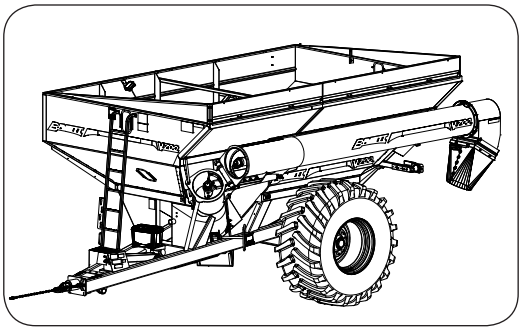


BRENT **Grain Handling**

CORNER-AUGER GRAIN CART
MODEL V700

Serial Number B36120100 & Higher

Part Number 272867

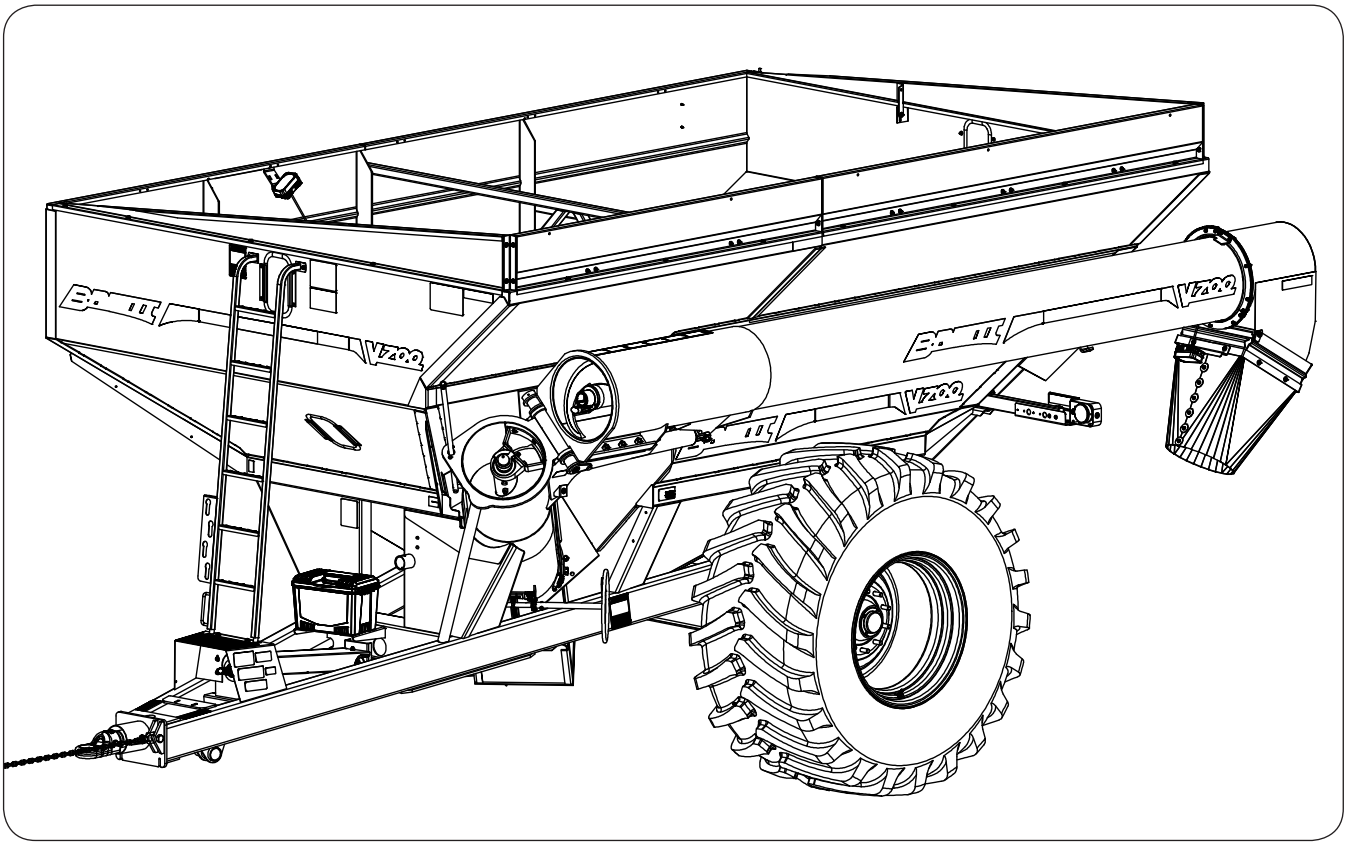
Foreword

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
- Serial Number

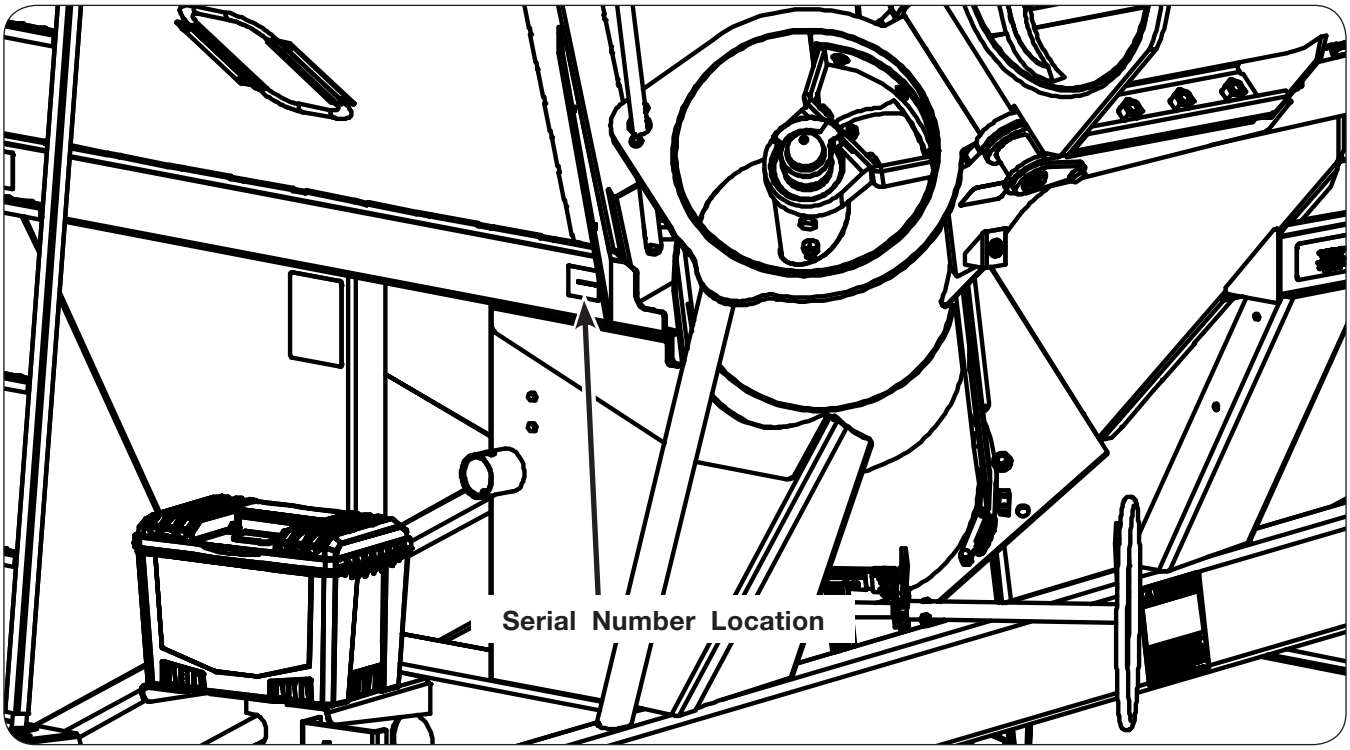
All products manufactured by Unverferth Mfg. Co., Inc. are warranted to be free from material and workmanship defects for one full year from time of consumer delivery. Your local dealer will gladly assist you with any warranty questions.

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

FOR SCALE INFORMATION, PLEASE REFER TO YOUR SCALE MANUAL.
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Section I
Safety

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

DANGER

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

WARNING

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

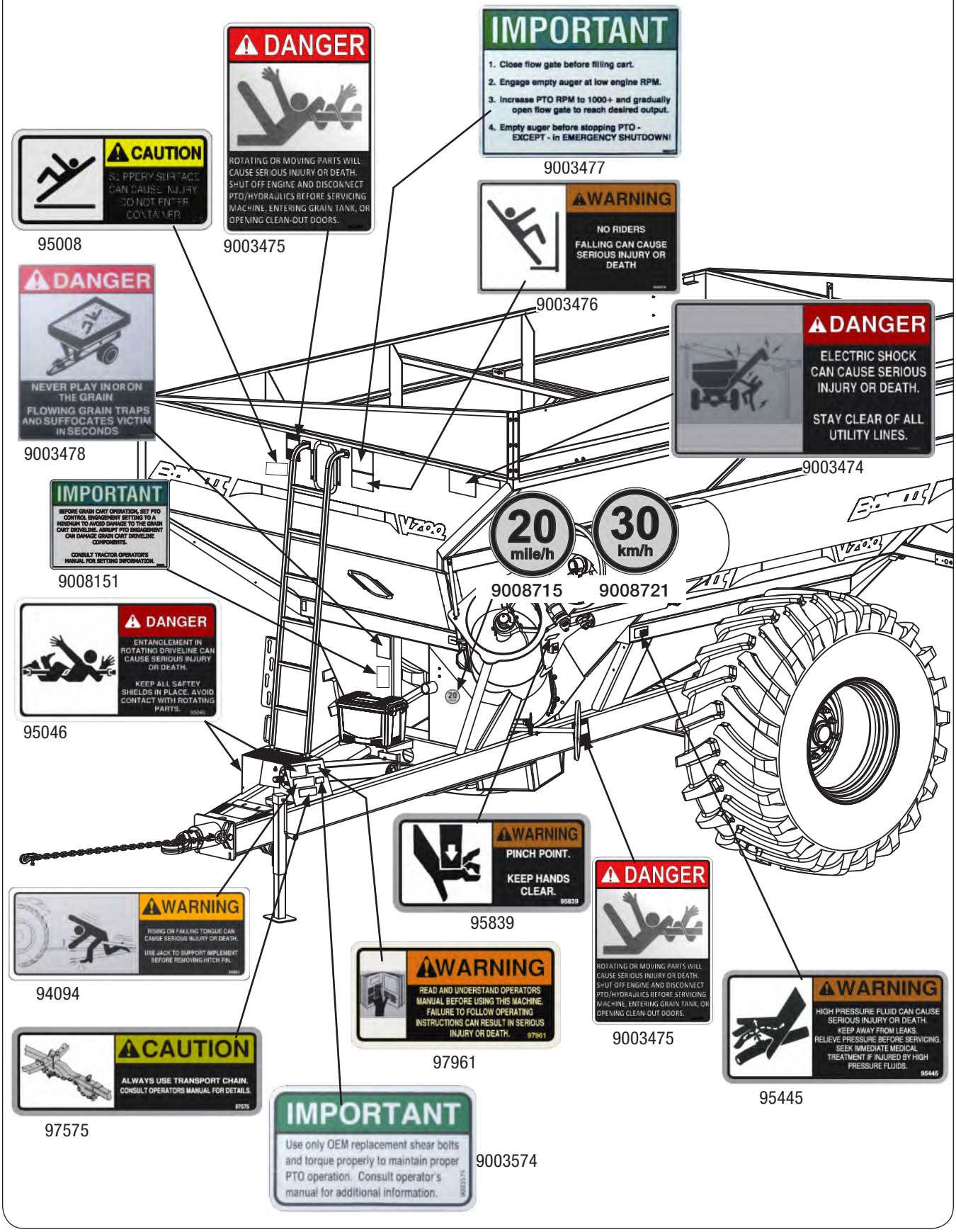
CAUTION

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

IMPORTANT

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

Safety Decals



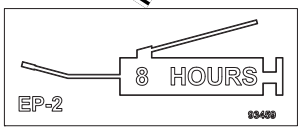
Safety Decals (continued)

9008714 9008720

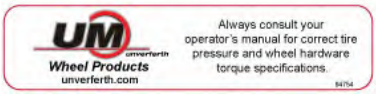
TA1-906109-0

TA510514

95046



93459



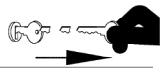
94754

REFLECTORS
9003125 (Fluorescent)
9003126 (Red)
9003127 (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 Operating

- 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.

- Ensure that all applicable safety decals are installed and legible.
- When working around the implement, be careful not to be cut by sharp edges.
- Secure drawbar pin with safety latch and lock tractor drawbar in fixed position.

Before Servicing

- 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.
- When working around the implement, be careful not to be cut by sharp edges.
- 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.

During Operation

- Regulate speed to field conditions. Maintain complete control at all times.
- Never 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.
- Use good judgment when transporting equipment on highways. 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 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 or bottom out when turning and/or going over rough terrain which will cause serious injury or death from contact with uncontrolled flailing of PTO shaft assembly components.

Pressurized Oil

- Relieve pressure before disconnecting hydraulic lines from tractor, loosening any hydraulic fittings or servicing hydraulic system. See hydraulic power unit manual for procedure to relieve pressure.

- High-pressure fluids can penetrate the skin and cause serious injury or death. Use a piece of cardboard or wood to detect leaks of hydraulic fluid under pressure. 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.
  - Armoring embedded in the outer cover.

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

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

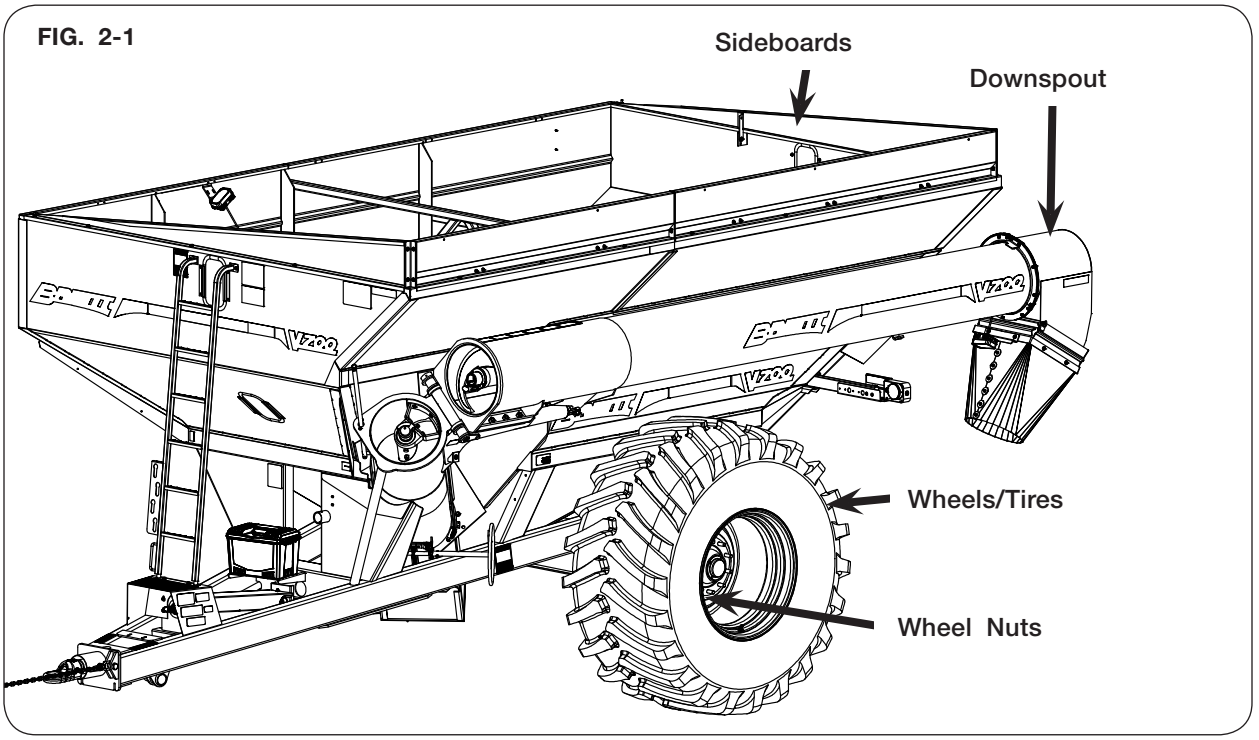
Set Up Checklist

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.

- ☐ 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 to specified air pressure. (If applicable)
- ☐ 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 shipping film is removed and SIS decals are clean and visible.
- ☐ Check to be sure transport lights are working properly.
- ☐ Check Driveline Assembly phasing. See “Auger Driveline Assembly” in OPERATION section.
- ☐ 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.
- ☐ Paint all parts scratched in shipment.
- ☐ Test run the augers. See “Auger Operation” in OPERATION section.
- ☐ Set tractor PTO control engagement setting to a minimum. Refer to tractor operators manual for setting information.

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, 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.**

Basic Set Up (continued)

Folding Side Extensions

1. Rotate extensions up into position and secure at corner holes. Assemble extension panel bases to top edge of hopper with included fasteners.
2. Attach center support hardware.
3. Tighten all hardware, including hinge bolts.
4. Install hopper light. Mount in front right corner.

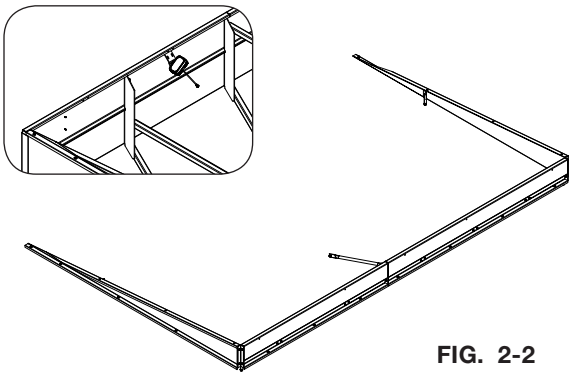


FIG. 2-2

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.

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

FIG. 2-3

FIG. 2-3A

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

Basic Set Up (continued)

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 inner edge of the amber lights 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).

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.

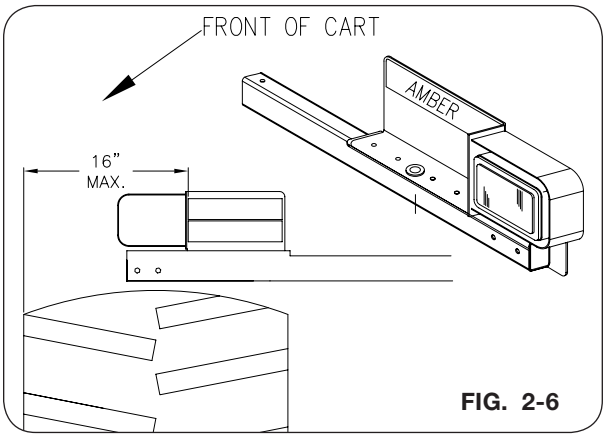


FIG. 2-6

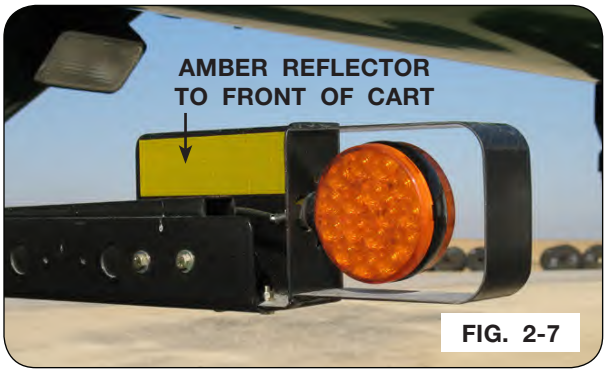


FIG. 2-7

Driveline Storage

Storage brackets are located on the rear of the 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. 2-8

PTO Storage Located On The Rear.

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

⚠ WARNING

- **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 16,000 LBS. SPECIFIC LOAD RATINGS FOR INDIVIDUAL LOADS WILL BE GIVEN AT THE APPROPRIATE TIME IN THE INSTRUCTIONS.**
- **KEEP HANDS CLEAR OF PINCH POINT AREAS.**
- **EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.**
- **TIPPING OR MOVEMENT OF THE MACHINE CAN CAUSE SERIOUS INJURY OR DEATH. BE SURE MACHINE IS SECURELY BLOCKED.**

⚠ 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.**

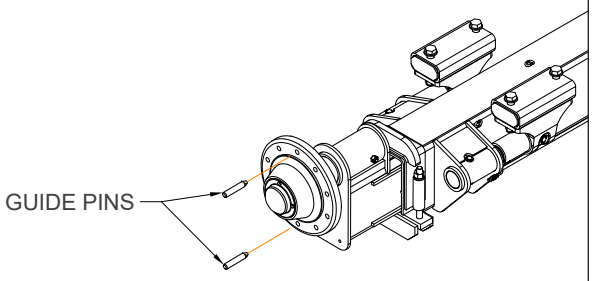
IMPORTANT

- *Installing wheels without the proper inset/offset could result in hub or spindle failure. This will cause substantial damage to cart and is not covered by warranty. Inset/offset will vary depending on tire size. Consult dealer for proper inset/offset.*

Dual Wheel Installation

1. Use a safe lifting device rated at a minimum of 16,000 lbs. and supports rated at 8,000 lbs. minimum during the wheel and tire attachment. Place supports under the axle near the axle clamps.
2. Insert the guide pins into the bolt holes on the hub. (FIG. 2-9).

FIG. 2-9

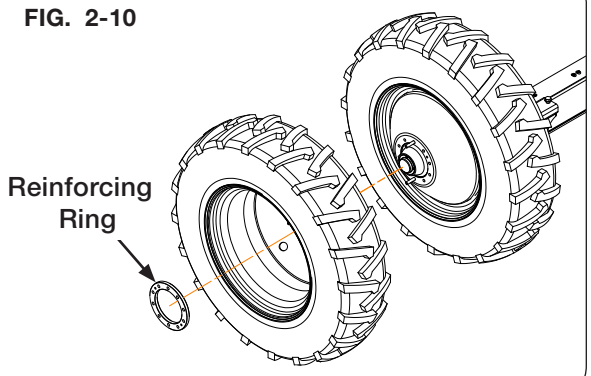


Basic Set Up (continued)

Dual Wheel Installation (continued)

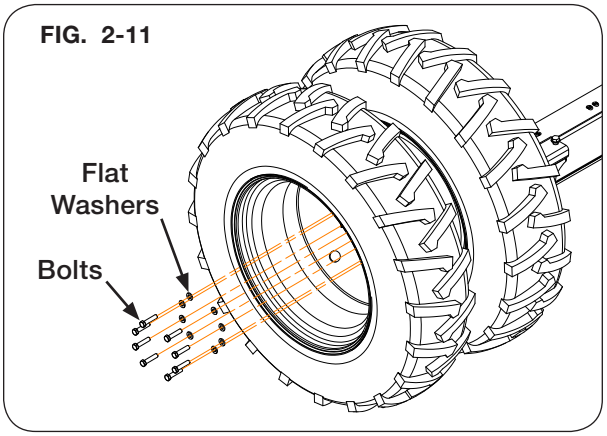
3. Align and install the dual wheels and reinforcing ring over the guide pins (FIG. 2-10).

FIG. 2-10



4. Secure the wheel and reinforcing ring with 8 flat washers and 8 bolts provided. (FIG. 2-11)

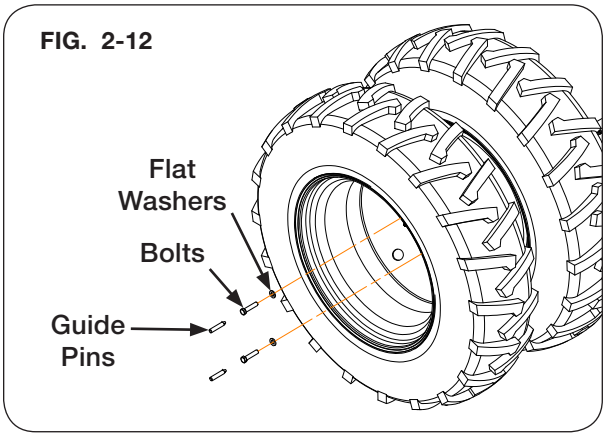
FIG. 2-11



5. Remove the guide pins and install the 2 remaining flat washers and bolts. (FIG. 2-12).

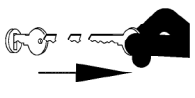
NOTE: Refer to the MAINTENANCE section for proper torque requirements.

FIG. 2-12



Adjustable Axle (Optional)

1. Hitch cart to tractor. Park the empty unit on a firm, level surface. Set the tractor's parking brake, shut-off engine and remove the ignition key.



Basic Set Up (continued)

Adjustable Axle (Optional)

WARNING

- **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 16,000 LBS. SPECIFIC LOAD RATINGS FOR INDIVIDUAL LOADS WILL BE GIVEN AT THE APPROPRIATE TIME IN THE INSTRUCTIONS.**

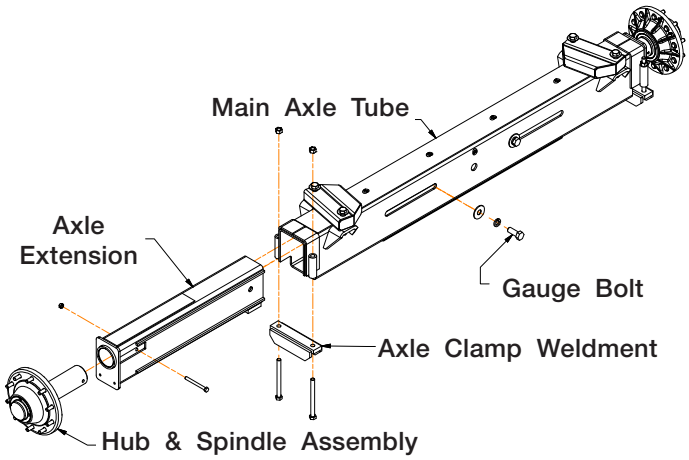
- **TIPPING OR MOVEMENT OF THE MACHINE CAN CAUSE SERIOUS INJURY OR DEATH. BE SURE MACHINE IS SECURELY BLOCKED.**

1. Hitch cart to tractor. Park the empty unit on a firm, level surface. Set the tractor's parking brake, shut-off engine and remove the ignition key.

2. Using a safe lifting device rated for a minimum of 8 tons and supports rated at 4 tons minimum, raise the cart and place supports under the axle near the axle clamps.

3. Loosen axle extension clamp and axle gauge bolts. Do not remove.

FIG. 2-13



4. Slide extensions to desired tire gauge spacing. Axle extensions should be extended equally. Refer to chart below.

Tire Size	Slide Out Distance (From end of the main axle tube to inside of the extension weldment end cap plate.)	Distance Hub Flange to Hub Flange	Distance End to End
520/85 x R-1			
650/75 x 32 R-1W			
800/65 x 32 R-1W			
IF800/60 x 32 R-3			
900/60 x 32 R-1W	11 1/4"	124"	137"
900/65 x 32 R-3	11 1/4"	124"	137"

5. Tighten axle gauge bolts followed by axle clamp bolts.

6. Remove supports and lower cart to ground.

NOTE: If tires are positioned at a wider tread width, make sure lights are also moved out to within 16" of the outside of tires. Refer to page 2-5 for details.

