

** Grain Handling**
CORNER AUGER GRAIN CART
MODEL 1360

Serial Number D73680100 & Higher

Part No. 299234

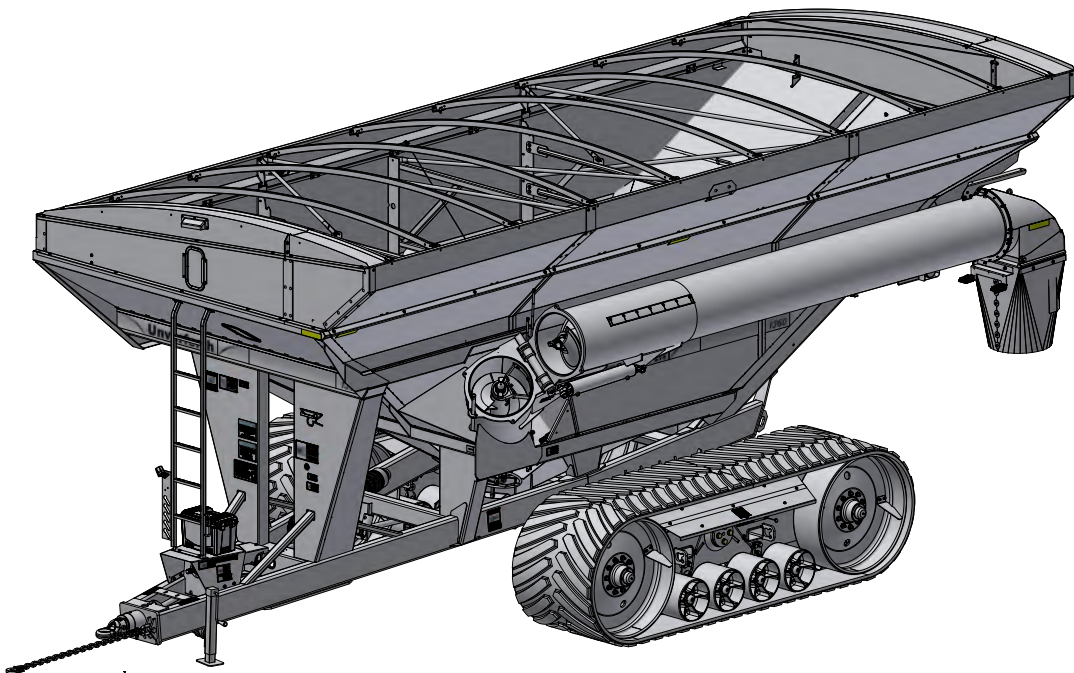
Foreword

 This symbol identifies important safety messages. When you see it, read the message that follows and be alert to the possibility of personal injury.

Remember, safety instructions stated in this manual are for your protection. Read them carefully and follow them closely when working around or using this machine.

Read and study this manual completely before attempting to operate this implement. Take this manual to the field for handy reference when operating, adjusting, or servicing your machine.

When referenced, “Right-Hand” (RH) and “Left-Hand” (LH) side of the machine are determined by standing behind the machine and facing in the direction of travel.



Product Information

When ordering parts or when requesting further information or assistance, always give the following information:

- Machine name
- Model number
- Serial number

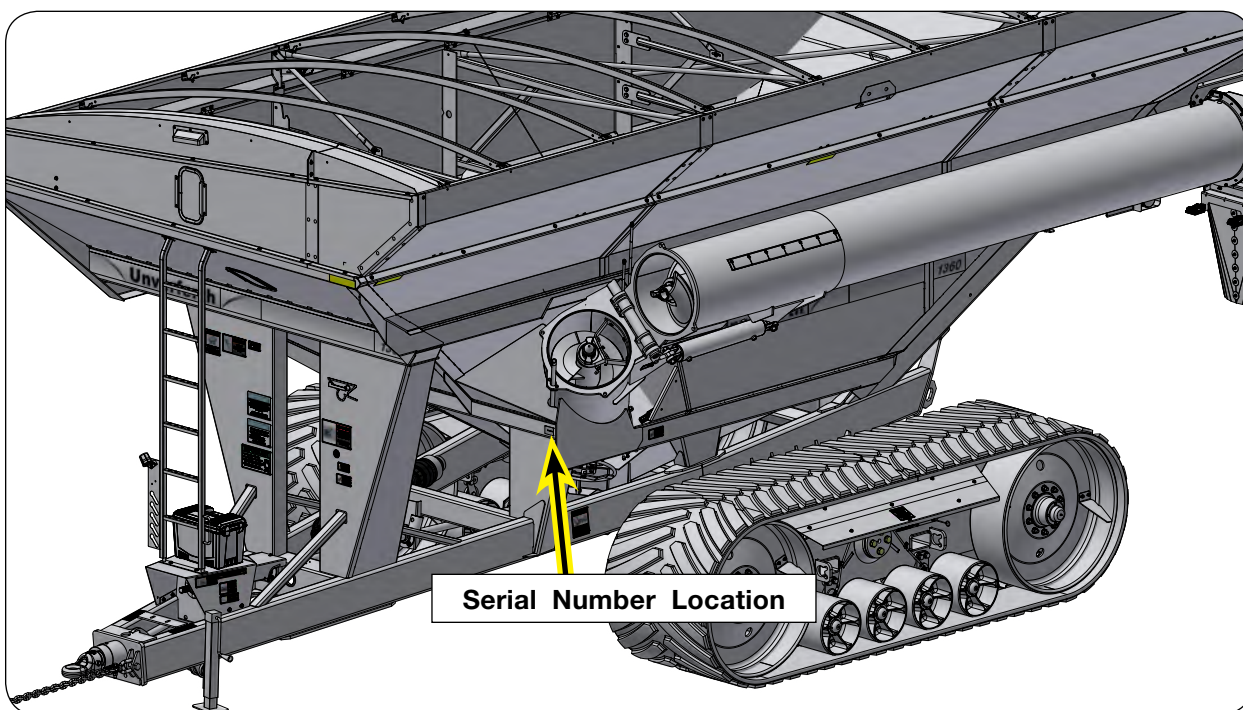
All products manufactured by Unverferth Mfg. Co., Inc. are warranted to be free from material and workmanship defects for one full year from time of consumer delivery. Your local dealer will gladly assist you with any warranty questions.

Please fill out and retain this portion for your records. The serial number plate is located on the frame as shown below.

Purchase Date _____ Model _____ Serial Number _____

Dealer _____ City _____

Dealer Contact _____ Phone _____



IMPORTANT

- *The information, specifications, and illustrations in the manual are based on information available at the time it was written. Due to continuing improvements in the design and manufacture of Unverferth products, all specifications and information contained herein are subject to change without notice.*

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FOR TRACK INFORMATION, PLEASE REFER TO YOUR TRACK MANUAL.

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FOR HYDRAULIC DRIVE INFORMATION, PLEASE REFER TO YOUR HYDRAULIC DRIVE MANUAL.

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General Hazard Information

No accident-prevention program can be successful without the wholehearted cooperation of the person who is directly responsible for the operation of the equipment.

A large number of accidents can be prevented only by the operator anticipating the result before the accident is caused and doing something about it. No power-driven equipment, whether it be transportation or processing, whether it be on the highway, in the field, or in the industrial plant, can be safer than the person who is at the controls. If accidents are to be prevented--and they can be prevented--it will be done by the operators who accept the full measure of their responsibility.

It is true that the designer, the manufacturer, and the safety engineer can help; and they will help, but their combined efforts can be wiped out by a single careless act of the operator.

It is said that, "the best kind of a safety device is a careful operator." We, at Unverferth Mfg. Co., Inc. ask that you be that kind of operator.



REMEMBER:
THINK SAFETY
A CAREFUL OPERATOR IS THE
BEST INSURANCE AGAINST AN
ACCIDENT!

SIGNAL WORDS



INDICATES AN EXTREMELY HAZARDOUS SITUATION OR ACTION THAT WILL RESULT IN SERIOUS INJURY OR DEATH.



INDICATES A HAZARDOUS SITUATION OR ACTION THAT COULD RESULT IN SERIOUS INJURY OR DEATH.



INDICATES AN UNSAFE SITUATION OR ACTION THAT MAY RESULT IN PERSONAL INJURY.



Is used for instruction on operating, adjusting, or servicing a machine.

Safety Decals

WARNING

- REPLACE LOST, DAMAGED, PAINTED, OR UNREADABLE DECALS IMMEDIATELY. IF PARTS THAT HAVE DECALS ARE REPLACED, ALSO MAKE SURE TO INSTALL NEW DECALS. THESE DECALS INFORM AND REMIND THE OPERATOR WITH OPERATIONAL INFORMATION AND SAFETY MESSAGES.



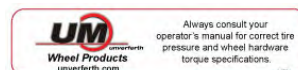
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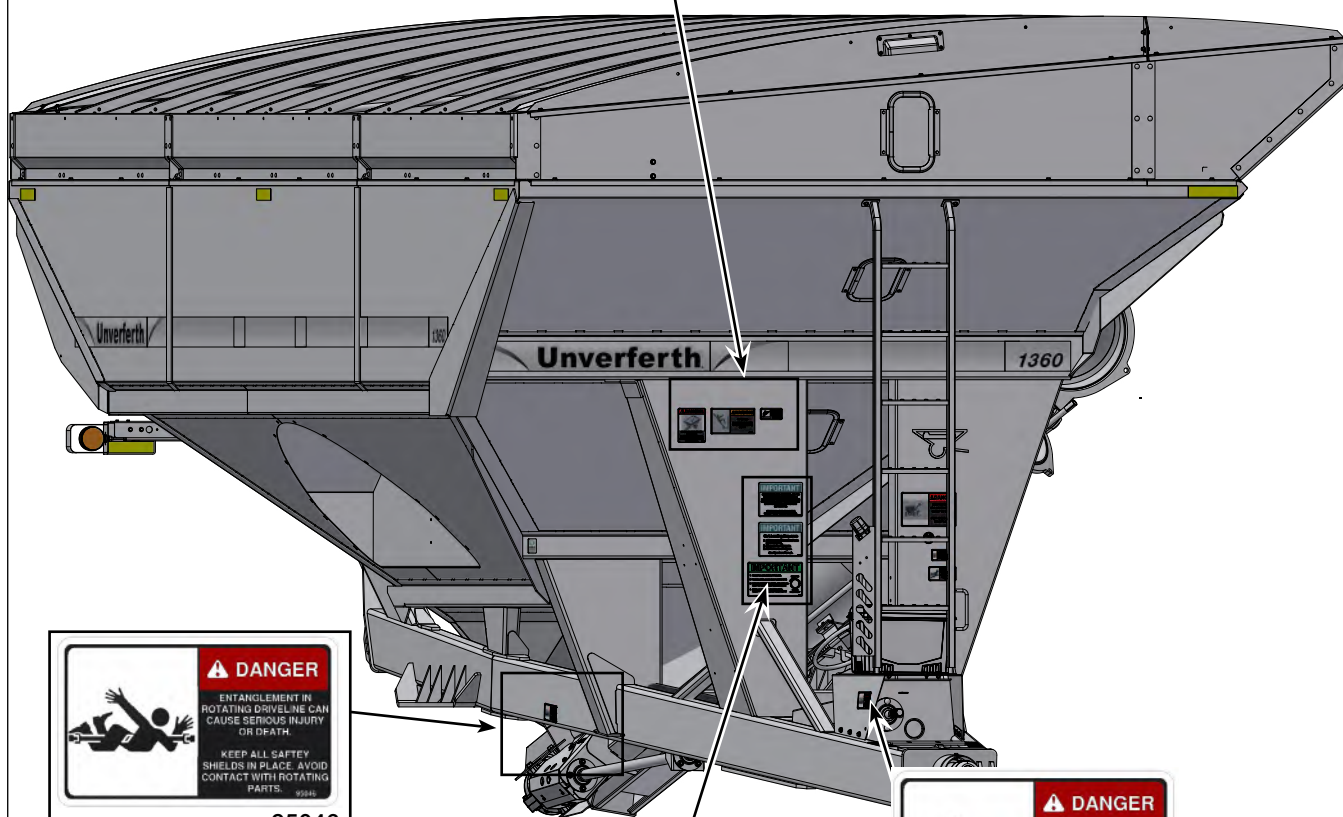
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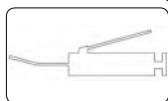
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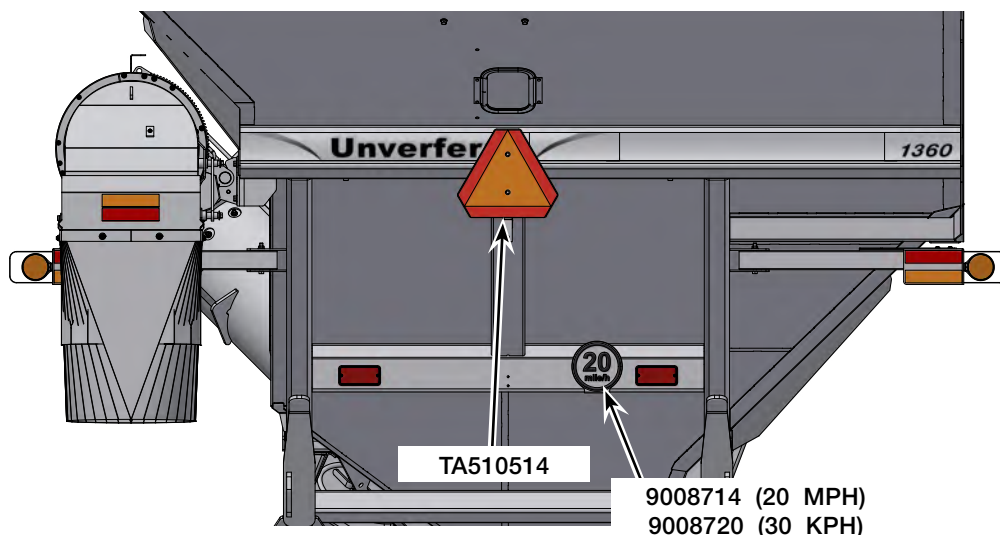
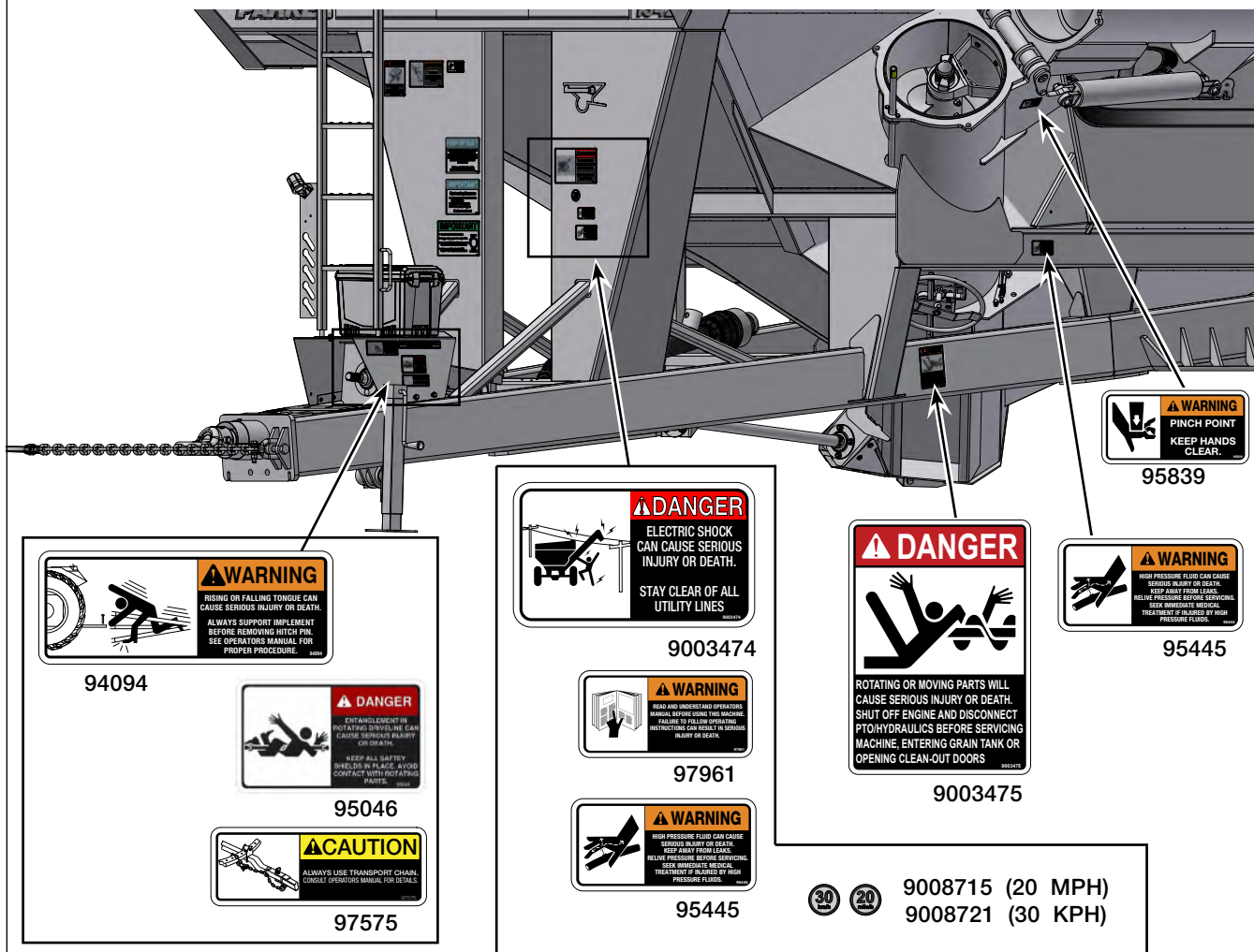


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9003477

Safety Decals (continued)



Part No. 9003126
Reflector RED

Part No. 9003125
Fluorescent Strip

Part No. 9003127
Reflector AMBER

Following Safety Instructions

- Read and understand this operator's manual before operating.



- All machinery should be operated only by trained and authorized personnel.

- To prevent machine damage, use only attachments and service parts approved by the manufacturer.

- Always shut tractor engine off and remove key before servicing.



- Avoid personal attire such as loose fitting clothing, shoestrings, drawstrings, pants cuffs, long hair, etc., that may become entangled in moving parts.

- Do not allow anyone to ride on the implement. Make sure everyone is clear before operating machine or towing vehicle.



- Never attempt to operate implement unless you are in the driver's seat.

- Never enter a cart containing grain. Flowing grain traps and suffocates victims in seconds.



Before Servicing or Operating

- Avoid working under an implement; however, if it becomes absolutely unavoidable, make sure the implement is safely blocked. 
- Ensure that all applicable safety decals are installed and legible.
- Sharp edges on the machine can cause injury. Be careful when working around the machine.
- To prevent personal injury or death, always ensure that there are people who remain outside the cart to assist the person working inside, and that all safe workplace practices are followed. There is restricted mobility and limited exit paths when working inside the implement.
- Secure drawbar pin with safety lock and lock tractor drawbar in fixed position.
- Explosive separation of a tire and rim can cause serious injury or death. Only properly trained personnel should attempt to service a tire and wheel assembly.
- Add sufficient ballast to tractor to maintain steering and braking control at all times. Do not exceed tractor's lift capacity or ballast capacity.
- Do not stand between towing vehicle and implement during hitching. 
- Always make certain everyone and everything is clear of the machine before beginning operation.
- Verify that all safety shields are in place and properly secured. 
- Hot parts can cause severe burns. Use caution when working around power system/ground engaging components. Allow parts to cool before servicing.

During Operation

- Regulate speed to field conditions. Maintain complete control at all times.
- Never service or lubricate equipment when in operation.
- Keep away from overhead power lines. Electrical shock can cause serious injury or death. 
- Use extreme care when operating close to ditches, fences, or on hillsides.
- Do not leave towing vehicle unattended with engine running.

Before Transporting

- Secure transport chains to towing vehicle before transporting. DO NOT transport without chains.
- Install transport locks before transporting.
- Check for proper function of all available transport lights. Make sure that all reflectors are clean and in place on machine. Make sure the SMV emblem and SIS decals are visible to approaching traffic.
- This implement may not be equipped with brakes. Ensure that the towing vehicle has adequate weight and braking capacity to tow this unit.

During Transport

- Comply with all laws governing highway safety when moving machinery.
- Use transport lights as required by all laws to adequately warn operators of other vehicles.
- Regulate speed to road conditions and maintain complete control.
- Maximum transport speed of this implement should never exceed 20 m.p.h. as indicated on the machine. Maximum transport speed of any combination of implements must not exceed the lowest specified speed of the implements in combination. Do not exceed 10 m.p.h. during off-highway travel.
- Slow down before making sharp turns to avoid tipping. Drive slowly over rough ground and side slopes.
- Do not transport grain cart on roads while loaded.
- It is probable that this implement is taller, wider and longer than the towing vehicle. Become aware of and avoid all obstacles and hazards in the travel path of the equipment, such as power lines, ditches, etc.

Driveline Safety

- Do not allow children near equipment that is running or engaged.



- Do not exceed 1000 rpm PTO speed.
- Disengage the PTO, stop the tractor engine, and remove key from ignition before making inspections, or performing maintenance and repairs.
- Inspect the driveline, quick disconnect, overload shear-bolt limiter or clutch, and shielding often. Repair immediately. Use replacement parts and attaching hardware equivalent to the original equipment. Only alterations described in this manual for overall length adjustment are allowed. Any other alteration is prohibited.
- Avoid excessively long hardware or exposed and protruding parts which can snag and cause entanglement.
- Lubricate the driveline as recommended in the MAINTENANCE section.
- Keep hoses, wiring, ropes, etc. from dangling too close to the driveline.
- Install driveline and shields according to recommended lengths and attaching methods with recommended hardware. The driveline shield should rotate independently a full rotation and telescope freely. The retaining chain must be secured to the implement safety shield.
- Adjust drawbar to height and length recommended in OPERATION section.

Use caution when turning to avoid contact between tractor tires and driveline.

- Check the length of the telescoping members to insure the driveline will not bottom out or separate when turning and/or going over rough terrain.
- Proper extended and collapsed lengths of the telescoping PTO shaft must be verified before first operation with each and every tractor. If the extended length of the PTO shaft is insufficient, it may become uncoupled during operation and cause serious injury or death from contact with uncontrolled flailing of PTO shaft assembly components.

Pressurized Oil

- Relieve the hydraulic system of all pressure before adjusting or servicing. See hydraulic power unit manual for procedure to relieve pressure.
- High-pressure fluids can penetrate the skin and cause serious injury or death. Leaks of high-pressure fluids may not be visible. Use cardboard or wood to detect leaks in the hydraulic system. Seek medical treatment immediately if injured by high-pressure fluids. 
- Hydraulic system must be purged of air before operating to prevent serious injury or death.
- Do not bend or strike high-pressure lines. Do not install bent or damaged tubes or hoses.
- Repair all oil leaks. Leaks can cause fires, personal injury, and environmental damage.
- Route hoses and lines carefully to prevent premature failure due to kinking and rubbing against other parts. Make sure that all clamps, guards and shields are installed correctly.
- Check hydraulic hoses and tubes carefully. Replace components as necessary if any of the following conditions are found:
 - End fittings damaged, displaced, or leaking.
 - Outer covering chafed or cut and wire reinforcing exposed.
 - Outer covering ballooning locally.
 - Evidence of kinking or crushing of the flexible part of a hose.

Preparing for Emergencies

- Keep a first aid kit and properly rated fire extinguisher nearby.



- Keep emergency numbers for fire, rescue, and poison control personnel near the phone.



Wearing Protective Equipment

- Wear clothing and personal protective equipment appropriate for the job.



- Wear steel-toed shoes when operating.



- Wear hearing protection when exposed to loud noises.



- Do not wear additional hearing impairing devices such as radio headphones, etc.



Section II

Set Up

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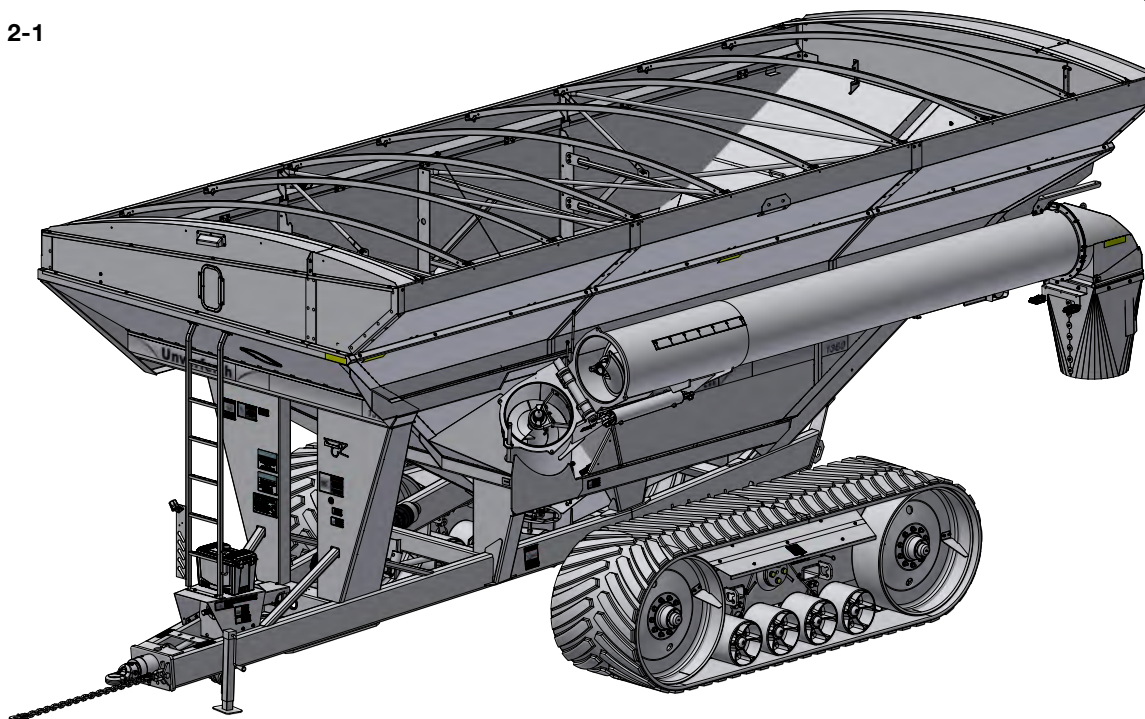
Set Up Checklist

After the cart has been completely assembled, use the following checklist and inspect the cart. Check off each item as it is found satisfactory or after proper adjustment is made.

- ☐ Remove auger rest retainer.
- ☐ Complete sideboard and tarp set up. Remove tarp/sideboard shipping brackets.
- ☐ Reposition spindles from transport position to operating position. Refer to “Spindle Positioning”.
- ☐ Torque wheel nuts and check tire pressure as specified in MAINTENANCE section.
- ☐ Axles are adjusted from shipping position to desired operating position. (If Applicable)
- ☐ Tires are inflated as specified in MAINTENANCE section.
- ☐ All grease fittings have been lubricated and gearbox oil level checked.
- ☐ Check cleanout door assembly play or movement. See maintenance section for adjustment procedure.
- ☐ Check to be sure all safety decals are correctly located and legible. Replace if damaged.
- ☐ Check to be sure all reflective decals are correctly located.
- ☐ Check to be sure SMV decal is in place and shipping cover removed.
- ☐ Check to be sure transport lights are working properly.
- ☐ Check PTO. See “Verify Telescoping PTO Shaft Length” in MAINTENANCE section.
- ☐ Check to be sure screens over auger are in place and properly secured.
- ☐ Transport chains are properly installed and hardware is torqued to specification. See “Transport Chain Connection” in OPERATION section.
- ☐ Set tractor PTO control engagement setting to a minimum, refer to tractor operators manual for setting information.
- ☐ Paint all parts scratched in shipment.
- ☐ Test run the augers. See “Auger Operation” in OPERATION section.
- ☐ Check hydraulics for leaks and check hose routing.

Basic Set Up

FIG. 2-1



Due to shipping requirements and various dealer-installed options, some initial cart set up will be required after it arrives from the factory. Use the following procedures as needed for initial cart set up.

WARNING

- TO PREVENT PERSONAL INJURY OR DEATH WHILE SERVICING, ALWAYS ENSURE THAT THERE ARE PEOPLE WHO REMAIN OUTSIDE THE CART TO ASSIST THE PERSON WORKING INSIDE, AND THAT ALL SAFE WORKPLACE PRACTICES ARE FOLLOWED. THERE IS RESTRICTED MOBILITY AND LIMITED EXIT PATHS WHEN WORKING INSIDE THE IMPLEMENT.
- KEEP HANDS CLEAR OF PINCH POINT AREAS.
- FALLING OBJECTS CAN CAUSE SERIOUS INJURY OR DEATH. DO NOT WORK UNDER THE MACHINE AT ANY TIME WHILE BEING HOISTED. BE SURE ALL LIFTING DEVICES AND SUPPORTS ARE RATED FOR THE LOADS BEING HOISTED. THESE ASSEMBLY INSTRUCTIONS WILL REQUIRE SAFE LIFTING DEVICES UP TO 32,000 LBS. SPECIFIC LOAD RATINGS FOR INDIVIDUAL LOADS WILL BE GIVEN AT THE APPROPRIATE TIME IN THE INSTRUCTIONS.
- EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.

Basic Set Up (continued)

Transport Lighting and Markings

NOTE: Unverferth Manufacturing has designed the transport lighting and marking kit to meet United States federal law and ASABE standards at the time of manufacture. Machine modifications, including additional features or changes to the intended configurations, may require updates to the lighting and marking as well.

Compliance with all lighting and marking laws is the responsibility of the operator at the time of travel.

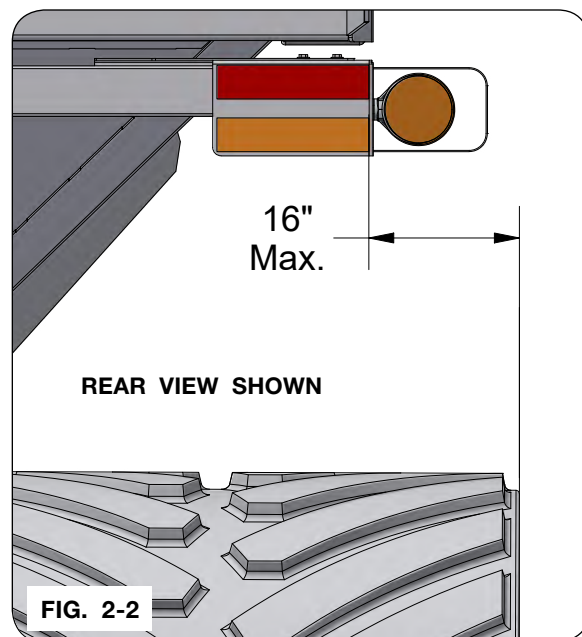
See federal regulation 49 CFR 562; available at www.govinfo.gov for US federal law requirements.

See your Unverferth dealer for additional brackets, reflectors, or lights to meet your requirements.

Lamp Set Up

Pivot lamp extension arms into position at sides of cart. The lamp bracket width is adjustable, if necessary, adjust lamp mount position to achieve dimension shown. Ensure that the brackets are adjusted such that the reflectors are no more than 16" from outer edge of the tires.

Be sure that amber reflector is facing the front of the cart (some lights on certain cart models will be flipped down for shipping).



Basic Set Up (continued)

SMV Emblem & SIS Decals

Before the cart is used, the reflective surface of the SMV must face rearward. This may require removal of film protecting the reflective surface or removing and reinstallation of the SMV. When reinstalling the SMV make sure that it is mounted with the wide part of the SMV at the bottom. (FIG 2-3)

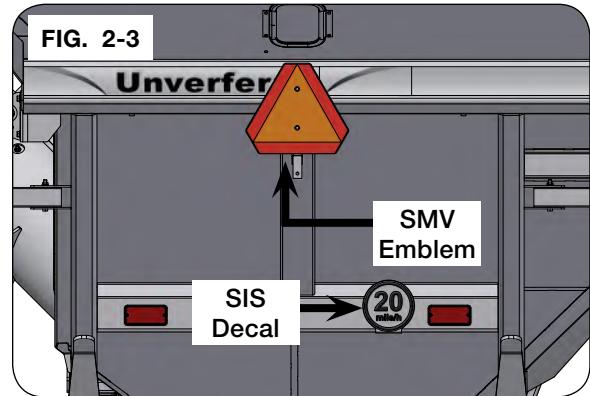
Before the cart is used, ensure the front and rear SIS placards are clean and visible after shipping. (FIG. 2-3)

Remove rear SIS decal mounting bracket from shipping position and reinstall as shown. (FIG. 2-3)

Before the cart is used, ensure the front and rear SIS decals are clean and visible.

For 20 M.P.H. SIS decals, order 9008715 for the front & 9008714 for the rear.

For 30 K.P.H. SIS decals, order 9008721 for the front & 9008720 for the rear.



Basic Set Up (continued)

Auger Rest Retainer Removal

Remove the retainer located on the upper auger rest at the back of the cart, before folding out the upper auger tube.

IMPORTANT

- *Upper auger retainer must be removed before operating upper auger tube. Failure to remove retainer will result in damage to the upper auger tube.*



FIG. 2-4



FIG. 2-5

Driveline Storage

Storage brackets are located on the inside right frame rail. Secure the PTO shaft to these brackets for extended transporting or seasonal storage.

IMPORTANT

- *Remove and store the complete PTO before towing grain cart behind a delivery truck. Interference could occur when turning resulting in damage to PTO and cart.*

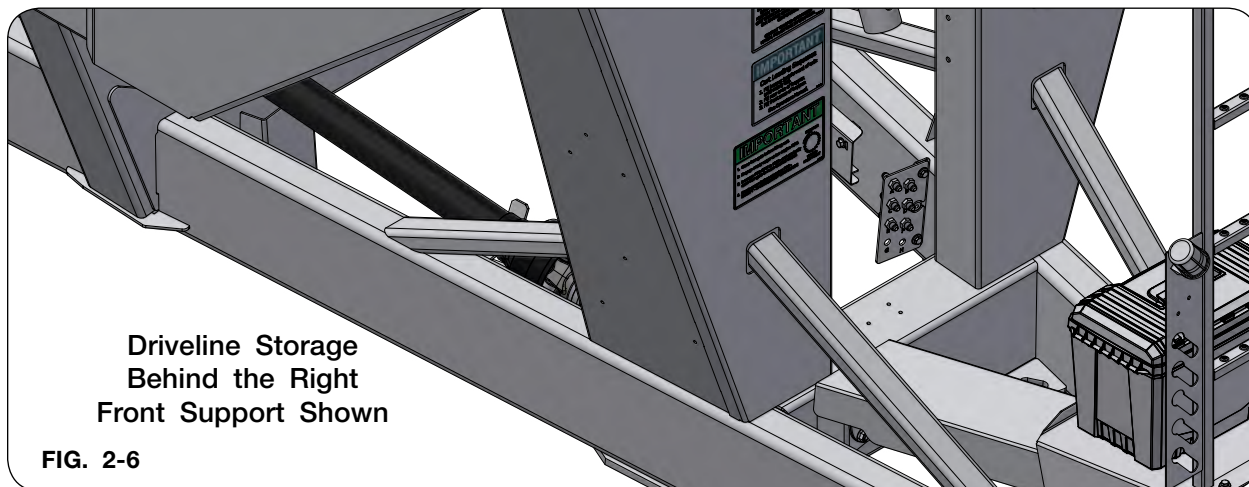


FIG. 2-6

Basic Set Up (continued)

Wheel/Tire Set Up

Tire Pressure

Tire pressure must be verified before first use and adjusted as necessary. Refer to maintenance section of this manual for information on tire pressure.

Wheel Nuts



CAUTION

- IMPROPERLY TORQUED WHEEL NUTS/BOLTS CAN CAUSE A LOSS OF IMPLEMENT CONTROL AND MACHINE DAMAGE. WHEEL NUTS/BOLTS MUST BE CHECKED REGULARLY. SEE TORQUE PAGE IN THE “MAINTENANCE” SECTION FOR PROPER WHEEL NUT/BOLT SPECIFICATIONS. WARRANTY DOES NOT COVER FAILURES CAUSED BY IMPROPERLY TORQUED WHEEL NUTS/BOLTS.

IMPORTANT

- *Installing wheels without the proper inset could result in hub or spindle failure. This will cause substantial damage to cart.*

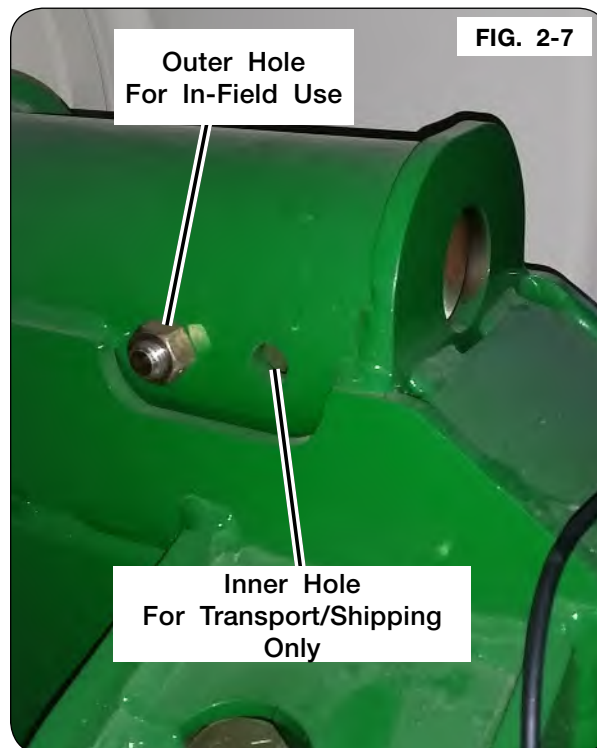
Spindle Positioning

IMPORTANT

- *Single tire hubs and spindles are slid in for shipping and need to be slid out before attaching wheels/tires to provide adequate clearance between tires and wheel wells.*

Spindles on carts with single wheels are moved inward for transportation. To achieve proper tire clearance during field operation, these spindles must be moved outward prior to cart use. (FIG. 2-7)

1. Hitch cart to tractor. Park the empty cart on a firm, level surface. Set tractor parking brake, shut off engine, and remove ignition key. Block the machine to prevent movement.
2. Use safe lifting and load holding devices rated at 32,000 lbs. to lift and support the weight of the grain cart. Place the safe lifting device under the axle closest to the tire
3. Remove 3/4" X 8" spindle retainer capscrew and locknut.
4. Using a safe lifting device rated at a minimum 600 lbs, slide spindle out.
5. Reinstall capscrew and locknut. Torque to specification.
6. Remove safe lifting device (or support) and repeat for other side.



Sideboards and End Caps Installation

1. Park the empty grain cart on a firm, level surface. Block the machine to keep it from moving. Set the tractor's parking brake, shut-off the engine, remove the ignition key and disconnect the PTO shaft.
2. Remove the crank handle, crank handle holder, shipping bundle which includes front and rear end caps, and small front and rear sideboards from inside the cart.
3. Remove and discard shipping hardware from right-hand sideboards. (FIG. 2-8)

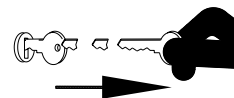
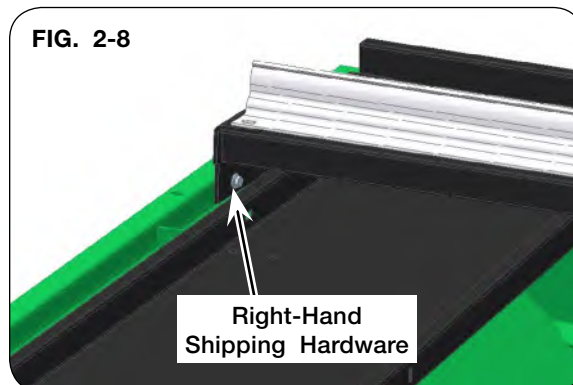


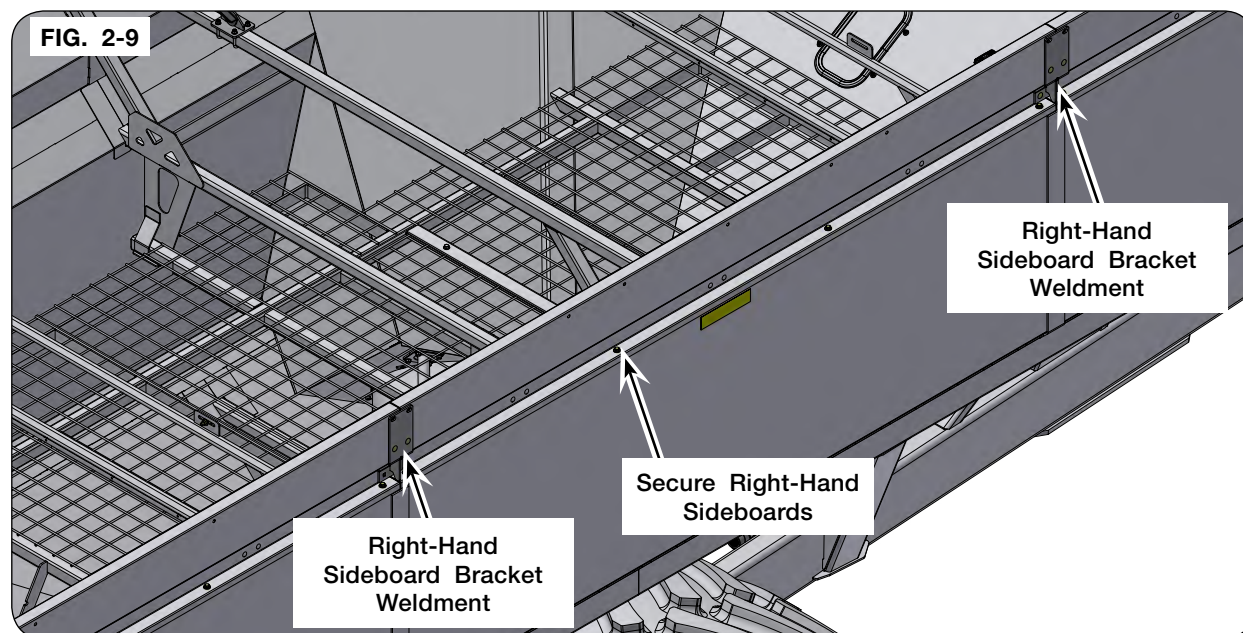
FIG. 2-8



4. Lift the right-hand sideboards into position and loosely secure sideboard into place using 3/8"-16UNC x 3/4" flange screws (95585) and 3/8"-16UNC locknuts (9008159) along sideboard bottom edge. (FIG. 2-9)

NOTE: Hinge brackets WILL support the sideboard. (FIG. 2-9)

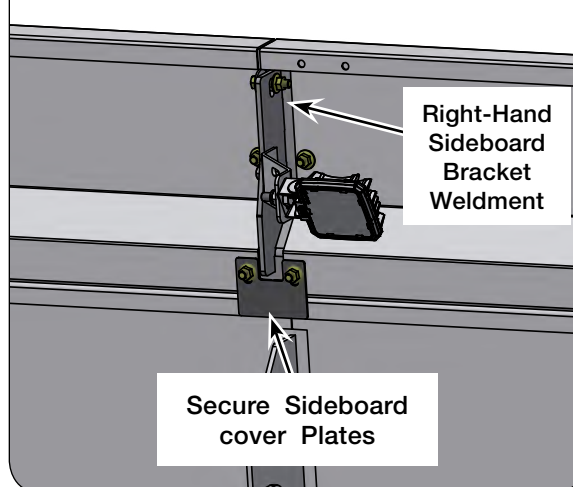
NOTE: The right-hand sideboard bracket weldments (295681B) come from the factory attached between the right-hand sideboards. (FIG. 2-9)



Sideboards and End Caps Installation (continued)

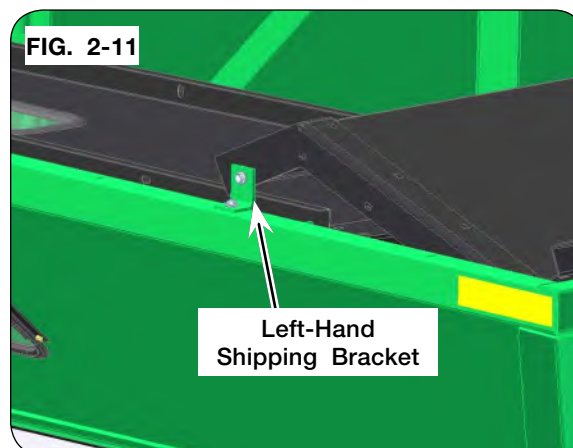
5. Loosely secure sideboard cover plates (295691B) with 3/8"-16UNC x 1" carriage bolts (9388-051) and 3/8"-16UNC locknuts (9008159) to the inside bottom right-hand front and right-hand rear sideboards. (FIG. 2-10)

FIG. 2-10



6. Remove and discard shipping bracket for left-hand sideboard. (FIG. 2-11)

FIG. 2-11

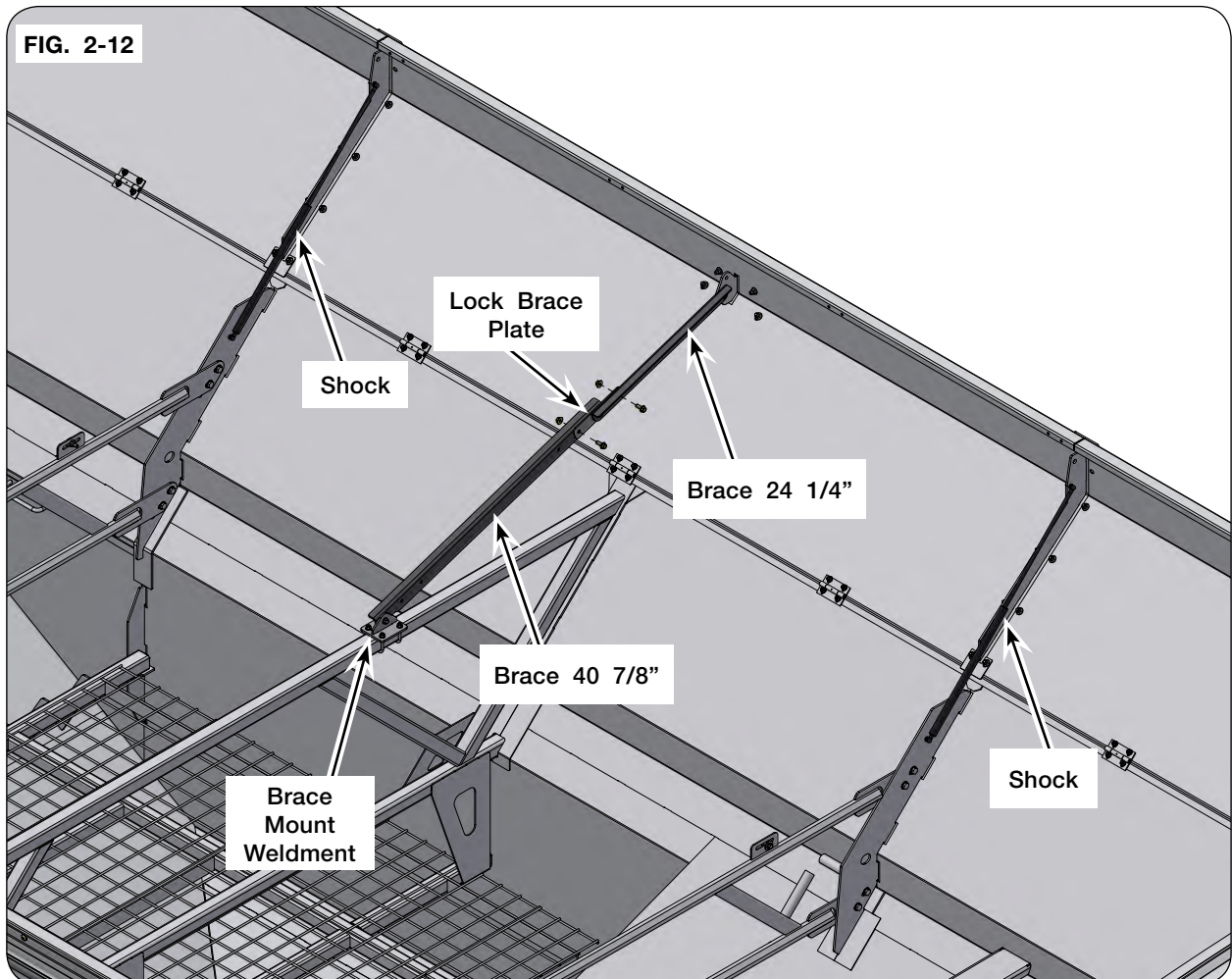


Sideboards and End Caps Installation (continued)

7. Lift the left-hand sideboards into position.

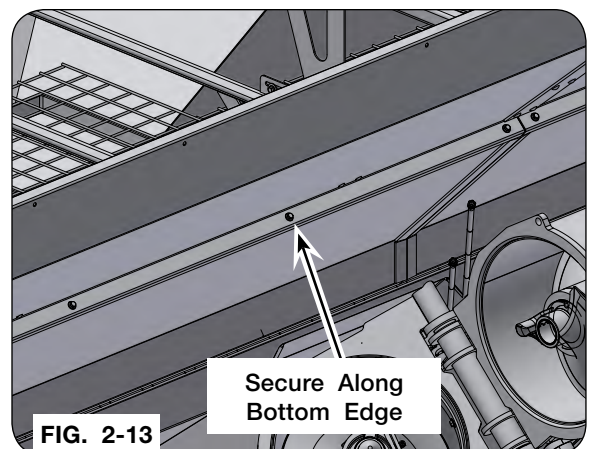
NOTE: Hinge brackets **WILL** support the sideboard and tarp.

