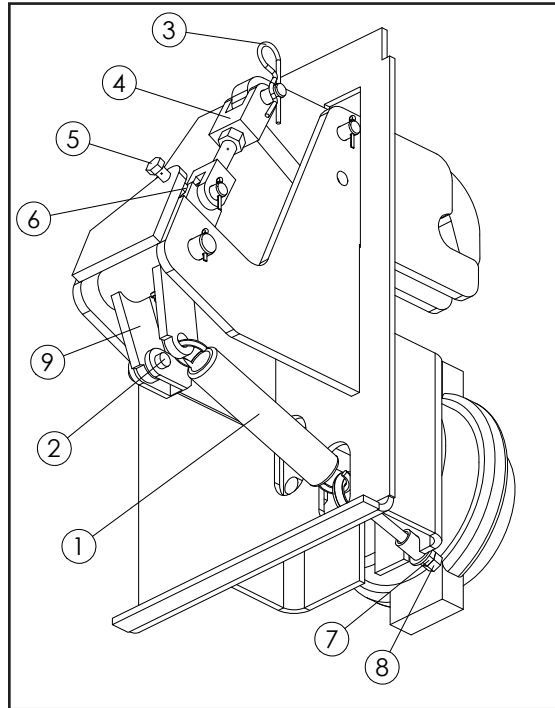


Figure 1 - Latch Adjustment

Test tailgate latch mechanism by opening latch with about 85 PSI. Release air pressure and latch should close and toggle over-center with spring tension. Adjust according to the following (using Figure 1):

1. Close tailgate, lower body and disconnect air brakes from air supply before making any adjustments.
2. Detach spring (1) and remove clevis pin (2) from air brake yoke.
3. Push yoke joint off of over-center to open latch.
4. Remove hairpin (3) and disconnect yoke (4).
5. Turn upper yoke half a turn to adjust latch force.
6. Connect yoke (4) and secure with hairpin (3).
7. Push mechanism over-center. Latch should be tight enough to close tailgate with a good seal, but not so tight that it can't be manually pushed over-center. Adjust as necessary.
8. Make sure mechanism is over-center and tighten cap screw (5) until latch opens.
9. Loosen screw (5) one-and-a-half turns and secure with nut (6).
10. Attach spring (1) and tighten eyebolt nut (7) until finger tight. Tighten two more turns and secure with additional nut (8).
11. Adjust air brake yoke and attach to pivot arm (9).
12. Connect latch to air supply. Test latch with air pressure to make sure it operates properly.

## Tailgate

### **NOTICE**

Laying the tailgate flat is not recommended. New Leader Manufacturing is not responsible for damage caused by such use.

Tailgate latches must be locked closed with clevis pins (not supplied) to prevent tailgate from dropping. Attach chains from tailgate lift hooks to dump body lift hooks. With tailgate supported by a suitable lifting device, remove lynch pins and hinge pins at top of tailgate to lay tailgate flat. Use suitable lifting device to carefully lower tailgate. Do not let tailgate hang below horizontal.

## Rear Spinner

Change spread pattern by adjusting spinner location. Loosen Hanger/Spinner hardware to move spinner right/left as necessary. Remove Frame hardware to move spinner up/down as necessary. Loosen Frame/Tube Mount hardware and slide spinner forward/rearward as necessary. Make only one adjustment between spread pattern tests.

## Dumping

Make sure unit has been properly serviced and is in good operating condition.

**⚠ CAUTION** Disengage tailgate air with dump body completely down and make sure latches are closed before filling body with material.

**⚠ DANGER** Open tailgate before hoisting dump body with material in it. TRUCK COULD TIP if body is raised with the tailgate closed, causing serious injury or death if dump body is hoisted with a closed tailgate.

**⚠ DANGER** Check for overhead power lines and other obstructions before raising body. Lower dump body before leaving job site.

**⚠ CAUTION** Make sure tailgate latch is open before lowering dump body. Close latch when tailgate is closed. If tailgate does not latch shut, tailgate will swing loose and material may be lost or injury could occur.

**NOTICE** Do not operate conveyor when raising dump body. Do not operate conveyor with conveyor cover installed.

1. Open tailgate latch.
2. Engage pump drive PTO.
3. Raise dump body as necessary.

## Tailgate Air Kit

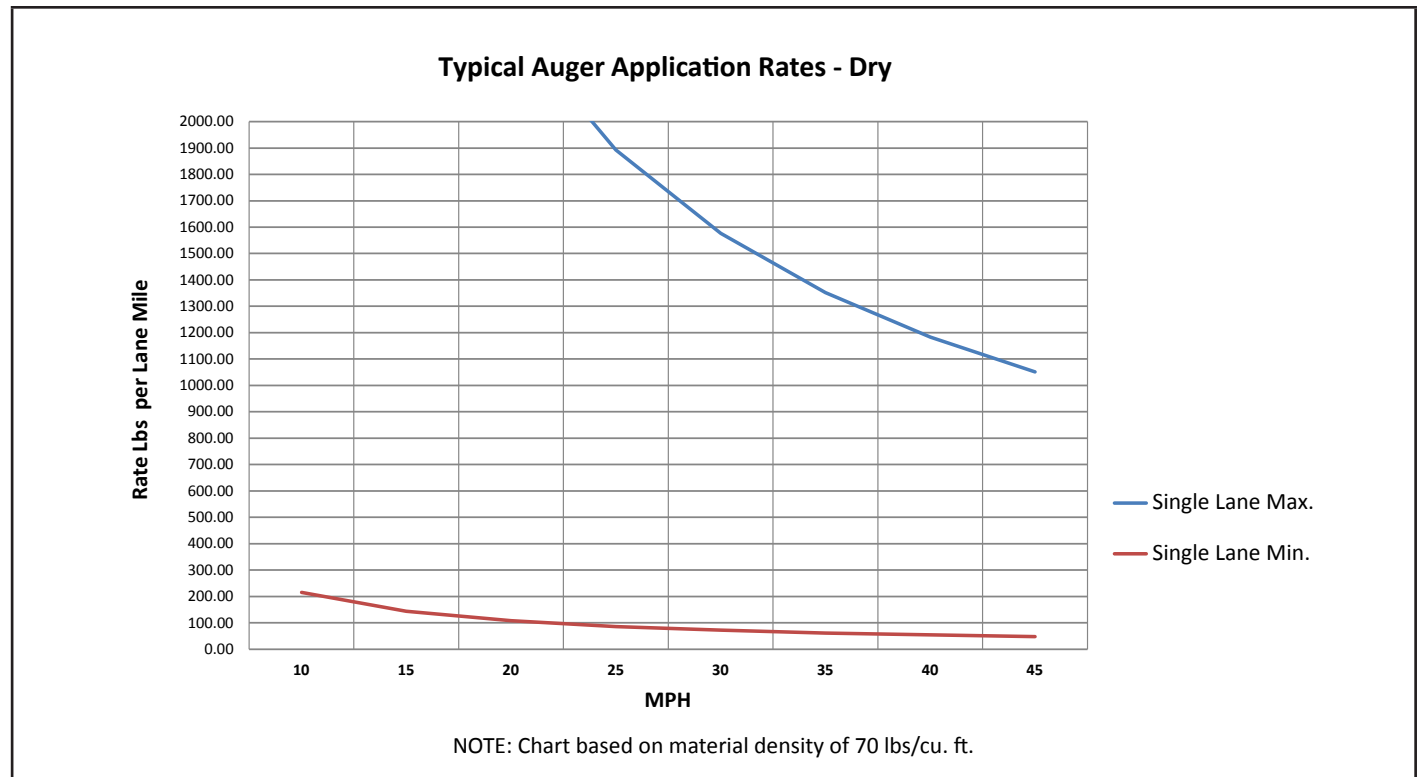
Pull knob up to open tailgate; press knob down to close tailgate. Place knob in center position for no pressure (neutral position).

## Spreading

**⚠ CAUTION** Drive only at speeds which permit safe control of vehicle.

1. Adjust augers to setting required for material used.
2. Adjust spinner to setting required for material used to give spread width and pattern desired.
3. Make sure hydraulic reservoir shut-off valve is fully opened.
4. Set auger speed to desired rate.
5. Engage pump drive PTO.
6. Drive at speeds that will allow engine to turn at proper RPM.

## Application Rates



**Typical Auger Prewet Liquid Rates**

Rate Lbs per Lane Mile	GPM Liquid Req'd per Applied Material Rate							
	10	15	20	25	30	35	40	45
2000	2.00	3.00	4.00					
1900	1.90	2.85	3.80					
1800	1.80	2.70	3.60	4.50				
1700	1.70	2.55	3.40	4.25				
1600	1.60	2.40	3.20	4.00				
1500	1.50	2.25	3.00	3.75	4.50			
1400	1.40	2.10	2.80	3.50	4.20			
1300	1.30	1.95	2.60	3.25	3.90	4.55		
1200	1.20	1.80	2.40	3.00	3.60	4.20		
1100	1.10	1.65	2.20	2.75	3.30	3.85	4.40	
1000	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
900	0.90	1.35	1.80	2.25	2.70	3.15	3.60	4.05
800	0.80	1.20	1.60	2.00	2.40	2.80	3.20	3.60
700	0.70	1.05	1.40	1.75	2.10	2.45	2.80	3.15
600	0.60	0.90	1.20	1.50	1.80	2.10	2.40	2.70
500	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25
400	0.40	0.60	0.80	1.00	1.20	1.40	1.60	1.80
300	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35
200	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90
100	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45
0								

NOTE: Chart depicts 12 gallon per ton of applied material (typical range is 8 - 12 gal/ton).

## Preventative Maintenance Pays!

The handling and spreading of salt and sand is a highly severe operation with respect to metal corrosion. Establish a frequent, periodic preventative maintenance program to prevent rapid deterioration to equipment. Proper cleaning, lubrication and maintenance will yield longer life, more satisfactory service and more economical use of your equipment.

### **⚠ WARNING**

Shut off all power and allow all moving parts to come to rest before performing any maintenance operation.

## Hydraulic System

Proper oil in the hydraulic system is one of the most important factors for satisfactory operation. Utmost cleanliness in handling the oil cannot be stressed enough. Keep hydraulic oil in original closed containers, clean top of container before opening and pouring, and handle in extremely clean measures and funnels.

Check hydraulic oil level and filter condition regularly.

Refer to "Lubricant and Hydraulic Oil Specifications" for selection of the proper hydraulic fluid for use in the hydraulic system.

### **⚠ WARNING**

DO NOT check leaks with hands while system is operating as high pressure oil leaks can be dangerous! If skin is pierced with hydraulic fluid at high pressure seek immediate medical attention as fluid injected into the skin could cause gangrene if left untreated. Relieve pressure before disconnecting hydraulic lines or working system. Make sure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system. Wear protective gloves and safety glasses or goggles when working with hydraulic systems.

### **⚠ WARNING**

DO NOT check for leaks adjacent to moving parts while system is operating as there may be danger of entanglement!

Periodically inspect hydraulic hoses and fittings for leaks. Repair and replace components as necessary.

Check hydraulic oil daily by means of sight gauge on reservoir. Add oil as necessary to maintain level around mid-point of sight gauge. Periodically inspect hoses and fittings for leaks.

### **NOTICE**

Change hydraulic oil filter after first week (or not more than 50 hours) of operation on a unit.

After first filter change, replace filter when indicator reaches Red Zone.

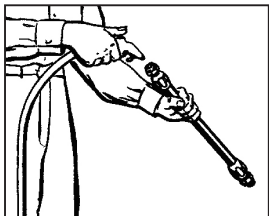
Drain reservoir through drain plug (not through suction outlet), flush, and refill and change filter element annually. Oil and filter should also be changed whenever oil shows any signs of breaking down under continued high-pressure operation. Discoloration of oil is one sign of breakdown.

## Hydraulic Hose

Hose assemblies in operation should be inspected frequently for leakage, kinking, abrasion, corrosion or other signs of wear or damage. Worn or damaged hose assemblies should be replaced immediately.

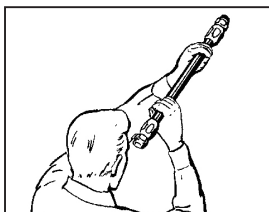
### **⚠ WARNING**

Testing should be conducted in approved test stands with adequate guards to protect the operator.



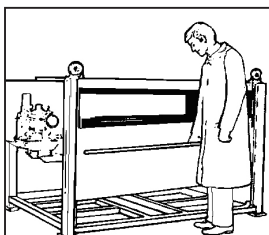
### **Clean**

Clean assembly by blowing out with clean compressed air. Assemblies may be rinsed out with mineral spirits if the tube stock is compatible with oil, otherwise hot water at 150°F (65.55° C) maximum may be used.



### **Inspect**

Examine hose assembly internally for cut or bulged tube, obstructions, and cleanliness. For segment style fittings, be sure that the hose butts up against the nipple shoulder; band and retaining ring are properly set and tight, and segments are properly spaced. Check for proper gap between nut and socket oWr hex and socket. Nuts should swivel freely. Check the layline of the hose to be sure the assembly is not twisted. Cap the ends of the hose with plastic covers to keep clean.



### **Test**

The hose assembly should be hydrostatically tested at twice the recommended working pressure of the hose.

Test pressure should be held for not more than one minute and not less than 30 seconds. When test pressure is reached, visually inspect hose assembly for: 1. Any leaks or signs of weakness. 2. Any movement of the hose fitting in relation to the hose. Any of these defects are cause for rejection.