Weather Guard Tarp Installation (Optional)

⚠ 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 CART.**
- **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 250 LBS. SPECIFIC LOAD RATINGS FOR INDIVIDUAL LOADS WILL BE GIVEN AT THE APPROPRIATE TIME IN THE INSTRUCTIONS.**
- **TIPPING OR MOVEMENT OF THE MACHINE CAN CAUSE SERIOUS INJURY OR DEATH. BE SURE MACHINE IS SECURELY BLOCKED.**

End Caps, Bows

1. Assemble the end caps (286839B) to the front and rear side boards with flange screws (95585) and flange nuts (91263). Fasten end cap panels (286843B - right-hand front & left-hand rear; 286842B - left-hand front & right-hand rear) to the side board and end cap with 5/16”-18UNC x 3/4” large flange screws (91256), 5/16”-18UNC flange nuts (91257), 1/4”-14 x 1” self-threading screws (9512), 3/8”-16UNC x 1” truss head screws (9005312), and 3/8”-16UNC large flange nuts (91263). Install Trim-lok on front board. (FIG. 2-14)

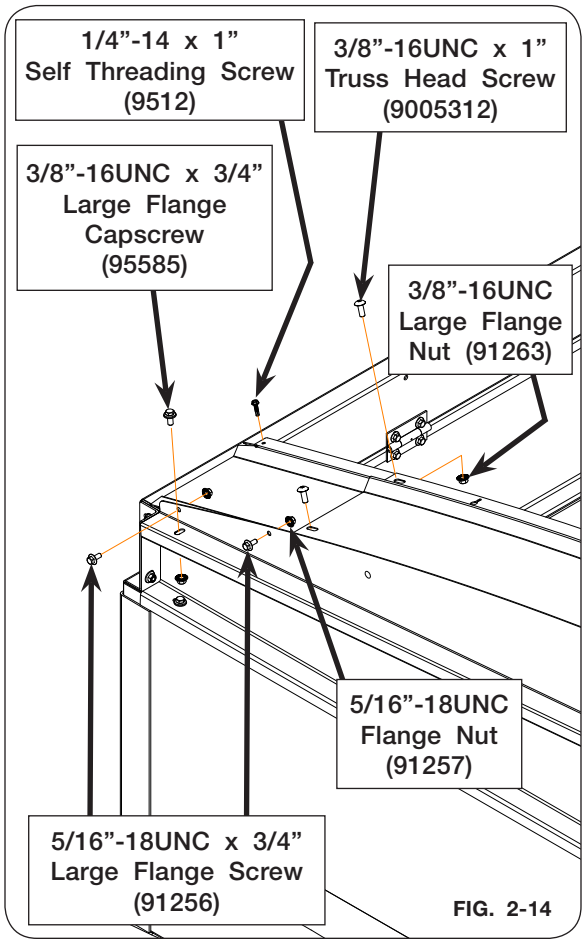
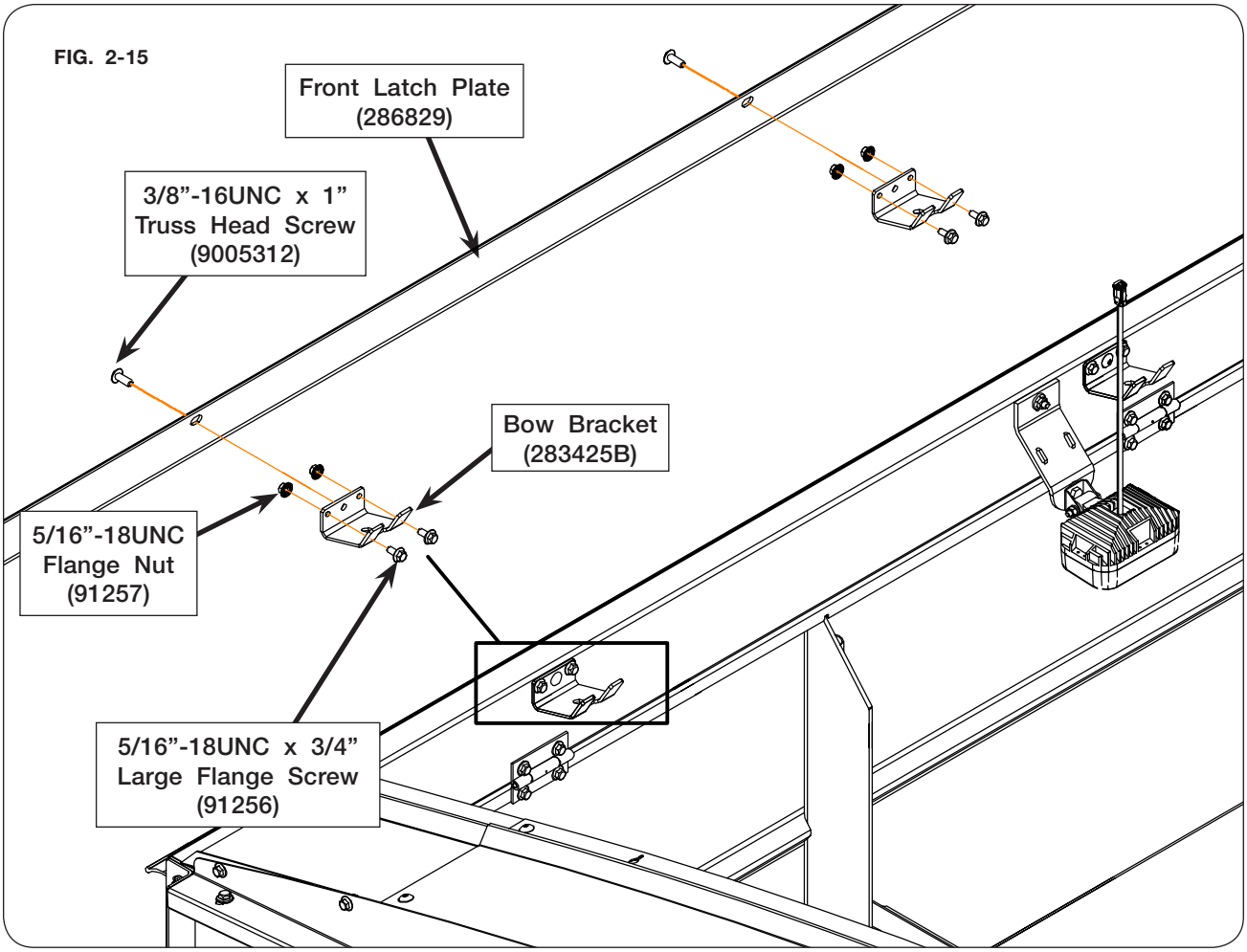


FIG. 2-14

Weather Guard Tarp Installation (Optional) (continued)

2. Assemble the bow brackets (283425B) to the inside, right-hand side of the cart with 5/16”-18UNC x 3/4” large flange screws (91256) and 5/16”-18UNC flange nuts (91257). (FIG. 2-15)

FIG. 2-15



Weather Guard Tarp Installation (Optional) (continued)

3. Secure the front latch plate (286829) to the front of the panel with eyebolt (9004548), 3/8" flat washer (9405-074) and 3/8"-16UNC large flange nut (91263). (FIG. 2-16)

4. Insert a plug (9004968) into the front of the front latch plate and the rear of the rear latch plate. (FIG. 2-16)

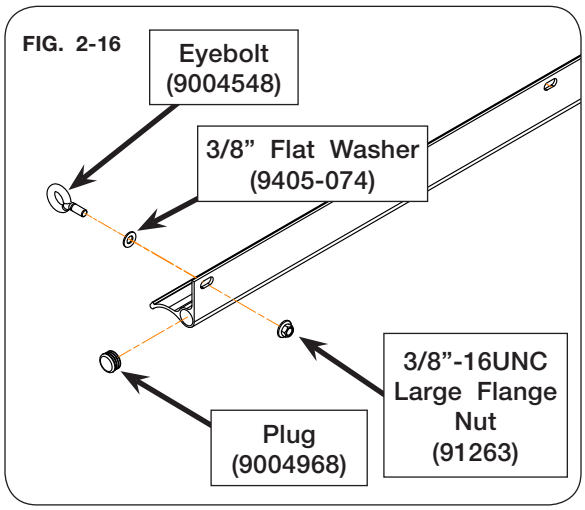


FIG. 2-16

5. Attach the rear of the front latch plate (286829) and the front and rear of the rear latch plate (286830) with 3/8"-16UNC x 1" truss head screws (9005312) and 3/8"-16UNC large flange nuts (91263). (FIG. 2-17)

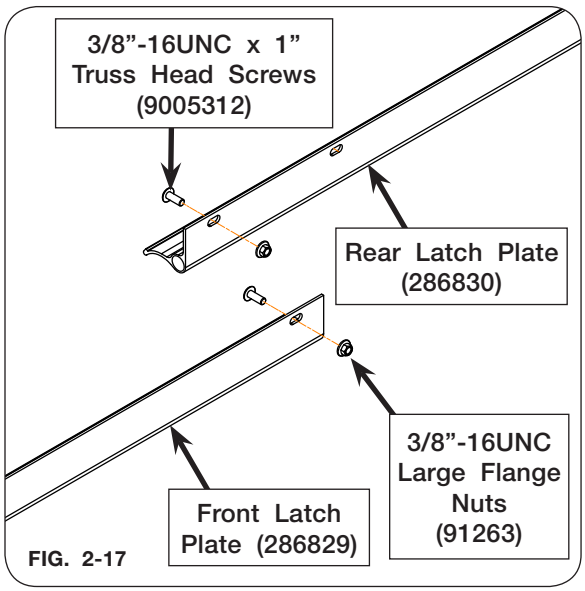


FIG. 2-17

NOTE: Ensure sideboard doublers (281936B) are inside the left-hand sideboard lip. See FIG. 2-18.

6. Assemble five bow brackets (283427B) and sideboard doubler (281936B) to the left sideboard with 5/16"-18UNC x 1" large flange screws (97604) and 5/16"-18UNC flange nuts (91257). (FIG. 2-18)

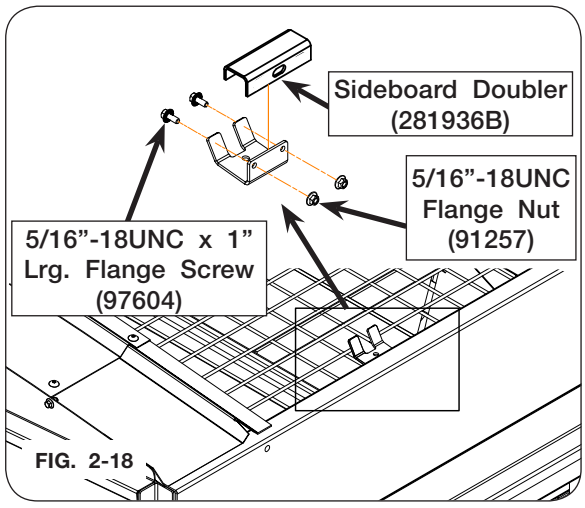


FIG. 2-18

Weather Guard Tarp Installation (Optional) (continued)

7. Install five long tarp bows (283424B) across the top of the cart, using bracket (283425B), 3/8"-16UNC x 3" capscrew (902703-046), 3/8"-16UNC (91263), 5/16"-18UNC x 3/4" flange screw (91256) and 5/16"-18UNC flange nut (91257). (FIG. 2-19)

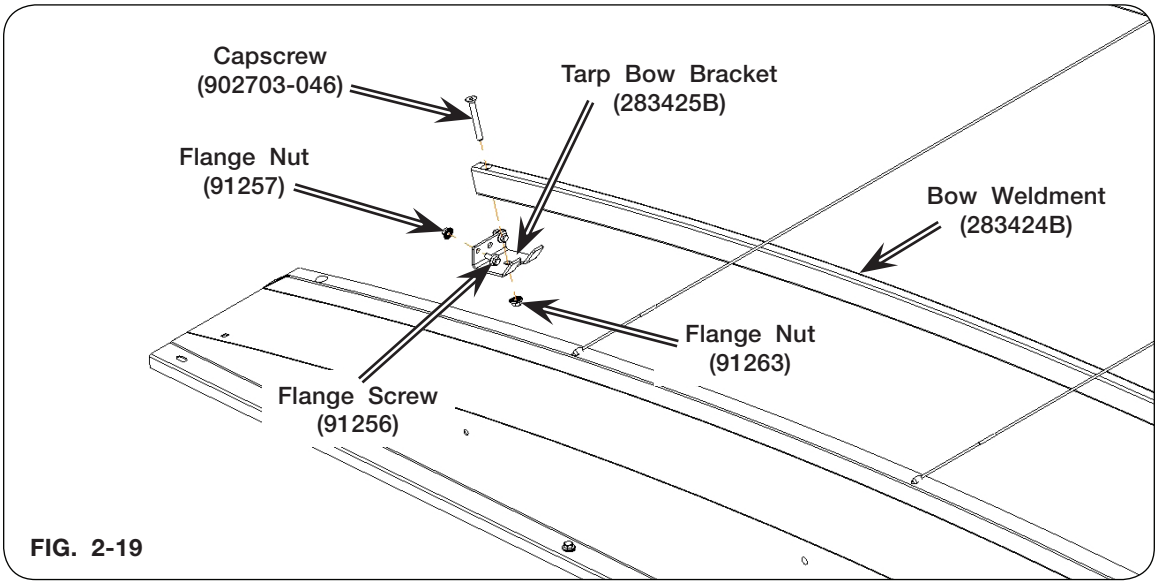


FIG. 2-19

NOTE: Ensure capscrew head (902703-046) is flush with the top of bow weldment (283424B). (FIG. 2-20)

8. Tighten all hardware.

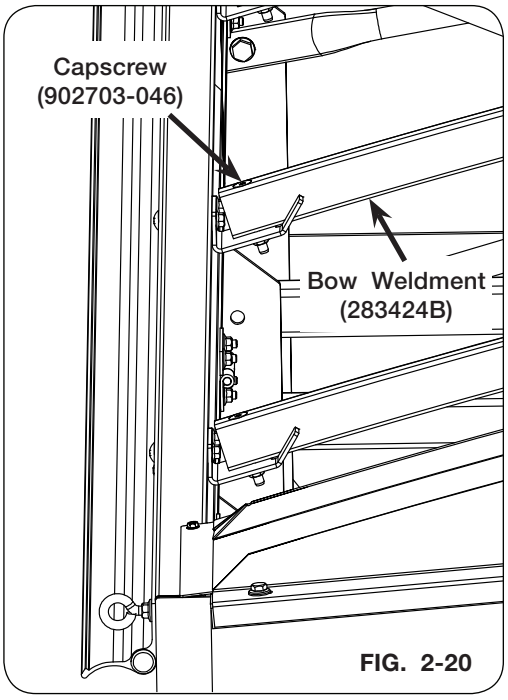


FIG. 2-20

Weather Guard Tarp Installation (Optional) (continued)

Cables, Tarp, Tubes

9. Attach the cable assemblies (9007675) to the front end cap (286839B) slotted holes, see FIG. 2-21. Run the cables over the top of the bows (283424B). Route the cables through the holes in the rear end caps (286839B), see FIG. 2-22. Secure the cables to the slot in the bracket (281712B), see FIG. 2-23. To tighten the cables, tighten the capscrew (TA0907131-0) on the outside of the cart until the bracket makes the cables snug tight, see FIG. 2-24. **Do not overtighten.**

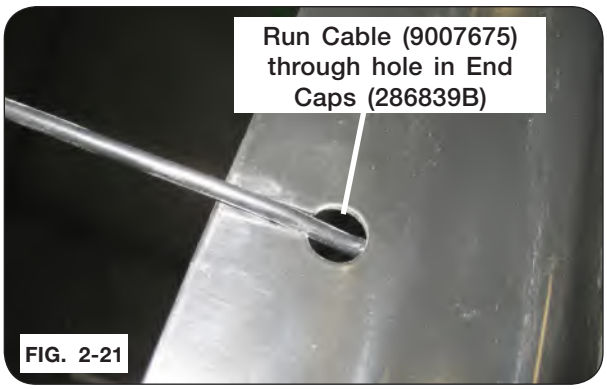


FIG. 2-21

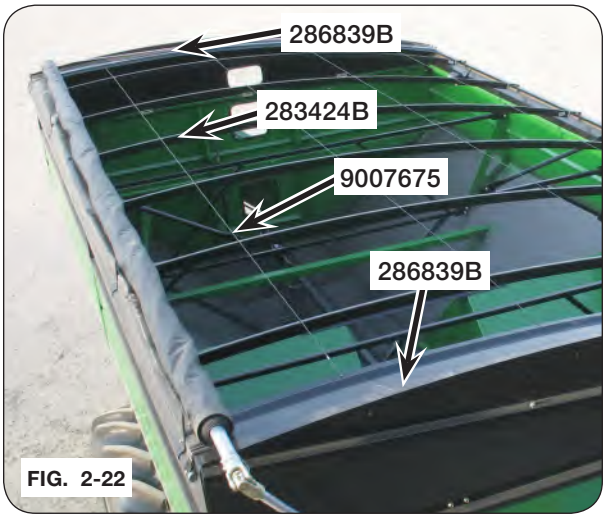


FIG. 2-22

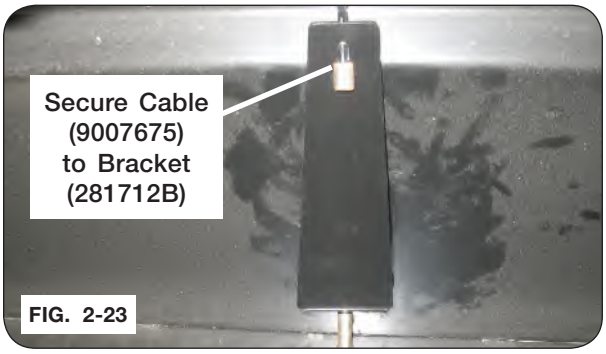


FIG. 2-23

FIG. 2-24

Weather Guard Tarp Installation (Optional) (continued)

10. (2-person operation) On a clean floor, lay the tarp out flat with the raw edge of the hems and pockets down and the exterior side facing up.

11. Insert the small 1 1/8" tube (221808) by sliding it into the small pocket of the tarp. Leave 1" of the tube sticking out one end and drill a 3/16" hole through the center of the outer reinforcement strap and tube. Fasten with a rivet (9003378). At the other end, pull on the tarp by hand to stretch it until there is 1" of tube sticking out. Drill hole and install rivet. Press the 1 1/8" plugs (9005088) into each end of the tube. (FIG. 2-25)

INSTALLATION TIP: Tarp is designed to be stretched the length of the tube to reduce wrinkling. For easier assembly, apply liberal dusting of baby powder on tube and inside of tube pockets before sliding tubes in pockets.

12. Insert the 2" roll tube into the large pockets, with the splined shaft to the rear. Measure 10 1/2" from the end of the spline to the start of the tarp. Install the first U-clamp (9004949) and self-drilling screws (9005197) to the first reinforcement strap,to secure the tarp to the tube. Work down the roll tube putting the U-clamps and self-drilling screws on each reinforcement strap. Make sure to keep the tarp pulled tight to reduce wrinkling. (FIG. 2-25)

    Grain carts with any unused holes on the side of the cart need to be plugged. Use pre-drilled 1/8" locator holes in the right-hand side of the cart. Install with 1/4" self-tapping screws and nuts provided.

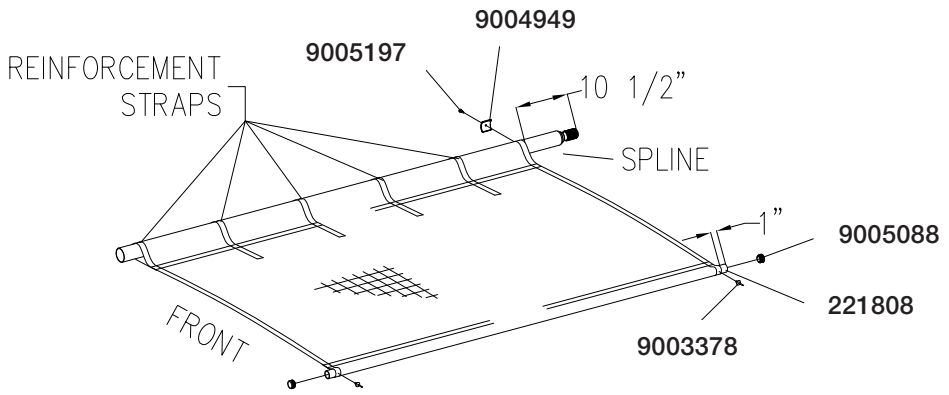


FIG. 2-25

Weather Guard Tarp Installation (Optional) (continued)

13. Insert knotted stretch rope (221722) through flat washer (9405-074), plastic tube (221668), end plug (9004947) and hose (TA806225). Place these items as an assembly into front end of 2" tube (221809) and press the end plug into the end of the tube. Screw self-drilling screw (9001396) through side of roll tube into end plug (9004947) to retain plug into tube. Slide hose (TA806225) over bungee. (FIG. 2-26)

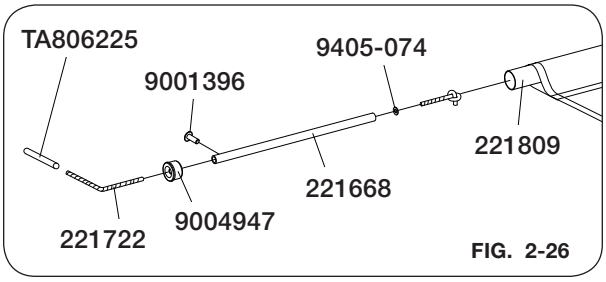
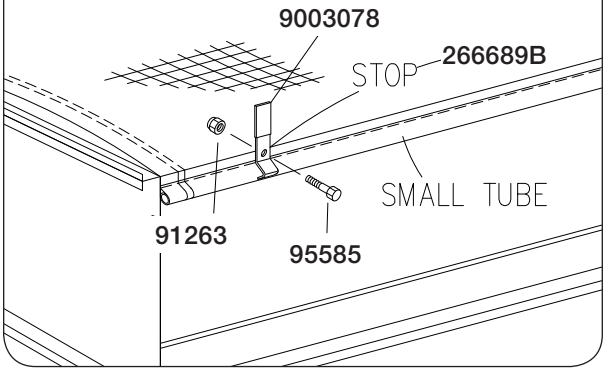


FIG. 2-26

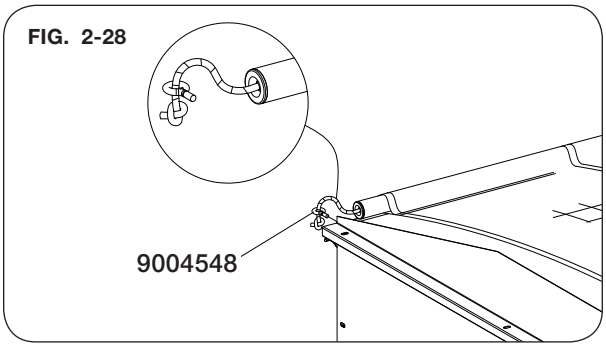
14. Using an appropriate lifting device rated for a minimum of 250 lbs. position the tarp on top of the left-hand side of the cart. Hand roll the tarp into open position. Place the 1 1/8" stationary tube side of the tarp on top of the left side of the box, centered from front to back of box. BE CAREFUL NOT TO LET THE TARP ROLL OFF OF THE BOX. Assemble the tarp and stops (266689B) (with caps) to the left sideboards by poking a hole through the tarp and using flange screws (95585) and flange nuts (91263). Assemble the center stop through the bow weldment, the front and rear stops should be one foot in from the ends of the cart. (FIG. 2-27)

FIG. 2-27



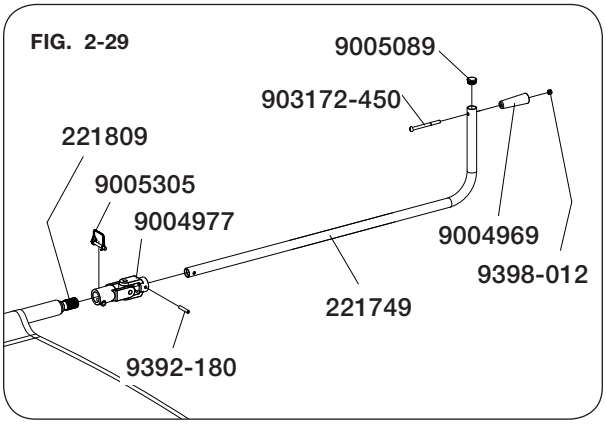
15. Unroll the tarp and insert stretch cord through the top of the eye bolt (9004548). With the tarp rolled up under the latch plate, leave two or three inches of slack in the bungee and knot off. If there is an excess of cord, cut a couple inches below the knot and sear end of bungee with a lighter to keep from fraying. (FIG. 2-28)

FIG. 2-28



16. Insert U-joint (9004977) over splined coupling (221809) and secure with wire lynch pin (9005305). Insert crank handle (221749) into U-joint and secure with roll pin (9392-180). Insert philips head screw (903172-450) into bottom hole of crank handle (221749) and slide plastic handle (9004969) onto bolt securing with elastic nut (9398-012). Insert 1 1/4" plug (9005089) into end of handle. (FIG. 2-29)

FIG. 2-29



Weather Guard Tarp Installation (Optional) (continued)

Hand Crank

17. Locate the mounting bracket underneath the rear perimeter, centered on the box. Use capscrews (9390-099) and flange nuts (9002058) to attach the crank holder tube (265706B). Attach bracket (221770B) to the crank holder tube (265706B) using capscrew (9390-055) and locknut (9928). (FIG. 2-30)

NOTE: A slight bow in the 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. Over time it may need to be readjusted.

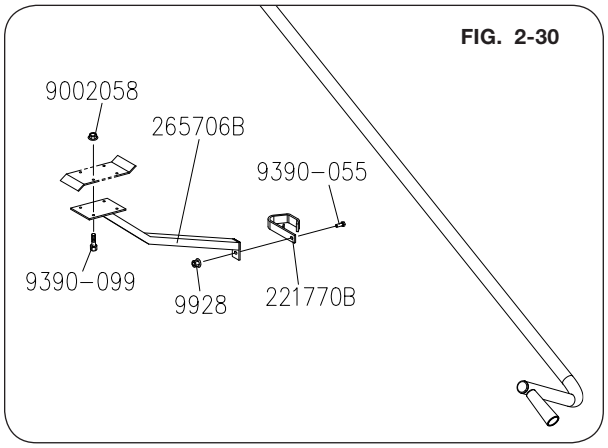


FIG. 2-30


FIG. 2-31

Section III
Operation

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.
- ❑ Check axle spacing to be sure axle is adjusted from shipping position to desired operating width. (If applicable)
- ❑ Check to be sure all the reflective decals, the SMV sign and SIS decals are clearly visible with the cart attached to the tractor. Check to be sure the transport lights are in working condition. Check and follow all regulations before towing on a road or highway.
- ❑ Check to be sure the hitch height when attached to the tractor is sufficient to prevent severe bends in PTO U-joint angles.
- ❑ Check to be sure PTO is correct length for making turns and operating on uneven terrain. See "Verify Telescoping PTO Shaft Length" in MAINTENANCE section.
- ❑ Torque wheel nuts and check tire pressure as specified in MAINTENANCE section.
- ❑ Transport chains are properly installed and hardware is torqued to specification. See "Transport Chain Connection" in OPERATION section.
- ❑ Check to be sure all screens and safety shields are in place.
- ❑ Check to be sure recommended lubrication procedures are being followed.
- ❑ Check operation and functionality of flow door, flow door indicator, auger fold, and auger pivot.
- ❑ Test run the augers. See "Auger Operation" in OPERATION section.
- ❑ Set tractor PTO control engagement setting to a minimum. Refer to tractor operator's manual for setting information.

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 the tractor hydraulic oil reservoir and add oil if needed.

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

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)

Auger Driveline Assembly

NOTE: Ends of driveshaft are symmetrical.

1. 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. 3-1 and 3-3)
2. Tighten all flangette mounting hardware.
3. With bearing mounting hardware completely 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. 3-1)
4. 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. 3-1, 3-2, and 3-3)
5. Install the universal joint cover to the bearing flange mounts. Review to ensure PVC driveshaft covers and driveline cover located behind the ladder are in place prior to operation.
6. Apply thread lock on bearing setscrews and tighten.

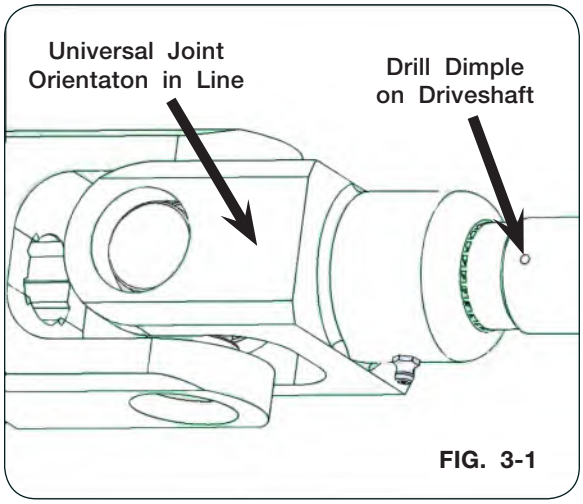


FIG. 3-1

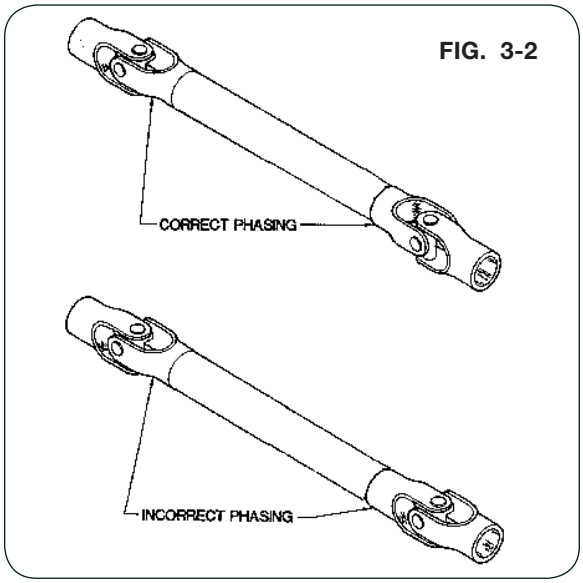


FIG. 3-2

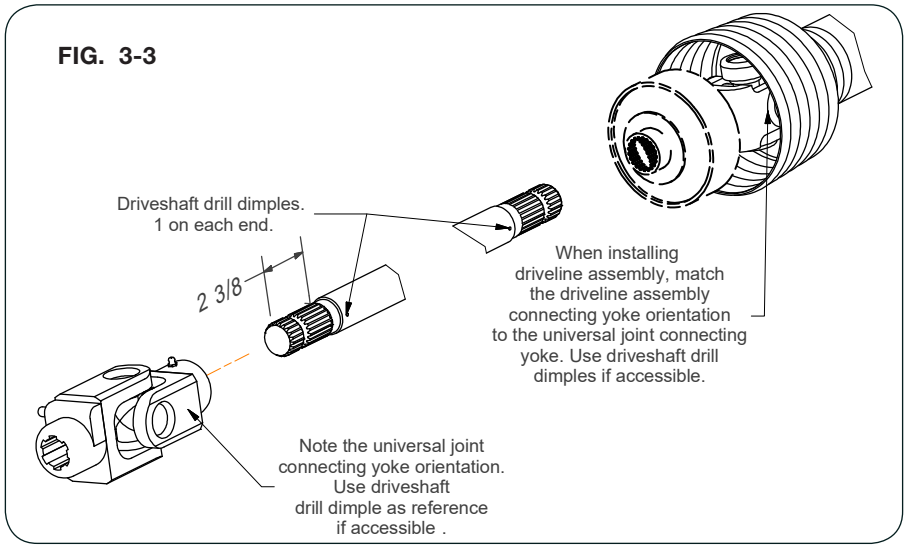


FIG. 3-3

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/offset could result in hub or spindle failure. This will cause substantial damage to cart and is not covered by warranty. Inset/offset will vary depending on tire size. Consult dealer for proper inset/offset.*

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 is equipped standard with a single tang hitch. A hitch pin between 1 1/2" or 2" diameter must only be used with a clevis-type tractor drawbar. An optional hammer strap is available if your tractor has a single tang drawbar.

NOTE: The use of a smaller diameter hitch pin will result in additional clearance between the hitch and pin. This additional clearance may cause accelerated pin wear, tractor and cart hitch wear, along with more pronounced jolting from the cart during transport operation.

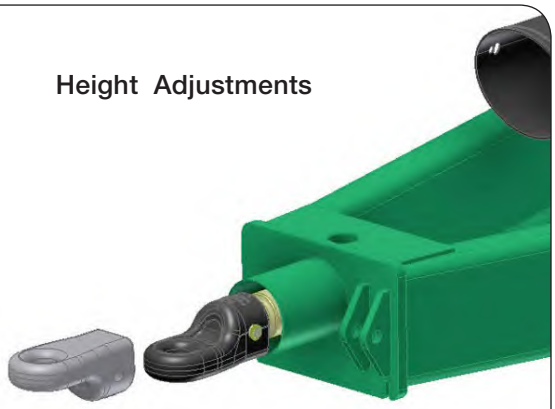
⚠ WARNING

- **DO NOT STAND BETWEEN THE MACHINE AND TRACTOR WHEN HITCHING. ALWAYS ENGAGE PARKING BRAKE AND STOP ENGINE BEFORE INSERTING HITCH PIN.**

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

NOTE: Cast hitch can be flipped providing a drawbar connection height difference of 2 7/8" (FIG. 3-1). 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 reviewed.