NOTE: Shocks are attached to the left-hand sideboard. (FIG. 2-12)



NOTE: Hinge brackets **WILL** support the sideboard

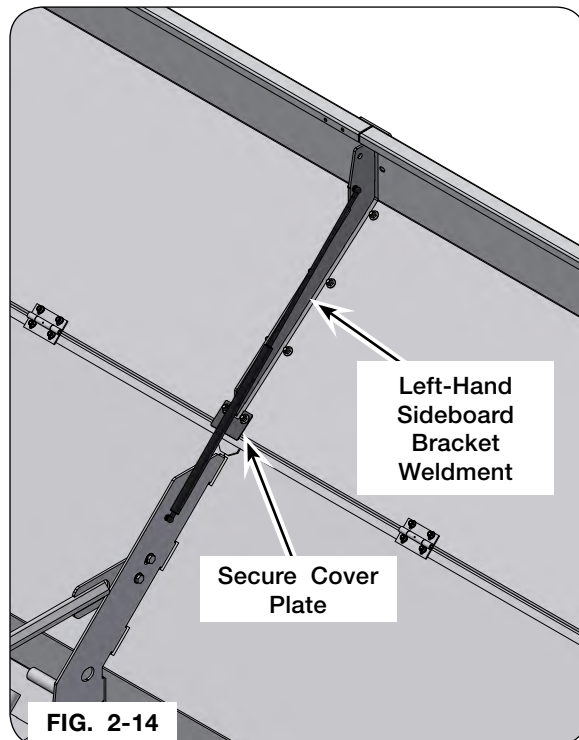
8. Loosely secure left-hand sideboard with 3/8"-16UNC x 3/4" flange screws (95585) and 3/8"-16UNC locknuts (9008159) along the bottom edge. (FIG. 2-13)
9. Secure the center braces and lock brace plate with 3/8"-16UNC x 1" flange screws (91262) and 3/8"-16UNC locknuts (9008159). (FIG. 2-12)



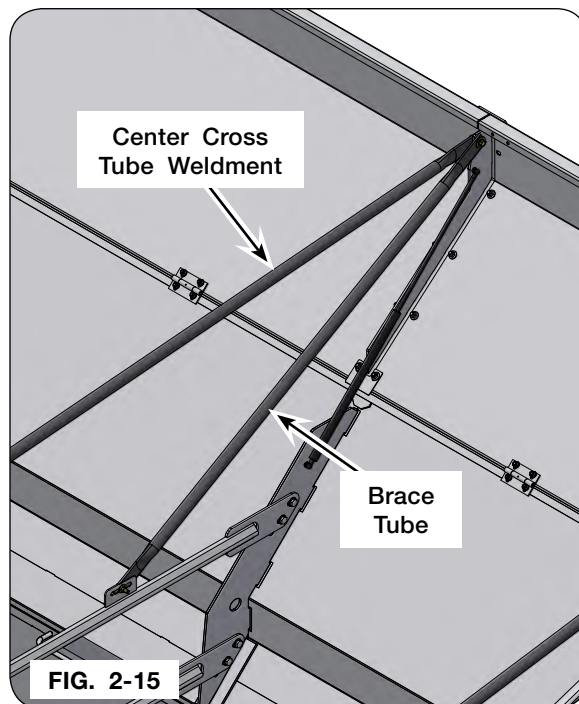
Sideboards and End Caps Installation (continued)

NOTE: The left-hand sideboard bracket weldments (295682B) come from the factory attached between the left-hand sideboards (FIG. 2-14)

10. Loosely secure sideboard cover plate (295691B) with 3/8"-16UNC x 1" carriage bolts (9388-051) and 3/8"-16UNC locknuts (9008159) to the inside bottom left-hand front and rear sideboards. (FIG. 2-14)

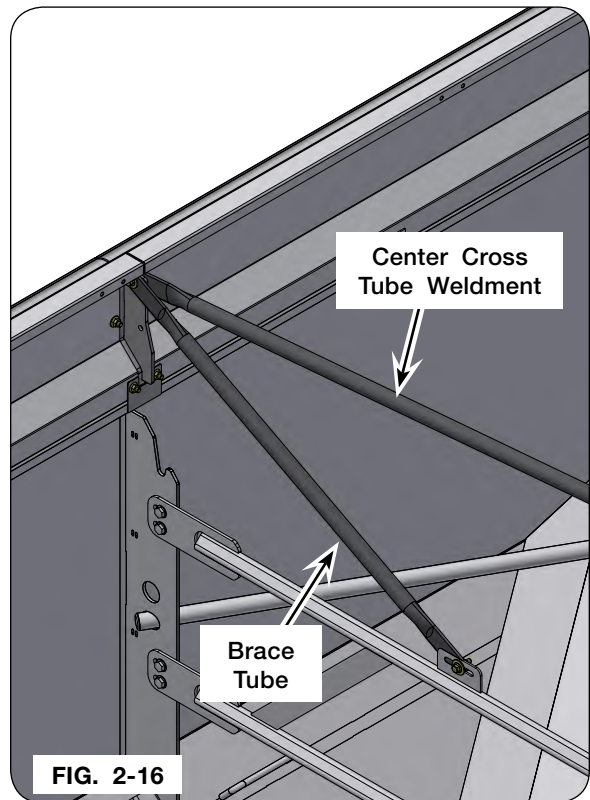


11. Install two sideboard brace tubes (287692B) and center cross tube weldments to the left-hand sideboards. Loosely secure the top with 3/8"-16UNC x 1 1/2" flange screws (95785), 3/8" flat washers (9405-078) and 3/8"-16UNC locknuts (9008159). (FIG. 2-15)
12. Secure the bottom of the brace tubes (287692B) with 3/8"-16UNC x 1 1/4" flange screws (9003259), 3/8" flat washers (9405-078) and 3/8"-16UNC locknuts (9008159). (FIG. 2-15)

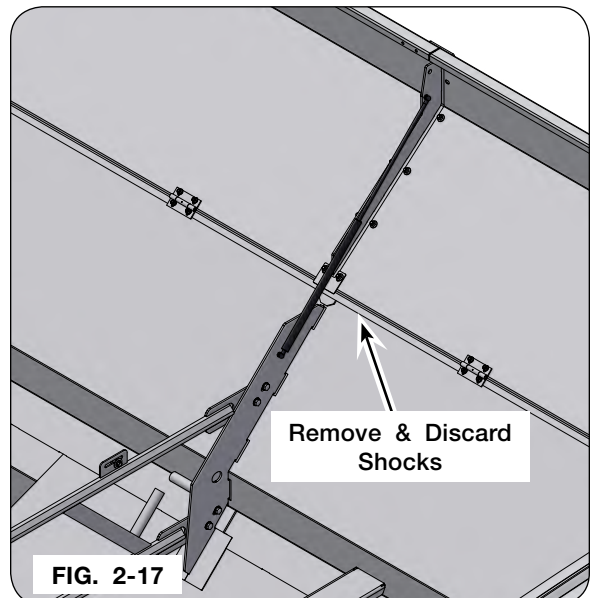


Sideboards and End Caps Installation (continued)

13. Install two sideboard brace tubes (220032B) and center cross tube weldments to the right-hand sideboards. Loosely secure the top with 3/8"-16UNC x 1 1/2" flange screws (95785), 3/8" flat washers (9405-078) and 3/8"-16UNC locknuts (9008159). (FIG. 2-16)
14. Secure the bottom of the brace tubes (287692B) with 3/8"-16UNC x 1 1/4" flange screws (9003259), 3/8" flat washers (9405-078) and 3/8"-16UNC locknuts (9008159). (FIG. 2-16)

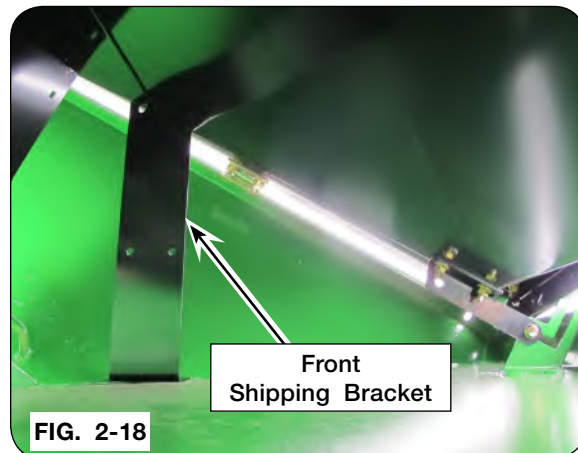


15. Remove and discard the shocks and associated brackets from the left-hand sideboard. (FIG. 2-17)

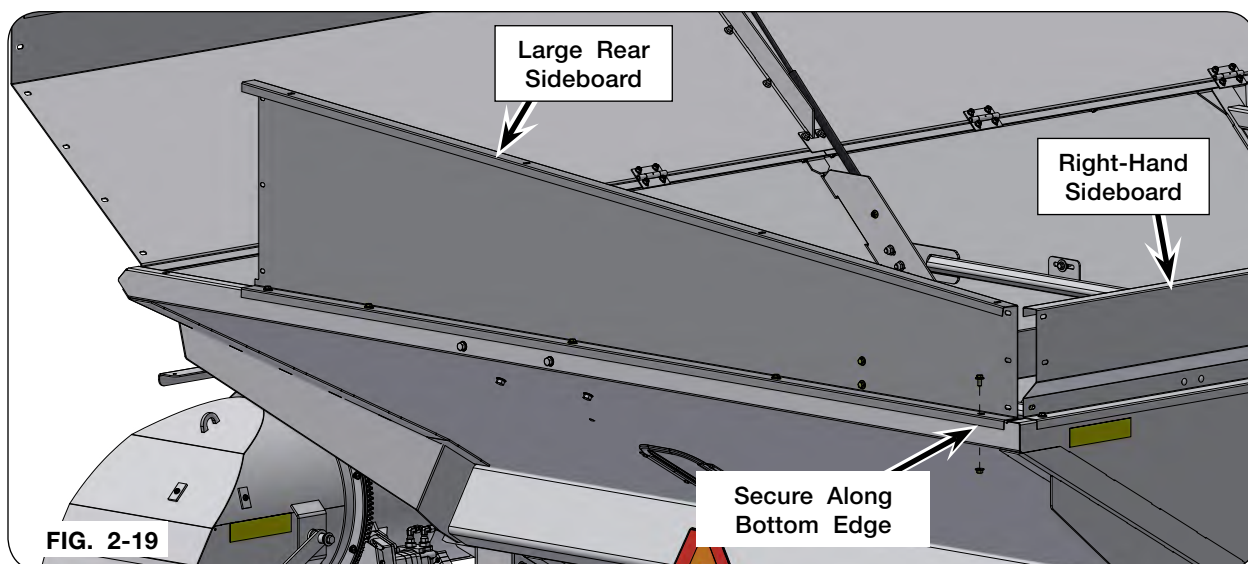


Sideboards and End Caps Installation (continued)

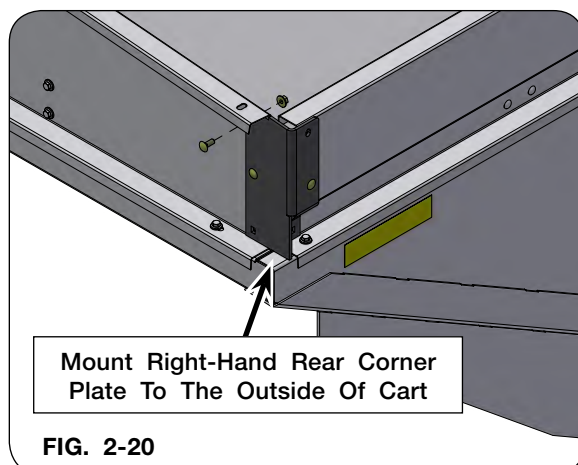
16. Remove and discard the shipping brackets from the rear and front sideboards. Front sideboard shown in FIG. 2-18.



17. Lift the large rear sideboard (295671B) up into position and loosely secure with 3/8"-16UNC x 3/4" flange screws (95585) and 3/8"-16UNC locknuts (9008159) along the bottom. (FIG. 2-19)

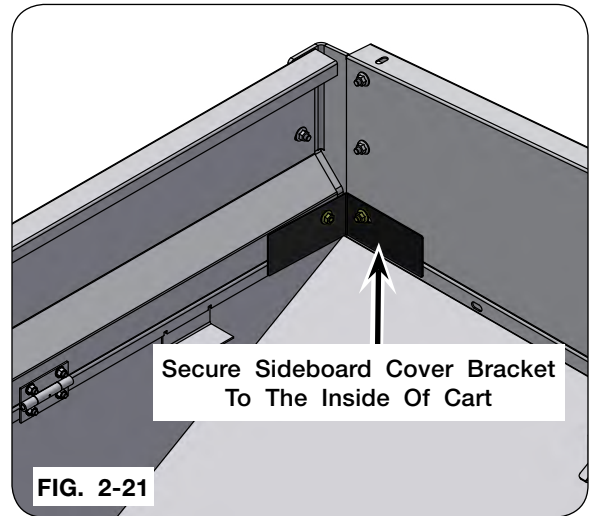


18. Connect large rear sideboard to right-hand rear sideboard using right-hand rear corner sideboard plate (295680B). Loosely secure using 3/8"-16UNC x 1" carriage bolts (9388-051) and 3/8"-16UNC locknuts (9008159). (FIG. 2-20)

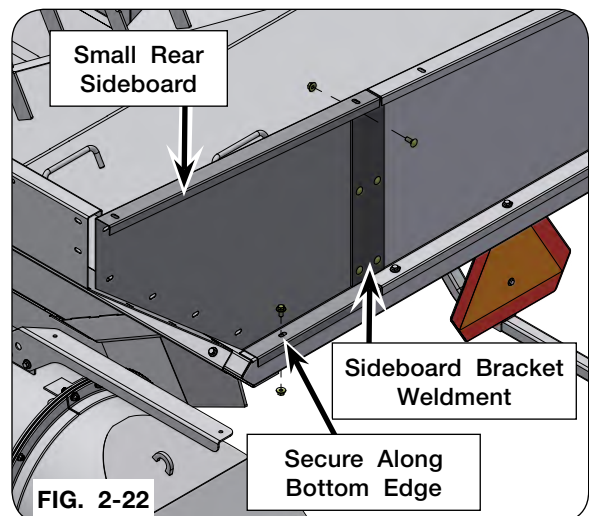


Sideboards and End Caps Installation (continued)

19. Loosely secure sideboard cover bracket (295667B) with 3/8"-16UNC x 1" carriage bolts (9388-051) and 3/8"-16UNC locknuts (9008159) to the inside right-hand bottom corner of large rear sideboard and the right-hand sideboard. (FIG. 2-21)

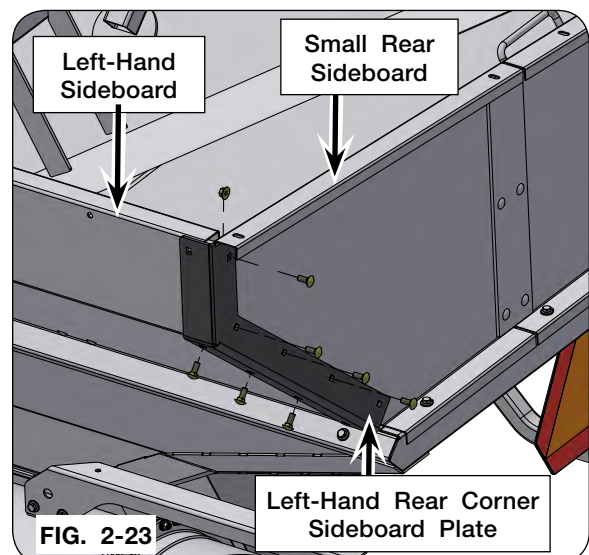


20. Loosely connect the small rear sideboard (295672B) to the large rear sideboard (295671B) using the sideboard bracket weldment (295697B) and 3/8"-16UNC x 1" carriage bolts (9388-051) and 3/8"-16UNC locknuts (9008159). Also, loosely install 3/8"-16UNC x 3/4" flange screws (95585) and 3/8"-16UNC locknuts (9008159) along the bottom. (FIG. 2-22)



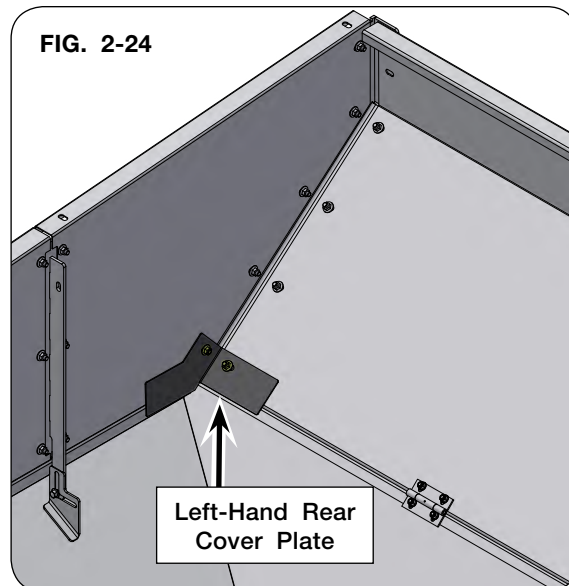
21. Loosely attach small rear sideboard to the left-hand sideboard using the left-hand rear sideboard corner plate (295678B) on the outside of the sideboards with 3/8"-16UNC x 1" carriage bolts (9388-051) and 3/8"-16UNC locknuts (9008159). (FIG. 2-23)

22. Attach the top of the left-hand rear sideboard corner plate (295678B) with 3/8"-16UNC x 1 1/4" truss head machine screws (9009089) and 3/8"-16UNC locknuts (9008159). (FIG. 2-23)

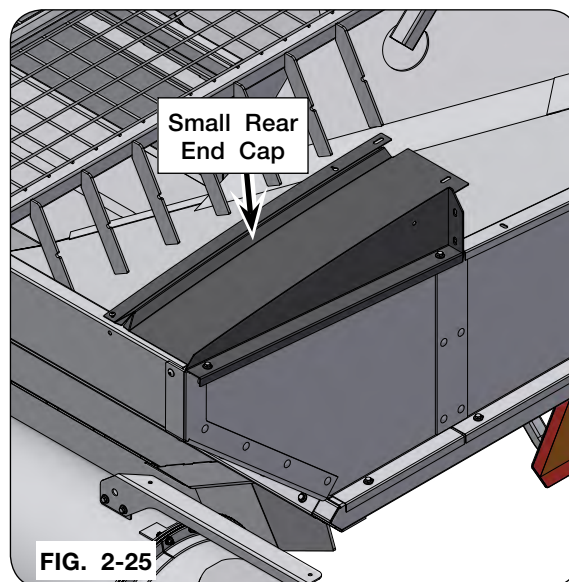


Sideboards and End Caps Installation (continued)

23. Loosely secure sideboard cover plate (298159B) with 3/8"-16UNC x 1" carriage bolts (9388-051) and 3/8"-16UNC locknuts (9008159) to the inside left-hand bottom corner of small rear sideboard. (FIG. 2-24)



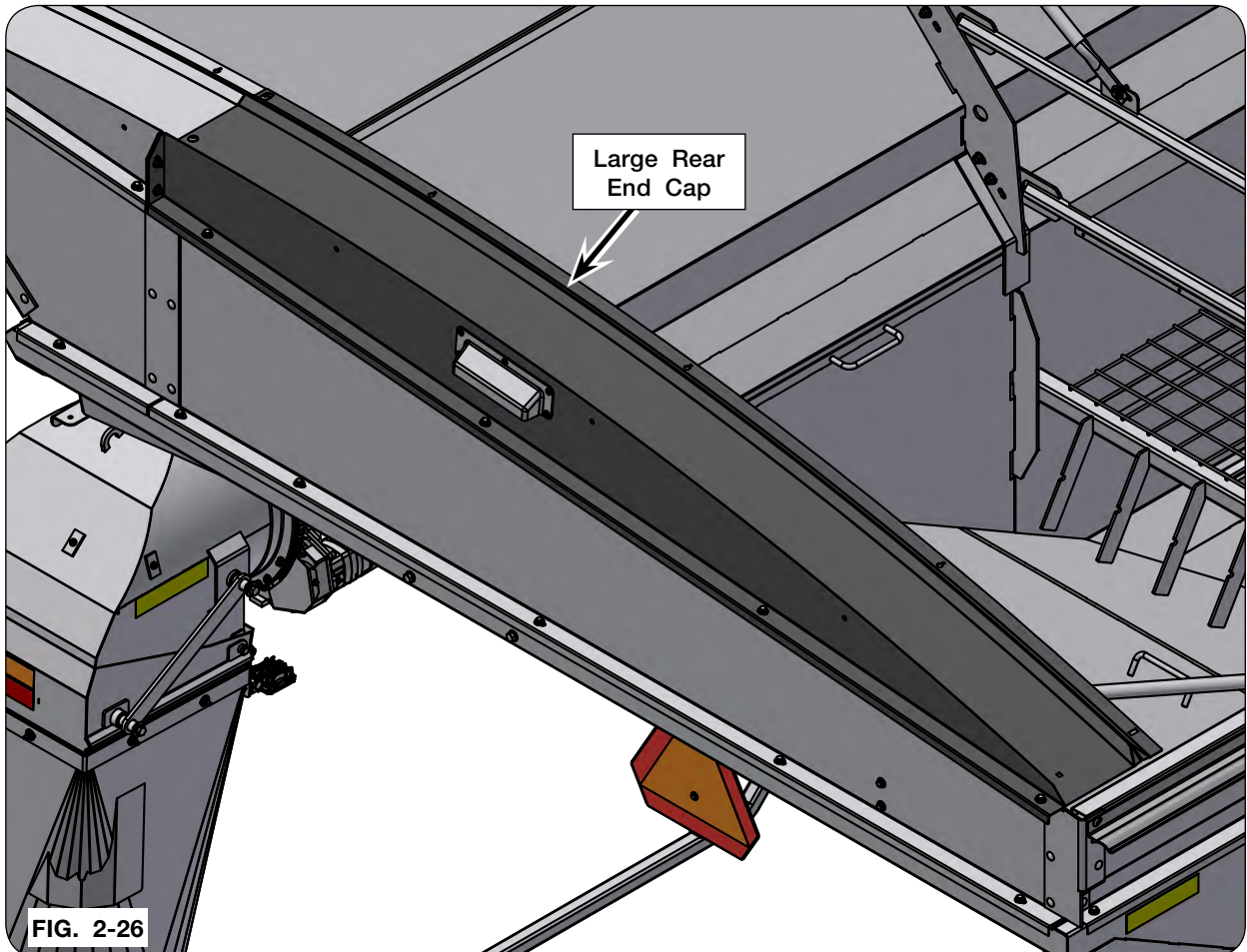
24. Attach small rear end cap (288341B) on top of the rear sideboards. Loosely secure using 3/8"-16UNC x 3/4" flange screws (95585) and 3/8"-16UNC locknuts (9008159) along the bottom. (FIG. 2-25)
25. Fasten the rear of the small rear end cap (288341B) to the left-hand sideboard with 1/4"-14 x 1" truss head screw (9505717). (FIG. 2-25)



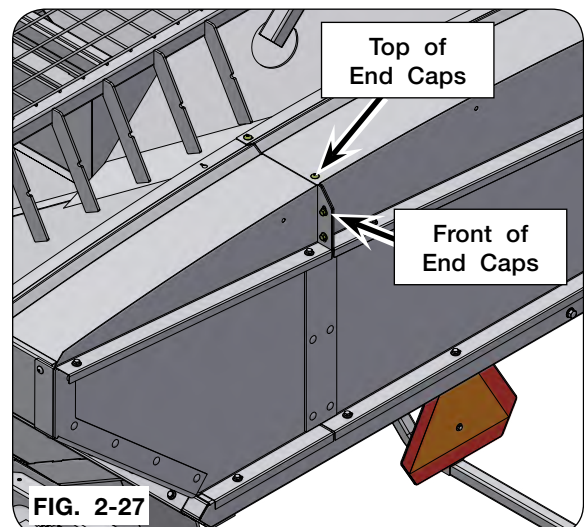
Sideboards and End Caps Installation (continued)

26. Attach large rear end cap (296131B) on top of rear sideboard. Loosely secure using 3/8"-16UNC x 3/4" flange screws (95585) and 3/8"-16UNC locknuts (9008159) along the bottom. (FIG. 2-26)

NOTE: Tabs on smaller end cap go UNDER the larger end cap.



27. Loosely secure the top of the large rear end cap to small rear end cap using 3/8"-16UNC x 1" truss head screws (9005312) and 3/8"-16UNC locknuts (9008159). (FIG. 2-27)
28. Loosely secure the front of the large rear end cap to small rear end cap using 3/8"-16UNC x 1" flange screws (91262) and 3/8"-16UNC locknuts (9008159). (FIG. 2-27)

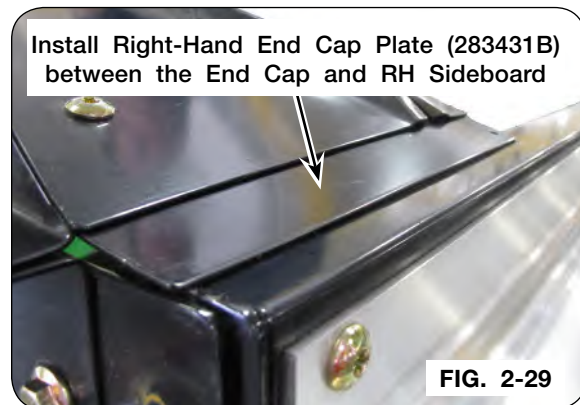
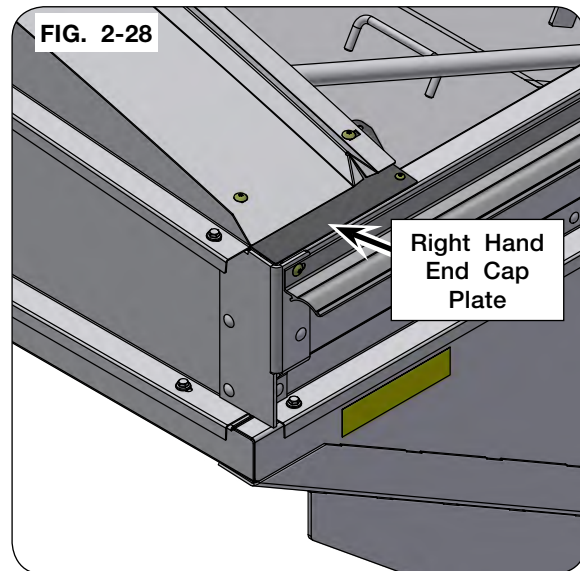


Sideboards and End Caps Installation (continued)

29. Position right-hand end cap plate (283431B) between the large end cap and right-hand sideboard. (FIG. 2-28 & FIG. 2-29)

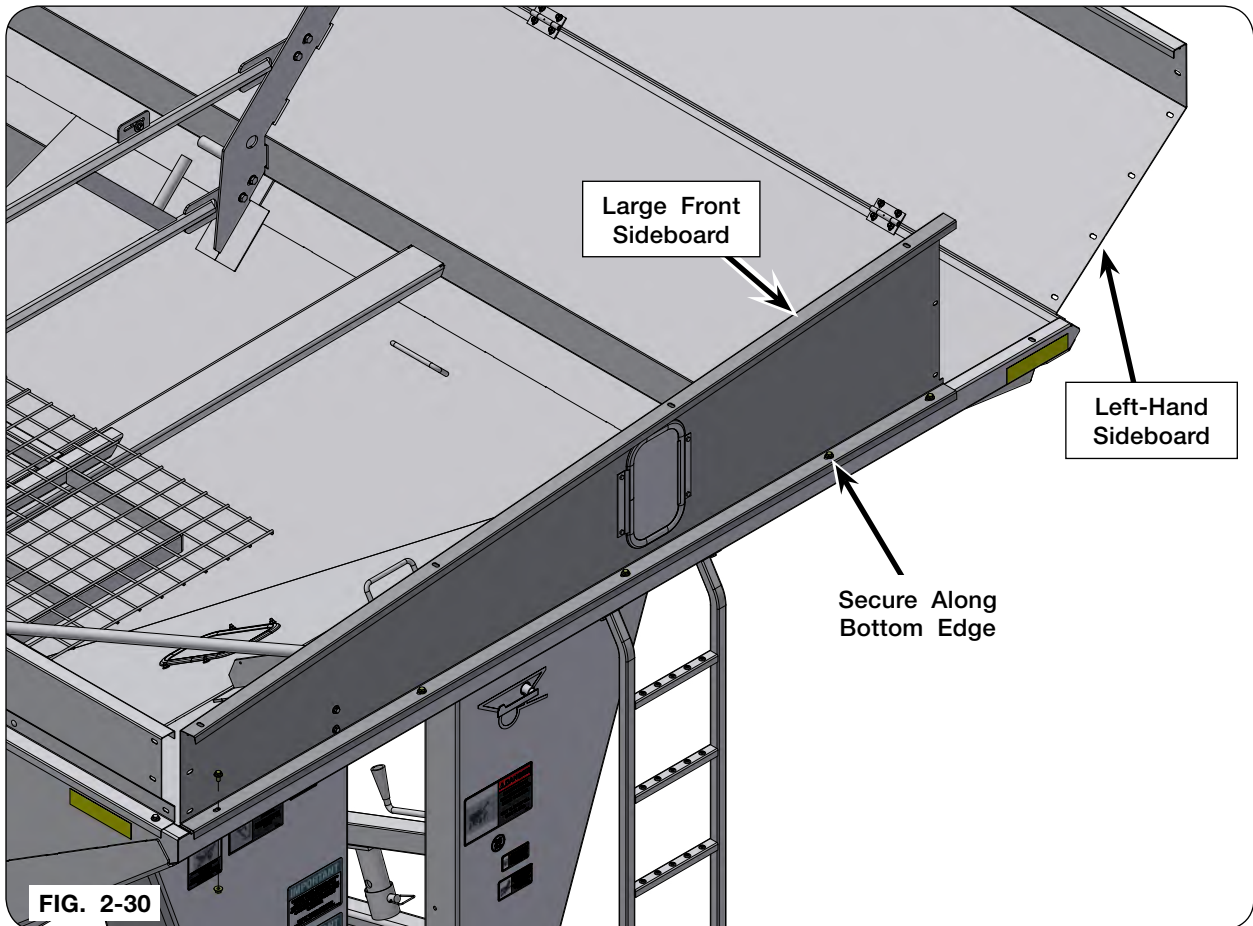
NOTE: Right-hand end cap plates must be installed at least 1/4" from the outside edge of the sideboard to prevent tearing the tarp.

30. Loosely retain right-hand end cap plate to large end cap using two truss head screws (9005312) and two flange nuts (91263). (FIG. 2-28 & FIG. 2-29)

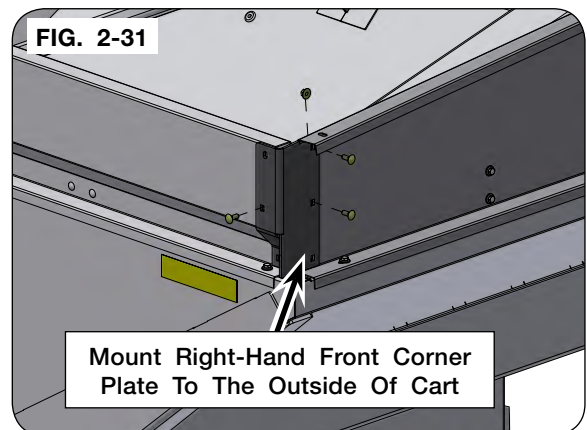


Sideboards and End Caps Installation (continued)

31. Lift large front sideboard (297652B) into position and loosely secure with 3/8"-16UNC x 3/4" flange screws (95585) and 3/8"-16UNC locknuts (9008159) along the bottom. (FIG. 2-30)

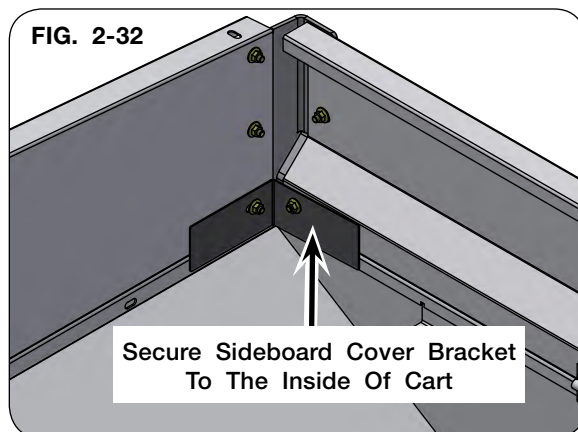


32. Connect large front sideboard to the right-hand sideboard using the right-hand front corner sideboard plate (295679B). Loosely secure using 3/8"-16UNC x 1" carriage bolts (9388-051) and 3/8"-16UNC locknuts (9008159). (FIG. 2-31)

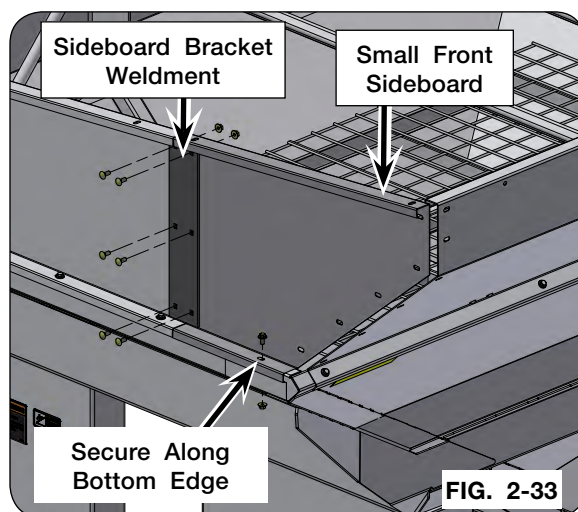


Sideboards and End Caps Installation (continued)

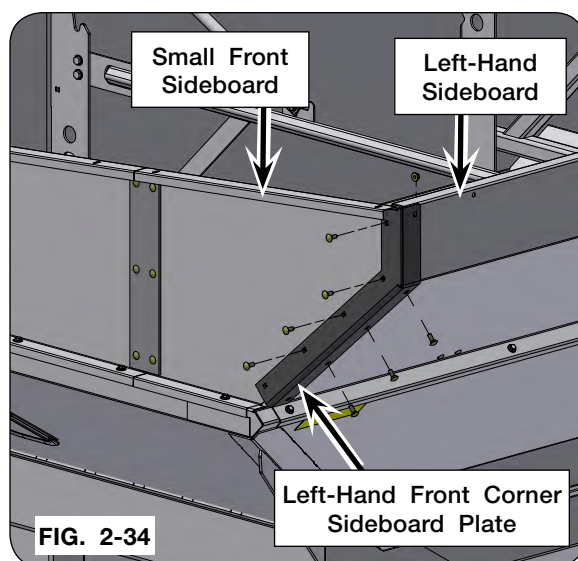
33. Loosely secure sideboard cover bracket (295667B) with 3/8"-16UNC x 1" carriage bolts (9388-051) and 3/8"-16UNC locknuts (9008159) to the inside right-hand bottom corner of large front sideboard and the right-hand sideboard. (FIG. 2-32)



34. Loosely connect the small front sideboard (295670B) to the large front sideboard (298647B) using the sideboard bracket weldment (295697B) and 3/8"-16UNC x 1" carriage bolts (9388-051) and 3/8"-16UNC locknuts (9008159). Also, loosely install 3/8"-16UNC x 3/4" flange screws (95585) and 3/8"-16UNC locknuts (9008159) along the bottom. (FIG. 2-33)

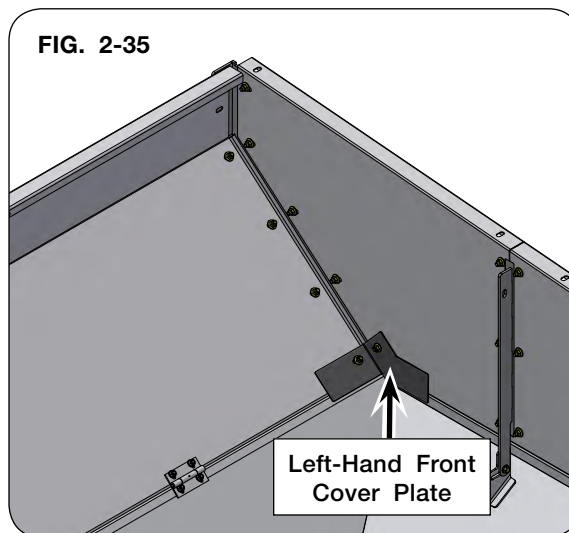


35. Loosely attach small front sideboard to the left-hand sideboard using the left-hand front sideboard corner plate (295677B) on the outside of the sideboards with 3/8"-16UNC x 1" carriage bolts (9388-051) and 3/8"-16UNC locknuts (9008159). (FIG. 2-34)
36. Attach the top of the left-hand front sideboard corner plate (295677B) with 3/8"-16UNC x 1 1/4" truss head machine screws (9009089) and 3/8"-16UNC locknuts (9008159). (FIG. 2-34)

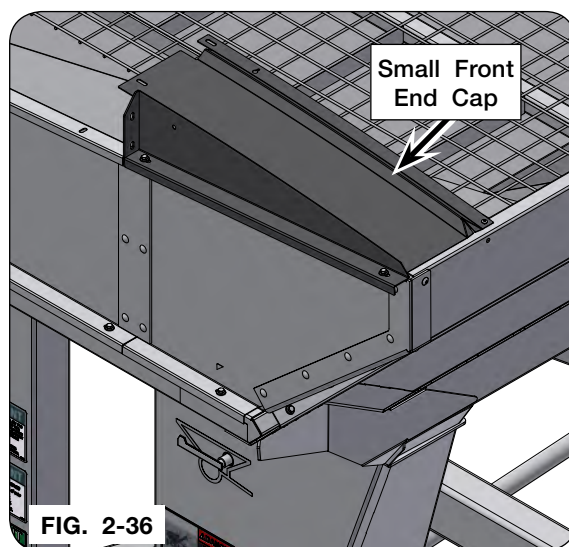


Sideboards and End Caps Installation (continued)

37. Loosely secure sideboard cover plate (298159B) with 3/8"-16UNC x 1" carriage bolts (9388-051) and 3/8"-16UNC locknuts (9008159) to the inside left-hand bottom corner of small front sideboard. (FIG. 2-35)



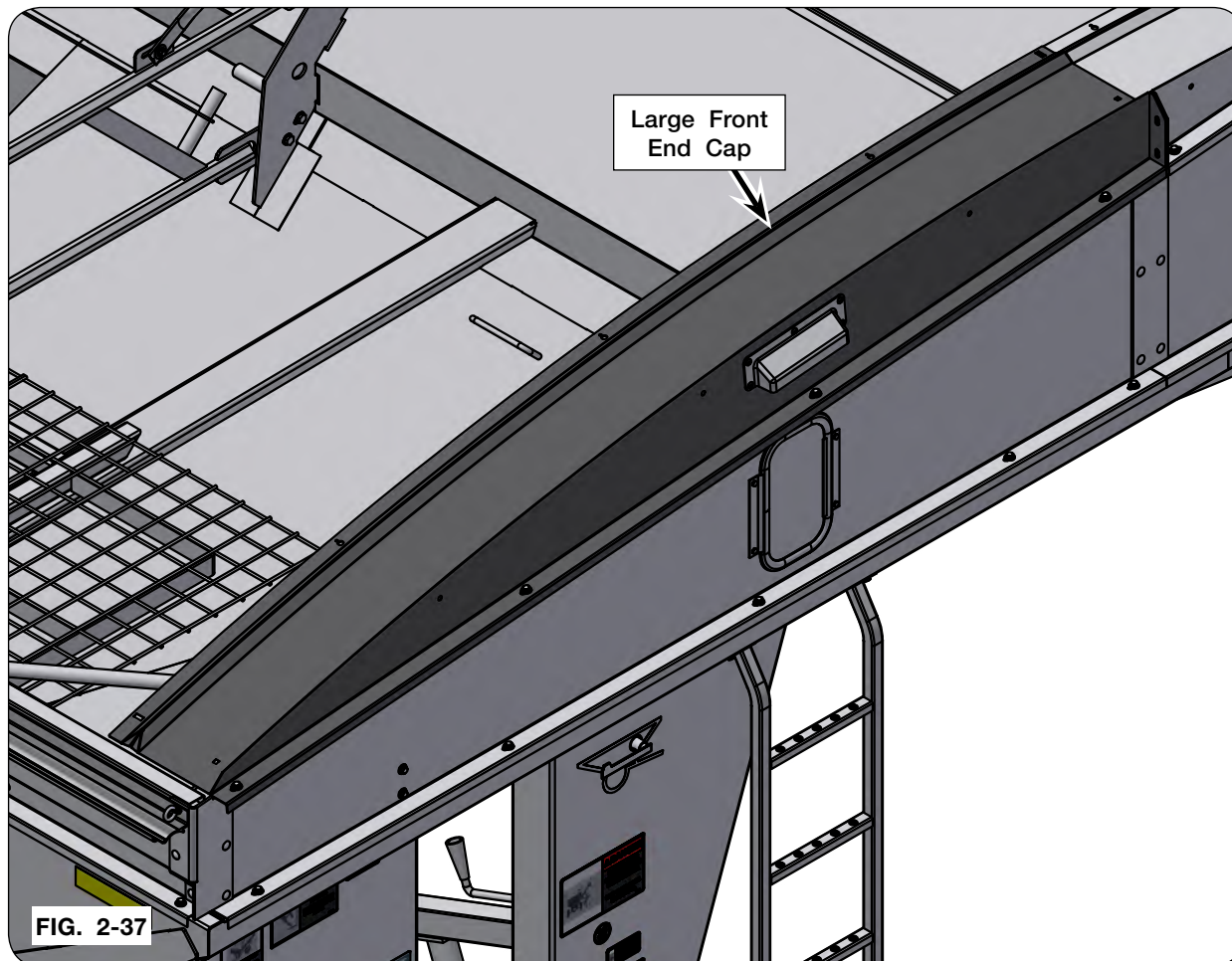
38. Attach small front end cap (288341B) on top of the front sideboards. Loosely secure using 3/8"-16UNC x 3/4" flange screws (95585) and 3/8"-16UNC locknuts (9008159) along the bottom. (FIG. 2-36)
39. Fasten the rear of the small front end cap (288341B) to the left-hand sideboard with 1/4"-14 x 1" truss head screw (9505717). (FIG. 2-36)



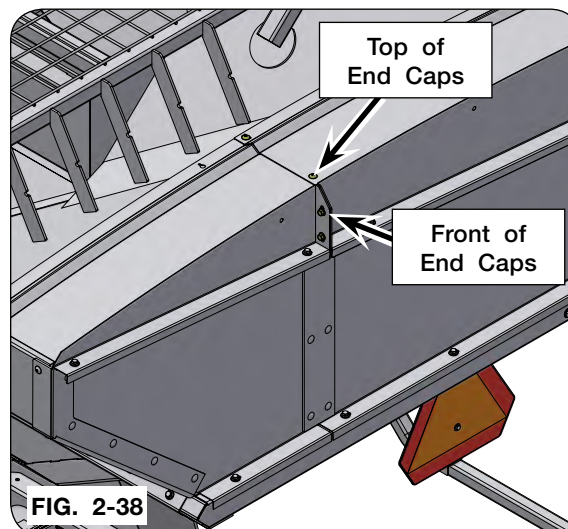
Sideboards and End Caps Installation (continued)

40. Attach large front end cap (296129B) on top of front sideboard. Loosely secure using 3/8"-16UNC x 3/4" flange screws (95585) and 3/8"-16UNC locknuts (9008159) along the bottom. (FIG. 2-37)

NOTE: Tabs on smaller end cap go UNDER the larger end cap.



41. Loosely secure the top of the large front end cap to small front end cap using 3/8"-16UNC x 1" truss head screws (9005312) and 3/8"-16UNC locknuts (9008159). (FIG. 2-38)
42. Loosely secure the front of the large front end cap to small front end cap using 3/8"-16UNC x 1" flange screws (91262) and 3/8"-16UNC locknuts (9008159). (FIG. 2-38)



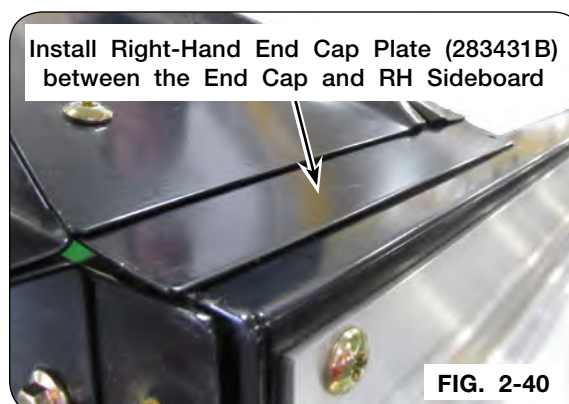
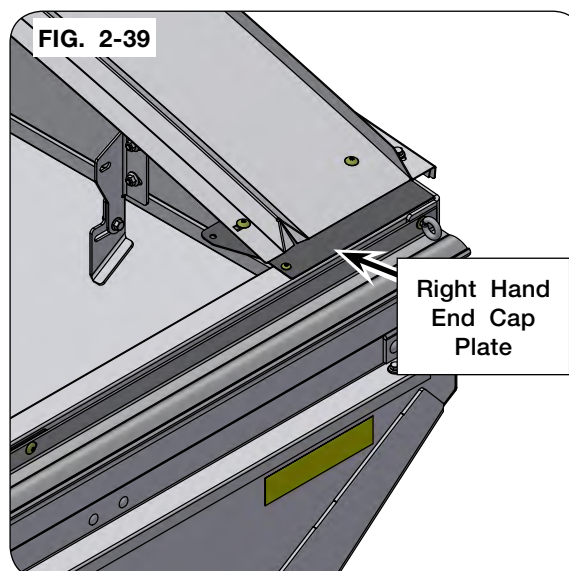
Sideboards and End Caps Installation (continued)

43. Position right-hand end cap plate (283431B) between the large end cap and right-hand sideboard. (FIG. 2-39 & FIG. 2-40)

NOTE: Right-hand end cap plates must be installed at least 1/4" from the outside edge of the sideboard to prevent tearing the tarp.

44. Loosely retain right-hand end cap plate to large end cap using two truss head screws (9005312) and two flange nuts (91263). (FIG. 2-39 & FIG. 2-40)

NOTE: DO NOT tighten hardware at this time. Wait until tarp bows are in place before torquing hardware.

