OPERATORS MANUAL

LIVE BOTTOM TRUCK MOUNT



GINCOR WERX®

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GINCOR WERX
LIVE BOTTOM TRUCK MOUNT



If you have purchased this product, GINCOR Werx would like to thank you. We take great pride in producing products that "**Owners Want to Own and Drivers Want to Drive**". If you are reviewing this as a training tool, then welcome to the world of Live Bottom Truck Mounts.

As a leading manufacturer/up-fitter in aggregate truck and hoppers, we are committed to quality workmanship, and consumer satisfaction. By offering a product line that includes various flat deck, step deck, tag-a-long, and live bottom units, we are dedicated to building hoppers that are not only suited to your needs but have been engineered with safety, durability, and overall performance in mind.

This manual is intended as an overview of your GINCOR Werx Live Bottom truck mount for the benefit of the individual operating or maintaining the truck mount and as a training guide for those working with or dealing with this product. It includes information on safety, operation, and maintenance, as well as specific live bottom truck mount components and schematics. The reference material of this manual is intended to help support keeping your unit running smoothly and efficiently. More specific details can be found in other training/operating manuals available through GINCOR Werx.

If you ever have any questions or comments, please reach out to us and we would be happy to help.



GENERAL INFORMATION

It is especially important from the safety standpoint that this manual be thoroughly read and understood before performing any operational or maintenance function.

The information contained in this manual will enable you to better understand the operation and performance of the machine and thus better utilize it to obtain maximum performance from your Live Bottom.

Reporting Safety Defects

If you have concerns that your truck mount has a defect which could cause a vehicle collision which could injure you or another motorist, you should immediately inform GINCOR Werx.

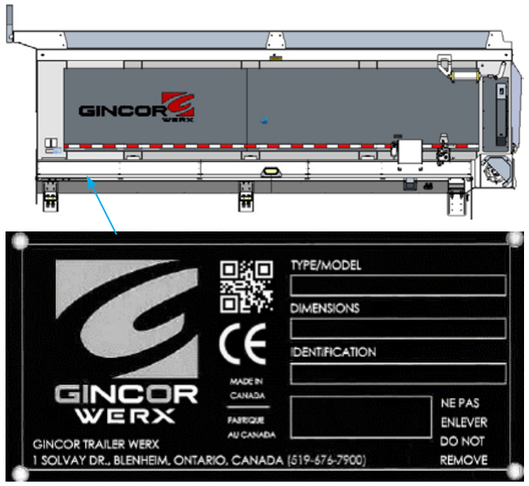
GINCOR Werx can be reached via telephone at +1 519-676-7900, email at info@gincor.com or via mail at 1 Solvay Dr. Blenheim, Ontario, N0P 1A0.

In this manual you will read about standard live bottom features and options. If your unit incorporates custom features, some of the information contained in this manual may not apply. If you have any questions regarding this manual or your unit, contact your dealer or GINCOR Werx Service Department via telephone at +1 519-676-7900 or email at service@gincor.com.

This manual contains operation, maintenance and service instructions for GINCOR Werx Live Bottom Truck Mount.

Prior to operating the hopper, the instructions must be read and understood.

The operator is responsible for maintaining the unit.



Serial number and type of truck mount can be found on Plate located on the left side of the unit.

Type/Model
Type such as 24LBTM, 24 for the overall length of the truck indicated “LBTM” for Live Bottom Truck Mount.

Dimensions
The Truck Mount Dimensions Length x Width x Height.

Identification
Serial Number of unit.

GENERAL SAFETY

INTRODUCTION

We are proud to be able to offer you this resource as a basic guide to your GINCOR Werx Live Bottom Truck Mount. As an owner or operator, it is important to read and understand the information within this document before operating or maintaining your GINCOR Werx Live Bottom Truck Mount (LBTM). Only competent, responsible, trained individuals should operate this equipment.

It is the responsibility of the owner/operator to ensure that anyone working on or near the hopper has been made aware and follows all safety signs and procedures. An untrained individual exposes himself and others to injury or death. Utilize the safety information provided to prevent accidents.

Anyone who has not read, understood, and been trained to follow safety procedures is not qualified to operate this unit. As an information resource for owners, this manual will provide the foundation for understanding the operation of a GINCOR Werx LBTM.

Throughout this document you will see the warning signs indicated below. Please pay close attention to the signs and their meaning. Similar indicators can be found on your product and need to be obeyed. These warnings and labels follow ANSI Z535.4 standard and are important to your understanding of the product.

DANGER

This box indicates when serious injury or death may occur if instructions are ignored.

WARNING

This box indicates a hazard that may result in death or serious injury, but where the overall risk is not severe enough for a “Danger” Sign.

CAUTION

This symbol indicates a procedure you must follow exactly or damage to components or equipment may occur. Serious personal injury may also result from failure to follow this procedure.

NOTE

This symbol is used throughout this manual to call attention to operations, procedures and instructions that are important for proper service. It may also indicate information that can make service quicker or easier.

GENERAL SAFETY

It is important to read and understand the owner's manual before operating or maintaining the equipment.
Only trained, responsible individuals should operate this equipment. Anyone who has not read, understood
and been trained to follow safety procedures is not qualified to operate this unit.

The Following Is A List Of General Safety Guidelines:

- Become familiar with all safety signs and practices.
- Wear protective gear such as a hard hat, gloves, non-slip footwear and safety glasses.
- A first aid kit should be available at all times. Ensure that each individual is aware of its location and how to use it.
- A fire extinguisher should be available at all times. Ensure that it is in good working condition and that each individual is aware of its location and how to use it.
- Never allow riders.
- Do not drink and drive.

Operating Safety

It is important to follow these recommended guidelines before beginning to operate the hopper.

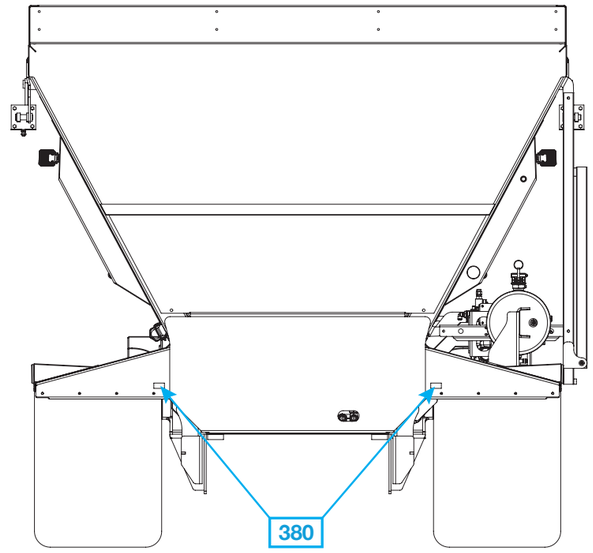
- Check that all lights and reflectors are clean, easily visible, and in their proper location.
- Ensure the surrounding area is clear of all bystanders before starting the truck or operating the hopper.
- Riders should not be allowed on any part of the hopper.
- Be cautious when driving on uneven terrain or during harsh weather conditions.
- Always check load weight. It should not exceed the hopper carrying specifications or legal load.
- Make sure you are in compliance with all local regulations regarding transporting on public roads and highways.
- Watch for large rocks or pieces when loading to prevent damaging gates, walls or belting.
- Unit must be on level ground before load can be dumped.
- Keep hands, feet, clothing and hair away from all moving parts.
- Proceed with caution when operating discharge gates manually.
- Keep yourself and others at a distance from discharge gate when engine or air system is pressurized. Stay clear during unloading.
- Be certain to remove air and hydraulic lines from truck, exhaust air system install gate safety prop before entering hopper.
- Truck to Truck Mount connection should be maintened to continued smooth operation.

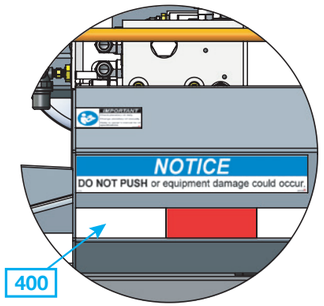
Maintenance Safety

Read and understand the maintenance information provided in the owner's manual before adjusting or servicing the hopper.

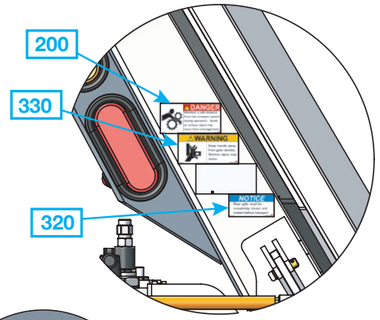
- Keep service area clean at all times. Use proper lighting when working on the unit.
- Before adjusting, servicing or maintaining the unit, place all controls in neutral, stop the engine, remove the ignition key and set the park brake.
- Before working on discharge gate, disconnect air lines, exhaust air system and install safety prop.
- Keep hand clothing & loose tools clear of chain during operation.
- Ensure fasteners are tightened to their specified torque at all times.
- Always wear proper PPE when working around pressured hydraulic components.

DECAL LOCATIONS

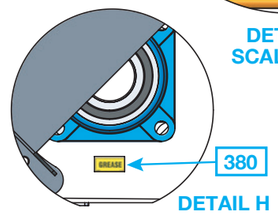




DETAIL F
SCALE 1 : 12

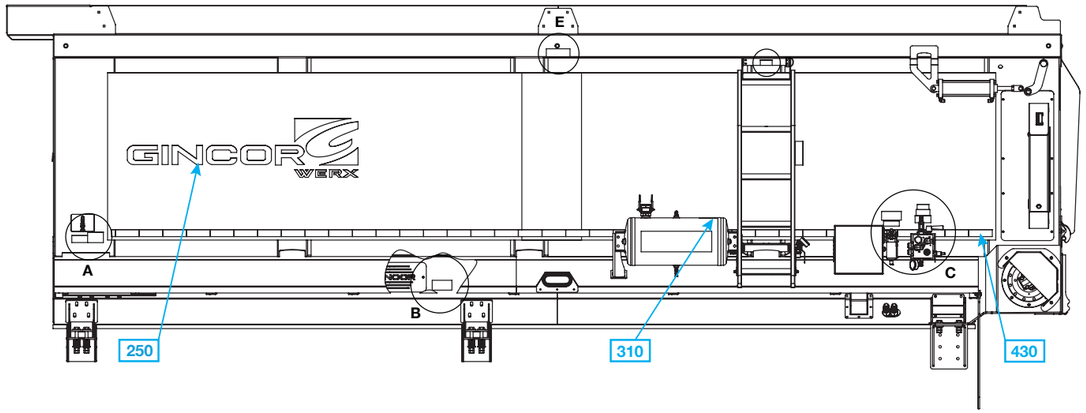


DETAIL G
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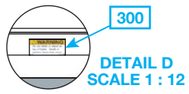
DETAIL H
SCALE 1 : 12

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
200	16437	Decal, Conveyor	2
240	16026	Decal, Gincor Werx,12"	1
380	16002	Decal, Grease	5
400	16451-18.000	2" Reflective Tape	1
410	16451-29.000	2" Reflective Tape	1
420	16451-6.000 White	2" Reflective Tape	1

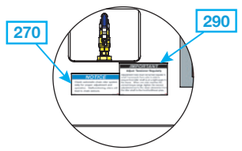




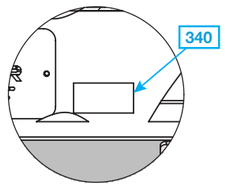
DETAIL E
SCALE 1 : 18



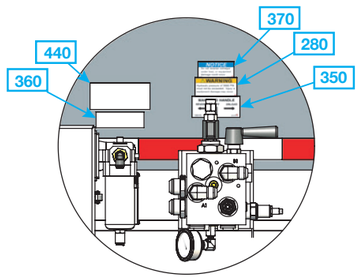
DETAIL D
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DETAIL A
SCALE 1 : 12

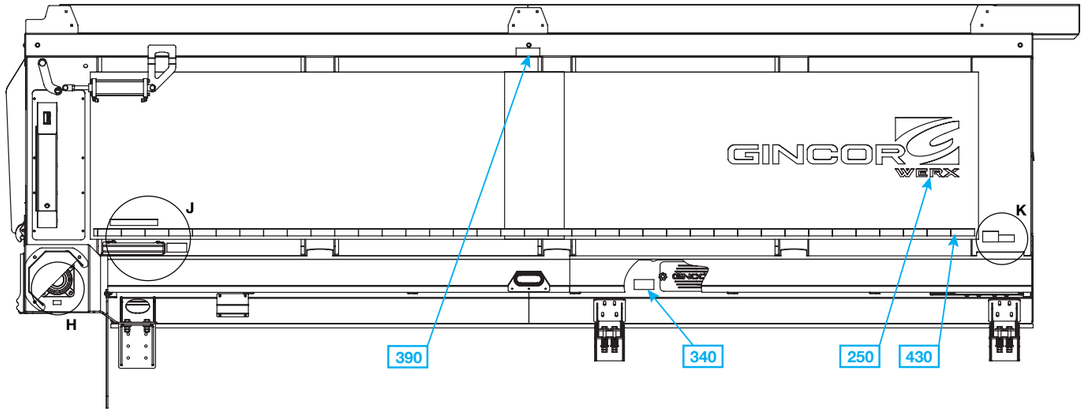


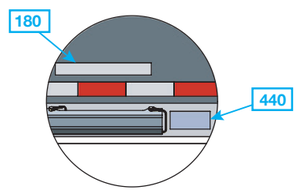
DETAIL B
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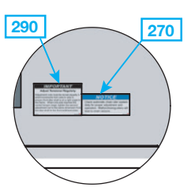
DETAIL C
SCALE 1 : 12

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
250	16025	Decal, GINCOR Werx	2
270	16021	Decal, Chain Oiler	2
280	16020	Hydraulic Pressure	1
290	16018	Decal, Adjusting Rod	2
300	16017	Decal, Do Not Stand	1
310	16016	Decal, Caution, Pressurized	1
340	16011	Decal, Conveyer Chain	2
350	16010	Manifold Handle Decal	1
360	16009	Decal, Filter	1
370	16008	Decal, Do not Reverse	1
390	16162	Decal, Cross Brace	2
430	16451-223.000	2” Reflective Tape, 11” Red with GINCOR Logo	2
440	16033	Decal, Warning - Lockout	2





DETAIL J
SCALE 1 : 18

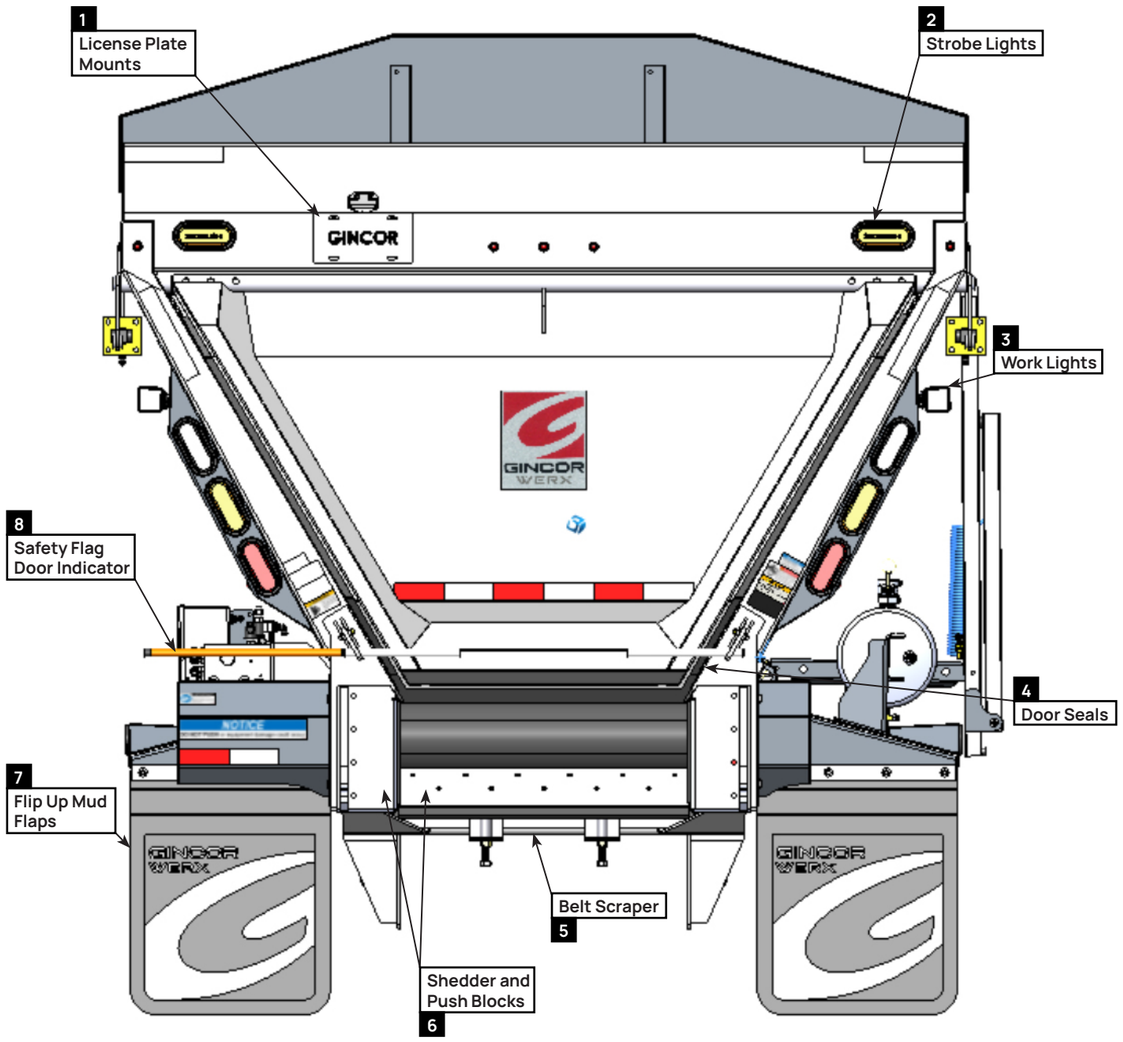


DETAIL K
SCALE 1 : 12

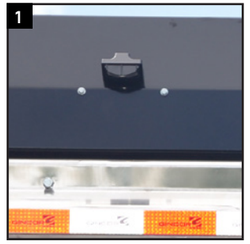
ITEM NO.	PART NUMBER	DESCRIPTION	QTY
180			
250	16025	Decal, GINCOR Werx,	2
270	16021	Decal, Chain Oiler	2
290	16018	Decal, Adjusting Rod	2
340	16011	Decal, Conveyer Chain	2
370	16008	Decal, Do not Reverse	1
390	16162	Decal, Cross Brace	2
430	16451-223.000	2” Reflective Tape, 11” Red with GINCOR Logo	2
440	16033	Decal, Warning - Lockout	2

FAMILIARIZATION

The following section illustrates a visual walkaround of the GINCOR Werx LBTM.