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. Refer to "Verify Telescoping PTO Shaft Length" in the MAINTENANCE section for details.



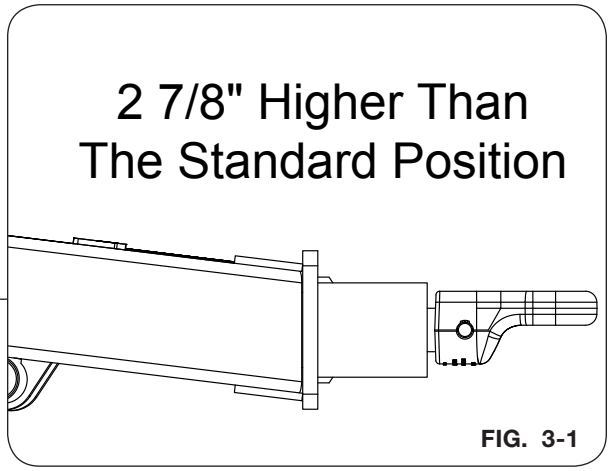


FIG. 3-1

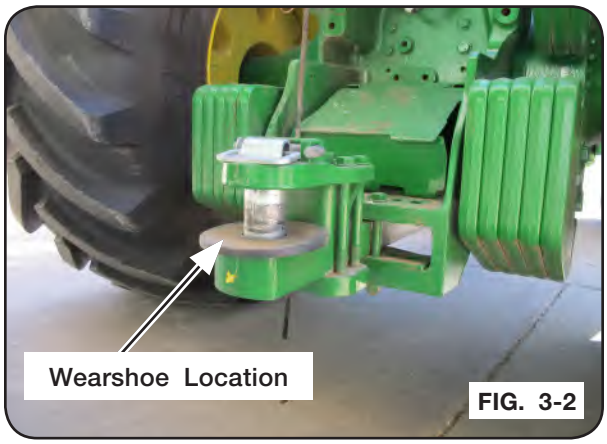


FIG. 3-2

Before inserting hitch pin, apply wearshoe (CAT 3 - 281663; CAT 4 - 281898) to the bottom of the cast hitch (FIG. 3-2).

Hitching to Tractor (continued)

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.*

FIG. 3-3

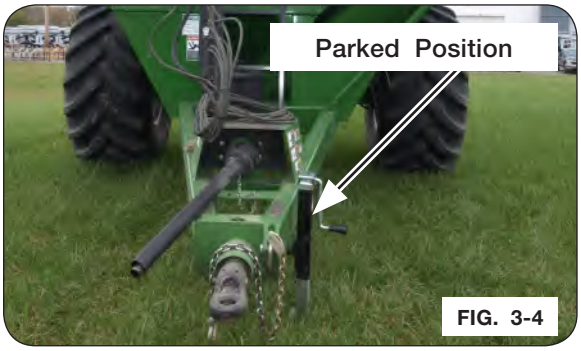


FIG. 3-4

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.**

Always use intermediate chain support when connecting the grain cart directly to a tractor. DO NOT use the intermediate chain support as the chain attaching point. FIG. 3-5 shows how the transport chain must be installed between the tractor and grain cart.

The chain is rated for towing the grain cart empty on public roads. Never tow a loaded grain cart on public roads. Use only ASABE approved chains. Allow no more slack in the chain than necessary to permit turning.


FIG. 3-5

⚠ CAUTION

- **REPLACE TRANSPORT CHAIN IF ANY LINK OR END FITTING IS BROKEN, STRETCHED OR DAMAGED. DO NOT WELD TRANSPORT CHAIN.**

Hitching to Tractor (continued)

Hydraulic Connections

IMPORTANT

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

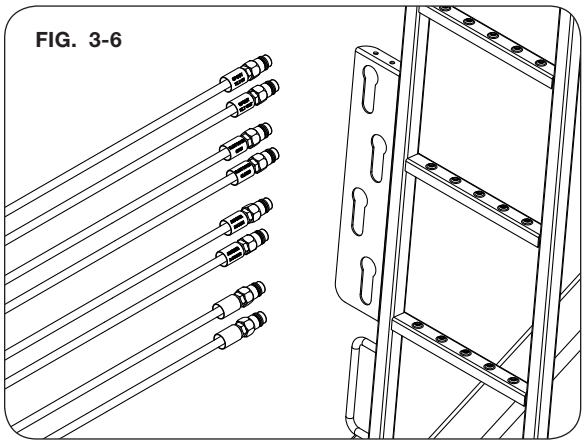


FIG. 3-6

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 coupler #2 and #3, and attach auger fold circuit to coupler #4.

This unit is equipped with color bands attached to the hydraulic hoses. This will help in identifying the hose function and correct hook up.

Green: Raise and Lower Auger
Red: Flow Door Open and Close
Yellow: Spout Left and Right
White: Spout In and Out

After initial set-up or replacement of any hydraulic component on the cart, air must be removed from the cart's hydraulic system.

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's Operator's Manual for the proper procedure. Shut off engine and apply parking brake before disconnecting hoses. Install couplers into storage slots provided.

Hitching to Tractor (continued)

Hydraulic Connections for Hydraulic Drive

Refer to grain cart's Hydraulic Drive Manual (282894) for installation, operation, and parts of the Hydraulic Drive.

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).

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

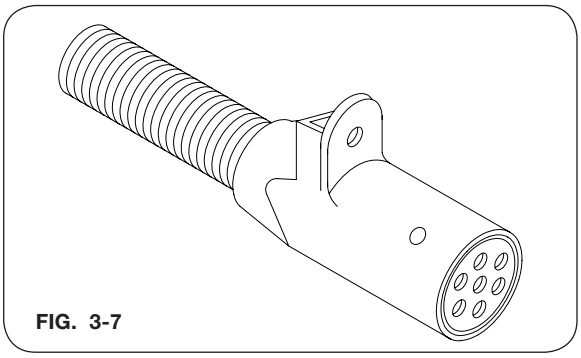


FIG. 3-7

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.

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.

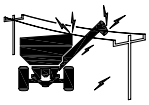
Always have the auger folded back into storage position when not in use.

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

DANGER



- **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 ENTANGLED IN A ROTATING DRIVELINE.**

1. Before loading cart or operating auger, verify that the flow control door is closed.

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.

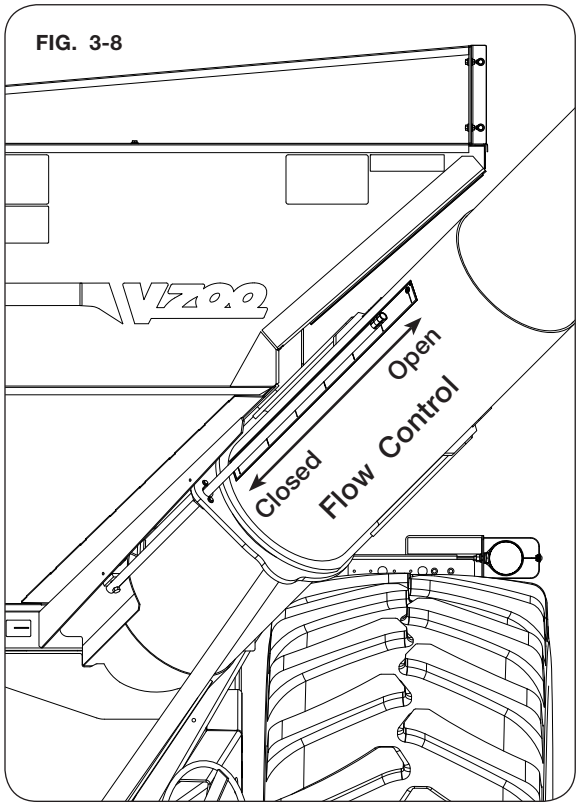
3. Engage PTO at low RPM, then increase the PTO RPM to about 1000 RPM.

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.

FIG. 3-8



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.

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.

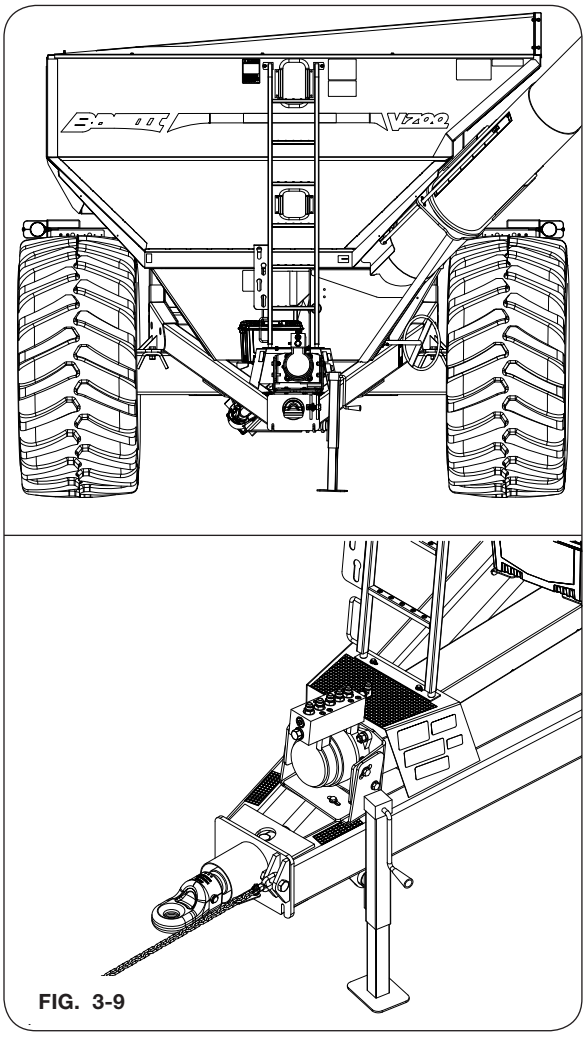


FIG. 3-9

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.

Weather Guard Tarp (Optional)

⚠ 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. If water pools on the tarp, adjust tarp crank handle position on roll tube, adjust tension of tarp cables and/or arm springs as required.*

Always use adequate caution when operating tarp.

Make sure tarp is open before unloading or loading.

Make sure no person or thing is near the tarp system before and during operating.

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

If tarp is covered with snow, it is important to remove 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)

Procedure

1. Using both hands, carefully remove crank handle from holder.

2. Roll tarp to the desired location, choosing either a fully open or fully closed position.

3. To close the tarp, roll the main tarp tube 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.

NOTE: Crank handle U-joint may need to be re-indexed on tarp tube to achieve correct tension.

4. Place crank handle in holder.

5. To open tarp, turn the main tarp tube counter clockwise until the tarp is fully open. Place crank handle in holder. (FIG. 3-18)

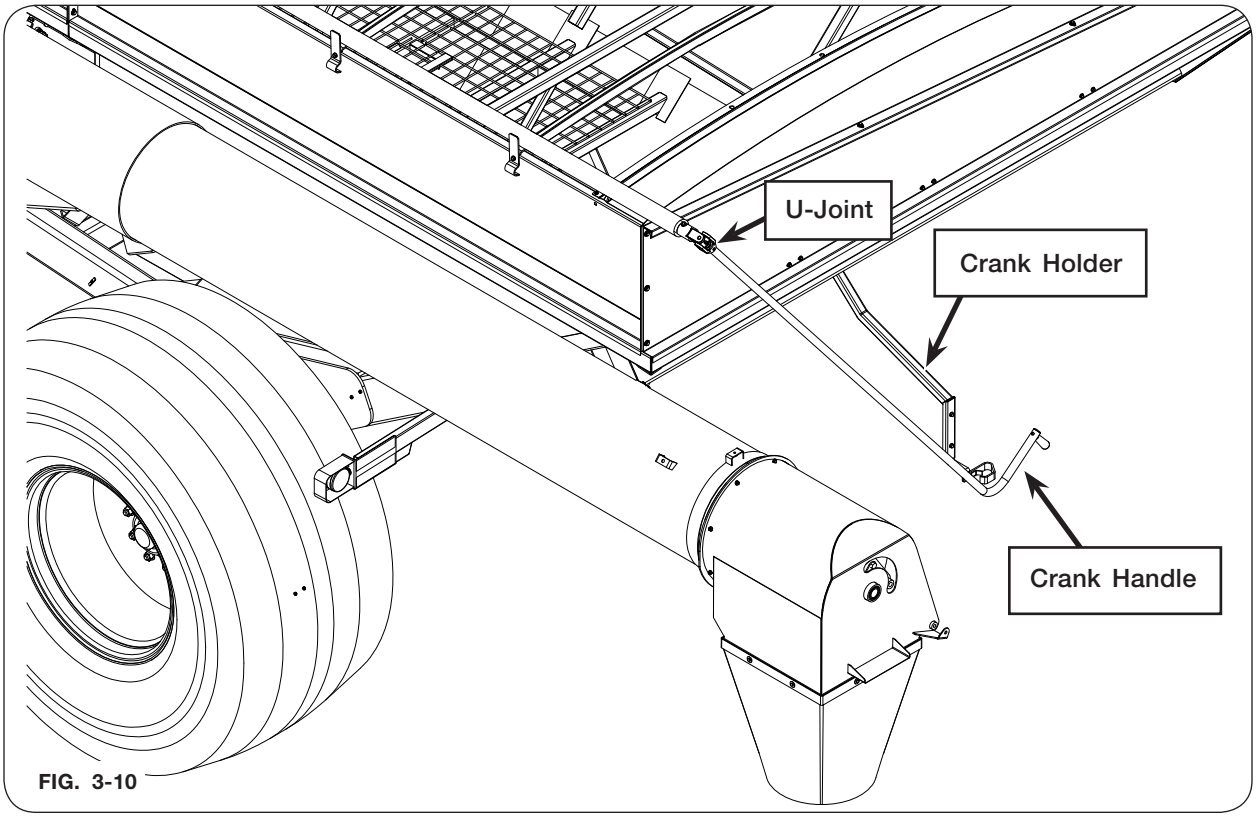


FIG. 3-10

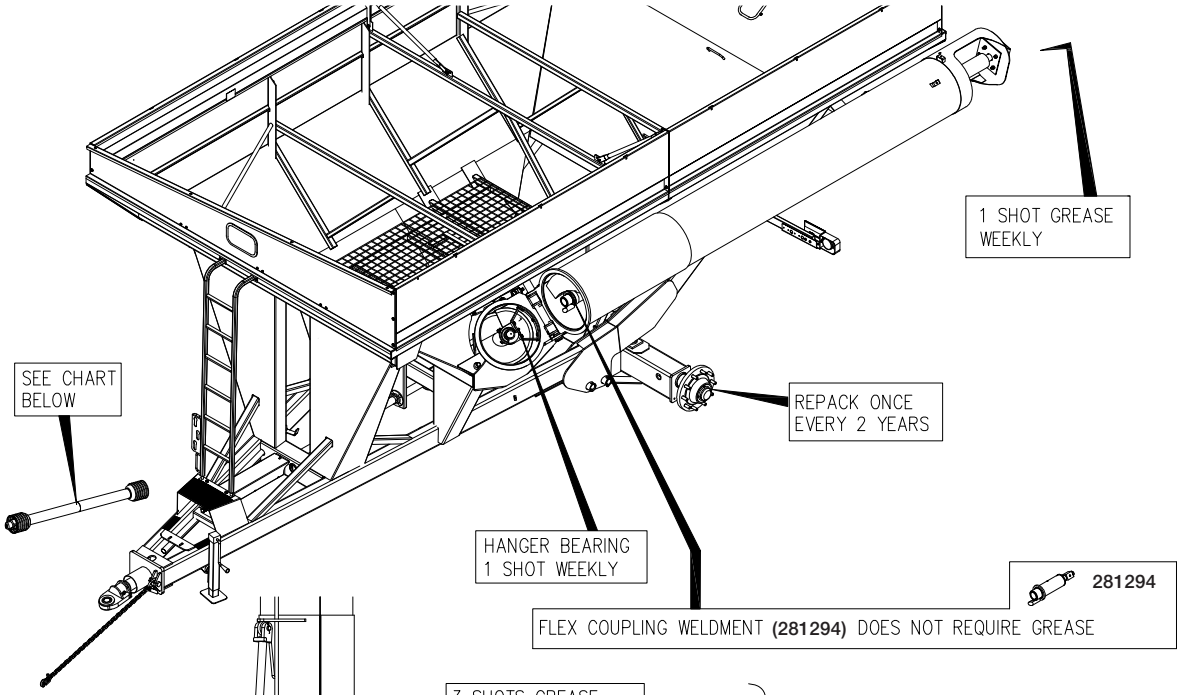
Notes

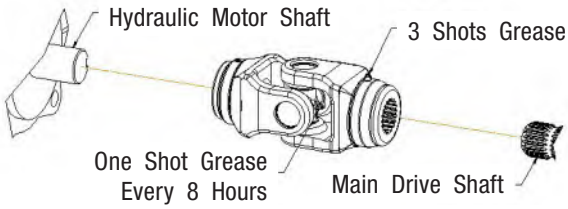
Section IV
Maintenance

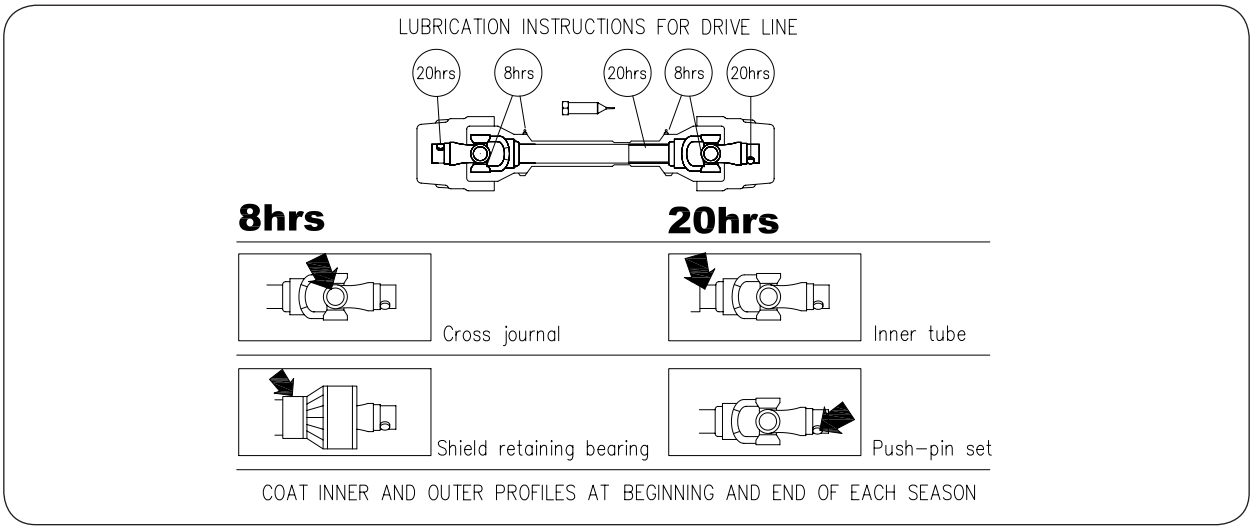
FOR SCALE INFORMATION, PLEASE REFER TO YOUR SCALE MANUAL.
FOR HYDRAULIC DRIVE INFORMATION, PLEASE REFER TO YOUR HYDRAULIC DRIVE MANUAL.

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.



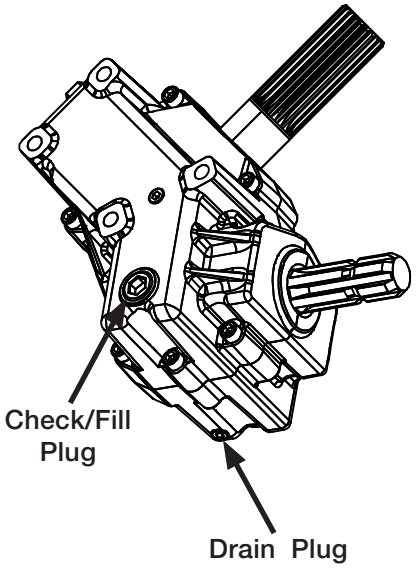




Gearbox Lubrication

Gearbox 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 gearbox life:
Check oil level every 2 weeks.
Replace oil every season with a minimum of 32 fl. oz. to 52 fl. oz. of 80W90 EP gear lubricant.

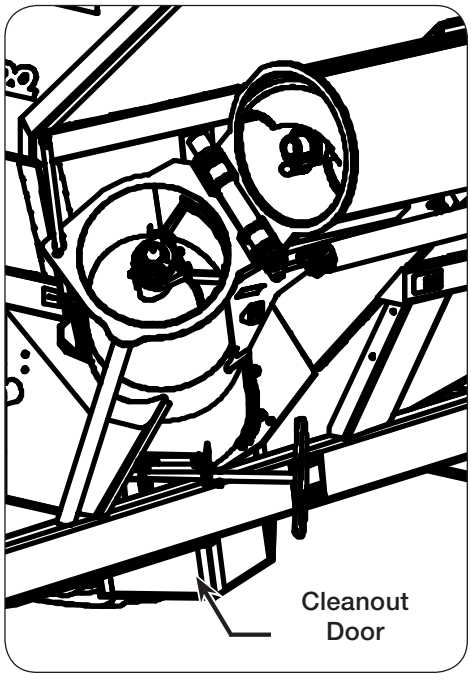


Seasonal Storage

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. Remove dirt and trash which could cause rusting.
2. Repaint any chipped or scraped areas.
3. Lubricate points as shown on previous page.
4. Inspect for damage or worn parts, replace before next season.
5. Store cart inside, away from livestock.
6. Replace all worn, torn or faded decals and reflectors.
7. Fully open flow door and auger cleanout door to remove any remaining grain and to allow moisture to drain.
8. Close the tarp to keep debris out of the hopper.



Auger Driveline

Bearings

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

Driveline Replacement

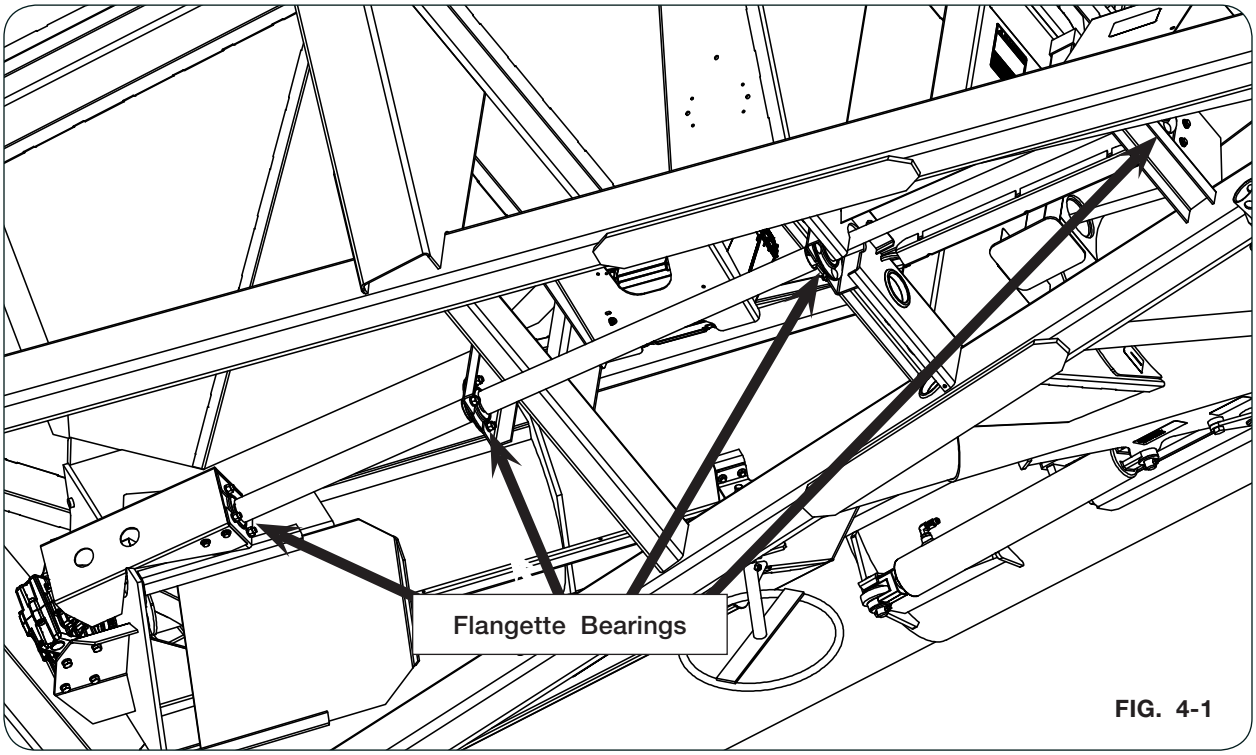


FIG. 4-1

1. Shut off engine and apply parking brake before disconnecting driveline assembly and bearing hardware.
2. Loosen the setscrews (9399-209) on all flangette bearings (92916) (Fig. 4-1).
3. Remove the 3/8" hex bolts (9390-055), flange nuts (9394-006), and lock washers (9404-021) holding the flangette bearings. Keep hardware. (Fig. 4-2).
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.

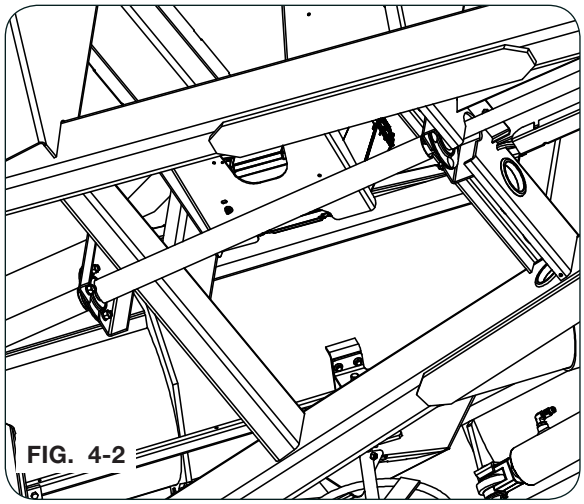


FIG. 4-2

6. Remove bearings, bearing mounts, universal joint cover, PVC driveshaft covers, driveshaft collars (if collars are attached to driveshaft), and driveline cover, located behind the ladder, off the current driveshaft.

Auger Driveline (continued)

Driveline Replacement (continued)

7. Slide new 1 3/8” dia. shaft collars (9008675) to both sides of new bearing (92916) closest to the U-Joint, when installing bearings onto new driveshaft (9007640).

8. Assemble new PVC driveshaft cover (286848) between new bearings (92916), when installing bearings onto new driveshaft (9007640).

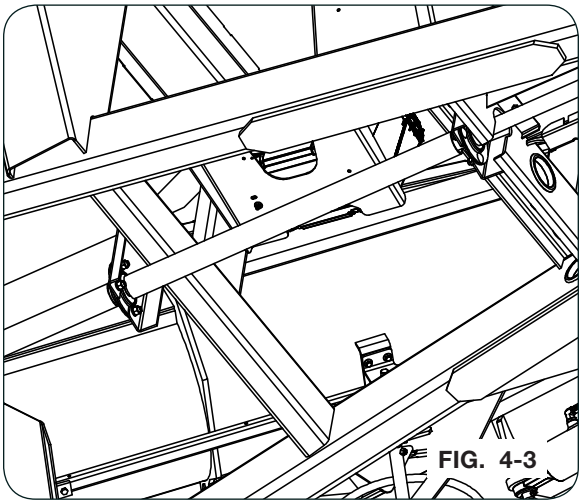


FIG. 4-3

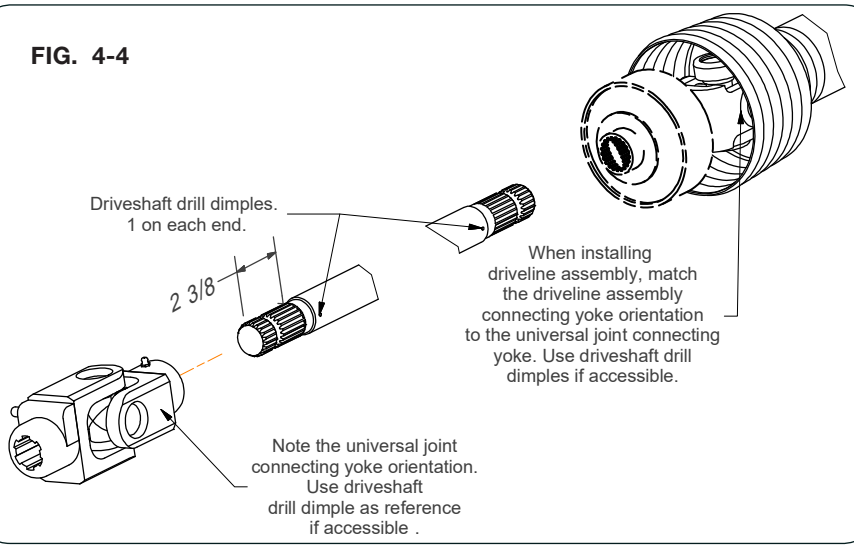
NOTE: Ends of driveshaft are symmetrical.

9. Slide the hitch end of the driveshaft, bearing and hitch driveline cover into the bearing near hitch of the cart. (FIG. 4-3)

10. Raise the gearbox end of the drive shaft up and insert the original 3/8” hex bolts, flange nuts, and lock washers 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.

11. 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. 4-4)

FIG. 4-4



Auger Driveline (continued)

Driveline Replacement (continued)

12. Tighten all flangette mounting hardware.

13. With bearing mounting hardware completely 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. 4-5)

14. 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. 4-5, 4-6, and 4-7)

NOTE: Check/fill gearbox and grease universal joint before installing universal joint cover.

15. Attach original universal joint cover to the bearing mount in front of the gearbox using original 3/8"-16UNC capscrews and 3/8"-16UNC flange nuts. Review to ensure PVC driveshaft covers and driveline cover, located behind the ladder, are in place and hardware tightened prior to operation.