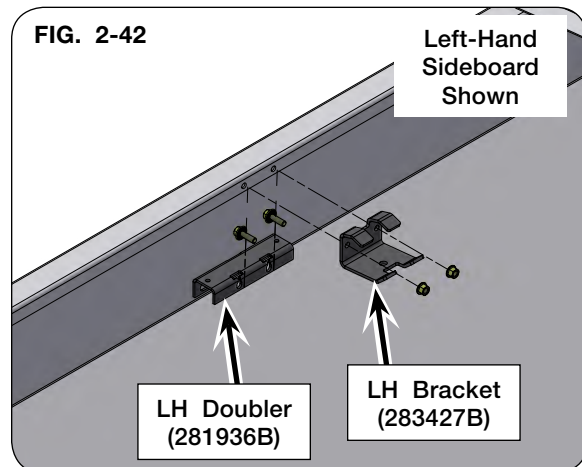
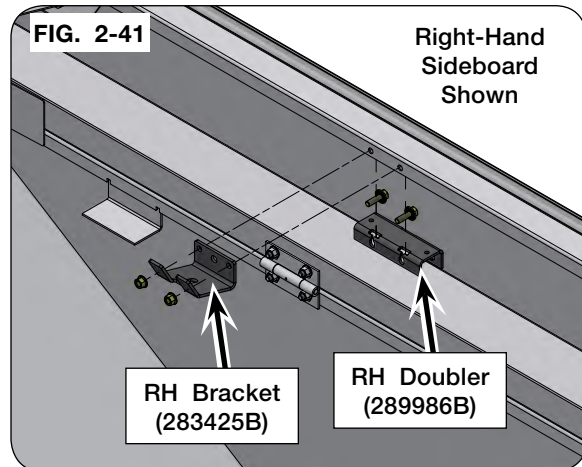


Tarp Installation

NOTE: Ensure RH and LH doublers are inside the sideboard lip. (FIG. 2-41 and FIG. 2-42)

NOTE: For each of the eight tarp bows, complete the following steps:

1. If applicable, attach tarp bow brackets (right-hand 283425B; left-hand 283427B) to doubler (right-hand 289986B, left-hand 281936B) under the sideboard lip with 5/16"-18UNC x 1" flange screws (97604) and 5/16"-18UNC flange nuts (9010154). (FIG. 2-41 and FIG. 2-42)



Tarp Installation (continued)

2. Install eight long tarp bows (288339B) across the top of the cart using 3/8"-16UNC x 3" flat hex cap-screw (902703-046) and 3/8"-16UNC flange nuts (91263). (FIG. 2-43)

NOTE: Right-hand sideboard may need to be pulled inwards to align holes and attach tarp bows.

NOTE: Ensure capscrew head (902703-046) is flush with the top of tarp bow tube. (FIG. 2-43)

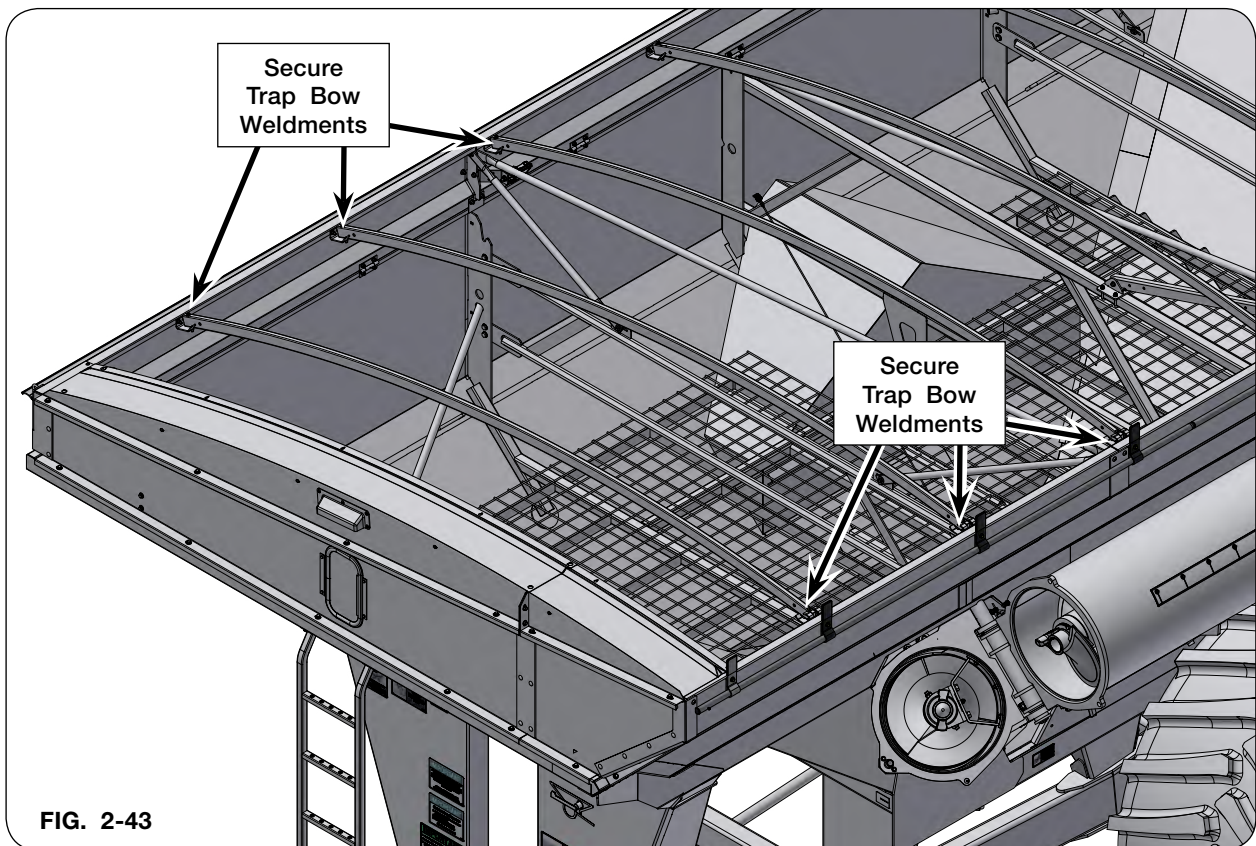


FIG. 2-43

3. Tighten ALL hardware.
Torque 3/8" hardware to 25–28 ft.-lbs.
4. Retain right-hand end cap plates to right-hand sideboards by using one 1/4"-14 x 1" truss head screw (9505717) for the front and rear of the cart. (FIG. 2-44)

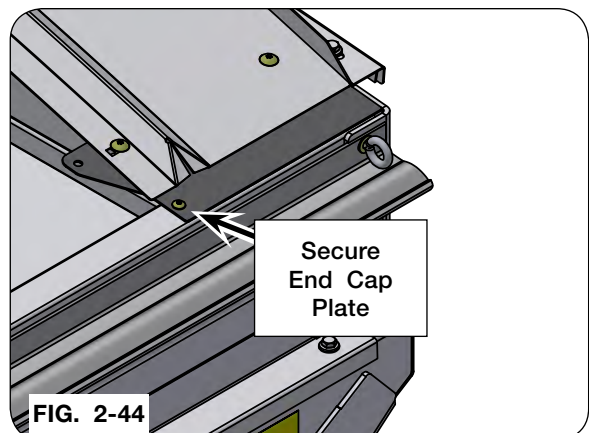
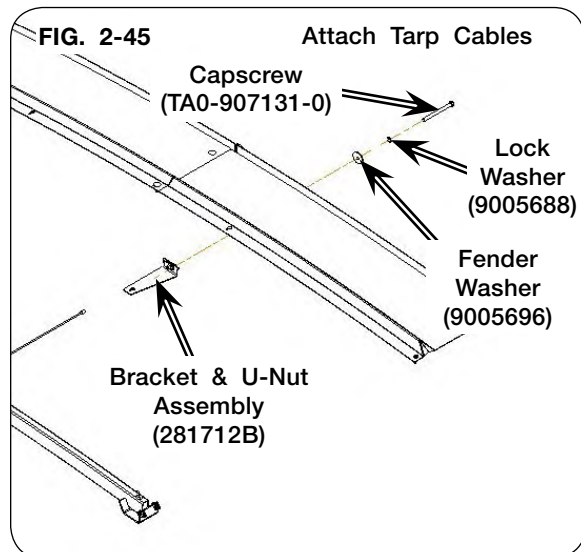


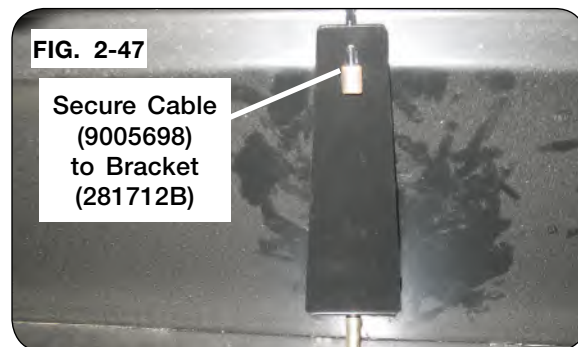
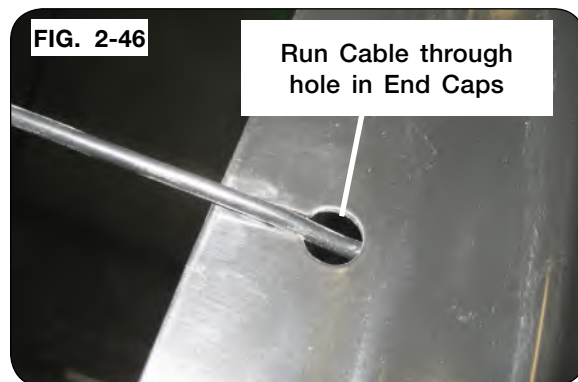
FIG. 2-44

Tarp Installation (continued)

5. Install four bracket & U-nut assemblies (281712B) using 3/8"-16UNC x 4 1/2" capscrews (TA0-907131-0), 3/8" lock washers (9005688), and 3/8" fender washers (9005696). (FIG. 2-45)

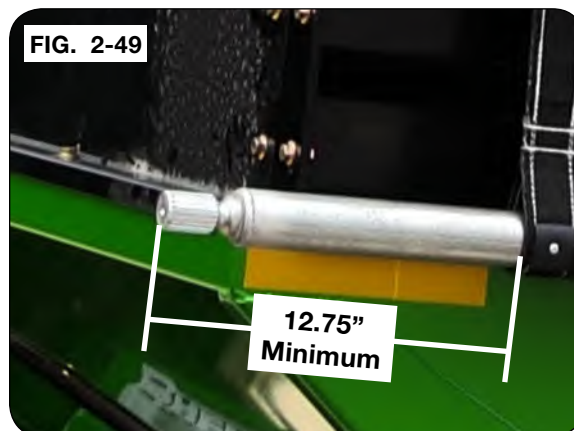


6. Insert nylon coated cable, through hole in front end cap and route over tarp bows. Insert through hole in rear end cap and secure to keyhole slot in adjusting bracket under end cap. (FIGS. 2-46 through 2-48)
7. Tighten cables until snug, without pulling front and rear board inward. **DO NOT** over-tighten.



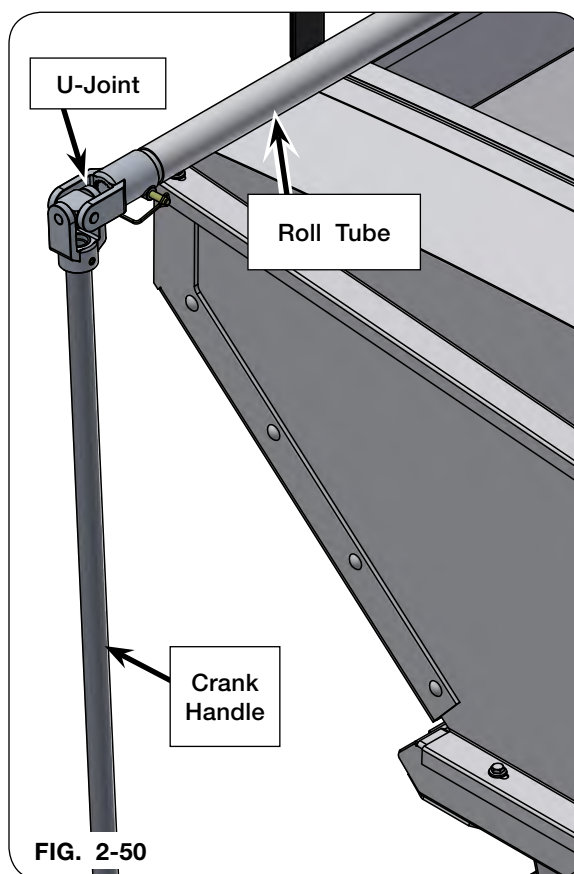
Tarp Installation (continued)

8. Confirm that the roll tube protrudes at a minimum of 12.75" from the edge of tarp. Adjust roll tube if needed. (FIG. 2-49)



9. Attach the crank handle (287944) to u-joint (900497) with 3/8" x 2" roll pin (9092-180). (FIG. 2-50)
10. Vertically attach the crank handle/u-joint assembly to the tarp roll tube (288360) with lynch pin (9005305). (FIG. 2-50)

NOTE: Remove zip ties holding tarp roll. Take care not to damage tarp.

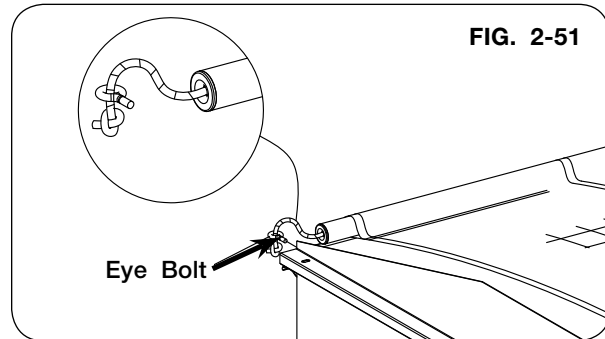


Tarp Installation (continued)

11. Turn the crank handle clockwise with tarp rolled up under latch plates, thread the bungee cord end through the top of the eye bolt. Leave 2-3 inches of slack and knot off. Cut off excess 2-3 inches past knot. Sear end to keep from fraying, (FIG. 2-51).
12. Test tarp for proper working motion. Tighten tarp by holding the crank firmly with both hands and roll the main tarp tube counter-clockwise up under the latch plate. Next, bring the crank handle down perpendicular to the ground. Continue by lifting it up into the crank retainer. (FIG. 2-52)

NOTE: A slight bow in crank tube should indicate adequate tension.

NOTE: U-joint may need to be re-indexed on the splined shaft of the roll tube to achieve an ideal tarp tension and over time it may need to be readjusted.



Operational Check

WARNING

- **MOVING OR ROTATING COMPONENTS CAN CAUSE SERIOUS INJURY OR DEATH. ENSURE SERVICE COVERS, CHAIN/BELT COVERS AND CLEAN-OUT DOOR ARE IN PLACE AND SECURELY FASTENED BEFORE OPERATING UNIT.**

IMPORTANT

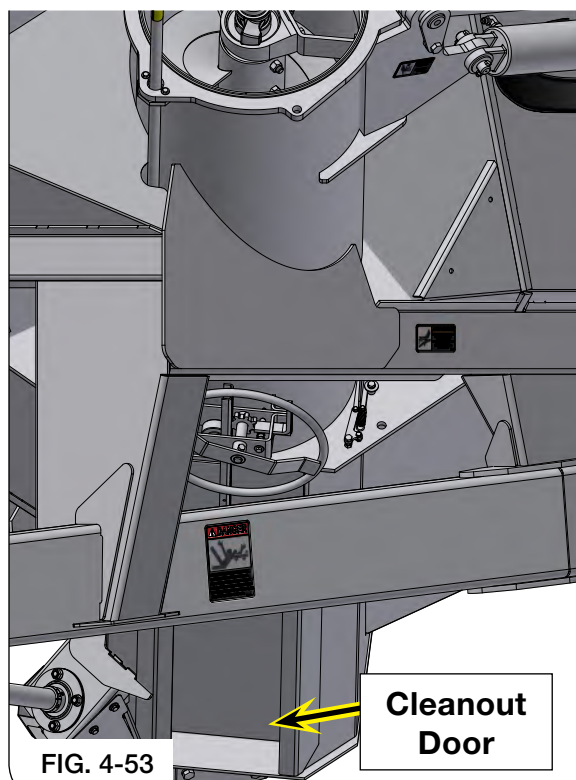
- *Before running the auger, inspect and verify all grain dust and filings are removed from inside the lower auger to prevent machine damage and the cleanout door is completely closed.*

NOTE: For cleanout door assembly adjustment, refer to “Adjusting Cleanout Door” in the MAINTENANCE section.

NOTE: The joystick and 7-pin connector **MUST** be plugged into the same power source. If plugged into different power sources, the spout rotate and auger fold functions **WILL NOT** operate normally.

Once set-up has been completed, run the cart to check for operation and functionality:

1. Lights - Work, Turn, Brake
2. Hydraulic Drive (if applicable)
3. Flow Door
4. Flow Door Indicator
5. Open & Close Cleanout Door
6. Auger Fold
7. Spout Rotate (if applicable)
8. Spout Tilt
9. Auger Startup & Shut-down
10. Tarp
11. Video System Camera (if applicable)
12. Scale (if applicable)



Notes

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FOR TRACK INFORMATION, PLEASE REFER TO YOUR TRACK MANUAL.

FOR TARP INFORMATION, PLEASE REFER TO YOUR TARP MANUAL.

FOR SCALE INFORMATION, PLEASE REFER TO YOUR SCALE MANUAL.

FOR HYDRAULIC DRIVE INFORMATION, PLEASE REFER TO YOUR HYDRAULIC DRIVE MANUAL.

Operating Checklist

- ☐ Read and understand all safety precautions before operating cart.
- ☐ R.V. antifreeze needs to be completely flushed from the Water Delivery System and disposed of properly. Make certain the Water Delivery System only contains water before placing the Water Delivery System in service. (If applicable)
- ☐ Test operation and functionality of flow door indicator, auger fold, spout rotate, spout tilt, tarp, rear access door and if equipped, scale, joystick, scale remote display, video system, and water delivery system.
- ☐ Verify transport lights are working properly. Check and follow all regulations before towing on a road or highway.
- ☐ Verify tractor drawbar height and length. See “Preparing Tractor” in this section.
- ☐ Verify hitch height and length as outlined in OPERATION section.
- ☐ Install transport chain and torque hardware to specification. See “Transport Chain Connection” in OPERATION section.
- ☐ Test run the augers. See “Auger Operation” in OPERATION section.

Preparing Tractor

Before operating cart, read the tractor Operator's Manual and gain an understanding of its safe methods of operation.

Check the tractor brakes and transport lights. Make sure they are in proper working order.

Check if the tractor has multiple PTO engagement modulation settings and has the latest PTO engagement software from the OEM. If unsure, contact your local dealer for tractor capabilities and recommended setting for grain cart operation.

The cart driveline is designed to attach to a tractor drawbar set to 20" from the end of PTO to center of drawbar hitch pin (per ASABE standard AD6489-3). See your tractor's operator manual for drawbar position when operating PTO and drawbar position adjustment procedure. Before operating, verify the length of telescoping PTO shaft; see sizing procedure in MAINTENANCE

Ensure that PTO engagement setting is set to minimum (or softest) setting.

Check the tractor hydraulic oil reservoir and add oil if needed.

Verify that the tractor is adequately ballasted for drawbar operation at the anticipated draft load. See tractor manual for ballasting instructions.

If possible, adjust the tractor drawbar vertically so the topside of the drawbar is approximately 17-22 inches from the ground. Ensure that the drawbar is locked in the center position.

On tractors equipped with a 3-point hitch, raise and secure the linkage to prevent interference with the cart tongue, hydraulic hoses and the hydraulic drive option during turning. It may be necessary to remove tractor 3-point quick attach to avoid damage during turning.

Preparing Cart

Perform the service checks as outlined below. Repair or replace any damaged or worn parts before operating.

Hardware

Check for loose bolts and nuts, and tighten as needed. Check again after the first half-day of operation.

Pivot Pins

Check that all pins are in place and in good condition. Replace any worn, damaged or missing pins.

Hitch

Check hitch wear plates for damage and wear. Be aware of the size of hitch adapter bushing that is being used. Select correct size for the hitch pin/draw bar you are using.

Auger

Inspect auger for damage and wear.

IMPORTANT

- *Remove transport retainer located on auger rest, before folding out upper auger.*



Preparing Cart (continued)

Soft Start System

Check for wear or damage. Lubricate as recommended. Do not over lubricate.

Hydraulic System

Check all hoses and cylinders for signs of leakage. Hoses should not be kinked, twisted or rubbing against sharp edges. Re-route or repair hoses as necessary. Refer to SAFETY section for additional information on safe repair and inspection of hydraulic components.

Tires/Wheels

Check tire pressures and maintain at recommended values listed in the MAINTENANCE section of this manual.



CAUTION

- IMPROPERLY TORQUED WHEEL NUTS/BOLTS CAN CAUSE A LOSS OF IMPLEMENT CONTROL AND MACHINE DAMAGE. WHEEL NUTS/BOLTS MUST BE CHECKED REGULARLY. SEE TORQUE PAGE IN THE “MAINTENANCE” SECTION FOR PROPER WHEEL NUT/BOLT SPECIFICATIONS. WARRANTY DOES NOT COVER FAILURES CAUSED BY IMPROPERLY TORQUED WHEEL NUTS/BOLTS.

IMPORTANT

- *Installing wheels without the proper inset could result in hub or spindle failure. This will cause substantial damage to cart.*

For questions regarding new tire warranty, please contact your local original equipment tire dealer. Used tires carry no warranty. Tire manufacturers' phone numbers and web sites are listed in the “MAINTENANCE” section of this manual for your convenience.

Lubrication

Lubricate the cart as outlined in the MAINTENANCE section of this manual.

Hitching to Tractor

Drawbar Connection

This cart is intended to be hitched to a tractor drawbar. Do not attempt to hitch to any other location on the tractor other than the drawbar.

The cart comes with a CAT 4 hitch for use with a 2" pin and designed for a clevis-type tractor drawbar. If a 1 1/2" or 1 3/4" diameter hitch pin is used, a corresponding bushing must be inserted into the hitch tang and held in place with o-rings. (FIG. 3-1)

NOTE: Use of proper hitch pin/bushing will prevent excessive wear and tear on both the cart and tractor.

NOTE: Bushings and o-rings are stored in the toolbox behind the ladder.

NOTE: CAT 5 tongue is available for a 2 3/4" diameter pin. Contact your dealer if a CAT 5 tongue/hitch, if required.

Lock tractor drawbar in center position.

Refer to the tractor Operator's Manual for information on tractor drawbar length.

WARNING

- **DO NOT STAND BETWEEN THE CART AND TRACTOR WHEN HITCHING. ALWAYS ENGAGE PARKING BRAKE AND STOP ENGINE BEFORE INSERTING HITCH PINS OR SECURING LATCHES.**

Place wear shoe (281898-CAT 4; 281899-CAT 5) between tractor hitch and grain cart hitch. (FIG. 3-2)

After inserting drawbar pin, secure drawbar pin with a locking device to prevent uncoupling during use.

NOTE: Cast hitch can be flipped providing a drawbar connection height difference of 2 7/8" (FIG. 3-3). Position the cast hitch to help assure a level cart when loaded, or the rear of the hopper slightly higher than the front, to maintain rear slope cleanout. Whenever the cast hitch is flipped, the driveline clearances needs to be rechecked.

FIG. 3-1

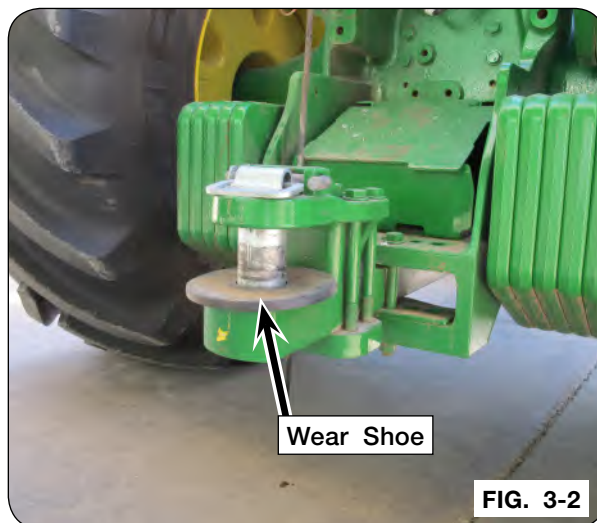
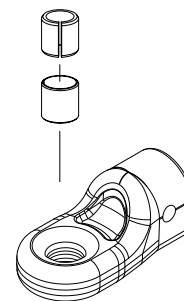
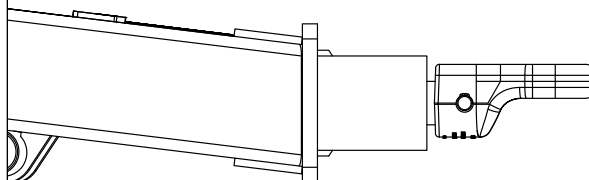


FIG. 3-3

**2 7/8" Higher Than
The Standard Position**



Hitching to Tractor

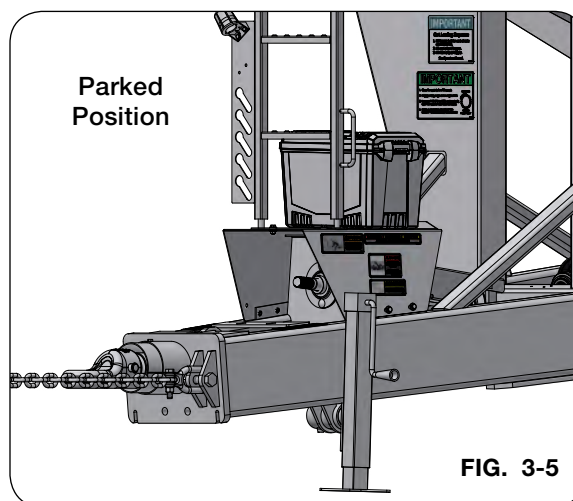
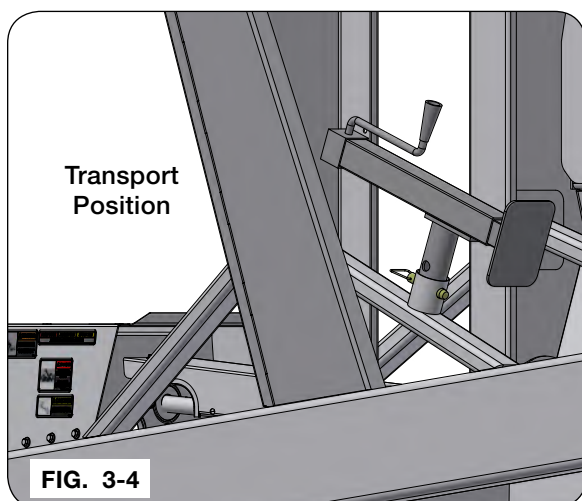
Jack Usage

WARNING

- UNHITCHING A LOADED CART CAN CAUSE SERIOUS INJURY OR DEATH DUE TO THE TONGUE RISING OR FALLING. ALWAYS HAVE A LOADED CART ATTACHED TO A TRACTOR. THE JACK IS INTENDED TO SUPPORT AN EMPTY CART ONLY.

IMPORTANT

- Mount jack in storage location indicated after cart is hitched to tractor.



Hitching to Tractor (continued)

Transport Chain Connection

CAUTION

- ALWAYS USE TRANSPORT CHAIN WHEN TRANSPORTING IMPLEMENTS. FAILURE TO USE A TRANSPORT CHAIN COULD CAUSE PERSONAL INJURY IF CART BECOMES DISENGAGED.
- REPLACE TRANSPORT CHAIN IF ANY LINK OR END FITTING IS BROKEN, STRETCHED, DAMAGED OR NOT FUNCTIONING. DO NOT WELD TRANSPORT CHAIN.
- USE ONLY AN UNVERFERTH ASABE TRANSPORT CHAIN WITH A WEIGHT RATING EXCEEDING THE GROSS COMBINED WEIGHT OF ALL TOWED IMPLEMENTS. CONTACT YOUR UNVERFERTH DEALER FOR ADDITIONAL INFORMATION.

Tractor must be equipped with a transport chain support. Always use intermediate support when connecting cart directly to a tractor. DO NOT use intermediate chain support as the chain attaching point. See tractor operator's manual for proper chain attachment. FIG. 3-6 shows how the transport chain must be installed between implement and towing vehicle.

The standard transport chain is rated for towing the grain cart empty on public roads. Never tow a loaded grain cart on public roads.



FIG. 3-6

Hydraulic Connections

Store and keep hydraulic hoses clean. (FIG. 3-7)

IMPORTANT

- *When coupling hydraulic hoses to ports on the tractor, be sure that the coupler ends are clean or dust, dirt and debris. Failure to do so could contaminate hydraulic system resulting in excessive wear and possible failure.*

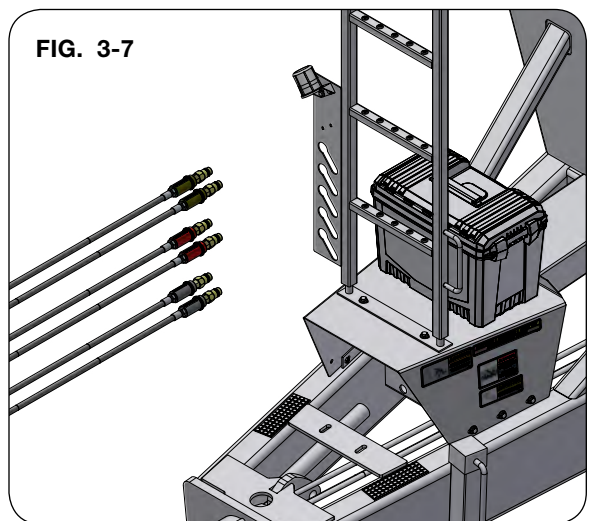


FIG. 3-7

Hitching to Tractor (continued)

Clean hydraulic hose couplers before connecting to the tractor. For convenience, it is recommended to connect the flow door circuit hoses to tractor implement coupler #1, auger spout circuit hoses to couplers #2 and #3, and attach auger fold circuit to coupler #4.

This unit is equipped with color-coded grips on the hydraulic hoses. This will help in identifying the hose function and correct hook up.

COLOR	HOSE FUNCTION
Red	Flow Door Open (+) and Close (-)
Yellow	Spout Tilt Out (+) and Tilt In (-)
Gray	Spout Rotate Out (+) and In (-)
Green	Auger Unfold (+) and Fold (-)
Blue	Water Pump

After initial set-up or replacement of any hydraulic component on the cart, air must be removed from the cart's hydraulic system. Refer to "Hydraulic System" in the MAINTENANCE section for procedure.

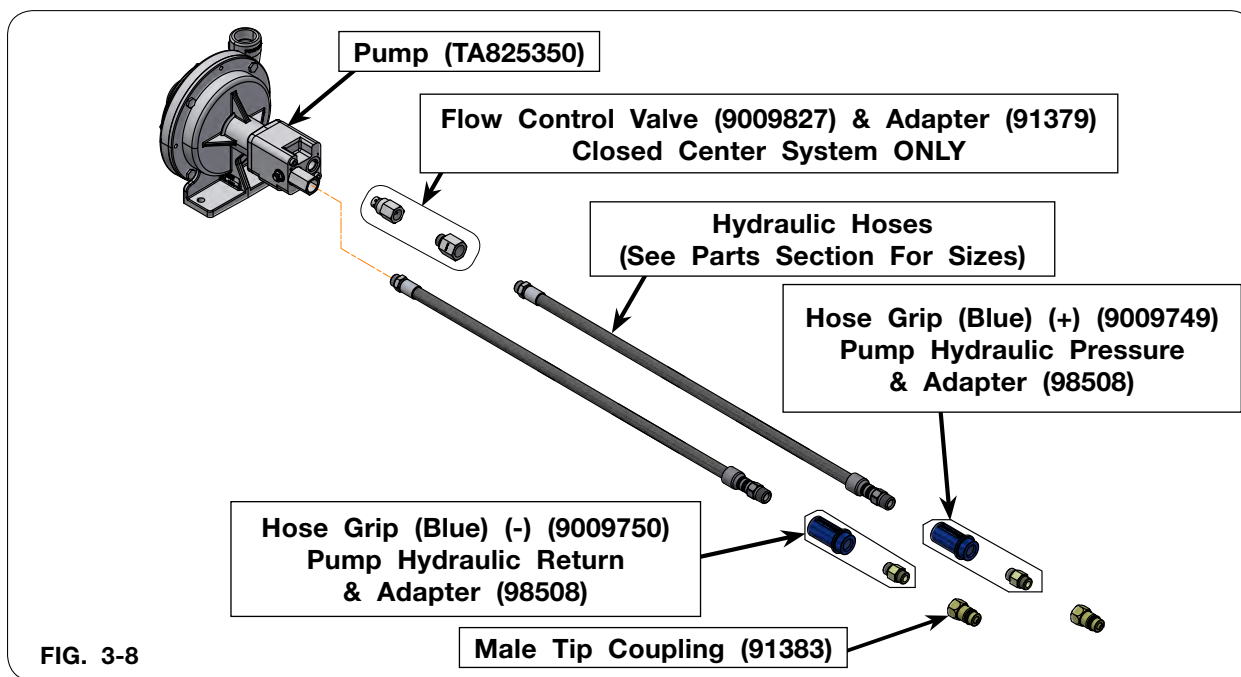
Route hoses away from areas that may cause abrasion or kinking of hoses during operation.

Before disconnecting hoses from the tractor, relieve pressure in the system. See the tractor Operator's Manual for the proper procedure. Shut off engine and apply parking brake before disconnecting hoses. Install couplers into storage slots provided. (Fig. 3-8)

Hydraulic Connections for Hydraulic Drive

Refer to grain cart's Hydraulic Drive Manual for installation, operation and parts of the Hydraulic Drive.

Hydraulic Connections For Optional Water Delivery System



Hitching to Tractor (continued)

Electrical Connections

This cart is equipped with a seven-pin SAE connector plug which will connect with the receptacle found on most newer tractors. If your tractor does not have this type of receptacle, an SAE J-560 seven-point socket can be purchased from your Unverferth dealer (Part number 92824).

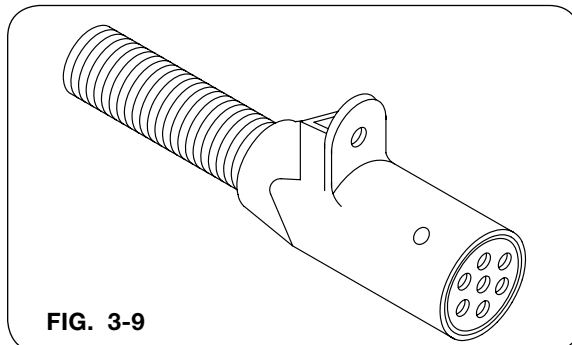


FIG. 3-9

The wiring schematic for this cart, shown in the MAINTENANCE section, complies with ASABE Standards. Always verify correct electrical function before using this cart.

Compliance with all lighting and marking laws is the responsibility of the operator at the time of travel.

See federal regulation 49 CFR 562; available at www.govinfo.gov for US federal law requirements.

See your Unverferth dealer for additional brackets, reflectors, or lights to meet your requirements.

Cart Loading Sequence

WARNING

- NEVER LOAD THE REAR OF A GRAIN CART FIRST. LOAD THE CART EVENLY TO MAINTAIN WEIGHT ON THE TRACTOR DRAWBAR. LOADING ONLY THE FRONT, OR ONLY THE REAR, CAN CAUSE A LOSS OF CONTROL.
- TIPPING OR MOVEMENT OF THE MACHINE CAN CAUSE SERIOUS INJURY OR DEATH. BE SURE THE MACHINE IS SECURELY BLOCKED.
- UNHITCHING A LOADED CART CAN CAUSE SERIOUS INJURY OR DEATH DUE TO THE TONGUE RISING OR FALLING. ALWAYS HAVE A LOADED CART ATTACHED TO A TRACTOR. THE JACK IS INTENDED TO SUPPORT AN EMPTY CART ONLY.
- NEVER ENTER A CART CONTAINING GRAIN. FLOWING GRAIN TRAPS AND SUFFOCATES VICTIMS IN SECONDS.

1. Ensure auger flow door is closed before loading cart.
2. Fill the cart starting just forward of the axle until nearly full.

NOTE: Overfilling the front or rear area of the hopper can result in reduced control of the cart when towing.

3. Fill the rear area of the hopper before topping off the front area. This maintains proper weight on the hitch of the tractor.

Towing

This cart is not equipped with brakes. Ensure that the towing vehicle has adequate weight and braking capacity to tow this implement. See towing vehicle's operators manual for towing capacity. Never tow a loaded grain cart over public roads.

Do not exceed 10 mph during off-highway travel. Do not exceed 8 mph when cart is fully loaded.

Secure drawbar pin with a locking device and lock tractor drawbar in centered position. Connect the PTO driveshaft to the tractor.

Secure transport chain to tractor chain support before towing.

CAUTION

- **THE STANDARD TRANSPORT CHAIN IS DESIGNED TO SUPPORT AN EMPTY GRAIN CART DURING ROAD TRAVEL.**
-

It is probable that this cart is taller, wider and longer than the towing tractor. Become aware of and avoid all obstacles and hazards in the travel path of the equipment, such as power lines, ditches, etc.

Always have the auger folded back into storage position when not in use.

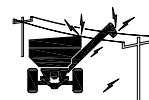
To prevent damage during turning when using non-PTO equipped towing vehicles, store the PTO driveshaft in the brackets provided on the inside right frame rail.

Auger Operation

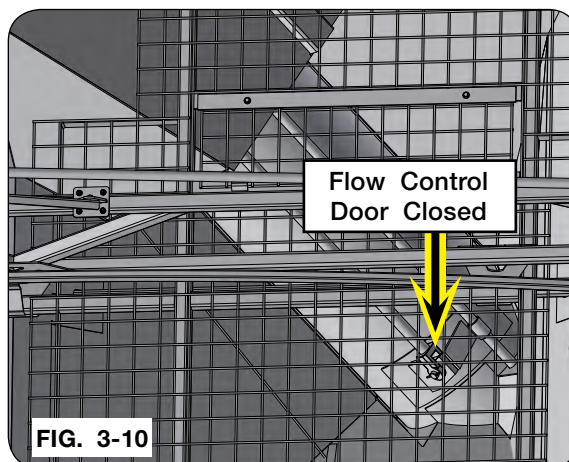
PTO Driven Auger



- **ELECTROCUTION WILL CAUSE SERIOUS INJURY OR DEATH. THE GRAIN CART IS NOT INSULATED. KEEP AWAY FROM ALL ELECTRICAL LINES AND DEVICES. ELECTROCUTION CAN OCCUR WITHOUT DIRECT CONTACT.**
- **ENTANGLEMENT WITH THE DRIVELINE WILL CAUSE SERIOUS INJURY OR DEATH. KEEP ALL GUARDS AND SHIELDS IN GOOD CONDITION AND PROPERLY INSTALLED AT ALL TIMES. AVOID PERSONAL ATTIRE SUCH AS LOOSE FITTING CLOTHING, SHOE STRINGS, DRAWSTRINGS, PANTS CUFFS, LONG HAIR, ETC. THAT CAN BECOME EN-TANGLED IN A ROTATING DRIVELINE.**



1. Before loading cart or operating auger, verify that the flow control door is closed. (FIG. 3-10)
2. Choose an area free from obstructions and unfold auger into unloading position. Allow sufficient time for the cylinder to fully engage the two augers. (FIG. 3-11)
3. Engage PTO at low RPM, then increase the PTO RPM to about 1000 RPM.
4. Open flow control door to desired unloading rate. Numbers on the auger tube provide a point of reference for operator convenience.



NOTE: If an overload occurs, (Shear-bolt failure or excessive heat/smoke from friction clutch) stop auger immediately. Close flow control door and relieve auger grain pressure by opening bottom door to remove some grain from auger before resuming.

5. To slow or stop grain flow, close flow door, rather than reducing tractor RPM. Close flow door fully when unloading is complete.

NOTE: It is not recommended to disengage auger with flow control door open. Auger system will require substantially more torque to start, placing extra stress on both cart and tractor driveline.

6. Stop PTO. After the PTO has come to a complete stop, fold auger to the transport position.

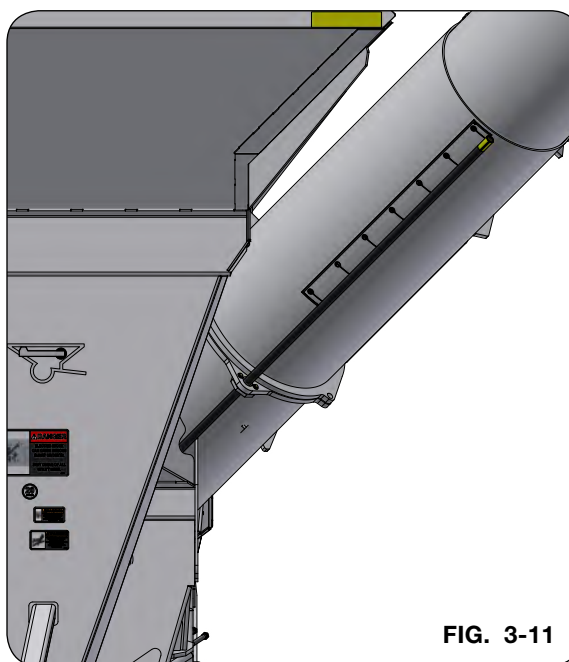


FIG. 3-11

Weather Guard Tarp

WARNING

- **TO PREVENT PERSONAL INJURY OR DEATH, DO NOT ALLOW ANYONE ON A CLOSED TARP. TARP SYSTEM IS NOT DESIGNED TO SUPPORT A PERSON.**
- **FALLING OBJECTS CAN CAUSE SERIOUS INJURY OR DEATH. REMOVE ACCUMULATED WATER/SNOW/ICE OR ANY OTHER OBJECTS FROM TARP BEFORE OPENING TARP.**

IMPORTANT

- *Do not open or close tarp while moving or in high wind conditions. Damage to the tarp may occur.*
- *Tarp should not be used if it is torn or the bungee cords are frayed or show damage. Fully close tarp with tension on the latch plate to prevent water from pooling.*

Always use caution when operating tarp.

Open and close the tarp evenly.

Make sure tarp is open before loading.

Make sure all persons are clear of the tarp system before and during operating.

Do not operate tarp with cart hoisted in an elevated position.

Remove any ice or snow before operating.

End caps must be free from grain that may be piled on them. Grain should not be heaped higher than the end caps or tarp bows.

Tarp may be fully opened or completely closed while in transit. However, the closed position is recommended.

Ensure everyone who operates the tarp is familiar with the correct procedures outlined in this manual.

Weather Guard Tarp (continued)

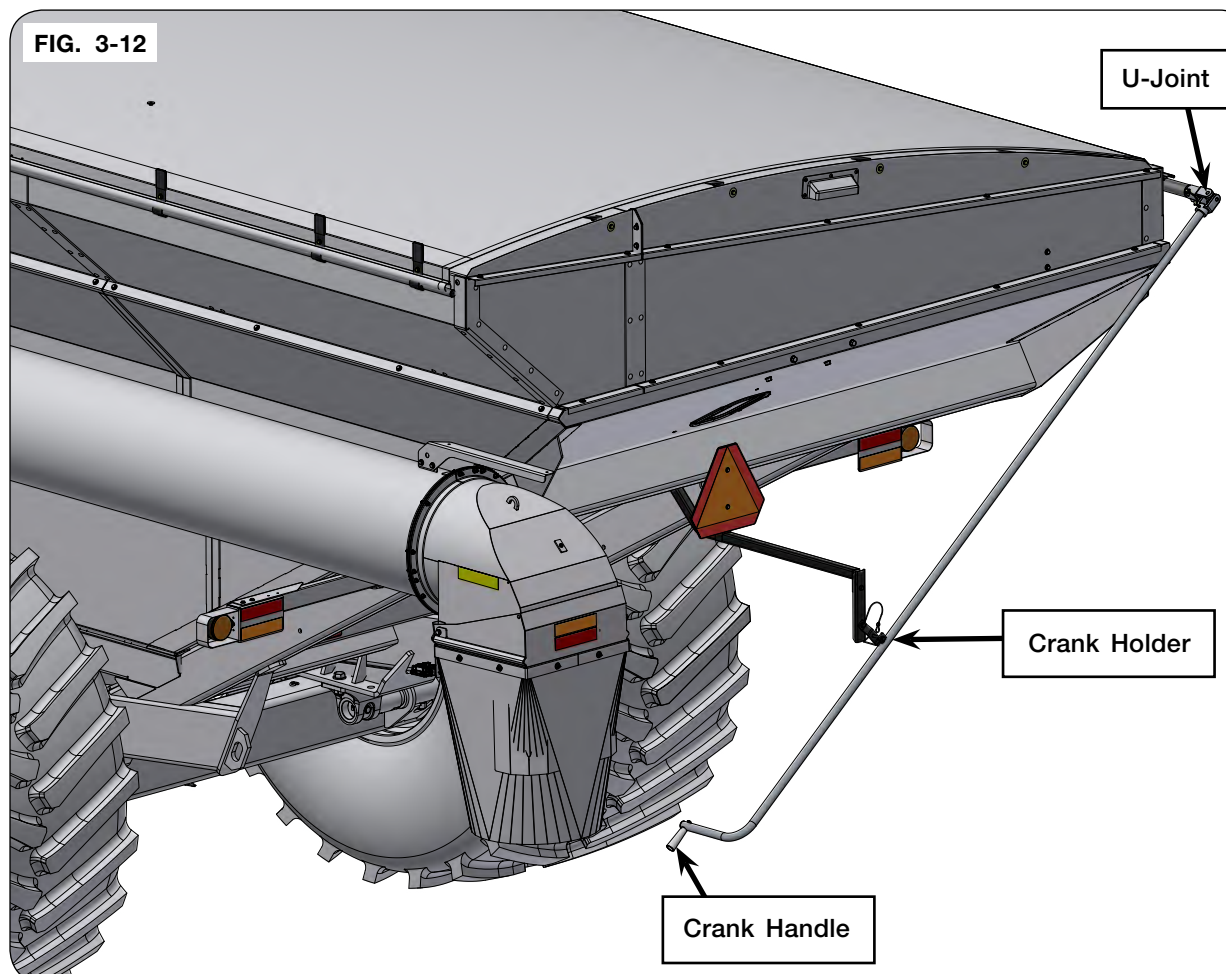
1. Using both hands, carefully remove tarp handle weldment from tube holder. (FIG. 3-12)
2. Roll tarp to the desired location, choosing either a fully open or fully closed position.
3. To close the tarp, rotate the roll tube clockwise up under the latch plate.
4. Make sure tarp is positioned evenly over latch plate length.

NOTE: Do not tighten if tarp overlaps end of the latch plate. Tearing of the tarp may occur. Reposition tarp, as necessary.

5. Bring the tarp handle weldment down perpendicular to the ground. Continue by lifting it up into the tube holder.

NOTE: Tarp handle weldment U-joint may need to be re-indexed on roll tube to achieve correct tension.

6. To open tarp, turn the roll tube counter clockwise until the tarp is fully open. Place tarp handle weldment in tube holder.



Optional Equipment

Hydraulic Drive

The optional hydraulically-driven auger permits cart operation using tractors that are not equipped with a PTO. However, due to the power requirements of a grain cart, it should be expected that a hydraulically-driven grain cart will not unload as quickly as a PTO driven cart.

IMPORTANT

- Depending on the option chosen, the motor is rated for either 55 or 100 gpm hydraulic flow at 3000 psi. Sustained flow and pressure above these amounts will dramatically reduce motor life. Be aware of maximum tractor hydraulic flow and pressure before operating auger.

NOTE: A motor containing two pressure and two return lines is a 55 GPM motor. A motor containing three pressure and three return lines is a 100 GPM motor. If unsure of motor size, contact your dealer providing your cart's serial number.