FAMILIARIZATION



LICENCE PLATE MOUNTS
Located on upper left-hand side above the tailgate, uses a 7/16" head 1/4" x 1" size bolt to fasten the licence plate to the body.



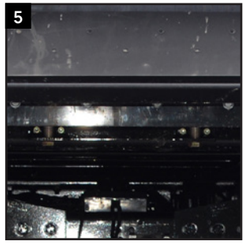
STROBE LIGHTS
Strobe Warning Lights - activated from inside the cab.



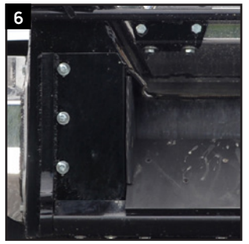
OPTIONAL WORK LIGHTS
Work Lights – activated from inside the cab.



CONVEYOR AND DOOR SEALS
Conveyor side and rear tailgate seals to help prevent fine materials from leaking out of body tub.



BELT SCRAPER
The rear Belt Scraper is tensioned with a spring on each side with a nut to apply pressure on the spring, which in turn applies more pressure on the belt to scrape the belt clean and help avoid contamination between loads.



3 PIECES SHEDDER AND PUSH BLOCKS
Shedder plate is welded to the rear bulkhead, facilitating material flow with push blocks providing a stable assembly that transfers rear pushing force to the hopper frame, preventing conveyor damage.

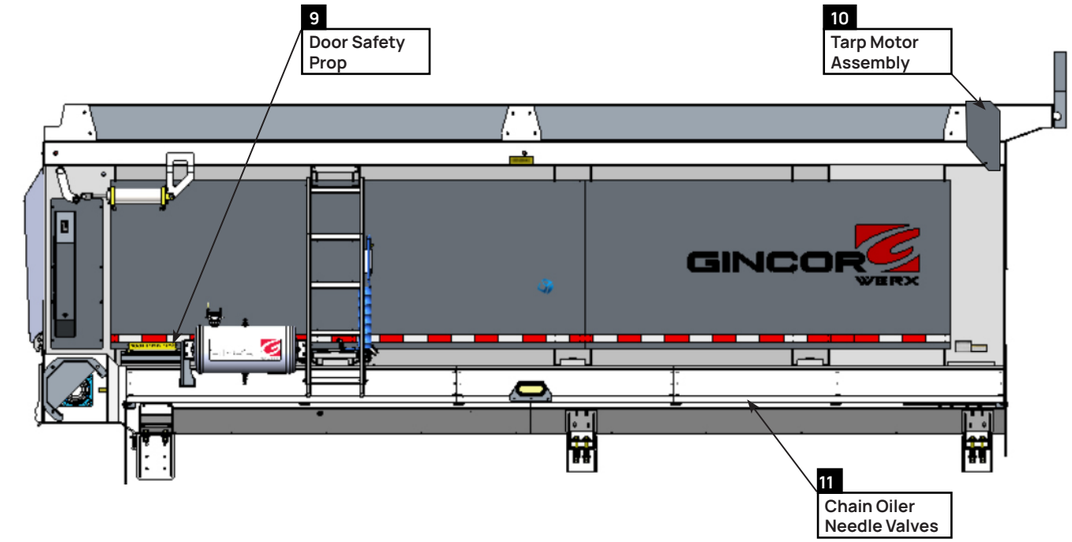


FLIP UP MUD FLAPS
Rear mounted mud flaps designed to flip up and are also easily removable.



SAFETY FLAG DOOR INDICATOR
24" Stud Mount Marker in fluorescent orange for better visibility.

FAMILIARIZATION



FAMILIARIZATION



DOOR SAFETY PROP
Tailgate Safety Prop.



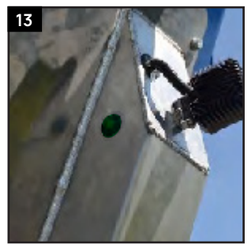
TARP MOTOR ASSEMBLY
Tarp motor assembly is chain driven and electrically operated by in cab rocker switch.



CHAIN OILER NEEDLE VALVES
The conveyor chain oiler control has adjustable needle valves and is plumbed into the hydraulic return lines with a shut off ball valve.



CROSS-BRACE
Cross-brace indicators identify the location of the horizontal cross-brace(s) that run across the top of the hopper.



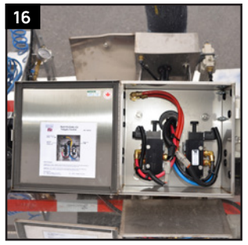
OPTIONAL TAILGATE INDICATOR LIGHT
Optional safety feature. Green penny light to indicate when the tailgate unlocks.



EMERGENCY MANUAL TARP CRANK
A manual tarp crank is available when the electric drive kit malfuctions.



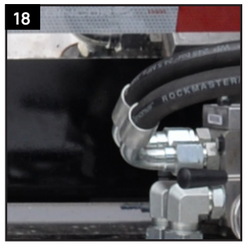
PNEUMATIC FILTER
Compressed air is treated with air prep components to extend component longevity and enhance efficiency. Simple adjustability and easy maintenance.



AIR CONTROL BOX
The Air Control box is customized to each trailer by specification. Controls for tailgate locks and air lift, electrical suspension dump, lift axle(s) controls, etc.

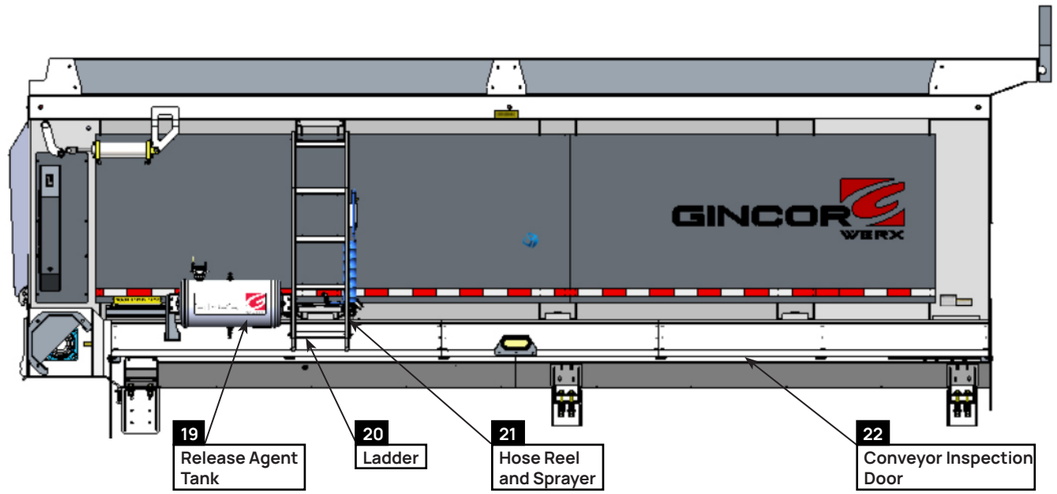


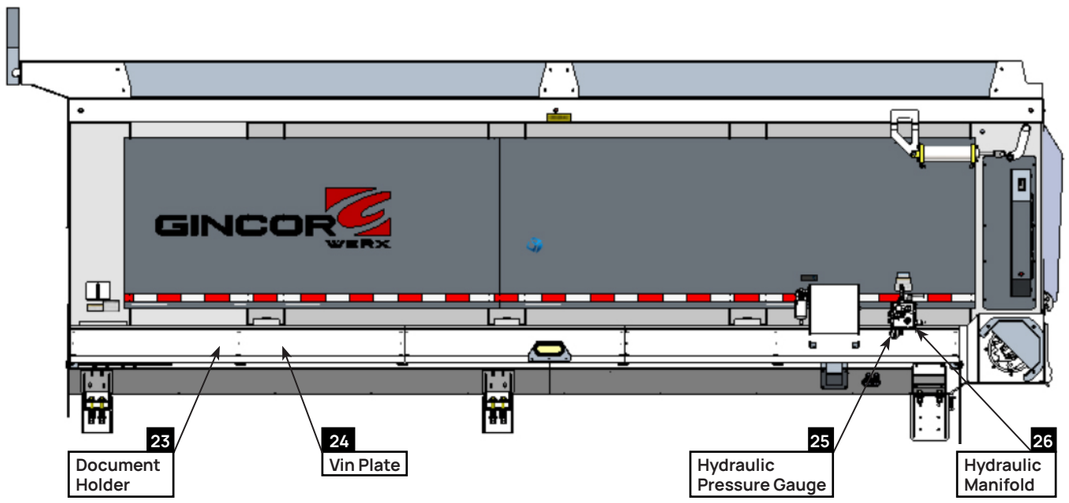
HYDRAULIC RETURN LINE
Hydraulic return line should always be connected first to avoid damage to the hydraulic components. Keep area clean, running upper along the hopper.



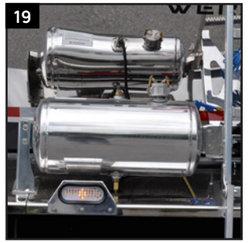
HYDRAULIC PRESSURE LINE
Hydraulic pressure/ supply line which must be threaded properly and fully otherwise, this could result in hydraulic system damage, running lower along the hopper.

FAMILIARIZATION





FAMILIARIZATION



OPTIONAL RELEASE AGENT TANK



OPTIONAL LADDER
Aluminum ladder for convenient load access, rated for 250 lbs (113 kg).



OPTIONAL RELEASE AGENT HOSE REEL AND SPRAYER
Release agent hose reel and sprayer for application of asphalt release agent(s).



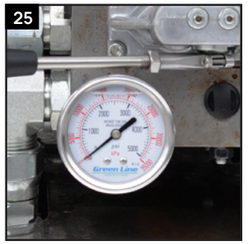
CONVEYOR INSPECTION DOOR
Convenient locations to visually inspect and/or access conveyor.



OPTIONAL DOCUMENT HOLDER
Twist lock enclosed document holder for safe keeping from the elements.



VIN PLATE
Manufacture generated plate identifying the VIN number, manufacture date and GVWR & GAWR ratings.



HYDRAULIC PRESSURE GAUGE



HYDRAULIC MANIFOLD WITH CONTROLS
Single piece aluminum machine block manifold with unload/off/reverse function. Needle valve flow control. Pressure relief valves for unload & reverse. *NOTE* Only reverse when loaded less than ¼ capacity and ensure load does not jam.

TRUCK REQUIREMENTS

WHAT TO CHECK FOR WHEN PROBLEMS OCCUR

The GINCOR Werx LBTM is equipped with a heavy-duty hydraulic system which operates the belt. Pressurized hydraulic oil supplied by the truck runs through the lines to a series of components that function together to operate the belt. If for some reason the hopper will not unload or becomes sluggish there are numerous reasons why.

- It is the responsibility of the driver to keep the truck pressure at or below 2500 psi (172 bar) as not to damage the units hydraulic system.
- All tractor PTO pumps should be equipped with a pressure relief set at 2500 psi (172 bar) and a filtration system.
- Forward relief valve on the LBTM manifold is pre-set at 2000 psi (137 bar) at the factory and should not require any setting
- Reverse relief valve on the LBTM manifold is pre-set at 600 psi (42 bar) at the factory and should not require any setting
- Adjusting the forward or reverse pressure relief valves
  outside of this range, for any reason, this may cause damage to belt and or chain and will void warranty.
- If, for any reason, contaminates enter hydraulic system this could cause sluggish performance and possibly belt stopping during unloading.
- If filter on truck becomes clogged the LBTM will not unload properly.
- In the colder seasons the hydraulic fluid may become
  too thick and slow the system. Higher altitudes would have the reverse effect.
- If belt stops or makes any odd or loud noises stop unit and check for possible chain issues.

TROUBLESHOOTING

Pressure at gauge when pump is not running
- Connections at front of hopper not hooked up properly, relieve pressure and check hook-ups
- Blockage in hydraulic lines, check for hose kinking

Low pressure at gauge when pump is engaged, and manifold is in neutral
- Possible problem with tractor pump
- Supply line on front of hopper is hooked up improperly
- Low oil level in tractor tank
- Contamination in oil or filter is clogged

MINIMUM SPECIFICATIONS FOR HYDRAULICS
Max Flow: 20 gpm (75 l/min) maximum
Maximum Pressure: 2500 psi (172 bar) maximum
Tank Volume: 35 gal (132 L) minimum

RECOMMENDED:
Dual head hydraulic filter, canister type c/w 10-micron filter. Use suitable oil suggested by manufacturer.

LIVE BOTTOM TRUCK MOUNT INTRODUCTION

GINCOR Werx LBTM General Description Of Operation

GINCOR Werx LBTMs are designed to unload material in a horizontal position. They are a much safer alternative to conventional dumping hoppers. They can be unloaded in a structure, under a bridge, on soft ground or uneven terrain without the risk of hitting overhead obstructions and the possibility of roll-overs.

The horizontal unloading is achieved by utilizing a hydraulically powered conveyor in the bottom of the body that will primarily run front to back to unload the material at the rear of the hopper.

GINCOR's Live Bottom has a forward and reverse function manifold, which controls the direction of the belt. We have also incorporated a roller chain which allows the chain to be run in reverse with less chance of binding as compared to a pintle chain.

CAUTION

The hopper must not contain more than 1/4 of the maximum volumetric or weight load capacity when reversing belt direction. Ensure the load does not jam or build up at the front wall.

Power to the system is achieved via hydraulic pump mounted on the tractor through the power take-off (PTO). This hydraulic power is achieved by attaching the hydraulic circuit on the truck to the hopper via quick couplers mounted on a connection plate at the front of the hopper or hard piping.

The speed at which the belt unloads is primarily controlled via the tractor engine RPM. If the rate of discharge is too quick at idle, hopper is equipped with a flow control manifold which is located on the left side of the hopper at the rear.

What Materials Can Be Loaded / Transported

Our unit can transport a vast variety of materials and thus it is easier to list some the limitations to the hopper. These are general guidelines and if you are unsure whether your application is recommended please reach out to one of our product specialists.

Special Care

Salt Application: Our units can be used to haul salt, however due to the high level of corrosion created by salt special maintenance is required.

Materials That Should Not Be Transported

Liquid amaterials: While the unit has seals in the hopper and around the tailgate that help materials not get into the conveyor system or fall out of the rear of the hopper. They are not liquid tight

Sharp Materials: ie: Scrap steel, demolition material should be limited as they have sharp pieces that can damage the rubber belting.

Large Material: Material that is larger than 6" can damage the conveyor system. It is recommended that when material larger than 2 ½" is being loaded, layer the bottom of the hopper with a smaller material on the bottom to help take the impact of the large material as it will extended belt life. Please refer to loading the hopper section of the manual.

Extremely Hot Materials: As a standard we build our hoppers with a hot tar and asphalt belt. The operating limits of our standard asphalt belting has a cold temperature -15F ~-24c and a warm temperature of 350F ~ 174C. Operating outside the prescribed limits can tear and damage rubber belt. Should your application fall outside of these operating limits please reach out to our product specialists as we have other options for belting for special applications.

Snow: Snow has a tendency to bridge when unloading the hopper and thus it is not a recommended application

Fine Powdered Material: Fine powdered material which may be very dense in weight has potential to leak through the 80% water seal spec. of the hopper – **Materials of this nature are not recommended**

NOTE: Loading materials listed above may void warranty and cause premature failure of equipment.

DANGER

NEVER ENTER A LOADED HOPPER AS MATERIAL COULD SHIFT CAUSING THE OPERATOR TO GET ENTRAPPED. SERIOUS INJURY OR DEATH CAN OCCUR.

PROPER LOADING

PRIOR TO LOADING THE UNIT ALL SAFETY PROTOCOLS MUST BE OBSERVED

Loading The Unit With Material

When loading the unit is recommended to slowly drop the material into the body wall to slide down and fill the bottom at first rather than briskly dumping material onto the conveyor to lessen the impact.

When loading the unit, stay clear of the tarp components including the tarp shelf, motor, pulleys, and tarp itself. They are not designed to withstand material loading or contact with the loader.

Avoid dropping loads directly onto the conveyor. Slowly load the material on the wall and let it slide down onto the conveyor to lessen the impact. Especially when loading materials larger than 2-1/2", it is recommended to line the bottom of the hopper with small processed material or sand to soften the impact on the conveyor system.

Special care is required when loading material larger than 2-1/2". It is recommended to line the bottom of the hopper with small processed material in order to soften the impact on the conveyor system.

The load should be distributed as evenly as possible throughout the hopper. See figure below:

In order to maximize payload, it is important to understand your local weight laws and understand the proper AGVW (Allowable Gross Vehicle Weight) for your operating jurisdiction. Also, confirm your GVWR (Gross Vehicle Weight Rating) and GAWR (Gross Axle Weight Rating) in your truck specifications, and the actual weight distribution of your truck/live bottom combination in deciding payload.

WARNING

LOADING HOPPER PAST THE GVWR/GAWR LIMITS CAN RESULT IN DAMAGED EQUIPMENT, AND COULD ALSO RESULT IN CATASTROPHIC PRODUCT FAILURE



CORRECT EVENLY DISTRIBUTED LOAD



INCORRECT LOADING FRONT HEAVY

LOADING FRONT HEAVY MAY BE ADVISED DEPENDING ON TYPE OF LOAD AND LOCAL JURISDICTION



INCORRECT LOADING REAR HEAVY

CONTROLS & EQUIPMENT

The unit contains controls and valves used to operate different systems and components. Understanding the information on the hydraulic and air systems is crucial to the individual operating the hopper. It is important to know the location of each of the controls as well as how they are used.

This section of the manual will give an in depth understanding on where the functions of the live bottom can be found and operated as well as their basic operation.

Our live bottoms come with standard wiring that can be connected to the truck to operate the lights, tailgate etc. via switches located in the cab. Your truck may or may not be equipped with switches to operate these functions and this section will explain the manual operation the various functions

Hydraulic Controls

The GINCOR Werx LBTM is equipped with a hydraulic system which operates the belt. Pressurized hydraulic oil supplied by the truck runs through the lines to a series of components that function together to operate the belt. Every GINCOR Werx LBTM is equipped with one of the following controls that allow the hydraulic oil to pass through the components activating the belt.