## Storage and Handling

Hose should be stored in a dark, dry atmosphere away from electrical equipment, and the temperature should not exceed 90° F (32° C).

## Tailgate & Tailgate Latch

Pump multi-purpose grease into zerks. Oil all pivots and yoke threads monthly with heavy oil.



## **Bearings**

Grease in a bearing acts to prevent excessive wear of parts, protects ball races and balls from corrosion and aids in preventing excessive heat within the bearing. It is very important the grease maintains its proper consistency during operation. It must not be fluid and it must not channel.

Make sure that all fittings are thoroughly cleaned before grease is injected. Points to be lubricated by means of a grease gun have standard grease fittings.

Bearings should be lubricated by pumping grease in slowly until a slight bead forms around the seals. This bead indicates adequate lubrication and also provides additional protection against the entrance of dirt.

## **Greaseless Hinge Bushings**

Do not grease hinge self-lubricating bushings. Check bushings monthly to make sure they are secure and not worn.

## **Greaseable Hinge Bushings**

Make sure all fittings are thoroughly cleaned before lubricating. Slowly pump grease into each fitting until a slight bead forms around the seal. This bead indicates adequate lubrication and also provides additional protection against the entrance of dirt. Points to be lubricated by grease gun have standard grease fittings.

## **Hoist Cylinder**

Cylinder should be lubricated by pumping grease into the zerk slowly until slight bead forms around the seals. This bead indicates adequate lubrication and also provides additional protection against the entrance of dirt.

Be sure that all fittings are thoroughly cleaned before grease is injected. Points to be lubricated by means of a grease gun have standard grease fittings. Make sure hoist cylinder bolts are tightened to recommended torque.

## **Fasteners**

Tighten all screw fasteners to recommended torques after first week of operation and annually thereafter. If loose fasteners are found at anytime, tighten to recommended torques. Replace any lost or damaged fasteners or other parts immediately upon finding such damage or loss.

## **Clean-Up**

Maintain a minimum maintenance operation by washing this equipment thoroughly every two or three days during the operating season. Hose the unit down under pressure to free all sticky and frozen material.

It is important that the machine be thoroughly cleaned at the end of each operating season. All lubrication and maintenance instructions listed in this section should be closely followed. For longer body life, repaint worn spots to prevent the formation of rust.



## NOTICE

The lubricant distributor and/or supplier is to be held responsible for the results obtained from their products. Procure lubricants from distributors and/or suppliers with unquestionable integrity, supplying known and tested products. Do not jeopardize your equipment with inferior lubricants. No specific brands of oil are recommended. Use only products qualified under the following oil viscosity specifications and classifications and recommended by reputable oil companies.

## Hydraulic System

The following are the recommended procedures for selecting the proper hydraulic fluid for use in the hydraulic system. Select a major brand industrial PREMIUM QUALITY (anti-wear type) hydraulic oil to provide viscosity between 100-200 SSU at operating temperature. Premium hydraulic oils with viscosity indexes of 95 or above will provide the following temperature ranges :

Industry Identification/ SAE Viscosity Grade	Operating Temperature	Viscosity
150 SSU	122° F (50° C) / 84° F (28.9° C)	100 SSU / 200 SSU
225 SSU	140° F (60° C) / 107° F (41.7° C)	100 SSU / 200 SSU
300 SSU	150° F (66.6° C) / 116° F (46.1° C)	100 SSU / 200 SSU
450 SSU	165° F (73.9° C) / 130° F (54.5° C)	100 SSU / 200 SSU
600 SSU	182° F (83.3° C) / 145° F (62.8° C)	100 SSU / 200 SSU

If, because of necessity or convenience, it is desirable to use an automotive engine oil, multi-viscosity oils of SC rating (formerly MS quality) which will provide between 100-200 SSU at operating temperature can be used. These will provide proper viscosity over a wide range. For example:

SAE Viscosity Grade	Operating Temperature	Viscosity
10W-30	130° F (54.5° C)	100 SSU
	100° F (37.8° C)	200 SSU
10W-40	190° F (87.8° C)	100 SSU
	140° F (60° C)	200 SSU

## Gearcase Lubricant

Fill each gearcase with non-corrosive type extreme pressure (E.P.) gear oil conforming to MIL-L2105 B multi-purpose gear lubricating oil requirements (API Service GL 4) based on ambient temperatures listed below. Refill capacities as follows:

- Auger gearcase: 10 oz (0.3 L) each

## Grease Gun Lubricant

Use a waterproof ball and roller bearing lithium base lubricant with a minimum melting point of 300°F (150° C). This lubricant should have a viscosity which assures easy handling in the pressure gun at prevailing atmospheric temperatures. The grease should conform to NLGI No. 2 consistency.





## WARNING

Shut off all power and allow all moving parts to come to rest before performing any maintenance operation.

The spreader should be regularly lubricated with the lubricants recommended in this manual in accordance with the following chart:

LOCATION	PLACES	METHOD	FREQUENCY
Hydraulics			
Reservoir	1	Oil	Check Daily; Change Annually
Filter	1	Check Daily; Change Element when Indicated (Red)	
Tailgate			
Hinge Pins	2	Oil	Monthly
Latch Pivots	2	Grease Gun	Monthly
Latch Yoke Threads	2	Oil	Monthly
Hoist Cylinder			
Zerks	2	Grease Gun	Weekly
Hinge Point Fittings	2	Grease Gun	Daily
Hoist Mount Fittings	9	Grease Gun	Every 50 Hours of Operation
Augers			
Rear Bearings	2	Grease Gun	Weekly
Gearcases	2	Gear Oil	Check Monthly; Change Annually

NOTE: Unusual conditions, such as excessive dust, temperature extremes or excessive moisture may require more frequent lubrication of specific parts.

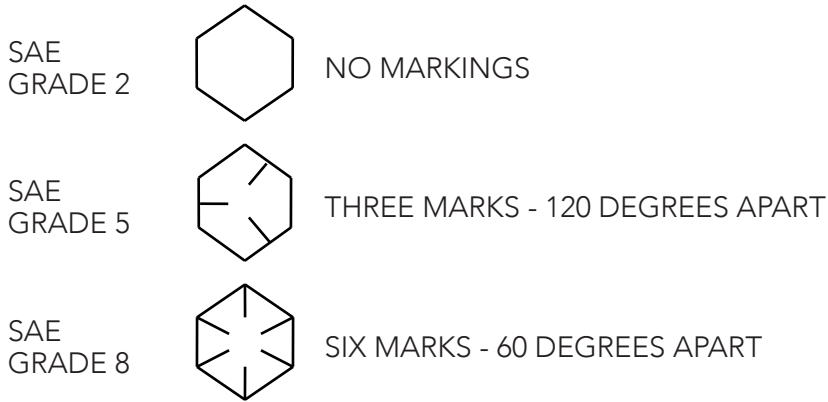
\* Refer to "Lubricant & Oil Specifications" for types of lubricants and oil to be used.

Symptom:	See Reasons:
Hoist will not raise body.	1, 2, 3
Augers won't run.	5, 6, 7, 15
Augers run in jerks.	14
Spinner won't run.	4, 11
Spinner speed is not constant.	3, 8, 9
Hydraulic oil overheats	1, 10, 11, 12, 13

REASON	CORRECTION
1. Hydraulic oil level low.	Add hydraulic oil to reservoir to maintain level around mid-point of sight gauge.
2. Hydraulic Pump is not rotating.	<ol style="list-style-type: none"> <li>1. PTO is disengaged. Shift into engagement.</li> <li>2. Drive line has failed. Repair or replace.</li> <li>3. Key in pump shaft has failed. Replace key.</li> <li>4. U-joint pin or key has failed. Replace pin or key.</li> </ol>
3. Worn pump.	Replace pump.
4. Jammed or frozen spinner motors.	Free up. If not possible, replace as required.
5. Jammed or frozen augers.	Check augers for obstruction. Clear as necessary.
6. Jammed or frozen auger hydraulic motor.	Replace motor.
7. Hydraulic motor shaft key sheared.	Replace key.
8. Pump speed is not adequate to provide sufficient flow to maintain spinner speed.	Increase engine speed.
9. Insufficient hydraulic oil flow at normal driving speeds.	Install higher percent PTO or use larger pump.
10. Excessive oil is being pumped.	<ol style="list-style-type: none"> <li>1. PTO percentage too high. Change PTO to smaller percentage or use smaller pump.</li> <li>2. Pump is too large. Do not exceed 25 GPM pumping rate. Change to smaller pump or use smaller percentage PTO.</li> <li>3. Pressure drop in control valve is sufficient to run lightly loaded conveyor motor. Shut off pump drive by disengaging PTO shaft.</li> </ol>
11. Worn motor (spinner or augers).	Motor heats up at an excessive rate (check for this heating when system is cold). Replace motor.
12. Improper or deteriorated hydraulic oil.	Replace hydraulic oil with proper specification oil and replace filter.
13. Pinched or obstructed hose, hydraulic line or fitting.	Clear obstruction or replace part. Straighten kinked hoses.
14. Driving too fast for application rate.	Shift truck transmission to a lower gear. Will not normally occur if within maximum application rates.
15. Auger coupling bolt sheared.	Replace bolt coupling motor to auger.



## CAP SCREW GRADE IDENTIFICATION - MARKINGS ON HEAD



USE GRADE 2 TORQUES FOR STAINLESS STEEL FASTENERS AND CARRIAGE BOLTS.

	TORQUE - FOOT-POUNDS					
CAP SCREW SIZE	GRADE 2		GRADE 5		GRADE 8	
	DRY	LUBE	DRY	LUBE	DRY	LUBE
1/4"	5	4	8	6	12	9
5/16"	11	8	17	13	25	18
3/8"	20	15	30	23	45	35
7/16"	30	24	50	35	70	55
1/2"	50	35	75	55	110	80
9/16"	65	50	110	80	150	110
5/8"	90	70	150	110	220	170
3/4"	100	120	260	200	380	280
7/8"	140	110	400	300	600	460
1"	220	160	580	440	900	650

**PARTS**

**Instructions for Ordering Parts**

Order from the **AUTHORIZED DEALER** in your area.

Always give the pertinent model and serial number.

Give part name, part number and the quantity required.

Give the correct address to where the parts are to be shipped, and the carrier if there is a preference.

Unless claims for shortages or errors are made immediately upon receipt of goods they will not be considered. Any part returns should be directed through the dealer from which they were purchased.

When broken goods are received, a full description of the damage should be made by the carrier agent on the freight bill. If this description is insisted upon, full damage can always be collected from the transportation company.

No responsibility is assumed for delay or damage to merchandise while in transit. Our responsibility ceases upon delivery of shipment to the transportation company from whom a receipt is received showing that shipment was in good condition when delivered to them, therefore, claims (if any) should be filed with the transportation company and not with New Leader Manufacturing.

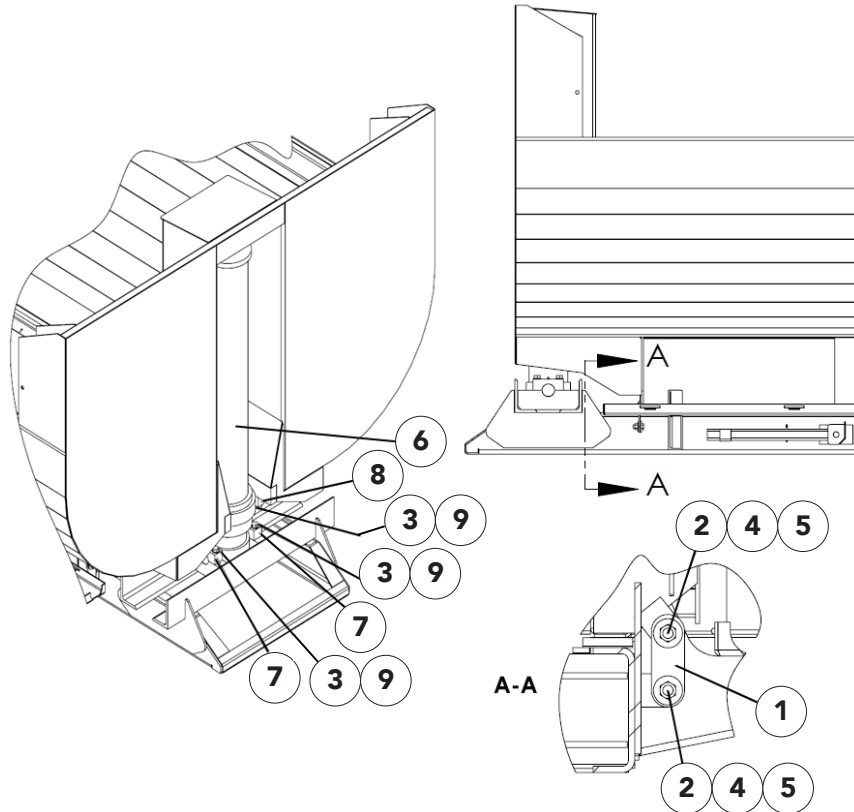
If your claims are not being handled (by the transportation company) to your satisfaction, please call the Parts Manager at New Leader Manufacturing (319-363-8281) for assistance.

In the parts list the following symbols and abbreviations stand for:

\* - Not Shown  
AR – As Required  
CS – Carbon Steel  
SS – Stainless Steel

The parts listed under the different steel types (CS, 409 SS and 304 SS) are for that type of unit and do not necessarily mean the part is made of that type of steel.