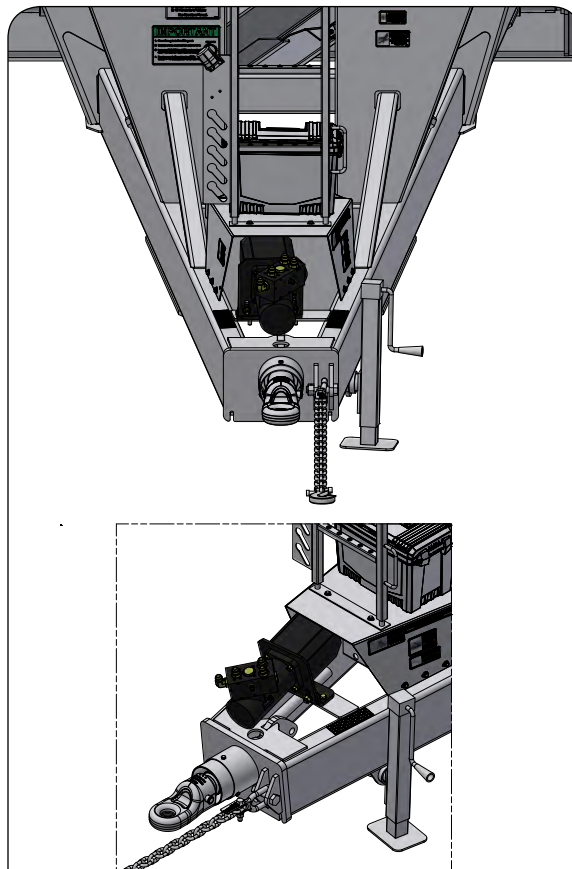


FIG. 3-13

Optional Equipment (continued)

Hydraulic Drive (continued)

NOTE: For complete assembly and operation details for the Hydraulic Drive, please refer to the Hydraulic Drive manual (282894).

1. Before loading cart or operating auger, verify that the flow control door is closed.
2. Choose an area free from obstructions and fully unfold auger to the unloading position.
3. Connect hydraulic hoses to tractor hydraulic circuits. Attach pump pressure hoses to RETRACT ports on tractor.

Multiple connections help utilize the tractor's fully hydraulic power and flow. Use the tractor's flow controls to regulate total output. See hydraulic connections for hydraulic drive in previous "OPERATIONS" sections.

NOTE: The dual connections help utilize full tractor hydraulic power at the cart hydraulic motor. For tractors that have more than 55 GPM available pump output, use tractor flow controls to regulate total output to a maximum of 55 GPM.

4. Engage hydraulic drive circuits at low engine RPM one at a time, then increase engine to full throttle. See hydraulic connections for hydraulic drive in previous "OPERATIONS" sections for cold starts.
5. While watching hydraulic pressure gauge, begin slowly opening flow control door. Stop opening flow control door when pressure (on hydraulic gauge by pump) climbs to within 200 psi less than maximum tractor hydraulic pressure. Ideally, maintaining maximum PTO RPM will optimize unloading performance.

IMPORTANT

- *If auger stalls during unloading, **immediately** place tractor hydraulic controls for motor functions in **FLOAT** to stop auger. Close flow control door, then move all hydraulic controls to **HOLD**. Relieve auger grain pressure by opening auger cleanout door to remove some grain before attempting to restart auger.*
6. To slow or stop grain flow, close flow door rather than reducing tractor RPM. Close flow door fully when unloading is complete.
 7. Stop auger by placing both auger hydraulic circuits in FLOAT. This reduces strain on driveline components and prolongs hydraulic motor life. Move controls to HOLD after auger has come to a complete stop.
 8. Choose an area free from obstructions and fully fold auger to the transport position.

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FOR TRACK INFORMATION, PLEASE REFER TO YOUR TRACK MANUAL.

FOR TARP INFORMATION, PLEASE REFER TO YOUR TARP MANUAL.

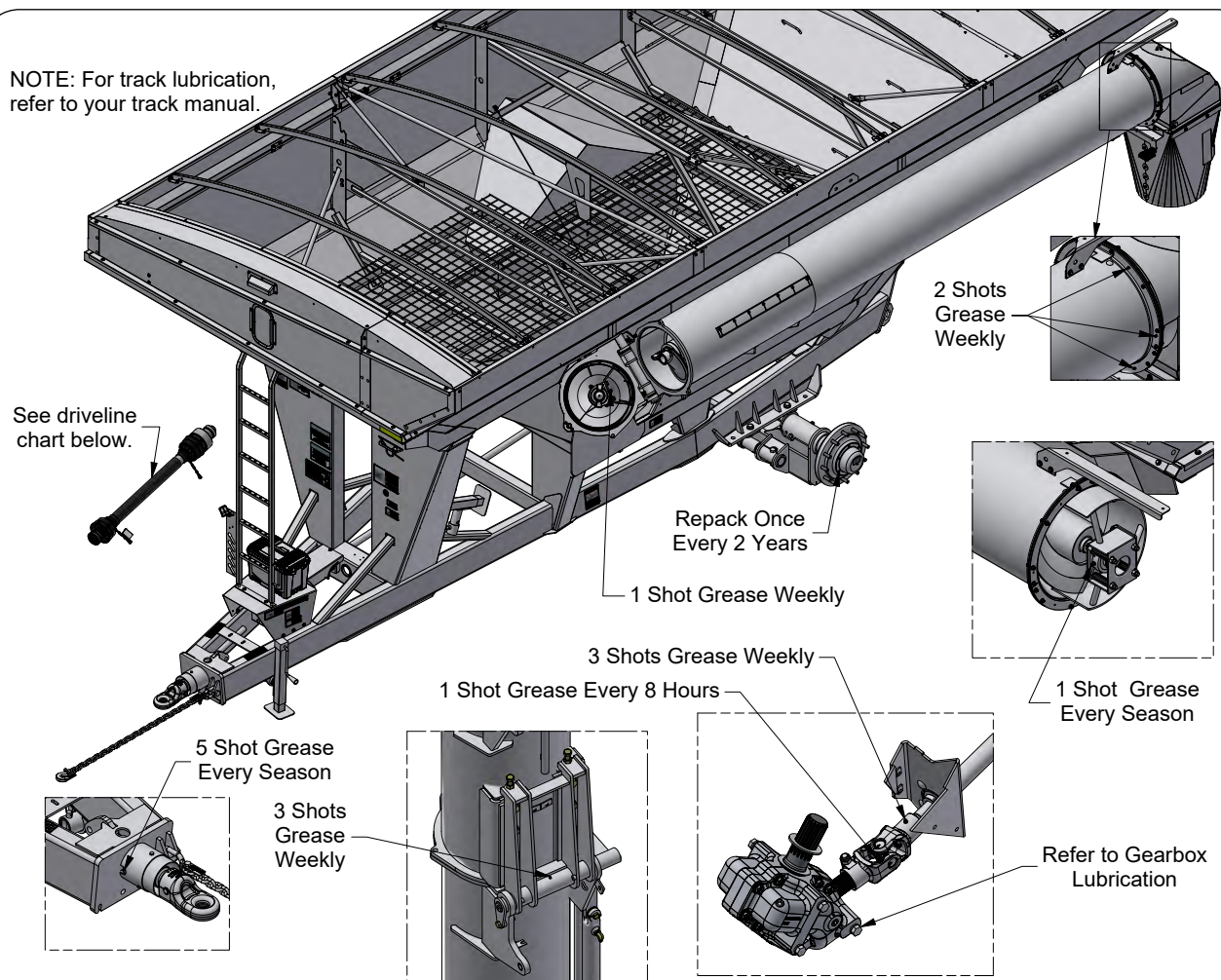
FOR SCALE INFORMATION, PLEASE REFER TO YOUR SCALE MANUAL.

FOR HYDRAULIC DRIVE INFORMATION, PLEASE REFER TO YOUR HYDRAULIC DRIVE MANUAL.

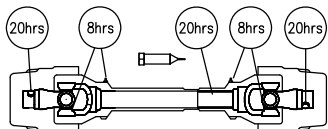
Lubrication

To keep your grain cart in top operating condition and to assure its proper performance and reliability for a long period of time, periodic inspection and lubrication is a must.

NOTE: For track lubrication, refer to your track manual.

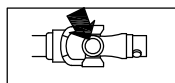


LUBRICATION INSTRUCTIONS FOR DRIVE LINE

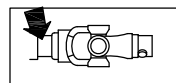


8hrs

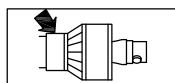
20hrs



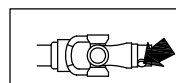
Cross journal



Inner tube



Shield retaining bearing



Push-pin set

COAT INNER AND OUTER PROFILES AT BEGINNING AND END OF EACH SEASON

Lubrication (continued)

To keep your grain cart in top operating condition and to assure its proper performance and reliability for a long period of time, periodic inspection and lubrication is a must.

Unverferth Mfg. recommends use of NLGI #2 Extreme Pressure grease.

The lubrication locations and recommended schedule are as follows:

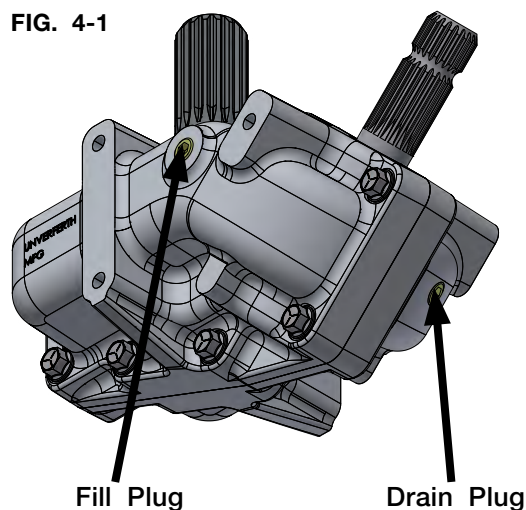
DESCRIPTION	POINT	LUBRICANT	QTY.	HOURS
PTO Driveshaft	7	EP-2	1 Shot	See Previous Page
Gearbox - Check oil level every 2 weeks. Replace oil every season. Refer to "Gearbox Lubrication" in MAINTENANCE section for instructions.	1	EP80W90	73 oz.	Once Every Season
U-Joint Cross Bearing - Driveline	1	EP-2	1 Shots	8 Hours
Splined Yoke - Driveline U-Joint	1	EP-2	3 Shots	Weekly
Hanger Bearing - Lower Auger	1	EP-2	1 Shot	Weekly
Top Bearing - Upper Auger	1	EP-2	1 Shot	Each Season
Pivot Rings - Upper Auger	4	EP-2	2 Shots	Weekly
Auger Pivot Pin	1	EP-2	3 Shots	Weekly
Hubs	2	EP-2	Repack	2 Years
Hitch	1	EP-2	5 Shots	Each Season

Gearbox Lubrication

Gear box check/fill plug is located on the right hand front side of the housing. To check oil fluid level, place cart on a level surface with the tongue elevated to hitch height and remove the plug. Oil level should be at the bottom thread or approximately 5/8" below the outside gearbox surface.

For Maximum gear box life:
Check oil level every 2 weeks.
Replace oil every season with 32 fl. oz. of 80W90 EP gear lubricant.

FIG. 4-1



Hydraulic System

Refer to parts section for hydraulic component detail listing.

When properly assembled and maintained, the hydraulic system of the grain cart requires little maintenance.

Replacing Hoses/Fittings/Cylinders:

1. Use replacement hoses, fittings, and cylinders from your Unverferth Manufacturing dealer which are rated for 3000 psi.
2. Do not use hoses, fittings and cylinders that have pipe threads.
3. Do not use Teflon tape or thread sealant on JIC or O-ring fittings. Tighten fittings according to "Torque Chart - Hydraulic Fittings" in this section.
4. When replacing hoses, always allow sufficient slack to permit hoses to move through the full range of motion of the cylinders.
5. Always purge the hydraulic system after servicing.

Purge Hydraulic System

WARNING

- **HYDRAULIC SYSTEM MUST BE PURGED OF AIR BEFORE OPERATING TO PREVENT SERIOUS INJURY OR DEATH.**
- **RELIEVE HYDRAULIC SYSTEM OF ALL PRESSURE BEFORE ADJUSTING OR SERVICING. SEE THE HYDRAULIC POWER UNIT OPERATOR'S MANUAL FOR PROPER PROCEDURES.**
- **HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. LEAKS OF HIGH-PRESSURE FLUIDS MAY NOT BE VISIBLE. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS.**
- **KEEP CLEAR OF PINCH POINT AREAS.**



Purge air from system as follows:

- A. Clear all personnel and objects from the area, including where the machine will have full range of motion during the hydraulic movement. Remove transport locks from the machine.
- B. Pressurize the system and maintain the system at full pressure for at least 5 seconds after the cylinder rods stop moving, or hydraulic motors have completed the required movement. Check that all movements are fully completed.
- C. Check oil reservoir in the hydraulic power source and refill as needed.
- D. Pressurize the system again to reverse the motion of step B. Maintain pressure on the system for at least 5 seconds after the cylinder rods stop moving, or hydraulic motors have completed the required movement. Check that all movements are fully completed.
- E. Check for hydraulic oil leaks using cardboard or wood. Tighten connections according to directions in the Torque Specifications in the MAINTENANCE section.
- F. Repeat steps in B, C, D, and E 10-12 times.

Hydraulic System (continued)

IMPORTANT

- *Machine damage will occur if the cylinder is incorrectly installed.*

Check for and correct any leaks. Make sure hoses are not kinked, stretched, or twisted. Secure hoses to prevent cuts or chafing during operation.

Relieving Hydraulic Pressure

To relieve hydraulic pressure in the system, be sure hydraulic motor is disengaged and/or hydraulic cylinder is not exerting force on the system. Next, consult tractor operators manual for procedure to relieve pressure.

Auger System

WARNING

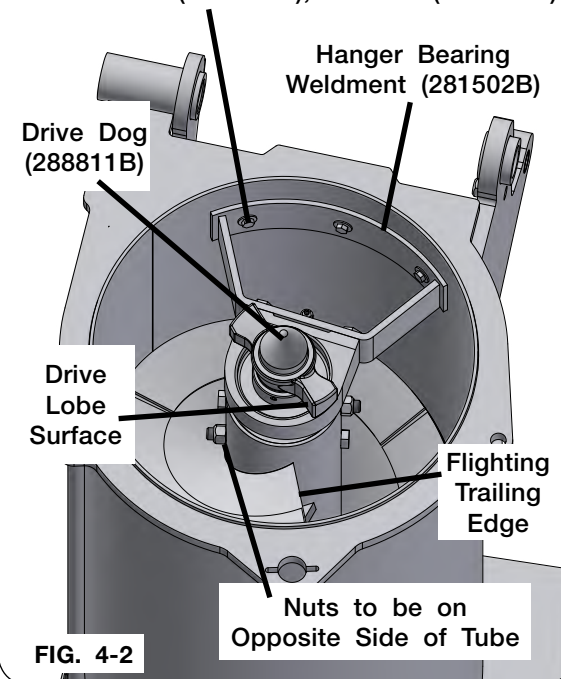
- TO PREVENT PERSONAL INJURY OR DEATH, ALWAYS ENSURE THAT THERE ARE PEOPLE WHO REMAIN OUTSIDE THE CART TO ASSIST THE PERSON WORKING INSIDE, AND THAT ALL SAFE WORKPLACE PRACTICES ARE FOLLOWED. THERE IS RESTRICTED MOBILITY AND LIMITED EXIT PATHS WHEN WORKING INSIDE THE IMPLEMENT.
- KEEP HANDS CLEAR OF PINCH POINT AREAS.
- EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.
- FALLING OBJECTS CAN CAUSE SERIOUS INJURY OR DEATH. DO NOT WORK UNDER THE MACHINE AT ANY TIME WHILE BEING HOISTED. BE SURE ALL LIFTING DEVICES AND SUPPORTS ARE RATED FOR THE LOADS BEING HOISTED. THESE ASSEMBLY INSTRUCTIONS WILL REQUIRE SAFE LIFTING DEVICES UP TO 4,000 LBS. SPECIFIC LOAD RATINGS FOR INDIVIDUAL LOADS WILL BE GIVEN AT THE APPROPRIATE TIME IN THE INSTRUCTIONS.
- MOVING OR ROTATING COMPONENTS CAN CAUSE SERIOUS INJURY OR DEATH. ALWAYS DISCONNECT POWER SOURCE BEFORE SERVICING. ENSURE SERVICE COVERS, CHAIN/BELT COVERS AND CLEAN-OUT DOOR(S) ARE IN PLACE AND SECURELY FASTENED BEFORE OPERATING MACHINE.



Lower Auger Disassembly

1. Remove the three 3/8"-16UNC x 1 1/4" capscrews (9390-056), six flat washers 3/8" (9405-076), three lock washers 3/8" (9404-021) and hex nuts 3/8"-16UNC (9394-006) which secures the hanger bearing weldment (281502B) to the auger tube (FIG. 4-2).
2. Using a safe lifting device rated for a minimum of 700 lbs., remove auger from auger tube and perform required repair or replacement.
3. Remove the two 5/8"-11UNC x 6" capscrews (9390-136), lock washers 5/8" (9404-029) and hex nuts 5/8"-11UNC (9394-014) which secures the drive dog to the auger as shown in FIG. 4-2.

Capscrew (9390-057), Flat Washers (9405-076), Lock Washer (9404-021), Hex Nut (9394-006)



Auger System (continued)**Lower Auger Assembly**

1. When installing the coupler into the auger pipe, the lower auger flighting should be set with the driving surface of the drive lobe at a 11:00 position and the flighting edge at a 12:00 position when looking from the top down towards the gearbox, see FIG. 4-3. The upper auger flighting should be set with the drive pin at a 9:00 position and the end flighting will be at an approximate 12:00 position when looking into the upper auger, see FIG. 4-3.

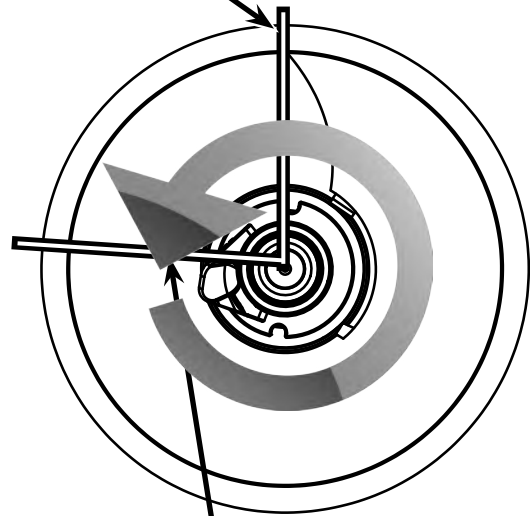
Lower Auger: Assemble the drive dog weldment (281506B) and hanger bearing weldment (281502B) to the auger making sure the drive dog weldment contact surface (for upper auger pin) is located approximately 30 degrees behind the lower auger flighting trailing edge. Secure with two 5/8"-11UNC x 6" capscrews (9390-136), lock washers (9404-029) and hex nuts 5/8"-11UNC (9394-014), installed opposite of each other, as shown in FIG. 4-4.

NOTE: Position of the drive dog weldment maintains correct timing and efficiencies of the upper and lower auger flightings.

2. Using a safe lifting device rated for a minimum of 700 lbs., install the lower auger sub-assembly into the lower auger housing. Align auger end with the three pin drive bushing and securely engage together. Secure hanger bearing to housing wall with three 3/8"-16UNC x 1 1/4" capscrews (9390-056), six flat washers (9405-076), three lock washers (9404-021) and hex nuts 3/8"-16UNC (9394-006) (FIG. 4-4).
3. Once secure, tighten hanger bearing weldment hardware.

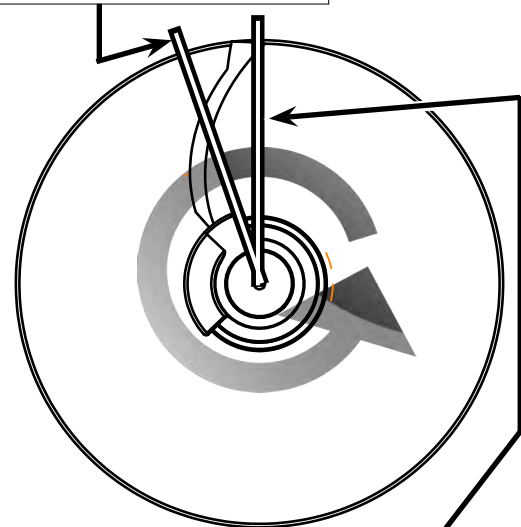
Upper Auger**FIG. 4-3**

Starting Edge of Flighting At 12:00 Reference.



Drive Pin At 9:00 Reference

LOOKING UP INTO THE UPPER AUGER FLIGHTING

Drive Lobe Driving Edge At 11:00 Reference**FIG. 4-4**

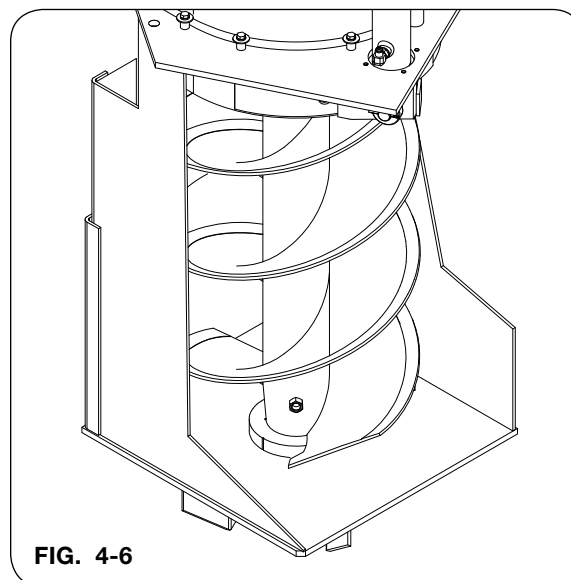
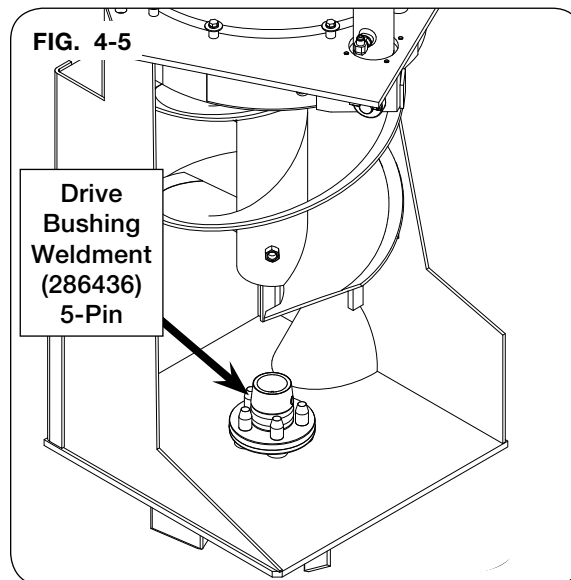
Finishing Edge of Flighting At 12:00 Reference.

Lower Auger

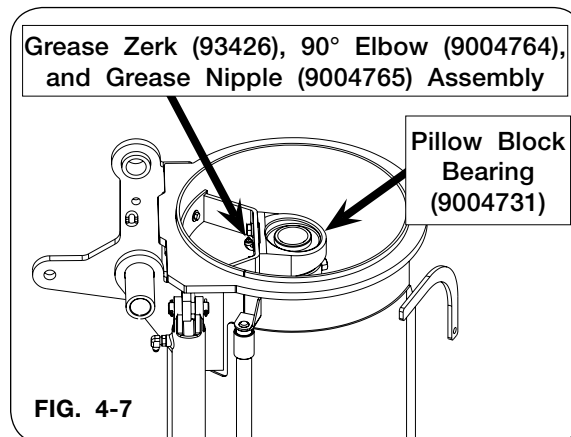
Auger System (continued)

Lower Auger Assembly (continued)

4. **5-Pin Drive Bushing Weldment:**
Rotate auger 360 degrees to ensure it is centered on the drive bushing weldment (286436) and the five pins are engaged with auger end. Check for flighting interference or binding along housing and at lower end. A portion of flighting may need to be removed from lower end of auger to ensure operational clearances. (FIG. 4-5 & FIG. 4-6)



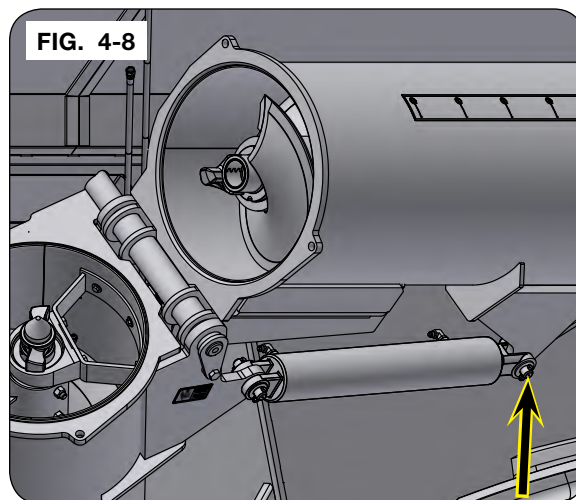
5. Raise the upper auger into position, checking upper drive dog engagement with lower auger drive dog.
6. Lower the upper auger. Lubricate the pillow block bearing (9004731) (FIG. 4-7). Check and remove any loose parts in the auger tube interior prior to start-up.



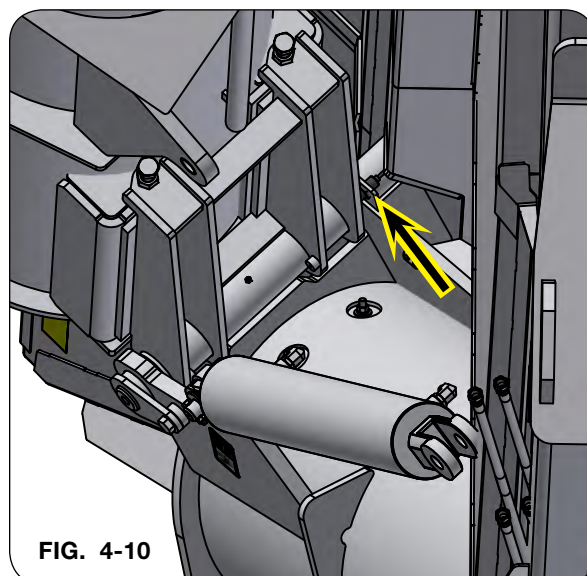
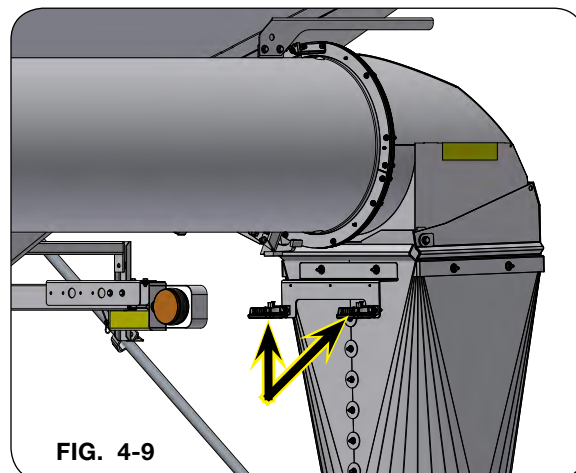
Auger System (continued)

Upper Auger Disassembly

1. Support the upper auger assembly using a 2-ton hoist and two straps rated for 2000 lbs.
2. Remove auger tube cylinder pin and carefully swing cylinder down without breaking hose connections. (FIG. 4-8)

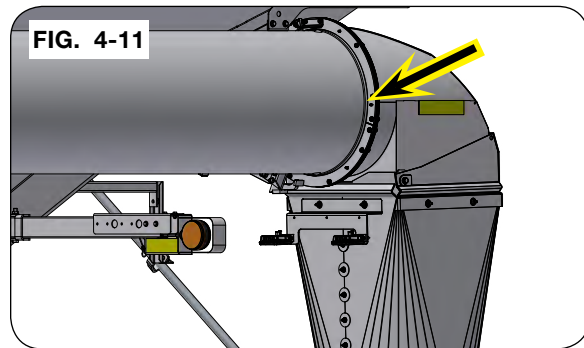


3. Disconnect chute lights and auger indicator cable from the bolt on bracket. (FIG. 4-9 & FIG. 4-10)

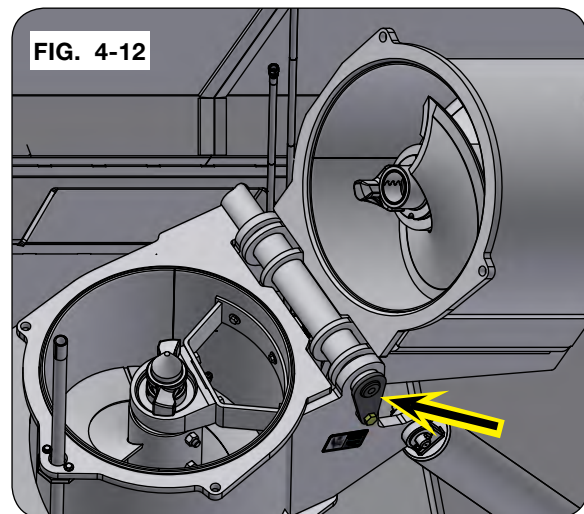


Auger System (continued)

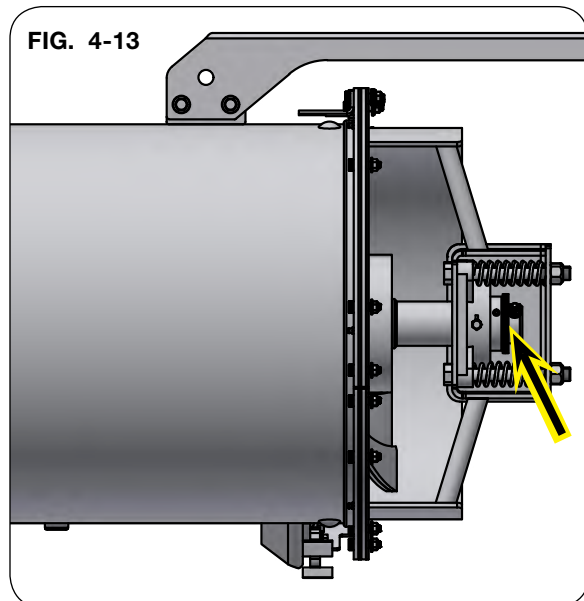
4. Remove chute assembly. (FIG. 4-11)



5. With auger tube fully supported, remove the 7/8"-9UNC x 2" capscrews (9390-164) and flat washers (97041) from the upper auger pivot bracket. (FIG. 4-12)



6. Lift upper auger assembly from unit. Repair or replace as required. (FIG. 4-13)
7. To remove auger from tube, loosen two bearing setscrews and the four 5/16" flat washers (9405-068), 5/16"-18UNC x 2 3/4" capscrew (9390-037) and 5/16"-18UNC locknut (901527)
8. Inspect upper auger bearing, springs and four 1/2" x 5 1/2" capscrews and locknuts. Replace if necessary.

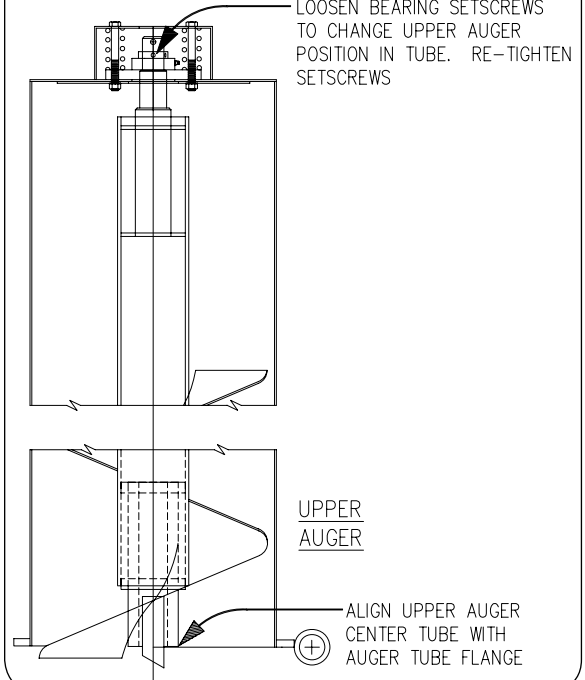


Auger System (continued)

Upper Auger Assembly

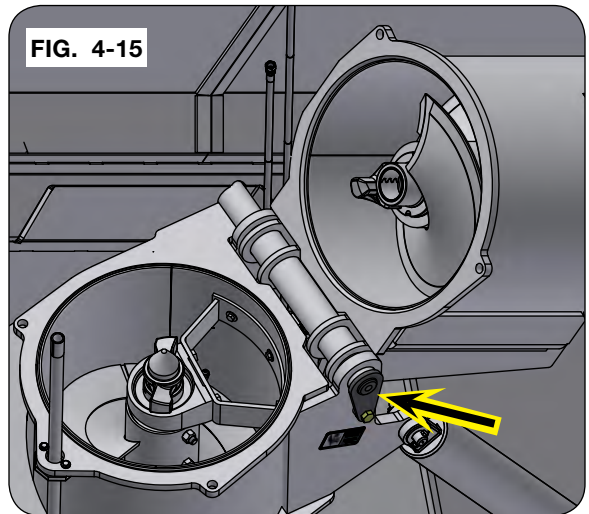
1. Install upper bearing and spring assembly if previously removed.
2. Insert auger in auger tube. Back out bearing setscrews and insert auger stub shaft through bearing and four 2" flat washers (93974). Retain auger with four 5/16" flat washers (9405-068), 5/16"-18UNC x 2 3/4" capscrew (9390-037) and 5/16"-18UNC locknut (901527). (FIG. 4-14)
3. Position opposite auger end flush with auger tube flange and tighten bearing setscrews and 5/16"-18UNC hardware.

FIG. 4-14



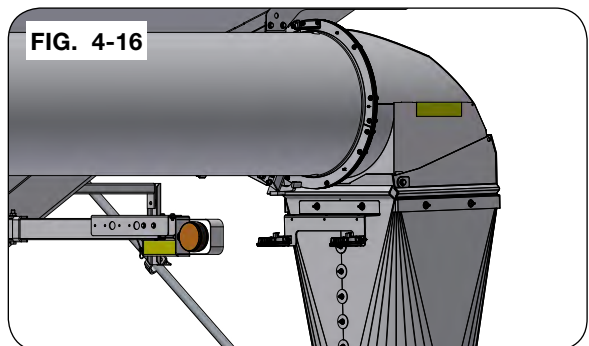
4. Lift upper auger assembly into position using adequate hoist and slings with a minimum capacity of 600 lbs. to support the upper auger. Install pivot pin. Align retainer holes and install bolt and nut. (FIG. 4-15)

FIG. 4-15



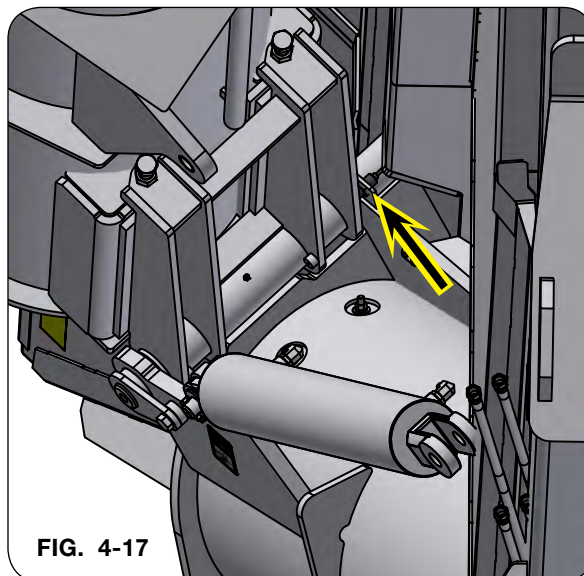
5. Install chute assembly. (FIG. 4-16)

FIG. 4-16

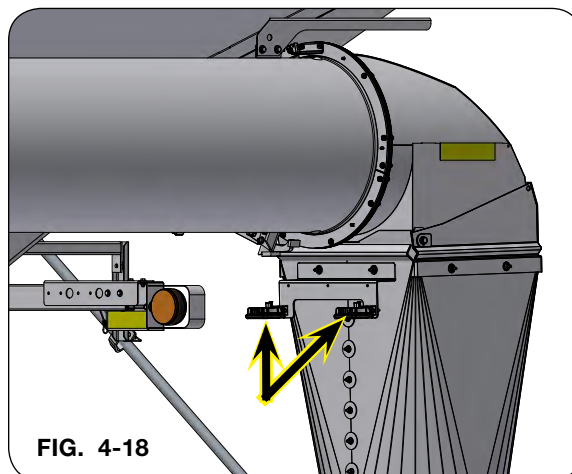


Auger System (continued)

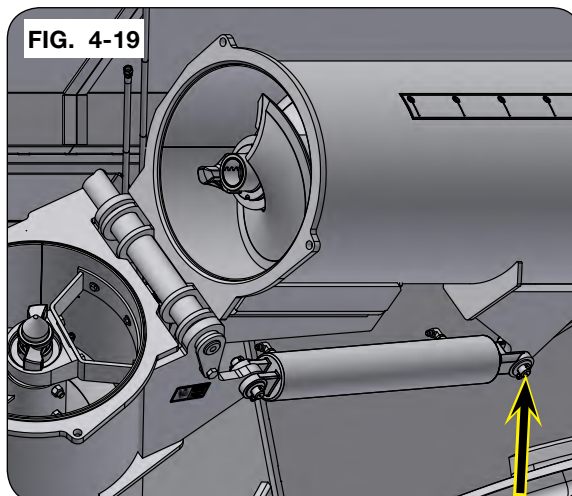
6. Reattach indicator cable. (FIG. 4-17)



7. Connect auger and chute light. (FIG. 4-18)



8. Reinstall hydraulic cylinder and pivot pins. Clamp hoses into position and recheck connector tightness. (FIG. 4-19)



Auger System (continued)

Auger Flow Door Cylinder Replacement

WARNING

- TO PREVENT PERSONAL INJURY OR DEATH ALWAYS ENSURE THAT THERE ARE PEOPLE WHO REMAIN OUTSIDE THE CART TO ASSIST THE PERSON WORKING INSIDE, AND THAT ALL SAFE WORKPLACE PRACTICES ARE FOLLOWED. THERE IS RESTRICTED MOBILITY AND LIMITED EXIT PATHS WHEN WORKING INSIDE THE IMPLEMENT.
- NEVER ENTER CART WITH AUGER OR TRACTOR RUNNING. SERIOUS OR FATAL INJURY CAN OCCUR DUE TO ENTANGLEMENT WITH ROTATING COMPONENTS. ALWAYS STOP ENGINE AND REMOVE KEY BEFORE ENTERING CART.
- EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.
- KEEP HANDS CLEAR OF PINCH POINT AREAS.



- RELIEVE HYDRAULIC SYSTEM OF ALL PRESSURE BEFORE ADJUSTING OR SERVICING. SEE TRACTOR OPERATOR'S MANUAL FOR PROPER PROCEDURES.
- HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. LEAKS OF HIGH-PRESSURE FLUIDS MAY NOT BE VISIBLE. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS.
- HYDRAULIC SYSTEM MUST BE PURGED OF AIR BEFORE OPERATING TO PREVENT SERIOUS INJURY OR DEATH.



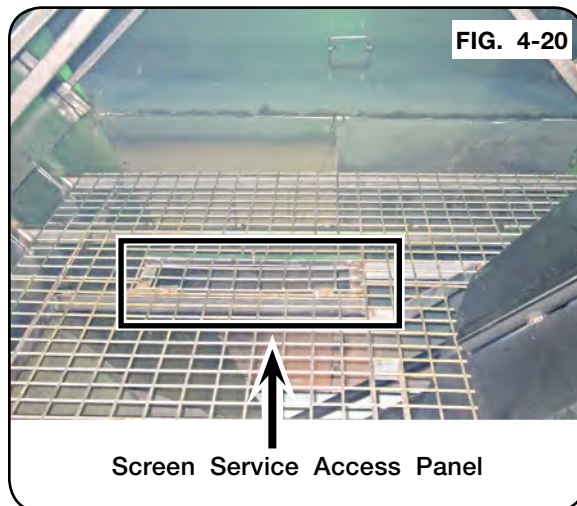
1. Park the empty grain cart on a firm, level surface and extend auger. Block the tires/tracks on the machine to keep it from moving. Unfold upper auger to make the flow door cylinder easier to access. If possible, close the flow door at least 8" from the fully open position. Relieve hydraulic pressure, see tractor operator's manual. Set the tractor's parking brake, shut-off the engine, remove the ignition key and disconnect the PTO shaft.



Auger System (continued)

Auger Flow Door Cylinder Replacement (continued)

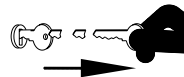
2. On the inside of the cart, open the screen service access panel shown in FIG. 4-20.



3. Remove the cotter pins from the lower cylinder pin then remove the pin. Then remove the four 3/8"16UNC x 1" flange bolts holding on the gasket and gasket plate, shown in FIG. 4-21.



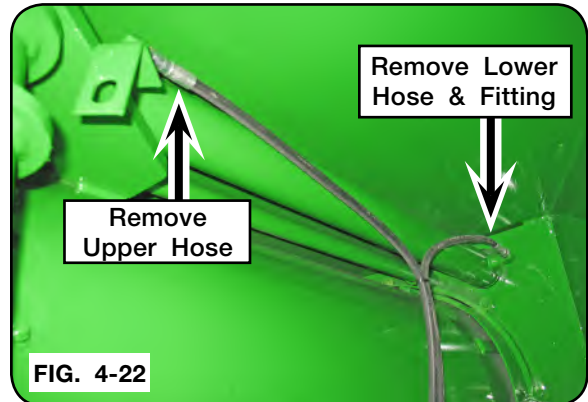
4. Remove all tools and extra hardware from the grain cart. Make sure all personnel are outside of the hopper. Then, retract the cylinder so that there is about 8" of clearance between the cylinder clevis and the lug.
5. Relieve hydraulic pressure, shut off the engine, remove the ignition key, and disconnect the hydraulic hoses from the tractor and cart.



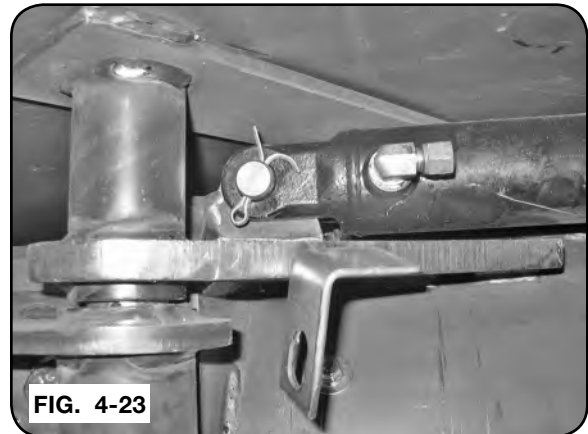
Auger System (continued)

Auger Flow Door Cylinder Replacement (continued)

6. Label the hydraulic hoses to indicate upper and lower. Disconnect them from the cylinder, along with the lower hydraulic fitting (FIG. 4-22).



7. Remove the cotter pins from the upper cylinder pin and remove pin (FIG. 4-23).



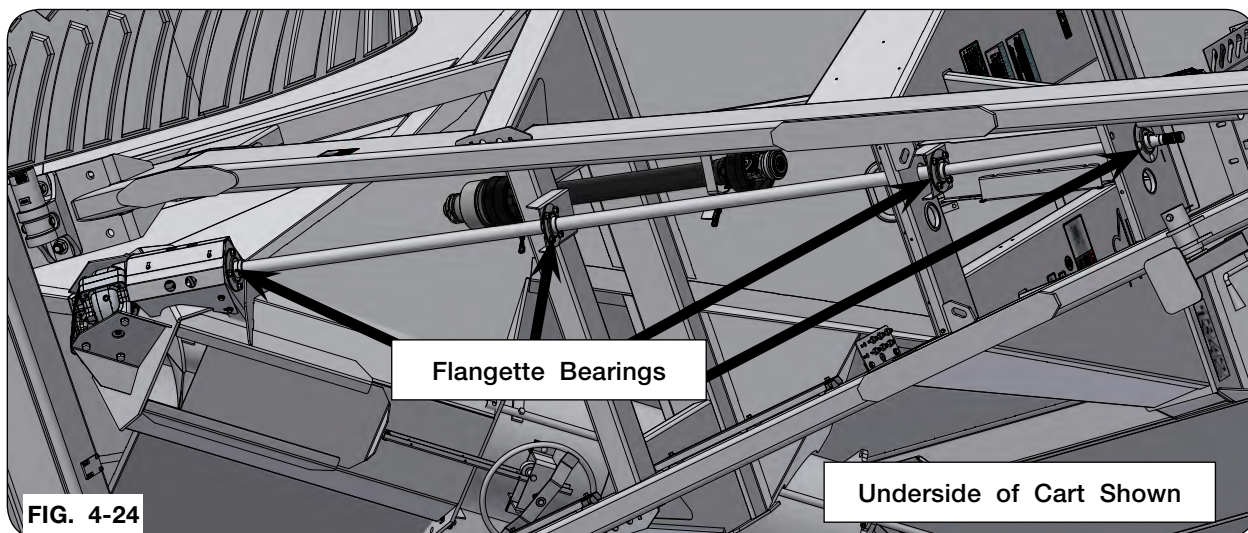
8. Slide the flow door cylinder through the hole in the junction box until the upper cylinder clevis clears the lug, then raise the top of the cylinder above the auger fold bushing and remove the cylinder.
9. Replace with the new cylinder and insert the upper cylinder pin. Remove the cylinder port plugs. Manually extend the cylinder until the lower clevis lines up with the door lug and assemble the pin and cotter pins. Assemble hydraulic fittings and attach hoses.
10. Replace rubber gasket and gasket plate with 3/8"-16UNC x 1" flange screws, shut and secure the screen service access panel.
11. Remove all tools and extra hardware from the grain cart. Make sure all personnel are outside of the hopper. **After the hydraulic components have been tightened, refer to "Purge Hydraulic System".**

Auger Driveline

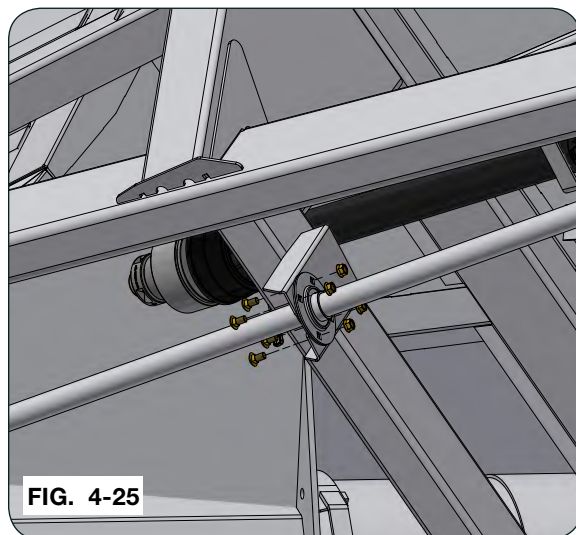
Bearings

It is important to periodically check setscrews in all bearings of the driveline for tightness.

Driveline Replacement



1. Park the empty cart on a firm, level surface. Block the wheels or tracks on the cart to keep it from moving. Set the tractor parking brake, shut off the engine, and remove the ignition key from the tractor before disconnecting driveline assembly and bearing hardware.
2. Loosen the setscrews (9399-071) on all flangette bearings (9003920) (FIG. 4-24).
3. Remove the 1/2"-13UNC x 1" carriage bolts (9388-102) and 1/2"-13UNC flange nuts (91267) holding the flangette bearings. Keep hardware. (FIG. 4-25).
4. Remove paint on driveshaft to allow for easier movement. Slide driveshaft forward until the rear spline is out of the universal joint connected to the gearbox.
5. Drop the gearbox end of driveshaft down and slide driveshaft out of the flangette bearing on the hitch end of the driveshaft.



Auger Driveline (continued)

Driveline Replacement (continued)

6. Remove bearings, bearing mounts, universal joint cover, PVC driveshaft covers, and driveline cover, located behind the ladder, off the current driveshaft.
7. When installing new bearings (9003920) onto new driveshaft (9010194), assemble new 43 1/2" PVC driveshaft cover (298588) between bearings near the gearbox, and new 54 3/4" PVC driveshaft cover (298589) between bearings behind the hitch driveline cover. (FIG. 4-26)

NOTE: Ends of driveshaft are symmetrical.