1. Directional Valve

GINCOR Werx LBTMs are equipped with a directional valve mounted on the left side of the hopper. (See figure A) It has three positions which move the belt. Unload, Reverse and Off.

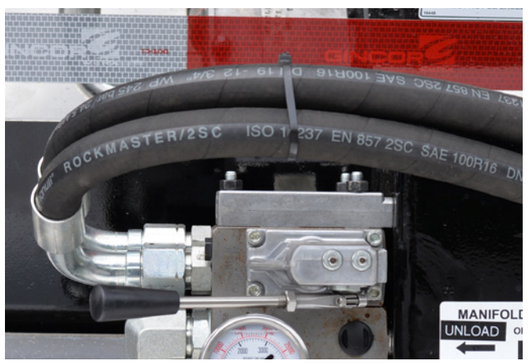


Figure A: Manual Directional Valve

To empty the load, the directional valve must be pushed toward the back of the hopper.

To reverse the belt, push the lever towards the front of the hopper.

CAUTION

The hopper must not contain more than 1/4 of the maximum volumetric or weight load capacity when reversing. Ensure the load does not jam or build up at the front wall.

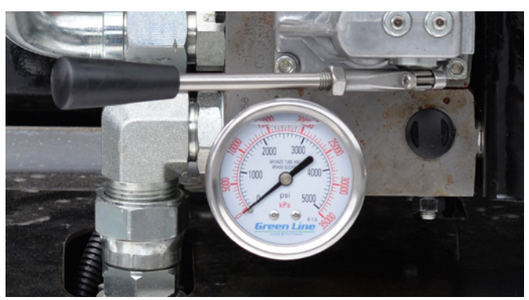
The center position on the directional valve will turn the belt off.

It is important to turn the belt off while transporting the load or servicing and maintaining the hopper.

2. Pressure Gauge

A pressure gauge is mounted on the manifold (see figure B) to indicate the pressure of the oil flowing through the lines as the belt is running.

The pressure needle will show a high psi as the belt initially starts to run. As the load empties, the needle will continuously drop showing a lower psi.



It is the responsibility of the operator to keep the pressure below 2500 psi (172 bar). Exceeding 2500 psi (172 bar) may cause damage to the hydraulic system. To change the settings, please refer to the forward and reverse relief valve instructions.

3. Relief Valves

Your hopper is equipped with a forward and reverse relief valve mounted on the manifold. The relief valves are a security feature which prevent the hydraulic system from being overloaded. Not all hoppers are equipped with a reverse relief valve. Never exceed 2500 psi (172 bar) while running the hydraulic system.

NOTE: It is Recommended that the truck PTO pump be equipped with a relief set to 2500 psi (172 bar) as an additional failsafe.

Forward Relief Valve
The forward relief valve is located on the rear of the manifold (See Figure D)

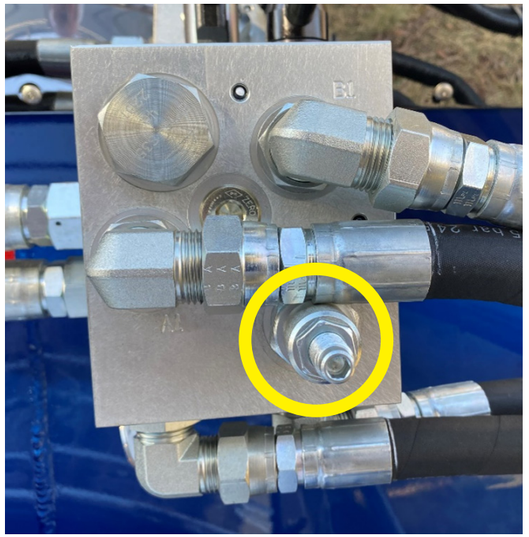


Figure D: Forward Relief Valve

The valve should always remain set at 2000 psi (137 bar). If the settings are incorrect, it is the resposibility of the owner/operator to ensure the belt drive is not pressurized above 2000 psi (137 bar). Use a 3/4" wrench to loosen the jam nut. Insert a 1/4" hex key and turn clockwise to increase, counter-clockwise to decrease. One full turn is approximately 500 psi (34 bar).

Reverse Relief Valve

The reverse relief valve is located on the side of the manifold (See figure C)

The valve should always remain set at 600 psi (137 bar). It is the responsibility of the owner/operator to ensure the belt does not reverse above 600 psi (137 bar). Running the reverse at more than 600 psi (137 bar) will void all warranty and cause severe damage to the Drive System. If the settings are incorrect, adjust in the same manner as the forward relief valve.

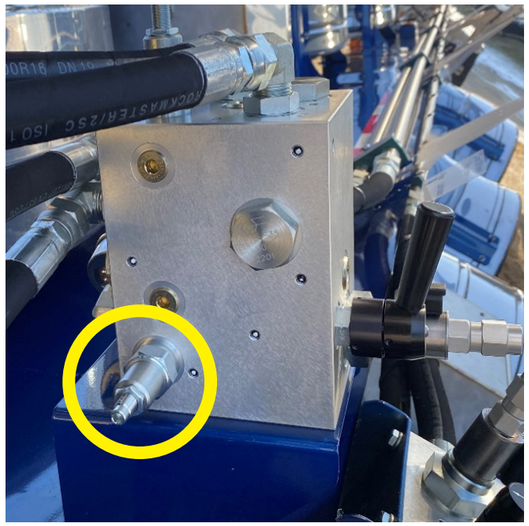


Figure C: Reverse Relief Valve

The hydraulic fluid in your hoppers system can reach 2500 psi (172 bar). ALWAYS wear safety glasses, gloves and your other personal protection equipment when in proximity of pressurized hydraulic hoses and systems. If you suspect a leak or have exceeded the stated maximum pressure, turn the system off and wait for the pressure to return to a safe level.

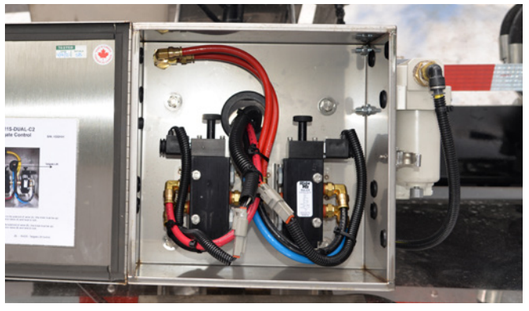
Air System Moisture Control, Filtration

The air system is made up of a series of components that work together to control the brakes, lift axle, gate, and air ride suspension. A switch is located inside the tractor which allows pressurized air to be supplied by the air compressor on the tractor to be stored in air tanks mounted on the hopper. The air tanks release the pressurized air
through hoses and air lines at the pressure and speed required by the commanding component.

The air control box is mounted on the Left side of the hopper. (See Figure E)



Figure E: Control Box



The control box contains valves to operate the gate lock, and gate lift.

The inside of the door on the control box will have a diagram with where to find which function on your particular hopper. (See Figure F)



Figure F: Control Box diagram

Air Filter

The filter is used to remove moisture and contaminants from the air running through the lines. The pressurized air used by the gate cylinders should be dry to prevent wearing the seals or freezing in cold weather.

When moisture is filtered out of the air lines it is stored in the bottom portion of the filter. The filter is equipped with components to store and release excess moisture, and should be checked daily. To remove moisture, open the valve on the bottom of the filter. Turn the main valve 90 Degees until you hear air pressure. When air release is free of moisture turn valve back 90 degrees to close.

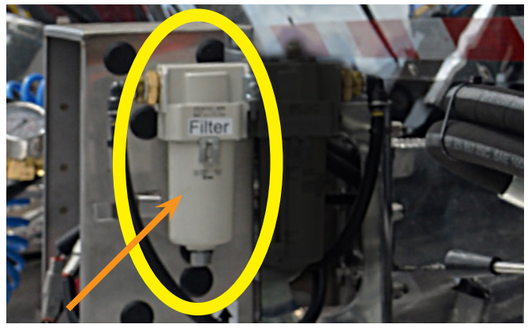


Figure I: Air Filter

CONTROLS & EQUIPMENT

Lubricator

With improvements to cylinder technology, the lubricator is optional and currently only provided as a maintenance point in case the cylinders stick due to extreme environments. It can remain off during normal function and can be used sparingly during maintenance routines as necessary.

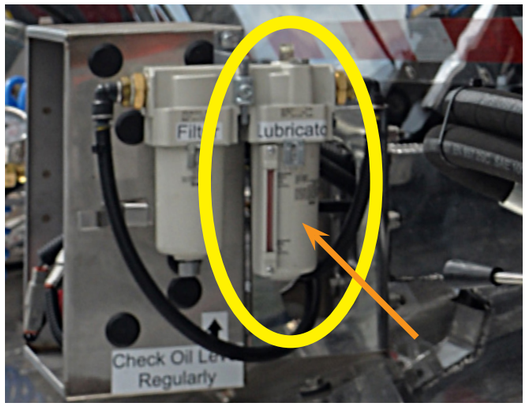


Figure II: Lubricator

Turning the oil adjustment valve counterclockwise increases the dripping amount, and turning it clockwise reduces the dripping amount. From the fully closed position, three rotations will bring it to the fully open position. Please do not rotate it any further than this. The numbered scale markings are guidelines for adjusting the position, and not indicators of the dripping amount.

Check oil levels prior to the maintenance routine. If the lubricator needs refilling, evacuate the hopper air supply by opening the drain valve on the filter. When there is no air present, it is safe to unscrew the bottom of the lubricator and add oil as necessary. To release and dispose of excess oil, open the valve located on the bottom of the lubricator by turning the valve 90 degrees. For oil specifications, please refer to the “Service and Maintenance” section.

END GATE LIFT & LOCK

End Gate Lift

The end gate is located at the rear of the unit. It can be lowered for transporting or lifted or floating (if equipped) for unloading. This function is achieved via two double acting air cylinders on the side of the hopper.



It is built with bolted on rubber sections that create a tight seal between the belt and the gate, as well as the hopper walls. The gate is controlled via the pneumatic control box.

To Lift The Gate

In the control box, depress the lift gate valve knob and make a ¼ turn so that the knob stays in the depressed position. This will send air to the cylinders opening the gate.

Floating gate (If Equipped)

Your hopper may be equipped with a floating tailgate option. This will allow the gate to be unlocked and to remove the positive pressure keeping the tailgate lowered. The gate will open as the material pushes it open via the conveyor.

To activate the floating option locate the ball valve at the rear of the hopper next to the light bars.



Figure 1:
Valve in activated position.



Figure 2:
Valve in deactivated position.

To Lower the gate

In the control box, turn the lift gate knob 1/4 turn so that the knob pops out and remains out. The gate will lower.

End Gate Lock

The gate lock system ensures there is no possibility that the gate will open under pressure of the load while loading or transporting. (See figure G)



Figure G: End Gate lock

The gate lock arms are controlled from inside the control box mounted on the frame of the hopper.

The gate lock is actuated by an air cylinder. The cylinder is located within the rear post in order to keep them safe from weather elements and prevent damage from loaders etc. SEE FIGURES 1 and 2

To Open The Gate Lock:

Depress the tailgate lock valve knob and make a ¼ turn so that the knob stays in the depressed position.

To Close The Gate Lock:

In the control box, turn the gate lock valve knob 1/4 turn so the knob pops out and remains out.

END GATE SAFETY PROP

Proper Operation Of The Tailgate Safety Prop

It is important when working on the unit or going into the unit from the rear, with the gate open to use the safety door prop. The gate prop is located on the passenger side of the hopper at the rear above the fender. It is clearly marked.

DANGER

DO NOT WALK UNDER A DOOR THAT IS OPEN WITHOUT THE SAFETY PROP ENGAGED, SERIOUS INJURY OR DEATH CAN OCCUR.

Tailgate Prop Installation

TOOLS REQUIRED: LADDER

Step 1: Make sure the unit is secure, and on level ground.

Step 2: Setup ladder on the side of the hopper close to the rear where you can easily reach the tailgate cylinder. It is important that you are on firm level ground.

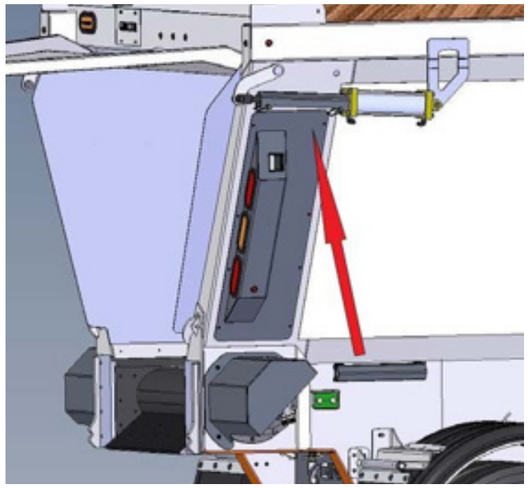
Step 3: Remove tailgate safety prop from the storage position and remove the linch pins from both ends of the prop



Step 4: Unlock the tailgate from the control box Open tailgate from the control box

Step 5: Open the tailgate

Step 6: Climb ladder and insert the safety prop over the cylinder ram place the linch pins back in both ends of the prop. The linch pins will hold the prop onto the cylinder and not allow it to fall off.



Tailgate Prop Removal

Step 1: Setup ladder on the side of the unit close to the rear where you can easily reach the tailgate cylinder. It is important that you are on firm level ground.

Step 2: Climb ladder and remove the linch pins from both ends of the prop. Once completed remove the safety prop from the cylinder ram.

Step 3. Climb down ladder, reengage linch pins into both end of the safety prop and return its storage location

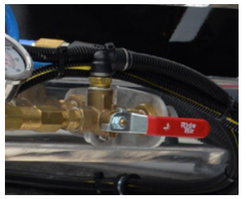
RELEASE AGENT SYSTEM

Release Agent System

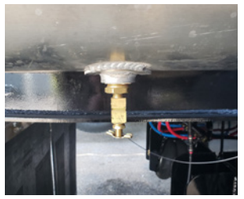
Your GINCOR Werx LBTM may be equipped with a release agent system used to spray the inside walls of the cargo area prior to loading your hopper with asphalt. (See Figure K)



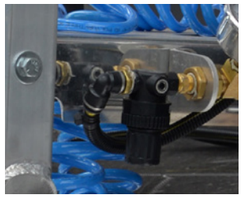
Figure K: Release Agent Tank



Ball Valve



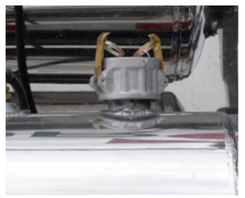
Tank Drain



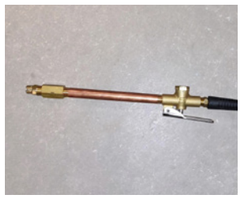
Regulator



Pressure Guage



Filler Cap



Sprayer Gun

Always wear your personal protection gear when working with or around this system. SAFETY GLASSES are an absolute must!

Operating Instructions / Relieve Tank Pressure

Step 1: Shut of ball valve to reservoir. Ball valve handle should be positioned vertically.

Step 2: Confirm there is no pressure in tank by opening bottom tank drain and letting drain completely. Once tank is empty close bottom drain valve. It is now safe to open the top plug and add the release agent.

WARNING

SERIOUS INJURY CAN OCCUR IF TANK FILL CAP IS OPENED WHEN TANK IS UNDER PRESSURE. – USE CAUTION AND FOLLOW OPERATING INSTRUCTIONS

Fill Tank

Step 3: Open filler cap and fill no more than 3/4 of tank.

DANGER

SERIOUS INJURY OR DEATH CAN OCCUR IF COMBUSTIBLES ARE PUT INTO THE TANK

Step 4: Close filler cap securely

Pressurize

Step 5: Pull out regulator knob, to increase pressure turn the knob clockwise, turn counter-clockwise to decrease pressure.

Step 6: Set pressure at 10 psi (0.68 bar) & listen for leaks.

Step 7: Slowly open the ball valve and let the tank pressurize, turn the handle so the lever is parallel with the air line, again listening for leaks.

Step 8: When you have confirmed there is no leaks you may adjust the pressure to your desired spray force. **(If a leak is detected have system repaired prior to operations)**

CAUTION

DO NOT EXCEED 100 psi (6 bar)

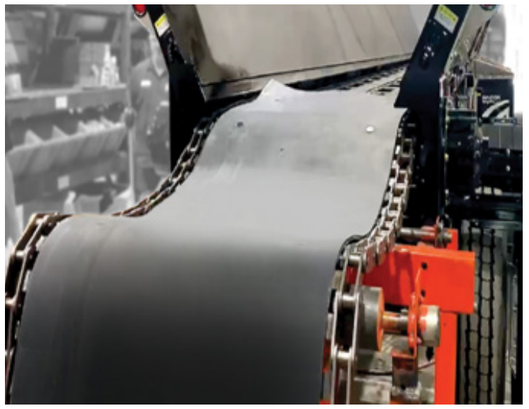
DANGER

KEEP SPRAY NOZZLE AWAY FROM EYES AND BODY PARTS. SERIOUS INJURY CAN OCCUR.

LIVE BOTTOM DRIVE SYSTEM

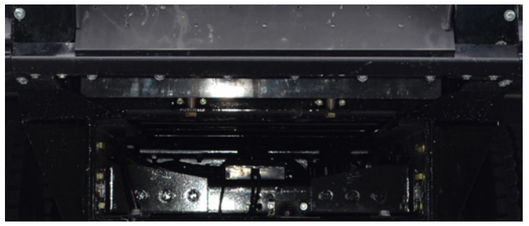
Belting

Our belting is typically a 36" (91.44 cm) wide 2-ply belting with 220PIW or greater. Our Hot Tar and Asphalt option is specified to excellent resistance to oil and heat up to 300° F (150°C) temperatures depending on the load, and as low temperature -55° C for some applications. Recommended for conveying hot mixtures containing diesel oil as well as kerosene, petroleum coke, hot asphalt, paving mixes, and carbon pitch. Our Aggregate option is recommended for aboveground abrasive materials at ambient temperatures. Recommended for crushed ores and rock, slag, limestone, salt, sand, aggregate, and other abrasives smaller than 6" (15 cm) diameter. To determine your hopper's belting characteristics, please check your hopper specification and maintenance records.