Subframe Assembly & Hoist



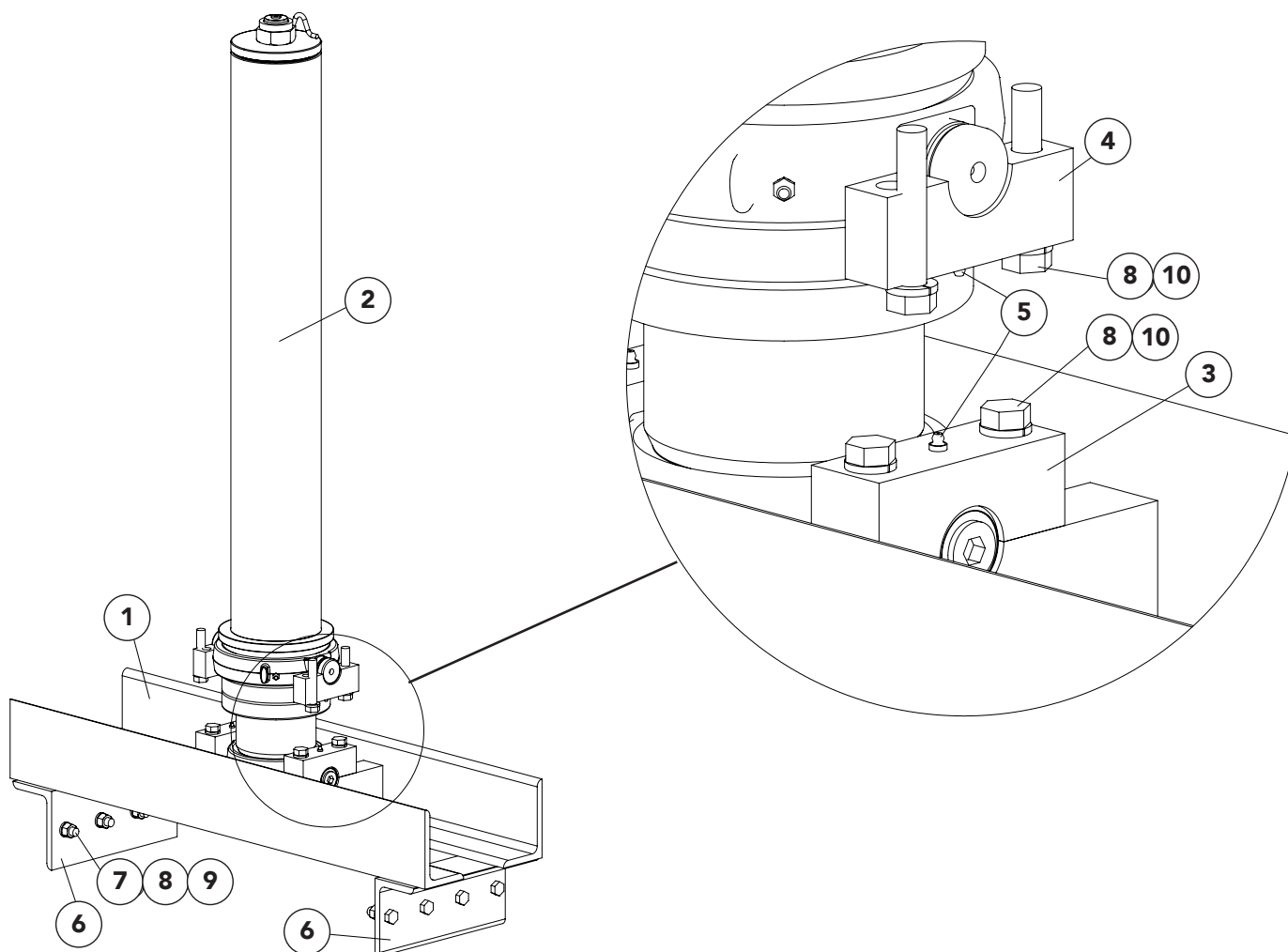
ITEM	PART NO.	DESCRIPTION	QTY
1	300462	Plate - Link Sub-Frame Lock	2
2	20175	Cap Screw - 5/8-11NC x 1-1/2	4
3	89529	Cap Screw - 5/8-10NC x 3.5 GR8	8
	300645	Cap Screw - 3/4-10NC x 3.5 GR8	8
4	20697	Washer - Flat 5/8	4
5	20648	Nut - Hex 5/8-11NC	4
6	300334-AA	Cylinder - Single (10')	1
	300334-AC	Cylinder - Single (12')	1
	300334-AE	Cylinder - Single (14')	1
7	300649-AC	Block - Cap Lower 6" Cyl (10',12')	2
	300649-AD	Block - Cap Lower 6" Cyl (14')	2
8	300649-AA	Block - Cap Upper 6" Cyl (10',12')	2
	300649-AB	Block - Cap Upper 6" Cyl (14')	2
9	20716	Washer - Lock 5/8 (10',12')	8
	20717	Washer - Lock 3/4 (14')	8
10	6069	Zerk - Grease .313 Drive-Type	4



## Mount Kit



ITEM	PART NO.	DESCRIPTION	QTY
1	88926	Guide - Body Down	2
2	89522	Capscrew - .5-13NC X 1.75 GR8	4
3	20714	Washer - Lock .5	4
4	89643	Nut - Hex .5-13NC GR8	4
5	20695	Washer - Flat .5	2

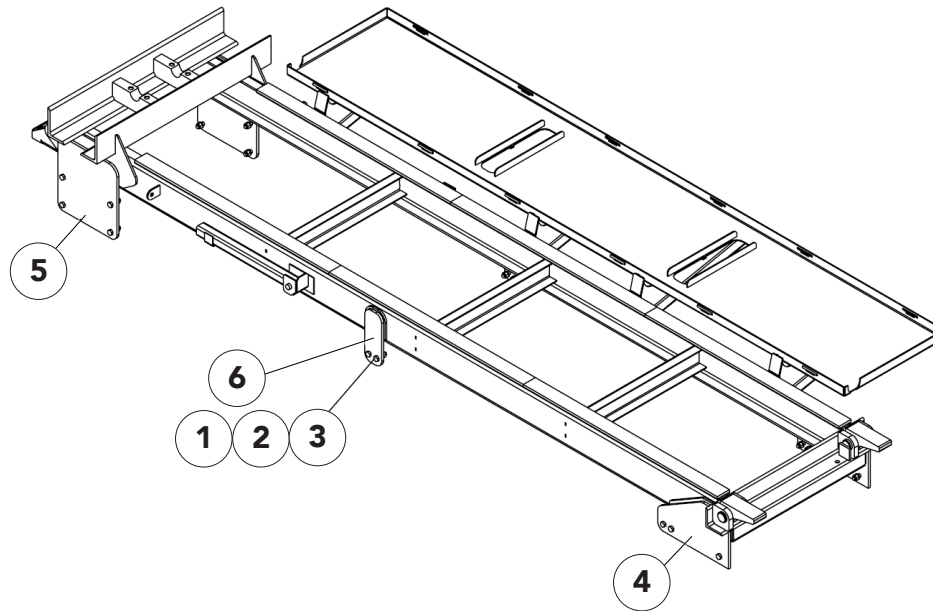


**Cradle Cont.**

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	300370-AA	Cradle - Weldment	1
	300370-AB	Cradle - Weldment	1
	300370-AC	Cradle - Weldment	1
2	300334-AA	Cylinder - 90-4-3 Single	1
	300334-AB	Cylinder - 110-5-3 Single	1
	300334-AC	Cylinder - 120-5-3 Single	1
	300334-AD	Cylinder - 130-6-3 Single	1
	300334-AE	Cylinder - 135-5.7-4 Single	1
	300334-AF	Cylinder - 150-5.7-4 Single	1
	300359-AA	Cylinder - 90-4.5-3 Double	1
	300359-AB	Cylinder - 110-5.5-3 Double	1
	300359-AC	Cylinder - 120-5.5-3 Double	1
	300359-AD	Cylinder - 130-6.5-4 Double	1
	300359-AE	Cylinder - 140-6.5-4 Double	1
	300359-AF	Cylinder - 150-6.5-4 Double	1
3	300649-AC	Block - Cap Lower T3 10-12	2
	300649-AD	Block - Cap Lower T3 13-15	2
4	300649-AA	Block - Cap Upper T3 10-12	2
	300649-AB	Block - Cap Upper T3 13-15	2
5	6069	Zerk - Grease	4
6	88828	Angle - 6 X 4 X .5 X 13	2
7	89526	Capscrew - .625-11NC X 2 GR8	8
8	20716	Washer - Lock .625	16
9	89591	Nut - Hex .625-11NC GR8	8
10	300644	Capscrew - .625-11NC X 2.5 SS	8

# Body Mounting

XT3 TYPE III A<sup>2</sup>

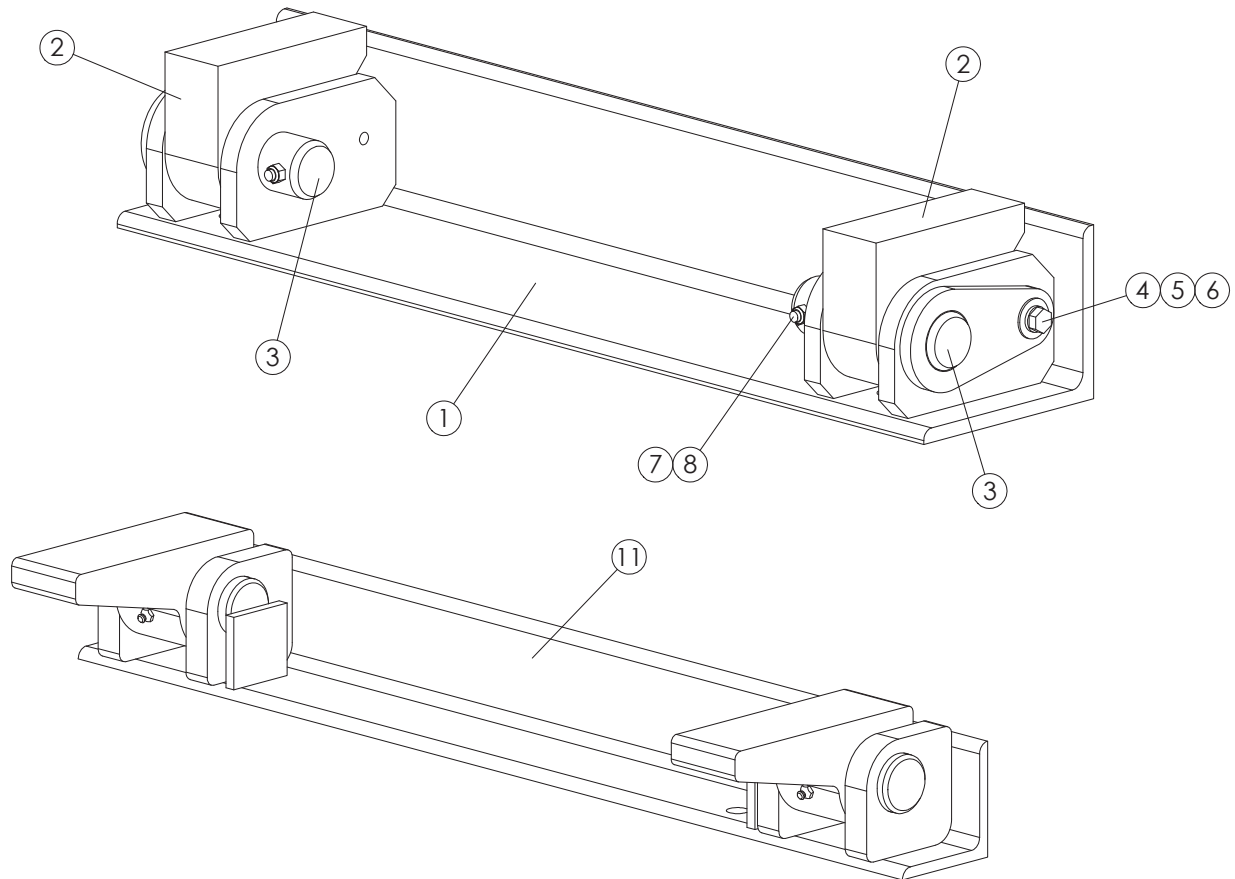


ITEM	PART NO.	DESCRIPTION	QTY
1	89526	Cap Screw - 5/8-11NC x 2 GR8	18
2	20716	Washer - Lock 5/8	18
3	89591	Nut - Hex 5/8-11NC GR8	18
4	310216	Plate - Shear Hinge	2
5	310217	Plate - Shear Cradle	2
6	310218	Plate - Shear	2