8. Slide the hitch end of the driveshaft, bearing and hitch driveline cover into the bearing near hitch of the cart. (FIG. 4-26)
9. Raise the gearbox end of the driveshaft up and insert the original 1/2" carriage bolts and flange nuts into the mounting flanges making sure that the bearing flanges are both on the front side of the mounting brackets. Only loosely tighten the hardware.
10. Slide driveshaft down into the universal joint attached to the gearbox until the end of the shaft extends into the universal joint about 2 3/8". Ensure universal joint and driveshaft splines completely engage. Verify the hitch end for adequate length for driveline assembly to connect. (FIG. 4-27)

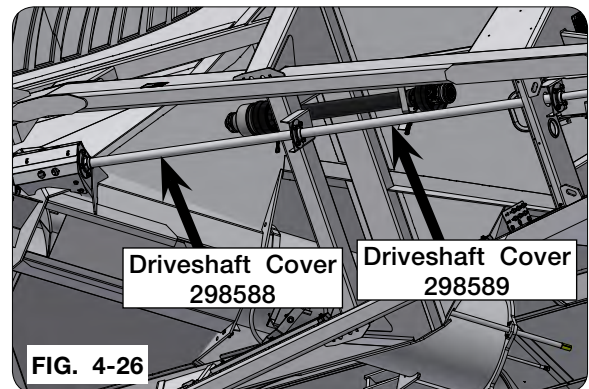
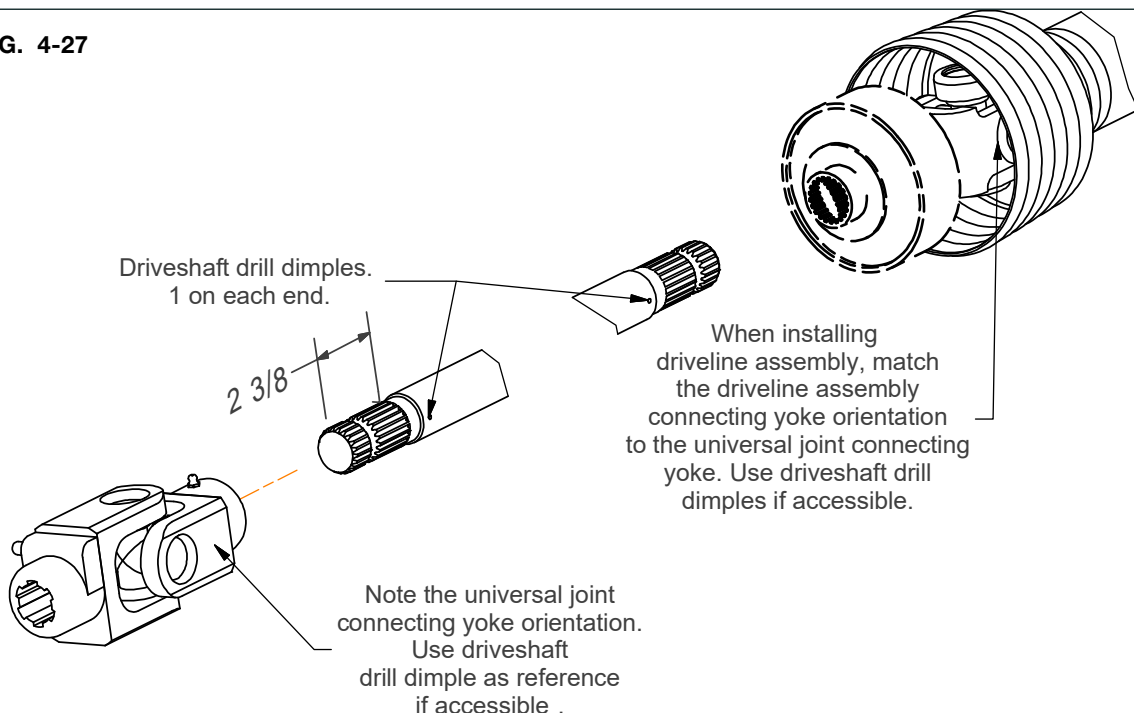


FIG. 4-26

FIG. 4-27



Auger Driveline (continued)

Driveline Replacement (continued)

11. Tighten all flange mounting hardware.
12. With bearing mounting hardware loosely tightened, drill a setscrew dimple in the driveshaft by going through the bearing setscrew threaded hole to dimple the driveshaft being careful to not damage threads. Drill the dimple to a depth that setscrews are flush with the bearing prior to applying thread locker and installing setscrews. (FIG. 4-28)
13. For alignment of the yoke, the orientation of the universal joint at the gearbox must be in line with the driveshaft drill dimple when the driveline assembly is attached. (FIG. 4-28, 4-29, and 4-30)

NOTE: Grease gearbox and universal joint before installing universal joint cover.

14. Attach new inside u-joint cover (298595B) and outside u-joint cover (298594B) to the bearing mount in front of the gearbox using original 3/8"-16UNC capscrews and 3/8"-16UNC weld nuts. Review to ensure PVC driveshaft covers and driveline cover, located behind the ladder, are in place and hardware tightened prior to operation.
15. Apply thread lock on bearing setscrews and tighten.
16. Test run driveline. Check for noise and/or vibration and address immediately.

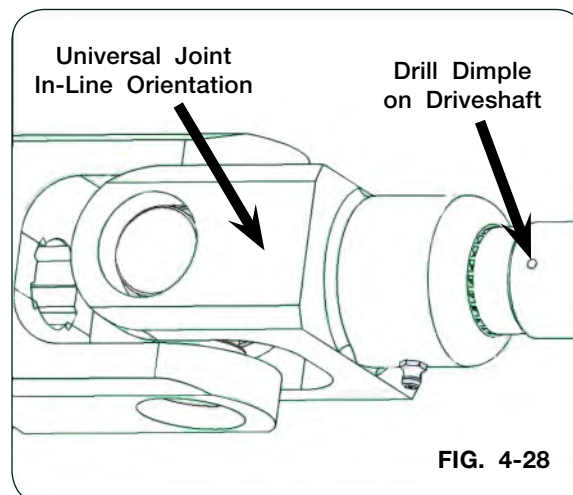


FIG. 4-28

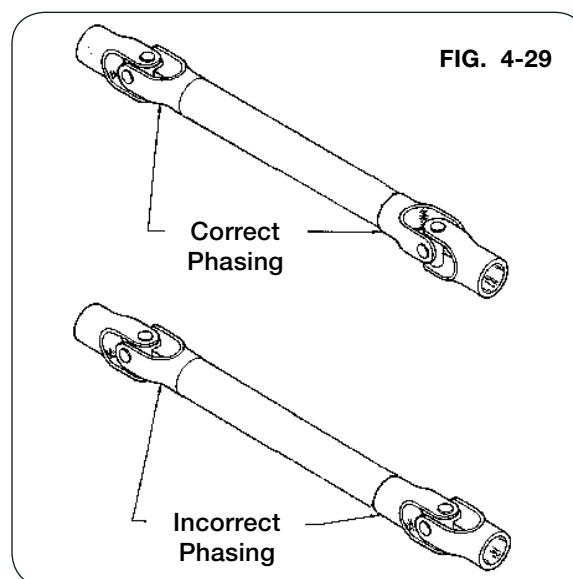


FIG. 4-29

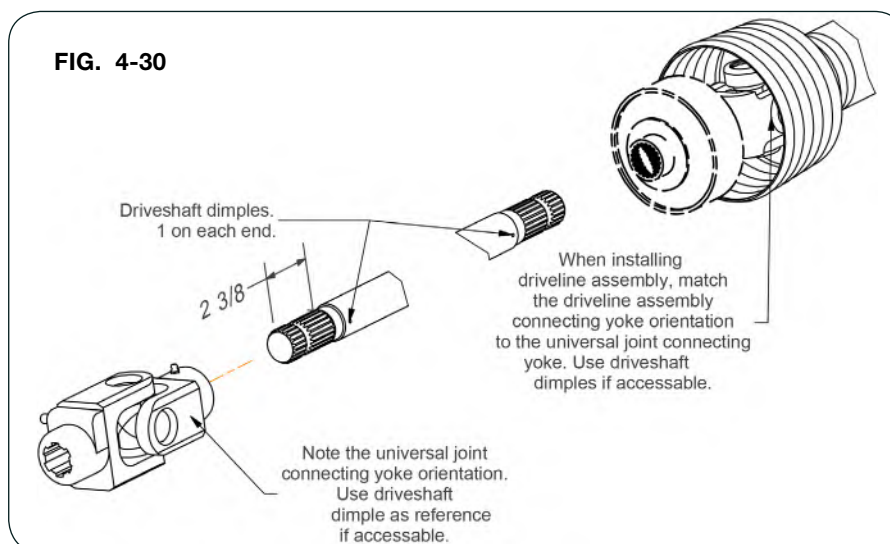


FIG. 4-30

Verify Telescoping PTO Shaft Length

WARNING

- PROPERLY EXTENDED AND COLLAPSED LENGTHS OF THE TELESCOPING PTO SHAFT MUST BE VERIFIED BEFORE FIRST OPERATION WITH EACH AND EVERY DIFFERENT TRACTOR. IF THE EXTENDED LENGTH OF THE PTO SHAFT IS NOT SUFFICIENT, IT MAY BECOME UNCOUPLED IN OPERATION AND CAUSE SERIOUS INJURY OR DEATH FROM CONTACT WITH UNCONTROLLED FLAILING OF PTO SHAFT ASSEMBLY COMPONENTS.

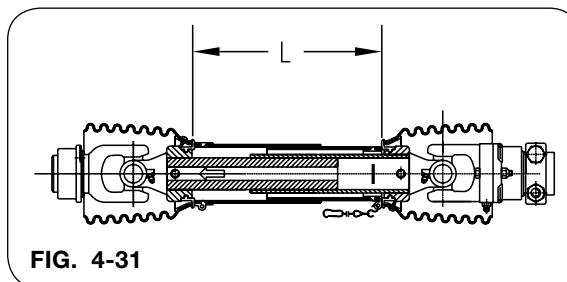
An excessive collapsed length can result in damage to the PTO driveline and attached components. This is most likely to occur during extreme turning angles and/or travel over rough terrain. Conditions are amplified on tractors with tracks operating in uneven terrain, particularly rice levies. Damaged driveline components can result in unsafe operation and severely reduced driveline component life.

NOTE: Do not exceed 10 degrees beyond a straight pull line while operating the PTO.

To verify proper extended and collapsed lengths, use the following procedure:

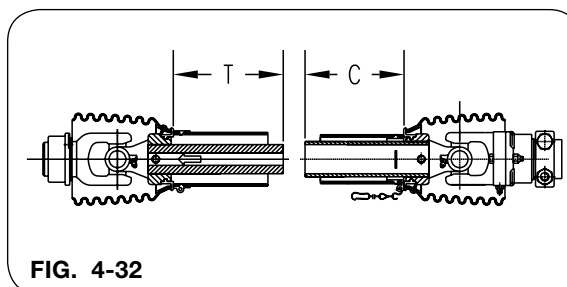
1. Fully collapse PTO shaft and measure length "L" (FIG. 4-31).

Enter here: _____ (1)
(Verify that outer tube does not bottom out on surrounding plastic shield components).



2. Pull apart PTO telescoping shaft ends and measure lengths "T" & "C" (FIG. 4-32).

Add "T" & "C" measurements together
Enter total here: _____ (2)



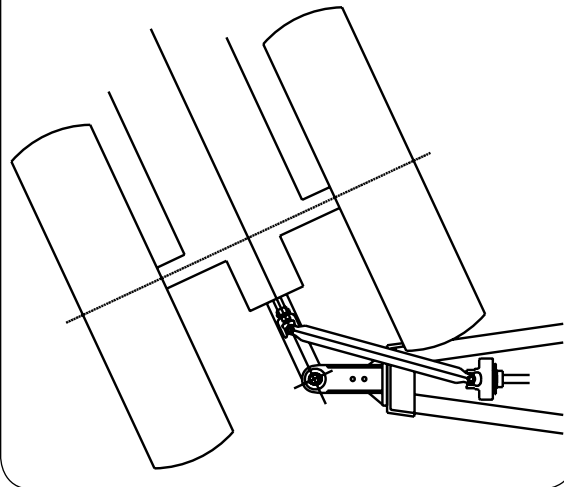
3. Calculate maximum recommended extended length:
 - a. Subtract line 1 from line 2. Enter here: _____ (a)
 - b. Divide line (a) by 2. Enter here: _____ (b)
 - c. Add line (b) to line 1. Enter here: _____ (c)
 - d. Subtract 3 inches from line (c). Enter here: _____ (d)

This is the maximum recommended extended length (LB).

Verify Telescoping PTO Shaft Length (continued)

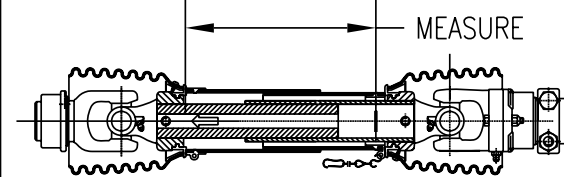
4. Hitch tractor drawbar to cart, ensuring that tractor and cart are on level ground and coupled as straight as practical.
5. Connect PTO shaft to tractor, and measure length “L” from same points as used in step 1. **Ensure that this measurement does not exceed the maximum recommended extended length calculated in step 3 above.** If necessary, choose a shorter drawbar position, or obtain a longer PTO shaft assembly before operating cart.
6. Position the tractor to obtain tightest turning angle, relative to the cart.

FIG. 4-33



7. Measure length “L” from same points as used in step 1. This distance must be at least 1.5 inches greater than the distance measured in step 1. If necessary, adjust length of PTO shaft by cutting inner and outer plastic guard tubes and inner and outer sliding profiles by the same length. Round off all sharp edges and remove burrs before greasing and reassembling shaft halves.

FIG. 4-34



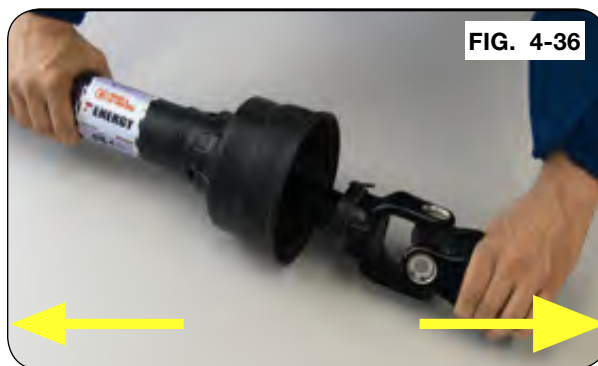
PTO Shaft and Clutch - Benzi PTO

To Dismantle Guard

1. Pull the guard tube backwards and, using a screwdriver, disengage the three bearing ring tabs by pushing them inward. (FIG. 4-35)



2. Remove half-guard. (FIG. 4-36)



3. Open the bearing ring and remove from the yoke groove. (FIG. 4-37)



PTO Shaft and Clutch - Benzi PTO (continued)

To Assemble Guard

1. Clean and grease the bearing ring, yoke groove and inner profile tube. (FIG. 4-38)



2. Fit bearing ring in groove with three bearing ring tabs positioned as shown. (FIG. 4-39)
3. Slip on half-guard by aligning the holes on the cone with three bearing ring tabs and the cone inner key with the cut of the bearing ring. (FIG. 4-39)



4. Push half-guard and yoke together causing the half-guard to engage. (FIG. 4-40)

NOTE: Ensure the three bearing ring tabs are positioned inside the grooves.

5. Confirm half-guard engagement by pulling backwards on the half-guard. (FIG. 4-40)

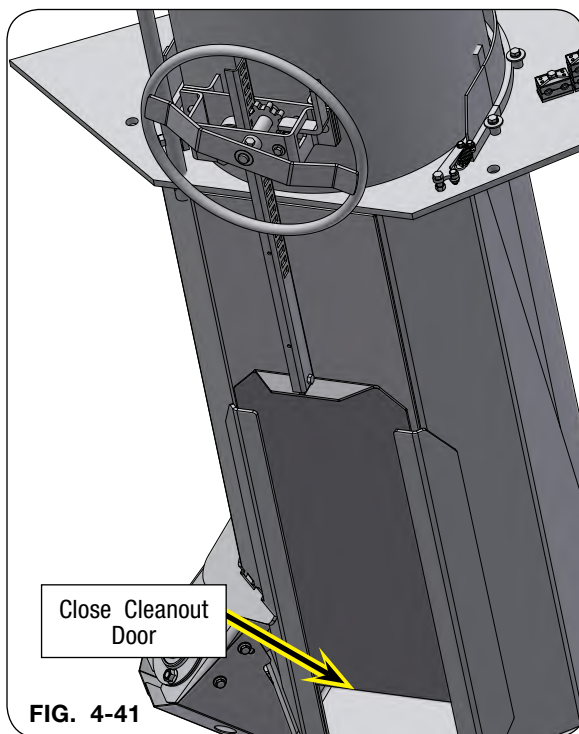


Adjusting Cleanout Door

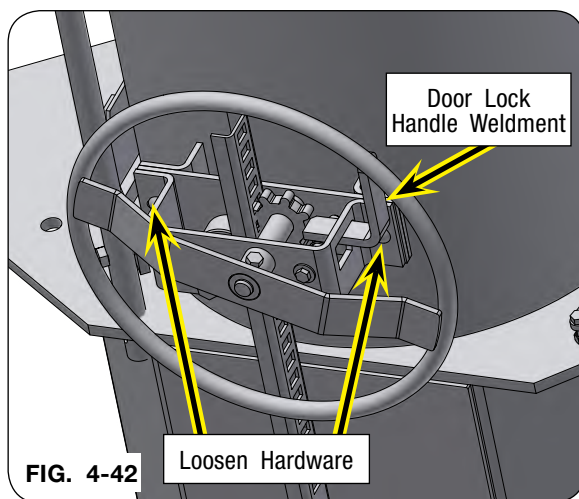
WARNING

- **MOVING PARTS CAN CRUSH AND CUT. KEEP AWAY FROM MOVING PARTS.**
- **KEEP HANDS CLEAR OF PINCH POINT AREAS.**
- **EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING THE IMPLEMENT.**

1. Park the empty grain cart on a firm and level surface. Block the tires/tracks on the machine to keep it from moving. Set the tractor's parking brake, shut-off the engine, remove the ignition key and disconnect the PTO shaft.
2. Completely close cleanout door. Inspect and verify that all the grain dust and fillings are removed that may prevent the door from shutting completely. (FIG. 4-41)

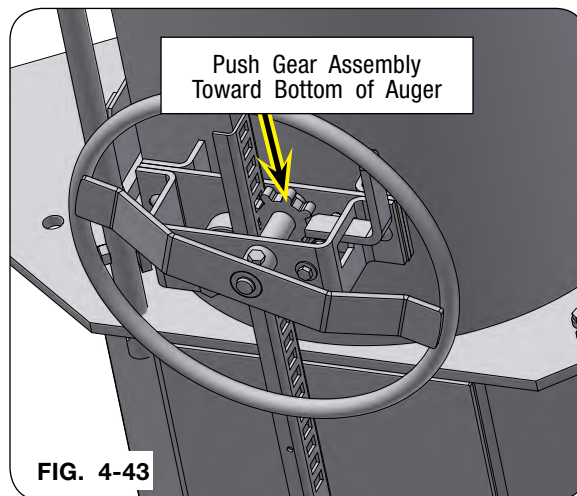


3. Engage the door lock handle weldment (281109). (FIG. 4-42)
4. Loosen mounting hardware. (FIG. 4-42)

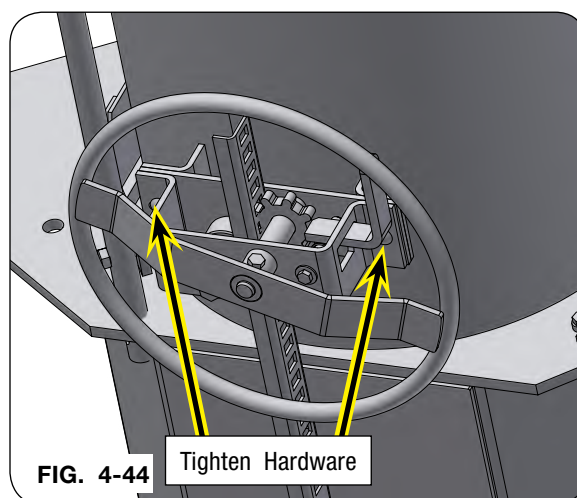


Adjusting Cleanout Door (continued)

5. Push the gear assembly toward bottom of auger to remove excess movement and prevent the door from moving upward when unloading the cart. (FIG. 4-43)



6. Tighten hardware loosened in step 4. (FIG. 4-44)
7. Check door operation. Lock the handle weldment into position. (FIG. 4-44)



Wheel, Hub and Spindle Disassembly and Assembly

WARNING

- TIPPING OR MOVEMENT OF THE MACHINE CAN CAUSE SERIOUS INJURY OR DEATH. BE SURE MACHINE IS SECURELY BLOCKED.
- FALLING OBJECTS CAN CAUSE SERIOUS INJURY OR DEATH. DO NOT WORK UNDER THE MACHINE AT ANY TIME WHILE BEING HOISTED. BE SURE ALL LIFTING DEVICES AND SUPPORTS ARE RATED FOR THE LOADS BEING HOISTED. THESE ASSEMBLY INSTRUCTIONS WILL REQUIRE SAFE LIFTING DEVICES UP TO 32,000 LBS. SPECIFIC LOAD RATINGS FOR INDIVIDUAL LOADS WILL BE GIVEN AT THE APPROPRIATE TIME IN THE INSTRUCTIONS.

CAUTION

- IMPROPERLY TORQUED WHEEL NUTS/BOLTS CAN CAUSE A LOSS OF IMPLEMENT CONTROL AND MACHINE DAMAGE. TORQUE WHEEL NUTS/BOLTS TO VALUES IN TABLE. CHECK TORQUE BEFORE USE, AFTER ONE HOUR OF UNLOADED USE OR AFTER FIRST LOAD, AND EACH LOAD UNTIL WHEEL NUTS/BOLTS MAINTAIN TORQUE VALUE. CHECK TORQUE EVERY 10 HOURS OF USE THERE-AFTER. AFTER EACH WHEEL REMOVAL START TORQUE PROCESS FROM BEGINNING. WARRANTY DOES NOT COVER FAILURES CAUSED BY IMPROPERLY TORQUED WHEEL NUTS/BOLTS.

IMPORTANT

- *Remove only one wheel and tire from a side at any given time using the following procedure.*
1. Hitch cart to tractor. Park the empty cart on a firm, level surface. Set the tractor's parking brake, shut off engine and remove key.
 2. With cart empty, place 32,000 lbs. safe lifting and load holding devices rated at 32,000 lbs. to support the weight of your grain cart. Place the safe lifting device under the axle closest to the tire/track.
 3. Use a 3,000 lbs. safe lifting device to support the wheel and tire then remove hardware.
 4. Remove the hardware retaining the hubcap. Next, remove the hubcap, gasket, capscrew, locknut, castle nut and spindle washer. Remove hub with bearings from old spindle using a 250 lb. lifting device.
 5. Inspect the spindle and replace if necessary. If spindle does not need to be replaced, skip to Step 6; otherwise continue.

Remove the capscrew and locknut that retains the spindle to the axle. Using a safe lifting device rated for 200 lbs., replace the old spindle with a new spindle. Coat axle contact length of spindle shaft (scale or non-scale) with anti-seize lubricant prior to installation. If installing scale spindle, install with 'top' decal facing upwards. Reuse capscrew and locknut to retain spindle to axle. Torque as outlined in MAINTENANCE section.

Wheel, Hub and Spindle Disassembly and Assembly (continued)

6. For Hub disassembly: Remove seal and inspect bearings, spindle washer, castle nut, capscrew and locknut. Replace if necessary. Pack both bearings with approved grease and reinstall inner bearing. Install new seal in hub with garter spring facing the hub by tapping on flat plate that completely covers seal while driving it square to hub. (FIG. 4-45) Install until flush with back face of hub. Using a 250 lb. rated lifting device, install hub assembly onto spindle. Install outer bearing, spindle washer and castle nut.

INSTALL SEAL WITH GARTER SPRING
TOWARD OUTSIDE OF HUB TO ALLOW
GREASE TO PURGE

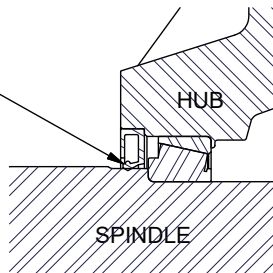


FIG. 4-45

7. For Hub adjustment: Slowly tighten castle nut while spinning the hub until drag causes the hub to stop freely spinning. Do not use an impact! Turn castle nut counterclockwise until the hole in the spindle aligns with the next notch in castle nut. Hub should spin smoothly with little drag and no end play. If play exists, tighten to next notch of castle nut. If drag exists, then back castle nut to next notch of castle nut. Spin and check again. Install capscrew and locknut. Clean face for hub cap gasket and install gasket, grease-filled hub cap and retain hub cap with hardware removed. Tighten hubcap hardware in alternating pattern.
8. Attach the wheel(s) and tire(s) to the hub using the same rated lifting device for removal. Tighten wheel nuts to appropriate requirements and recheck as outlined in "Wheel and Tire" in the MAINTENANCE section.
9. Raise cart, remove load holding devices and lower cart to the ground.

Wheels and Tires

Wheel Nut Torque Requirements

CAUTION

- IMPROPERLY TORQUED WHEEL NUTS/BOLTS CAN CAUSE A LOSS OF IMPLEMENT CONTROL AND MACHINE DAMAGE. TORQUE WHEEL NUTS/BOLTS TO VALUES IN TABLE. CHECK TORQUE BEFORE USE, AFTER ONE HOUR OF UNLOADED USE OR AFTER FIRST LOAD, AND EACH LOAD UNTIL WHEEL NUTS/BOLTS MAINTAIN TORQUE VALUE. CHECK TORQUE EVERY 10 HOURS OF USE THERE-AFTER. AFTER EACH WHEEL REMOVAL START TORQUE PROCESS FROM BEGINNING. WARRANTY DOES NOT COVER FAILURES CAUSED BY IMPROPERLY TORQUED WHEEL NUTS/BOLTS.

Failure to check torque before first load may damage wheel nut/bolt seats. Once seats are damaged, it will become impossible to keep nuts/bolts tight. Tighten nuts/bolts to applicable torque value shown in table. Start all nuts/bolts by hand to prevent cross threading. Torque nuts/bolts in the recommended sequence as shown in Diagram 1.

Note: Do not use anti-seize on wheel hardware.

WHEEL HARDWARE	
SIZE	FOOT-POUNDS
3/4-16 (UNF)	365 ft.-lbs.
7/8-14 (UNF)	440 ft.-lbs.
M22x1.5	475 ft.-lbs.

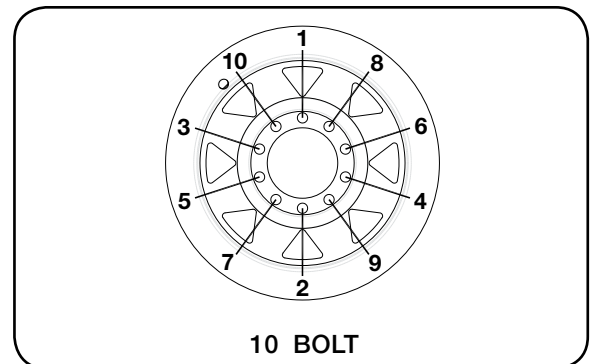


DIAGRAM 1

Wheels and Tires (continued)**Tire Pressure**

The following is to be used as a general guide for tire inflation and figures can vary depending on specific brand of tire used. **It is important that tires are inspected after unit is loaded.** Start with minimum pressure. The tire should stand up with no side-wall buckling or distress as tire rolls. Record the pressure needed to support the full load and maintain this pressure to achieve proper tire life. **Do not exceed maximum recommended tire pressure.** Each tire must be inflated to 35 PSI max to seat the beads, deflated to 5-10 PSI, then reinflated to recommended minimum pressure.

Tire Pressure for Grain Carts			
Tire Make	Tire Size	Load Index / Ply Rating	Max. PSI
Firestone	23.1x26 R-3	12	32
	23.1x26 R-1	12	32
	28Lx26 R-3	12	26
	24.5x32 R-3	12	32
	24.5x32 R-1	12	32
	30.5x32 R-1	14	28
	30.5x32 R-3	14	28
	30.5x32 R-3	16	34
	30.5x32 R-1	16	26
	35.5x32 R-3	20	36
	76x50.00x32 HF-3	16	40
	76x50.00x32 HF-3	20	50
	800/65R32 R-1W	172D	44
	800/60R32 R-3	181B	46
	900/65R32 R-3	191B	46
	900/60R32 R-1	176A8	44
	1250/50R32F IF/CFO R-1WNP	201D	46
	1250/50R32F IF/CFO R-1W	188B	30
	520/85R38 R-1	155A8	29
	520/85R38 R-1	173A8	64
	480/80R42 R-1	151A8	36
	520/85R42 R-1	157A8	29
	520/85R42 R-1	165A8	51
	520/85R42 IF/CFO R-1	169A8/B	35
	IF520/85R42 R-1W	169B	35
	VF520/85R42 R-1W	177B	35
	IF1100/50R42 CFO R-1W	197B	46
	420/80R46 R-1	151A8	44
	480/80R46 R-1	158A8	44
	380/90R46 R-1	152B	51

Wheels and Tires (continued)

Tire Pressure (continued)

Tire Pressure for Grain Carts			
Tire Make	Tire Size	Load Index / Ply Rating	Max. PSI
Titan/Goodyear	23.1x26 R-3	10	26
	23.1x26 R-1	10	26
	24.5R32 R-1	169A8/B (5-Star)	48
	24.5x32 R-3	12	32
	24.5x32 R-1	12	32
	30.5x32 R-3	16	26
	30.5x32 R-3	14	22
	30.5x32 R-1	14	22
	480/80x42 R-1	166A8	23
	800/65R32 R-1W	172D	34
	900/60R32 R-1W	185A	49
	1050/50R32 R-1	196D	52
	1100/45R46 R-1W	195D	35
	IF1250/50R32 R-1W	201D	46
Mitas	650/75R32 R-1W	172A8	58
	650/75R32 R-1	176A8	41
	800/65R32 R-1W	172A8	46
	900/60x32 R-1W	181A8	58
	900/60x32 CHO R-1W	181A8	46
	900/70R32 R-1W	188A8	53
	1050/50x32 R-1W	178A8	41
	1250/50R32 R-1W	188A8	41
	900/60x38 R-1W	181A8	44
	520/85x42 R-1W	162A8	44
	650/65x42 R-1W	168A8	44
Alliance	30.5B32	18-Ply	36
	35.5LR32	193A8	44
	900/60R32 R-1W	192D	46
	1050/50R32 R-1W	185A8	52
	1250/50R32 R-1W	201B	46
Trelleborg	TLVF1250/50R32CFO R-1	207D	52
	VF1050/50R32 R-1	198D	52
	900/50R32 R-1W	181A8	55
	900/60x32	176LI	44
	850/55R42 R-1W	161A8	32

*Each tire must be inflated to 35 PSI max to seat the beads, deflated to 5-10 PSI, then reinflated to the tire's max PSI.

Wheels and Tires (continued)

Tire Warranty

For questions regarding new tire warranty, please contact your local original equipment tire dealer. **USED TIRES CARRY NO WARRANTY.** Following are phone numbers and Websites for your convenience:

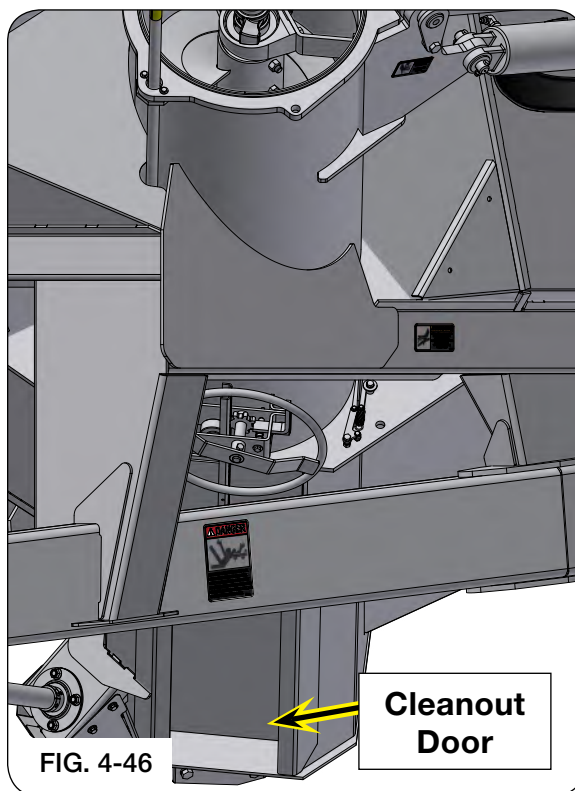
<u>Firestone</u>	www.firestoneag.com Phone 800-847-3364
<u>Titan</u> or <u>Goodyear</u>	www.titan-intl.com Phone 800-USA-BEAR Fax 515-265-9301
<u>Trelleborg</u>	www.trelleborg.com Phone 866-633-8473
<u>Continental/Mitas</u>	www.mitas-tires.com Phone 704-542-3422 Fax 704-542-3474
<u>Alliance</u>	www.atgtire.com Phone 781-325-3801

Seasonal Storage

Your cart is an important investment. Spend a little time to protect it from destructive rust and corrosion. You will be repaid in longer service life and better performance.

Do the following before placing the cart in storage:

1. Wash machine inside and out before storing to remove dirt and debris that can draw and collect moisture. When using pressure washers, maintain an adequate distance so not to force water into bearings.
2. Using safe lifting device rated at 100 lbs., store PTO on the rest brackets at the side of the frame rail.
3. Repaint all areas where paint has been removed to keep rust from developing. Rust will affect grain flow.
4. Coat exposed cylinder piston rods with rust preventative material if applicable.
5. Lubricate machine at all points outlined.
6. Inspect for damage or worn parts, replace before next season.
7. Store cart inside, away from livestock.
8. Replace all worn, torn or faded decals and reflectors.
9. If unit is equipped with a scale indicator or electric hydraulic controls, store these indoors in a dry location.
10. Fully open flow door and auger cleanout door to remove any remaining grain and to allow moisture to dry.
11. Close the tarp to keep debris out of the hopper.



Tarp - Troubleshooting Inspection and Maintenance

PROBABLE CAUSE	CORRECTION
Tarp sags in middle areas	1. Bows may be bent or adjusted too low.
	2. Missing or loose ridge strap. Replace or retighten.
	3. U-joint may need to be adjusted on splined shaft to provide more tension.
Holes or tears in tarp	1. Consult your local dealer for repairs.
	2. Order tarp repart kit from dealer.
	3. When new tarp or parts are needed always replace with original parts.

Inspection and Maintenance**⚠ WARNING**

- TO PREVENT PERSONAL INJURY OR DEATH, DO NOT ALLOW ANYONE ON A CLOSED TARP. TARP SYSTEM IS NOT DESIGNED TO SUPPORT A PERSON.
- FALLING OBJECTS CAN CAUSE SERIOUS INJURY OR DEATH. REMOVE ACCUMULATED WATER/SNOW/ICE OR ANY OTHER OBJECTS FROM TARP BEFORE OPENING TARP.

IMPORTANT

- *Do not open or close tarp while moving or in high wind conditions. Damage to the tarp may occur.*
- *Tarp should not be used if it is torn or the bungee cords are frayed or show damage. Fully close tarp with tension on the latch plate to prevent water from pooling.*

Periodic preventive maintenance should be practiced. Inspect tarp and hardware often for abrasions or loosened bolts that may need adjustment and/or repair. Check bungee cords for wear and adjust tension at the beginning of the season and again half way through the season.

Tears in tarp should addressed before further tarp operation. If water pools on tarp, adjust tension of tarp cables and/or arm springs.

If installed correctly, tarp should always operate as well as when first installed. If tarp does not pass this simple inspection, make all appropriate repairs or adjustments immediately before serious damage occurs.

Electrical Diagram — Plug #92450

GRAIN CART WIRES

White -- Ground
Green -- Right Amber Flashing Lamp
Yellow -- Left Amber Flashing Lamp
Brown -- Tail Light
Black -- Work Lights
Red -- Brake Lights
Blue -- NOT USED

Black - Work Lights

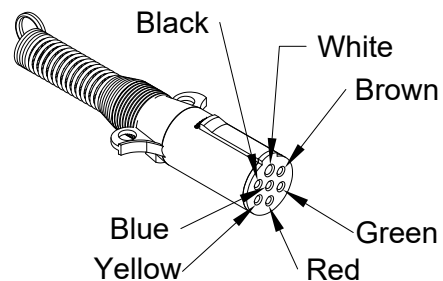
Green - RH Turn

Yellow - LH Turn

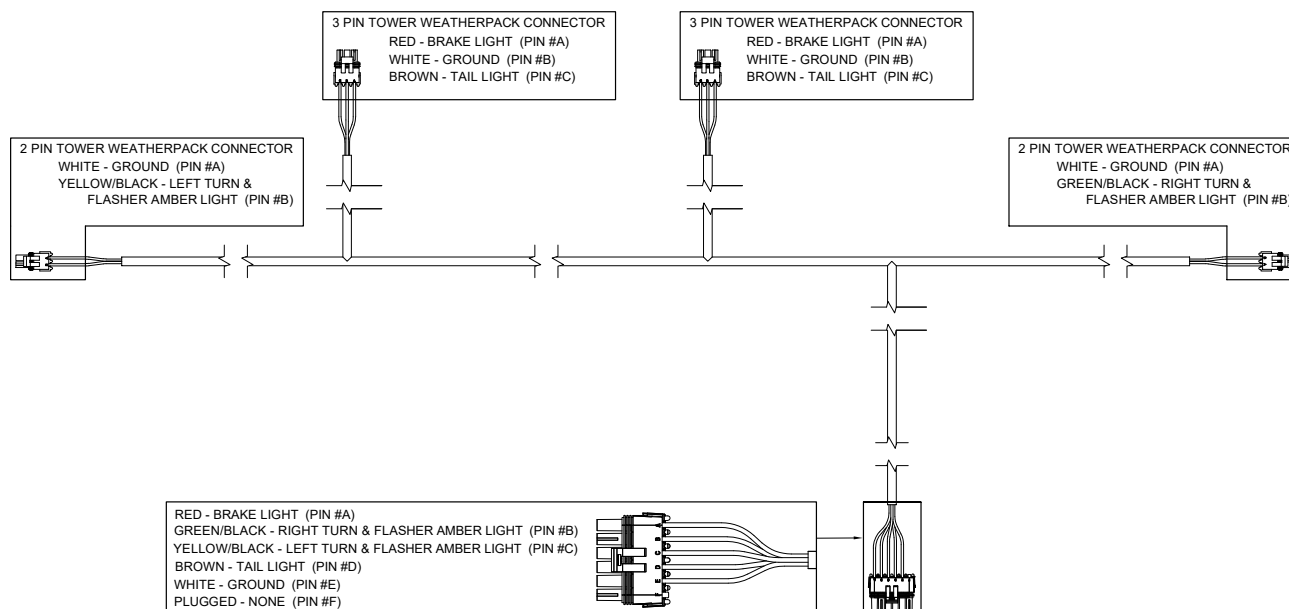
Brown - Tail

White - Ground

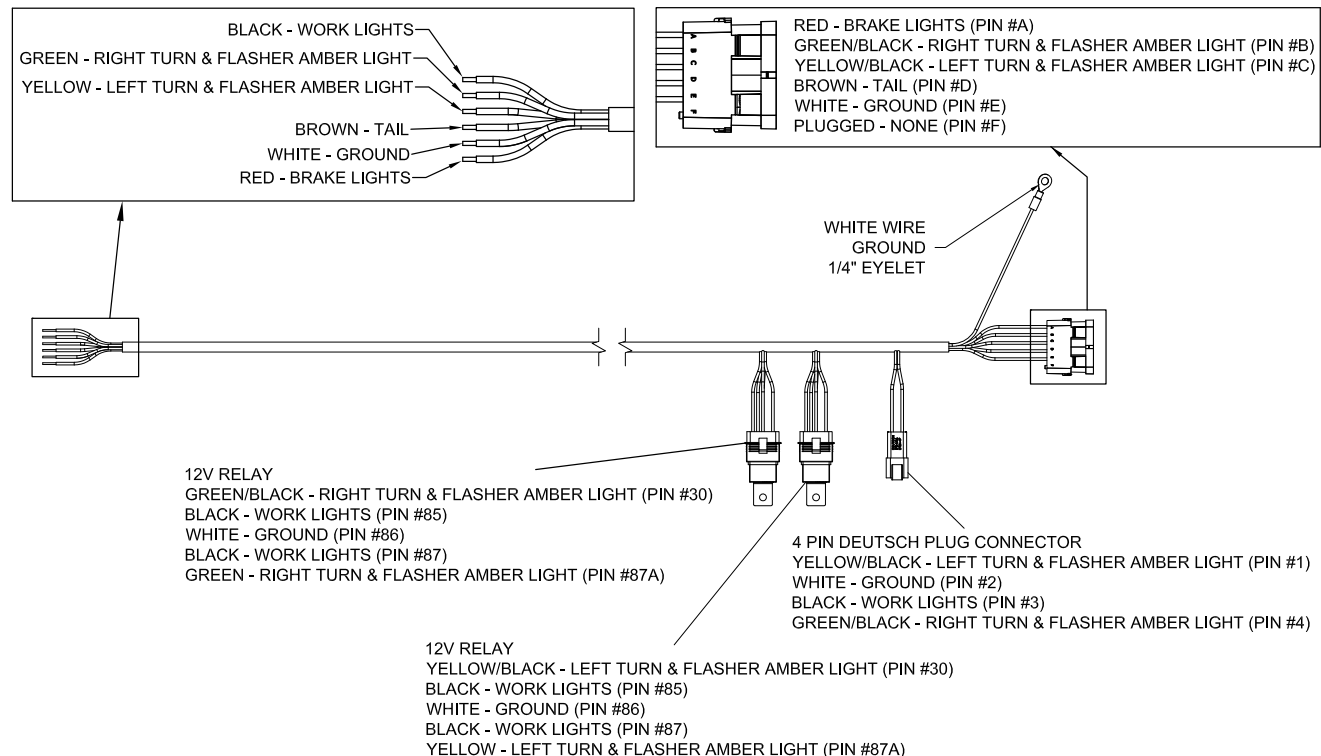
Red - Brake



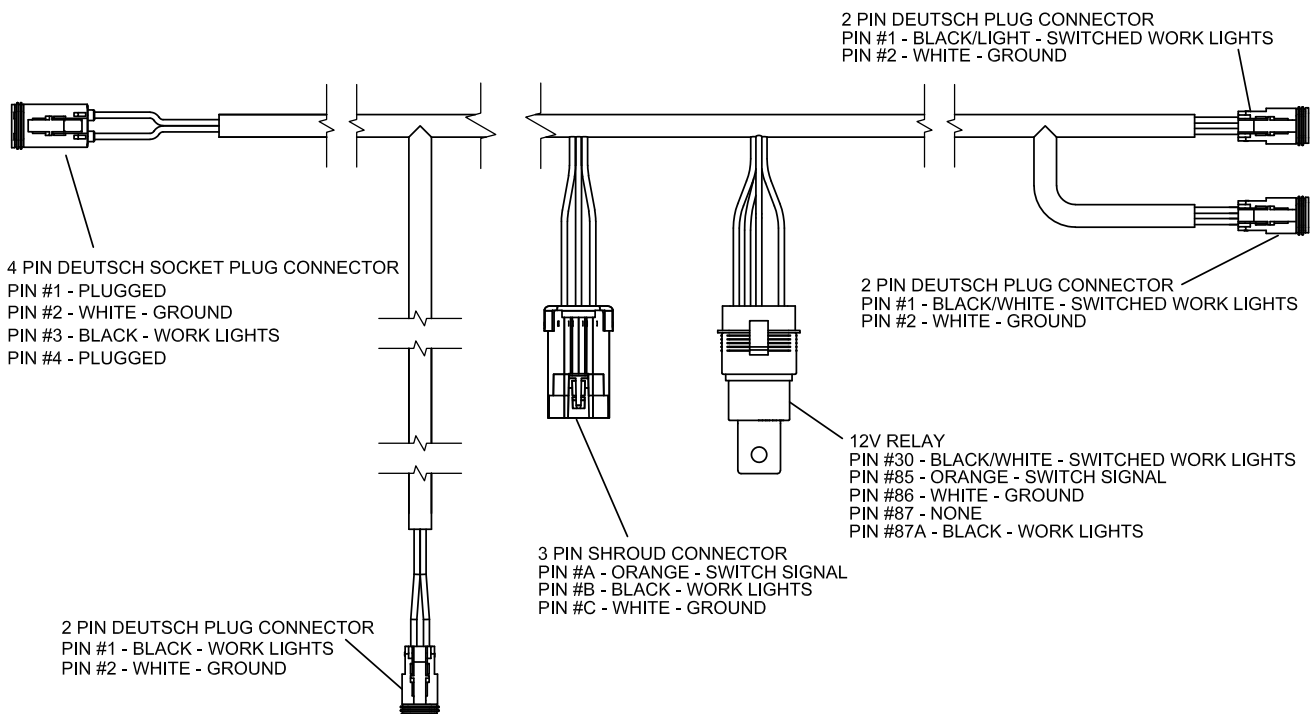
Electrical Schematic - Rear Wiring Harness #9008237



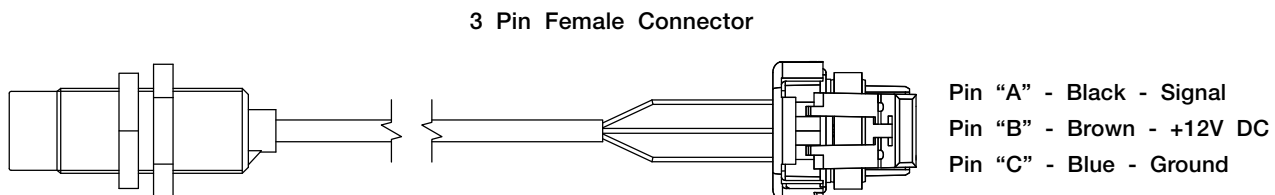
Electrical Schematic - Front Wiring Harness #9007911



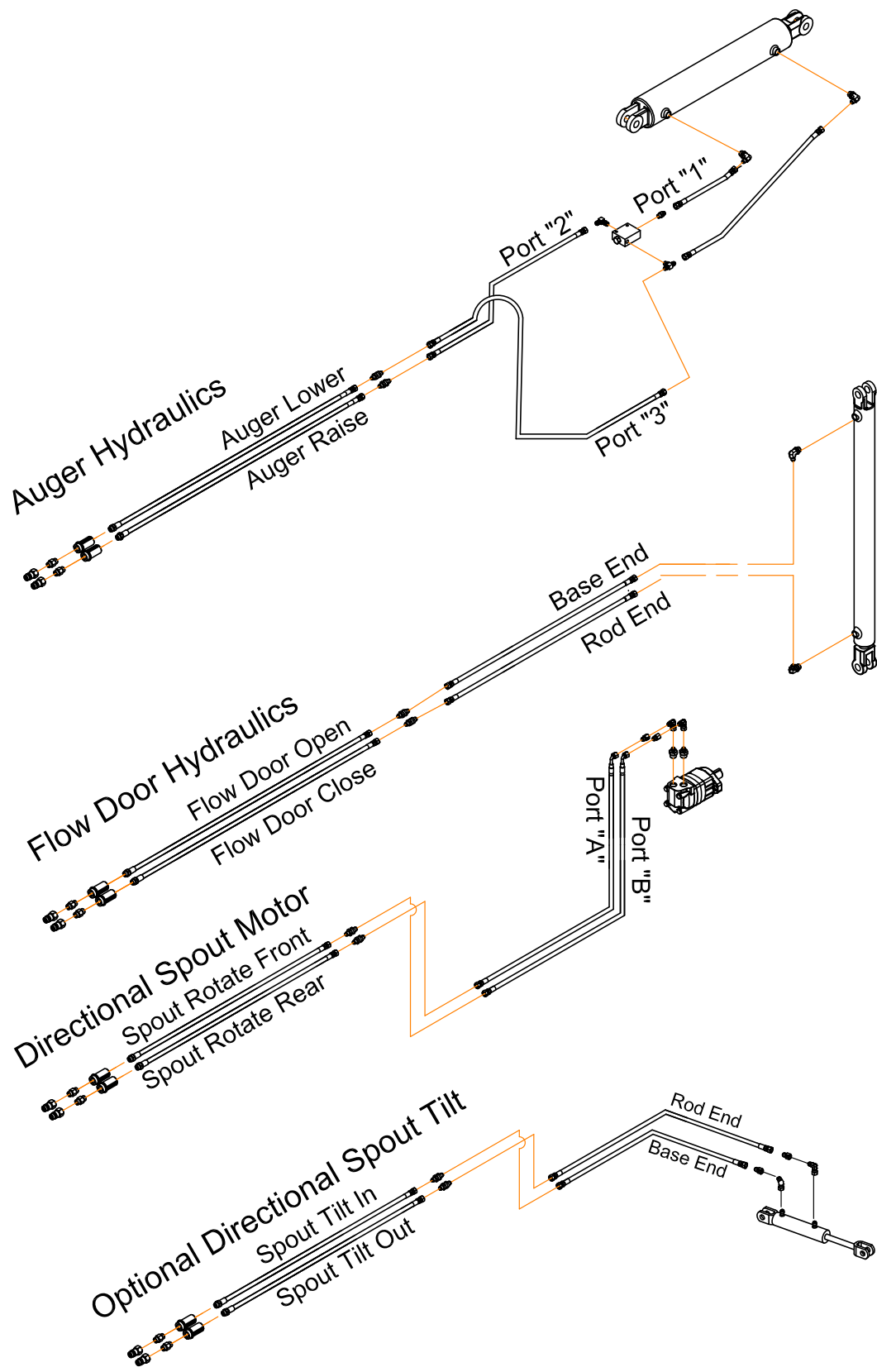
Electrical Schematic - Auger Wiring Harness #9010245



Electrical Schematic - Proximity Sensor Harness #9007472



Hydraulic System Layout



Complete Torque Chart

Capscrews - Grade 5

NOTE:

- Grade 5 capscrews can be identified by three radial dashes on the head.
- For wheel torque requirements, refer to Wheels and Tires.
- Tighten U-bolts evenly and equally to have the same number of threads exposed on each end.