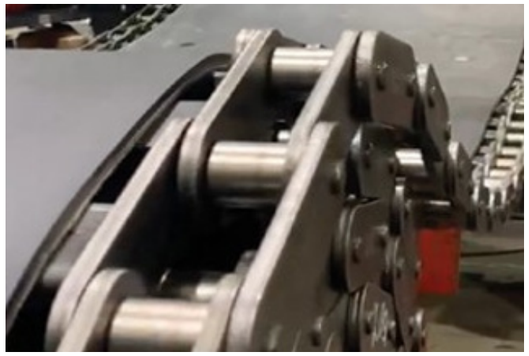
Belt Scraper

A spring-loaded belt scraper located under the hopper removes excess material from the belt surface.



4" Double Pitch Roller Chain

Our 4" (C2160H) double pitch roller chain rolls on and straddles a track. This design requires less force



to move the chain and allows reversing the belt as a standard feature. 1"x2" cross-tubes with.125" wall thickness are welded in every two chain links to increase strength as well as overall chain support and stability. Reinforcing tabs are also welded in every other chain link to ensure proper belt support to side seal and limit load leakage.

Shedder

A rubber-edged, abrasion-resistant steel-topped optional shedder plate guides tacky material off the belt, away from the hopper.



BELT CHAIN OILER SYSTEM

Belt Chain Oiler

Your GINCOR Werx LBTM is equipped with a belt chain oiling system.

2023 onward hoppers utilize a dual brush system.

This system places an oiler brush along each side of the chain link of the belt drive system ensuring full oil coverage.



These brushes use oil from the drive system return line to provide lubrication to the chain of the belt system.Oiler brushes are located at every chain inspection door and should be inspected daily. The bristles should be skimming the top of the chain. Over the course of time the height of the brush may need to beadjusted due to wear of the bristles. The brush height can be raised or lowered moving the slotted mounting brackets

Note: A gap between the top of the chain and the bottom of the brush can also be an indicator of excessive slack in the belt. To correct this, please refer to the "Belt Tensioning" section of this manual for tightening procedures.

Note: Keeping your chain lubricated may be the most cost saving maintenance you can do on your Live Bottom Truck Mount. A dry chain will lead to costly repairs. Inspect the chain daily to verify lubrication. If your hopper will be sitting for an extended period of time, apply additional lubrication to chain before and after.

The oil rate of flow is determined by the adjustment knob located in the inspection door above the brushes. (see Figure X)

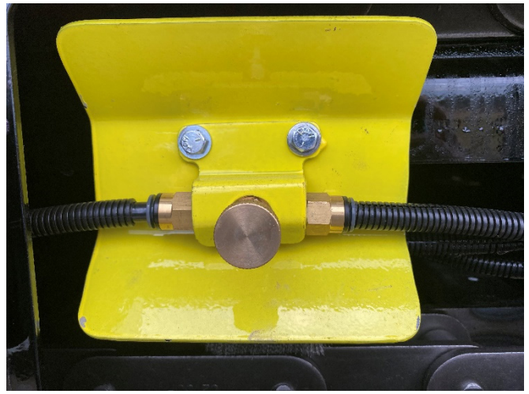


Figure X: Chain Oiler Adjustment Knob

Turning the knob clockwise will reduce flow of oil while turning it counterclockwise will increase flow.

A shut off valve is located on the drivers side at the front of the hopper in the event you need to turn the oiler system off temporarily. **The Oiler system must be functioning during operation of the live bottom drive system.**

BELT CHAIN OILER SYSTEM

Belt Chain Oiler – Previous Models

Depending on the vintage of your hopper it may be equipped with a single oiler brush system.

Some 2020 and all 2021-22 hoppers will have a single round or square oiler brush located along the chain inside each inspection hatch.



Figure Y: Single Chain Oiling Brush at inspection door

These brushes can be raised or lowered using the adjusting nuts on the threaded shaft or using the bracket.

Note: A gap between the top of the chain and the bottom of the brush can also be an indicator of excessive slack in the belt. To correct this, please refer to the “Belt Tensioning” section of this manual for tightening procedures.

Note: Keeping your chain lubricated may be the most cost saving maintenance you can do on your GINCOR Werx LBTM. A dry chain will lead to costly repairs. Inspect the chain daily to verify lubrication. If your hopper will be sitting for an extended period of time, apply additional lubrication to chain before and after.

2020 and older Model year hoppers single belt chain oiler brushes were located at the GINCOR Werx LBTM (See Figure YY).



Figure YY: Single Chain Oiling Brush front of hopper

2021 Model year and older GINCOR Werx LBTMs were also equipped with a sight glass which allows you to verify that oil is moving through out the brushes. The oil rate of flow is determined by the adjustment knob at the top of the needle valves. (see Figure X)



Figure X: Oiler Sight Glass, Adjustment and shut off valve

Turning the knob clockwise will reduce flow of oil while turning it counterclockwise will increase flow.

A shut off valve is located next to the adjustment knobs in the event you need to turn the oiler system off temporarily.

The Oiler system must be functioning during operation of the live bottom drive system.

BREAK IN

The break in period is crucial to your GINCOR Werx LBTM performance. If done correctly, it will ensure a longer life span and can prevent future problems and costly repairs. Check the unit for proper performance of all components and systems, adjust as required. It is important to inspect the unit frequently during the first 5000 miles (8000 km) as illustrated below. Note: This is only a guideline. The GINCOR Werx LBTM should be checked more frequently when operating in extreme or severe conditions.

Electrical and Air Lines

Visually inspect all electrical and air lines. Look for any that are pinched, kinked, cut or abraded, especially in more severe operating conditions. If the lines have become unfastened or are sagging away from the frame, secure using hose clips. All lines should be damage free and anchored securely. When components are damaged, do not operate before cleaning and repairing.

Planetary Gear

It is important to change the oil in the hydrostatic drive gear box after the first 50 hours of operation. The drain plug has a magnetized tip. It is common to have some metal filings in the oil during the first few hours of operation.



Chain System

The chain system is the heart of your live bottom hopper. The chain, sprockets and hydraulics are what drives the belt system to unload your GINCOR Werx LBTM. During first 20 hours of full operation chain can quicky stretch up to 0.1% of length due to wearing-in. Checking the belt tension and that the chain is being oiled is especially critical during the first few hours of operation.



SERVICE AND MAINTENANCE

The maintenance section of this owner's manual provides information on regular service and maintenance of your GINCOR Werx LBTM. Following these recommendations will ensure safe, dependable GINCOR Werx LBTM operation. Always put safety first and be sure all operators are familiar with proper maintenance and operating procedures. All inspections are in addition to your standard daily required inspections. A good maintenance program will find conditions early when they are easily and quickly corrected before they become major problems. Operating your GINCOR Werx LBTM in a defective condition, can lead to serious mechanical problems, create safety hazards for the driver, bystanders or other operators, as well as void warranty.

Maintenance Safety

- Ensure proper PPE is worn prior to any service or maintenance activities
- Before adjusting or servicing the hopper disconnect all power sources and ensure controls are placed in neutral and install gate safety prop
- Block wheels

Fluids and Lubricants

- Use an SAE multi-purpose lithium based grease on all hinges and pivot points.
- Use API-GL-5 for Planetary Gears (see manufacturer sheet)
- Use only new lubricants to operate your hopper. Lubricants should be stored in clean containers away from dust, moisture and other contaminants.

Greasing

- A hand held grease gun is recommended for greasing. Air powered greasing systems can lead to early failure by damaging grease seals.
- To avoid injecting dirt and grit, wipe the grease fitting with a clean cloth before greasing. Immediately repair or replace broken fittings.
- Remove and clean fittings if they do not take grease. Also clean lubricant passageway. If necessary, replace fitting.

SERVICE AND MAINTENANCE

Planetary Gears

Your unit is equipped with a double reduction planetary gear drive system each with Max. intermittent output torque of at least 100,000 lb-in. The oil in these planetary gears are crucial to the proper function and longevity of these units. Initially the oil in these units needs to be changed after the first 50 hours of use and should subsequently be changed annually.

Use extreme pressure lubricant API-GL-5 (see manufacturer sheet), when filling the Planetary under normal temperature ranges between 0° - 120°F (-18° to 49°C). Planetary is to be half full of oil when unit is mounted level and horizontal. Use drain and fill plugs located in cover and ring gear. Oil is to be changed after first 50 hours of operation with subsequent changes every 500 hours or yearly, whichever comes first. If ambient conditions are outside the specified range, or if the oil temperature exceeds 200°F (93°C) contact Planetary Manufacturer for oil and level recommendations.



SERVICE AND MAINTENANCE

Drive System Belt Chain Tension

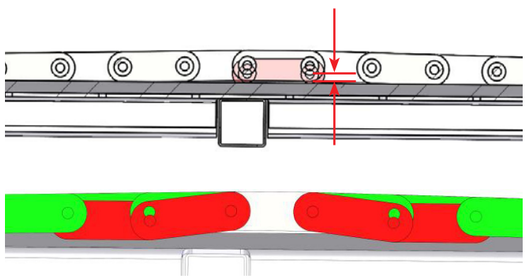
Maintaining your Chain & Belt Assembly will ensure GINCOR Werx LBTM performance and longevity. It is one of the most important maintenance activities you can do to ensure you maximize uptime and your return on investment.

The belt must be tightened regularly to prevent slack. We recommend checking this once a week. Without tension, the belt will not be properly sealed causing the load to be lost under the hopper. In addition, it could damage your drive system which will result in a costly and unnecessary repair. Unequal tension will cause the chain to climb up the sprockets, causing the belt to bind, or pull to one side where severe damage will occur.

You can check chain tension from the side inspection doors. Using a prybar, pry up on the bottom half of the conveyor chain. Test the belt tension by pushing up underneath the belt.



The belt should not lift off more than 1/2" off the track, if this occurs more tensioning is required. If the chain moves up and down visibly as one unit, then it is at the proper tension.





You can also verify each side of the hoppers chain is tensioned equally by measuring the distance from the pillow block to the front of the hopper. Both sides of the drive system must be tightened equally to ensure that the front shaft is running straight.





SERVICE AND MAINTENANCE

Drive System Belt Chain Tensioning

To tension the belt chain, use a 1 7/8" wrench. Loosen the tensioner lock nut and jam nut.

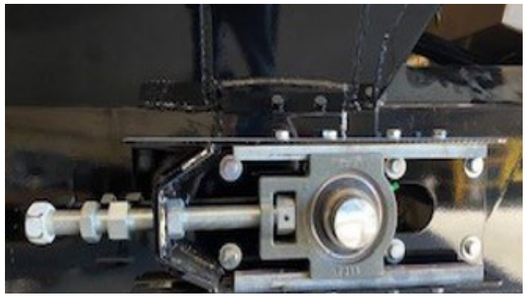


Figure Z: Belt Tensioner

Continuing with the 1 7/8" Wrench begin to screw the tensioning nut (at end of tensioner) and tighten to 250 lb-ft.



Figure AA: Tensioner Tightening Nuts

This will force the pillow block forward creating tension in the belt. Proceed to tighten the tension on the other side of the hopper to match the pillow block distance on the first side. Once completed, check both tensioners to ensure they are as tight as possible.

Tighten the second nut on either side to the tensioning nut to secure it in place. Now test the belt tension as noted above, again the belt should not lift off more than 1/2" off the track. If it does repeat the previous steps.

If the chain stretches by more than 1.5% of its original length (by measuring a large number of chain links and comparing actual measurement to expected measurement of original nominal pitch 4 inches (10 cm), it will not mesh with the sprocket properly. Consider replacement.

SERVICE AND MAINTENANCE

Servicing Intervals

A standard servicing schedule is provided as a guide for your convenience. In unusual or extreme operating conditions, increase the frequency or perform additional service items to customize this schedule to your application.

1. Servicing: Daily, 10 hours

a) Check truck hydraulic oil level.
b) Check for hydraulic leaks on hopper.
c) Check and inspect gate locks.
d) Check Oiler system is lubricating the belt

2. Weekly, 10 Days

a) Re-torque mounting bolts on push block.
b) Grease top and bottom points on each gate cylinder.
c) Grease two grease points located behind each gate latch cylinder
d) Inspect the Belt Tension
e) Grease Bearings
f) Inspect the belt for cracks /tears & wear
g) Visually inspect chain for wear, damage or broken parts or connections

3. Monthly

a) Pressure wash belt chain, re apply penetrating oil.

4. Quarterly or Every 3 Months

a) Inspect frame and structure for bends, distortions or cracks.
   • Compartment structure
   • Tarp
b) Inspect electrical system components for:
   • Binding
   • Rubbing/abrasion
   • Looseness/dangling
   • Cracks/tears in harness
   • Burned out lights
c) Check air system and components for:
   • Rubbing/abrasion
   • Cracked hoses
   • Perform leak-down test

5. Annually

a) Change oil in hubs.
b) Change planetary oil

TROUBLESHOOTING GUIDE

HYDRAULIC SYSTEM

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Belt will not run	PTO not engaged	Disengage and Reengage PTO
	Hydraulic hose not properly connected	Check to ensure hoses are properly connected
	Hydraulic fluid low	Top up hydraulic fluid with recommended fluid
	PTO pump clogged	Replace filter
	Hydraulic line kinked	Un-kink hose and replace as soon as possible
	Clogged Manifold Valve	Have qualified person inspect and change/clean faulty valve
Belt runs slowly	Oil viscosity too high for climate	Allow oil to warm up before operating, check viscosity matches climate
	Air in system	Check for leaks on the suction side
	Low pump speed	Increase engine speed
	Badly worn pump	Repair or replace
	Improper adjustment	Adjust as per manual
	Oil leaks	Tighten fitting and replace seals and lines
Belt runs erratically	Air in system	Check suction side for leaks
	Cold oil	Allow for oil to warm up before running belt
	Dirty or damaged components	Clean and or repair
	Restrictions in filters	Replace elements
Belt runs too fast	Flow control valve improperly adjusted	Adjust valve to suite required speed
Oil overheating	Excessive oil flowing through relief	Return PTO to neutral when not in use
	Incorrect oil	Use recommended oil
	Low oil	Top up reservoir with proper oil
	Dirty oil	Replace filter elements
	Engine RPS too high	Reduce engine speed
	Reservoir too small	Should be 1 ½ times GPM

TROUBLESHOOTING GUIDE

ELECTRICAL SYSTEM — Lighting and Accessories

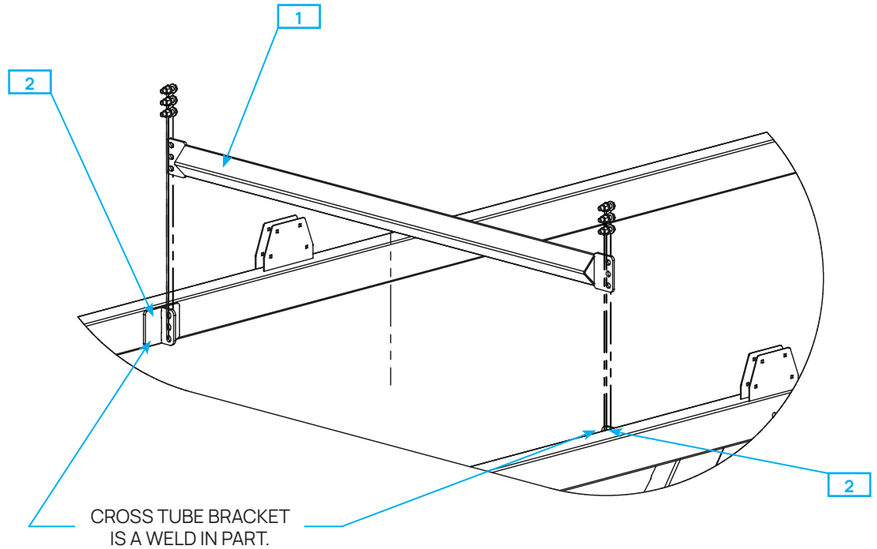
PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
No lights work	No power to 7-way plugs from truck	Check fuses/relays are not blown or tripped
	Improper ground	Check and clean ground
	7-Way connector in poor condition	Clean or replace connector
	Loose connection in junction box	Located behind drivers side light bar, open and inspect for loose or corroded connections
Single Light not working	Corrosion in light fixture	Clean fixture and use dielectric grease
	Light bulb blown	Check bulb with tester and replace with proper bulb
Lights flickering	Poor connections	Check light connections and clean
	Ground problem	Check plug for corrosion
	Corrosion in plug Break in wire	Clean plug Trace wire and replace bad wire

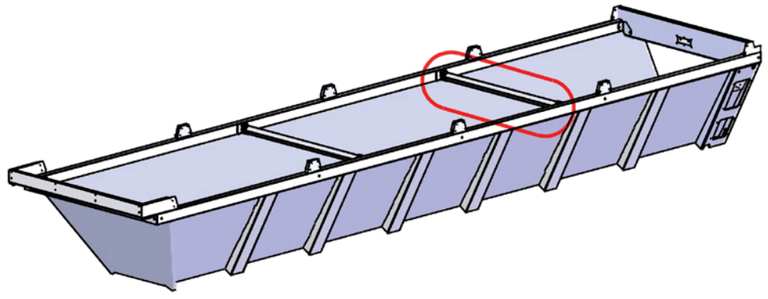
TROUBLESHOOTING GUIDE

AIR LOCK AND LIFT — Rear Gate and Gate Lock

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Gate lock will not operate	Air Leak	Find leak and repair
	Loss of power to valve in control box	Test connections with a test light for power, if no power find break in wire and repair.
Gate lock operates slowly	Air leak	Listen for leak/find and repair
	Air line has become kinked	Look for visible kink and replace line.
	Mechanism binding	Clean and lubricate linkage
	Cylinder damage	See Higginson repair instructions. Check the surface of the cylinder rod, cylinder tube, and the rod seal for damage or rust. If it is extensive, replace the entire cylinder.
Gate will not open/close	Air leak in system	Find and repair
	Loss of power to valve in control box	Test connections with a test light for power, if no power find break in wire and repair
Gate opens or closes slowly	Air leak	Find leak with soap and water and repair
	Gate hinge binding	Clean and lubricate gate hinge
	Air line kinked	Look for kink in air line and replace line
	Cylinder damage	See Higginson repair instructions. Check the surface of the cylinder rod, cylinder tube, and the rod seal for damage or rust. If it is extensive, replace the entire cylinder.