16. Apply thread lock on bearing setscrews and tighten.

17. Test run driveline. Verify smooth driveline operation.

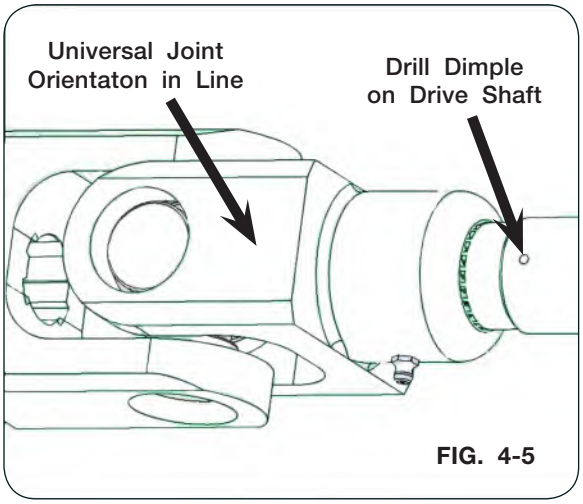


FIG. 4-5

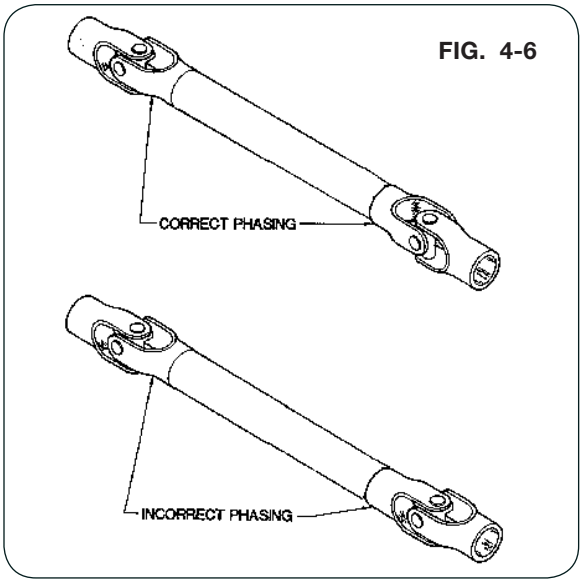
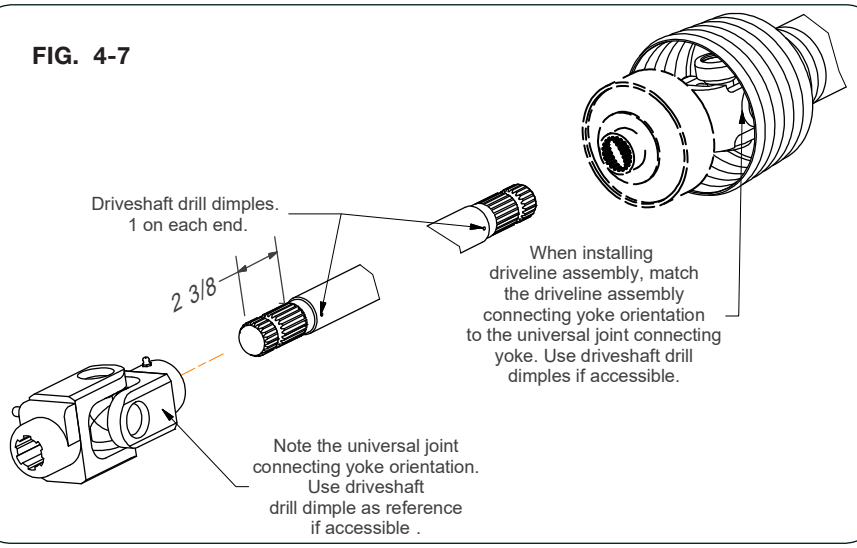


FIG. 4-6

FIG. 4-7



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 3/8” flat washers (9405-076), three 3/8” lock washers (9404-021) and 3/8”-16UNC hex nuts (9394-006) which secures the hanger bearing weldment (281620B) to the auger tube (Fig. 4-1).

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), 5/8” lock washers (9404-029) and 5/8”-11UNC hex nuts (9394-014) which secures the drive dog to the auger as shown in FIG 4-1.

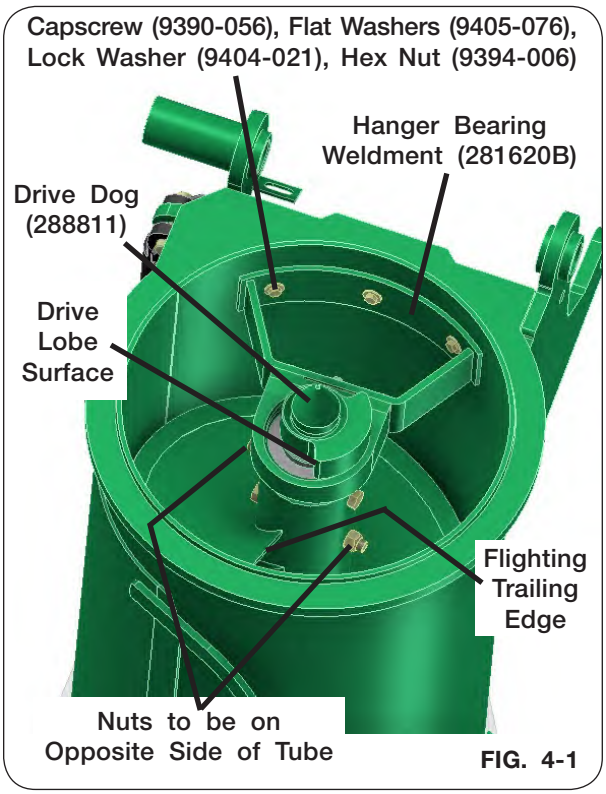


FIG. 4-1

Auger System (continued)

Lower Auger Assembly

1. For the lower auger, use the top edge of the flighting as a 12 o'clock reference. Position the drive dog so the driving edge is at the 5 o'clock position. (FIG. 4-2)

   Lower Auger: Assemble the drive dog weldment (288811) and hanger bearing weldment (281620B) 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), 5/8" lock washers (9404-029) and 5/8"-11UNC hex nuts (9394-014), installed opposite of each other, as shown in Fig. 4-1.

NOTE: Looking down at the lower flighting (as in Fig. 4-2) the auger rotation will be clockwise. When looking up at the upper flighting (as in Fig. 4-3) the auger rotation will be counter-clockwise.

2. For the top auger, use the bottom edge of the flighting as a 12 o'clock reference. Position the driven edge of the drive pin at the 7 o'clock position. (Fig. 4-3)

FIG. 4-2

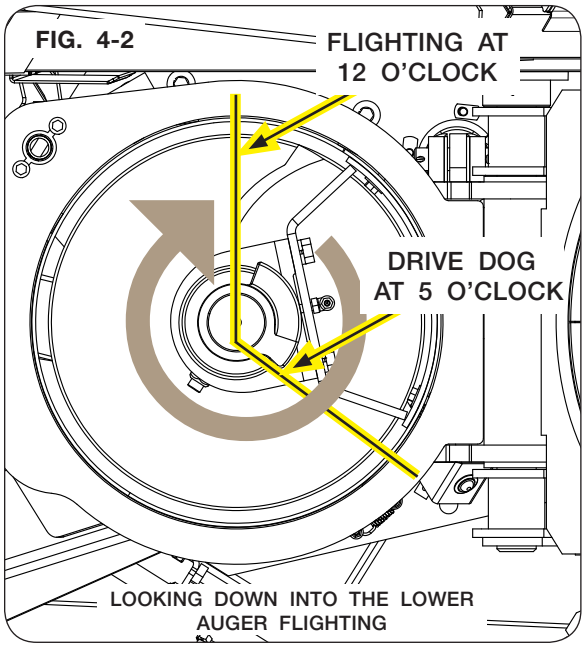
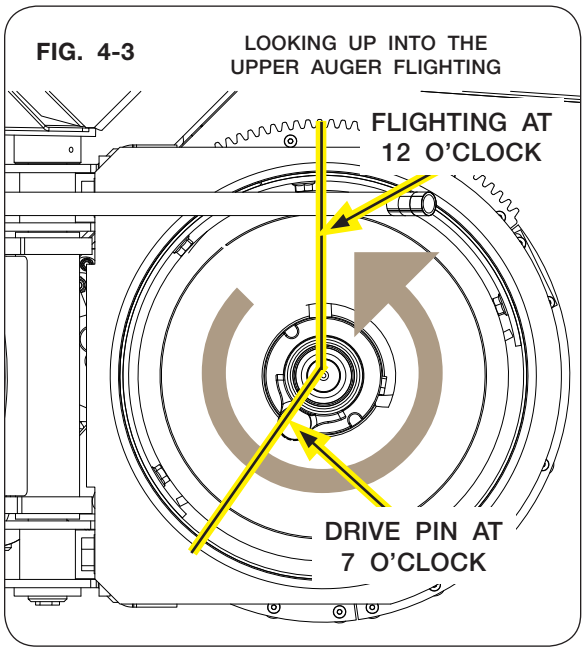


FIG. 4-3



Auger System (continued)

Lower Auger Assembly

3. When engaged, the top flighting should immediately follow the bottom flighting as pictured in (Fig. 4-4).

FIG. 4-4

4. Using a safe lifting device rated for a minimum of 700 lbs., install the lower auger subassembly 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 3/8” flat washers (9405-076), three 3/8” lock washers (9404-021) and 3/8”-16UNC hex nuts (9394-006) (Fig. 4-5).

5. Once secure, tighten hanger bearing weldment hardware.

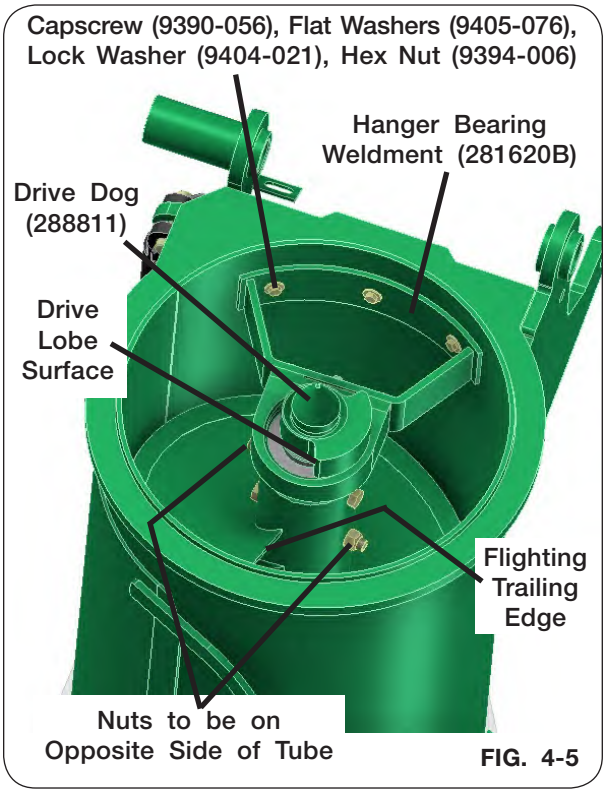


FIG. 4-5

Auger System (continued)

Lower Auger Assembly (continued)

6. 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. 4-6 & Fig. 4-7)

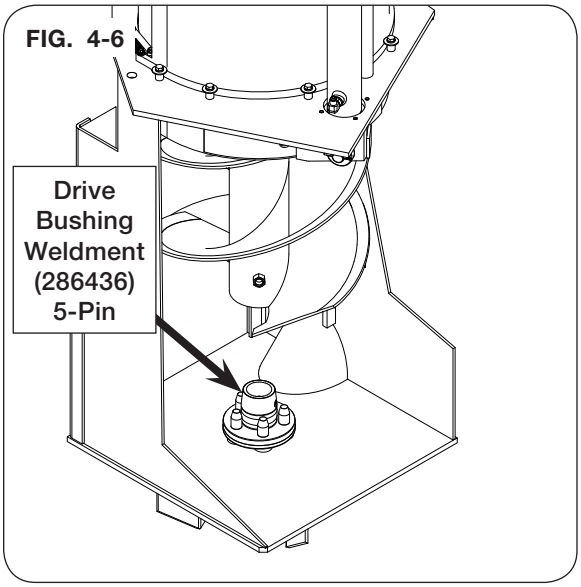


FIG. 4-6

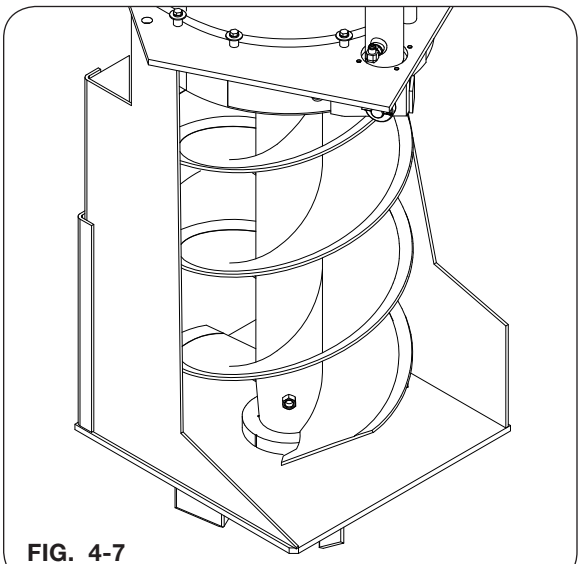


FIG. 4-7

7. Raise the upper auger into position, checking upper drive dog engagement with lower auger drive dog.

8. Lower the upper auger. Lubricate the pillow block bearing (9004731) (Fig. 4-8). Check and remove any loose parts in the auger tube interior prior to start-up.

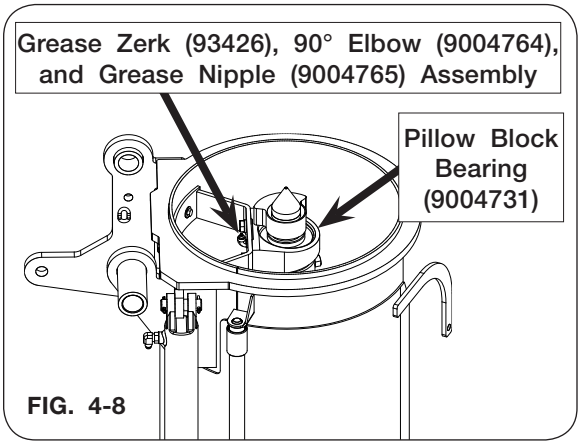


FIG. 4-8

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.
3. Disconnect auger and chute light.
4. Remove chute assembly.
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.
6. Lift upper auger assembly from unit. Repair or replace as required.
7. To remove auger from tube, loosen two bearing setscrews and remove 5/16” x 2” machine screw retainer.
8. Inspect upper auger bearing, springs and four 1/2” x 5 1/2” capscrews and locknuts. Replace if necessary.

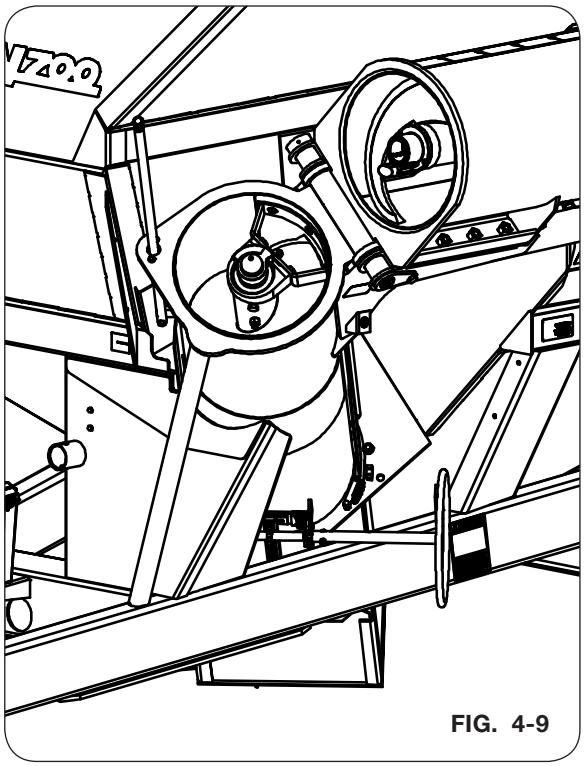


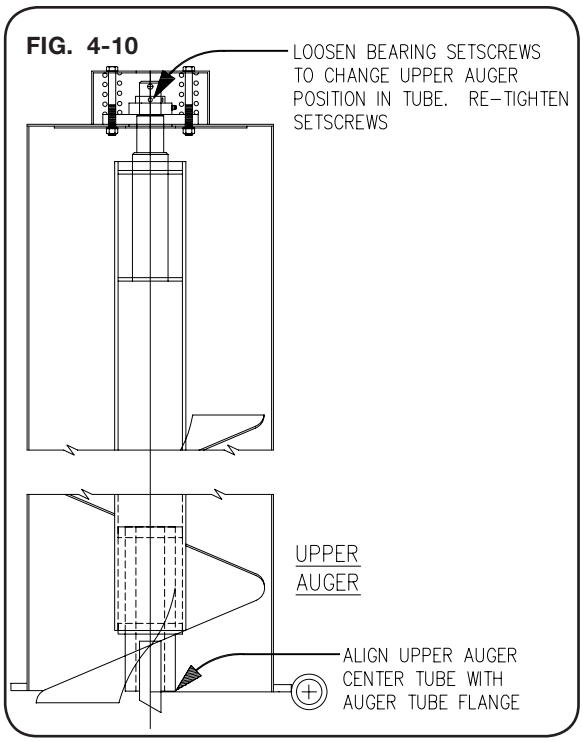
FIG. 4-9

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. Retain auger with 5/16” x 2” machine screw and nut.
3. Position opposite auger end flush with auger tube flange and tighten bearing setscrews and 5/16” x 2” machine screw
4. Lift upper auger assembly into position using and 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.
5. Install chute assembly.
6. Connect auger and chute light.
7. Reinstall hydraulic cylinder and pivot pins. Clamp hoses into position and recheck connector tightness.

FIG. 4-10



Auger System (continued)

Auger Flow Door Cylinder Replacement

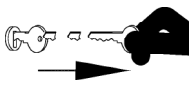
WARNING

- **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. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM.**

- **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 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. 4-11.

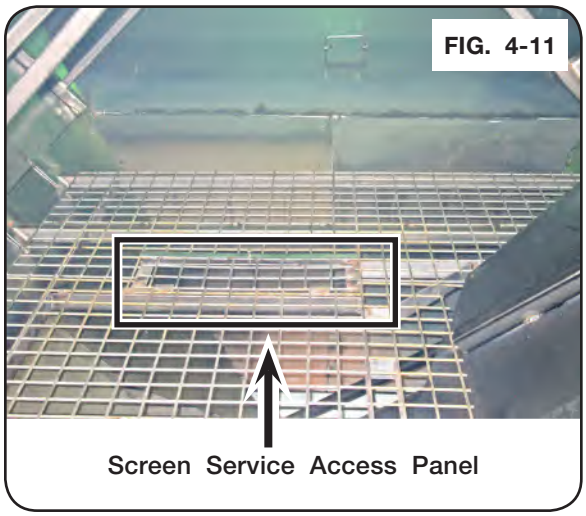


FIG. 4-11

Screen Service Access Panel

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. 4-12.

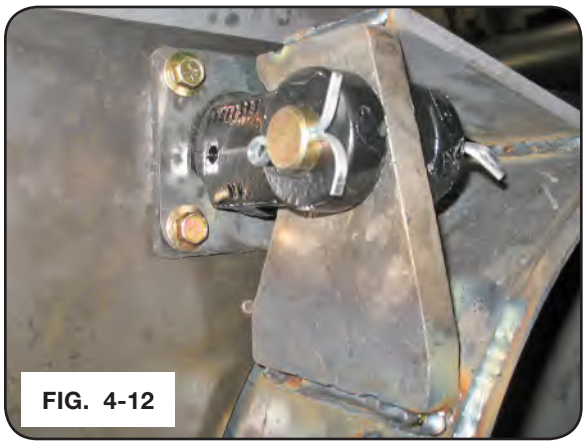
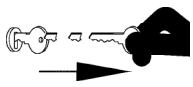


FIG. 4-12

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. 4-13).

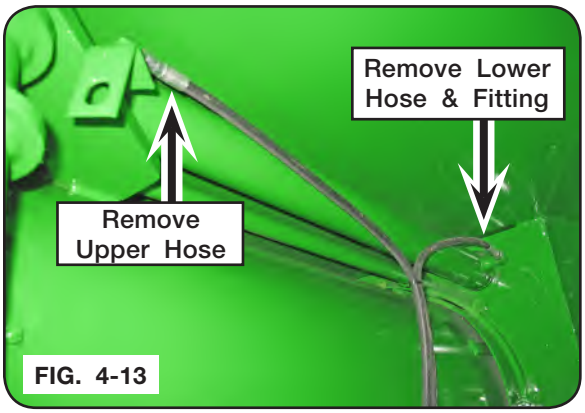


FIG. 4-13

7. Remove the cotter pins from the upper cylinder pin and remove pin (Fig. 4-14).

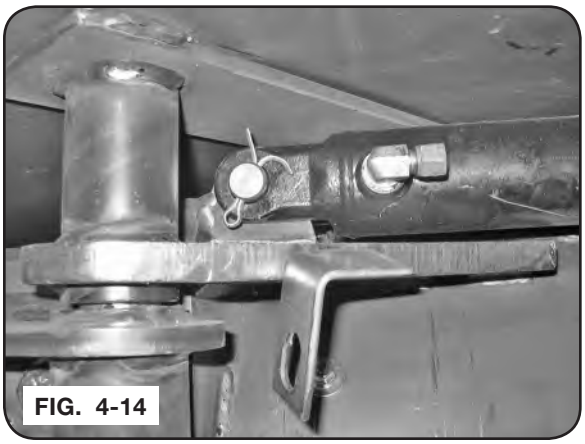


FIG. 4-14

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**, purge air from system as follows:

    A. Pressurize the system and maintain system at full pressure for at least 5 seconds after cylinder rods stop moving. Check that all cylinders have fully extended or retracted.
    B. Check oil reservoir in hydraulic power source and re-fill as needed.
    C. Pressurize system again to reverse the motion of step A. Maintain pressure on system for at least 5 seconds after cylinder rods stop moving. Check that cylinders have fully extended or retracted.
    D. Check for hydraulic leaks using cardboard or wood. Tighten connections according to directions in the Torque Specifications in your Operator’s Manual.
    E. Repeat steps A, B, C and D three or four times.

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. 4-15).

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

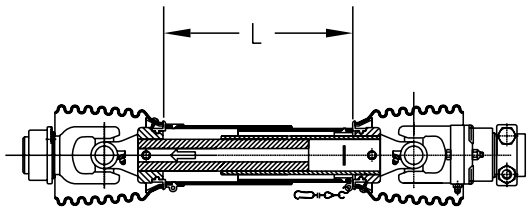


FIG. 4-15

2. Pull apart PTO telescoping shaft ends and measure lengths "T" & "C" (Fig. 4-16).

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

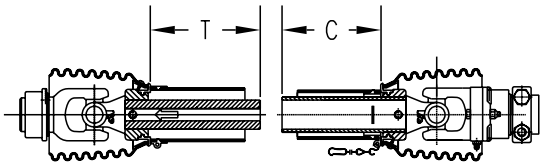


FIG. 4-16

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.

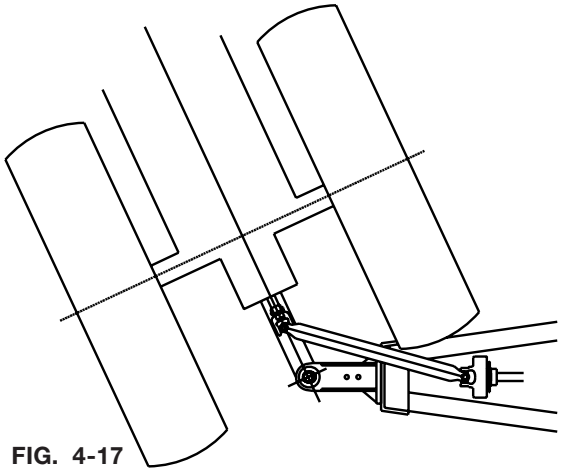


FIG. 4-17

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.

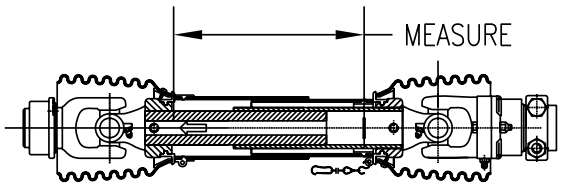


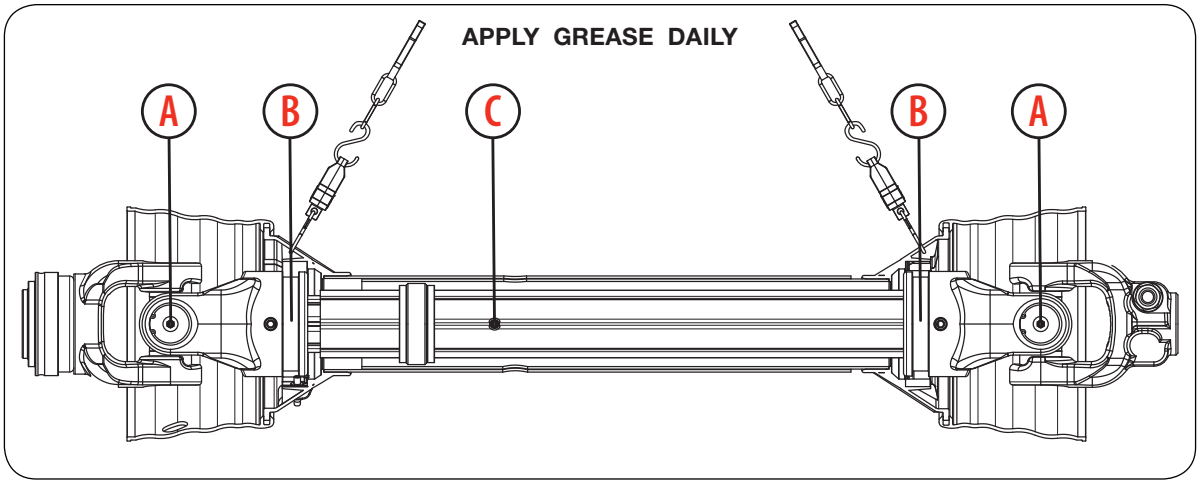
FIG. 4-18

PTO Shaft and Clutch - Benzi PTO
For SN B41980100 & Higher

Lubrication

Lubricate with NLGI grade 2 grease before starting work and every 8 operating hours. Clean and grease PTO drive shaft before each prolonged period of non-use. Molded nipples on the shield near each shield bearing are intended as grease fittings and should be lubricated every 8 hours of operation! Check and grease the guard tubes in winter to prevent freezing.

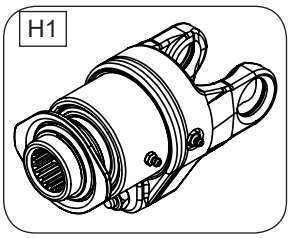
NOTE: Telescoping members must have lubrication to operate successfully regardless of whether a grease fitting is provided for that purpose! Telescoping members without fittings should be pulled apart and grease should be added manually.

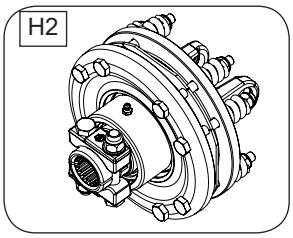


PTO Shaft and Clutch - Benzi PTO (continued)
For SN B41980100 & Higher

Shear-Bolt and Friction Clutches (Figs. H1 - H3)

1. **Shear bolt clutches:**
When the set torque value is exceeded, power flow is interrupted due to the bolt shearing. The torque is re-established by replacing the broken shear bolt. Use only the bolt specified in the PARTS section for replacement.
(FIG. H1)

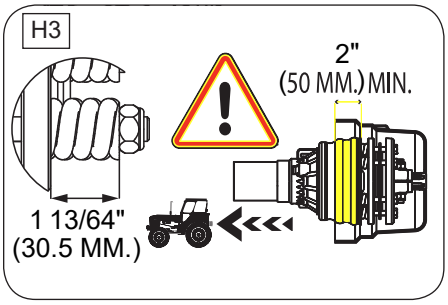




Friction clutches:
When overload occurs, the torque is limited and transmitted constantly during the period of slipping. Short-duration torque peaks are limited. (FIG. H2)

Verify the overlap between the implement guard cone and PTO driveshaft is at least 2” (50 mm). (FIG. H3)

When replacing the friction disks, screw spring nuts to height of 1 13/64” (30.5 mm) and torque to 892.5 ft.-lbs. (1210 NM). See FIG. H3 shown.



Prior to first utilization and after long periods out of use, check working of disk clutch.

a. Loosen spring nuts by unscrewing in two complete turns. Rotate clutch fully to unlock device.
b. Tighten nuts in two complete turns. Now the clutch is ready for use.

IMPORTANT

- *Avoid extended and frequent slippage of over-load clutches.*

PTO Shaft and Clutch - Benzi PTO (continued)
For SN B41980100 & Higher

To Dismantle Guard (Figs. J1 - J3)

1. Pull the guard tube backwards and, using a screwdriver, disengage the three bearing ring tabs by pushing them inward. (FIG. J1)

2. Remove half-guard. (FIG. J2)

3. Open the bearing ring and remove from the yoke groove. (FIG. J3)

PTO Shaft and Clutch - Benzi PTO (continued)
For SN B41980100 & Higher

To Assemble Guard (Figs. K1 - K3)

1. Clean and grease the bearing ring, yoke groove and inner profile tube. (FIG. K1)

2. Fit bearing ring in groove with three bearing ring tabs positioned as shown. (FIG. K2)

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. K2)

4. Push half-guard and yoke together causing the half-guard to engage. (FIG. K3)

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

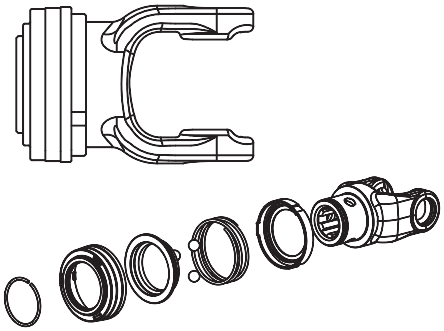
5. Confirm half-guard engagement by pulling backwards on the half-guard. (FIG. K3)

PTO Locking Systems - Benzi PTO
For SN B41980100 & Higher

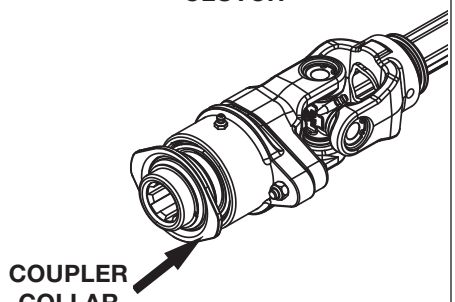
Ball-Type Collar Coupling

Slide clamp yoke or clutch onto connecting shaft. Pull in the coupler collar to release the balls and simultaneously push PTO driveshaft into the connecting shaft until the coupler collar locks onto the connecting shaft annular grooves. Slightly moving the clamp yoke or clutch to and from in the axial direction will help drive in the clamping cone. Check the clamp yoke or clutch for a tight and safe fit and continue to check at regular intervals.