SIZE	FOOT POUNDS	NEWTON METERS
1/4-20	8-10	11-13
1/4-28	9-11	12-15
5/16-18	15-17	20-23
5/16-24	17-19	23-26
3/8-16	25-28	34-38
3/8-24	28-31	38-42
7/16-14	40-45	54-61
7/16-20	45-50	61-68
1/2-13	62-68	84-92
1/2-20	68-75	92-102
9/16-12	90-98	122-133
9/16-18	100-110	134-148
5/8-11	120-135	162-183
5/8-18	124-137	168-186
3/4-10	200-220	270-300
3/4-16	210-230	285-310
7/8-9	330-350	425-475
7/8-14	360-380	460-515
1-8	500-525	675-710
1-14	540-560	730-760
1 1/8-7	600-635	815-860
1 1/8-12	665-700	920-950
1 1/4-7	850-895	1150-1215
1 1/4-12	940-990	1275-1340
1 3/8-6	1125-1175	1525-1590
1 3/8-12	1280-1335	1735-1810
1 1/2-6	1500-1560	2035-2115
1 1/2-12	1685-1755	2285-2380

IMPORTANT

- Follow these torque recommendations except when specified in text.

Complete Torque Chart

Capscrews - Grade 8

NOTE:

- Grade 8 capscrews can be identified by six radial dashes on the head.
- For wheel torque requirements, refer to Wheels and Tires.
- Tighten U-bolts evenly and equally to have the same number of threads exposed on each end.



SIZE	FOOT POUNDS	NEWTON METERS
5/16-18	20-22	27-30
5/16-24	21-23	28-31
3/8-16	35-39	47-53
3/8-24	36-41	49-55
7/16-14	54-58	73-78
7/16-20	55-60	75-80
1/2-13	82-88	110-120
1/2-20	94-99	125-135
9/16-12	127-134	170-180
9/16-18	147-155	199-210
5/8-11	160-170	215-230
5/8-18	165-175	225-235
3/4-10	280-295	380-400
3/4-16	330-365	445-495
7/8-9	410-430	555-580
7/8-14	420-440	570-595
1-8	630-650	850-880
1-14	680-700	920-950
1 1/8-7	900-930	1220-1260
1 1/8-12	930-950	1260-1290
1 1/4-7	1250-1300	1695-1760
1 1/4-12	1280-1320	1735-1790

IMPORTANT

- Follow these torque recommendations except when specified in text.

Hydraulic Fittings – Torque and Installation

WARNING

- EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING THE IMPLEMENT.
- HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. LEAKS OF HIGH-PRESSURE FLUIDS MAY NOT BE VISIBLE. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS.
- HYDRAULIC SYSTEM MUST BE PURGED OF AIR BEFORE OPERATING TO PREVENT SERIOUS INJURY OR DEATH.
- RELIEVE HYDRAULIC SYSTEM OF ALL PRESSURE BEFORE ADJUSTING OR SERVICING. SEE TRACTOR OPERATOR'S MANUAL FOR PROPER PROCEDURES.



Tightening O-Ring Fittings

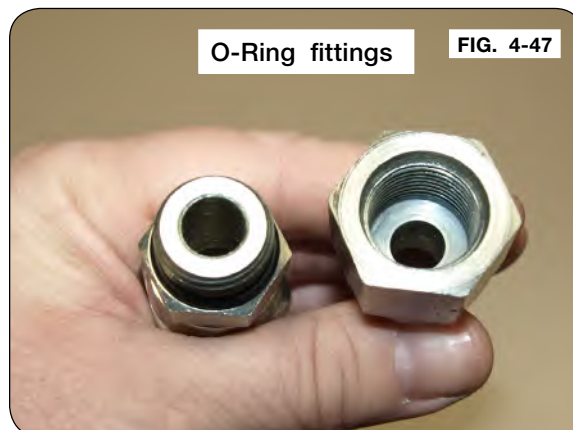
1. Inspect components for damage or contamination. Do not connect any other type of fitting to an O-ring fitting.
2. For adjustable fittings, ensure the jam nut and washer are fully backed up.
3. Lubricate the O-ring and threads on the fitting.
4. Turn the fitting into the port until it is finger tight.
5. For adjustable fittings, set in the desired position.
6. Using a wrench, torque the fitting to the value in the below table. For adjustable fittings the jam nut will be tightened.

NOTE: Never use a power tool to install a fitting.

Dash Size	Thread Size	Straight Stud Torque (Ft-Lbs)	Adjustable Stud Torque (Ft-Lbs)
-5	1/2-20	14-19	10-14
-6	9/16-18	18-24	12-16
-8	3/4-16	27-43	20-30
-10	7/8-14	36-48	30-36
-12	1-1/16-12	65-75	44-54
-14	1-3/16-12	75-99	53-70
-16	1-5/16-12	85-123	59-80
-20	1-5/8"-12	115-161	75-100
-24	1-7/8"-12	125-170	105-125

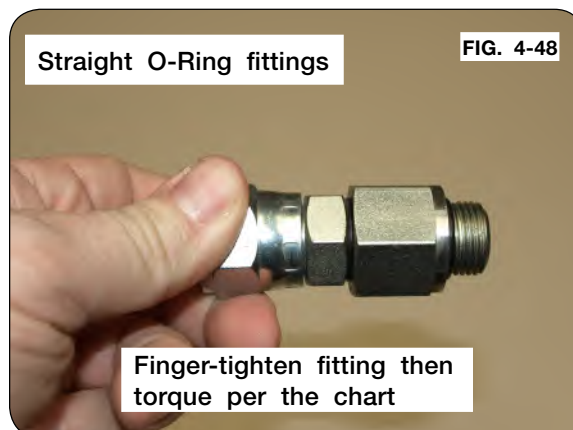
O-Ring fittings

FIG. 4-47



Straight O-Ring fittings

FIG. 4-48

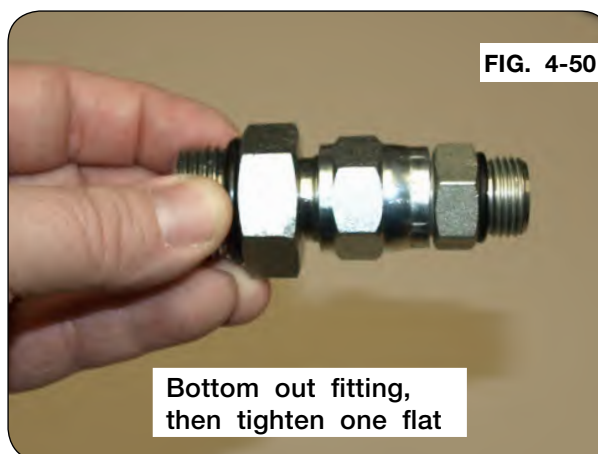


Hydraulic Fittings – Torque and Installation

Tightening JIC Fittings

1. Inspect all components for damage or contamination. Do not connect any other type of fitting to a JIC fitting.
2. Lubricate the threads.
3. Turn the fitting into the port until it bottoms out.
4. Use one wrench on the fixed hex on the hose to prevent twisting and a second on the swivel. Tighten the fitting another 60 degrees (or one flat)

NOTE: Never use a power tool to install a fitting.



Section V Parts

Please visit www.unverferth.com/parts/ for the most current parts listing.

Decals	5-2
Touch-Up Paint.....	5-3
Hitch, Transport Chain, Jack, Ladder, and Storage Box.....	5-4
Hopper Cross Brace Components.....	5-6
Sideboards.....	5-8
Rigid Axle & Hub Components.....	5-10
Wheels and Tires.....	5-12
Track Axle — 36" x 148" Standard Tracks.....	5-13
Track Axle — 42" x 131" Equalizer Tracks.....	5-14
Track Axle — 42" x 148" Equalizer Tracks.....	5-15
Track Axle Components	5-16
Wheel Well Cover Kit.....	5-17
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Flow Door Seals	5-20
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FOR TRACK INFORMATION, PLEASE REFER TO YOUR TRACK MANUAL.

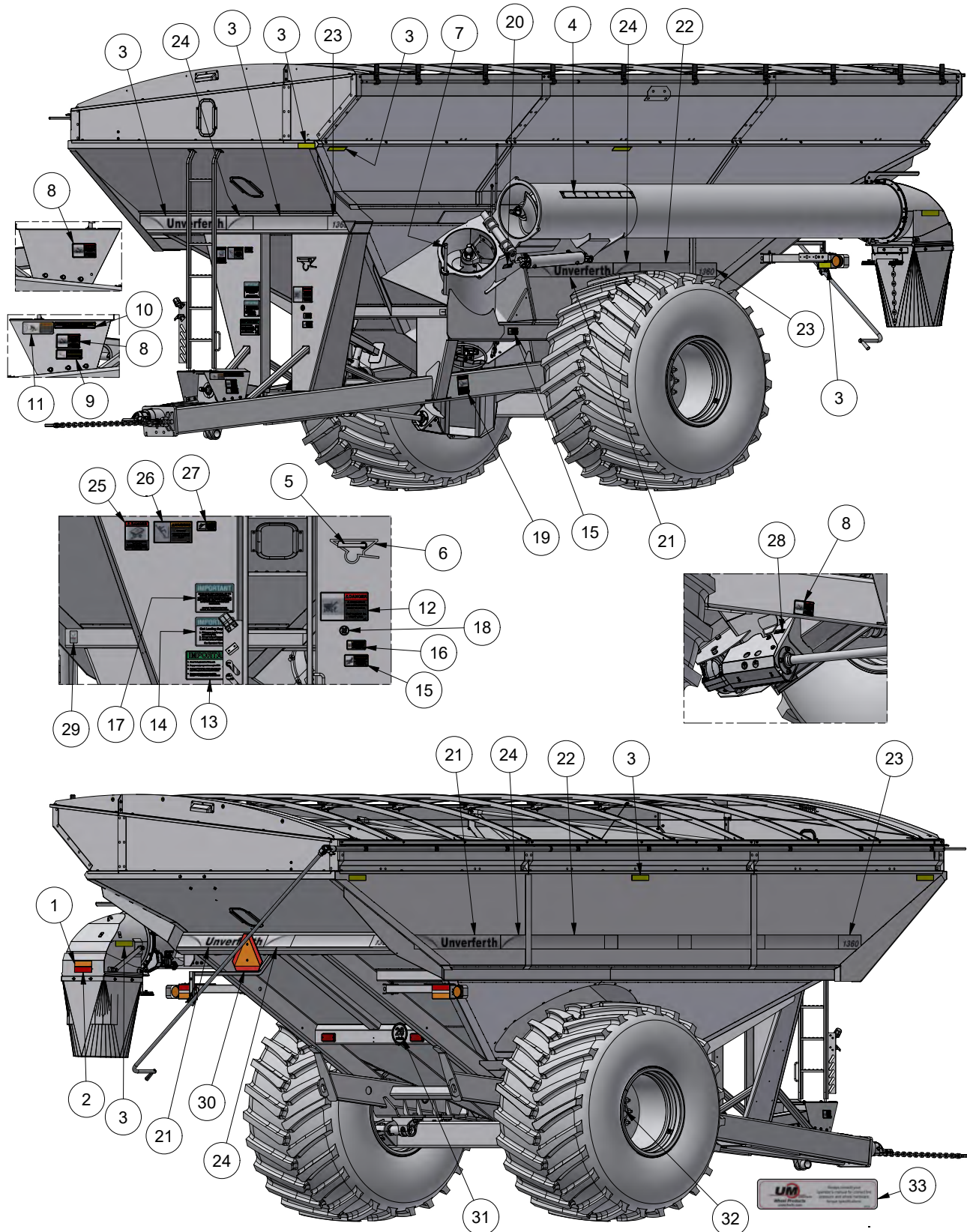
FOR TARP INFORMATION, PLEASE REFER TO YOUR TARP MANUAL.

FOR SCALE INFORMATION, PLEASE REFER TO YOUR SCALE MANUAL.

FOR HYDRAULIC DRIVE INFORMATION, PLEASE REFER TO YOUR HYDRAULIC DRIVE MANUAL.

Decals

Please visit www.unverferth.com/parts/ for the most current parts listing.



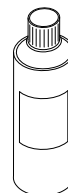
Decals

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	9003125	Fluorescent Strip	2	2 x 9"
2	9003126	Red Reflector	2	2 x 9"
3	9003127	Amber Reflector	8	2 x 9"
4	92563	Decal, Flow Control 3" x 38"	1	
5	9005335	Decal, Auger Indicator	1	
6	9004288	Decal, Profile Cart	1	
7	265384	Decal, Reflective Checker Tape	1	
8	95046	Decal, Danger, Driveshaft Entanglement	3	
9	97575	Decal, Caution, Transport Chain	1	
10	9009998	Decal, Hose Legend	1	
11	94094	Decal, Warning, Tongue Drop	1	
12	9003474	Decal, Danger, Electrical Lines	1	
13	9003477	Decal, Flow Control Gate	1	
14	9004966	Decal, Loading Sequence	1	
15	95445	Decal, Warning, High Pressure	2	
16	97961	Decal, Warning (Read & Understand)	1	
17	9008151	Decal, Important (PTO Engagement)	1	
18	9008715	Decal, Front SIS 20 MPH	1	
19	9003475	Decal, Danger, PTO Cut & Crush	1	
20	95839	Decal, Warning, Pinch Point	1	
21	9004298	Decal, Unverferth Logo (5 1/4" x 45 3/4")	4	
22	9004035	Decal, Stripe (5 1/4" x 46")	7	
23	9010243	Decal, 1360	4	
24	9004213	Decal, Stripe with Tail (5 1/4" x 14 1/4")	4	
25	9003478	Decal, Danger Just For Kids	1	
26	9003476	Decal, Warning (No Riders)	1	
27	9010442	Decal, CAUTION (Slippery Surface)	1	
28	93459	Decal, 8 Hours Grease	1	
29	91605	Decal, FEMA	1	
30	TA510514	SMV Sign	1	
31	9008714	Decal, Rear SIS 20 MPH	1	
32	9008141	Decal, IMPORTANT (Spindle)	2	
33	94754	Decal, UM Wheel Systems	1	

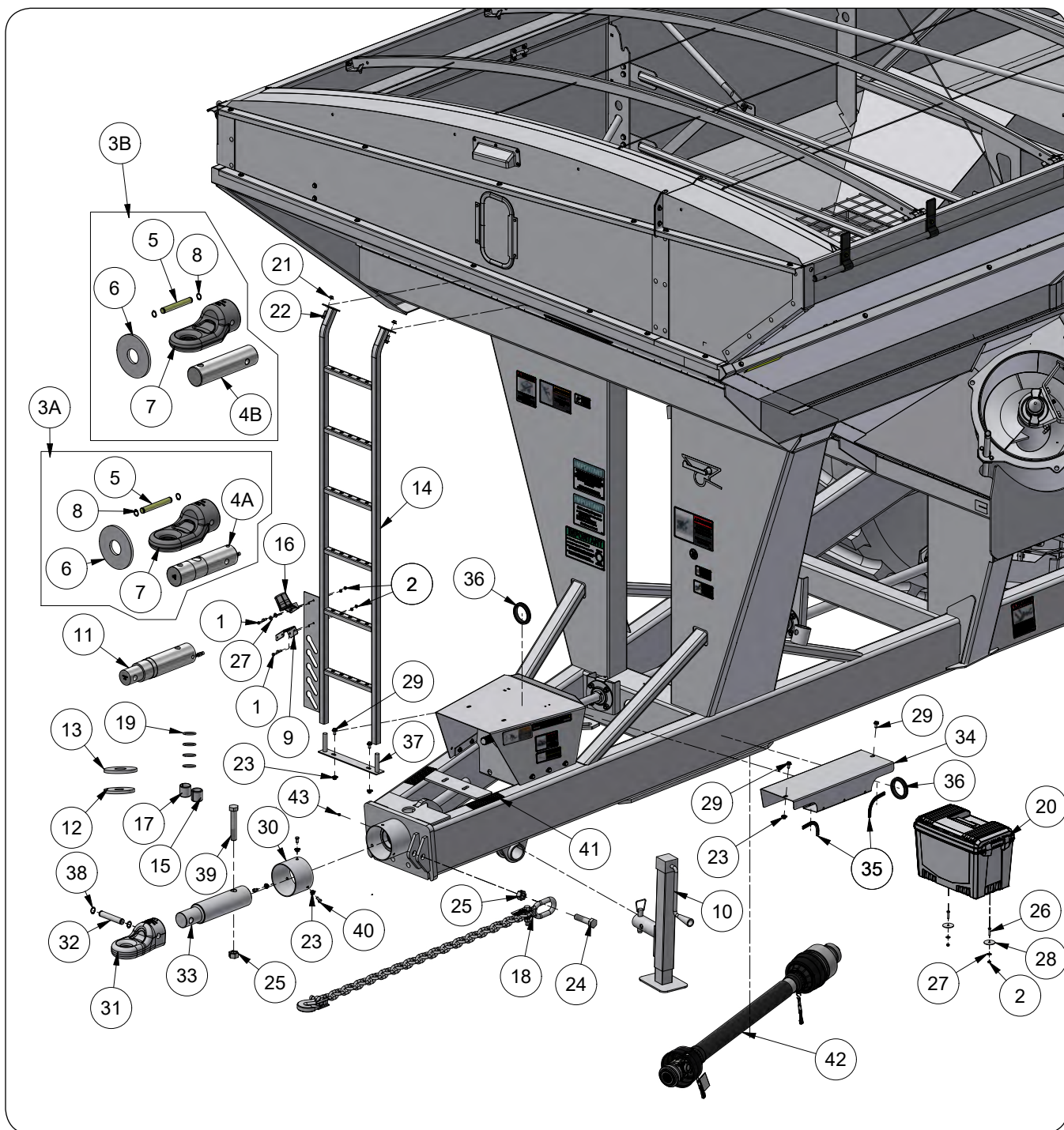
Touch-Up Paint

PAINT	SPRAY
Black	97013
Green, Primary Cart Color	97015
Red, Primary Cart Color	97301
Midnight Gray Metallic, Primary Cart Color	2013136
Sliver Mist	97012
Primer, Gray	9500082



Hitch, Transport Chain, Jack, Ladder and Storage Box

Please visit www.unverferth.com/parts/ for the most current parts listing.



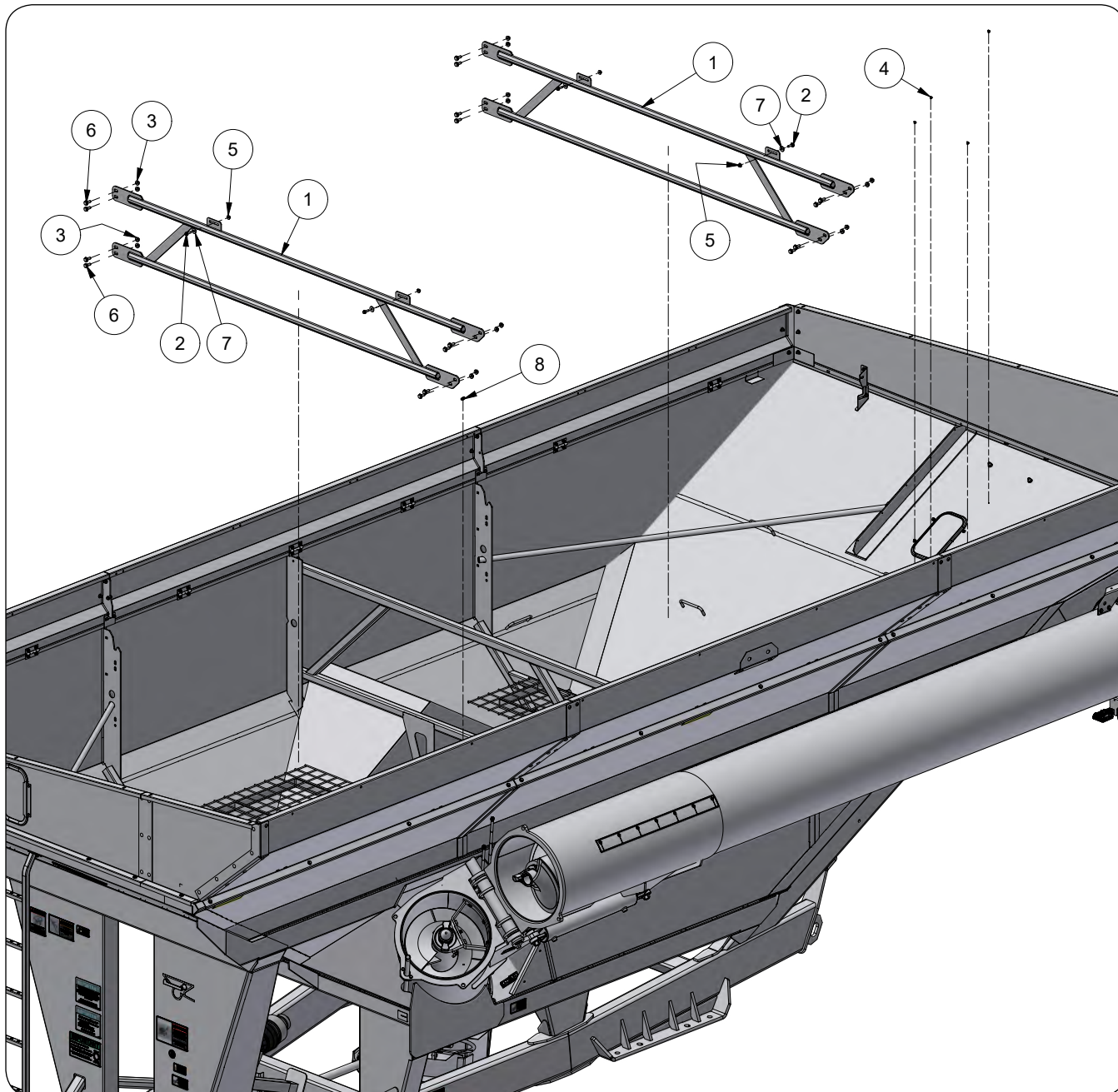
Hitch, Transport Chain, Jack, Ladder and Storage Box

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	9390-003	Capscrew, 1/4"-20UNC x 3/4" G5	4	
2	9936	Locknut/Top, 1/4"-20UNC	4	
3A	271887B	CAT 5 Hitch with Scales Conversion Kit =Black=	1	
3B	271893B	CAT 5 Hitch without Scales Conversion Kit =Black=	1	
4A	9008119	Hitch Load Bar, 3 3/4" Dia. x 14.625"	1	
4B	271894	Hitch, 3 3/4" Dia. x 14 5/8"	1	
5	281691	Pin, 1" Dia. x 7 1/2"	1	
6	281899	Wear Shoe Hitch, CAT 5	1	
7	282329B	Hitch, 7 " x 14 3/8" =Black=	1	
8	91192	Retaining Ring, 1"	2	
9	281836B	Connector Bracket =Black=	1	
10	9004156	Jack Assembly w/Pin	1	
	9004171	Pin, 7/8" Dia.	-	
11	9004910	Hitch Load Bar, 3 3/4" Dia. x 16.406", CAT 4	1	
12	281663	Wear Shoe Hitch, CAT 3	1	
13	281898	Wear Shoe Hitch, CAT 4	1	
14	288378B	Ladder Weldment =Black=	1	
15	9001917	Tension Bushing, 2" OD x 1.516" ID x 2"	1	
16	9001968	Connector Holder	1	
17	9002130	Split Tension Bushing, 2" OD x 1 3/4" ID x 2"	1	
18	9004898	Transport Chain, 41,000#	1	
19	9005259	O-Ring	4	
20	9005850	Storage Box	1	
21	9008159	Locknut, 3/8"-16UNC	2	
22	91262	Flange Screw, 3/8"-16UNC x 1" G5	2	
23	91263	Nut/Large Flange, 3/8"-16UNC	6	
24	91299-191	Capscrew, 1"-8UNC x 4" G8	1	
25	92199	Locknut, 1"-8UNC	2	
26	9390-006	Capscrew, 1/4"-20UNC x 1 1/4" G5	2	
27	9405-064	Flat Washer, 1/4"	4	
28	94763	Fender Washer	2	
29	95585	Capscrew/Large Flange, 3/8"-16UNC x 3/4" G5	4	
30	271891B	Tube Shield, 6 1/4" Dia. x 4 1/2" =Black=	1	
31	282875B	Hitch, Single Tang	1	
32	282876	Pin, 1" Dia. x 5 1/2"	1	
33	284780	Hitch Bar, 3 3/4" Dia.	1	
34	288381B	Drive Cover Plate =Black=	1	
35	9000787	Trim-Edge Vinyl	AR	
36	9006780	Rubber Grommet	3	
37	280603B	Ladder Guide Weldment =Black=	1	
38	91192	Retaining Ring, 1"	2	
39	91299-195	Capscrew, 1"-8UNC x 6" G8	1	
40	9390-053	Capscrew, 3/8"-16UNC x 3/4" G5	3	
41	9001498	Runner Pad	2	
42	9010262	PTO Assembly	1	
43	91160	Grease Zerk	1	

Hopper Cross Brace Components

Please visit www.unverferth.com/parts/ for the most current parts listing.



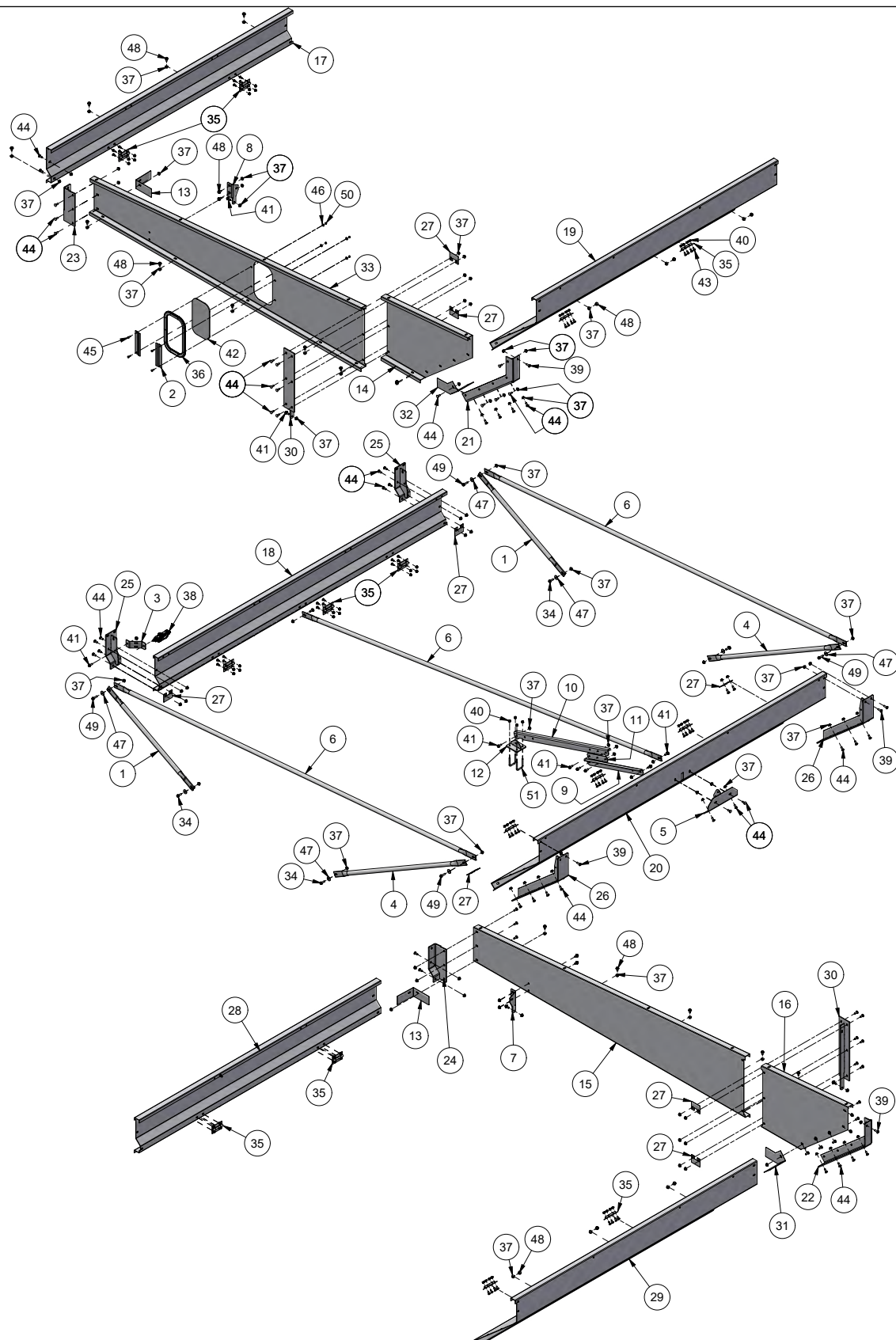
Hopper Cross Brace Components

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	288980B	Hopper Cross Brace Weldment =Black=	2	
2	9003259	Flange Screw, 3/8"-16UNC x 1 1/4" G5	4	
3	9003397	Locknut/Top, 1/2"-13UNC	16	
4	9007570	Plug, 0.20" Dia.	4	
5	9008159	Locknut, 3/8"-16UNC	4	
6	91266	Flange Screw, 1/2"-13UNC x 1 1/4" G5	16	
7	9405-078	Flat Washer, 3/8"	4	
8	9007987	Grommet, 3/4" Dia.	2	

Sideboards

Please visit www.unverferth.com/parts/ for the most current parts listing.



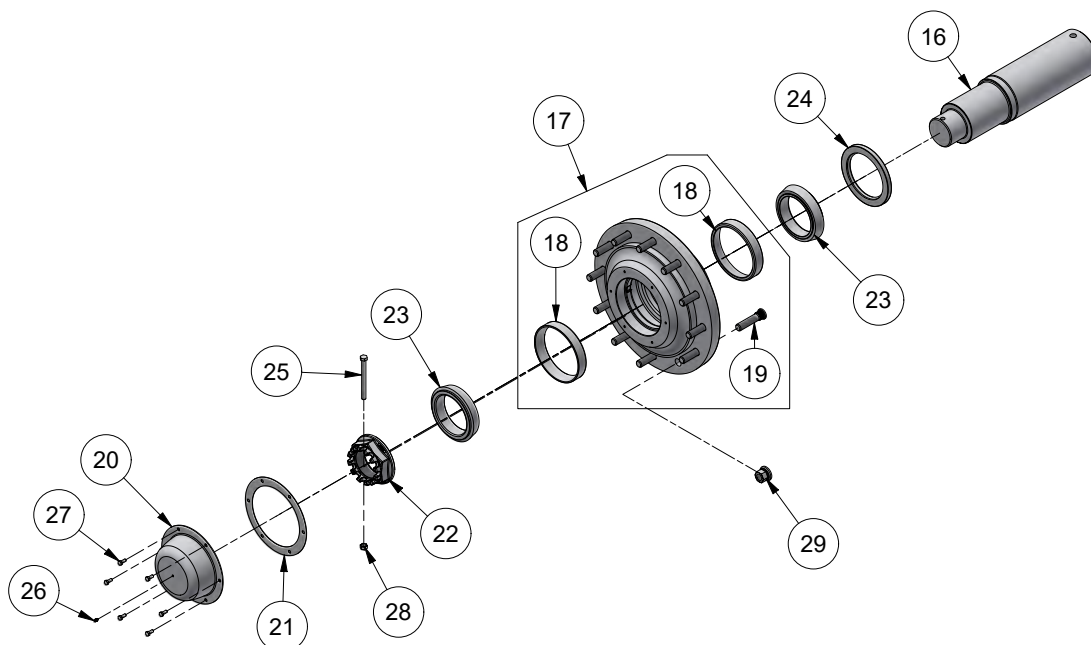
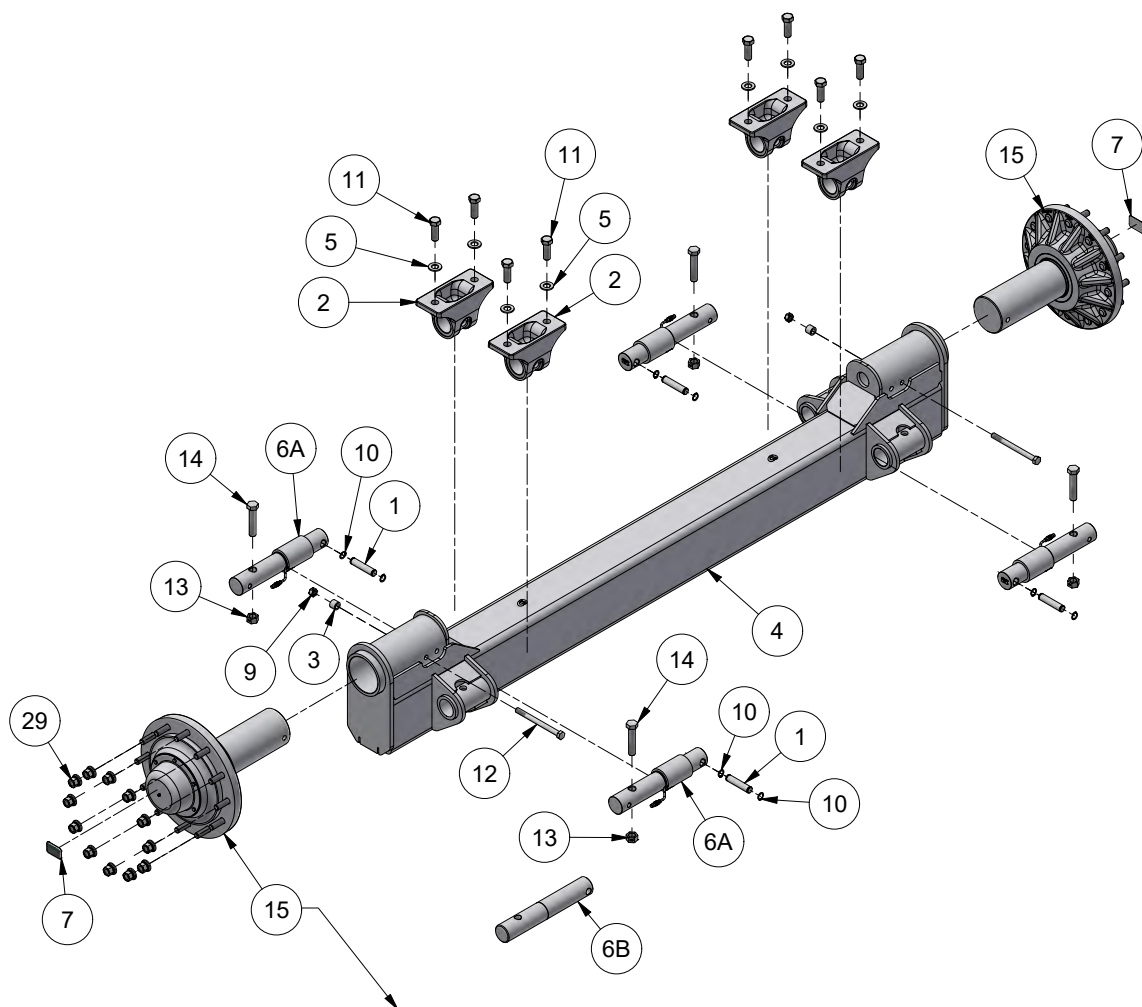
Sideboards

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NUMBER	DESCRIPTION	QTY.	NOTES
1	220032B	Tube, Angle Brace/Sideboard Support 39 7/8" =Black=	2	
2	250461B	Window Bracket =Black=	2	
3	271574B	Work Light Mount Plate =Black=	1	
4	287692B	Sideboard Brace Tube =Black=	2	
5	288354B	Brace Weldment =Black=	1	
6	288377B	Brace Tube 149 7/8" =Black=	3	
7	288427B	Hinge Plate =Black=	1	
8	288428B	Hinge Plate =Black=	1	
9	288693B	Brace Sideboard 24 1/4" =Black=	1	
10	288694B	Brace Sideboard 40 7/8" =Black=	1	
11	288695B	Lock Brace Plate =Black=	1	
12	288698B	Brace Mount Weldment =Black=	1	
13	295667B	Sideboard Cover Plate =Black=	2	
14	295670B	Small Sideboard, Front =Black=	1	
15	295671B	Large Sideboard Rear =Black=	1	
16	295672B	Small Sideboard, Rear =Black=	1	
17	295673B	Sideboard, Front RH =Black=	1	
18	295674B	Sideboard, Center RH =Black=	1	
19	295675B	Sideboard, Front LH =Black=	1	
20	295676B	Sideboard, Center LH =Black=	1	
21	295677B	Sideboard Corner Plate, LH Front =Black=	1	
22	295678B	Sideboard Corner Plate, LH Rear =Black=	1	
23	295679B	Sideboard Corner Plate, RH Front =Black=	1	
24	295680B	Sideboard Corner Plate, RH Rear =Black=	1	
25	295681B	Sideboard Bracket Weldment, RH =Black=	2	
26	295682B	Sideboard Bracket Weldment, LH =Black=	2	
27	295691B	Sideboard Cover Plate =Black=	8	
28	295695B	Sideboard, Rear RH =Black=	1	
29	295696B	Sideboard, Rear LH =Black=	1	
30	295697B	Sideboard Bracket Weldment Front/Rear =Black=	2	
31	298159B	Corner Plate, LH Rear =Black=	1	
32	298160B	Corner Plate, LH Front =Black=	1	
33	298647B	Large Sideboard Front =Black=	1	
34	9003259	Flange Screw, 3/8"-16UNC x 1 1/4" G5	1	
35	9004626	Hinge	14	
36	9007875	Window Molding	A/R	
37	9008159	Locknut, 3/8"-16UNC	176	
38	9008957	Work Light, LED	1	
39	9009089	Truss Head, 3/8"-16UNC x 1 1/4" Torx Head Machine Screw	6	
40	9010154	Flange Nut, 5/16"-18UNC	92	
41	91262	Flange Screw, 3/8"-16UNC x 1"	17	
42	92403	Window, 1/4" x 7 1/16" x 12 5/8"	1	
43	9388-024	Carriage Bolt, 5/16"-18UNC x 3/4" G5	56	
44	9388-051	Carriage Bolt, 3/8"-16UNC x 1" G5	68	
45	9390-003	Capscrew, 1/4"-20UNC x 3/4" G5	18	
46	9405-064	Flat Washer, 1/4"	4	
47	9405-078	Flat Washer, 3/8"	8	
48	95585	Flange Screw, 3/8"-16UNC x 3/4"	54	
49	95785	Flange Screw, 3/8"-16UNC x 1 1/2" G5	4	
50	9936	Locknut, 1/4"-20UNC	4	
51	9002713	U-Bolt, 5/16"-18UNC x 2 3/4", 2 3/8" C/C	2	

Rigid Axle & Hub Components

Please visit www.unverferth.com/parts/ for the most current parts listing.



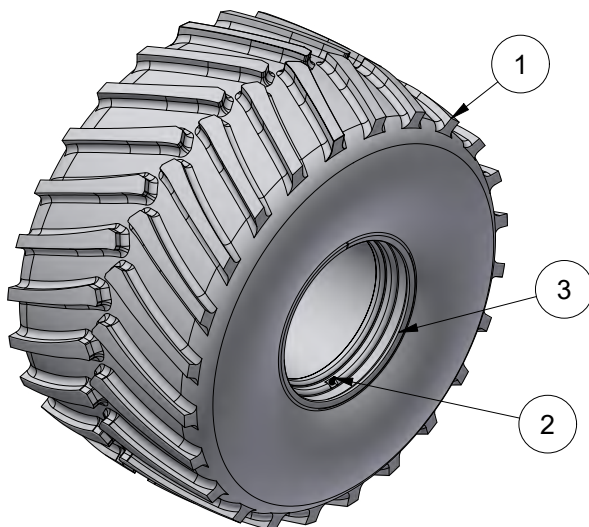
Rigid Axle & Hub Components

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NUMBER	DESCRIPTION	QTY	NOTES
	288190B	Rigid Axle Assembly w/Scales =Black=	1	Includes Items 1-5, 6A, 7-15 & 29
	288191B	Rigid Axle Assembly w/out Scales =Black=		Includes Items 1-5, 6B, 7-15 & 29
1	250843	Pin, 1" Dia. x 4 11/16"	4	
2	283854B	Axle Mount Weldment =Black=	4	
3	283895B	Spacer Bushing	2	
4	288223B	Rigid Axle Weldment =Black=	1	
5	804685	Washer	16	
6A	9004903	Load Bar, 2 7/8" Dia. x 18"	4	
6B	268289	Bar, 2 7/8" Dia. x 17 7/8"	4	
7	9008141	Decal, IMPORTANT	2	
8	9008441	Elastic Locknut, 1"-14UNS	8	
9	9008442	Locknut/Center, 3/4"-10UNC G8	2	
10	91192	Retaining Ring, 1"	8	
11	91299-1458	Capscrew, 1"-14UNS x 3 1/2" G8	8	
12	91299-256	Capscrew, 3/4"-10UNC x 9" G8	2	
13	92199	Locknut/Center, 1"-8UNC	4	
14	9390-193	Capscrew, 1"-8UNC x 5" G5	4	
15	282310B	Hub and Spindle Assembly =Black=	2	Includes Items 16-28
16	282311	Spindle, 6" Dia. x 23 3/4"	2	
17	282312B	Hub Assembly =Black=	2	Includes Items 18 & 19
18	9006996	Bearing Cup, 5.786" Dia. HM218210	4	
19	9007001	Stud Bolt, M22 x 1.5" x 4"	24	
20	282314B	Hub Cap =Black=	2	
21	282315	Hub Cap Gasket	2	
22	282316	Spindle Nut	2	
23	9007007	Bearing Cone, 5.25" Bore	4	
24	9007010	Seal, 150mm Shaft	2	
25	9007854	Capscrew, 1/2"-13UNC x 5 3/4" G5	2	
26	91160	Grease Zerk	2	
27	9390-028	Capscrew, 5/16"-18UNC x 3/4" G5	12	
28	94981	Locknut/Center, 1/2"-13UNC	2	
29	97319	Flanged Cap Nut, M22 x 1.5"	24	
	271414	Wheel Nut Kit, Flanged Cap Nut, M22 x 1.5"	-	

Wheels and Tires

Please visit www.unverferth.com/parts/ for the most current parts listing.



TIRES

For questions regarding new tire warranty, please contact your local original equipment tire dealer. Used tires carry no warranty.

IMPORTANT

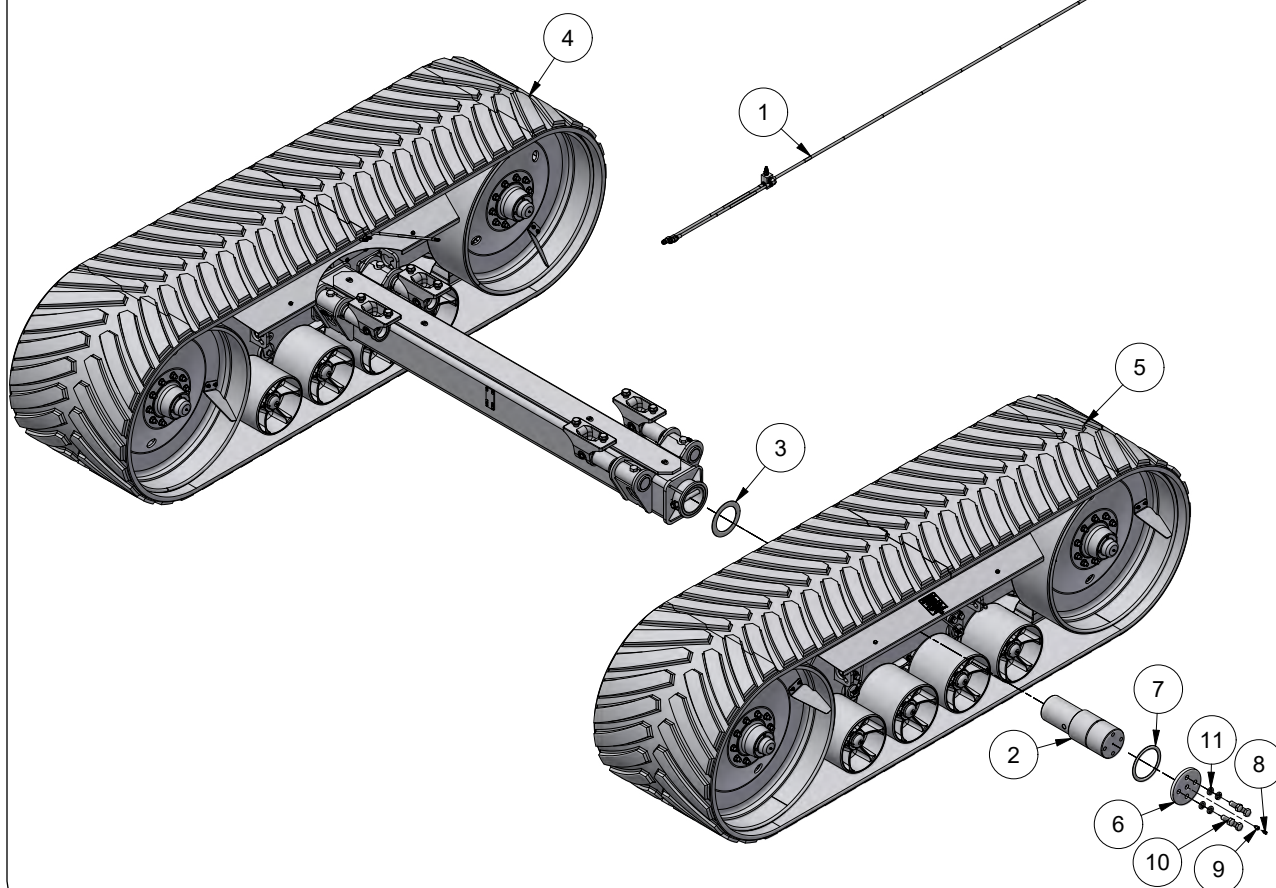
- Verify whether you have a **straight plate** or **formed plate** wheel before ordering a replacement wheel.

ITEM	PART NO.	DESCRIPTION	LOAD RATING	QTY	NOTES
1	110598SM/9500943	IF 1250/50R32 R-1W 201D Radial	201D	2	Includes Items 2 & 3
2	93300	Valve Stem	-	2	
3	110598SM	Wheels Only	-	2	44 x 32

Track Axle — 36" x 148" Standard Tracks

Please visit www.unverferth.com/parts/ for the most current parts listing.

FOR TRACK INFORMATION, PLEASE
REFER TO YOUR TRACK MANUAL.