BODY CROSS TUBE ASSEMBLY

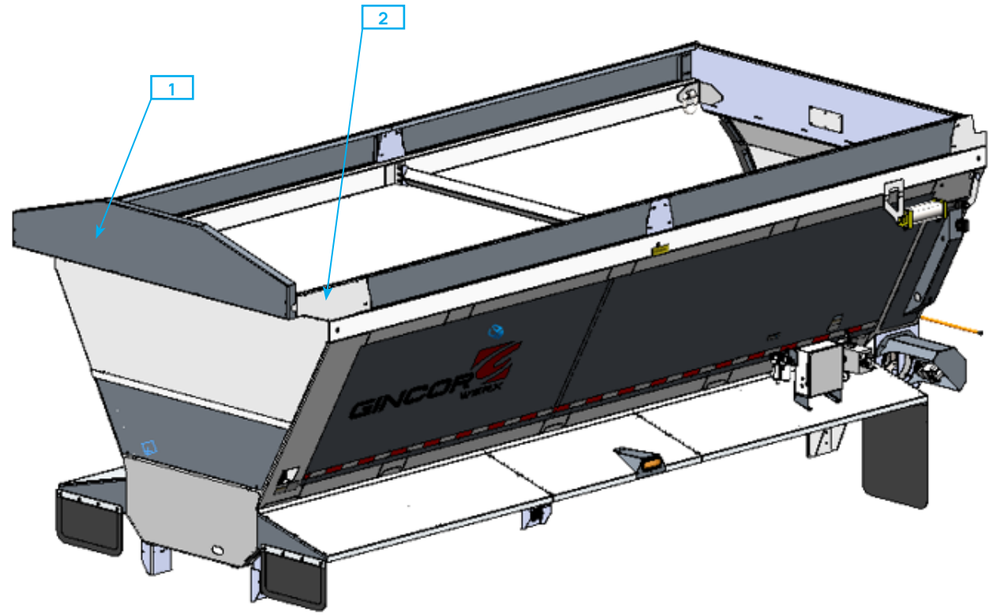




ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	405327	Wall Stiffener	1
2	405326	Cross Tube Bracket	2

FASTENERS		
PART NUMBER	DESCRIPTION	QTY.
14091	5/8"-11x2" BOLT	6
14081	5/8"-11 LOCK NUT	6
14080	5/8" FLAT WASHER	12

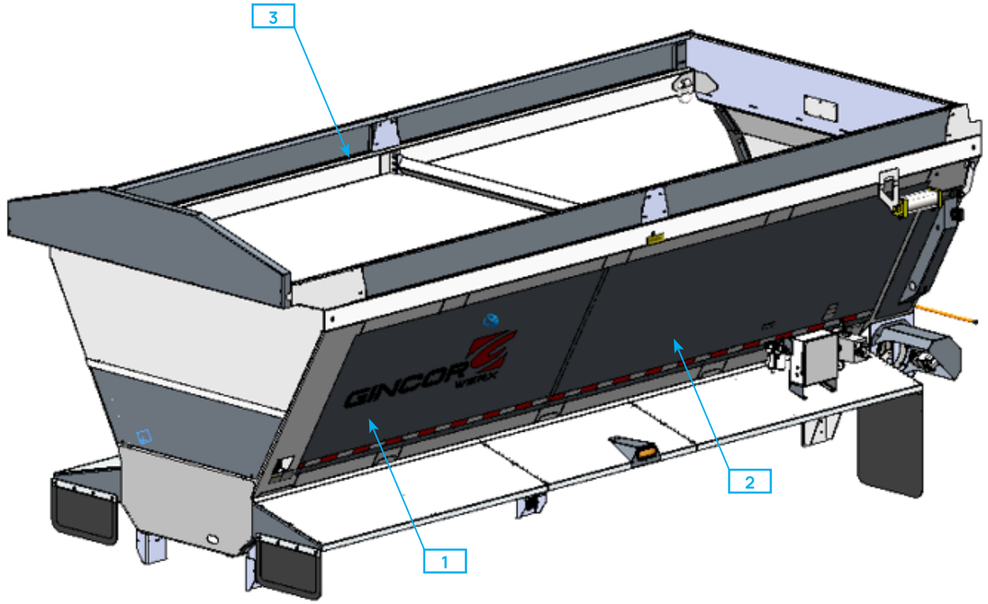
FRONT TARP SHIELD



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	206179-03	Tarp Shield	1
2	404016	Tarp Motor Bracket	1

TARP SYSTEM FASTENERS		
PART NUMBER	DESCRIPTION	QTY.
14051	3/8" Flat Washer	22
14068	3/8"-16 Lock Nut	10
14056	3/8"-16x1.000 Bolt	12
14052	3/8" Lock Washer	2

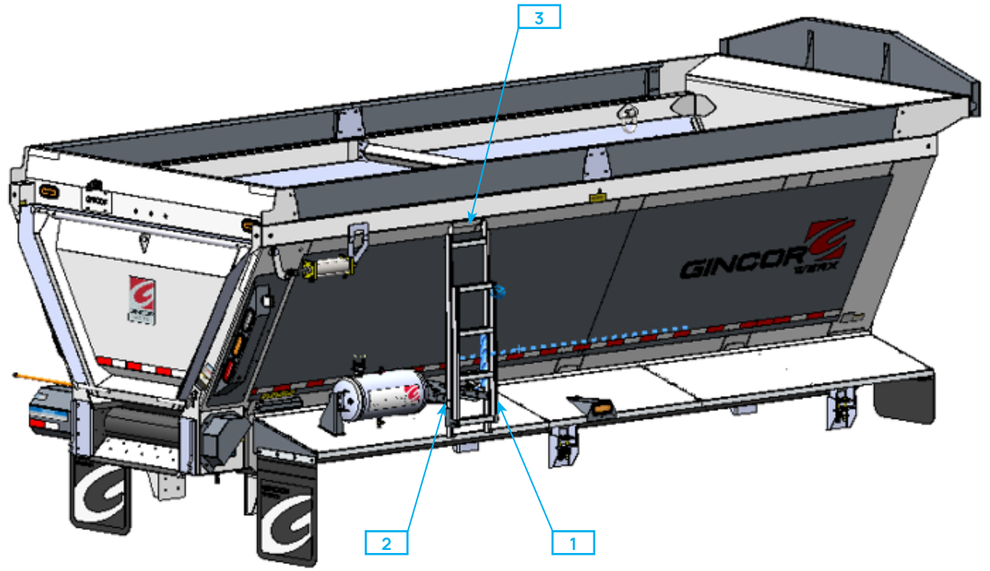
SIDE WALL SHEETING



ITEM NO.	PART NUMBER	DESCRIPTION
1	10361	ALUM. WALL SHEET
2	10751	S.S. WALL SHEET
3	19076	INSULATION

Quantites are per 120" side wall sheet.

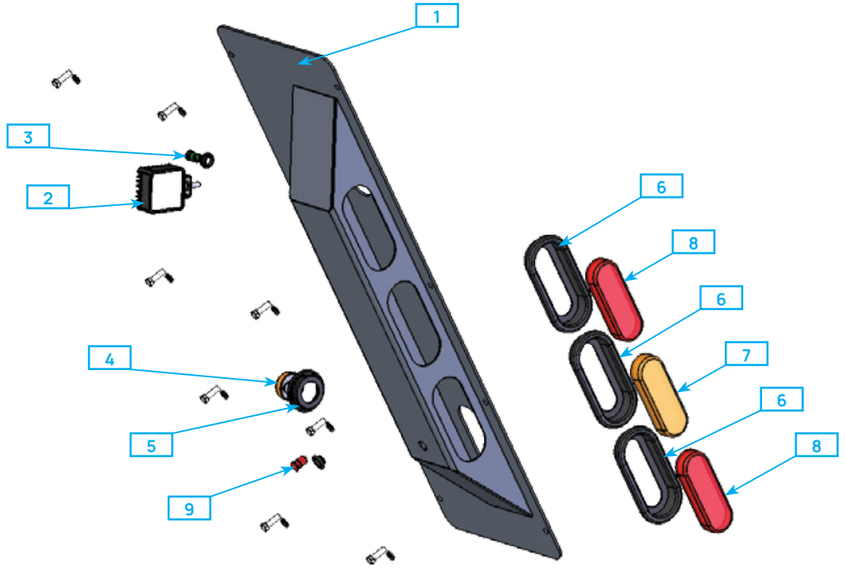
FOLD IN LADDER

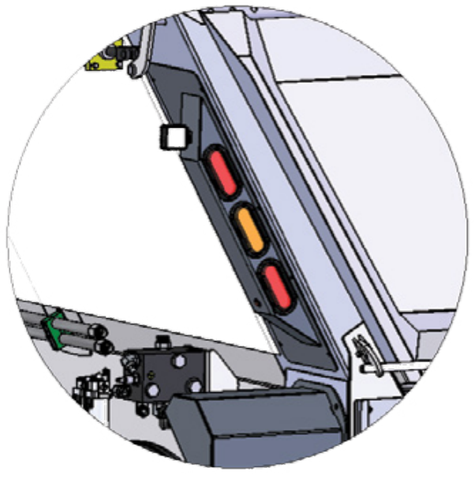


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	406338	Flip Up Ladder	1
2	306570	Ladder Mount	1
3	308194	Ladder Bracket	1

LADDER SYSTEM FASTENERS		
PART NUMBER	DESCRIPTION	QTY.
14058	3/8"-16x2" Gr. 5 Bolt	2
14056	3/8"-16x1.000 Gr. 5 Bolt	4
14054	3/8"-16x1.500 Gr. 5 Bolt	2
14068	3/8"-16 Gr. 5 Lock Nut	4
14051	3/8" Flat Washer	8
14052	3/8" Lock Washer	4
14302	1/4"-20 Threaded Stud Bumper	2

DRIVER SIDE LIGHT BAR

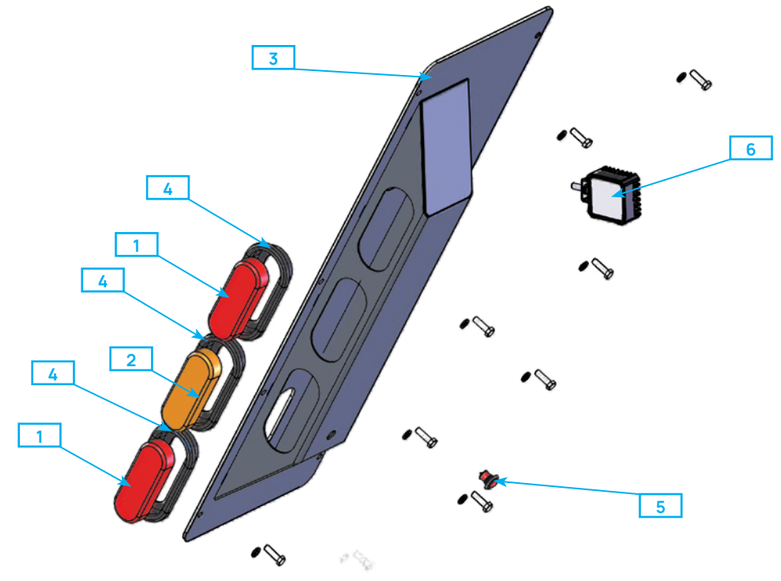


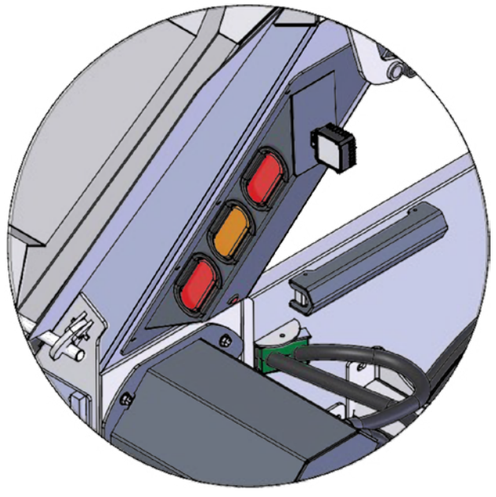


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	405480 L	Rear Light Bar	1
2	12204	LED Work Light	1
3	12112	Gate Lock Light	1
4	12103	ABS Light	1
5	12063	Round Open Back	1
6	12059	Oval Open Back	3
7	12056	Amber Oval Light	1
8	12055	Red Oval Light	2
9	12028	Red Penny Light	1

FASTENERS		
PART NUMBER	DESCRIPTION	QTY.
14133	3/8"-16X1.250 GR5 BOLT	8
14051	3/8" FLAT WASHER	8

PASSENGER SIDE LIGHT BAR

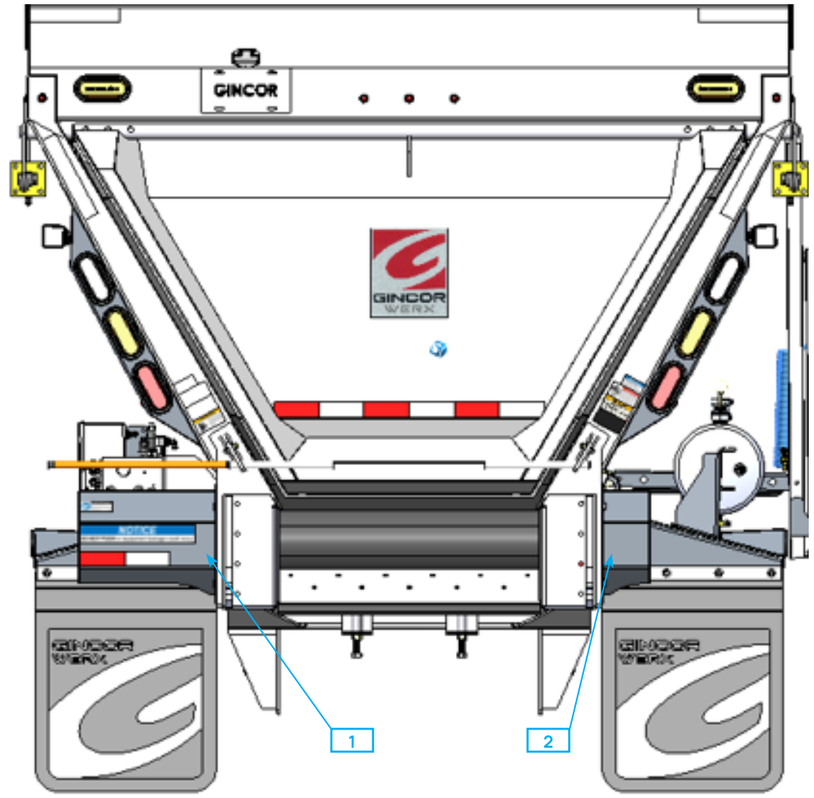




ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	12055	Red Oval Light	2
2	12056	Amber Oval Light	1
3	405480R	Light Bar Panel	1
4	12059	Oval Open Back	3
5	12028	Red Penny Light	1
6	12204	LED Work Light	1

FASTENERS		
PART NUMBER	DESCRIPTION	QTY.
14133	3/8"-16X1.250 Gr.5 Bolt	8
14052	3/8 Lock Washer	8

PLANETARY COVERS

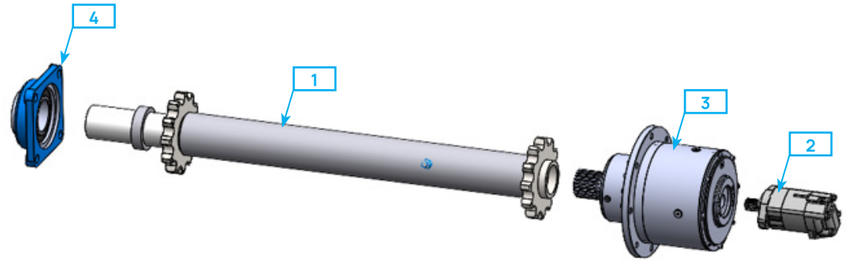


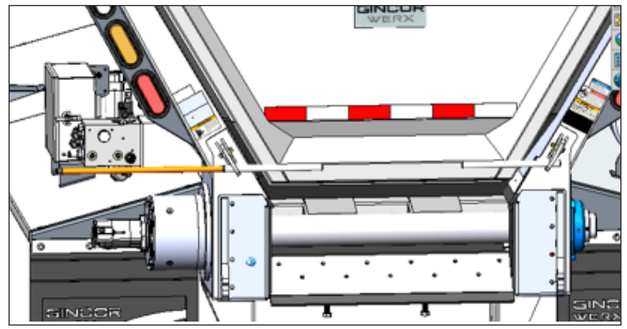
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	403957-01	Planetary Cover	1
2	403957-02	Drive Cover	1

PLANETARY COVER FASTENERS		
PART NUMBER	DESCRIPTION	QTY.
14019	1/2"-13x1.500 Gr.5 Bolt	6
14013	1/2" flat washer	6

DECALS		
PART NUMBER	DESCRIPTION	QTY.
16464	Check/change oil	1
16725	Do Not Push	1
16451	Reflective Tape	1

SINGLE DRIVE SYSTEM



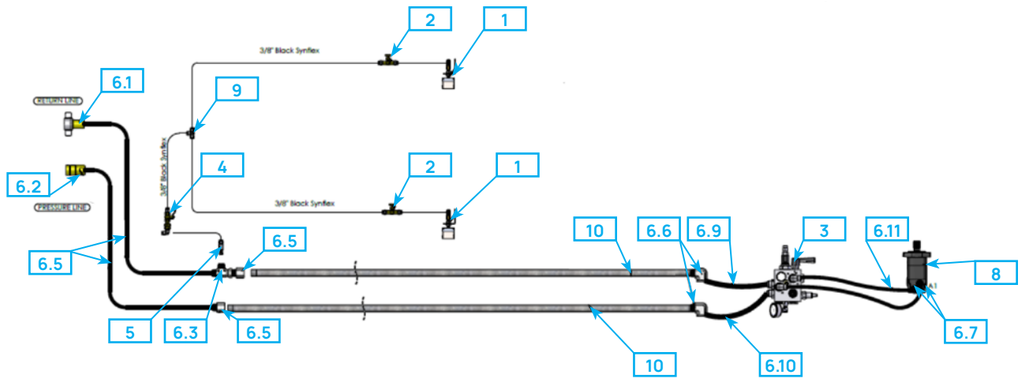


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	405087	sprocket/Tube Assembly	1
2	11545	Hydraulic Motor	1
3	11525	Planetary	1
4	17058	4 Bolt Flange Bearing	1

FASTENERS		
PART NUMBER	DESCRIPTION	QTY.
14295	9/16"-18x2.5 Gr. 8 Fine Hex Screw	12
14296	9/16" flat washer	12