# Body Hinge

XT3 TYPE III A<sup>2</sup>

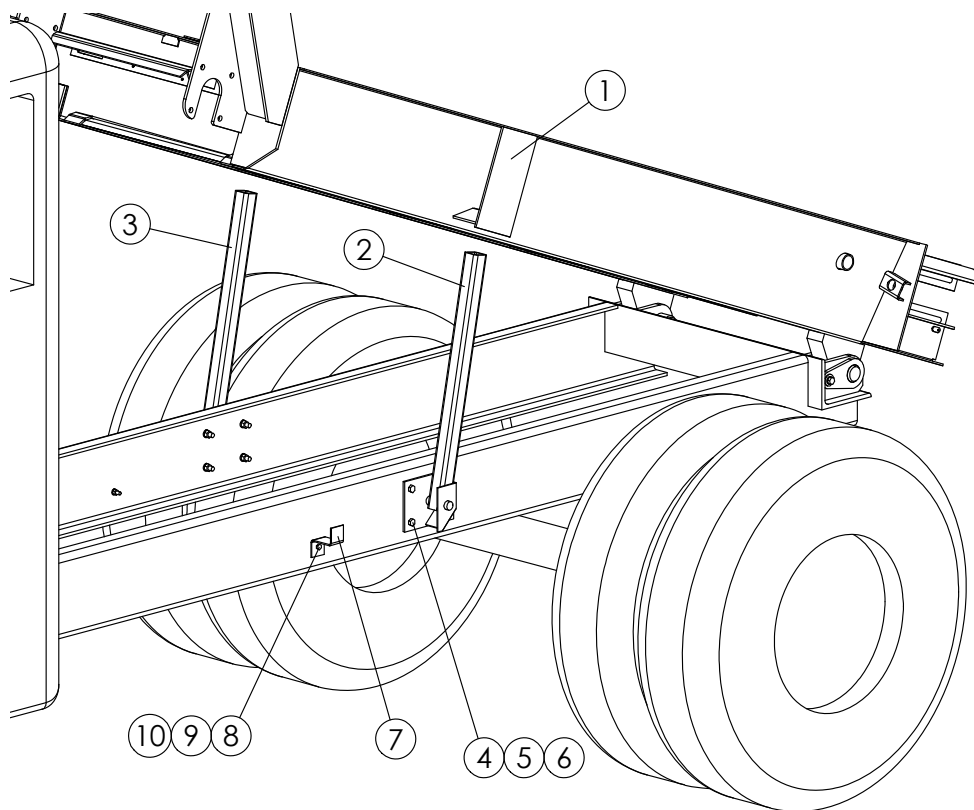


ITEM	PART NO.	DESCRIPTION	QTY
	88613	Hinge – Assy 2" Greaseless, Includes 1–9	
	300398	Hinge – Assy 2" Regreaseable 6 x 8, Includes 1, 2, 4 - 10	
1	88608	Hinge – Wldmt Angle	1
2	88609	Block – Hinge, Greaseless	2
	300399	Block – Hinge, Greaseable	2
3	88605	Bearing – Sleeve, Greaseless Hinge	2
4	88612	Pin – Wldmt Hinge	2
5	20695	Washer – Flat 1/2	2
6	20714	Washer - Lock 1/2	2
7	20129	Cap Screw – 1/2-13NC x 1-1/2	2
8	20073	Cap Screw – 3/8-16NC x 2-1/2	2
9	20678	Nut – Lock 3/8	2
10	* 6072	Zerk – Grease, Greaseable Hinge	2
11	302315	Hinge – Assy 2" Greaseable 4 x 4	1

\* - Not Shown



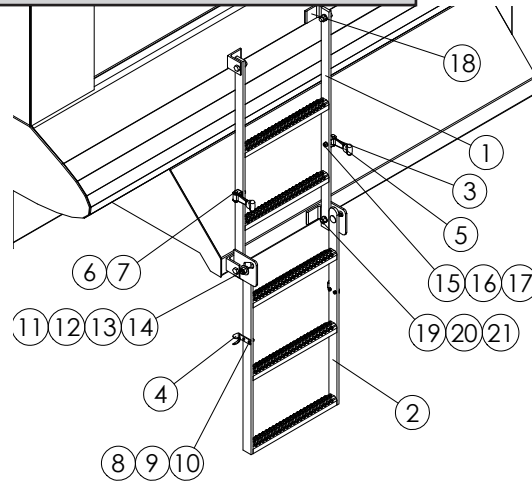
## Body Props



ITEM	PART NO.		DESCRIPTION	QTY
	CS	SS		
1	88917	97593	Prop – Wldmt Body Upper	2
2	88923-AA	88923-AA	Prop – Wldmt Body Lower LH	1
3	88923-AB	88923-AB	Prop – Wldmt Body Lower RH	1
4	89522	89522	Cap Screw – 1/2 x 1-3/4 GR 8	8
5	20714	20714	Washer – Lock 1/2	8
6	89643	89643	Nut – Hex 1/2	8
7	89970	89970	Plate – Rest Body Prop	2
8	20069	20069	Cap Screw – 3/8 x 1-1/2	2
9	20712	20712	Washer – Lock 3/8	2
10	20644	20644	Nut – Hex 3/8	2

# Body Ladder

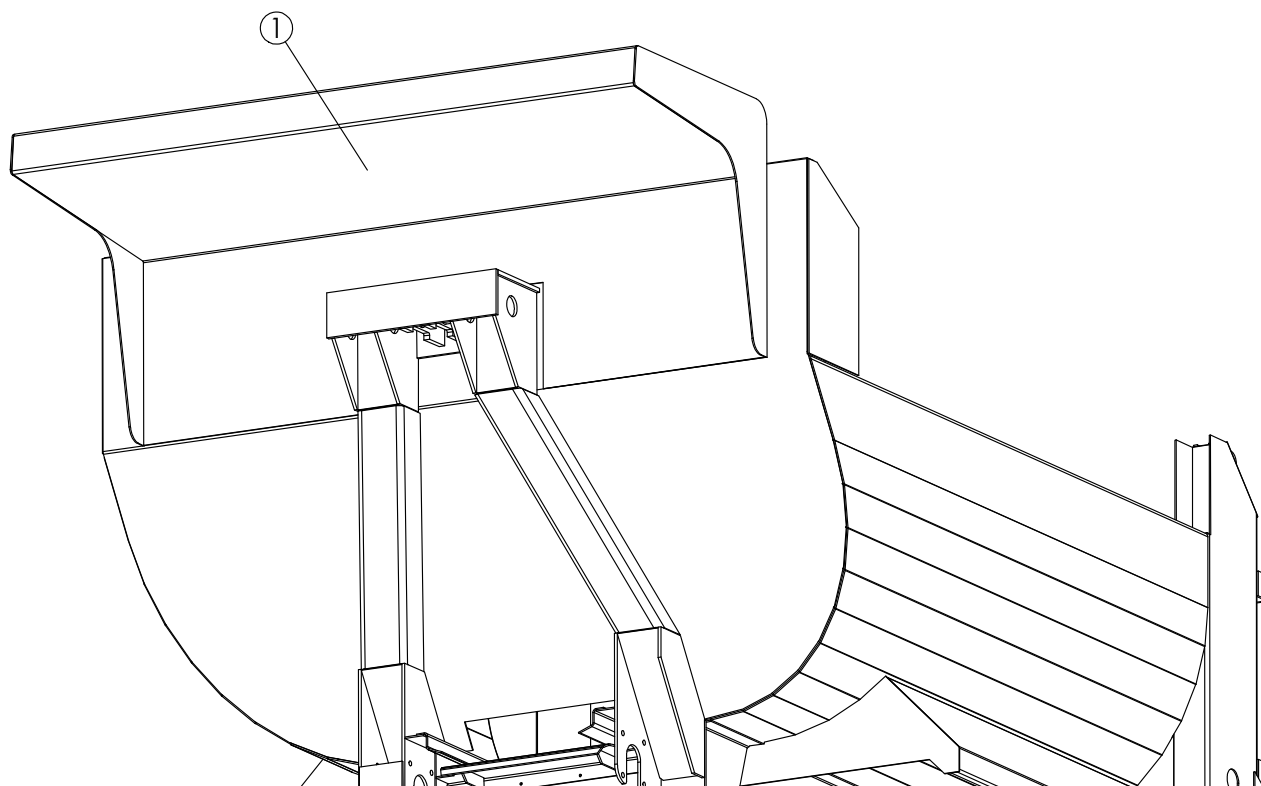
XT3 TYPE III A<sup>2</sup>



ITEM	PART NO.		DESCRIPTION	QTY
	CS	SS		
	89041	300453	Ladder – Kit Inspection	
1	89043	300454	Ladder – Wldmt Upper	1
2	89044	300456	Ladder – Wldmt Lower	1
-		304096	Ladder – Wldmt Lower 44" 304	1
3	73344	73344	Bracket – Anchor	2
4	150043	150043	Bracket – Hood	2
5	73343	73343	Hook – Rubber	2
6	20007	42448	Cap Screw – 1/4 x 1-1/2	2
7	20676	42034	Nut – Lock 1/4	2
8	20572	44483	Screw - #10 x 3/4	4
9	20709	44451	Washer – Lock #10	4
10	20641	47295	Nut – Hex #10	4
11	20366	36411	Bolt – Carriage 1/2 x 1-1/2	2
12	20695	36426	Washer – Flat 1/2	2
13	88638	88638	Tube – 3/4 x 3/8	2
14	20680	39016	Nut – Lock 1/2	2
15	20035	300458	Cap Screw – 5/16 x 7/8	2
16	20711	36419	Washer – Lock 5/16	2
17	20643	36413	Nut – Hex 5/16	2
18	89040	97535	Angle – Mount Ladder SS	4
19	20129	36539	Cap Screw – 1/2 x 1-1/2 SS	4
20	20714	36422	Washer – Lock 1/2 SS	4
21	20646	36416	Nut – Hex 1/2 SS	4



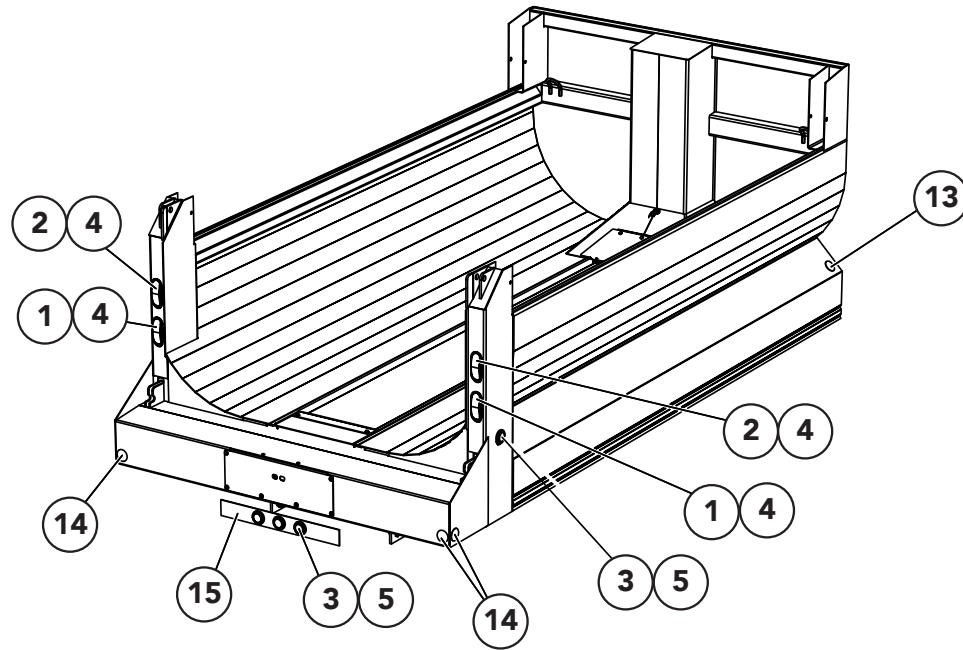
## Cab Shield



ITEM	PART NO.			DESCRIPTION	QTY
	CS	304 SS	201 SS		
1	306261-AA	306262-AA	309449-AA	Cab Shield – Wldmt 78" x 16"	1
	306261-AB	306262-AB	309449-AB	Cab Shield – Wldmt 78" x 22"	1
	306261-AC	306262-AC	309449-AC	Cab Shield – Wldmt 78" x 32"	1
			309449-AD	Cab Shield - Wldmt 78" x 40"	1
	306261-AE	306262-AE	309449-AE	Cab Shield – Wldmt 84" x 16"	1
	306261-AF	306262-AF	309449-AF	Cab Shield – Wldmt 84" x 22"	1
	306261-AG	306262-AG	309449-AG	Cab Shield – Wldmt 84" x 32"	1
	306261-AH	306262-AH	309449-AH	Cab Shield – Wldmt 84" x 40"	1
	306261-AI	306262-AI	309449-AI	Cab Shield – Wldmt 95" x 16"	1
	306261-AJ	306262-AJ	309449-AJ	Cab Shield – Wldmt 95" x 22"	1
	306261-AK	306262-AK	309449-AK	Cab Shield – Wldmt 95" x 32"	1
	306261-AL	--	309449-AL	Cab Shield – Wldmt 95" x 40"	1