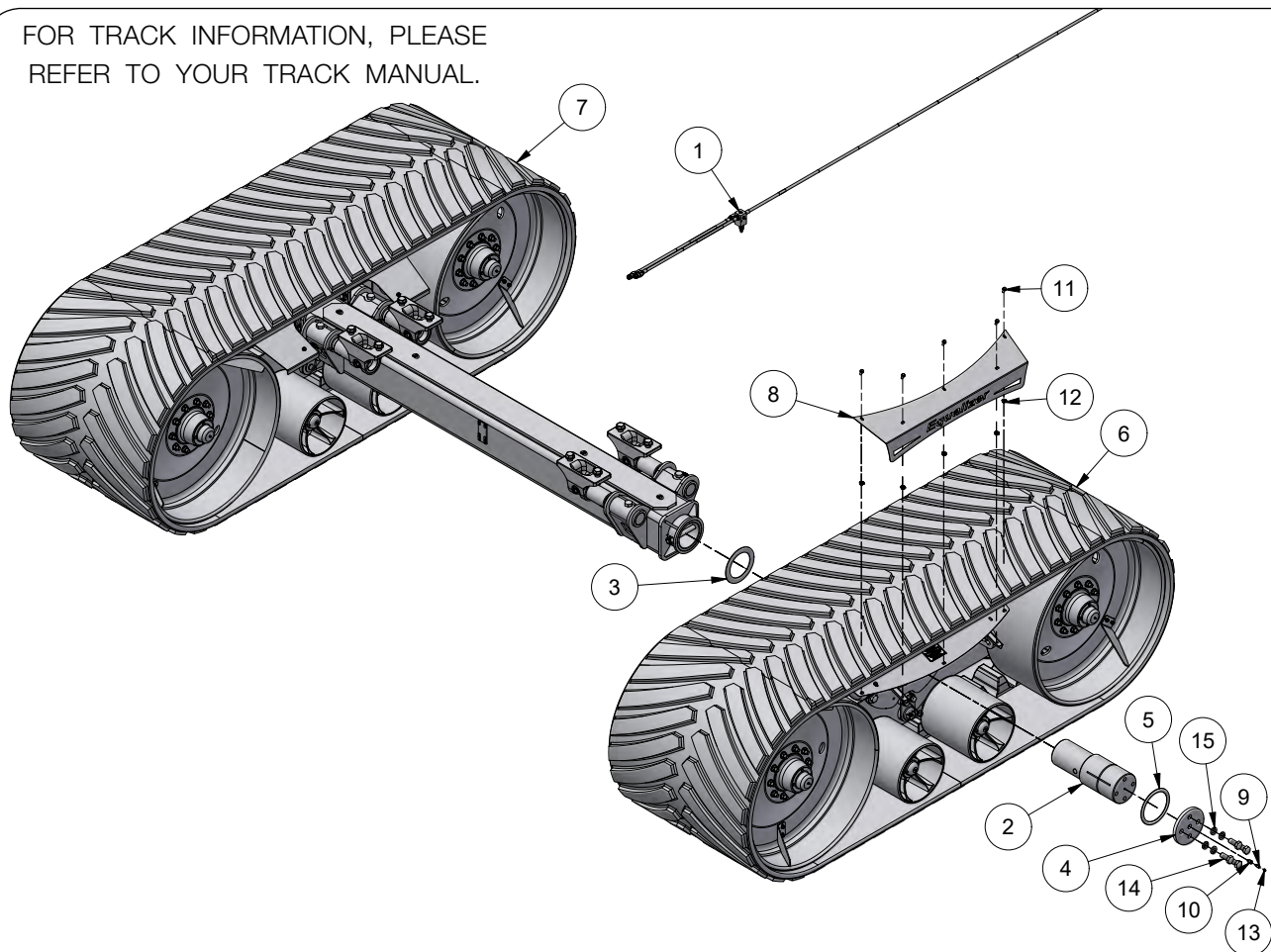


ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	268063	Tensioner Hose Assembly	1	
2	282395	Track Pivot Pin, 6.992" Dia. x 19.188"	2	
3	282397	Washer, 8 1/2" OD x 6.063" ID	2	
4	N/A	Track Assembly Right-Hand =Black=	1	
5	N/A	Track Assembly Left-Hand =Black=	1	
6	282689B	Cover Plate =Black=	2	
7	282690	Washer, 8 1/2" OD x 7.063" ID	2	
8	9006785	90° Adapter, 1/8" NPT	2	
9	9006816	Adapter, 1/8" NPT	2	
10	9390-184	Capscrew, 1"-8UNC x 2 1/4" Full Thread G5	8	
11	9404-041	Lock Washer, 1"	8	
12	267939	Track Assembly Alignment Cone Kit	-	NOT SHOWN

Track Axle — 42" x 131" Equalizer Tracks

Please visit www.unverferth.com/parts/ for the most current parts listing.

FOR TRACK INFORMATION, PLEASE
REFER TO YOUR TRACK MANUAL.

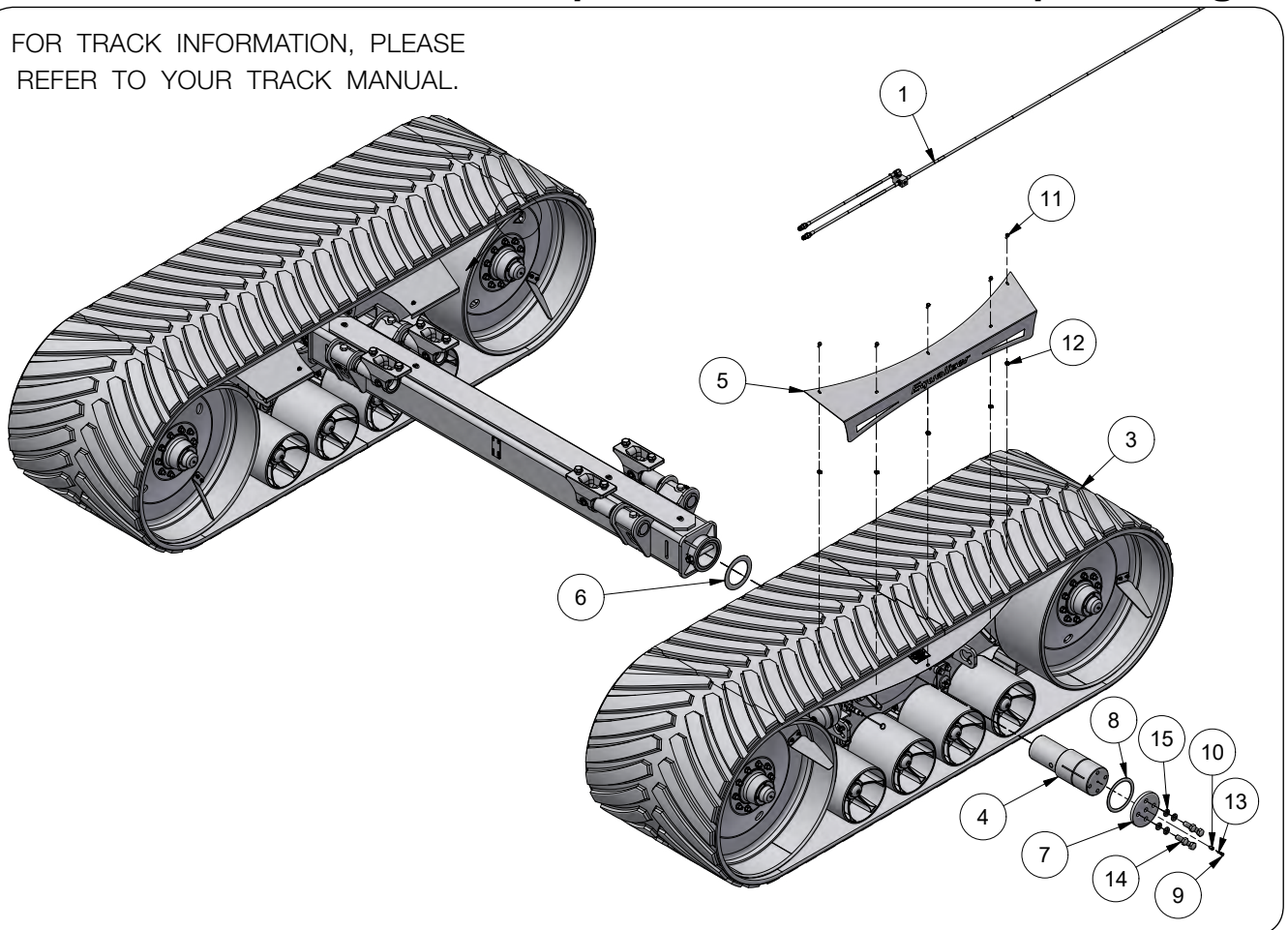


ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	268063	Tensioner Hose Assembly	1	
2	282026	Track Pivot Pin, 6.992" Dia. x 19.188"	2	
3	282397	Washer, 8 1/2" OD x 6.063" ID	2	
4	282689B	Cover Plate =Black=	2	
5	282690	Washer, 8 1/2" OD x 7.063" ID	2	
6	N/A	Track Assembly Left-Hand =Black=	1	
7	N/A	Track Assembly Right-Hand =Black=	1	
8	283286B	Debris Deflector Plate	2	
9	9006785	90° Adapter, 1/8" NPT	2	
10	9006816	Adapter, 1/8" NPT	2	
11	91262	Flange Screw, 3/8"-16UNC x 1" G5	10	
12	91263	Nut/Large Flange, 3/8"-16UNC	10	
13	93426	Grease Zerk	2	
14	9390-184	Capscrew, 1"-8UNC x 2 1/4" Full Thread G5	8	
15	9404-041	Lock Washer, 1"	8	
16	267939	Track Assembly Alignment Cone Kit	-	NOT SHOWN

Track Axle — 42" x 148" Equalizer Tracks

Please visit www.unverferth.com/parts/ for the most current parts listing.

FOR TRACK INFORMATION, PLEASE
REFER TO YOUR TRACK MANUAL.

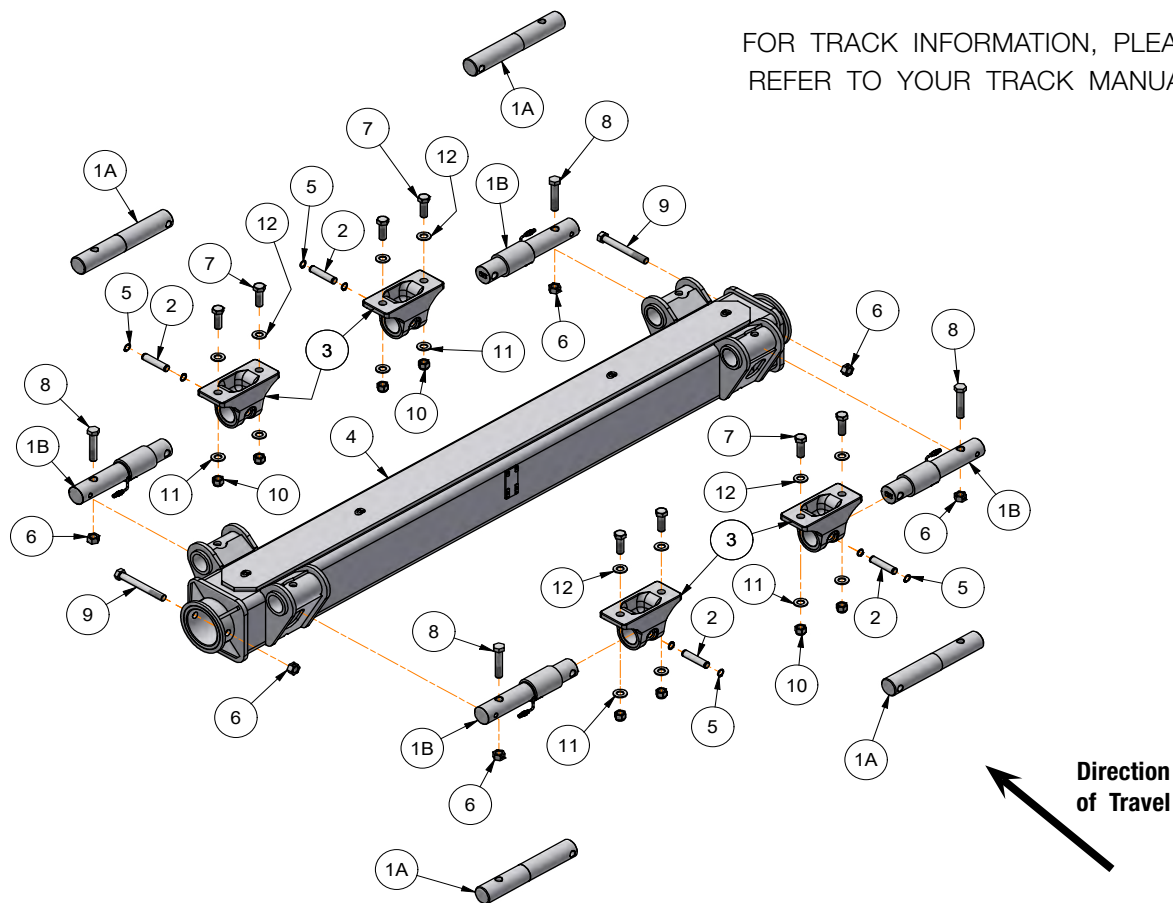


ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	268063	Tensioner Hose Assembly	1	
2	N/A	Track Assembly Right-Hand =Black=	1	
3	N/A	Track Assembly Left-Hand =Black=	1	
4	282026	Track Pivot Pin, 6.992" Dia. x 19.188"	2	
5	282071B	Debris Deflector Plate	2	
6	282397	Washer, 8 1/2" OD x 6.063" ID	2	
7	282689B	Cover Plate =Black=	2	
8	282690	Washer, 8 1/2" OD x 7.063" ID	2	
9	9006785	90° Adapter, 1/8" NPT	2	
10	9006816	Adapter, 1/8" NPT	2	
11	91262	Flange Screw, 3/8"-16UNC x 1" G5	10	
12	91263	Nut/Large Flange, 3/8"-16UNC	10	
13	93426	Grease Zerk	2	
14	9390-184	Capscrew, 1"-8UNC x 2 1/4" Full Thread G5	8	
15	9404-041	Lock Washer 1"	8	
16	267939	Track Assembly Alignment Cone Kit	-	NOT SHOWN

Track Axle

Please visit www.unverferth.com/parts/ for the most current parts listing.

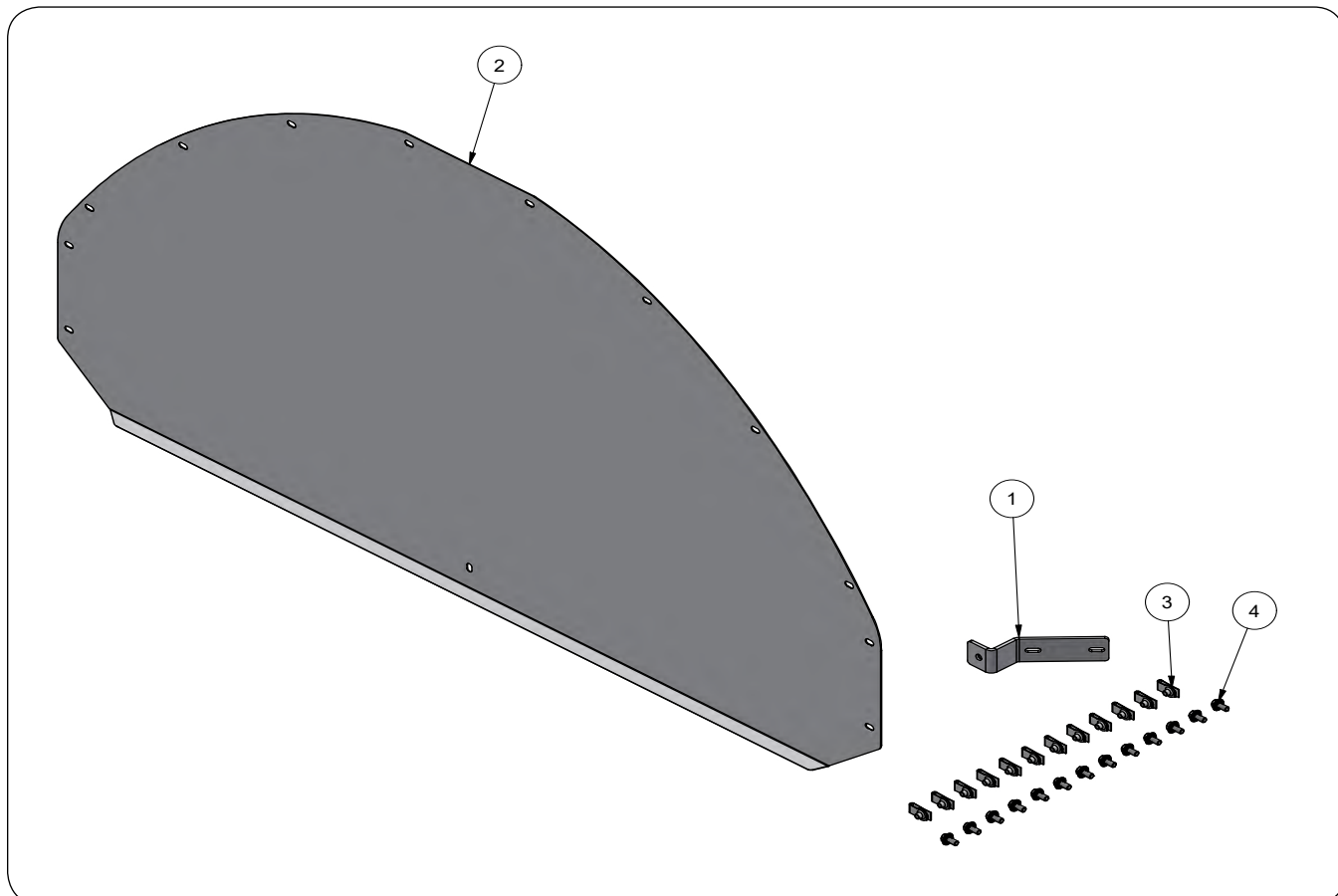
FOR TRACK INFORMATION, PLEASE
REFER TO YOUR TRACK MANUAL.



ITEM	PART NUMBER	DESCRIPTION	QTY	NOTES
	288193B	Track Axle Assembly w/out Scales =Black=	1	Includes Items 1A, 2 through 12 All Service Parts Are Black
	288192B	Track Axle Assembly w/Scales =Black=		Includes Items 1B, 2 through 12 All Service Parts Are Black
1A	268289	Hitch Bar For Units w/out Scales	4	
1B	9004903	Hitch Bar For Units w/Scales		
2	250843	Hitch Pin, 1" Dia. x 4 9/16"	8	
3	283854B	Axle Mount Casting =Black=	4	All Service Parts Are Black
4	288224B	Track Axle Weldment =Black=	1	All Service Parts Are Black
5	91192	Retaining Ring, 1" G5	16	
6	92199	Locknut/Center, 1"-8UNC	8	
7	9008339	Capscrew, 1"-14UNS x 2 1/2" G8	3	
8	9390-193	Capscrew, 1"-8UNC x 5" G5	4	
9	9390-462	Capscrew, 1"-8UNC x 8 1/2" G5	2	
10	9008338	Hex Nut, 1"-14UNS G8	8	
11	9404-041	Lock Washer, 1"	8	
12	9405-118	Flat Washer, 1" USS	8	

Wheel Well Cover Kit #288203G or #288203R

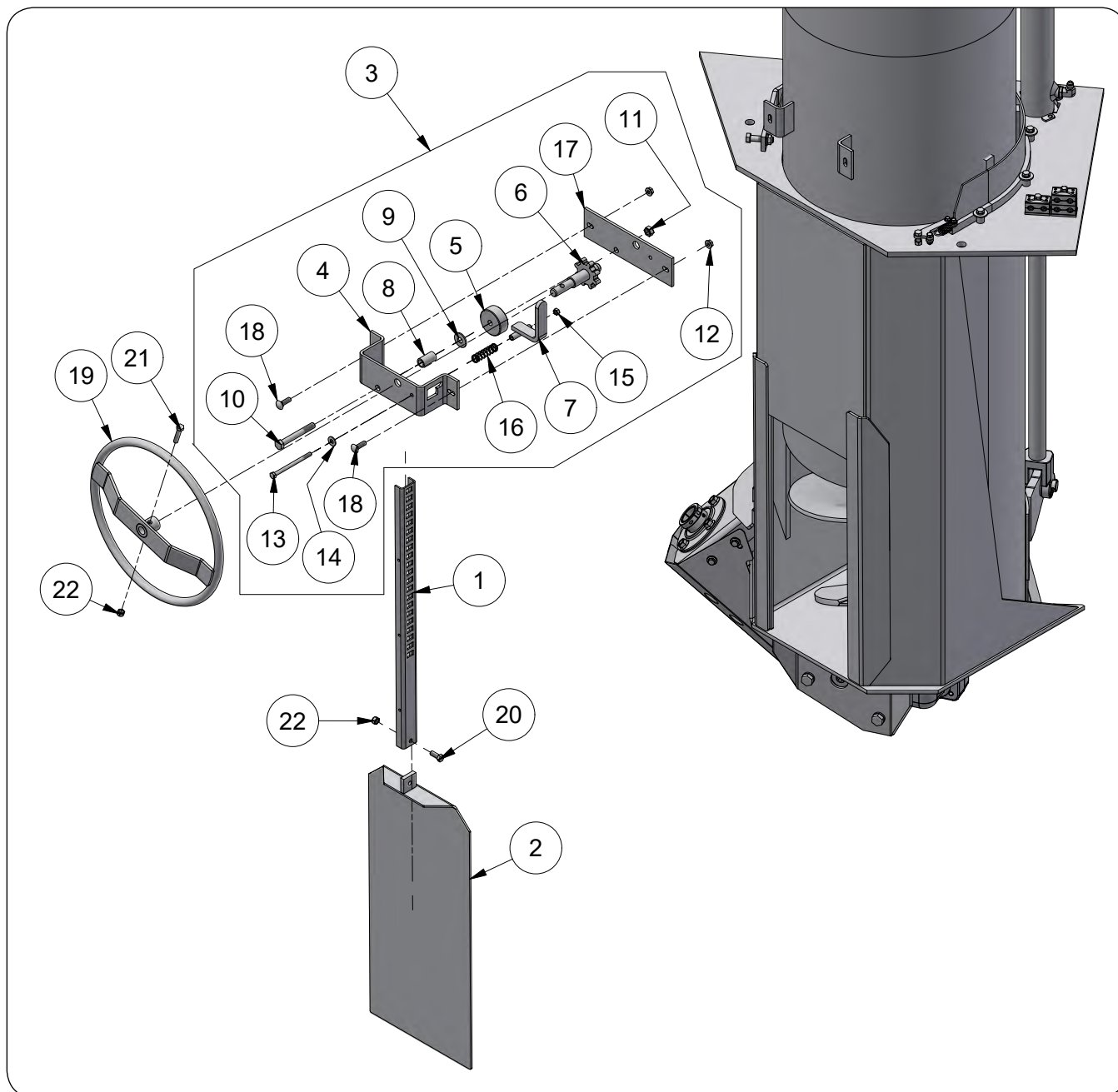
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	288203G	Wheel Well Cover Kit =Green=	1	Includes Items 1 - 4
	288203M	Wheel Well Cover Kit =Midnight Gray Metallic=		
	288203R	Wheel Well Cover Kit =Red=		
1	287691B	Plate Weldment =Black=	1	
2	288128G	Cover Panel =Green=	1	
	288128M	Cover Panel =Midnight Gray Metallic=		
	288128R	Cover Panel =Red=		
3	9005376	U-Nut 3/8"-16UNC	12	
4	95585	Large Flange Capscrew 3/8"-16UNC x 3/4" Grade 5	13	

Cleanout Door Assembly

Please visit www.unverferth.com/parts/ for the most current parts listing.



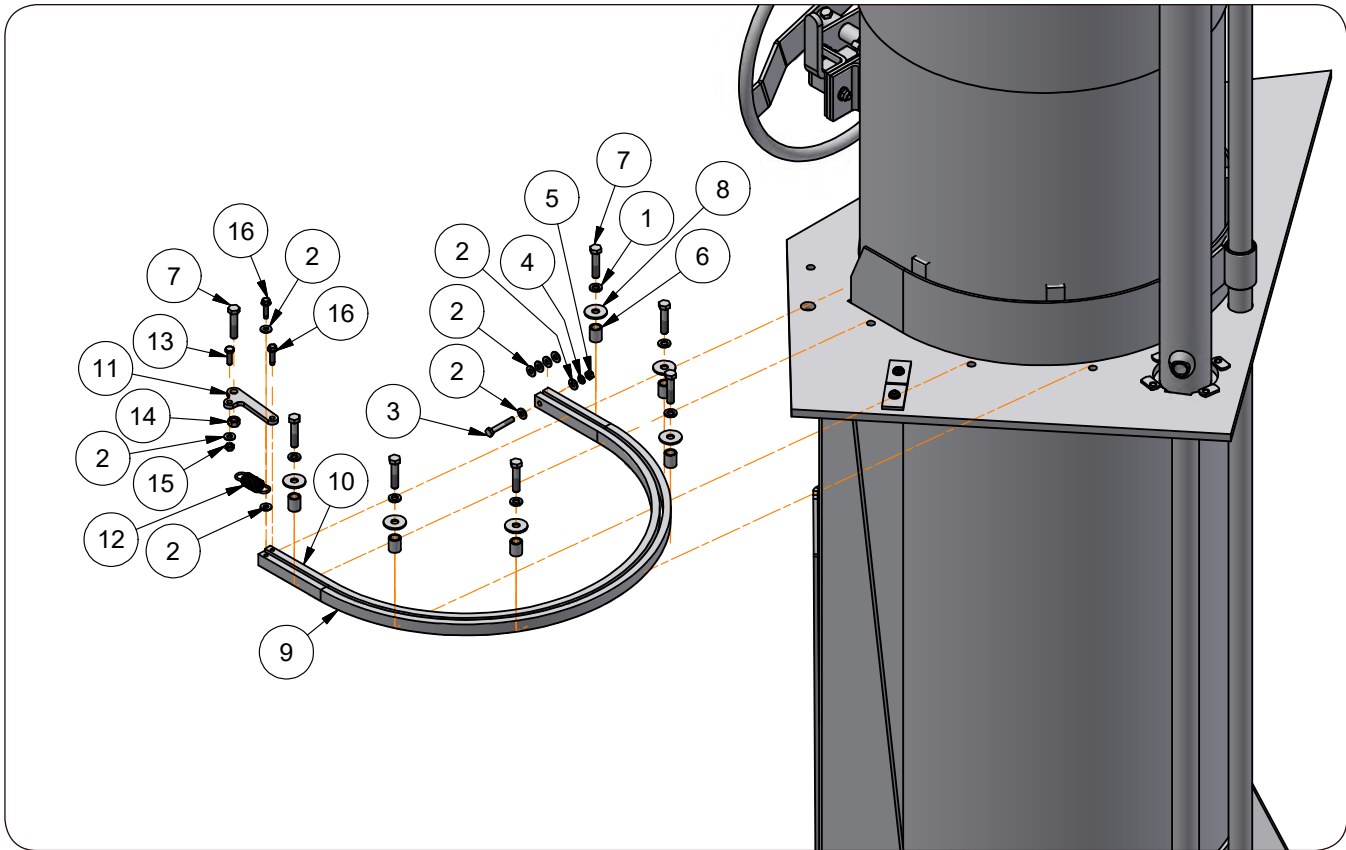
Cleanout Door Assembly

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	298392B	Rail, 27 3/4" =Black=	1	
2	298586B	Cleanout Door Weldment =Black=	1	
3	298613B	Door Lift Assembly =Black=	1	Includes Items 4-18
4	281060B	Plate, Front Door Lift	1	
5	222118	Roller, Plastic	1	
6	281062	Shaft & Gear Weldment	1	
7	281109	Handle Weldment, Door Lock	1	
8	281145B	Bushing, Spacer	1	
9	9405-088	Flat Washer, 1/2"	1	
10	9390-111	Capscrew, 1/2"-13UNC x 4"	1	
11	94981	Locknut, 1/2"-13UNC	1	
12	9003396	Locknut, 3/8"-16UNC	2	
13	9390-043	Capscrew, 5/16"-18UNC x 4 1/2"	1	
14	9405-070	Flat Washer, 5/16"	1	
15	9807	Locknut/Top, 5/16"-18UNC	1	
16	TA510035	Spring, Stop Pin	1	
17	298614B	Door Lift Back, 10 3/4" =Black=	1	
18	9388-052	Carriage Bolt, 3/8"-16UNC x 1 1/4"	2	
19	298618B	Door Wheel Weldment =Black=	1	
20	9390-055	Capscrew, 3/8"-16UNC x 1"	1	
21	9390-058	Capscrew, 3/8"-16UNC x 1 3/4"	2	
22	9928	Locknut/Top, 3/8"-16UNC	2	

Flow Door Seals

Please visit www.unverferth.com/parts/ for the most current parts listing.



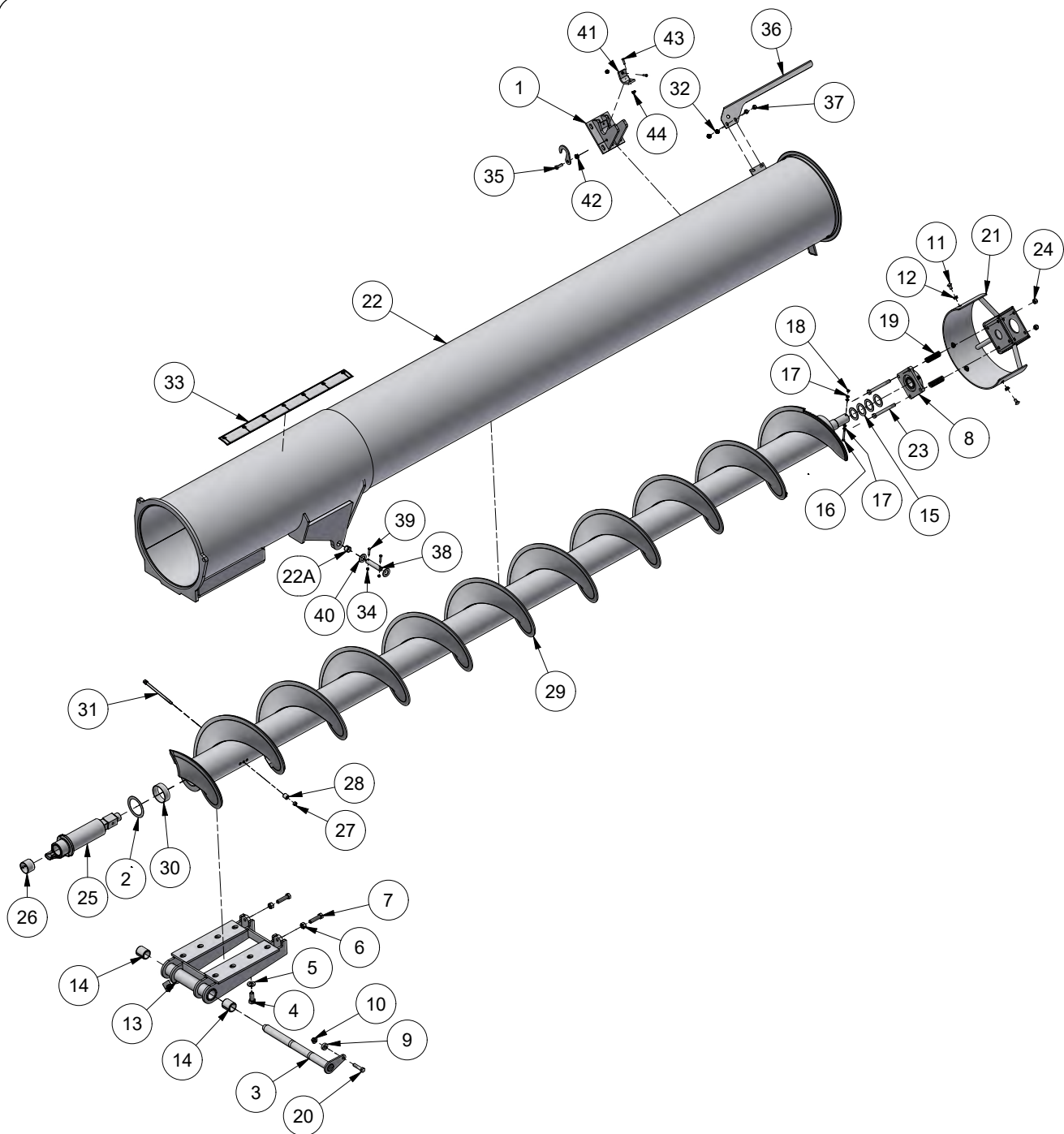
Flow Door Seals

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	9404-021	Lock Washer, 3/8"	9	
2	9405-062	Flat Washer, 1/4"	6	
3	9390-008	Capscrew, 1/4"-20UNC x 1 3/4" G5	1	
4	9404-017	Lock Washer, 1/4"	1	
5	9394-002	Hex Nut, 1/4"-20UNC G5	1	
6	281257G	Spacer Bushing =Green=	6	
	281257M	Spacer Bushing =Midnight Gray Metallic=		
	281257R	Spacer Bushing =Red=		
7	9390-058	Capscrew, 3/8"-16UNC x 1 3/4" G5	6	
8	9405-078	Flat Washer, 3/8"	6	
9	287073	Seal - Poly	1	
10	292294	Seal - Poly	1	
11	N/A	Spring Bracket	1	
12	9004375	Spring	1	
13	9390-004	Capscrew, 1/4"-20UNC x 7/8" G5	1	
14	9394-006	Hex Nut, 3/8"-16UNC G5	1	
15	9936	Locknut/Top, 1/4"-20UNC	1	
16	9004355	Screw, 1/4"-20UNC x 1" (Self-Threading)	2	

Upper Auger Components

Please visit www.unverferth.com/parts/ for the most current parts listing.



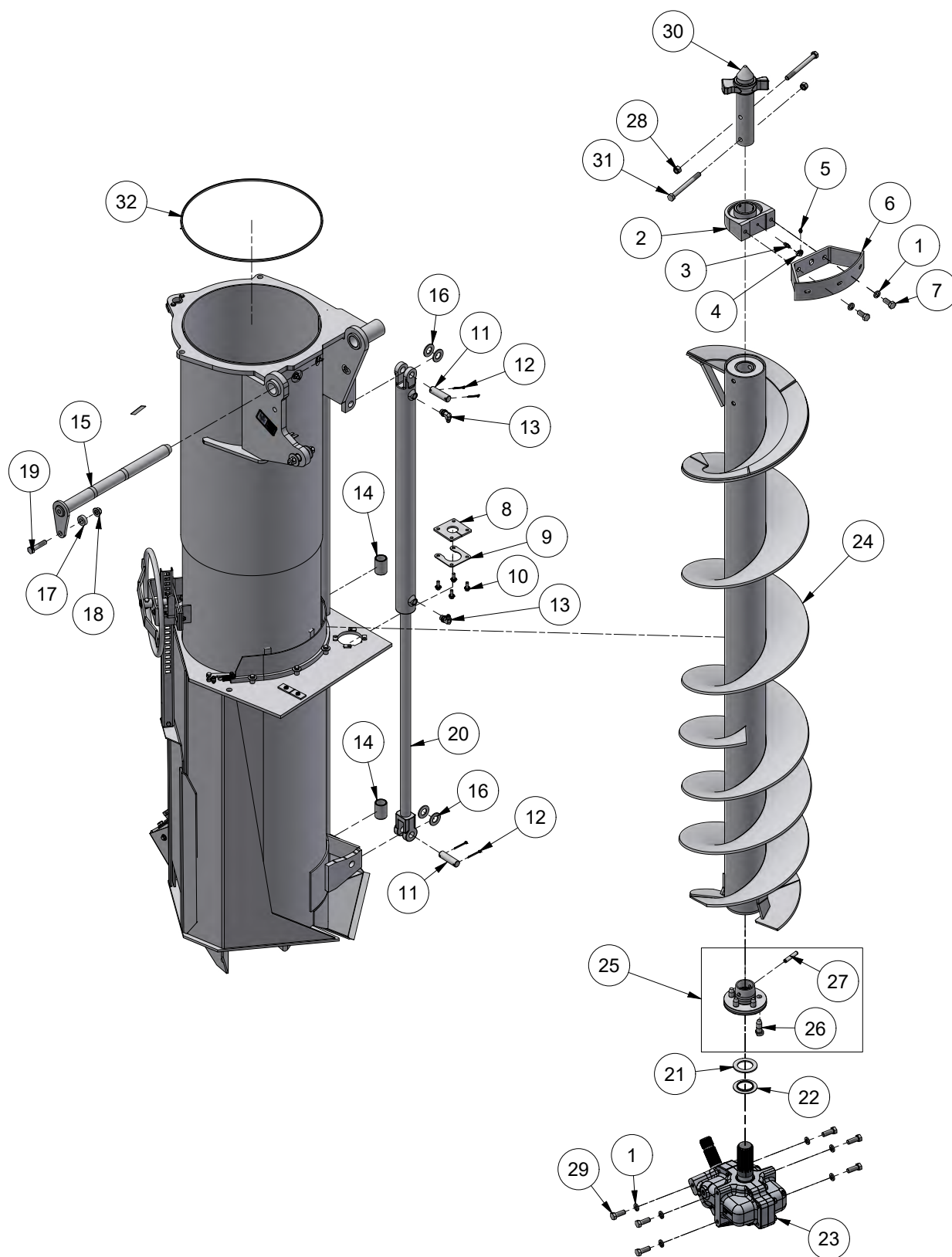
Upper Auger Components

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	268942G	Auger Rest Weldment =Green=	1	
	268942M	Auger Rest Weldment =Midnight Gray Metallic=		
	268942R	Auger Rest Weldment =Red=		
2	9004878	Thrust Washer, 4.063" ID	1	
3	268946	Shaft & Plate Weldment	1	
4	9390-164	Capscrew, 7/8"-10UNC x 2" G5	8	
5	97041	Flat Washer, 7/8"	8	
6	9394-016	Hex Nut, 3/4"-10UNC G5	2	
7	94733	Capscrew, 3/4"-10UNC x 3" G5 Full Thread	2	
8	9002492	Flanged Bearing 2" Dia. With Grease Zerk	1	
	91160	Grease Zerk 1/4-28	1	
9	268896	Spacer Bushing 1 1/2" OD x 3/4" ID x 1/2"	1	
10	9003398	Locknut/Top, 5/8"-11UNC	1	
11	9388-102	Carriage Bolt, 1/2"-13UNC x 1" G5	4	
12	9003397	Locknut, 1/2"-13UNC	4	
13	286984G	Upper Auger Pivot Weldment =Green=	1	
	286984M	Upper Auger Pivot Weldment =Midnight Gray Metallic=		
	286984R	Upper Auger Pivot Weldment =Red=		
14	9004980	Bushing, 2.25" OD x 1.75" ID x 2 1/2"	2	
15	93974	Washer, 2"	4	
16	9390-037	Capscrew, 5/16"-18UNC x 2 3/4" G5	1	
17	9405-068	Flat Washer, 5/16" SAE	4	
18	901527	Locknut/Center, 5/16"-18UNC	1	
19	9001812	Compression Spring, 4"	4	
20	9390-127	Capscrew, 5/8"-11UNC x 2 3/4" G5	1	
21	296451B	Hanger Bearing Weldment =Black=	1	
22	298005G	Upper Auger Housing Weldment =Green=	1	
	298005M	Upper Auger Housing Weldment =Midnight Gray Metallic=		
	298005R	Upper Auger Housing Weldment =Red=		
22A	91268	Tension Bushing		
23	9390-136	Capscrew, 5/8"-11UNC x 6" G5	4	
24	9801	Locknut/Top, 5/8"-11UNC	6	
25	278086	Soft Start Kit (Black)	1	Includes Items 2, 26-28, 30-31
26	9003230	Split Bushing, 2 3/4" OD x 2 1/4" ID	1	
27	9800	Locknut/Top, 1/2"-13UNC	1	
28	410511	Spacer Bushing	1	
29	2013589B	Upper Auger Replacement Kit =Black=	1	Includes Items 25
30	9004877	Self Lubricating Bushing	1	
31	9390-435	Capscrew, 1/2"-13UNC x 9" G5	1	
32	91263	Flange Nut, 3/8"-16UNC	15	
33	92563	Decal, Flow Control	1	
34	9807	Locknut/Top, 5/16"-18UNC	19	
35	9390-101	Capscrew, 1/2"-13UNC x 1 1/2" G5	1	
36	288383B	Hose Bracket =Black=	1	
37	95585	Capscrew, Large Flange 3/8"-16UNC x 3/4" G5	16	
38	291988	Pin, 1" Dia. x 4 7/8"	2	
39	9390-032	Capscrew, 5/16"-18UNC x 1 1/2" G5	4	
40	9405-116	Flat Washer, 1" SAE	4	
41	9004263	Rubber Stop Pad 3/8 x 2 x 5	1	
42	91267	Flange Nut, 1/2"-13UNC	1	
43	903171-662	Countersunk Phillips Screw, 5/16"-18UNC x 1 1/4"	2	
44	91257	Flange Nut, 5/16"-18UNC	2	

Lower Auger Components

Please visit www.unverferth.com/parts/ for the most current parts listing.



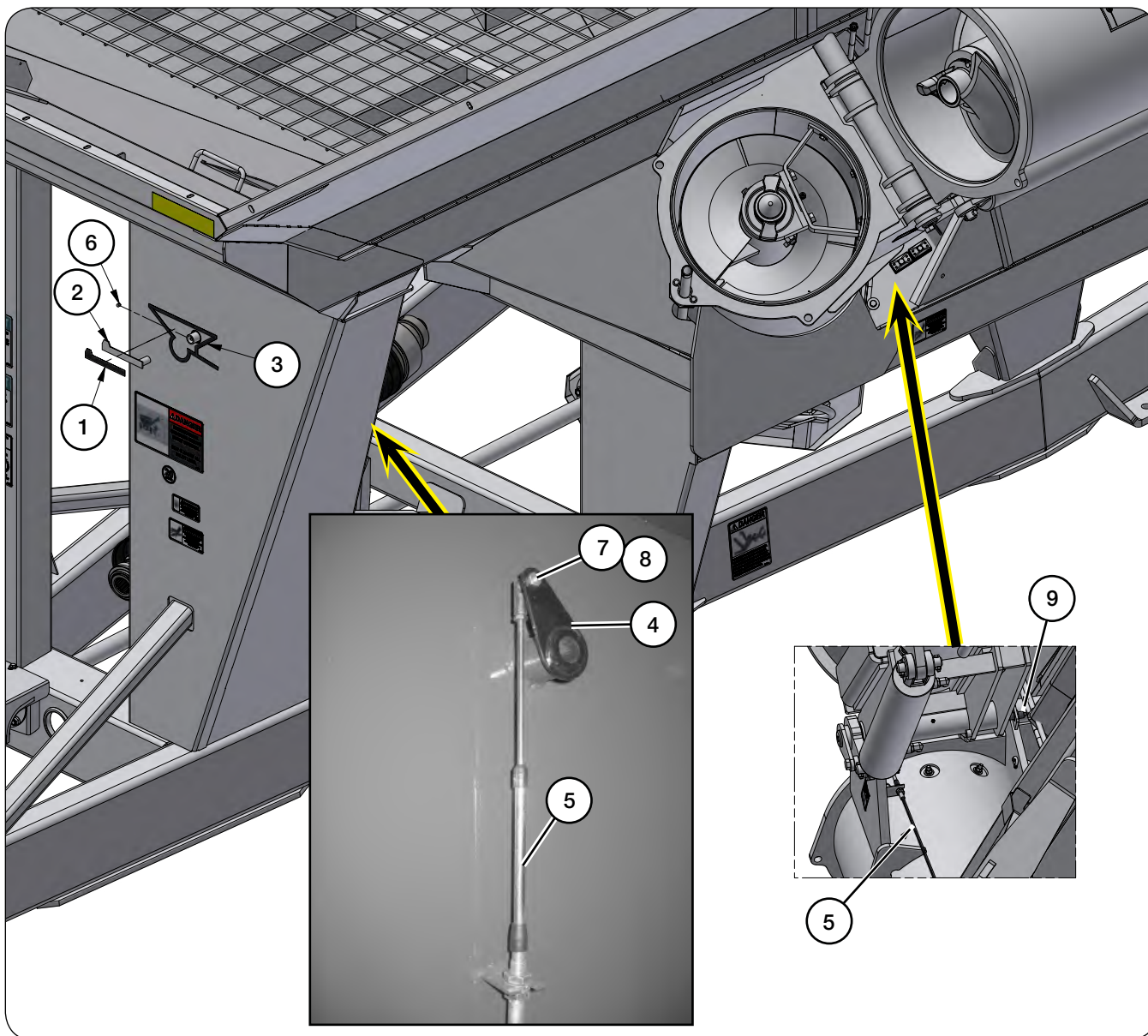
Lower Auger Components

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	9404-029	Lock Washer, 5/8"	8	
2	9004731	Pillow Block Bearing 2 1/2" Bore	1	
3	9004765	Nipple 1/8 NPTF Male x 1/8 NPTF Male Hex Pipe	1	
4	9004764	90° Elbow, 1/8 NPTF Female x 1/8 NPTF Female	1	
5	93426	Grease Zerk, 1/8" NPT	1	
6	281502B	Hanger Bearing Weldment	1	
7	9390-122	Capscrew, 5/8"-11UNC x 1 1/2" G5	2	
8	268217	Rubber Gasket, 1/4" x 4" x 4"	1	
9	268218	Cover Plate	1	
10	91262	Screw/Large Flange, 3/8"-16UNC x 1" G5	4	
11	804572	Pin, 1" Dia. x 3 1/2"	2	
12	9391-046	Cotter Pin, 3/16" Dia. x 2"	4	
13	9874	90° Elbow, 9/16"-18 JIC Male x 3/4"-16 O-Ring Male	2	
14	253025	Pipe Slide	2	
15	268946	Shaft & Plate Weldment	1	
16	9405-116	Flat Washer, 1" SAE	4	
17	268896	Spacer Bushing 1 1/2" OD x 3/4" ID x 1/2"	1	
18	9003398	Locknut/Top, 5/8"-11UNC	1	
19	9390-127	Capscrew, 5/8"-11UNC x 2 3/4" G5	1	
20	9005363	Cylinder, 2 1/2" x 36" (3000 PSI)	1	
21	287897	Washer, 3 1/2" OD	1	
22	9007377B	Dust Cover =Black=	1	
23	9008711	Gearbox 45°	1	
24	2013591B	Lower Auger Replacement Kit	1	
25	287802	Drive Plate Assembly - 5 Pin	1	Includes Items 26 & 27
26	9007000	Drive Pin, 0.763" Dia. x 2"	5	
27	902614-238	Spiral Pin, 1/2" Dia. x 2 3/4"	1	
28	9801	Locknut/Top, 5/8"-11UNC	6	
29	9390-123	Capscrew, 5/8"-11UNC x 1 3/4" G5	6	
30	288811	Drive Dog Weldment	1	
31	9390-138	Capscrew, 5/8"-11UNC x 7" G5	2	
32	296290	Auger Seal Gasket Kit	1	

Auger Fold Indicator

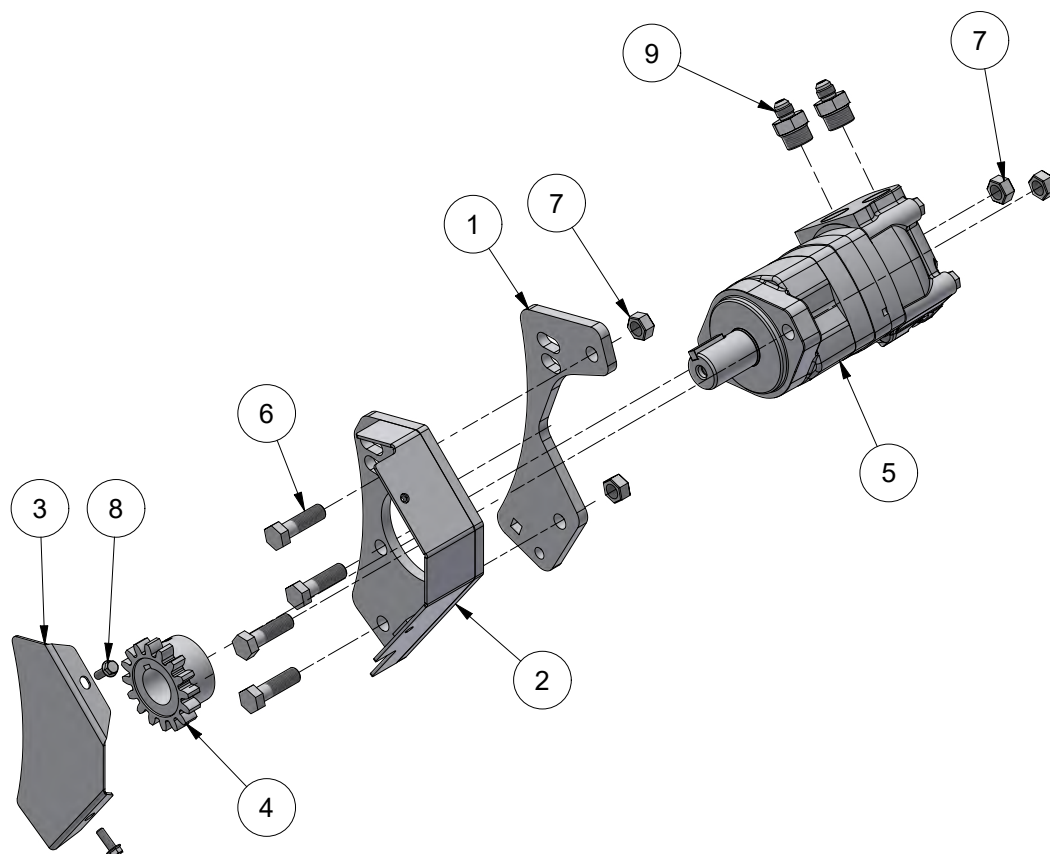
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	DESCRIPTION	PART NO.	QTY.	NOTES
1	Auger Indicator Kit	280575	1	Includes Item 2
2	Decal, Auger Indicator	9005335	1	
3	Decal, Cart Profile	9004288	1	
4	Indicator Retainer Weldment =Black=	268671B	1	
5	Push/Pull Cable, 248"	9010248	1	
6	Set Screw, 5/16"-18UNC x 3/8"	9399-071	1	
7	Hex Nut, #10-32 G2	9830-016	1	
8	Lock Washer, #10	9404-013	1	
9	Proximity Sensor w/Connector	9007472	1	

Directional Spout Motor Components

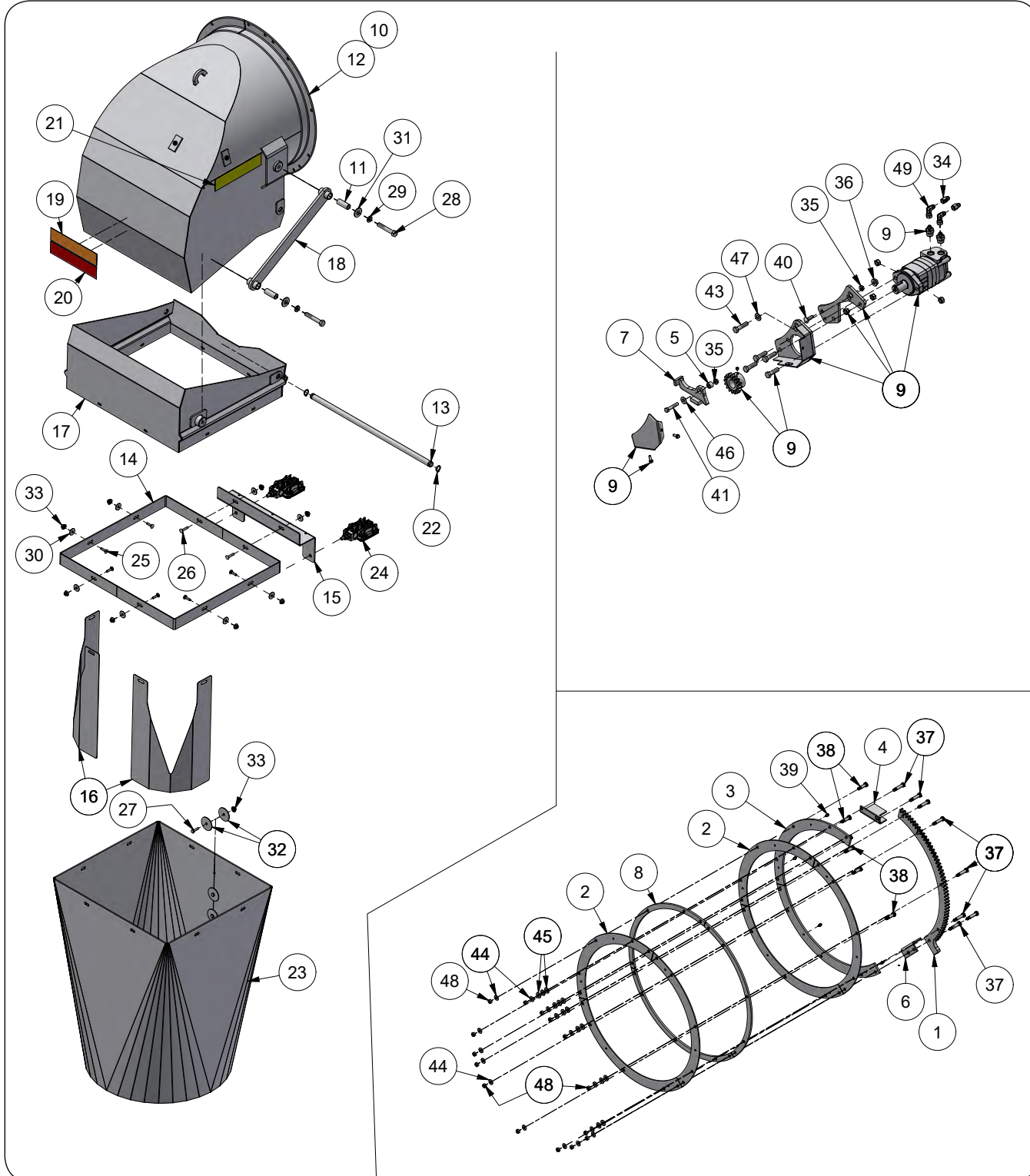
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NUMBER	DESCRIPTION	QTY.	NOTES
1	297738B	Gear Drive Mount Plate =Black=	1	
2	297759B	Spur Gear Mount Weldment =Black=	1	
3	297762B	Plate, Cover =Black=	1	
4	297765B	Spur Gear Weldment w/Set Screws	1	
5	9010071	Spout Hydraulic Motor 4.9 CID, 1 1/4" Dia. Shaft	1	
	9010121	Seal Kit	-	
6	9390-102	Capscrew, 1/2"-13UNC x 1 3/4" G5	4	
7	94981	Locknut/Center, 1/2"-13UNC	4	
8	97420	Flange Screw, 1/4"-20UNC x 3/4" G5	2	
9	98078	Adapter, 9/16"-18 JIC Male x 7/8"-14 O-Ring Male	2	

Directional Spout

Please visit www.unverferth.com/parts/ for the most current parts listing.