MAIN HYDRAULICS

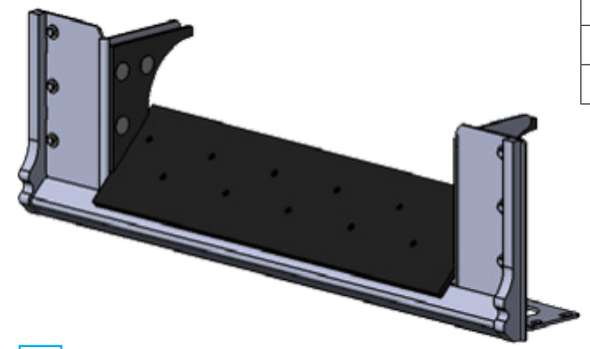


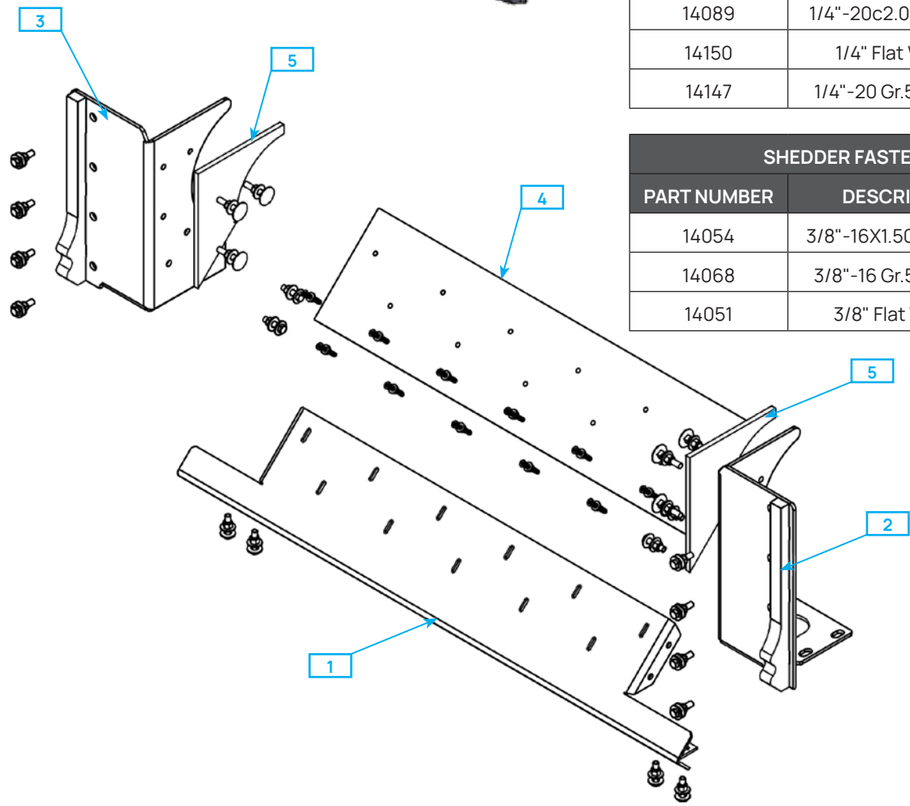


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	406643	Flat Brush Oiler Assembly	2
2	407014	Oiler Valve Assembly	1
3	406789	JEM Manifold Assembly - Single Drive	1
4	407031	Ball valve assembly	1
5	407100	1/4" Straight Fittings Assembly	1
6	12384	Hydraulic Kit #5	1
6.1	11153	1" Brass Valve Wing Nut Coupler	1
6.2	11450	1" Brass Valve Nipple for Coupler	1
6.3	11513	1" Male x F Swivel JIC Steel Run Tee	1
6.4	11319	1" F x 1/4" M Steel Bushing JIC	1
6.5	11010	1" Female NPT x 1" Male JIC Connector	2
6.6	11447	JIC Connector, Steel 1" FPT x 1" Male JIC, 90 Degree Elbow	2
6.7	11004	7/8" Male ORB x 3/4" Male JIC Connector	2

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
6.8	11186	Front Return Line 1" Female JIC Swivel x 1" Male NPT x 30"	2
6.9	11173	Side Pressure Line 1" Female JIC Swivel x 1" Female JIC Swivel x 35"	1
6.10	11174	Side Pressure Line 1" Female JIC Swivel x 1" Female JIC Swivel x 31"	1
6.11	11191	Side Pressure Line 3/4" Female JIC Swivel x 3/4" Female JIC Swivel 90 x 19 1/2"	1
6.12	11192	Side Pressure Line 3/4" Female JIC Swivel x 3/4" Female JIC Swivel 90 x 23"	1
7	11525	PLANETARY	1
8	11545	Hydraulic Motor 1032	1
9	406789	Tee, Union, Composite, 3/8" Tube	1
OPTIONAL USE STAINLESS STEEL OR GALVANIZED PIPE			
10	407100	1" Galvanized Pipe	2
	12384	1" Stainless Steel	2

REAR SHEDDER ASSEMBLY





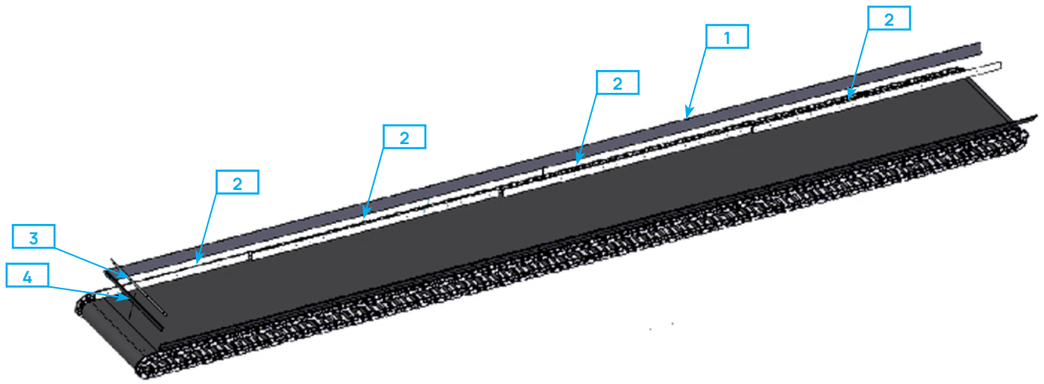
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	308264	Rear Shedder Plate	1
2	405558	Right Frame Cap	1
3	405559	Left Frame Cap	1
4	206999	Scraper	1
5	207006	Seal	2

SHEDDER WEAR PLATE FASTENERS		
PART NUMBER	DESCRIPTION	QTY.
14036	3/8"-16X1.500 Elev. Bolt	6
14068	3/8"-16 Gr.5 Lock Nut	6
14051	3/8" Flat Washer	6
14089	1/4"-20c2.000 CS Self	11
14150	1/4" Flat Washer	11
14147	1/4"-20 Gr.5 Lock Nut	11

SHEDDER FASTENERS		
PART NUMBER	DESCRIPTION	QTY.
14054	3/8"-16X1.500 Gr.5 Bolt	16
14068	3/8"-16 Gr.5 Lock Nut	16
14051	3/8" Flat Washer	32

BELT SEAL AND RETAINING STRIPS

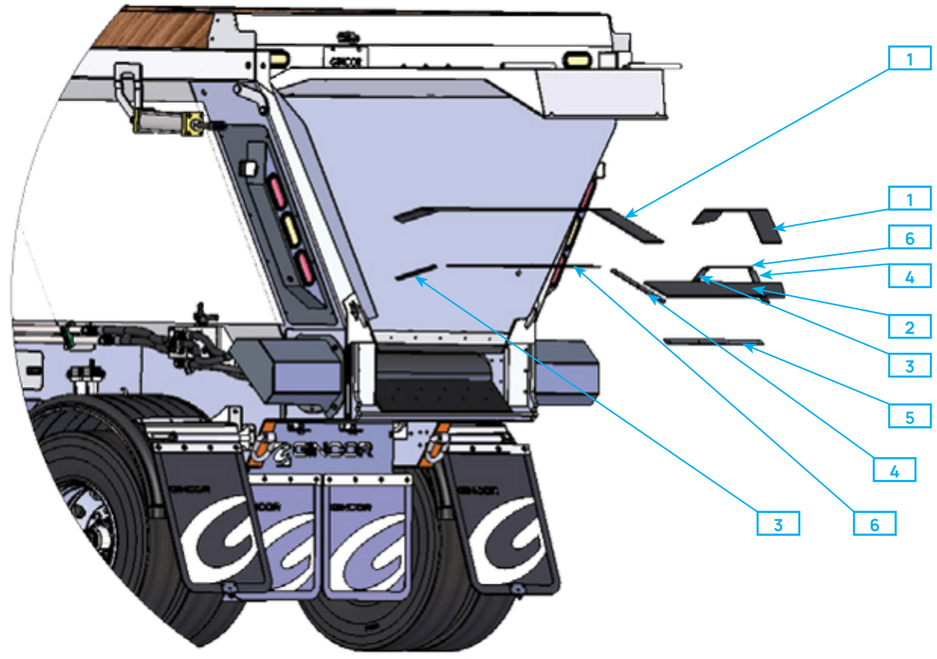
Side belt seal and retainer stips and fasteners will vary with hopper model due to length.



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	19163	Side Rubber Belt Seal	2
2	310829	Side Retainer Strip	var.
3	210244	Front Retainer Strip	1
4	19163	Front Belt Seal	1

PART NUMBER	DESCRIPTION	QTY.
14089	1/4"-20X2" Torx Flat Head bolts	var.

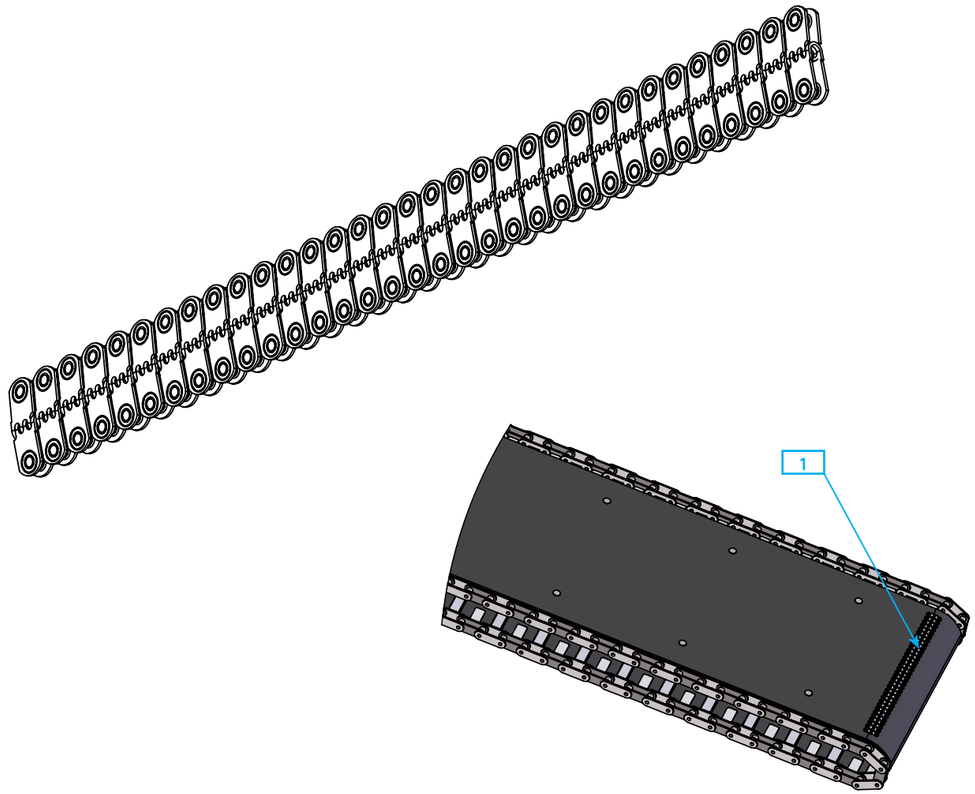
REAR GATE SEALS



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	208560	Side Gate Seal	2
2	208561	Bottom Gate Seal	1
3	308716-8.000	Seal Retainer Strip	2
4	308716-12.000	Seal Retainer Strip	2
5	308716-26.000	Seal Retainer Strip	1
6	308716-30.000	Seal Retainer Strip	2

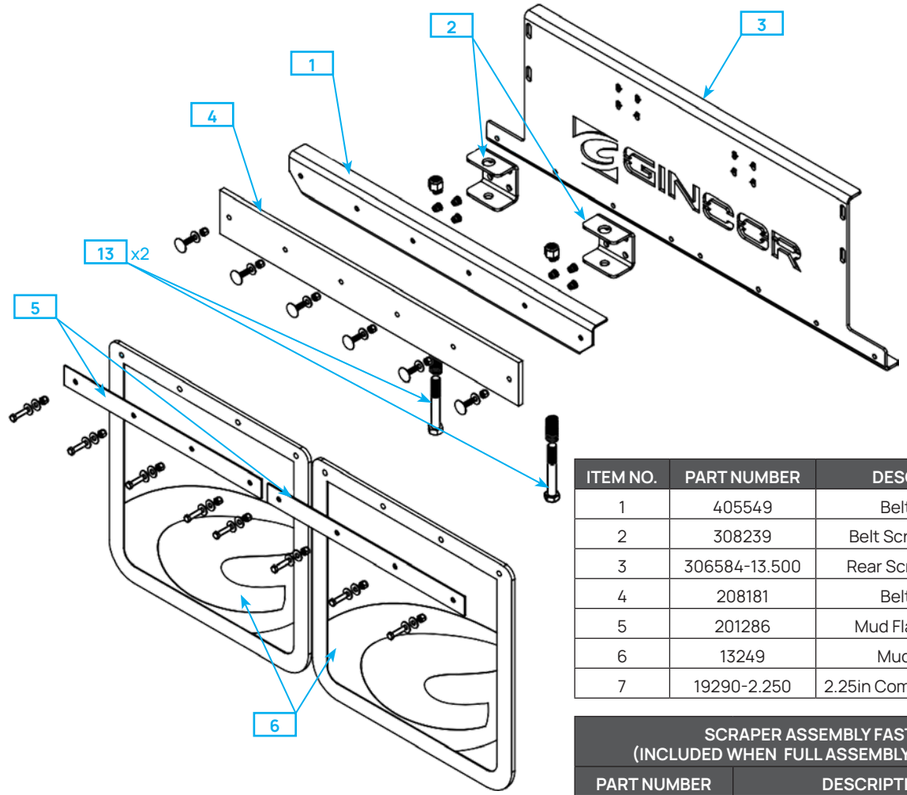
FASTENERS		
PART NUMBER	DESCRIPTION	QTY.
14089	1/4"-20X2.000 Screw	24

BELT SPLICE KIT



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	19005	Belt Splice Kit	1

BELT SCRAPER/MUD FLAPS

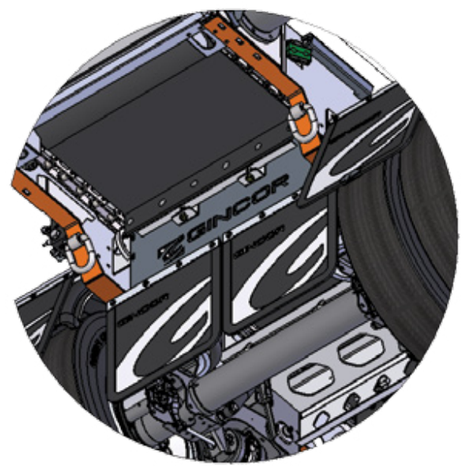


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	405549	Belt Scraper	1
2	308239	Belt Scraper Bracket	2
3	306584-13.500	Rear Scraper Bracket	1
4	208181	Belt Scraper	1
5	201286	Mud Flap Bolt Plate	2
6	13249	Mud Flap-24"	2
7	19290-2.250	2.25in Compression Spring	2

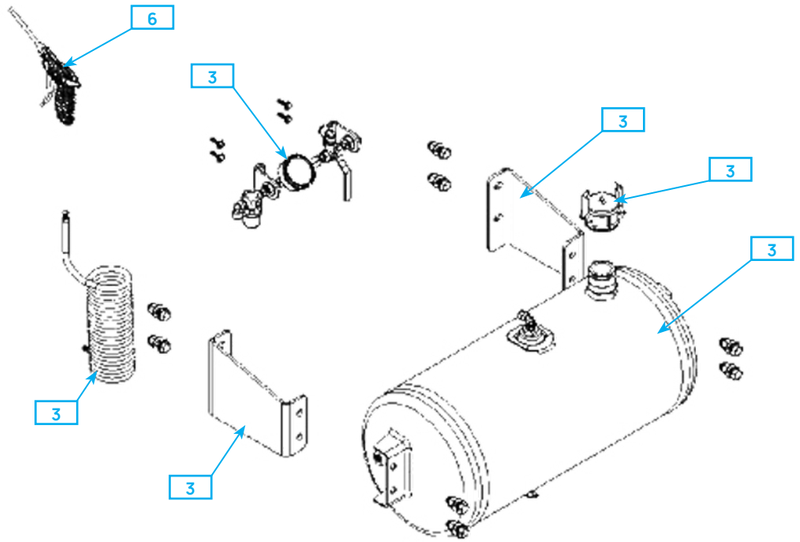
SCRAPER ASSEMBLY FASTENERS (INCLUDED WHEN FULL ASSEMBLY IS PURCHASED)		
PART NUMBER	DESCRIPTION	QTY.
14046	3/4"X5.00" UNC GR.8 BOLT	2
14268	3/4" UNC GR.8 LOCK NUT	2
14191	3/8"-16 RIVET NUT	8

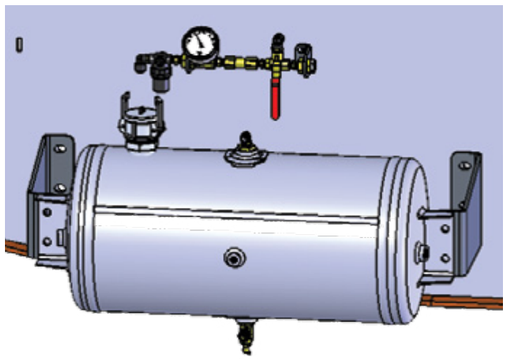
MUD FLAP HARDWARE (INCLUDED WHEN FULL ASSEMBLY IS PURCHASED)		
PART NUMBER	DESCRIPTION	QTY.
14204	3/8"-16X1.500 GR5 BOLT	8
14142	3/8" FLAT WASHER	16
14188	3/8"-16 GR5 LOCK NUT	8