## Lighting &amp; Visibility

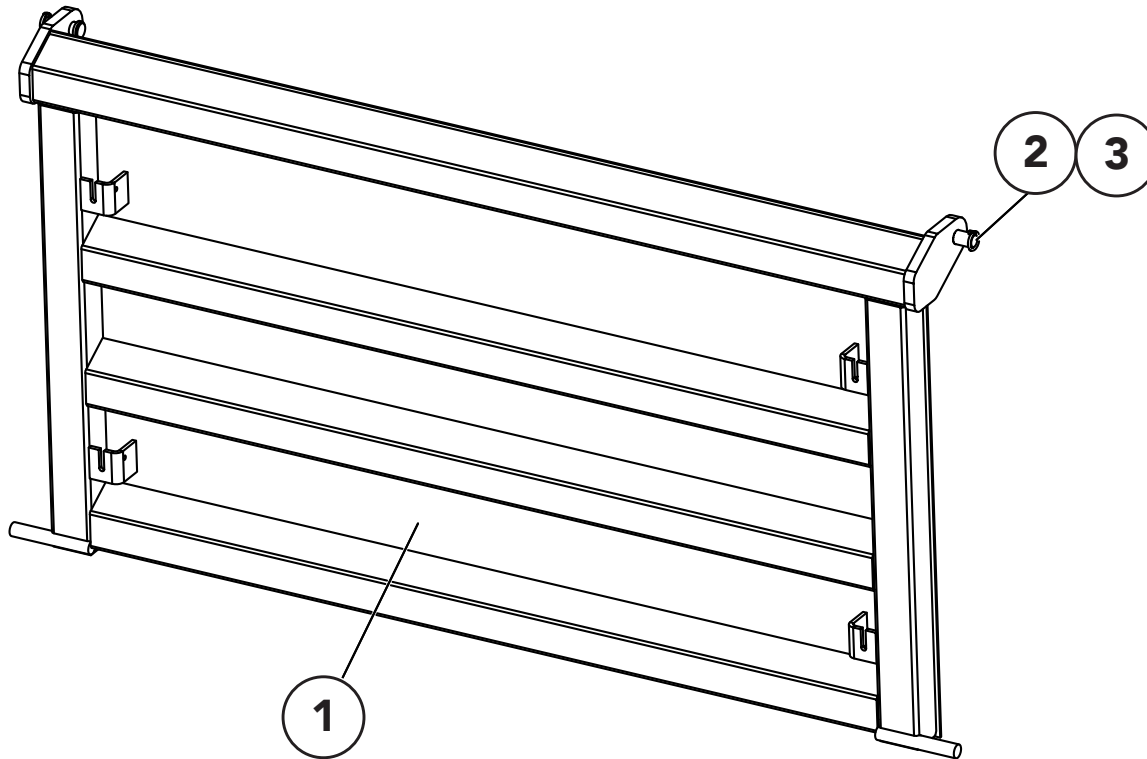


ITEM	PART NO.	DESCRIPTION	QTY
1	89988	Light – Red Oval	2
	97633	Light – Red Oval LED	2
2	89989	Light – Yellow Oval	2
	97634	Light – Yellow Oval LED	2
3	89990	Light – Red Round	5
	97635	Light – Red Round LED	5
4	89991	Grommet – Oval	4
5	89992	Grommet – Round	5
6	* 89993	Junction Box	1
7	* 89994	Fitting – Compression	1
8	* 89995	Fitting – Compression	2
9	* 89996	Fitting – Compression	1
10	* 89997	Harness	1
11	* 89998	Harness – RH	1
12	* 89999	Harness – LH	1
13	89978	Reflector – Yellow	2
14	89979	Reflector – Red	4
15	88688	Bar – 3-Light Cluster	1
16	* 97636	Adapter – LED only	1

\* - Not Shown



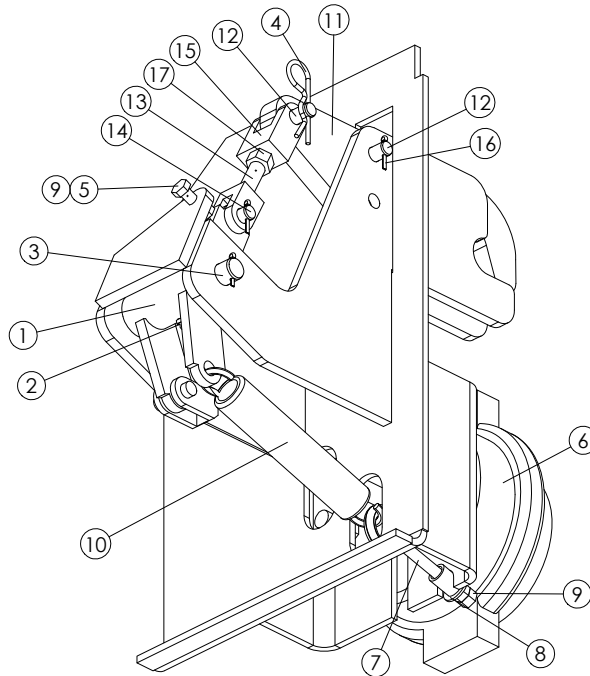
**Tailgate**



<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	314068	Tailgate - Wldmt Type III Auger	
2	88780	Pin – Clevis 1-1/4 x 4	2
3	88824	Pin – Lynch	2
4	89942	Chain – 3/8 x 48	2

\* - Not Shown

## Tailgate Latch

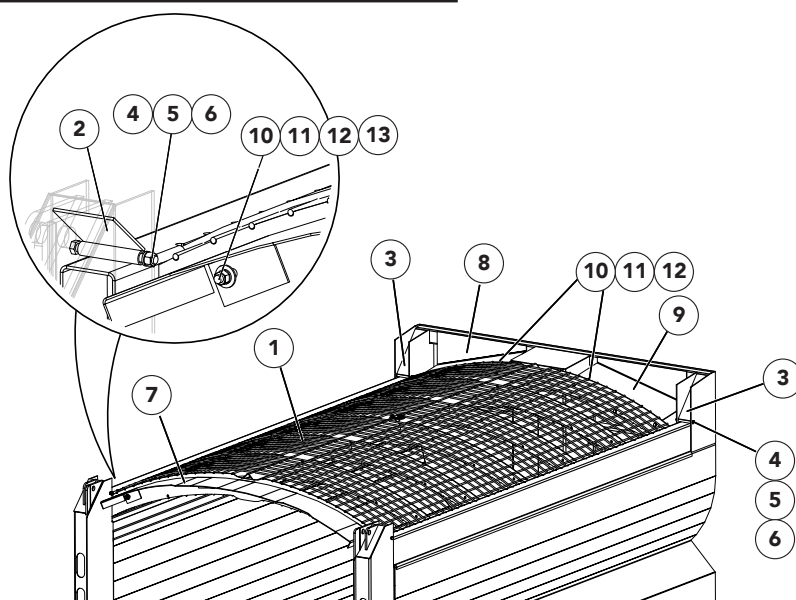


ITEM	PART NO.	DESCRIPTION	QTY
<u>SS</u>			
1	88767-AA	Pivot – Wldmt LH	1
	88767-AB	Pivot – Wldmt RH	1
2	6069	Zerk – Grease	1
3	97485	Pin – Clevis 3/4 x 5	1
4	36429	Pin – Hair	1
5	36399	Cap Screw – 3/8 x 1-1/4	1
6	307024	Modification – Air Tailgate	1
7	88773	Eyebolt – Tension	1
8	36425	Washer – Flat 3/8	1
9	36414	Nut – Hex 3/8	3
10	88604	Spring – Extension	1
11	88772	Plate – Hook	1
12	96247	Pin – Clevis 1/2 x 2-1/4	2
13	88770	Yoke – Wldmt	1
14	99671	Pin – Clevis 1/2 x 1-1/2	1
15	88771	Yoke – Driven	1
16	36427	Pin – Cotter 1/8 x 1	3
17	36417	Nut – Hex 5/8	1

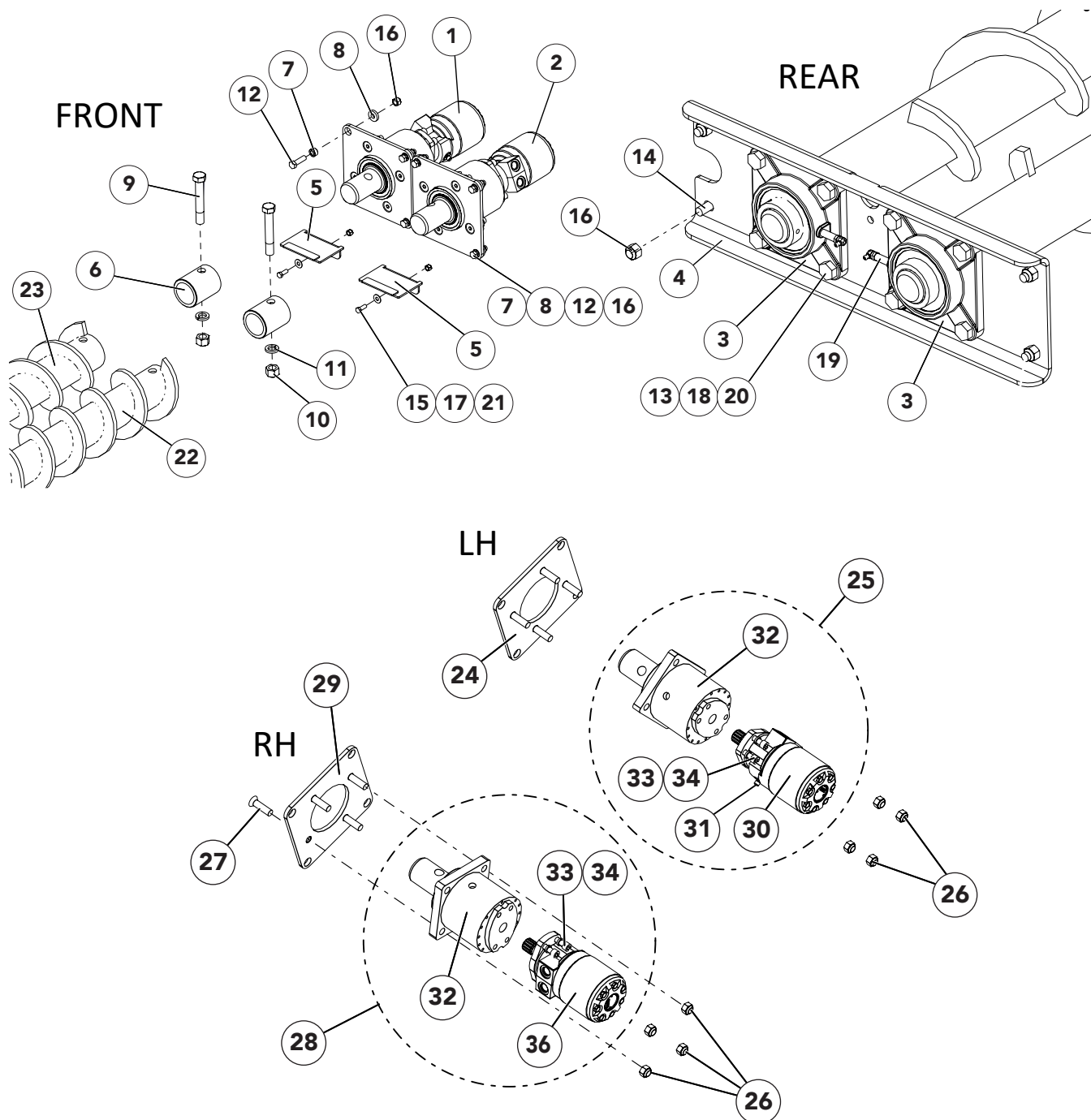
\* - Not Shown



## Domed



ITEM	PART NO.	DESCRIPTION	QTY
	301584	Hardware – Kit Screens, Includes 4-6	
	303406	Hardware – Kit Deflectors, Includes 10-13	
1	301421-AA	Screen – Wldmt Domed 108" (10')	1
	301421-AB	Screen – Wldmt Domed 120" (11')	1
	301421-AC	Screen – Wldmt Domed 132" (12')	1
	301421-AD	Screen – Wldmt Domed 144" (13')	1
	301421-AE	Screen – Wldmt Domed 158" (14')	1
	301421-AF	Screen – Wldmt Domed 170" (15')	1
2	301432	Spacer – Wldmt Rear	2
3	301431	Spacer – Wldmt Front	2
4	20145	Cap Screw – 1/2-13x 5-1/2	4
5	20714	Washer – Lock 1/2	4
6	20646	Nut – Hex 1/2	4
7	303403	Deflector – Screens Rear	1
8	303404-AA	Deflector – Screens Front LH	1
9	303404-AB	Deflector – Screens Front RH	1
10	20128	Cap Screw – 1/2-13 x 1-1/4	11
11	20695	Washer – Flat 1/2	11
12	20714	Washer – Lock 1/2	11
13	20646	Nut – Hex 1/2	11



**Auger****XT3 TYPE III A<sup>2</sup>****Drive Assembly Cont.**

ITEM	PART NO.	DESCRIPTION	QTY
1	314136	Drive - Assy Auger LH, Includes Items 24 - 27	1
2	314135	Drive - Assy Auger RH, Includes Items 26 - 29	1
3	6465	Bearing	2
4	314147	Plate - Bearing Rear 304	1
5	314150	Cover - Wldmt Coupling 304	2
6	314143	Insert - Drive Auger Tube	2
7	314142	Bushing - Drive 304	8
8	314144	Washer - Drive Plate 304	8
9	314138	Bolt - Coupling 7/8-9NC x 5-1/2 304	2
10	314139	Nut - Lock 7/8-9NC SS	2
11	314140	Washer - Lock 7/8 SS	2
12	71832	Cap Screw - 1/2-13NC x 1-3/4 SS	8
13	58800	Cap Screw - 5/8-11NC x 1-3/4 SS	8
14	36402	Cap Screw - 5/8-11NC x 1-1/4 SS	4
15	36398	Cap Screw - 3/8-16NC x 1 SS	2
16	39016	Nut - Lock 1/2-13NC SS	12
17	72054	Nut - Lock 3/8-16NC SS	2
18	36417	Nut - Hex 5/8-11NC SS	8
19	314137	Zerk - Grease 90° Extended	2
20	40597	Washer - Lock 5/8 SS	8
21	36425	Washer - Flat 3/8 SS	2
22	314114	Auger - Wldmt RH 10'	1
	314116	Auger - Wldmt RH 11'	1
	314118	Auger - Wldmt RH 12'	1
	314120	Auger - Wldmt RH 13'	1
	314122	Auger - Wldmt RH 14'	1
	314124	Auger - Wldmt RH 15'	1
23	314115	Auger - Wldmt LH 10'	1
	314117	Auger - Wldmt LH 11'	1
	314119	Auger - Wldmt LH 12'	1