Directional Spout

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NUMBER	DESCRIPTION	QTY.	NOTES
1	272719	Gear Rack	1	
2	272748	Pad-Pivot, 22 7/8" ID x 1/8"	6	
3	272842B	Plate-Pivot, Spout =Black=	2	
4	272855B	Stop Plate =Black=	1	
5	290882	Pivot Lock Bushing	1	
6	290884B	Stop Plate =Black=	1	
7	291327B	Stop Weldment =Black=	1	
8	291344B	Plate-Pivot, Spacer 24 3/16" ID x 1/4"	3	
9	N/A	See "Directional Spout Motor Components"	1	
10	298628B	Spout Assembly	1	Includes Items 11-33
11	285290	Bushing-Sleeve 2.0625" Long	2	
12	288947B	Spout Weldment =Black=	1	
13	290993	Shaft-Pivot 3/4" Dia. x 25 5/16"	1	
14	292197B	Plate-Chute Strap =Black=	2	
15	292198B	Bracket-Light =Black=	1	
16	292292B	Plate, Chute Support =Black=	2	
17	292352B	Spout Weldment =Black=	1	
18	298629B	Link Weldment =Black=	1	
19	9003125	Fluorescent Orange Decal	1	
20	9003126	Reflector =RED=	1	
21	9003127	Reflector =AMBER=	2	
22	9003810	Snap Ring 3/4"	2	
23	9008139	Rubber Hood	1	
24	9008957	Work Light LED	2	
25	9388-003	Carriage Bolt 1/4"-20UNC x 1"	6	
26	9388-004	Carriage Bolt 1/4"-20UNC x 1 1/4"	2	
27	9390-005	Capscrew 1/4"-20UNC x 1"	8	
28	9390-107	Capscrew, 1/2"-13UNC x 3" Grade 5	2	
29	9404-025	Lock Washer 1/2"	2	
30	9405-066	Flat Washer 1/4" (Fender Washer)	8	
31	9405-088	Flat Washer 1/2" USS	2	
32	94763	Fender Washer 5/16" ID	16	
33	97189	Hex Nut/Large Flange 1/4"-20UNC	16	
34	9003303	Adapter, 9/16"-18 JIC Female x 9/16"-18 JIC Male	2	w/ 0.045" Restrictor
35	9003396	Locknut/Top 3/8"-16UNC (Automation Locknut)	2	
36	9003397	Locking Flange Nut 1/2"-13UNC	2	
37	9007837	Shoulder Bolt, 3/8" Dia. x 1 1/4", Socket Head, 5/16"-18UNC	8	
38	9007838	Shoulder Bolt 3/8" Dia. x 7/8", Socket Head, 5/16"-18UNC	7	
39	91160	Grease Zerk	5	
40	9388-052	Carriage Bolt 3/8"-16UNC x 1 1/4" Grade 5	1	
41	9390-059	Capscrew, 3/8"-16UNC x 2" G5	1	
42	9390-101	Capscrew, 1/2"-13UNC x 1 1/2" G5	1	
43	9390-103	Capscrew, 1/2"-13UNC x 2" G5	2	
44	9405-064	Flat Washer 1/4" USS	17	
45	9405-074	Flat Washer, 3/8" SAE	18	
46	9405-076	Flat Washer, 3/8" USS	1	
47	9405-086	Flat Washer 1/2" SAE	1	
48	9807	Locknut 5/16"-18UNC	19	
49	9876	90° Elbow 9/16"-18 JIC Female x 9/16"-18 JIC Male	2	

Cut Out Clutch PTO Assembly

Please visit www.unverferth.com/parts/ for the most current parts listing.



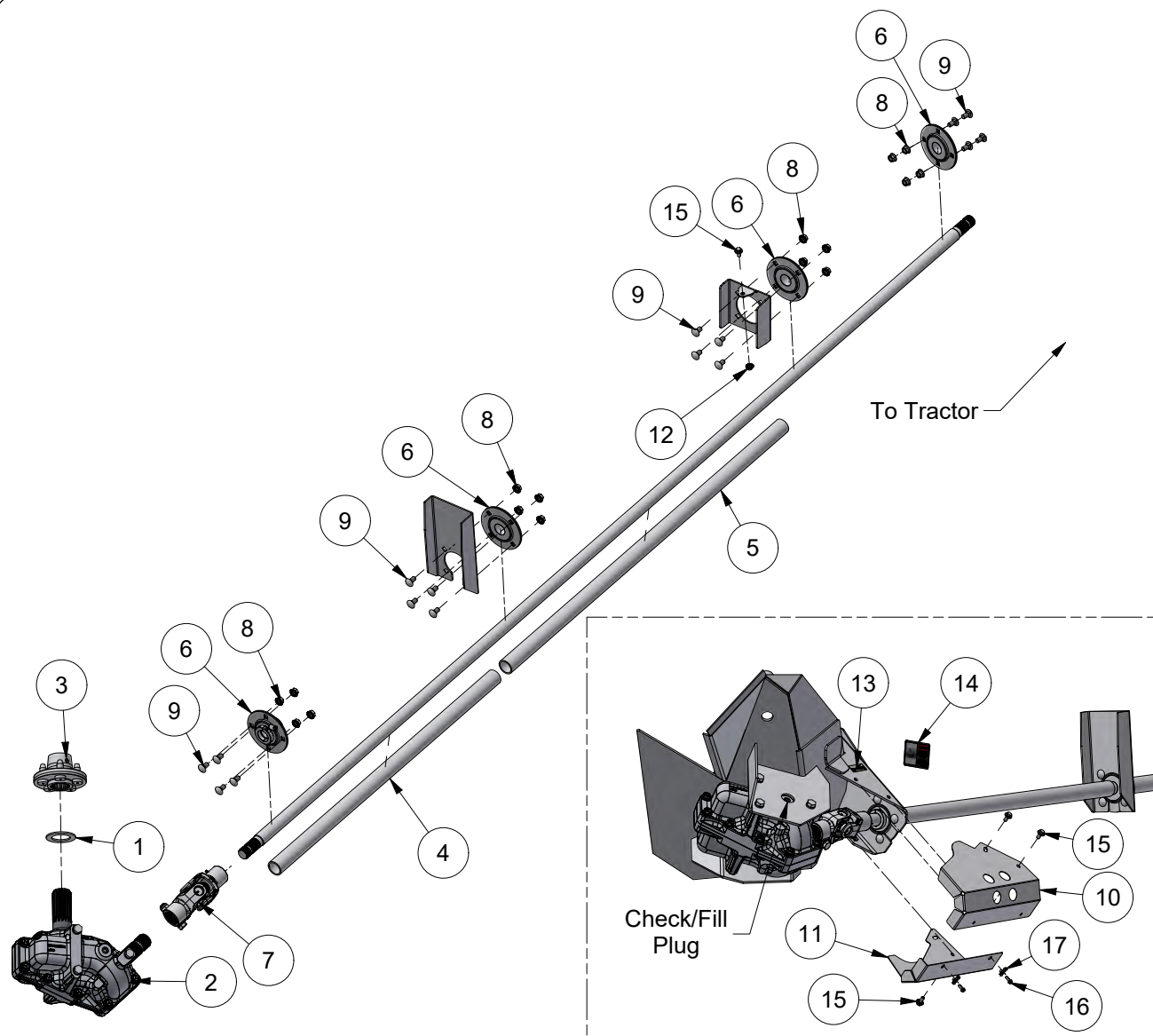
ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	9010262	PTO Assembly Complete, 1 3/4"-20 Spline w/Quick Link & 1 3/8"-21 Spline Cut Out Clutch w/Overrunning clutch (2500Nm Setting) CAT 4	-	
3		Over-Running PTO Clutch Assembly	1	
4		Cross & Bearing Kit	2	
5		Spring Pin 10x90	2	
6		Inboard Yoke S4	1	
7		Inner Profile	1	
8		Inboard Yoke, Tube, & Sleeve	1	
9		Reinforcing Collar	2	
10		Cut Out Clutch (3200 N-m Setting)	1	1 3/4"-20 Spline 1000RPM
11		Shield Cone 8 Rib	1	
12		Outer Shield Tube Oval	1	
13		Inner Shield Tube Oval	1	
14		Bearing Ring	2	
15		Safety Chain	1	
16		Screw	2	
17		Shield Cone 6 Rib	1	
18		Decal K64	1	"Tighten to 75 Ft.-Lbs."
19		Support Bearing	1	
20		Quick-Disconnect Kit	1	1 3/4"-20 Spline w/Metal Collar
21		Cut Out Clutch Lock Assembly	1	

Notes

Please visit www.unverferth.com/parts/ for the most current parts listing.

Driveline Components

Please visit www.unverferth.com/parts/ for the most current parts listing.



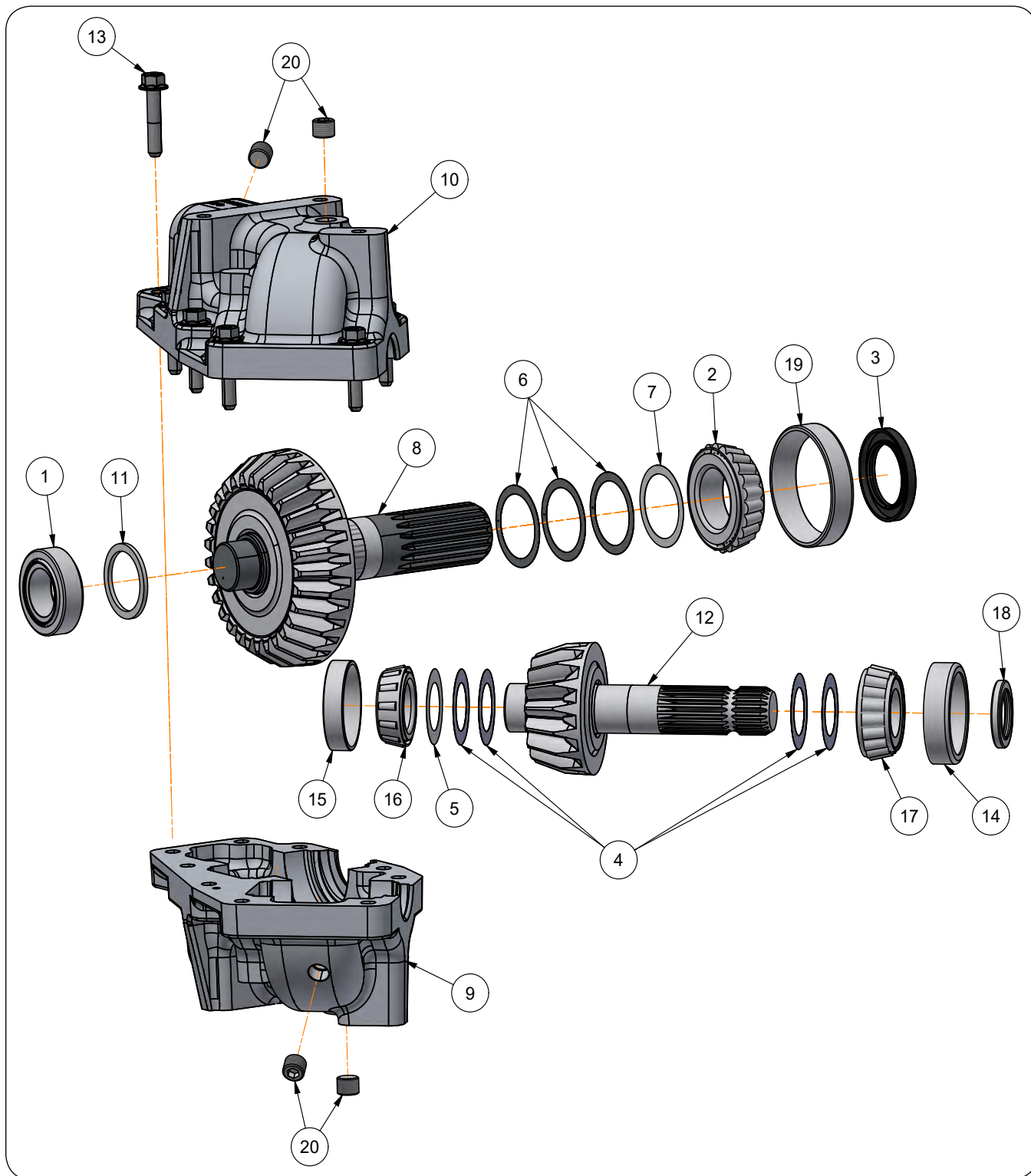
Driveline Components

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	287897	Washer, 3 1/2" Dia.	1	
2	9008711	Gearbox	1	
3	287802	Auger Drive Plate Assembly	1	
4	298588	Rear Driveshaft Cover	1	
5	298589	Front Driveshaft Cover	1	
6	9003920	Flangette Bearing, 1 1/2" ID	3	
7	9010230	U-Joint Assembly	1	Refer to "Driveline U-Joint Assembly" in this Section for Parts Listing
8	91267	Flange Nut, 1/2"-13UNC	16	
9	9388-102	Carriage Bolt, 1/2"-13UNC x 1"	16	
10	298594B	U-Joint Cover, Outside	1	
11	298595B	U-Joint Cover, Inside	1	
12	91263	Nut/Large Flange, 3/8"-16UNC	15	
13	93459	Decal, 8 Hours Grease	1	
14	95046	Decal, DANGER "Driveline"	3	
15	95585	Capscrew/Large Flange, 3/8"-16UNC x 3/4" G5	16	
16	97420	FLANGE SCREW 1/4-20UNCx3/4 G5	3	
17	TA500592	CAGE NUT-CLIP ON	2	

45 Degree Gearbox Components

Please visit www.unverferth.com/parts/ for the most current parts listing.



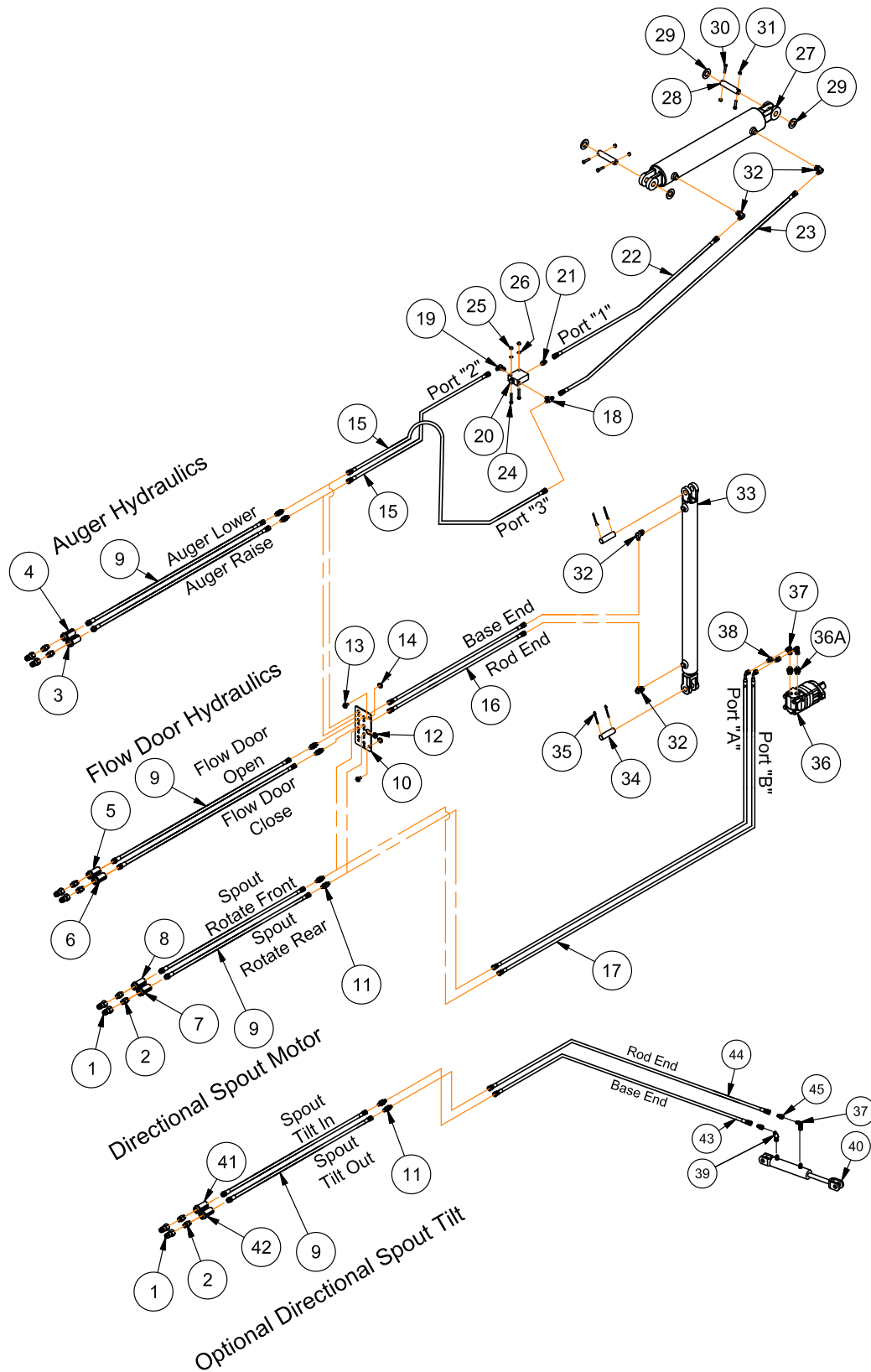
45 Degree Gearbox Components

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
	9008711	Gearbox 45° Q135 Series, Complete	1	Includes Items 1 through 20
1	9007488	Bearing Cup/Cone, 3.15" OD x 1.772" ID	1	
2	9007507	Bearing Cone, 2 1/4" ID x 1 1/4"	1	
3	9007508	Seal	1	
4	9007509	Steel Shim, 2.75" x 1.75" x .005"	4	
5	9007510	Steel Shim, 2.75" x 1.75" x .003"	1	
6	9007511	Steel Shim, 3.00" x 2.36" x .005"	3	
7	9007512	Steel Shim, 3.00" x 2.36" x .003"	1	
8	9007516	Gear Shaft Assembly, 29 Tooth, 2 1/4-17 Spline	1	
9	9008509	Gearbox Housing Q135 w/Tapped Holes	1	
10	9008510	Gearbox Housing Q135 w/Thru Holes	1	
11	9008511	Spacer	1	
12	9008790	Gear Shaft Assembly, 16 Tooth, 1 3/4"-20 Spline	1	
13	903161-060	Flange Screw, 1/2"-13UNC x 2 1/2" G5	9	
14	91151	Bearing Cup, #3720	1	Large
15	91812	Bearing Cup, 3.265" OD x 0.75"	1	
16	91822	Bearing Cone, 1.75" ID	1	
17	92697	Bearing Cone, 1.750" ID x 1 1/4"	1	Large
18	92702	Seal	1	Large
19	93819	Bearing Cup, 4 7/16" OD x 15/16"	1	
20	95283	Pipe Plug, 1/2" NPT	4	

Hydraulics

Please visit www.unverferth.com/parts/ for the most current parts listing.



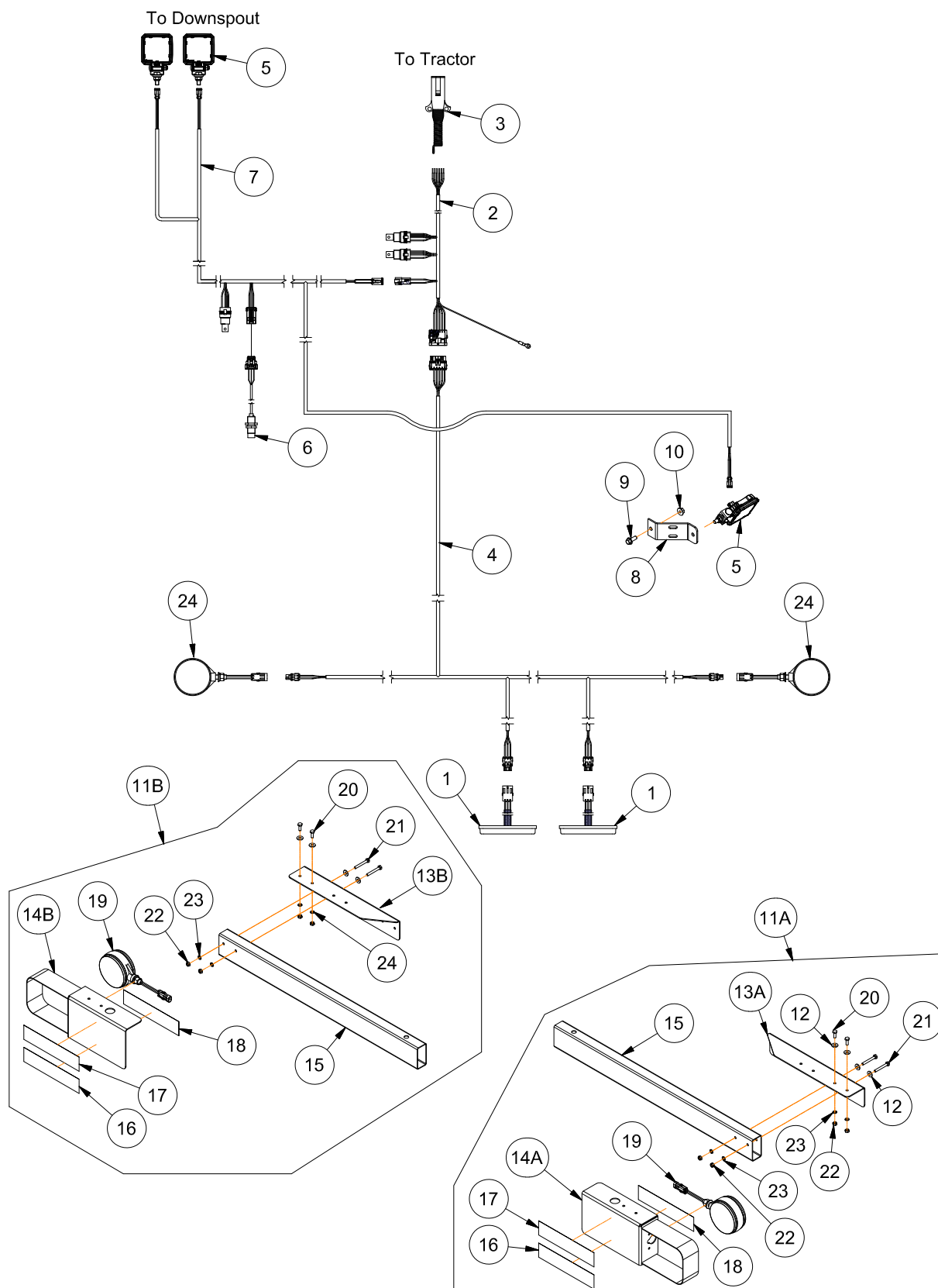
Hydraulics

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NUMBER	DESCRIPTION	QTY	NOTES
1	91383	Male Coupler, 3/4"-16 Female O-Ring	6	
2	98508	Fitting Union, 3/4"-16 O-Ring Male	6	
3	9009751	Hose Grip (Auger Raise) (GREEN +)	1	
4	9009752	Hose Grip (Auger Lower) (GREEN -)	1	
5	9009755	Hose Grip (Flow Door Open) (RED -)	1	
6	9009754	Hose Grip (Flow Door Close) (RED +)	1	
7	9009765	Hose Grip (Spout Rotate Rear) (GRAY +)	1	
8	9009766	Hose Grip (Spout Rotate Front) (GRAY -)	1	
9	9007842	Hose, 1/4" x 172" (9/16"-18 JIC Female x 3/4"-16 O-Ring Male)	6	
10	298553B	Bulkhead Mounting Plate	1	
11	95192	Bulkhead Union, 9/16"-18 JIC Male x 9/16"-18 JIC Male w/Nut	6	
12	9007987	Grommet, 3/4" Dia.	1	
13	95585	Capscrew/Large Flange, 3/8"-16UNC x 3/4" G5	2	
14	91263	Flange Nut, 3/8"-16UNC	2	
15	9505579	Hose, 1/4" x 156" (9/16"-18 JIC Female x 9/16"-18 JIC Female)	3	
16	9505578	Hose, 1/4" x 144" (9/16"-18 JIC Female x 9/16"-18 JIC Female)	2	
17	9010246	Hose, 1/4" x 376" (9/16"-18 JIC Female x 9/16"-18 JIC Female)	4	
18	9001710	Tee, 9/16"-18 JIC Male x 9/16"-18 JIC Male x 9/16"-18 O-Ring Male	1	
19	97445	90° Elbow, 9/16"-18 JIC Male x 9/16"-18 O-Ring Male	1	
20	9003990	Block Pilot Operated Check Valve	1	
21	9001495	Adapter, 9/16"-18 JIC Male x 9/16"-18 O-Ring Male	1	
22	93848	Hose, 1/4" x 62" (9/16"-18 JIC Female x 9/16"-18 JIC Female)	2	
23	9003436	Hose, 1/4" x 39 1/2" (9/16"-18 JIC Female x 9/16"-18 JIC Female)	2	
24	9390-034	Capscrew, 5/16"-18UNC x 2" G5	2	
25	9394-004	Hex Nut, 5/16"-18UNC	2	
26	9404-019	Lock Washer, 5/16"	2	
27	9007960	Hydraulic Cylinder, 4" x 20" - 3000 PSI	1	
	9008025	Seal Kit	-	
28	291988	Pin, 1" Dia. x 4 7/8"	2	
29	9405-116	Flat Washer, 1" SAE	4	
30	9390-032	Capscrew, 5/16"-18UNC x 1 1/2" G5	4	
31	9807	Locknut/Top, 5/16"-18UNC	4	
32	9874	90° Elbow, 9/16"-18 JIC Male x 3/4"-16 O-Ring Male	4	
33	9005363	Flow Door Cylinder, 2 1/2" x 36"	1	
	9005409	Seal Kit	-	
34	804572	Pin, 1" Dia. x 3 1/2"	2	
35	9391-046	Cotter Pin, 3/16" Dia. x 2"	4	
36	9010071	Hydraulic Motor - 4.9 CID, 20 GPM, 3000 PSI	1	
	9010121	Seal Kit	-	
36A	98078	Adapter, 9/16"-18 JIC Male x 7/8"-14 O-Ring Male	2	
37	9876	90° Elbow, 9/16"-18 JIC Male x 9/16"-18 JIC Female	2	
38	9003303	Adapter, 9/16"-18 JIC Female x 9/16"-18 JIC Male w/0.045 Restrictor	2	
39	9001041	45° Elbow, 9/16"-18 JIC Female x 9/16"-18 JIC Male	1	
40	9008152	Hydraulic Cylinder, 1 1/2" x 6" - 3000 PSI	1	
	9008341	Seal Kit	-	
41	9009759	Hose Grip (Spout Tilt In) (YELLOW +)	1	
42	9009760	Hose Grip (Spout Tilt Out) (YELLOW -)	1	
43	9010313	Hose, 1/4" x 474" (9/16"-18 JIC Female x 9/16"-18 JIC Female)	1	
44	9010314	Hose, 1/4" x 490" (9/16"-18 JIC Female x 9/16"-18 JIC Female)	1	
45	95193	Adapter, 9/16"-18 JIC Female x 9/16"-18 JIC Male w/0.030 Restrictor	2	

Electrical Components

Please visit www.unverferth.com/parts/ for the most current parts listing.



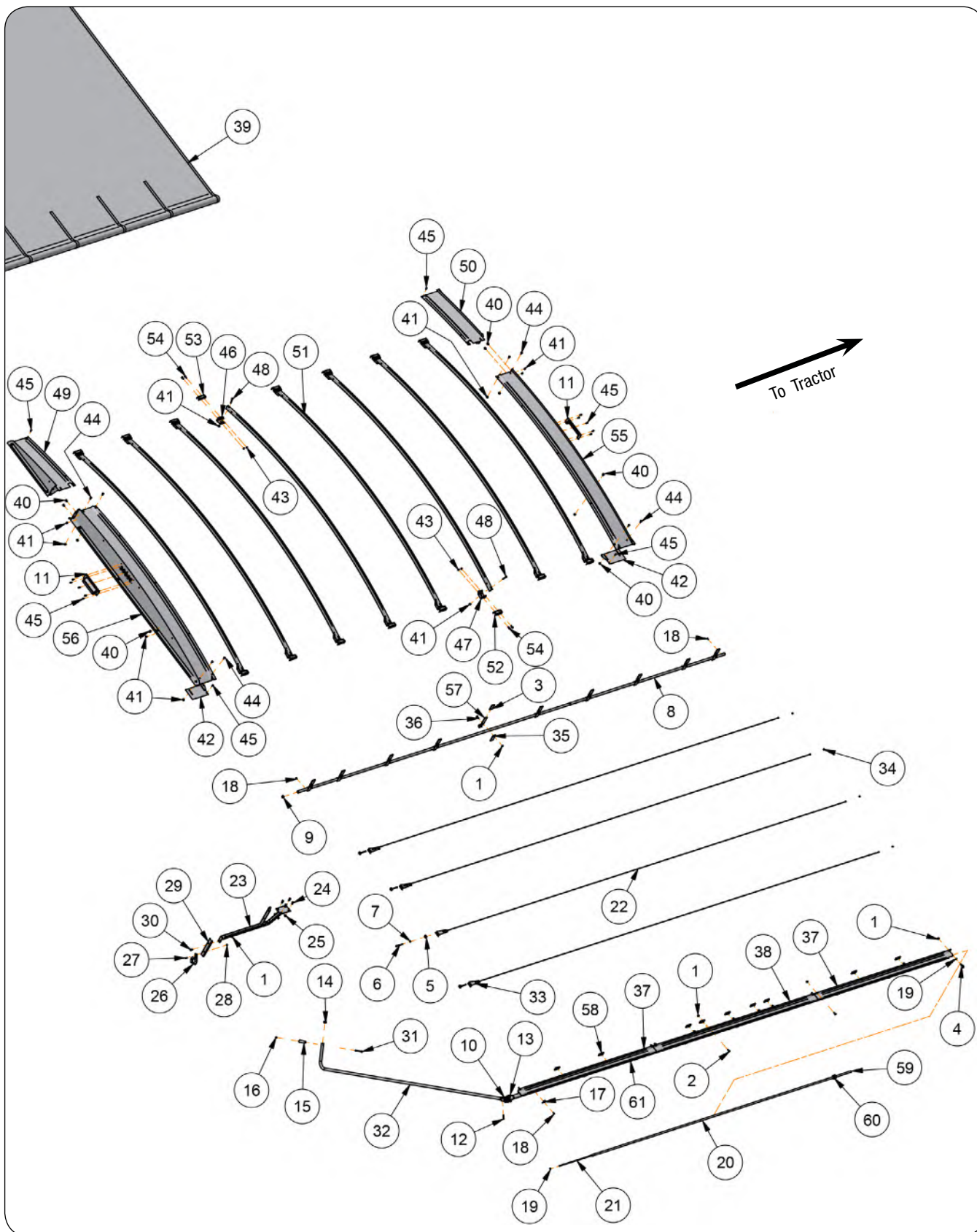
Electrical Components

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	9006282	Lamp - Red LED	2	
	232169	Lamp - Red LED Assembly with Mtg Hardware	2	
2	9007911	Wiring Harness - Front	1	
	9005618	Relay for 12VDC, Type 101	-	Replacement Only
3	92450	7-Way Plug	1	
4	9008237	Wiring Harness - Rear	1	
5	9008957	Work Light (LED)	3	
6	9007472	Proximity Sensor with Connector	1	
7	9010245	Wiring Harness - Auger	1	
	9005618	Relay for 12VDC, Type 101	-	Replacement Only
8	271574B	Light Bracket =Black=	1	
9	91262	Flange Screw, 3/8"-16UNC x 1" G5	1	
10	9008159	Automation Locknut, 3/8"-16UNC	1	
11A	280847	Light Bracket Assembly Right-Hand	1	Includes Items 12-23
11B	280848	Light Bracket Assembly Left-Hand	1	Includes Items 12-23
12	9405-064	Flat Washer, 1/4" USS	8	
13A	251407B	Light Bracket, Right-Hand =Black=	1	
13B	251406B	Light Bracket, Left-Hand =Black=	1	
14A	251155B	Light Bracket Weldment, Right-Hand =Black=	1	
14B	251167B	Light Bracket Weldment, Left-Hand =Black=	1	
15	280370B	Light Tube =Black=	2	
16	9003125	Fluorescent Strip, Red-Orange	2	2 x 9"
17	9003126	Reflector =RED=	2	2 x 9"
18	9003127	Reflector =AMBER=	2	2 x 9"
19	9005142	LED Light, Amber - Double Face	2	
20	9390-003	Capscrew, 1/4"-20UNC x 3/4" G5	4	
21	9390-009	Capscrew, 1/4"-20UNC x 2" G5	4	
22	9394-002	Hex Nut, 1/4"-20UNC	8	
23	9404-017	Lock Washer, 1/4"	8	
24	9000106	Cable Tie, 7 1/2"	8	Not Shown
	9000107	Cable Tie, 14 1/2"	8	
	9000104	Cable Tie, 21 1/2"	15	

Weather Guard Tarp

Please visit www.unverferth.com/parts/ for the most current parts listing.



Weather Guard Tarp

Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	91263	Flange Nut 3/8"-16UNC	16	
2	9009089	Machine Screw 3/8"-16UNC x 1 1/4"	3	
3	9003078	Plastic Cap 3/16"x2"x3"	10	
4	9004548	Eye Bolt 3/8"-16UNC x 1 3/4"	1	
5	9005696	Fender Washer 3/8"	4	
6	TA0-907131-0	Cap Screw 3/8"-16UNC x 4 1/2" Grade 5	4	
7	9005688	Lock Washer 3/8"	4	
8	288362	Fixed Tube 1 1/8" x 116 1/2"	1	
9	9005088	Plug 1 1/8"	2	
10	9004977	U-Joint 1 3/8"-21 Spline	1	
11	9009504	End Cap Vent Cover	2	
12	9092-180	Roll Pin 3/8" x 2"	1	
13	9005305	Lynch Pin 3/8" x 3"	1	
14	9005089	Plug 1 1/4"	1	
15	9004969	Handle	1	
16	9398-012	Locknut 3/8"-16UNC	1	
17	9004949	U-Clamp 1 9/16" x 1 1/2"	9	
18	9005197	Self Drilling Screw #10-16 x 3/4"	9	
19	9405-074	Flat Washer 3/8" SAE	2	
20	221668	PVC Pipe	1	
21	221722	Bungee Cord	1	
22	9007866	Cable Assembly 301"	4	
23	256712B	Tarp Crank Holder Weldment =Black=	1	
24	9390-099	Cap Screw 1/2"-13UNC x 1" Grade 5	4	
25	9002058	Flange Nut 1/2"-13 UNC	4	
26	221770B	Handle Retainer Bracket =Black=	1	
27	9390-055	Cap Screw 3/8"-16UNC x 1" Grade 5	1	
28	9928	Lock Nut 3/8"-16UNC	1	
29	265743B	Crank Holder Extension =Black=	1	
30	91262	Flange Screw 3/8"-16UNC x 1" Grade 5	1	
31	903172-450	Pan Head Screw 3/8"-16UNC x 4 1/2"	1	
32	287944	Handle Weldment	1	
33	281712B	Bracket & U-Nut Assembly =Black=	4	
34	9005727	Plug 7/16"	4	
35	295183B	Tarp Stop Plate =Black=	10	
36	9003259	Flange Screw 3/8"-16UNC x 1 1/4"	10	

(Continued on next page)

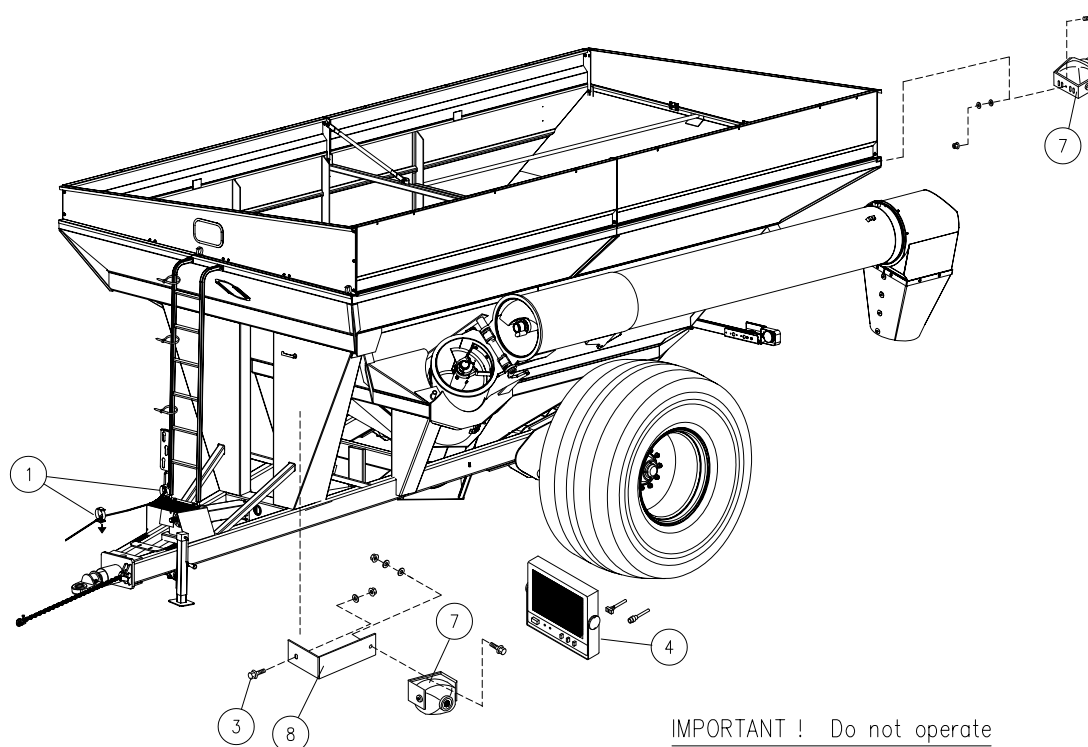
Weather Guard Tarp (continued)

Please visit www.unverferth.com/parts/ for the most current parts listing.

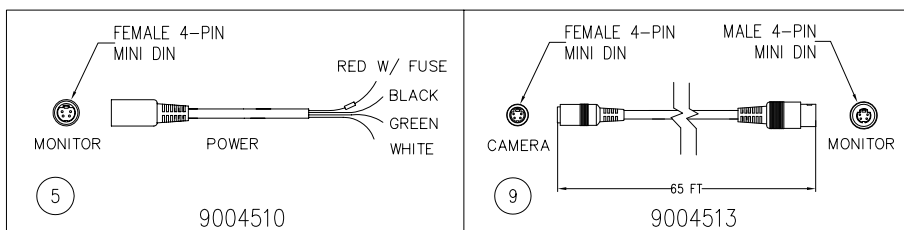
ITEM	PART NO.	DESCRIPTION	QTY	NOTES
37	296847	Front and Rear Latch Plate 100 3/16"	2	Replacement kit #297782
38	296848	Middle Latch Plate 119 1/2"	1	
39	9007865	Tarp 176" x 314"	1	
	9005581	Tarp Repair Kit	-	
40	95585	Flange Screw 3/8"-16UNC x 3/4" Grade 5	16	
41	91263	Flange Nut 3/8"-16UNC	40	
42	283431B	End Cap Plate =Black=	2	
43	91257	Flange Nut 5/16"-18UNC	32	
44	9005312	Truss Head Screw 3/8"-16UNC x 1"	12	
45	9512	Self Drilling Screw 1/4"-14 x 1"	14	
46	283427B	Tarp Bow Bracket LH =Black=	8	
47	283425B	Tarp Bow Bracket RH =Black=	8	
48	902703-046	Socket Cap Screw 3/8"-16 UNC x 3"	16	
49	288343B	End Cap Weldment - Rear - Short =Black=	1	
50	288341B	End Cap Weldment - Front - Short =Black=	1	
51	288339B	Tarp Bow Tube =Black=	8	
52	289986B	Doubler Plate RH =Black=	8	
53	281936B	Doubler Plate LH =Black=	8	
54	97604	Flange Screw 5/16"-18UNC x 1" Grade 5	32	
55	296129B	End Cap Weldment - Front - Long =Black=	1	
56	296131B	End Cap Weldment - Rear - Long =Black=	1	
57	266689B	Tarp - Short Stop =Black=	10	
58	295259B	Tarp Spacer Plate =Black=	8	
59	TA806225	Hose 1/2" EPDM	1	
60	9004947	Tube End Plug 2"	1	
61	288360	Roll Tube Weldment	1	

Video System Option

Please visit www.unverferth.com/parts/ for the most current parts listing.



IMPORTANT ! Do not operate
Video System below 15° F.



ITEM	PART NUMBER	DESCRIPTION	QTY	NOTES
	265770	Video System Kit for Front View	1	Includes Items 1,3,4,5,6,7,8
	9004506	Additional Camera for Rear View	1	Includes Items 6 & 7
1	TAAU14007	Snap Clip, Adhesive	10	
3	9512	Self-Drilling Screw 1/4-14 x 1	10	
4	9006273	Monitor, 7" LCD/LED	1	
5	9004510	Cable w/Fuse	1	
7	9006274	Camera	1	
8	265771B	Bracket	1	
9	9004513	Cable, 65'	1	
10	9000106	Cable Tie	AR	
11	9004506	Camera Kit for Rear View with 65' Cable	1	Not Shown
12	9007174	Camera Cable, 16 ft.	1	Not Shown



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