END YOKE



SHEARBOLT CLUTCH WITH OVERRUNNING CLUTCH



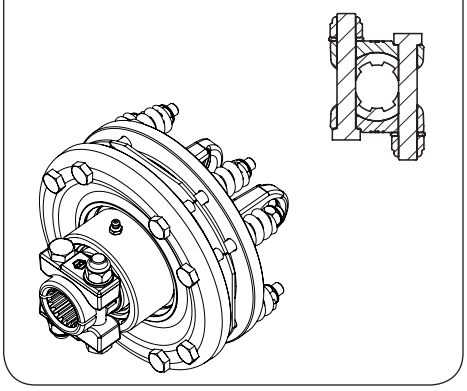
Clamp Bridge Coupling For Friction Clutch

Remove the bolts from the yoke hub. Insert the yoke hub onto the connecting shaft. Ensure the holes for the clamping bridge and hub are above the annular grooves of the connecting shaft. Insert the bolts, position the washers and tighten to recommended torque: M12 = 70 ft.-lbs.; M14 = 107 ft.-lbs.; M16 = 154 ft.-lbs.

⚠ WARNING

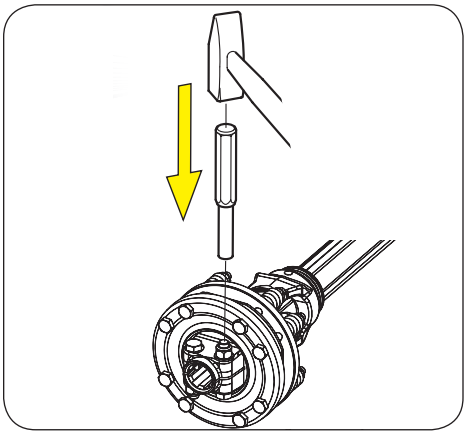
- **CHECK TO ENSURE ALL THE LOCKS ARE SECURELY ENGAGED BEFORE STARTING WORK WITH THE PTO DRIVESHAFT.**

CLAMP BRIDGE LOCK



Clamp Bridge Uncoupling

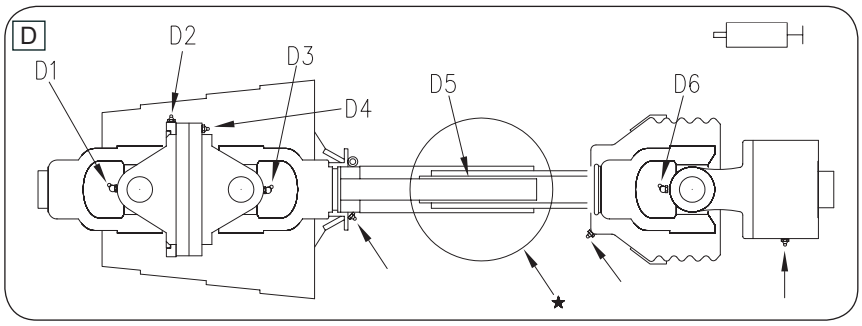
Unscrew the bolts a partial turn. Use the punch and hammer to help alleviate the torque resistance on the wrench, if necessary. After a few cycles, the bolts will move freely with low torque resistance for the removal process.

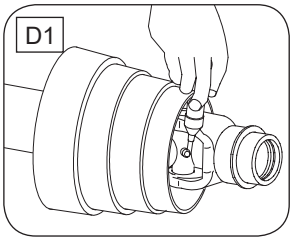


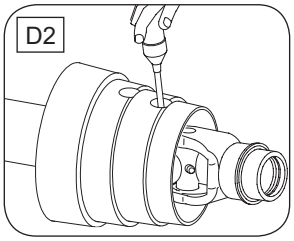
PTO Shaft and Clutch - GKN Walterscheid PTO
For SN B41980099 & Lower

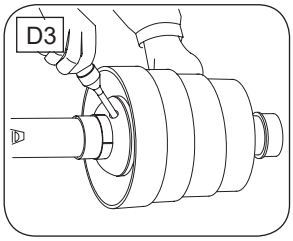
Lubrication (Figs. D1 - D6)

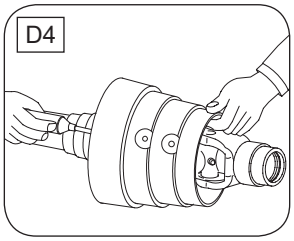
Lubricate with quality grease before starting work and every 8 operating hours. Clean and grease PTO drive shaft before each prolonged period of non-use. Molded nipples on the shield near each shield bearing are intended as grease fittings and should be lubricated every 8 hours of operation! Telescoping members must have lubrication to operate successfully regardless of whether a grease fitting is provided for that purpose! Telescoping members without fittings should be pulled apart and grease should be added manually. Check and grease the guard tubes in winter to prevent freezing.

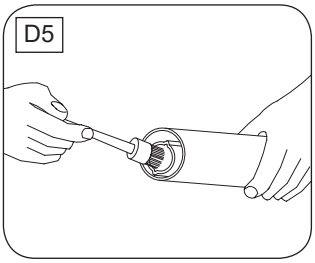


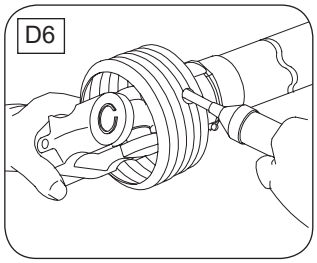












PTO Shaft and Clutch - GKN Walterscheid PTO (continued)
For SN B41980099 & Lower

Coupling the PTO drive shaft (Figs. E1 - E2)

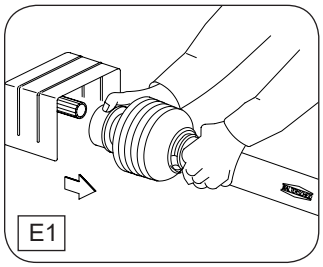
Clean and grease the PTO and implement input connection (IIC)

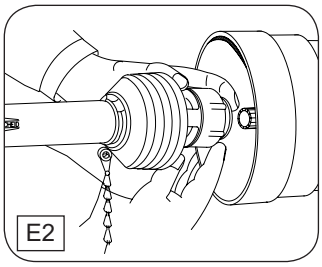
AS-Lock

1. Pull locking collar and simultaneously push PTO drive shaft onto PTO shaft until the locking device engages.

Push-Pull Lock

2. Pull locking collar and simultaneously push PTO drive shaft onto PTO shaft until the locking device engages.





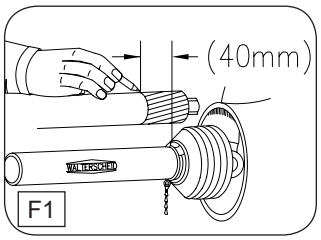
⚠ WARNING

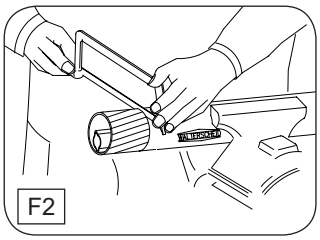
- **CHECK TO INSURE ALL THE LOCKS ARE SECURELY ENGAGED BEFORE STARTING WORK WITH THE PTO DRIVESHAFT.**

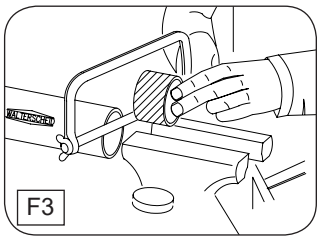
Length Adjustment (Figs. F1 - F4)

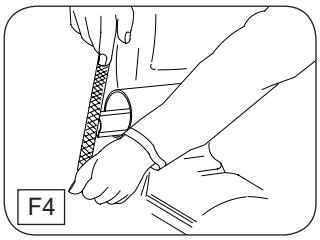
NOTE: Maximum operating length LB. (Refer to "Verify Telescoping PTO Shaft Length" for LB length.)

1. To adjust length, hold the half-shafts next to each other in the shortest working position and mark them.
2. Shorten inner and outer guard tubes equally.
3. Shorten inner and outer sliding profiles by the same length as the guard tubes.
4. Round off all sharp edges and remove burrs. Grease sliding profiles.









⚠ WARNING

- **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.**

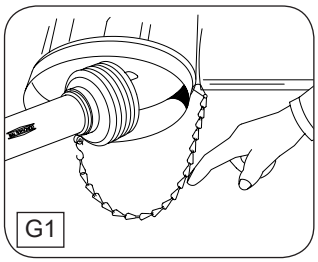
PTO Shaft and Clutch - GKN Walterscheid PTO (continued)
For SN B41980099 & Lower

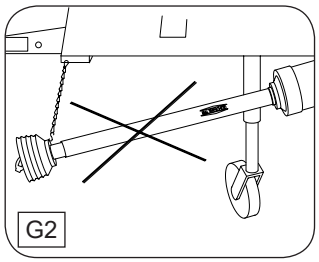
Chains (Figs. G1 - G3)

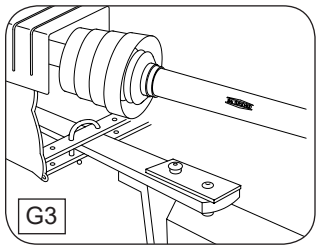
NOTE: The chain is intended to prevent the shield from rotating against non-moving parts and thereby preventing shield damage. A properly installed chain will increase the service life of the shield.

1. Chains must be fitted so as to allow sufficient articulation of the shaft in all working positions. Care must be taken to be sure that chain does not become entangled with drawbar hitch or other restrictions during operation or transport of machine.

2. The PTO drive shaft must not be suspended from the chain.







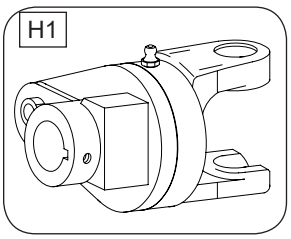
Shear-Bolt and Friction Clutches (Figs. H1 - H3)

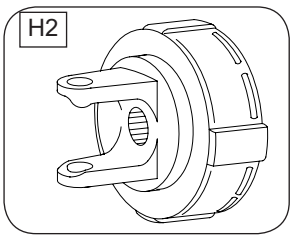
1. **Shear-bolt clutches:**
   When the torque is exceeded, power flow is interrupted due to the bolt shearing. The torque is re-established by replacing the broken shear-bolt. Use only the bolt specified in the Operator's Manual for replacement. Remove locking screw.

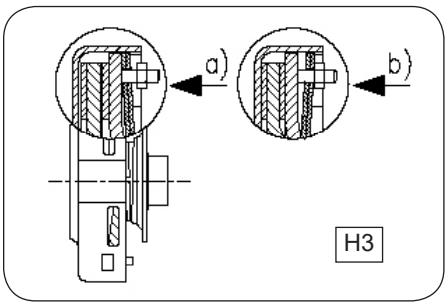
   Friction clutches:
   When overload occurs, the torque is limited and transmitted constantly during the period of slipping. Short-duration torque peaks are limited.

   Prior to first utilization and after long periods out of use, check working of disk clutch.

   a. Tighten nuts until friction disks are released. Rotate clutch fully.
   b. Turn nuts fully back. Now the clutch is ready for use. Fig. H3 shown.







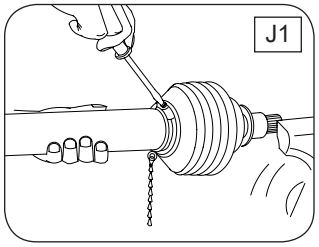
IMPORTANT

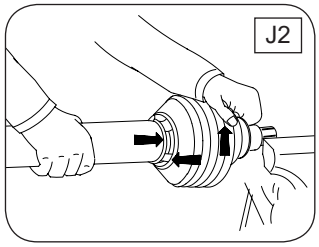
- *Avoid extended and frequent slippage of overload clutches.*

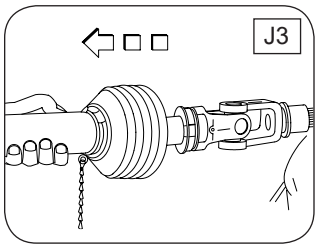
PTO Shaft and Clutch - GKN Walterscheid PTO (continued)
For SN B41980099 & Lower

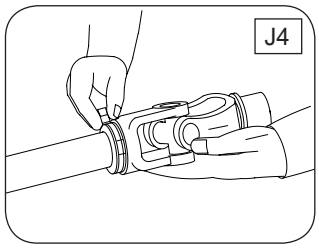
To Dismantle Guard (Figs. J1 - J4)

1. Remove locking screw.
2. Align bearing tabs with cone pockets.
3. Remove half-guard.
4. Remove bearing ring.



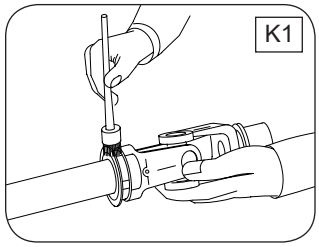


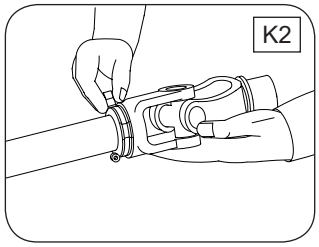


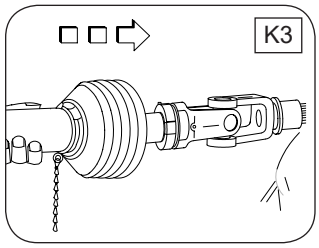


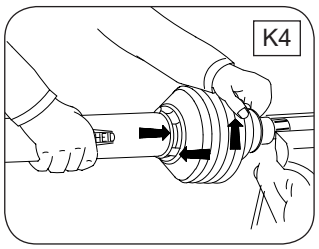
To Assemble Guard (Figs. K1 - K5)

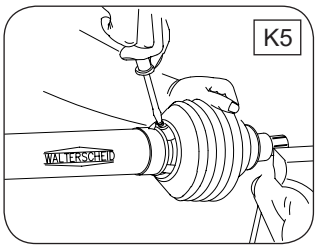
1. Grease yoke groove and inner profile tube.
2. Fit bearing ring in groove with recesses facing profile tube.
3. Slip on half-guard.
4. Turn cone until it engages correctly.
5. Install locking screw.







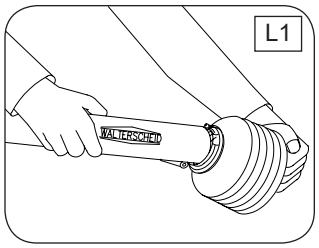


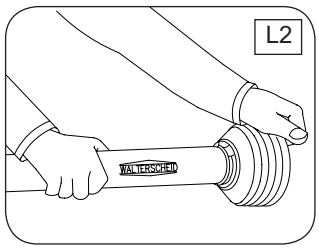


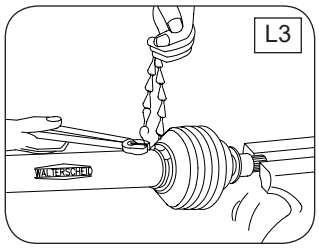
PTO Shaft and Clutch - GKN Walterscheid PTO (continued)
For SN B41980099 & Lower

To Assemble Cone (Figs. L1 - L3)

1. Dismantle guard (Figs. J1 - J3). Remove old cone (e.g. cut open with knife). Take off chain. Place neck of new cone in hot water (approx 80° C / 180° F) and pull onto bearing housing (Fig. L1).
2. Turn guard cone into assembly position (Fig. L2). Further assembly instructions for guard (Figs. K1 - K5).
3. Reconnect chain if required (Fig. L3).



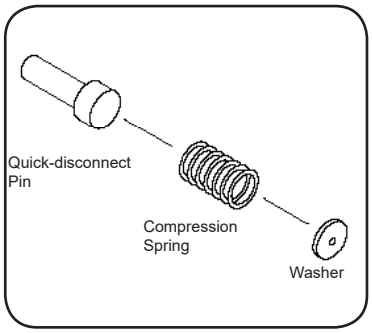


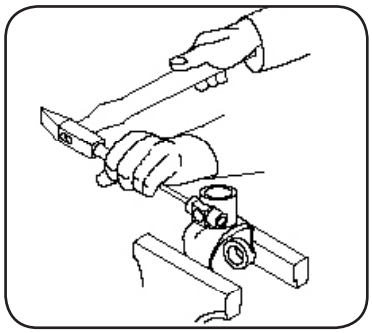


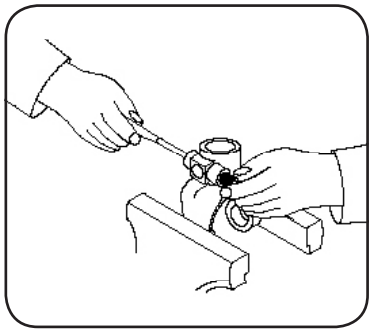
PTO Quick Disconnect - GKN Walterscheid PTO
For SN B41980099 & Lower

Quick Disconnect Pin

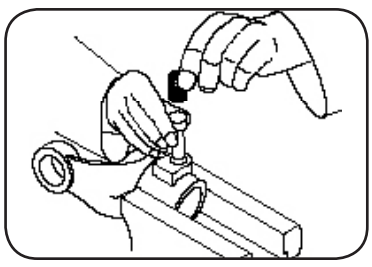
Using a drift punch and hammer, drive the pin towards the retaining washer to force the complete assembly out. Clear the edges of the retaining washer bore to accept the new one by removing the deformed metal from the last peening operation to hold the washer in place.

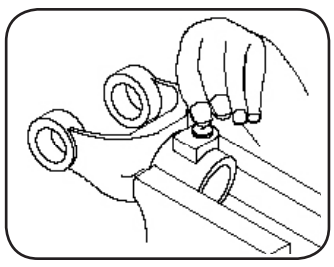


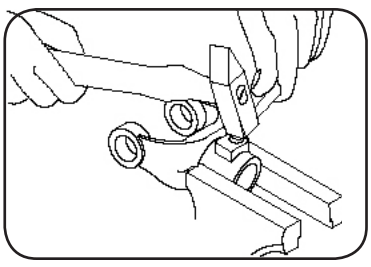




Insert quick-disconnect pin, compression spring and washer into hole, Holding the washer in place, peen the edges of the pore seat to retain the washer, spring and pin.



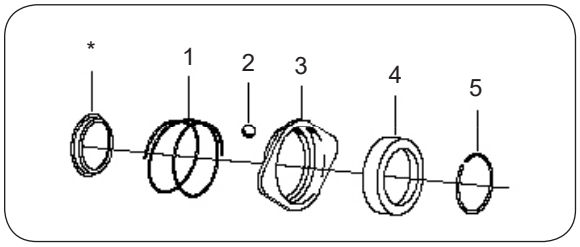




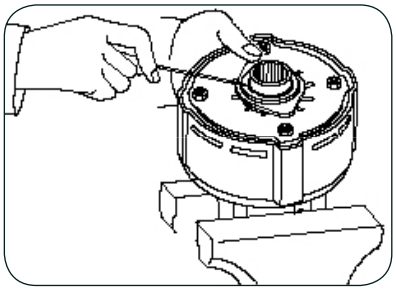
PTO Quick Disconnect - GKN Walterscheid PTO (continued)
For SN B41980099 & Lower

Quick Disconnect Disassembly

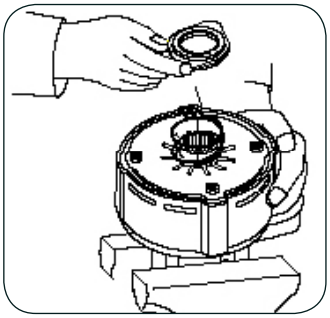
1. Compression Spring
2. Ball
3. Lock Collar
4. Back-up ring
5. Snap ring
   * Back-up ring
   * (For some clutch types, place additional back up ring first).



Compress lock collar (#3) and remove snap right (#5).

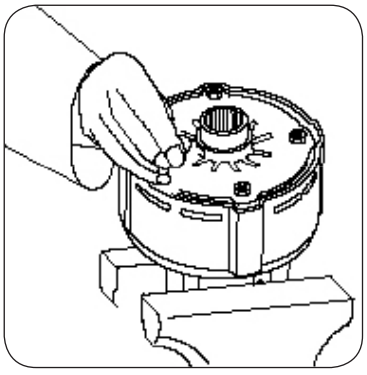


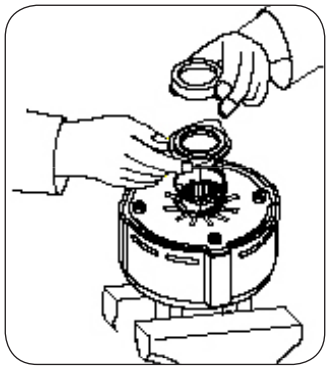
Remove back-up ring, lock collar, compression spring and balls.

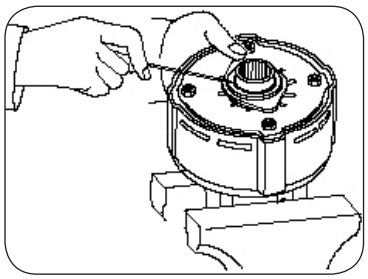


Quick Disconnect Assembly

Insert balls. Place compression spring, lock collar and back-up ring onto the hub. Remove back-up ring, lock collar, compression spring and balls.



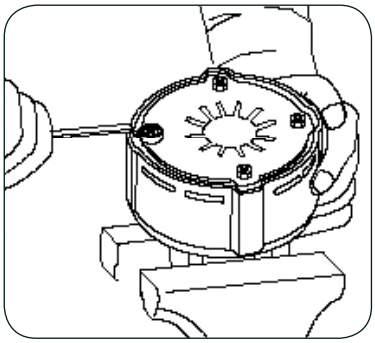
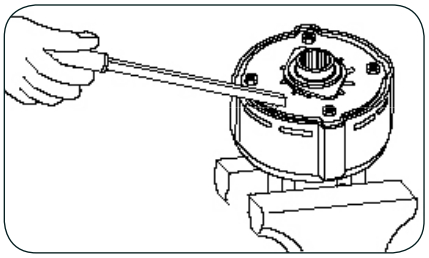
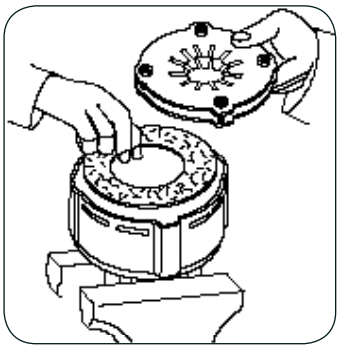




PTO Quick Disconnect - GKN Walterscheid PTO (continued)
For SN B41980099 & Lower

Clutch Disassembly

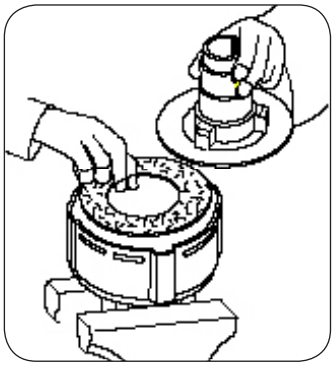
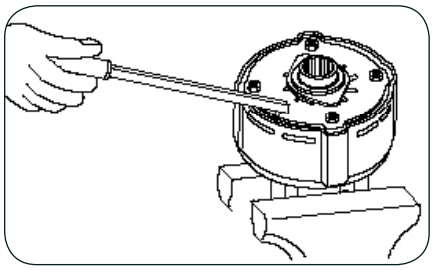
Tighten the four hex nuts uniformly until the clutch pack and hub are loose. Use special tool 9002007 to bend all four retaining lugs back on the edge of the clutch housing. Remove the thrust plate with Belleville springs to get at the friction disks, drive plates and hub for inspection and service.

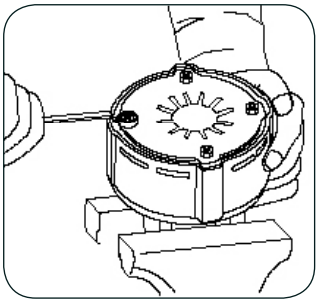
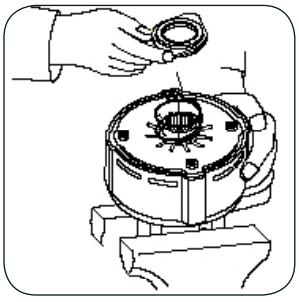
Clutch Assembly

Place hub and friction disks into the clutch housing. Note that items #8 and (are only used in the four plate clutch. Next, compress the Belleville spring(s) to the pressure plate by tightening the four hex nuts and placing them into the clutch housing as illustrated.

Use special tool #9002007 to bend the retaining lugs inward over the Belleville spring edges to secure the springs when you back the four hex nuts off. (Note: Wide lugs for one (1) Belleville spring, narrow lugs for two (2) Belleville springs).

With the lugs in place, loosen the four hex nuts completely to the end of the threaded studs. Replace the quick-disconnect assembly.

Tarp Troubleshooting Inspection & Maintenance

PROBLEM	SOLUTION
TARP SAGS IN MIDDLE AREAS	1. BOWS MAY BE BENT OR ADJUSTED TOO LOW 2. MISSING OR LOOSE RIDGE STRAP REPLACE OR RETIGHTEN 3. TENSION MAY BE TOO LOOSE. 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 REPAIR 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

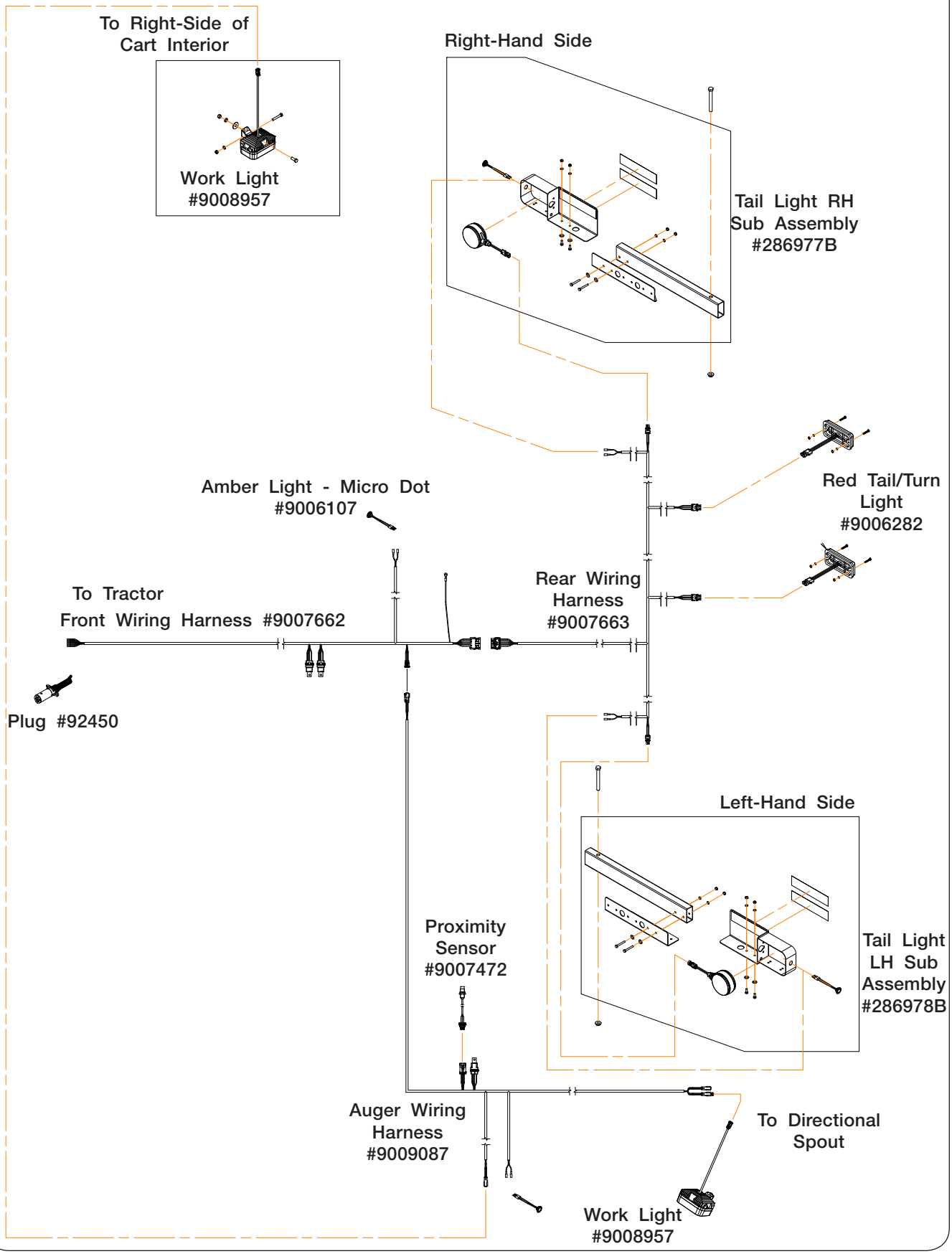
- *Do not open or close tarp while moving or in high wind conditions. Damage to the tarp may occur.*
- *Tarp should not be used if it is torn or the bungee cords are frayed or show damage. If water pools on the tarp, adjust tension of tarp cables and/or arm springs as required.*

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.

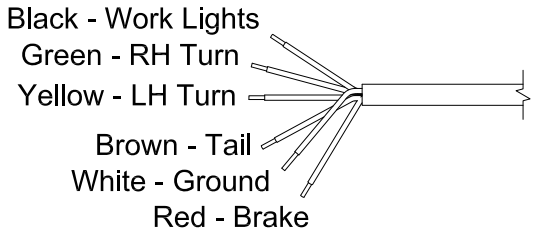
Tears in tarp should addressed before further tarp operation. If water pools on tarp, adjust tension of tarp cables and/or arm springs.