\* - Not Shown    AR - As Required



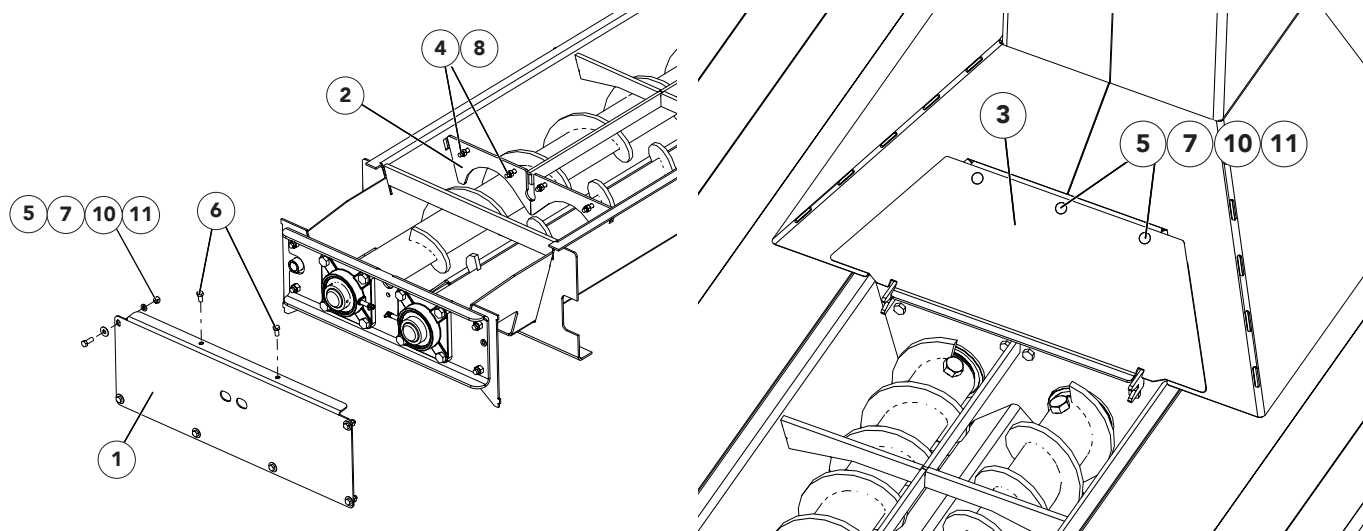
**Drive Assembly Cont.**

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>
	314121	Auger - Wldmt LH 13'	1
	314123	Auger - Wldmt LH 14'	1
	314125	Auger - Wldmt LH 15'	1
24	314131	Plate - Drive LH 304	1
25	314134	Gearcase - Assy Auger LH, Includes Items 30 - 35	1
26	41762	Nut - Lock 5/8-11NC SS	8
27	314132	Screw - Flat Head 5/8-11NC x 2-1/4 SS	8
28	314133	Gearcase - Assy Auger RH, Includes Items 32 - 36	1
29	314130	Plate - Drive RH 304	1
30	314127	Motor - Hydraulic 24.7 Cid Rev Rotation w/ Sensor, Includes Item 31	1
31	314153	Sensor - Speed	1
32	314128	Gearcase - Planetary 3.6:1	2
33	89701	Screw - Socket Head 1/2-13NC x 1-1/2 GR8	8
34	30227	Washer - Lock Socket Head 1/2	8
35	*314129	O-Ring - 2-152 Buna-N	2
36	314126	Motor - Hydraulic 24.7 CID Std Rotation	1
37	*56327	Seal - Kit Motor	AR

\* - Not Shown    AR - As Required

# Auger Guards

XT3 TYPE III A<sup>2</sup>



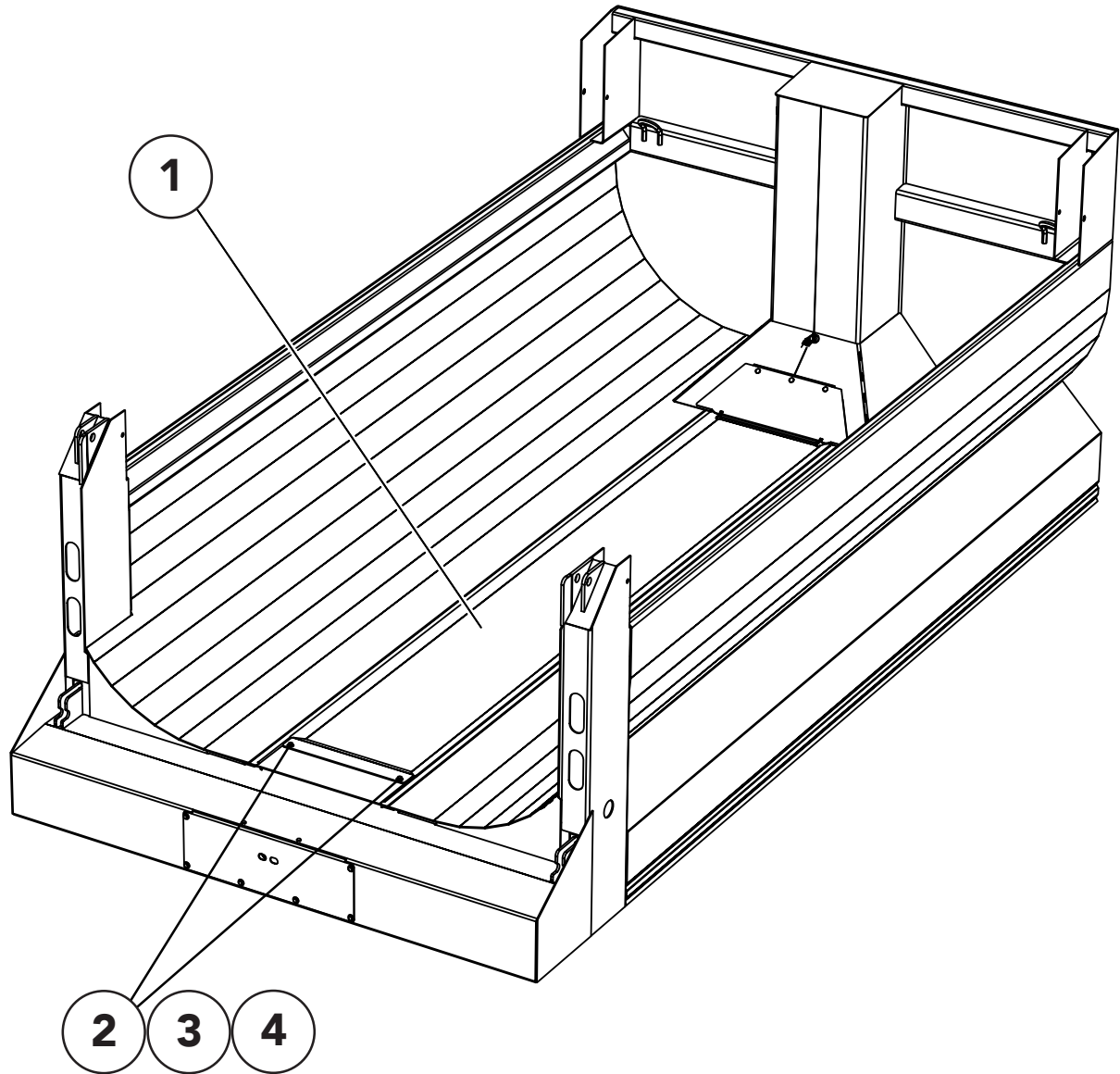
ITEM	PART NO.	DESCRIPTION	QTY
1	314146	Cover - Wldmt Rear 304	1
2	314152	Plate - Screed 304	2
3	314151	Cover - Front Access 304	1
4	34858	Cap Screw - 3/8-16NC x 1-1/2 SS	4
5	36398	Cap Screw - 3/8-16NC x 1 SS	6
6	36293	Cap Screw - 3/8-16NC x 3/4 SS	2
7	36414	Nut - Hex 3/8-16NC SS	9
8	72054	Nut - Lock 3/8-16NC SS	4
9	36408	Bolt - Carriage 3/8-16NC x 1 SS	3
10	36420	Washer - Lock 3/8 SS	9
11	36425	Washer - Flat 3/8 SS	6

\* - Not Shown    AR - As Required



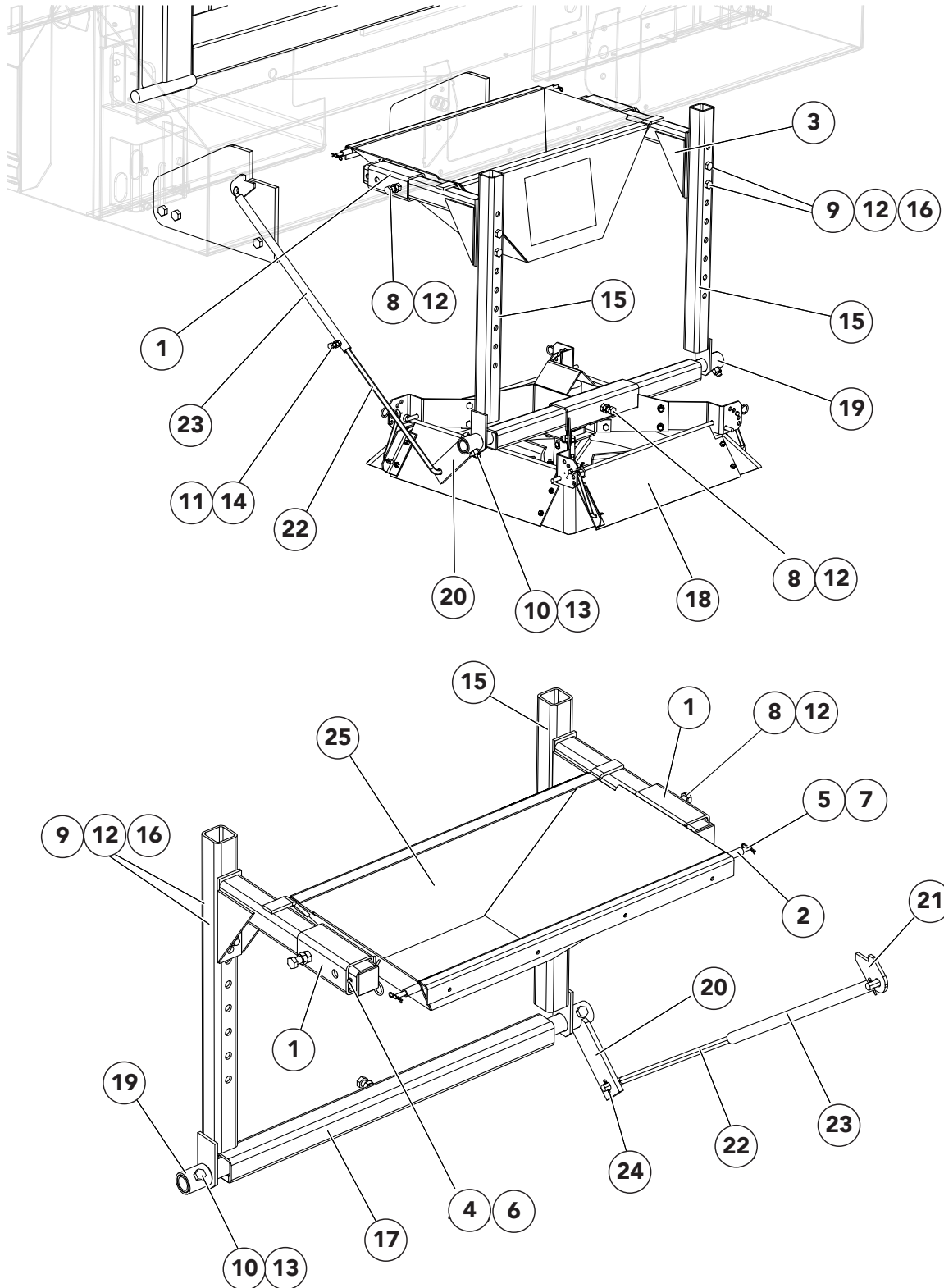


## Auger Cover



ITEM	PART NO.	DESCRIPTION	QTY
1	314157	Cover - Wldmt 10' 304	1
	314203	Cover - Wldmt 14' 304	1
2	36398	Cap Screw - 3/8-16NC x 1 SS	2
3	36425	Washer - Flat 3/8 SS	2
4	36420	Washer - Lock 3/8 SS	2