BELT SCRAPER HARDWARE (INCLUDED WHEN FULL ASSEMBLY IS PURCHASED)		
PART NUMBER	DESCRIPTION	QTY.
14054	3/8"-16X1.500 ELEVATOR BOLT	8
14051	3/8" FLAT WASHER	16
14068	3/8"-16 GR5 LOCK NUT	8



OPTIONAL RELEASE AGENT TANK



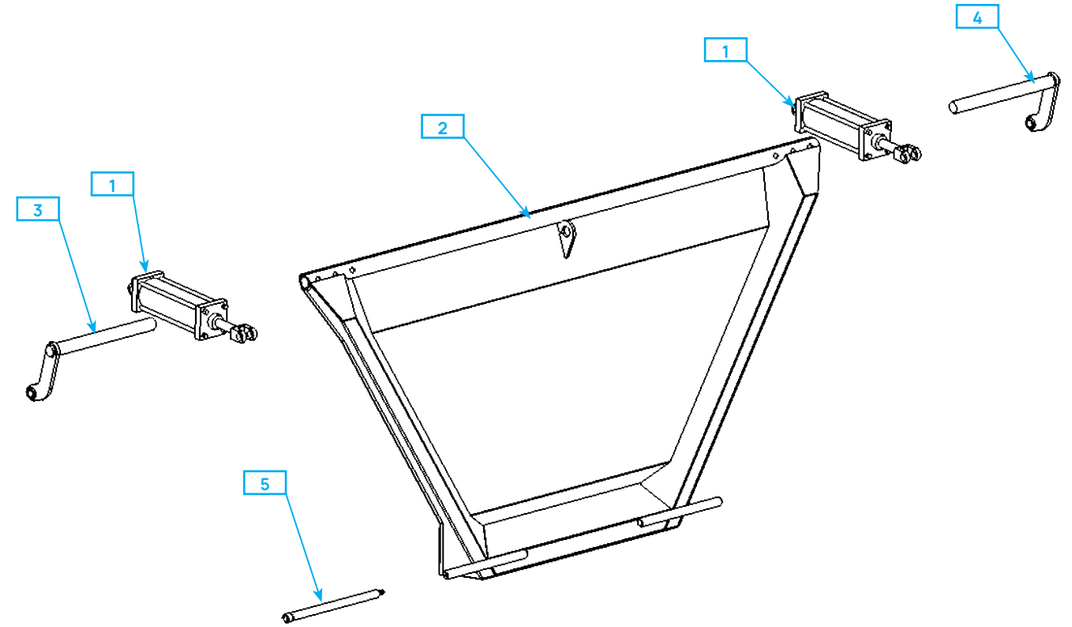


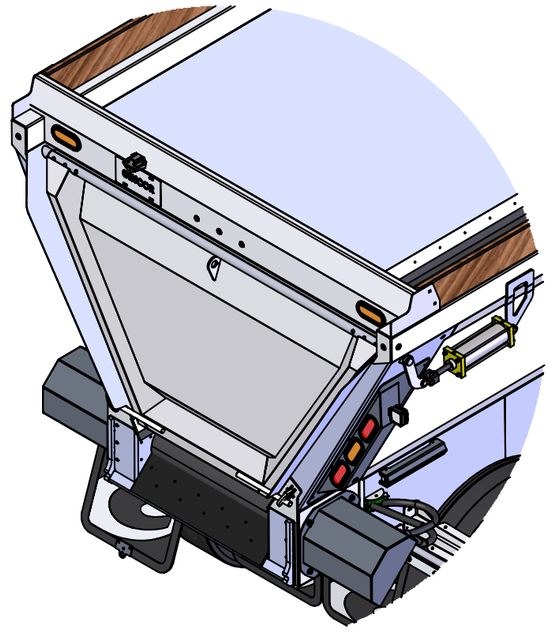
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	306675R	Tank Bracket	1
2	306675L	Tank Bracket	1
3	403955	Regulator Assembly	8
4	406401	Release Agent Tank	1
5	11792	Camlock Cap	1
6	406626	Sprayer	1
7	11185	Coil Hose	1

MANIFOLD FASTENERS		
PART NUMBER	DESCRIPTION	QTY.
14038	1/4"-20X1.000 Gr.5 Bolts	4
14150	1/4" Flat Washer	4

RELEASE AGENT TANK FASTENERS		
PART NUMBER	DESCRIPTION	QTY.
14019	1/2"-13x1.500 Gr.5 Bolts	8
14013	1/2" Flat Washer	8
14031	1/2"-13 Gr.5 Lock Nut	8

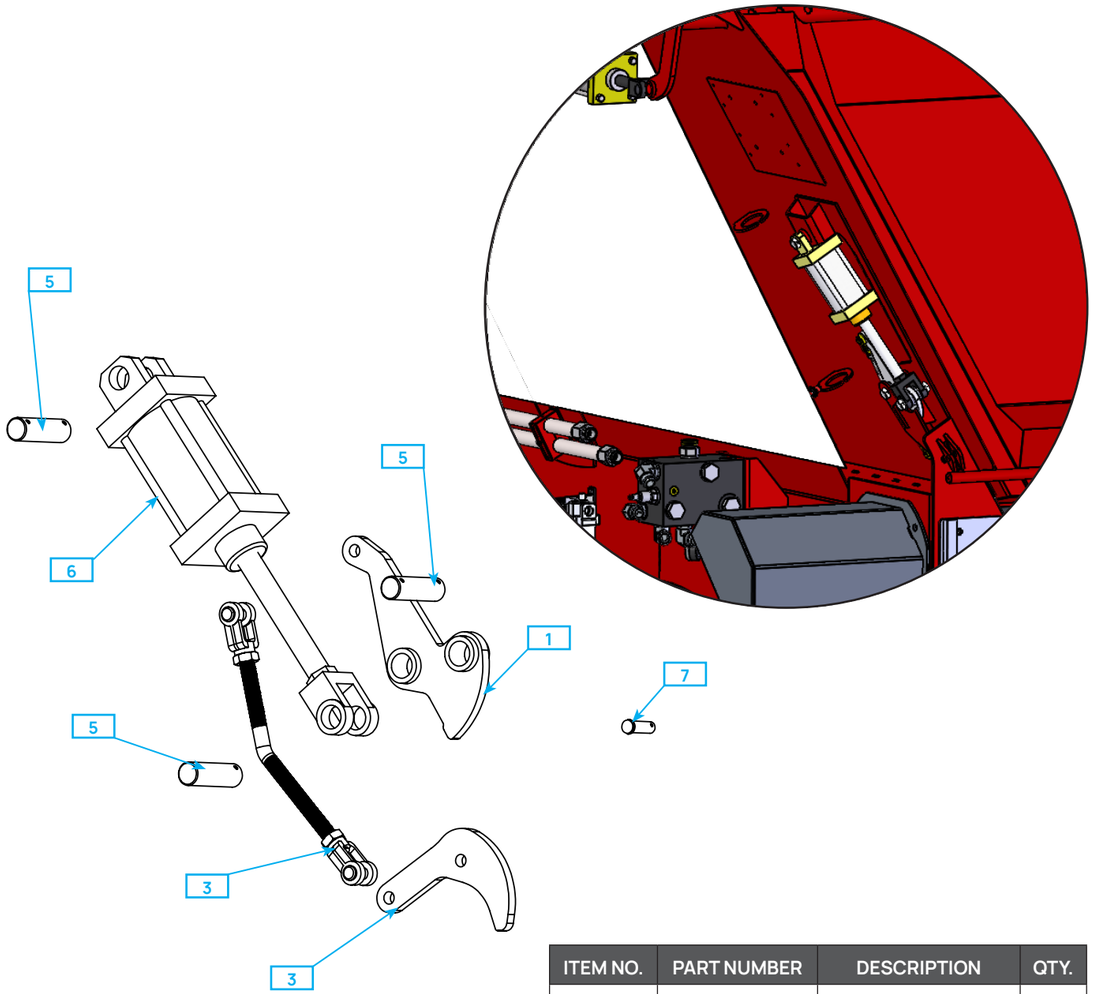
TAIL GATE LIFTING SYSTEM





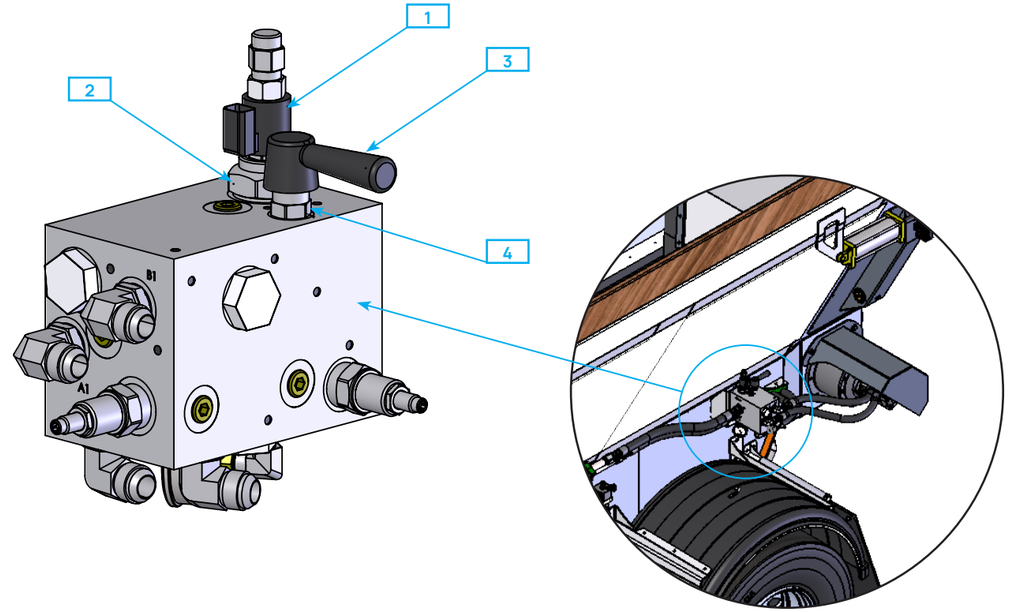
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	11619	Air Cylinder	2
2	403304	Tail Gate	1
3	403305L	Gate Hinge Pin Assembly	1
4	403305R	Gate Hinge Pin Assembly	1
5	14454	Marker Pole	1

TAIL GATE LATCH



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	403301	Gate Latch Rocker	1
2	206187	Gate Lock Finger	1
3	403303	Gate Latch Link	1
4	14415	5/8"-18 Gr.5 Jam Nut	2
5	206995	Cylinder Pin	3
6	11621	Air Cylinder	1
7	14421	Clevis Pin	1

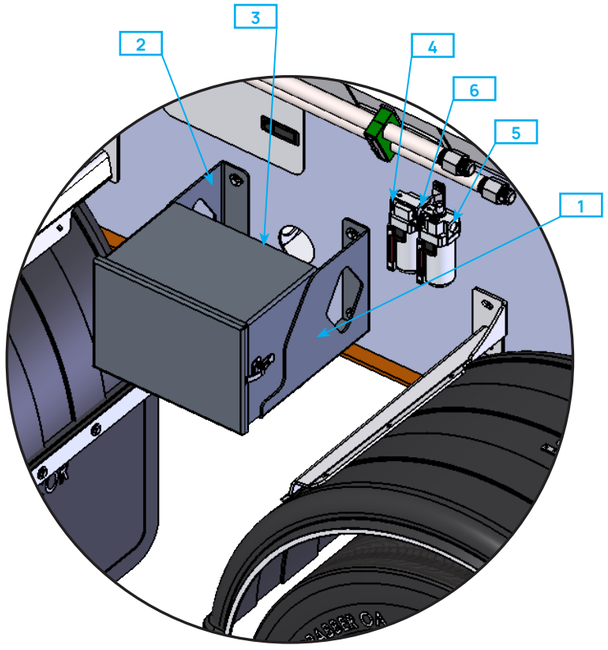
MANIFOLD ASSEMBLY



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	11913	FlowControl Coil	1
2	11912	Flow Control Cartridge	1
3	11922	Forward/Reverse Handle	1
4	11918	Forward/Reverse Cartridge	1

FASTENERS		
PART NUMBER	DESCRIPTION	QTY.
14056	3/8”-16X1”Gr5. Bolt	4
14052	3/8” LockWasher	4

CONTROL BOX / BRACKETS AND AIR LUBE AND FILTER



CONTROLS BOX AND BRACKETS			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	307938-01R	Right Control Box Bracket	1
2	307938-01L	Left Control Box Bracket	1
3	Varies	Control Box	1

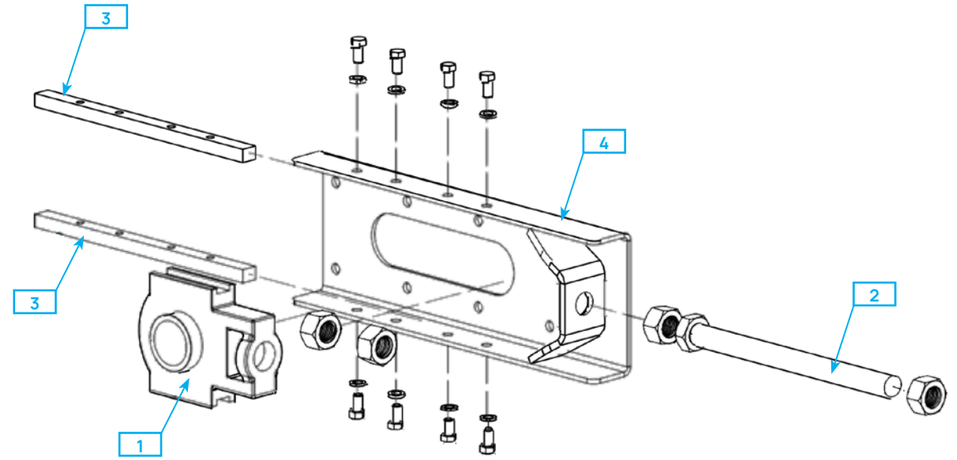
AIR FILTER			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
4	11391	Air Filter	1
5	11392	Air Lubricator	1
6	11393	Filter Bracket	1

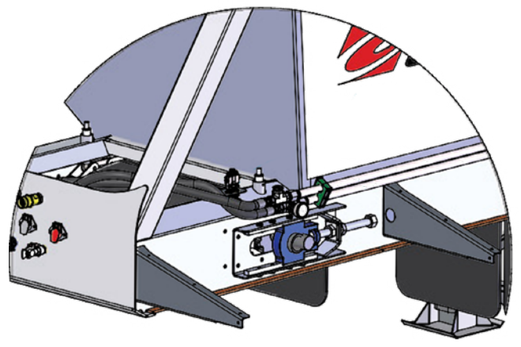
CONTROLS BOX AND BRACKETS FASTENERS (INCLUDED WHEN FULL ASSEMBLY IS PURCHASED)		
PART NUMBER	DESCRIPTION	QTY.
14051	3/8" Flat Washer	16
14068	3/8-16 LCOK NUT	8
14054	3/8-16x1.500 GR5 Bolt	4
14133	3/8-16x1.250 GR5 Bolt	4

AIR FILTER FASTENERS (INCLUDED WHEN FULL ASSEMBLY IS PURCHASED)		
PART NUMBER	DESCRIPTION	QTY.
14298	1/4 Flat Washer	2
14035	1/4-20x1 GR5 Bolt	2

BEARING TAKE-UP ASSEMBLY

Left and right side use same parts part number 403941 for full assembly.





ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	19304	LB Front Bearing	1
2	403973	Tensioner Rod	1
3	300868	Bearing Guide	2
4	403941	Chain Tensioner	1

FASTENERS		
PART NUMBER	DESCRIPTION	QTY.
14014	1/2 Lock Washer	8
14021	SAE 1/2-13 x 1 UNC GR5 Bolt	8
14183	1.25-7 UNC Gr.5 Jam Nut	1
14184	1.25-7 UNC Gr.5 Nut	4

CLEANING, PAINT MAINTENANCE & VISUAL INSPECTION

There are many benefits to keeping your GINCOR Werx LBTM clean and your paint fresh.

The most obvious reason is usually the enhanced image projected. Your customers and the local DOT associate a clean piece of equipment as well maintained. Frequent washing alone does not constitute a maintenance program, however it's definitely a key starting point.

Dirt and debris can conceal broken or worn parts. Early detection is the key to reducing maintenance cost and reducing down time. The ability to see it, will give you the opportunity make an informed decision on how and when to carry out repairs.

Dirt and other environmental contaminants may also migrate into the mechanical components causing premature wear or even failure. They may also lead to corrosion which may shorten the service life of your hopper.

Clean your GINCOR Werx LBTM with water and a mild detergent only. Avoid harsh cleaning chemicals and acids. Use care when using pressurized water in the area of hubs, hydraulic reservoirs and controls. Very hot water under high pressure may remove paint and warning labels.

If during your inspection you find chipped/missing paint, sand, prime and paint the area to restore the protective layer provided by the factory paint.



I - APPENDIX 1 – ARAUCO SPECIFIC ADDENDUMS

GINCOR Werx takes pride in our custom vocational vehicles, with the ability to incorporate customer requirements and preferences. We offer a standard build with the flexibility to tailor a design to a specific geography to pass along and maintain our quality standard combined with a cost-effective hybrid of our proven design.

GINCOR's hoppers for Arauco were specifically designed to incorporate some specialized features. Their specific descriptions, procedures, and maintenance are outlined below, in addition to all generic safety and instructions in the main body of the document. Please comply with regional and national regulations.

NOTE

For products purchased and integrated from other manufacturers, please see the manufacturer provided instructions and safety considerations.

II - ARAUCO SPECIFIC Hopper COMPONENTS

5 - Lodar



An industrial remote Lodar system allows control of various functions from a distance.

Functions:
· Gate Open/Close
· Gate Lock Open/Close
· Tarp Open
· Tarp Close
· Belt Start/Stop
· Spare

DANGER

The Lodar System electrical connection must be switched on/off in the cab so that the remote cannot accidentally be triggered, especially during travel.

CAUTION

When the Lodar Receiver is powered on after being off, the FAULT light will blink for 20 seconds, signaling that a replacement Transmitter can be registered. Ensure that no other Lodar Remote is attempting to pair in the vicinity, as this could result in another remote controlling your hopper. Additionally, please note that both the Transmitter and Receiver will automatically power down after a period of inactivity, typically around 30 minutes.

6. Camera System

Two cameras are connected to a monitor located in the cab. A 150^0 view camera monitors the area at the rear of the hopper pointed outwards while the 50^0 view camera is pointed at the gate.