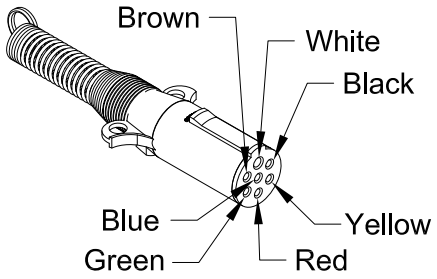
If installed correctly, tarp should always operate as well as when first installed. If tarp does not pass this simple inspection, make all appropriate repairs or adjustments immediately before serious damage occurs.

Electrical System Schematic — Overall



Electrical System Schematic — Plug #92450

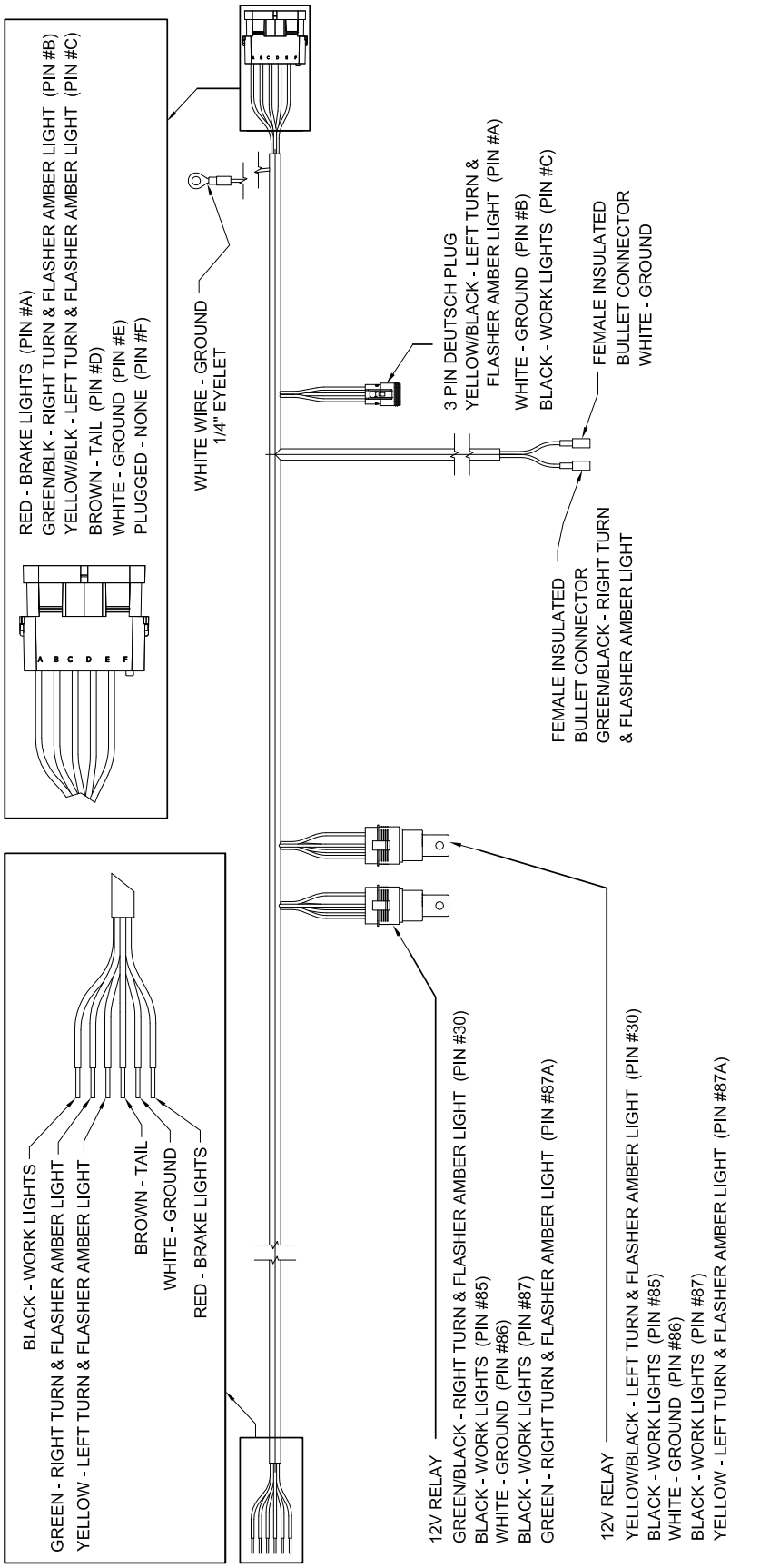




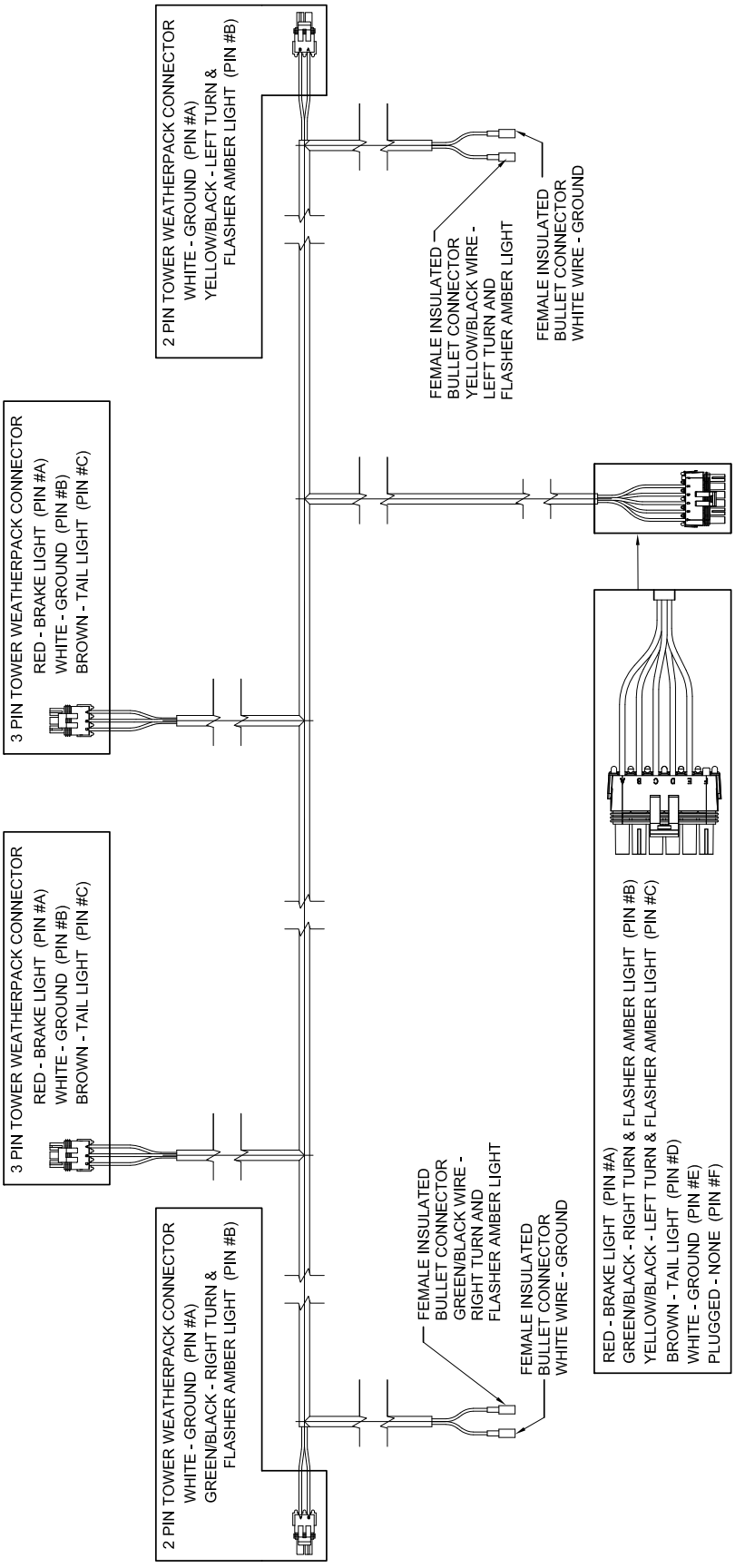
GRAIN CART WIRES

White -- Ground
Green -- Right amber flashing lamp
Yellow -- Left amber flashing lamp
Brown -- Tail light
Black -- Interior & Auger Lights
Red -- Brake Lights

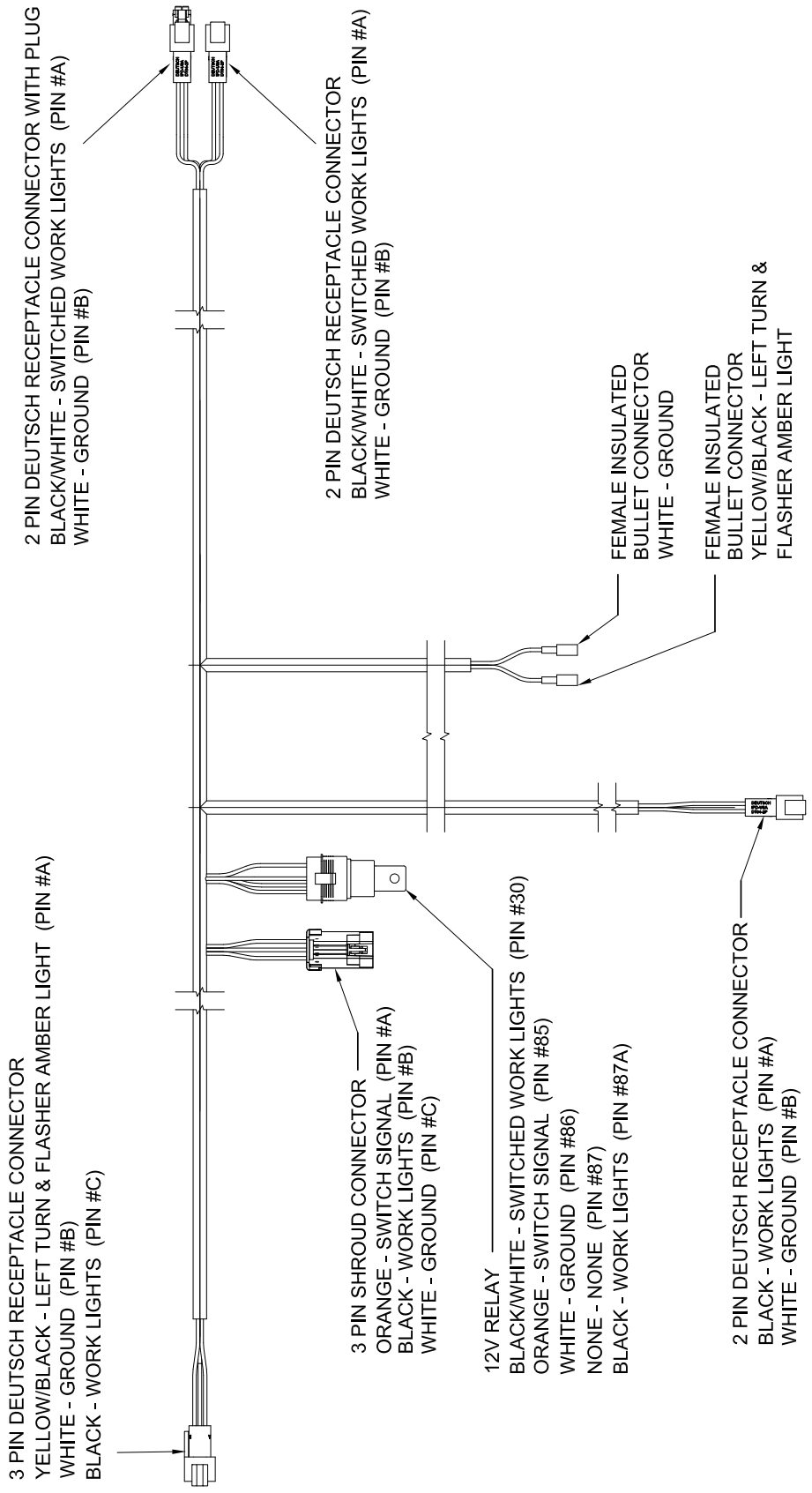
Electrical Schematic — Front Wiring Harness #9007662



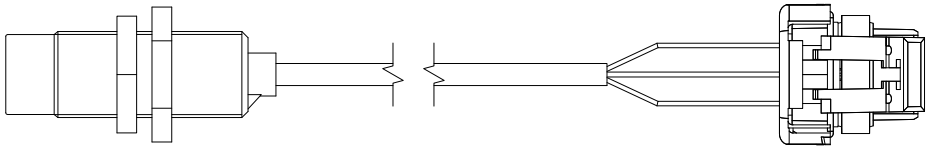
Electrical Schematic — Rear Wiring Harness #9007663



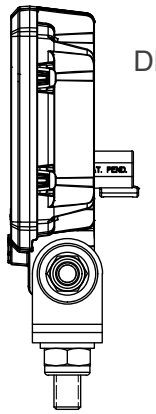
Electrical Schematic — Auger Wiring Harness
#9009087 - For SN B40910100 & Higher
#9007664 - For SN B40910099 & Lower



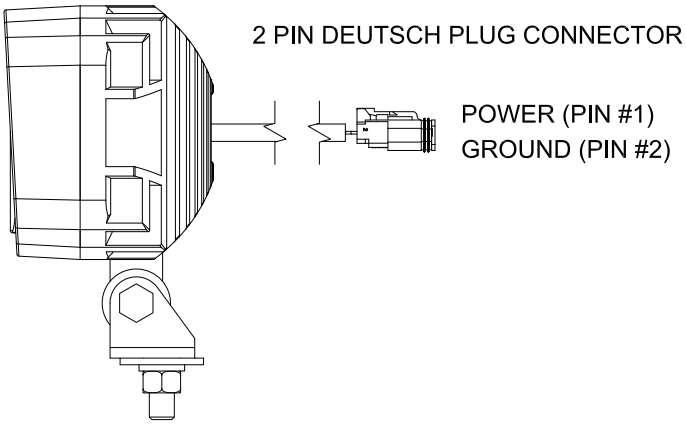
Electrical Schematic — Proximity Sensor #9007472



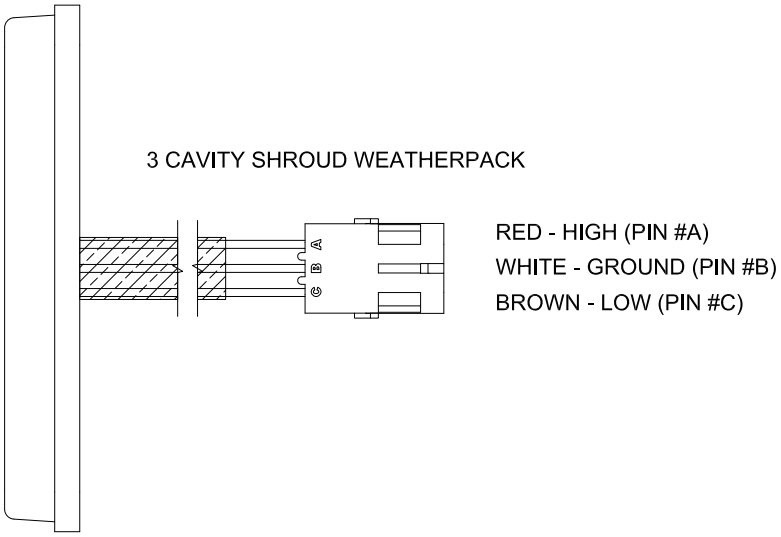
Electrical Schematic — Work Light #9008957 For SN B40910100 & Higher



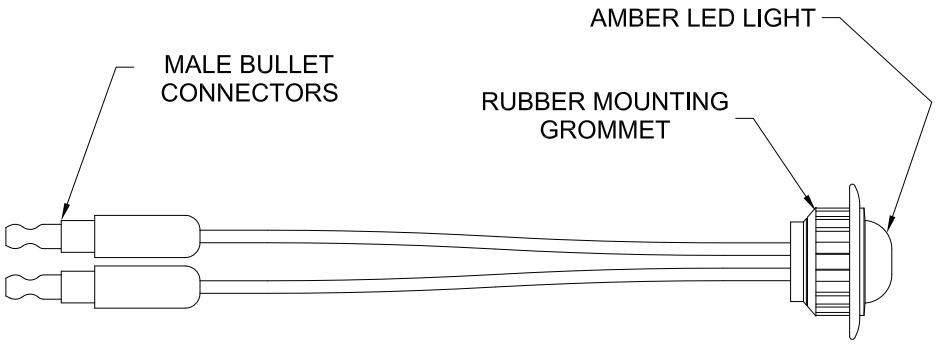
Electrical Schematic — Work Light #9007186 For SN B40910099 & Lower



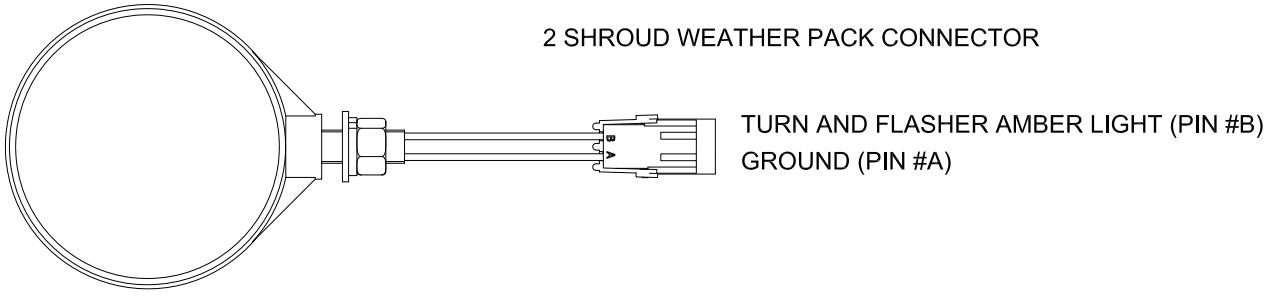
Electrical Schematic — Red Tail/Turn Light #9006282



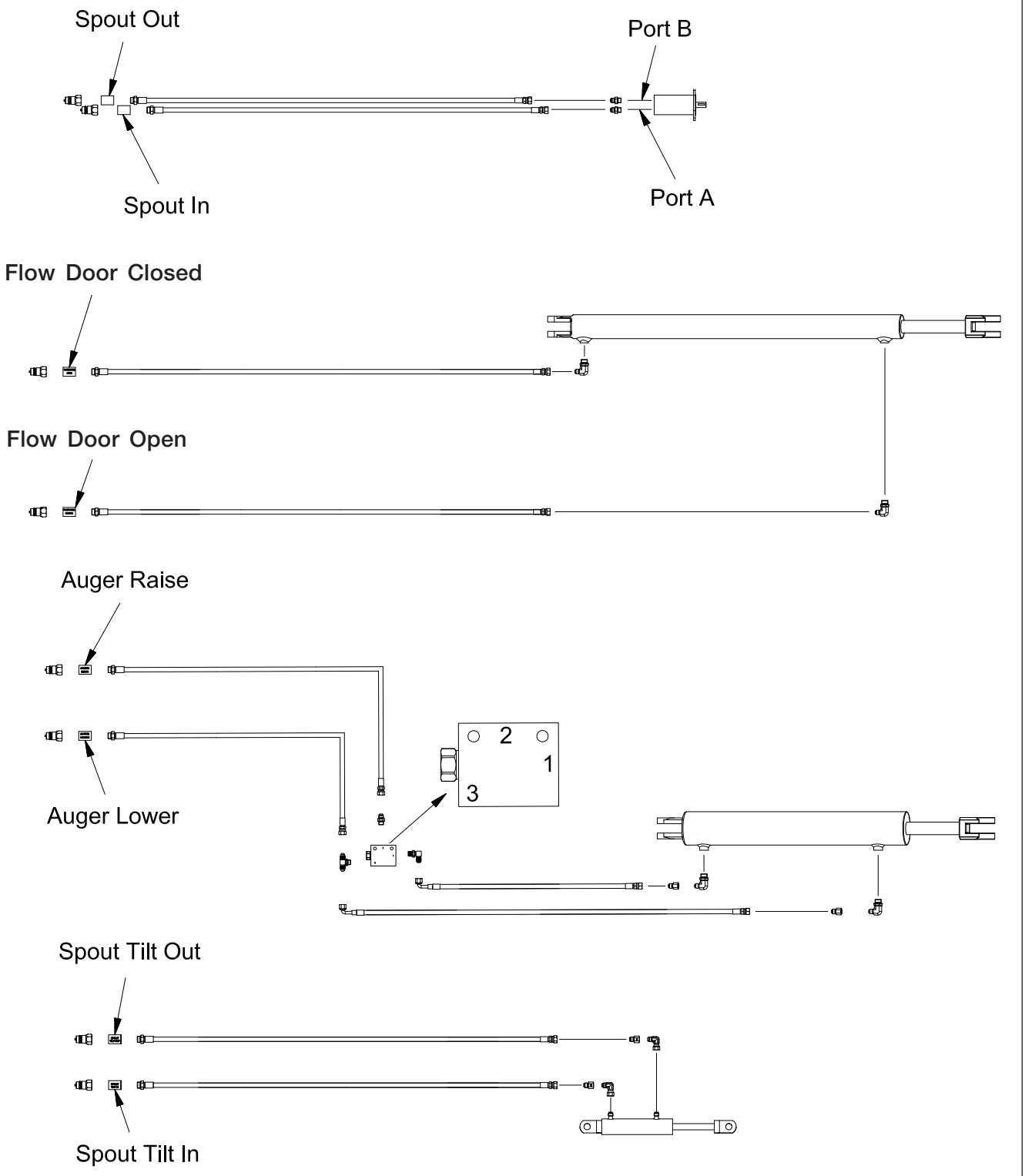
Electrical Schematic — Amber Light - Micro Dot #9006107



Electrical Schematic — Amber Lamp Double Face #9005142



Hydraulic System Schematic



Wheels and Tires

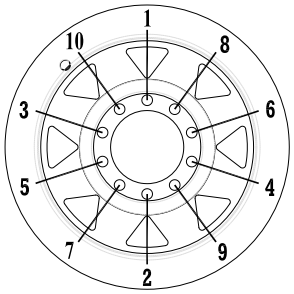
Wheel Nut Torque Requirements

⚠ 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.

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



10 BOLT

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 indicated. 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 the tire's max PSI when mounting.

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	172A8	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
	520/85R42 R-1W	169B	35
	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 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
	1100/45R46 F-1W	195D	35
Mitas	650/75R32 R-1W	172A8	58
	900/60x32 R-1W	176A8	41
	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	35.5LR32	193A8	44
	900/60R32 R-1W	192D	46
	1050/50R32 R-1W	185A8	63
	1250/50R32 R-1W	201B	46
Trelleborg	VF1050/50R32 R-1	198D	52
	900/50R32 R-1W	181A8	55
	900/60x32	176LI	44
	850/55R42 R-1W	161A8	32

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:

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

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 1/4-28	8-10 9-11	11-13 12-15
5/16-18 5/16-24	15-17 17-19	20-23 23-26
3/8-16 3/8-24	25-28 28-31	34-38 38-42
7/16-14 7/16-20	40-45 45-50	54-61 61-68
1/2-13 1/2-20	62-68 68-75	84-92 92-102
9/16-12 9/16-18	90-98 100-110	122-133 134-148
5/8-11 5/8-18	120-135 124-137	162-183 168-186
3/4-10 3/4-16	200-220 210-230	270-300 285-310
7/8-9 7/8-14	330-350 360-380	425-475 460-515
1-8 1-14	500-525 540-560	675-710 730-760
1 1/8-7 1 1/8-12	600-635 665-700	815-860 920-950
1 1/4-7 1 1/4-12	850-895 940-990	1150-1215 1275-1340
1 3/8-6 1 3/8-12	1125-1175 1280-1335	1525-1590 1735-1810
1 1/2-6 1 1/2-12	1500-1560 1685-1755	2035-2115 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 5/16-24	20-22 21-23	27-30 28-31
3/8-16 3/8-24	35-39 36-41	47-53 49-55
7/16-14 7/16-20	54-58 55-60	73-78 75-80
1/2-13 1/2-20	82-88 94-99	110-120 125-135
9/16-12 9/16-18	127-134 147-155	170-180 199-210
5/8-11 5/8-18	160-170 165-175	215-230 225-235
3/4-10 3/4-16	280-295 330-365	380-400 445-495
7/8-9 7/8-14	410-430 420-440	555-580 570-595
1-8 1-14	630-650 680-700	850-880 920-950
1 1/8-7 1 1/8-12	900-930 930-950	1220-1260 1260-1290
1 1/4-7 1 1/4-12	1250-1300 1280-1320	1695-1760 1735-1790

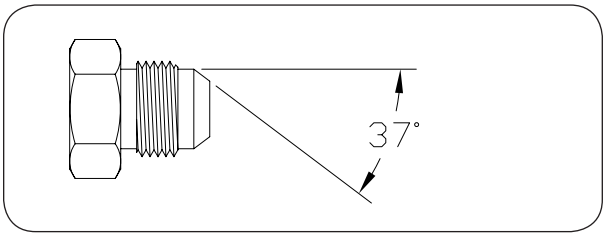
IMPORTANT

- *Follow these torque recommendations except when specified in text.*

Hydraulic Fittings – Torque and Installation

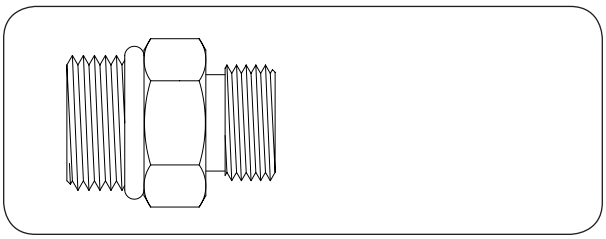
SAE Flare Connection (J. I. C.)

1. Tighten nut with finger until it bottoms the seat.
2. Using a wrench, rotate nut to tighten. Turn nut 1/3 turn to apply proper torque.



SAE Straight Thread O-Ring Seal

1. Insure jam nut and washer are backed up to the back side of smooth portion of elbow adapter.
2. Lubricate o-ring
3. Thread into port until washer bottoms onto spot face.
4. Position elbows by backing up adapter.
5. Tighten jam nut.