## Spinner Assembly

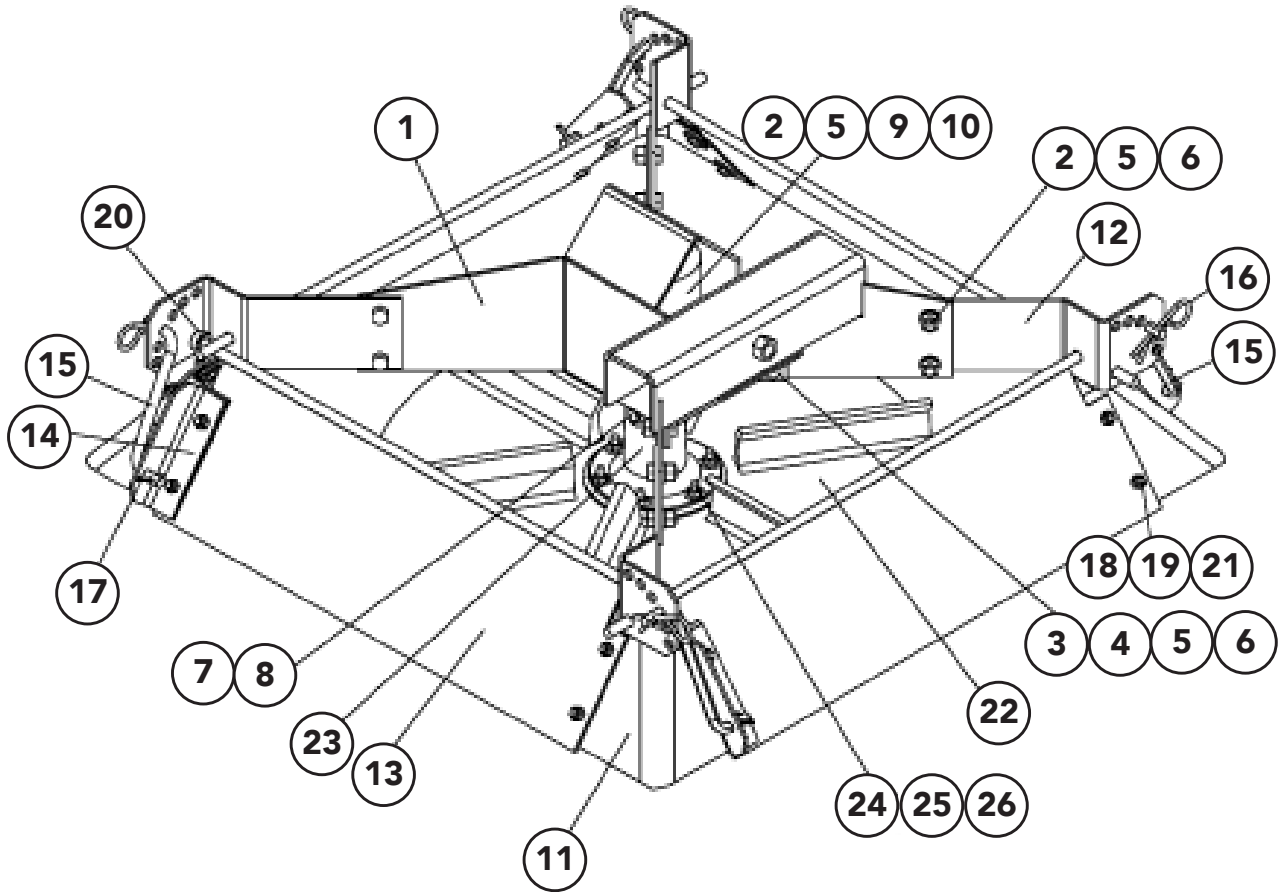


**Spinner Assembly Cont.**

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>
<u>304 SS</u>			
1	97537	Tube – Wldmt Mount Rear	2
2	97539	Pipe – 1/4 x 1-1/4	2
3	88955	Frame – Wldmt Horizontal	2
4	88229	Pin - Clevis 3/8 x 2-1/4	2
5	76821	Pin - Clevis 5/16 x 3-1/2	2
6	36429	Pin - Hair	2
7	41779	Pin - Hair	2
8	36539	Cap Screw - 1/2-13NC x 1-1/2	3
9	36297	Cap Screw - 1/2-13NC x 3	4
10	42454	Cap Screw - 1/2-13NC x 2-1/2	2
11	36399	Cap Screw - 3/8-16NC x 1-1/4	1
12	36416	Nut - Hex 1/2-13NC	7
13	39016	Nut – Lock 1/2-13NC	2
14	36414	Nut - Hex 3/8-16NC	1
15	310251	Frame – Wldmt Vertical Extended	2
16	36422	Washer – Lock 1/2	4
17	88962	Hanger – Wldmt Horizontal	1
18	97541-AA	Spinner – Assy Poly w/ Baffles	1
19	88966-AB	Pipe – Retainer Hanger	1
20	88965	Retainer - Wldmt Hanger	1
21	310220	Tab - Mounting	1
22	88971	Rod - Adjusting Sliding	1
23	88968	Rod - Wldmt Adjust	1
24	36427	Pin - Cotter	2
25	314161	Hopper - Wldmt	1

\* - Not Shown

## Spinner Assembly - w/ Baffles

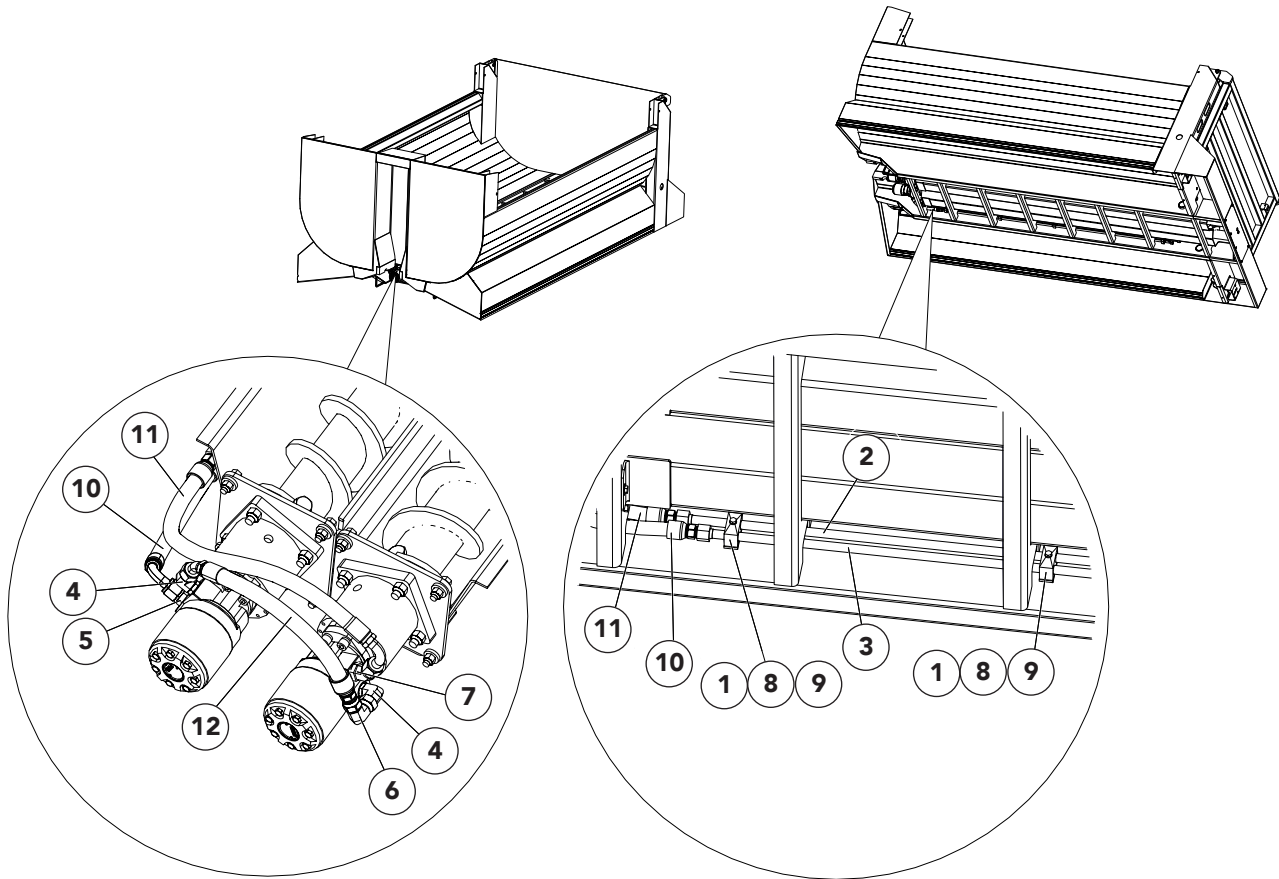


ITEM	PART NO.	DESCRIPTION	QTY
<u>304 SS</u>			
	97541-AA	Spinner – Assy Poly with Baffles	
	87757	Disc - Assy Spinner Steel, Includes 22,23,27-30	
	88396	Disc - Assy Spinner Poly, Includes 22-26	
1	97542	Frame – Wldmt Spinner	1
2	36293	Cap Screw – 3/8 x 3/4	12
3	36398	Cap Screw – 3/8 x 1	2
4	36425	Washer – Flat 3/8	2
5	36420	Washer – Lock 3/8	14
6	36414	Nut – Hex 3/8	10
7	88229	Pin – Clevis 3/8 x 2-1/4	1
8	36427	Pin – Cotter 1/8 x 1	1
9	97548	Mount – Wldmt Motor	1

**Spinner Assembly - w/ Baffles Cont.**

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>
10	58806	Motor – Hydraulic	1
11	87801	Deflector – Belt	4
12	97550	Support – Baffle	4
13	97551	Baffle – Wldmt	4
14	97554	Angle – Mounting	4
15	97555	Rod – Control	4
16	36429	Pin – Hair	4
17	76884	Pin – Cotter	4
18	36393	Cap Screw – 1/4 x 3/4	16
19	42034	Nut - Lock 1/4	16
20	21011	collar - Set 3/8	4
21	21423-X1	Washer - 1/4 Special	8
22	34853	Spinner - Urethane, Poly Only	1
	9098	Disc - Distributor, Steel Only	1
23	88002	Hub - Spinner Direct Drive	1
24	21423	Washer - 1/4 Special	6
25	20007	Cap Screw - 1/4-20 x 1-1/2	6
26	20676	Nut - Lock 1/4-20	6

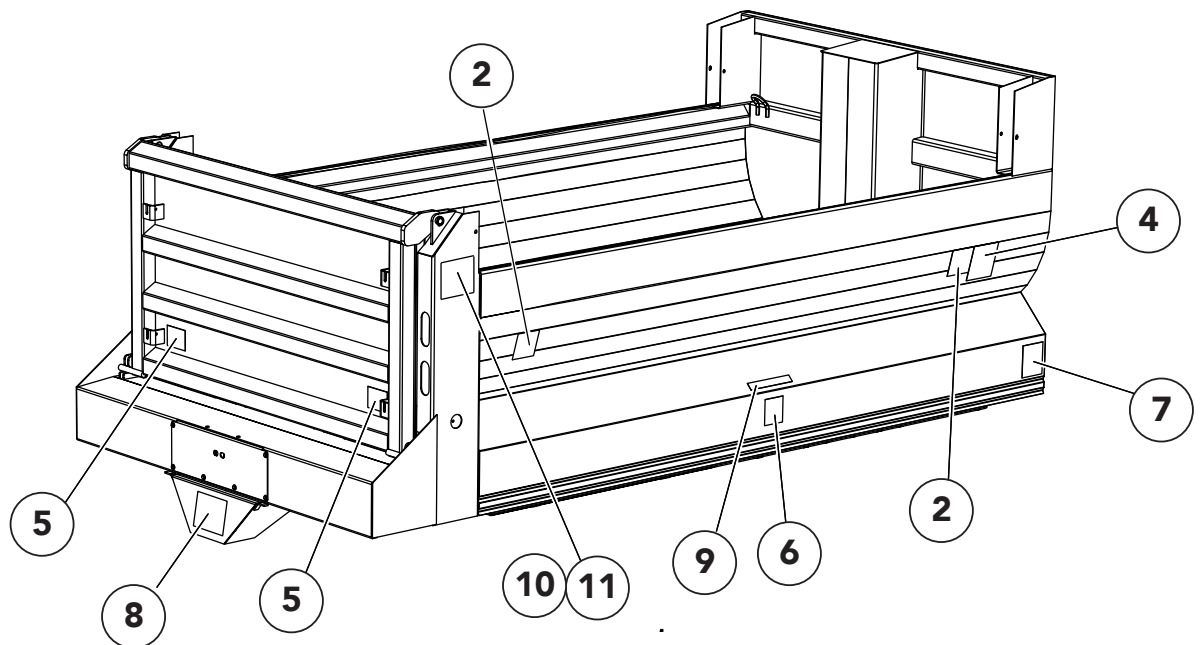
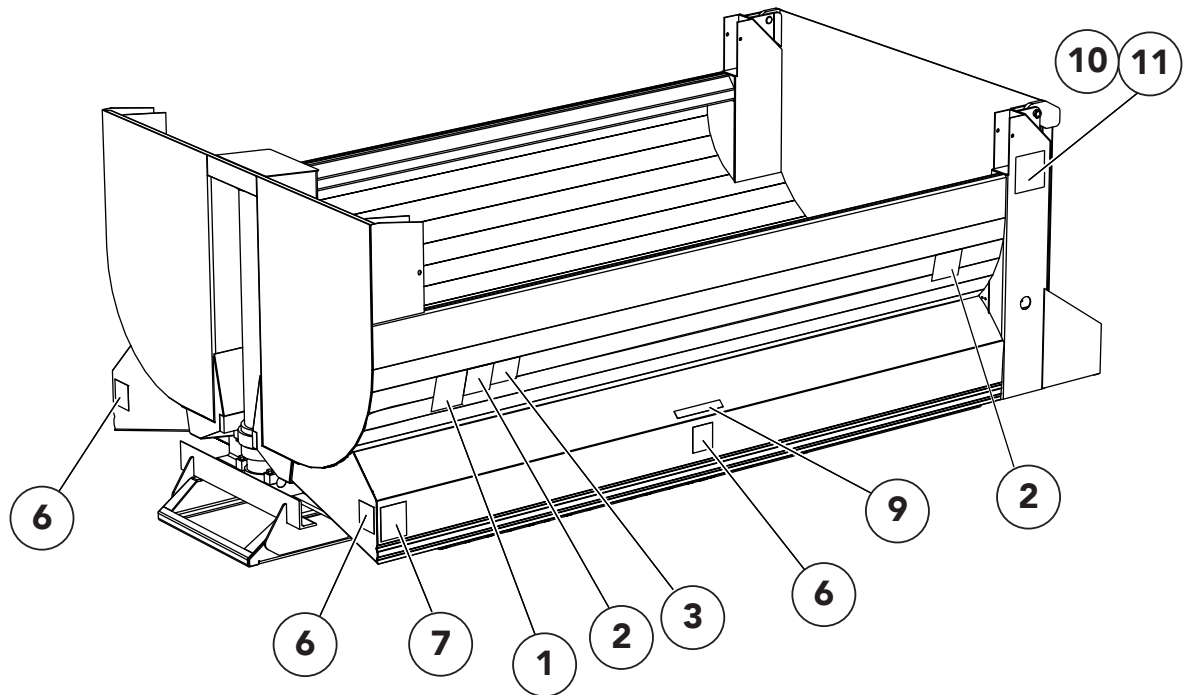
**Auger Hydraulics**