7. Ladder-less End Gate Safety Prop

The Safety Prop on this hopper has a handle attached so a ladder is not required for installation. Please follow the End Gate Prop Safety Instructions but the lynch pins have been replaced by rubber mounts for storage and a draw latch when in use. The draw latch meshes with the two-fingered end of the handle to hold the safety prop in place.

DANGER

Do not walk under a door that is open without the safety prop engaged and secured, serious injury or death can occur.

VII - INSTALLING LIVE BOTTOM TRUCK MOUNT ON TRUCK

1. Hydraulics – Install truck PTO and pump.

2. Electrical – Install truck cab controls.

3. Install subframe on truck rails bolting every hole (may be shipped installed).

4. Body – Place on subframe, make sure square and flush. Attach 4 or more Bodywork Attachments based on chassis space available. Bolt every other hole except around Bodywork Attachments (4+ per side), where it should be every hole, to achieve roughly 60% of holes.

Bolt	Suggested Torque
M12x1.75 Class 10.9 Zinc dry	92.8ft.lb (126Nm)
M20x2.5 Class 10.9 Zinc dry	449ft.lb (609Nm)

CAUTION

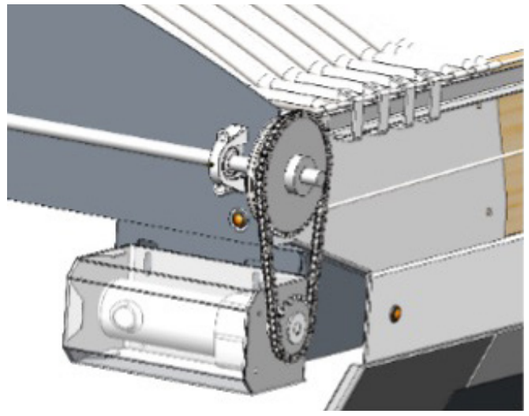
Do not reuse fasteners.

5. Install Gate Open/Close cylinders using pivot pins.

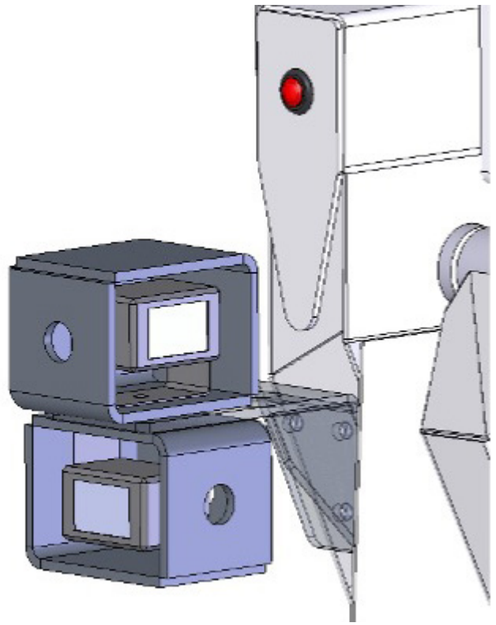
6. Install Ladder



7. Install Tarp using manufacturer instructions. Use washers behind Hold Down Angle Brackets to shim angles flush with steel top board brackets instead of wood. Ensure the Hold Down Brackets move smoothly below the angle.



8. Reattach camera bracket with cameras. Monitor should be installed in tractor.



VII - INSTALLING LIVE BOTTOM TRUCK MOUNT ON TRUCK

9. Connect Hydraulic Return then Hydraulic Pressure per truck manufacturer guidelines

10. Install Junction Box near front of the hopper in convenient location. To confirm wire colours remove the rear panel on the control box at left side rear or see attached documentation.

11. Connect electrical.



12. Connect air supply to the primary air tank after p ressure protection valve.

13. Ensure Lodar remote is synchronized to correct hopper.

14. Check conveyor tension and oiler system. Run general break-in procedures per main manual.

Follow Standard Connection and Break-In Procedures.

DANGER

The Lodar System electrical connection must be switched on/off in the cab so that the remote cannot accidentally be triggered, especially during travel.

VIII - PREVENTATIVE MAINTENANCE ADDENDUMS

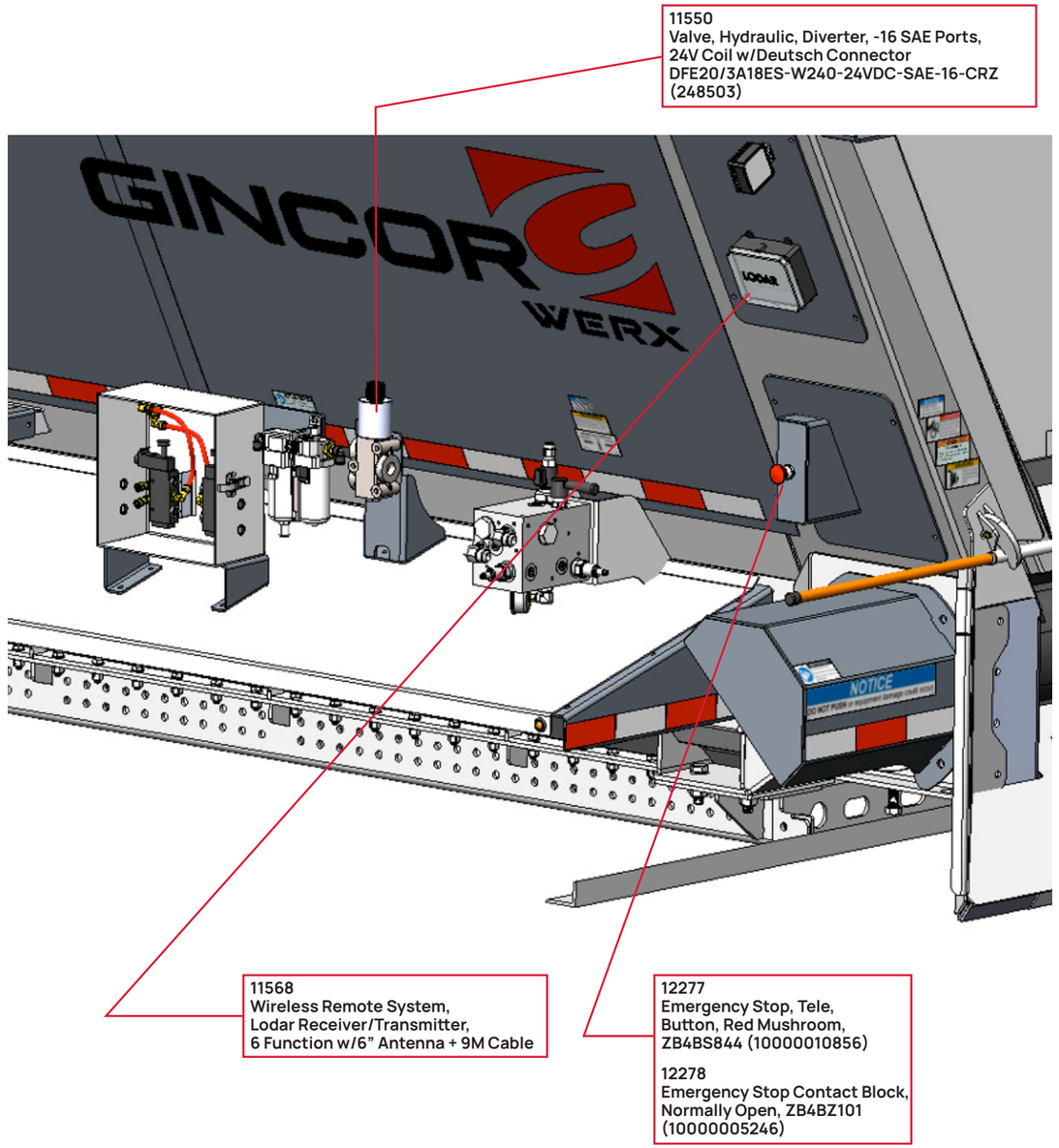
Clean the cameras as needed depending on conditions.

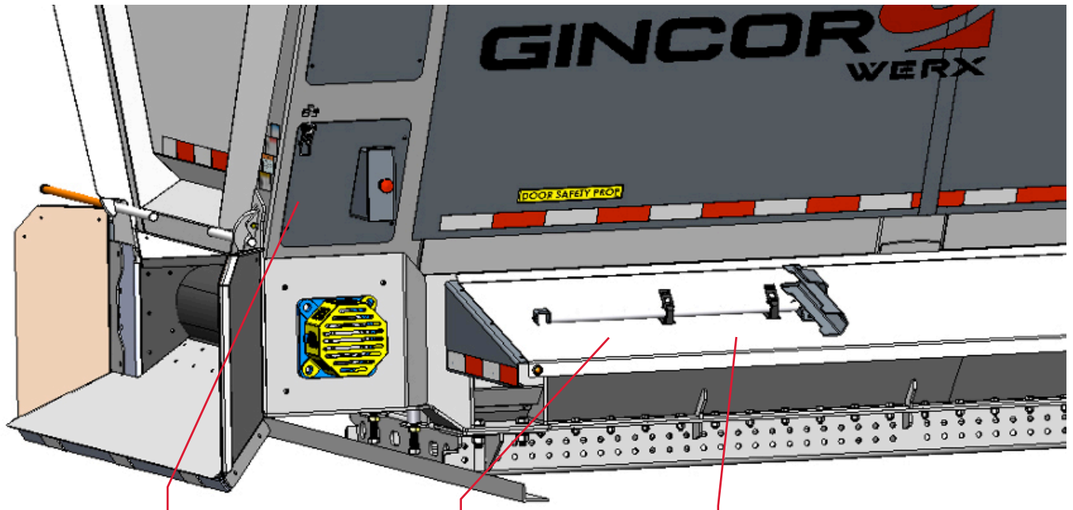
Check Belt E-stop buttons on both sides function daily to stop belt motion.

NOTE

For products purchased and integrated from other manufacturers, please see the manufacturer provided instructions and safety considerations.

IX - ARAUCO SPECIFIC PARTS BOOK

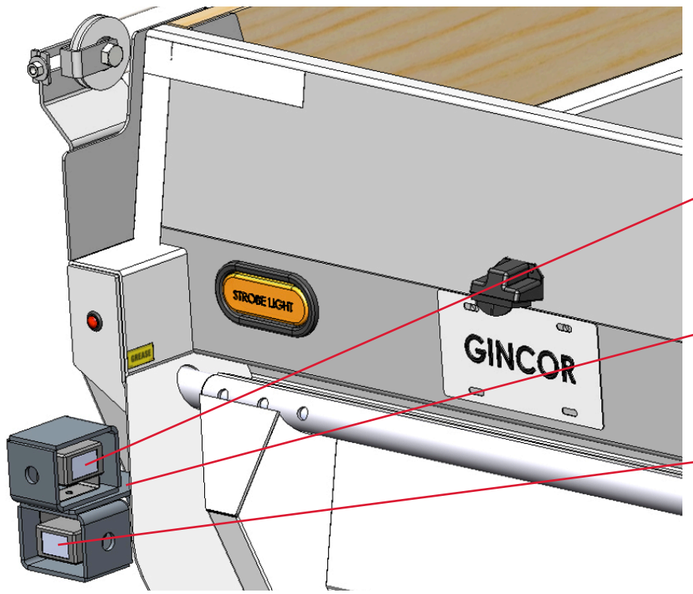




14317
Latch, Draw Latch, Adjustable, 2.13”-2.69” Latching Distance, 6.18” Overall (808LZN)

14607
Clamp, Quick Fist Mini Plastic Clamp for Mounting Tools, 5/8” - 1 3/8” Diameter Clamping

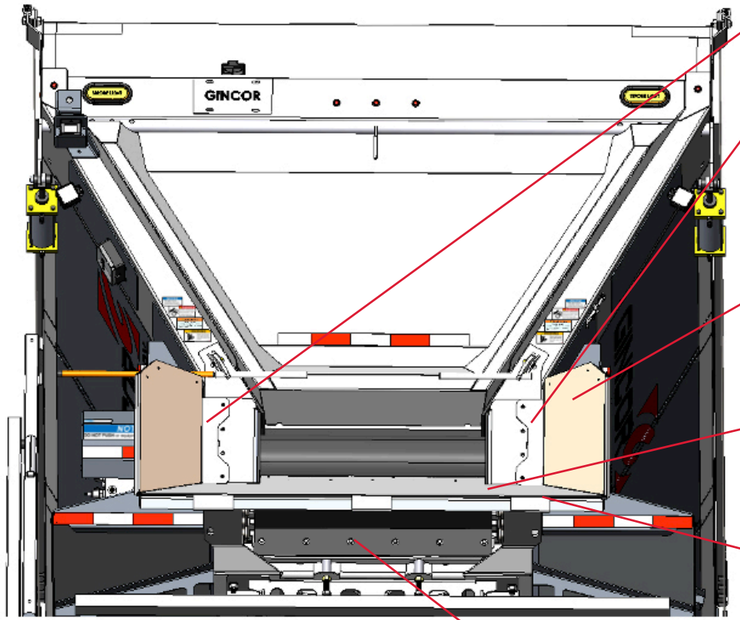
407745-01
Gate Prop Assembly



12351
Camera, 1/3” CCD COLOUR, AUDIO, 18 IR, 50^{0}, mirror on/off, no cable (SHV-B087MS-50NC)

311022
Camera Bracket

12350
Camera, 1/3” CCD COLOUR, AUDIO, 28 IR, 150^{0}, mirror on/off, Heater, no cable (SHV-B639MSH-150NC)



310962
Chute Left Side Weldment

310961
Chute Right Side

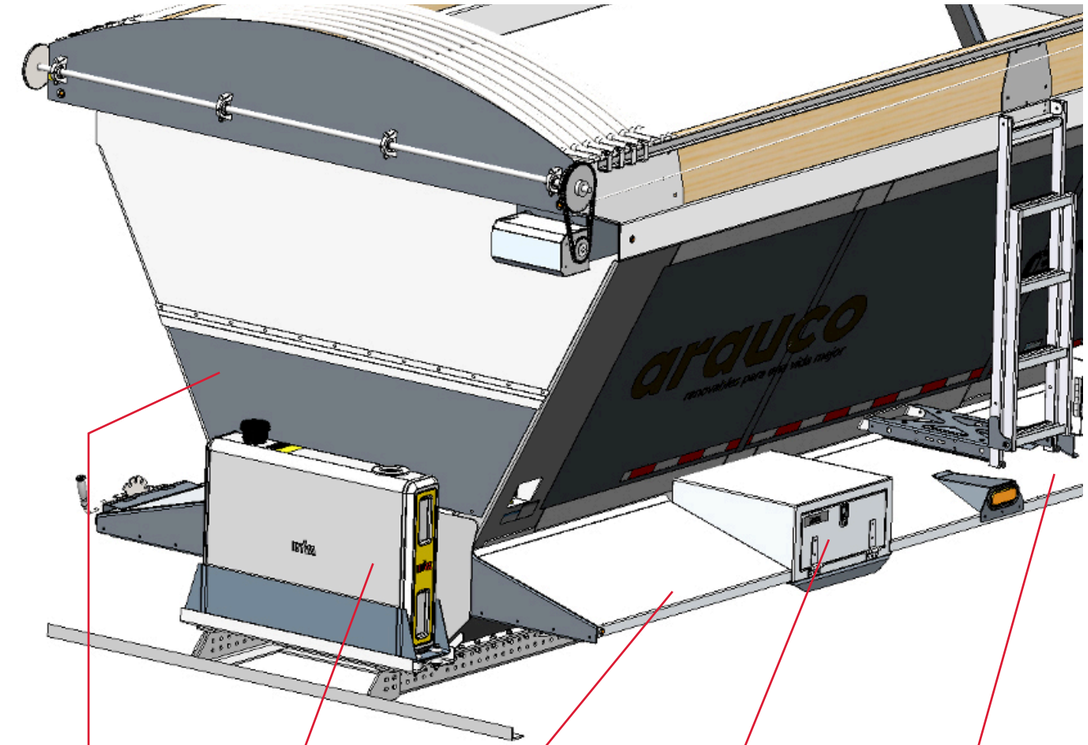
210318 (both sides)
Chute Side Hardox

408812
Chute Wear Plate Weldment

210317
Rubber Chute Seal

310959
Chute Weldment

407197
Vertical Belt Scraper Assembly
(including high wear part of)
208181
Belt Scraper



308180
Front Wall Access Panel

11866
Tank, Hydraulic, 36 Gal, Slim 7.95” (14015223)
Filter, Hydraulic Return, In Tank, Plate Mount, 250 L/m (14895925)

310485
L/R Fender Bracket - End

310486
L/R Fender Bracket - Mid

310487-47.750
Flat Fender

19325
Tool Box, Aluminum Checker Plate, T-Handle Latch, Open Down, 24”W x 12”H x 24”

408371
Tool Box Bracket

310487-104.250
Flat Fender

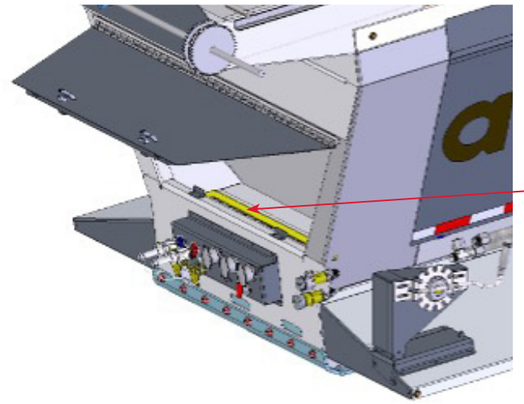
310486
L/R Fender Bracket - Mid

310485
L/R Fender Bracket - End

404329
Kanban Mid Turn Light Assy.

406752
6” Amber Oval Light, Tinted Lens w Grommet (12059 Grommet, 6”, Oval, Open Back, Black (92420), 12030 Light, LED 6” STT/FPT, Amber, Oval, 24v (52073))

VIII - ARAUCO SPECIFIC PARTS BOOK



408800
Kanban Front Belt Guard

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Newmarket, Ontario, Canada
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MATTAWA
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Carleton Place, Ontario, Canada
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Phone: +1 613-253-5545

KINGSTON
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1059 John Counter Boulevard
Kingston, Ontario, Canada
K7K 6C7
Phone: +1 844-542-5543

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Gincor Werx JC Series
25975 Woodbine Avenue
Keswick, Ontario, Canada
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AYLMER
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Aylmer, Ontario, Canada
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