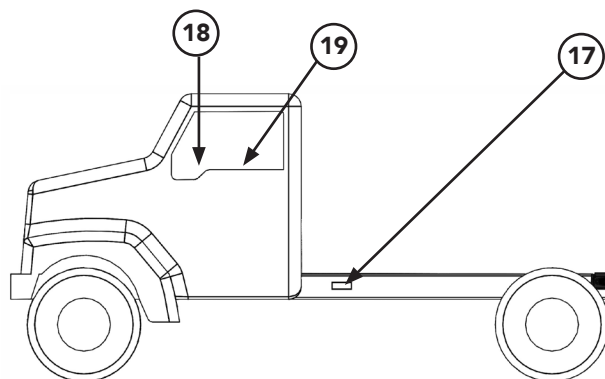


<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	75036	Clamp - Tubing Twin 3/4	AR
2	314172	Tube - Assy Return 304, 10' Unit	1
	314200	Tube - Assy Return 304, 14' Unit	1
3	314173	Tube - Assy Pressure 304, 10' Unit	1
	314201	Tube - Assy Pressure 304, 14' Unit	1
4	29773	Fitting - 12-10 070220	2
5	29753	Fitting - 12-10 Special Straight JIC x SAE	1
6	34709	Fitting - 12-12 070221	1
7	318345	Fitting - 12-12 070320	1
8	36419	Washer - Lock 5/16 SS	AR
9	309619	Cap Screw - 5/16-18NC x 2 SS	AR
10	314174	Hose - Assy SAE 12 x 17 100R12	1
11	314175	Hose - Assy SAE 12 x 34 100R1	1
12	314176	Hose - Assy SAE 12 x 20 100R12	1

AR - As Required



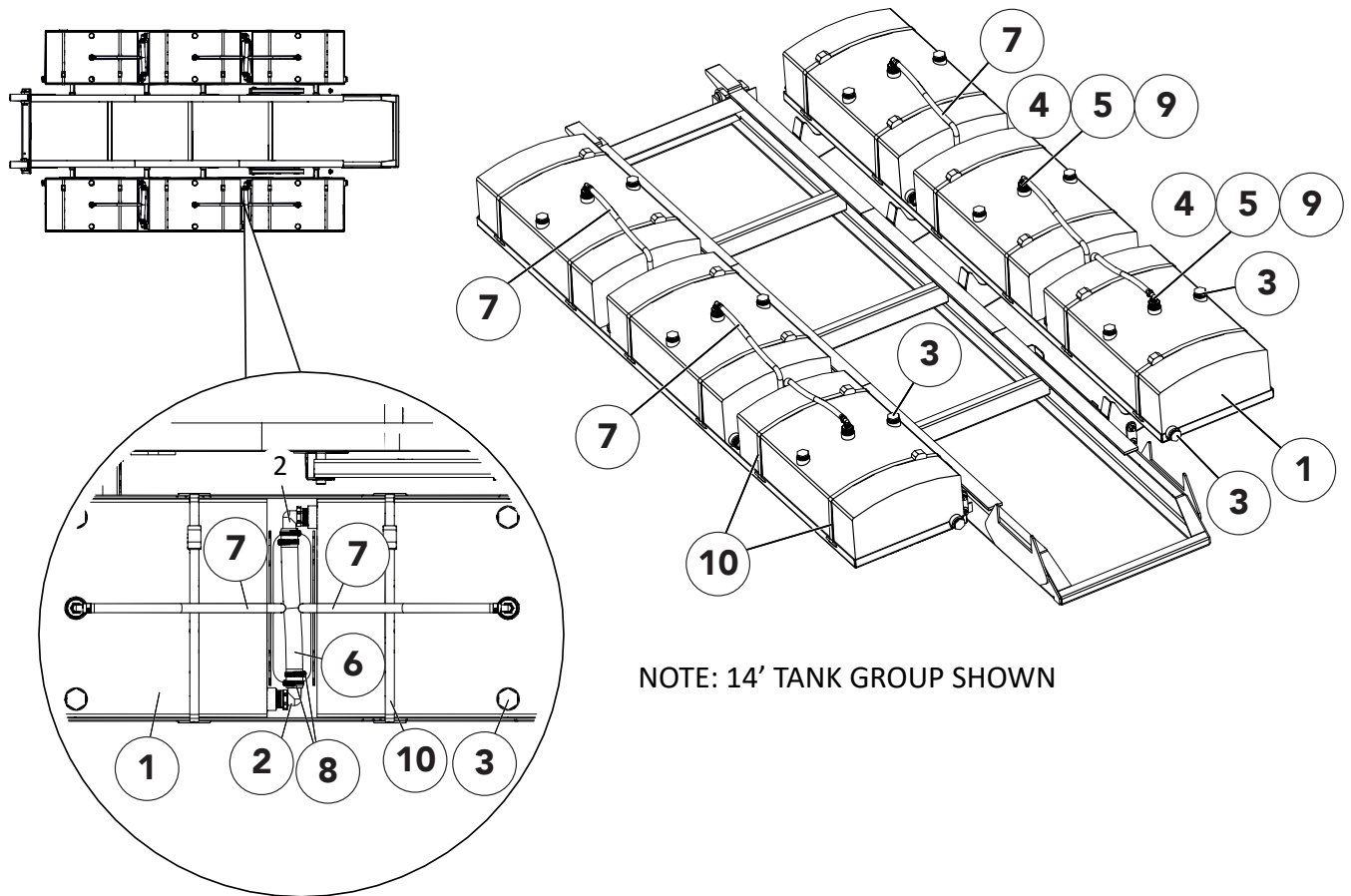




ITEM	PART NO.	DESCRIPTION	QTY
1	150034	Decal – Caution, Operation & Maintenance	1
2	55997	Decal – Danger, Moving Part Hazard - Auger	4
3	321	Decal – Caution, Hazardous Material	1
4	39138	Decal – Warning, High Pressure Fluid Hazard	1
5	366	Decal – Warning, Moving Part Hazard - Tailgate	2
6	310267	Decal – Danger, Crushing Hazard	4
7	96712	Decal – Danger, Crushing Hazard	2
8	368	Decal – Danger, Flying Material Hazard	1
9	39200	Decal – Warning, Falling Hazard	2
10	88691	Decal – Hi-Way XT3 Black	2
	307179	Decal - Hi-Way XT3 White	2
11	39870	Decal - Hi-Way Large Black	2
	90639	Decal - Hi-Way Large White	2
12	96704	Decal – Danger Crushing Hazard, On Truck Frame Rails	2
13	96715	Decal – Caution Raised Body, In Truck Cab	1
14	96716	Decal – Caution Operation Safety, In Truck Cab	1



## Tank Group



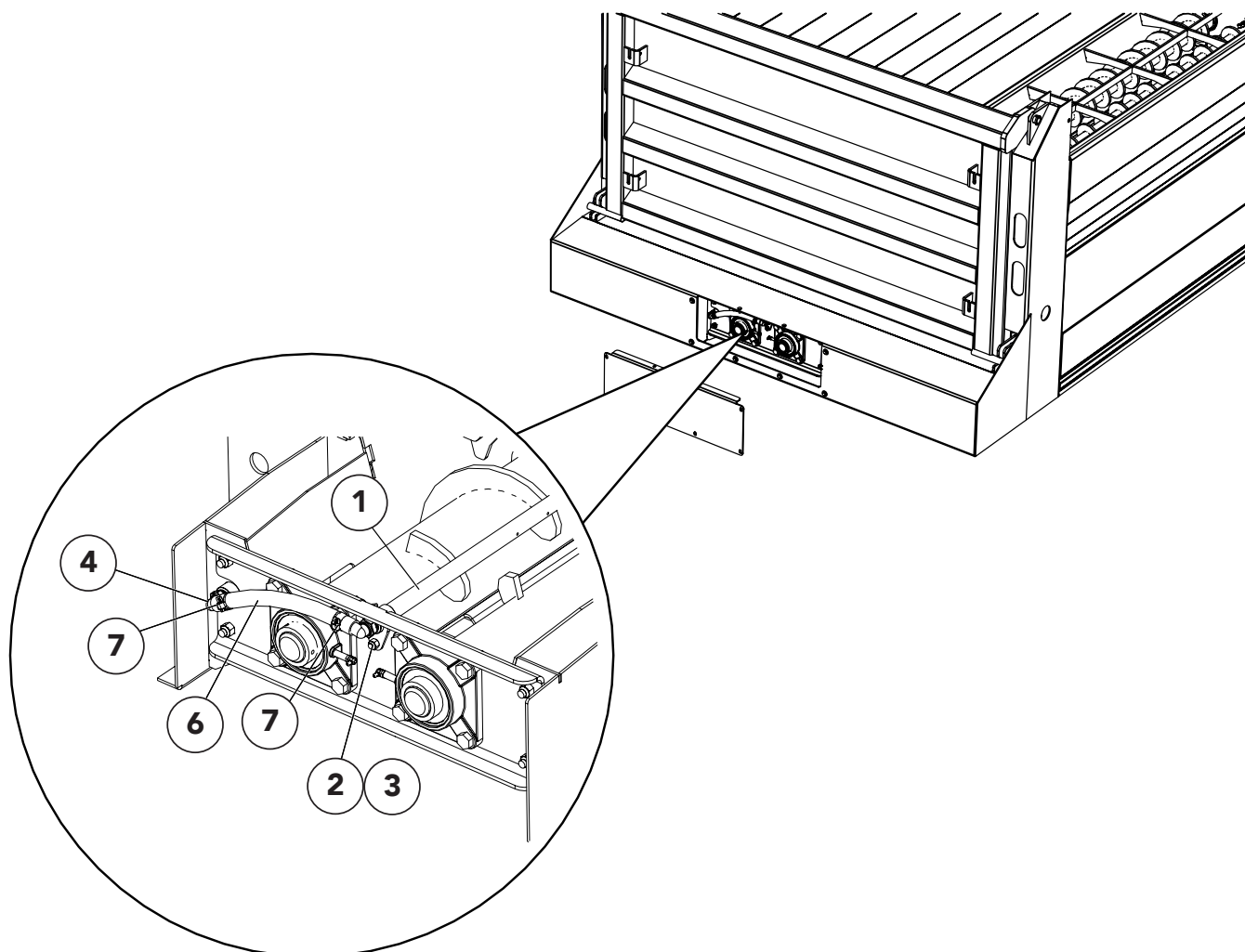
NOTE: 14' TANK GROUP SHOWN

ITEM	PART NO.	DESCRIPTION	QTY	
			Unit Length	
			10'	14'
1	310234	Tank - 50 Gal	4	6
2	310235	Fitting - Hose Barb 90° 1.5 Hose x 1.5 NPT Poly	4	8
3	310236	Fitting - Plug 1.5 MNPT Poly	12	16
4	310237	Fitting - Bushing 1.5 NPT x .75 NPT Poly	4	6
5	310238	Fitting - Hose Barb 90° .75 Hose x .75 NPT Poly	4	6
6	310239	Hose - PVC Suction 1-1/2 x 17-1/2	2	4
7	310240	Hose - Clear PVC Sight 3/4 x 36	4	6
8	308029	Clamp - Hose SAE 36 SS	8	16
9	308223	Clamp - Hose SAE 16 SS	4	6
10	310242	Strap - Cam Lock	8	12
11	*306836	Wire - Tie Black	12	12
12	*308240	Loctite - Plastic Pipe Sealant	--	--

\* - Not Shown



## Spray Tube Assembly



ITEM	PART NO.	DESCRIPTION	QTY
1	314165	Spray Tube - Wldmt 304	1
2	36398	Cap Screw - 3/8-16NC x 1 SS	1
3	72054	Nut - Lock 3/8-16NC SS	1
4	310238	Fitting - Hose Barb 90° 3/4 Hose x 3/4 NPT Poly	2
5	*307901	Fitting - Plug 3/4 NPT Hex Head Poly	1
6	314169	Hose - Clear PVC 3/4 x 12	1
7	308223	Clamp - Hose SAE 16 SS	2

\* - Not Shown