Notes

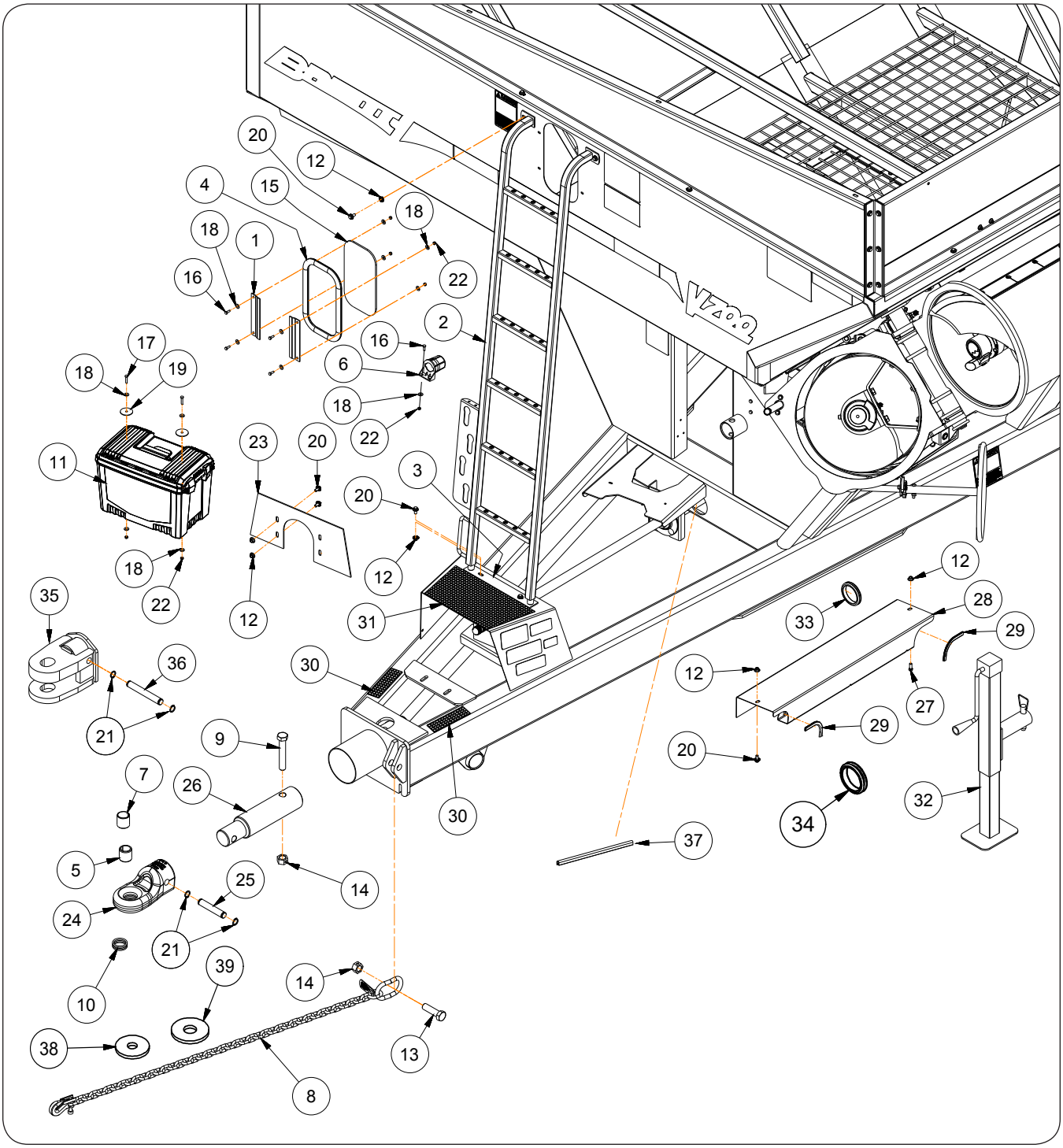
Section V
Parts

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

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

Final Assembly

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



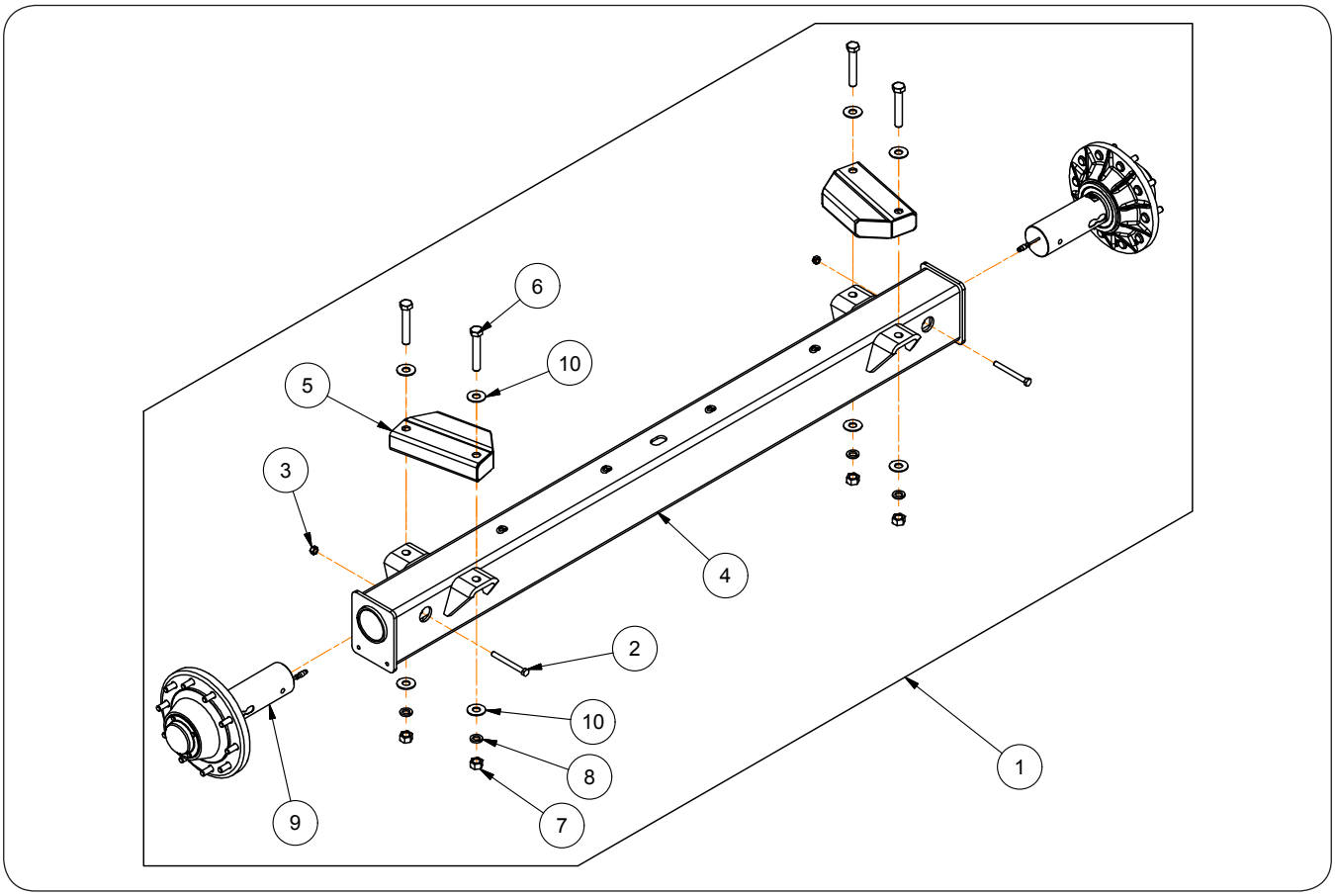
Final Assembly

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

ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
1	Bracket, Window Retainer	250461B	6	
2	Ladder Weldment	286831B	1	
3	Ladder Bracket Weldment	286845B	1	
4	Window Molding	271951	3	
5	Tension Bushing 2 OD x 1.516 ID x 2	9001917	1	
6	Connector Holder	9001968	1	
7	Split Tension Bushing 2 OD x 1 3/4 ID x 2	9002130	1	
8	Transport Chain	9003278	1	
9	Capscrew 1-8UNC x 6	9390-195	1	Grade 5
10	O-Ring	9005259	4	
11	Storage Box	9005850	1	
12	Nut/Large Flange 3/8-16UNC	91263	6	Grade 5
13	Capscrew 1-8UNC x 3 1/2	91299-189	1	Grade 8
14	Locknut 1-8UNC	92199	1	
15	Window	92403	3	
16	Capscrew 1/4-20UNC x 3/4	9390-003	12	Grade 5
17	Capscrew 1/4-20UNC x 1 1/4	9390-006	2	Grade 5
18	Flat Washer 1/4"	9405-064	12	
19	Fender Washer	94763	2	
20	Capscrew/Large Flange 3/8-16UNC x 3/4	95585	9	Grade 5
21	Retaining Ring 1"	91192	2	
22	Locknut 1/4-20UNC	9936	8	
23	Driveshaft Cover Plate	280554B	1	
24	Hitch, Single Tang	282875B	1	
25	Pin 1" Dia. x 5 1/2	282876	1	
26	Hitch Bar 3 3/4" Dia.	284780	1	
27	Capscrew 3/8-16UNC x 1	9390-055	1	
28	Driveshaft Cover	286807B	1	
29	Trim Lock	9000787	A/R	Specify in Feet
30	Runner Pad	9001498	2	
31	Platform Rubber Pad	9004114	1	
32	Jack Assembly w/Pin	9004156	1	
33	Rubber Grommet	9006780	2	
34	Rubber Grommet	9007173	2	
35	Scale Clevis Hitch	281690	Opt.	Includes Items 21 & 36
36	Pin 1” Dia. x 7 3/8	281691	Opt.	
37	Trim Lock	9003946	1	
38	Wearshoe - Hitch, CAT 3	281663	1	
39	Wearshoe - Hitch, CAT 4	281898	1	

Rigid Axle

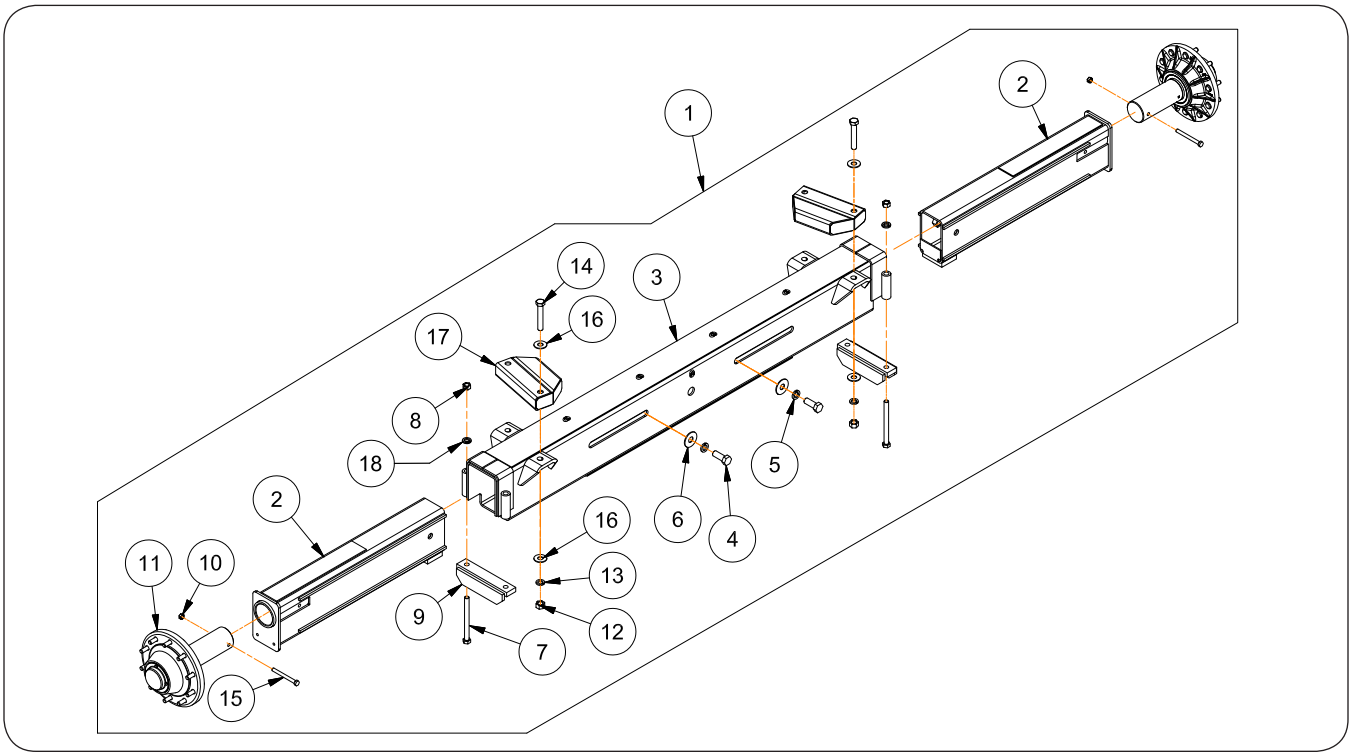
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
1	Rigid Axle Assembly w/out Scales (Green)	286627G	1	
	Rigid Axle Assembly w/out Scales (Red)	286627R		
	Rigid Axle Assembly w/Scales (Green)	286628G		
	Rigid Axle Assembly w/Scales (Red)	286628R		
2	Capscrew 5/8”-11UNC x 6”	9390-136	2	Grade 5
3	Locknut 5/8”-11UNC	95905	2	
4	Axle Tube Weldment =Green=	286629G	1	
	Axle Tube Weldment =Red=	286629R		
5	Axle Spacer Weldment (Green)	286945G	2	
	Axle Spacer Weldment (Red)	286945R		
6	Capscrew 1”-8UNC x 6”	9390-195	4	Grade 5
7	Hex Nut 1”-8UNC	9394-020	4	
8	Lock Washer 1”	9404-041	4	
9	Hub & Spindle Assembly w/out Scales (Green)	280634G	2	See “Hub & Spindle - Single Wheel” with 3/4” Hardware PARTS Page
	Hub & Spindle Assembly w/out Scales (Red)	280634R		
	Hub & Spindle Assembly w/Scales (Green)	286954G	2	
	Hub & Spindle Assembly w/Scales (Red)	286954R		
10	Flat Washer Hardened	9002270	8	

Adjustable Axle

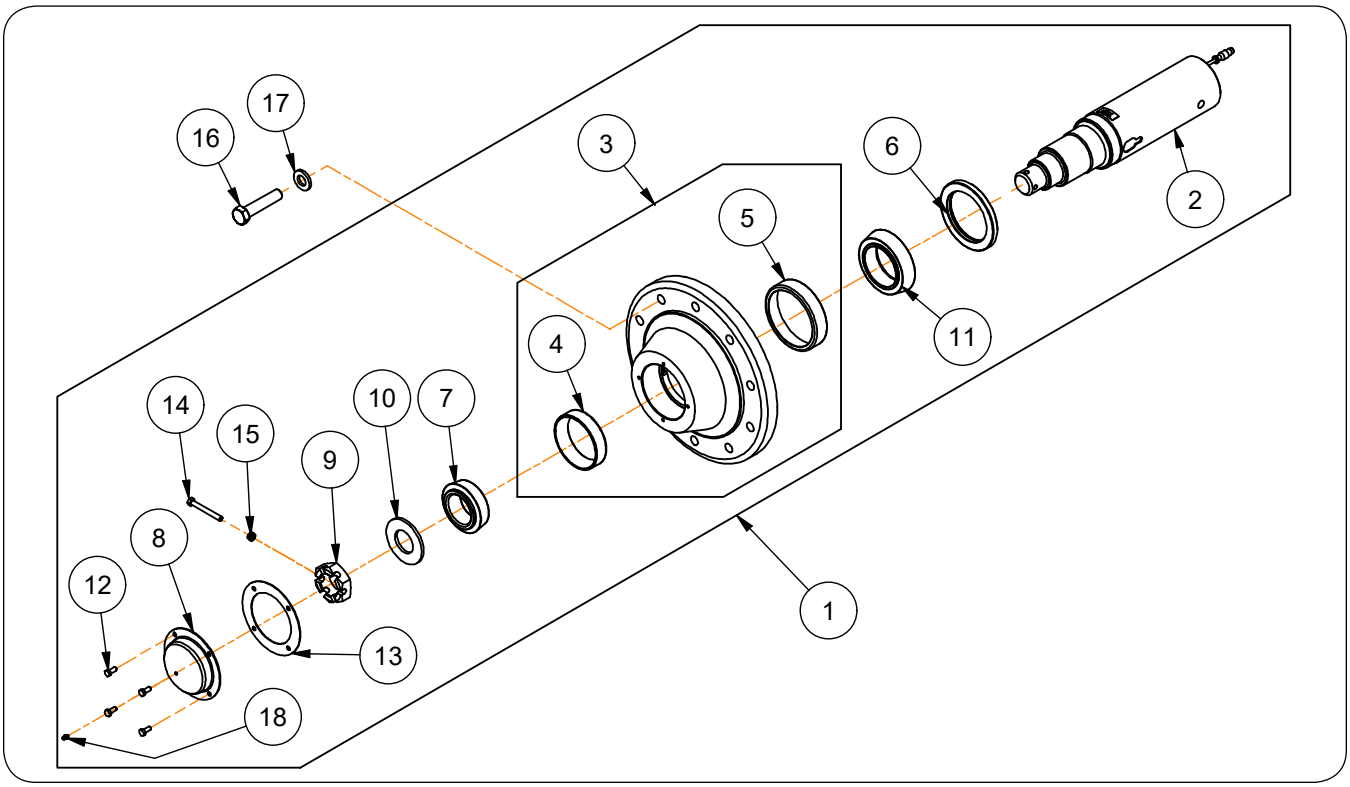
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	DESCRIPTION	PART NUMBER			QTY	NOTES
		Straddle Duals	Single Wheel M22 Hardware	Single Wheel 3/4" Hardware		
1	Adjustable Axle Assembly w/out Scales (Green)	286691G	286695G	286690G	-	
	Adjustable Axle Assembly w/out Scales (Red)	286691R	286695R	286690R		
	Adjustable Axle Assembly w/Scales (Green)	286956G	286957G	286955G		
	Adjustable Axle Assembly w/Scales (Red)	286956R	286957R	286955R		
2	Axle Extension Tube Weldment (Black)	280135B	>	>	2	
3	Main Tube Weldment (Green)	286692G	>	>	1	
	Main Tube Weldment (Red)	286692R	>	>		
4	Capscrew 1 1/8"-7UNC x 3"	9390-200	>	>	2	Grade 5
5	Lock Washer 1 1/8	9404-045	>	>	2	
6	Flat Washer 1 1/8	289325	>	>	2	
7	Capscrew 7/8"-9UNC x 10"	9390-457	>	>	4	Grade 5
8	Hex Nut 7/8"-9UNC	9394-018	>	>	4	
9	Clamp Weldment	280293B	>	>	2	
10	Locknut 5/8"-11UNC	95905	>	>	2	
11	Hub & Spindle (Green)	-	-	-	2	See "Hub & Spindle" PARTS Pages for Hub Hardware
	Hub & Spindle (Red)					
12	Hex Nut 1"-8UNC	9394-020	>	>	4	
13	Lock Washer 1"	9404-041	>	>	4	
14	Capscrew 1"-8UNC x 3" (Grade 5)	9390-187	>	-	4	
	Capscrew 1"-8UNC x 6" (Grade 5)	-	-	9390-195		
15	Capscrew 5/8"-11UNC x 6 1/4" (Grade 5	9007387	>	>	2	
16	Flat Washer Hardened	9002270	>	>	8	
17	Axle Spacer Weldment (Green)	-	-	286945G	2	
	Axle Spacer Weldment (Red)	-	-	286945R		
18	Lock Washer 7/8"	9404-037	>	>	4	

Hub & Spindle — Straddle Duals

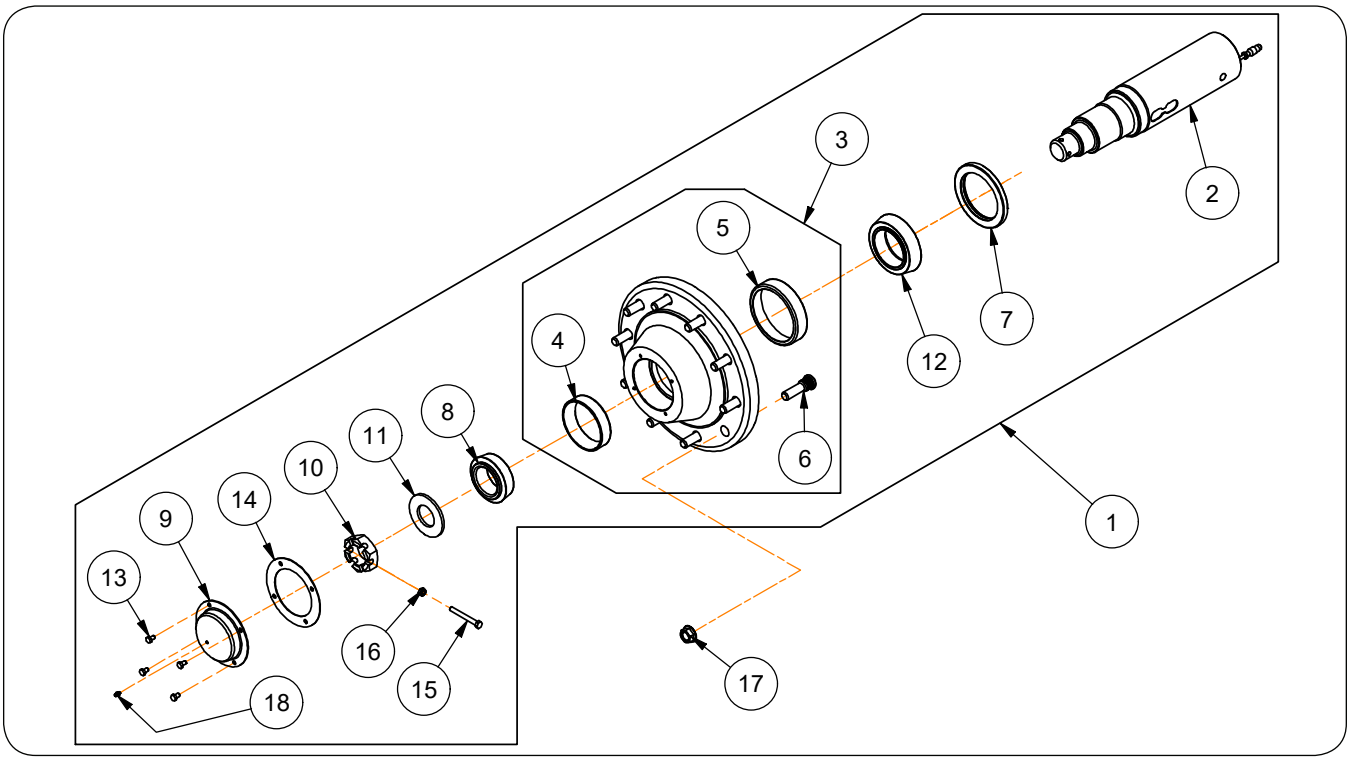
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
1	Hub & Spindle Assembly w/out Scales (Green)	284269G	-	Includes 2 through 15 & 18
	Hub & Spindle Assembly w/out Scales (Red)	284269R		
	Hub & Spindle Assembly w/Scales (Green)	267210G	-	
	Hub & Spindle Assembly w/Scales (Red)	267210R		
2	Spindle Dia. 4.50" (For Units w/out Scales)	280240	1	
	Spindle Dia. 4.50" (For Units w/Scales)	9006348		
3	Hub Sub Assembly (Green)	266455G	1	Includes Items 4 & 5
	Hub Sub Assembly (Red)	266455R		
4	Bearing Cup	92462	1	HM212011
5	Bearing Cup	92476	1	HM218210
6	Seal - 4.375" I.D.	92455	1	43605SA
7	Outer Bearing Cone	92464	1	HM212049
8	Hub Cap =Green=	286171G	1	
	Hub Cap =Red=	286171R	1	
9	Nut	92470	1	
10	Washer	92472	1	
11	Inner Bearing Cone	92545	1	HM218248
12	Capscrew 5/16"-18UNC x 3/4"	9390-028	4	Grade 5
13	Gasket	284230	1	
14	Capscrew 3/8"-16UNC x 3 1/4"	9390-064	1	Grade 5
15	Locknut 3/8"-16UNC	902875	1	
16	Capscrew 7/8"-14UNF x 4"	97043	10	Grade 8
17	Flat Washer 7/8"	97041	10	
18	Grease Zerk	91160	1	

Hub & Spindle — Single Wheel

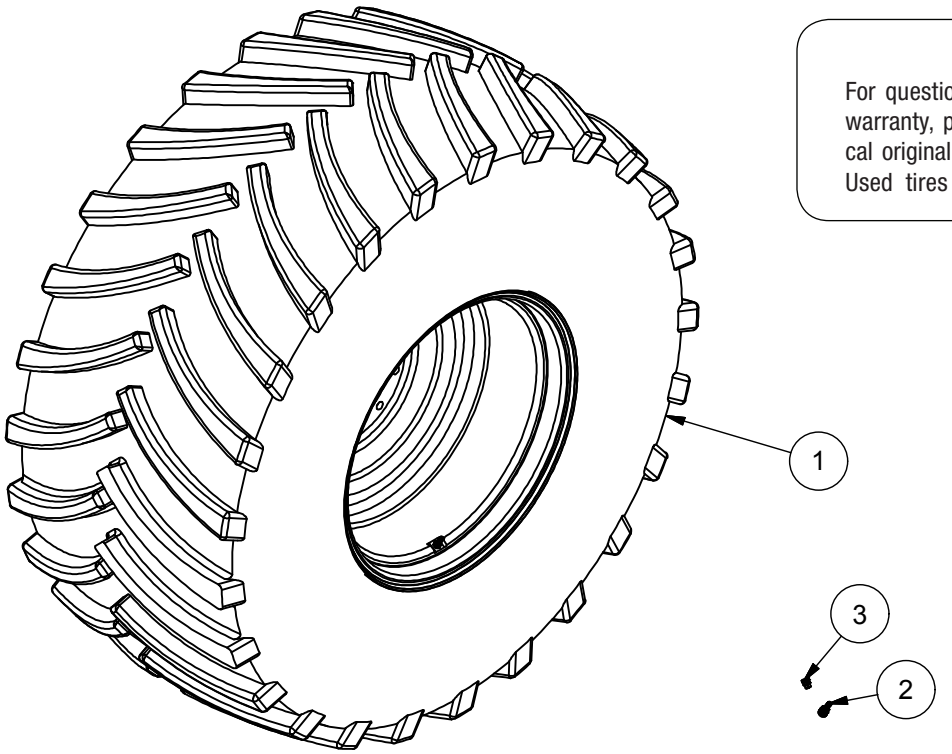
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	DESCRIPTION	PART NUMBER		QTY	NOTES
		3/4" Stud	M22 Stud		
1	Hub & Spindle Assembly w/out Scales (Green)	280634G	284268G	-	Includes 2 through 16 & 18
	Hub & Spindle Assembly w/out Scales (Red)	280634R	284268R		
	Hub & Spindle Assembly w/Scales (Green)	286954G	267280G	-	Includes 2 through 16 & 18
	Hub & Spindle Assembly w/Scales (Red)	286954R	267280R		
2	Spindle Dia. 4.50" (For Units w/out Scales)	280240	>	1	
	Spindle Dia. 4.50" (For Units w/Scales)	9006348	>		
3	Hub Sub Assembly (Green)	200039G	265390G	1	Includes Items 4, 5, 6
	Hub Sub Assembly (Red)	200039R	265390R		
4	Bearing Cup	92462	>	1	HM212011
5	Bearing Cup	92476	>	1	HM218210
6	Stud Bolt 3/4"-16UNF x 3"	94794	-	10	Grade 8
	Stud Bolt M22x1.5x4	-	9007001		
7	Seal - 4.375" I.D.	92455	>	1	43605SA
8	Outer Bearing Cone	92464	>	1	HM212049
9	Hub Cap =Green=	286171G	>	1	
	Hub Cap =Red=	286171R	>	1	
10	Nut	92470	>	1	
11	Washer	92472	>	1	
12	Inner Bearing Cone	92545	>	1	HM218248
13	Capscrew 5/16"-18UNC x 1/2"	9390-026	>	4	Grade 5
14	Gasket	284230	>	1	
15	Capscrew 3/8"-16UNC x 3 1/4"	9390-064	>	1	Grade 5
16	Locknut 3/8"-16UNC	902875	>	1	
17	Wheel Nut 3/4"-16UNF	92458	-	10	
	Flanged Cap Nut M22x1.5	-	97319		
18	Grease Zerk	91160	>	1	

Single Wheels & Tires

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



TIRES

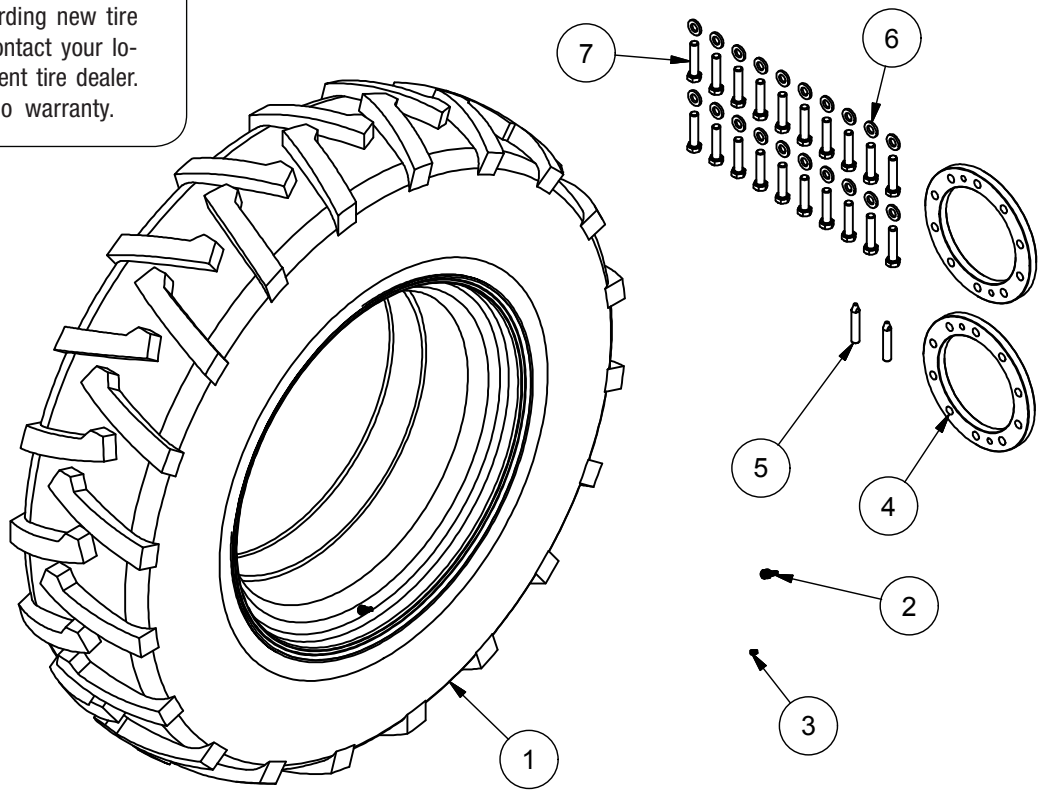
For questions regarding new tire warranty, please contact your local original equipment tire dealer. Used tires carry no warranty.

ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
1	Wheel & Tire Assembly	18519SM	2	30 x 32 / TL900/60R32 R-1W
	Wheel & Tire Assembly	110314SM	2	30 x 32 / TL900/65R32 R-3W
	Wheel Only	903059SM	2	30 x 32
1	Wheel & Tire Assembly	19976SM	2	27 x 32 / TL800/65R32 R-1W
	Wheel & Tire Assembly	19977SM	2	27 x 32 / TL800/60R32 R-3W
	Wheel Only	92417SM	2	27 x 32
1	Wheel & Tire Assembly	92416SM/9501523	2	21 x 32 / TL650/75R32 R-1W
	Wheel Only	92416SM	2	21 x 32
1	Wheel & Tire Assembly	16558SM	2	18 x 38 / TL520/85D38 R-1
	Wheel Only	17702SM	2	18 x 38
2	Valve Stem	93300	2	
3	Plug, Rim Hole	95365	2	

Dual Wheels & Tires

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

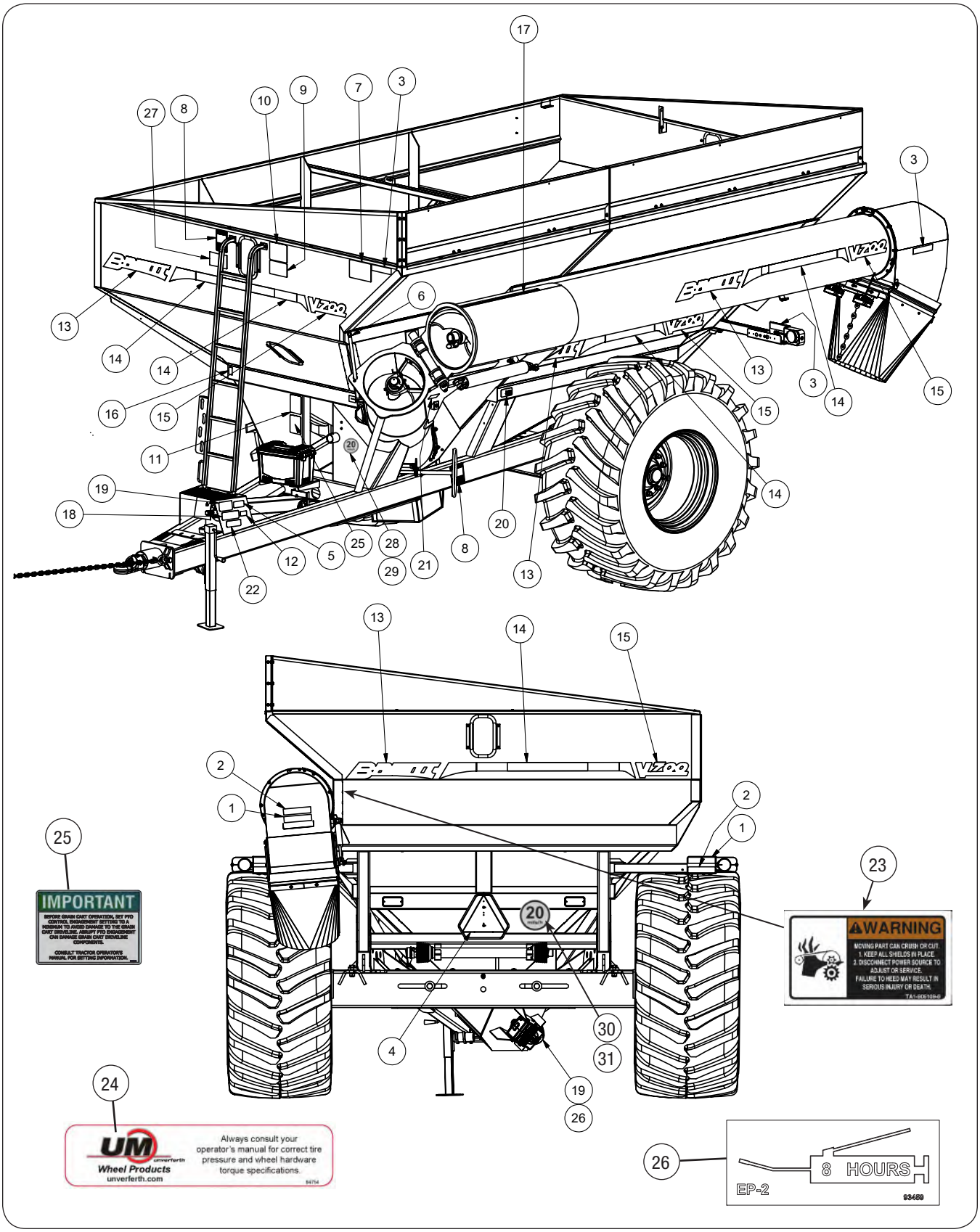
TIRES
For questions regarding new tire warranty, please contact your local original equipment tire dealer. Used tires carry no warranty.



ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
1	Wheel & Tire Assembly	15311SM	4	TL420/80R46F 3 Star R-1
	Wheel Only	15303SM	4	13 x 46 - 10 Hole
1	Wheel & Tire Assembly	14565SM	4	TL520/85R42F R-1
	Wheel Only	14562SM	4	18 x 42 - 10 Hole
1	Wheel & Tire Assembly	14564SM	4	TL480/80R42F R-1
	Wheel Only	14561SM	4	16 x 42 - 10 Hole
2	Valve Stem	93300	4	
3	Valve Stem Adapter	901207	4	
4	Reinforcing Ring	14442SM	2	
5	Guide Pin	266459	2	
6	Flat Washer 7/8"	97041	20	
7	Capscrew 7/8"-14UNF x 4"	97043	20	Grade 8

Decals

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



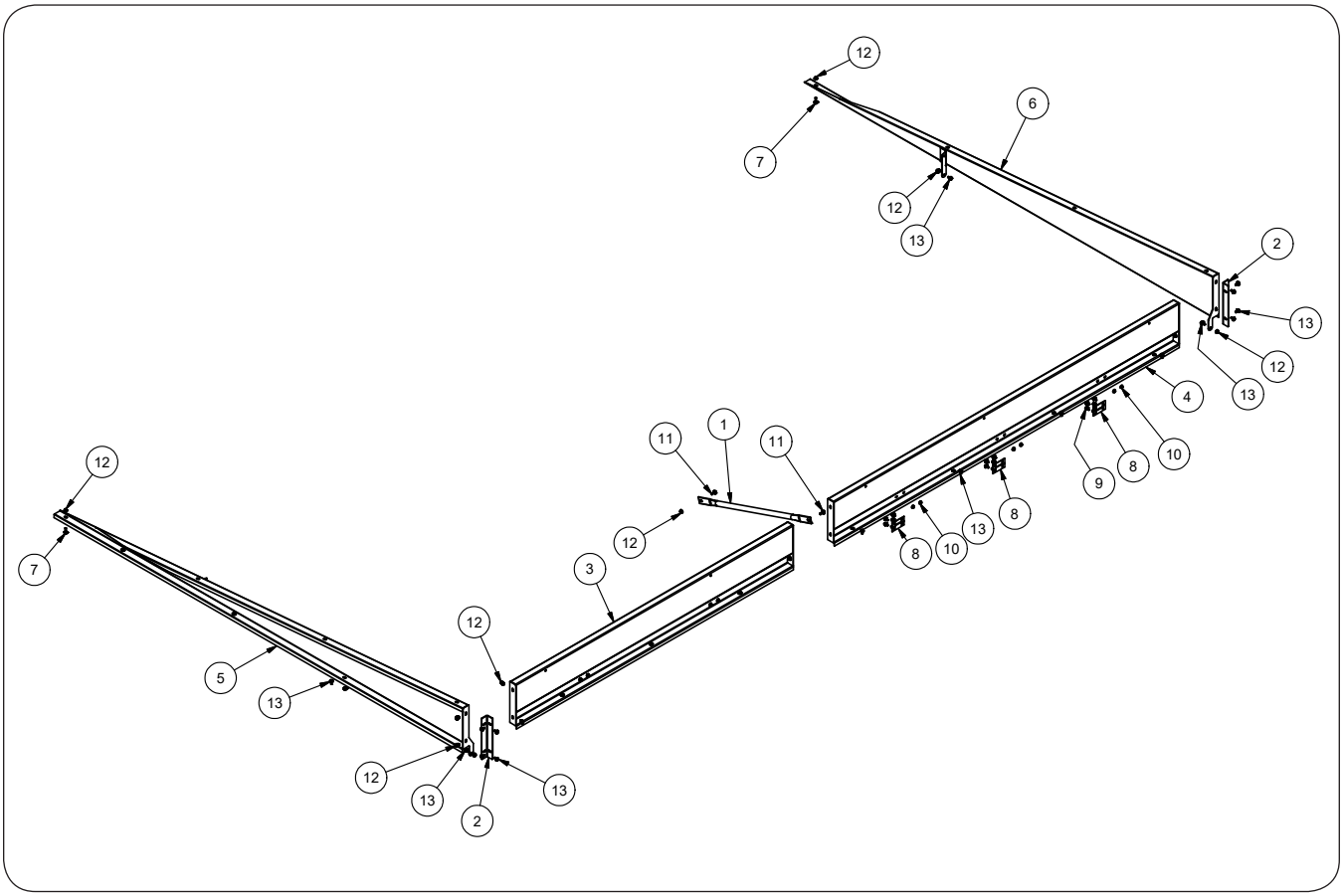
Decals

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

ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
1	Fluorescent Strip	9003125	3	2 x 9"
2	Red Reflector	9003126	3	2 x 9"
3	Amber Reflector	9003127	8	2 x 9"
4	SMV Sign	TA510514	1	
5	Decal, WARNING “Read & Understand”	97961	1	
6	Decal, Reflective Checker Tape	265384	1	
7	Decal, DANGER “Electrical Lines”	9003474	1	
8	Decal, WARNING “PTO Cut & Crush”	9003475	2	
9	Decal, WARNING “No Riders”	9003476	1	
10	Decal, IMPORTANT “Flow Control Gate”	9003477	1	
11	Decal, DANGER “Just For Kids”	9003478	1	
12	Decal, IMPORTANT “Shear-Bolts”	9003574	1	
13	Decal, Brent Logo - 5.5 x 43	9006360	5	
14	Decal, Stripe - 2.73 x 36.50	9006361	10	
15	Decal, V700	9007732	5	
16	Decal, FEMA	91605	1	
17	Decal, Flow Control 3" x 38"	92563	1	
18	Decal, WARNING “Tongue Drop”	94094	1	
19	Decal, DANGER “Drive Shaft Entanglement”	95046	3	
20	Decal, WARNING “High-Pressure”	95445	1	
21	Decal, WARNING “Pinch Point”	95839	1	
22	Decal, CAUTION “Transport Chain”	97575	1	
23	Decal, WARNING “Moving Parts”	TA1-906109-0	1	
24	Decal, UM Wheel Systems	94754	1	
25	Decal, IMPORTANT “PTO Engagement”	9008151	1	For SN B37430100 and Higher
26	Decal, 8 Hours Grease	93459	1	
27	Decal, CAUTION “Slippery Surface”	95008	1	
28	Decal, Front SIS 20 MPH	9008715	1	
29	Decal, Front SIS 30 KPH	9008721	1	
30	Decal, Rear SIS 20 MPH	9008714	1	Use Items 32, 33 and 34
31	Decal, Rear SIS 30 KPH	9008720	1	
32	SIS Decal Mounting Bracket =Black==	276987B	1	Not Shown
33	Hex Nut 1/4”-20UNC	97189	2	
34	Flange Screw 1/4”-20UNC x 3/4”	97420	2	

Sideboards

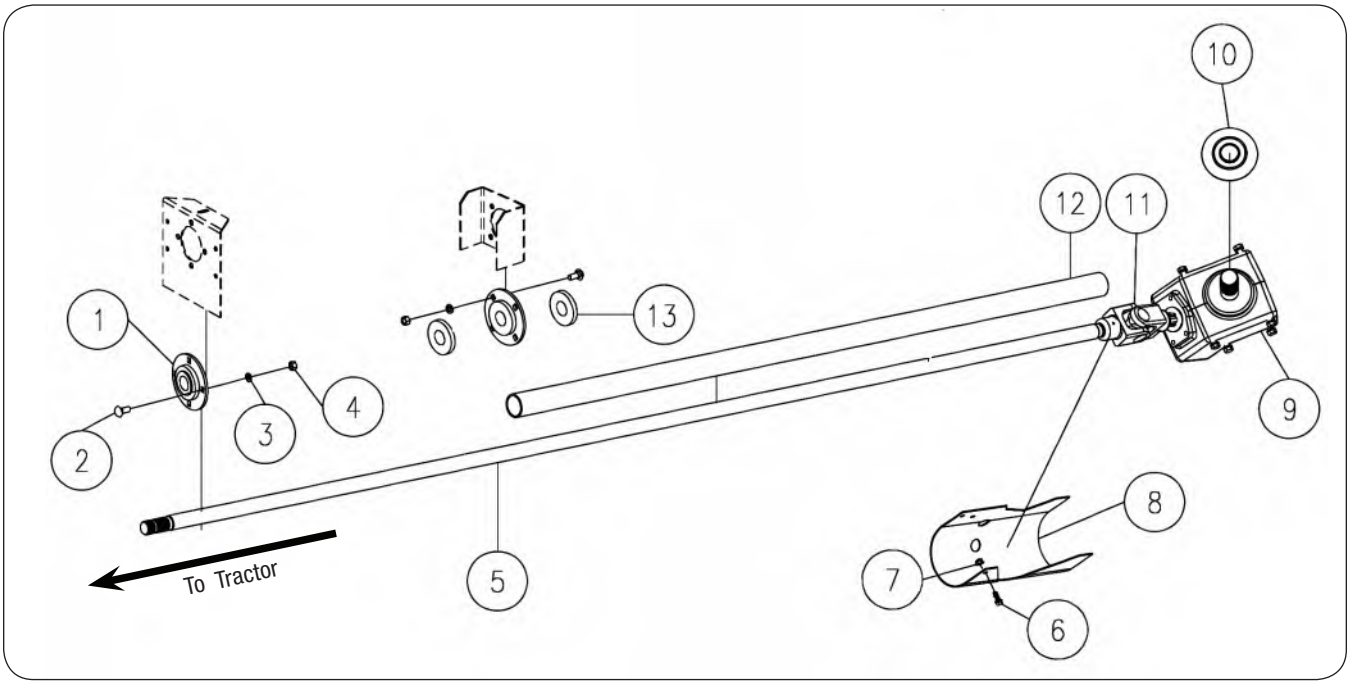
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
1	Tube, Angle Brace/Sideboard Support	220032B	1	
2	Sideboard Leg =Black=	285818B	2	
3	Sideboard Front Weldment, Left-Hand =Black=	286822B	1	
4	Sideboard Rear Weldment, Left-Hand =Black=	286823B	1	
5	Sideboard Front Weldment =Black=	286835B	1	
6	Sideboard Rear Weldment =Black=	286836B	1	
7	Flange Screw, 3/8-16UNC x 1 1/4 Gr.5	9003259	2	
8	Hinge	9004626	5	
9	Flange Bolt 5/16-18UNC x 3/4	91256	20	
10	Flange Nut 5/16-18UNC	91257	20	
11	Screw/Large Flange 3/8-16UNC x 1	91262	2	
12	Nut/Large Flange 3/8-16UNC	91263	35	
13	Capscrew/Large Flange 3/8-16UNC x 3/4	95585	30	

Drive Components

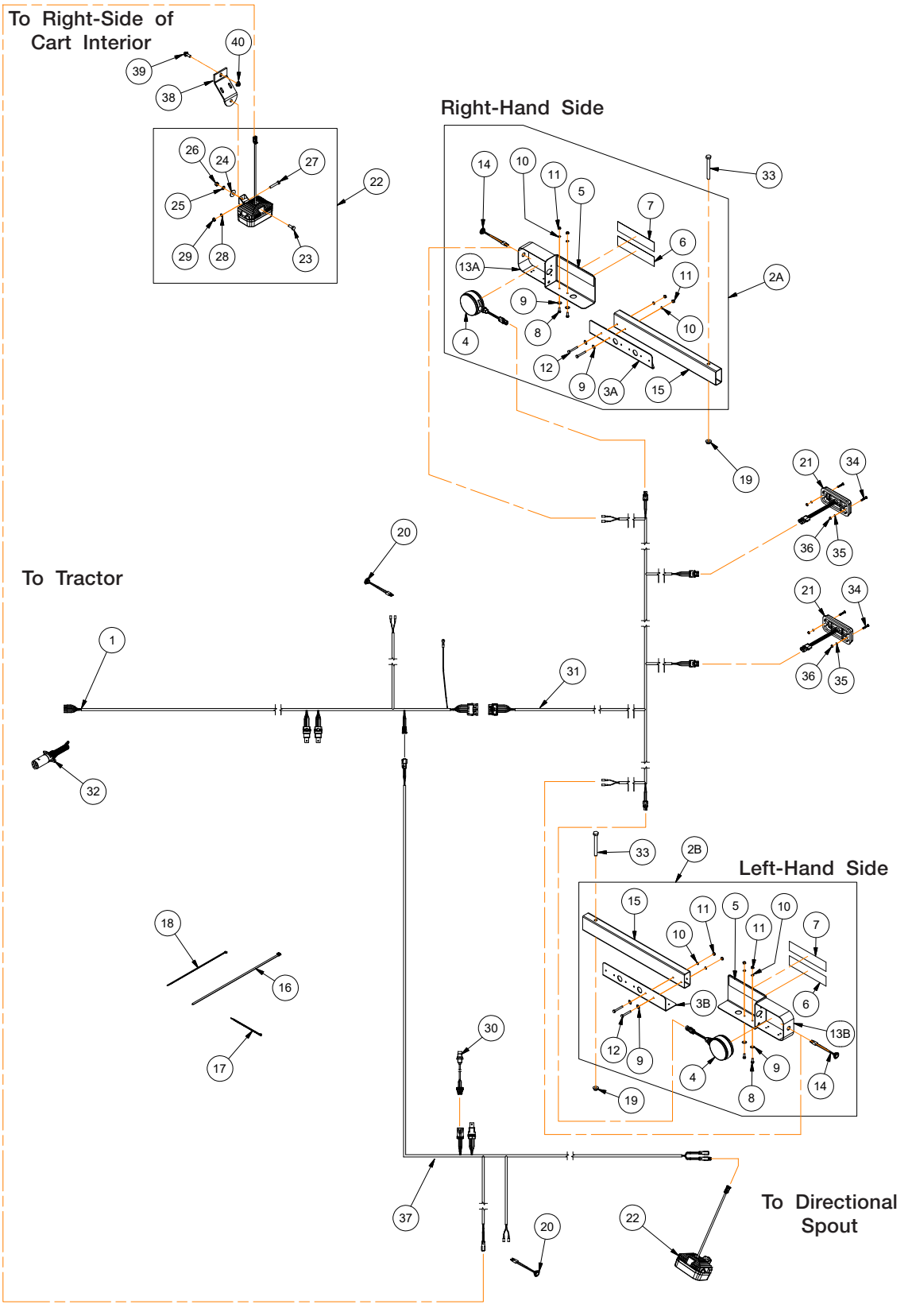
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
1	1 3/8 Flange Bearing	92916	2	
2	Capscrew, 3/8-16UNC x 1 Gr.5	9390-055	6	
3	Lock Washer 3/8	9404-021	6	
4	Hex Nut, 3/8-16UNC Gr.5	9394-006	6	
5	Drive Shaft Replacement Kit	289768	1	1 3/8-21 Splined Includes Items 1 through 5 and 12, 13
6	Screw/Large Flange 3/8-16 x 1	91262	3	
7	Nut/Large Flange 3/8-16UNC	91263	3	
8	U-Joint Cover	286850B	1	
9	Gearbox	9002812	1	Refer to “45 Degree Gearbox” in this Section for Parts Listing
10	Gearbox Dust Cover	92805	1	
11	U-Joint Assembly	95012	1	Refer to “Driveline U-Joint Assembly” in this Section for Parts Listing
12	Tube 2" SCH 40 x 40 1/2"	286848	1	
13	1 3/8” Dia. Shaft Collar	9008675	2	

Electrical

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



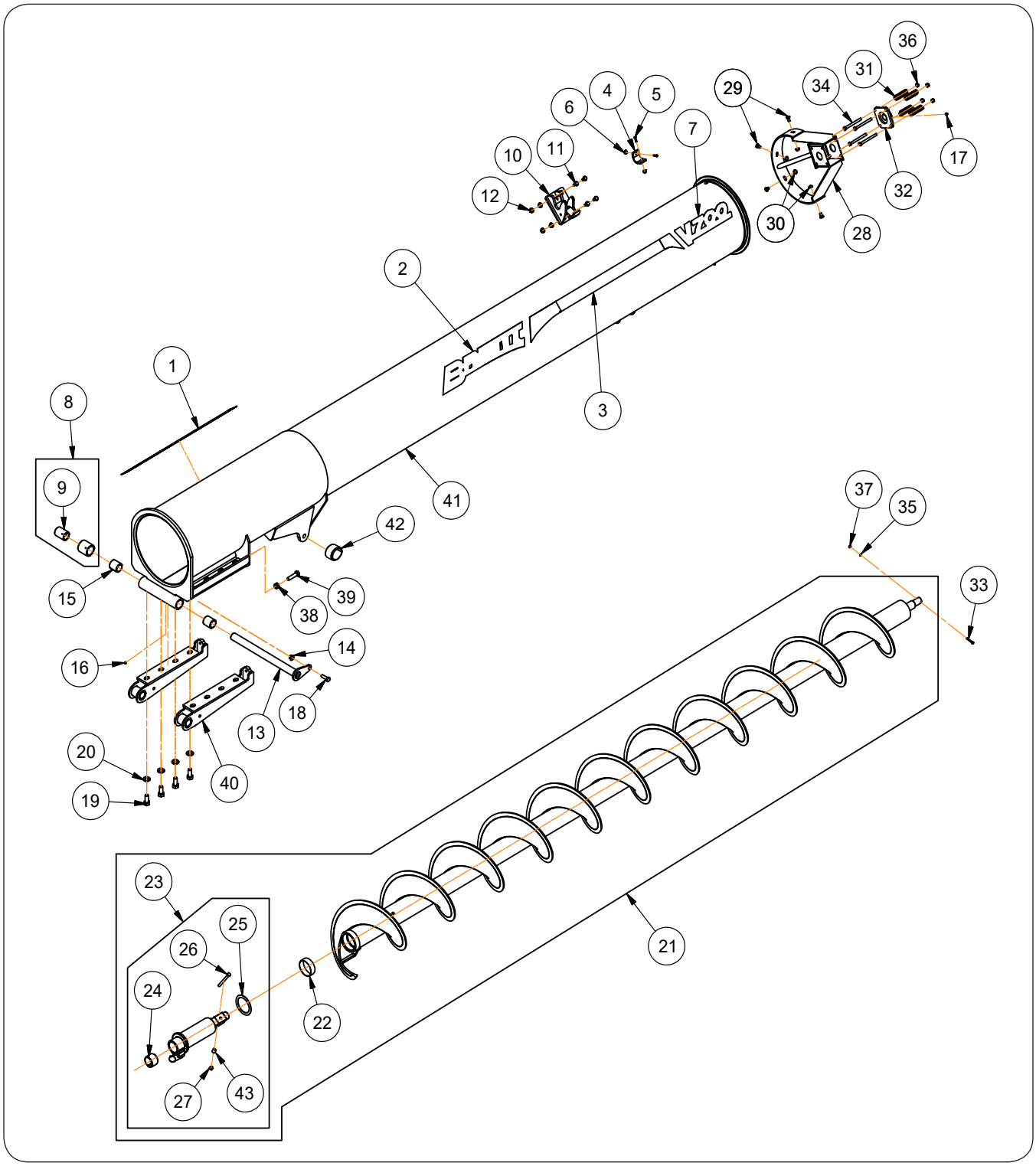
Electrical

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

ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
1	Wiring Harness, Front 180"	9007662	1	
2A	Tail Light RH Sub Assembly	286977B	1	Includes Items 3A, 4 through 12, 13A, 14, 15
2B	Tail Light LH Sub Assembly	286978B	1	Includes Items 3B, 4 through 12, 13B, 14, 15
3A	RH Plate	251406B	1	
3B	LH Plate	251407B	1	
4	LED Light, Amber - Double Face	9005142	2	
	LED Lens Only	9005095	-	
5	Amber Reflector	9003127	7	2 x 9"
6	Red Reflector	9003126	2	2 x 9"
7	Fluorescent Strip, Red-Orange	9003125	2	2 x 9"
8	Capscrew, 1/4-20UNC x 3/4	9390-003	4	
9	Flat Washer, 1/4	9405-064	8	
10	Lock Washer, 1/2	9404-017	8	
11	Hex Nut, 1/4-20UNC	9394-002	8	
12	Capscrew, 1/4-20 UNC x 2	9390-009	4	
13A	RH Light Bracket Weldment	286979B	1	
13B	LH Light Bracket Weldment	286980B	1	
14	Micro Dot Amber Light (LED)	9006107	2	
15	Tube, Light	286992B	2	
16	Cable Tie, 21 1/2"	9000104	3	
17	Cable Tie, 6"	9000106	8	
18	Cable Tie, 15 1/2"	9000107	2	
19	Locking Flange Nut 1/2-13UNC	9003397	2	
20	Micro Dot Amber Light (LED)	9006107	2	
21	Red Light- Tail/Turn (LED)	9006282	2	
22	Work Light (LED)	9007186	2	For SN B40910099 & Lower Includes Items 23 through 29
		9008957		For SN B40910100 & Higher Includes Items 23 through 29
23	Capscrew 3/8-16UNC x 1	9390-055	1	
24	Flat Washer 3/8”	9405-078	1	
25	Lock Washer 3/8”	9404-021	1	
26	Hex Nut 3/8-16UNC	9394-006	1	
27	Capscrew 5/16-18UNC x 2	9390-034	1	
28	Lock Washer 5/16”	9404-019	1	
29	Hex Nut 5/16-18UNC	9394-004	1	
30	Proximity Switch	9007472	1	
31	Wiring Harness, Rear 224"	9007663	1	
32	Electrical Coupler	92450	1	
33	Capscrew 1/2-13UNC x 4 1/2	9390-112	2	
34	Pan Head Machine Screw #10-32UNF x 1 1/4	903172-350	4	
35	Split Lock Washer, #10	9404-013	4	
36	Hex Nut #10-32 Grade 2	9830-016	4	
37	Wiring Harness - Auger Light 320"	9007664	1	For SN B40910099 & Lower
	Wiring Harness - Auger Light 395”	9009087		For SN B40910100 & Higher
38	Light Bracket	271574B	1	
39	Truss Head Machine Screw 3/8-16UNC x 1	9005312	1	
40	Nut/Large Flange 3/8-16UNC	91263	1	

Upper Auger Components

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



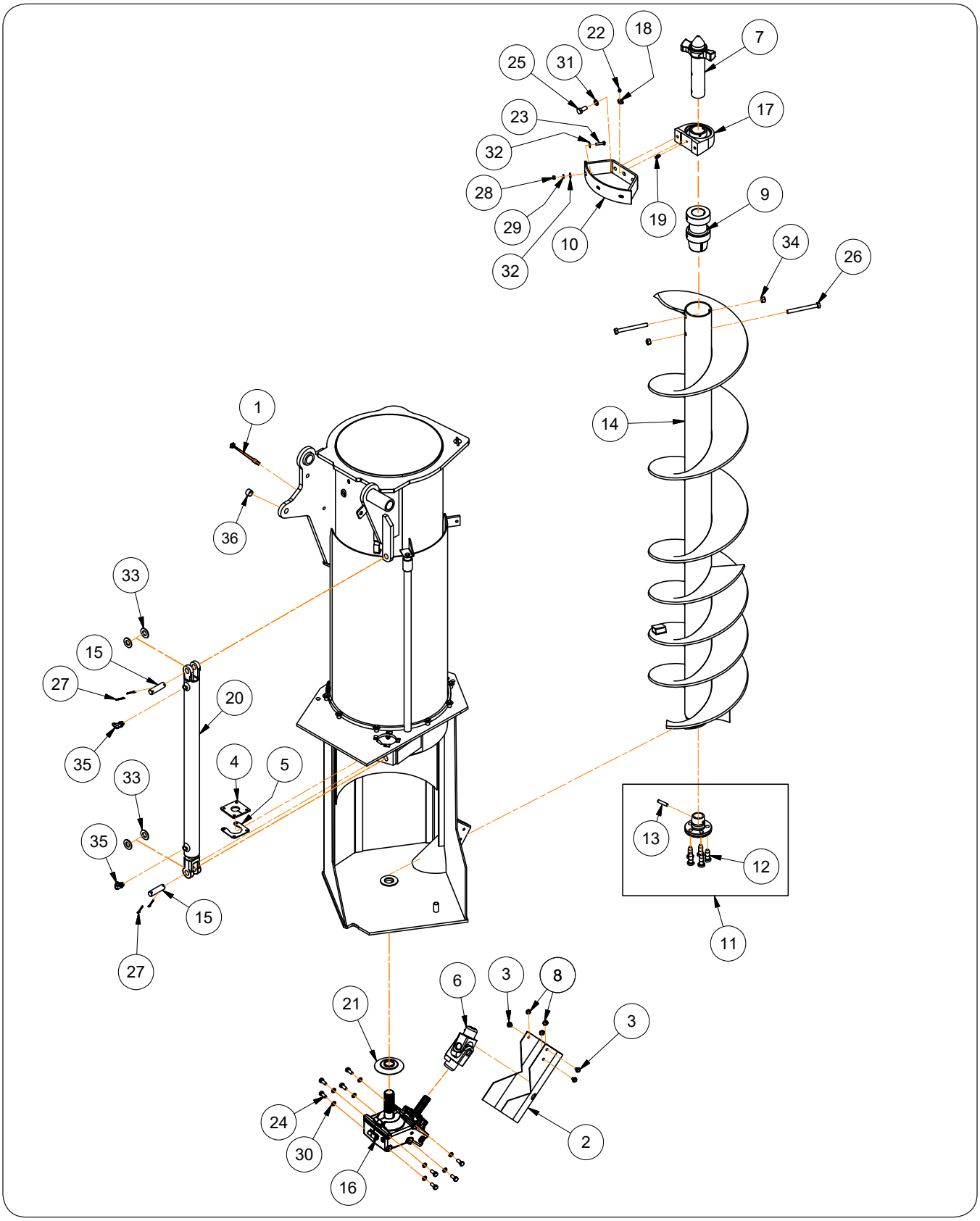
Upper Auger Components

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

ITEM	PART NUMBER	DESCRIPTION	QTY	NOTES
1	92563	Decal, Flow Control	1	
2	9006360	Decal, Brent Logo	5	
3	9006361	Decal, Stripe	10	
4	9004263	Pad-Stop (Rubber)	1	
5	903171-662	Flat Head Phillips Screw 5/16"-18UNC x 1 1/4"	2	
6	91257	Hex Nut/Large Flange 5/16"-18UNC	17	
7	9007732	Decal - V700	5	
8	281223	Pivot Bushing Assembly	1	Includes Item 9
9	9004569	Bearing-Bronze	1	
10	291198G	Auger Rest Weldment =Green=	1	
	291198R	Auger Rest Weldment =Red=		
11	91266	Flange Screw 1/2"-13UNC x 1 1/4"	4	
12	91267	Flange Nut 1/2"-13UNC	4	
13	281612	Pivot Shaft Weldment	1	
14	9003398	Locknut/Top 5/8"-11UNC	1	
15	9004980	Bushing-Tension 2 1/4" OD	2	
16	91160	Grease Zerk	1	
17	93426	Zerk-Grease	2	
18	9390-124	Capscrew 5/8"-11UNC x 2"	1	
19	9390-164	Capscrew 7/8"-9UNC x 2"	8	
20	97041	Flat Washer 7/8" Nom.	8	
21	272932B	Upper Auger Replacement Kit	1	Includes Item: 23
22	281514	Flex Coupler Bushing Assembly	1	
23	281682	Soft Start Kit	1	Includes Items 22, 24 through 27
24	9003230	Bushing-Split 2 3/4" OD	1	
25	9004878	Washer-Self Lubricating Thrust	1	
26	9390-117	Capscrew 1/2"-13UNC x 7"	1	Retaining Bolt Replacment Kit 293427 - Items 26, 27, 43
27	9800	Locknut/Top 1/2"-13UNC	1	
28	272706B	Hanger Bearing Weldment	1	
29	9388-102	Carriage Bolt 1/2"-13UNC x 1"	4	
30	9003397	Locking Flange Nut 1/2"-13UNC	4	
31	9001812	Compression Spring	4	
32	92406	Bearing-Flanged 1 1/2" Dia.	1	
33	9390-034	Capscrew 5/16"-18UNC x 2"	1	
34	9390-114	Capscrew 1/2"-13UNC x 5 1/2"	4	
35	9404-019	Lock Washer 5/16"	1	
36	94981	Locknut/Center 1/2"-13UNC	4	
37	9394-004	Hex Nut 5/16"-18UNC	1	
38	9394-016	Hex Nut 3/4"-10UNC	2	
39	94733	Capscrew 3/4"-10UNC x 3" (Full Threaded)	2	
40	272859G	Outer Pivot Bushing Weldment =Green=	2	
	272859R	Outer Pivot Bushing Weldment =Red=		
41	291786G	Upper Auger Weldment =Green=	1	
	291786R	Upper Auger Weldment =Red=		
42	91268	Split Tension Bushing	1	
43	410511	Spacer Bushing	1	

Lower Auger Components

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



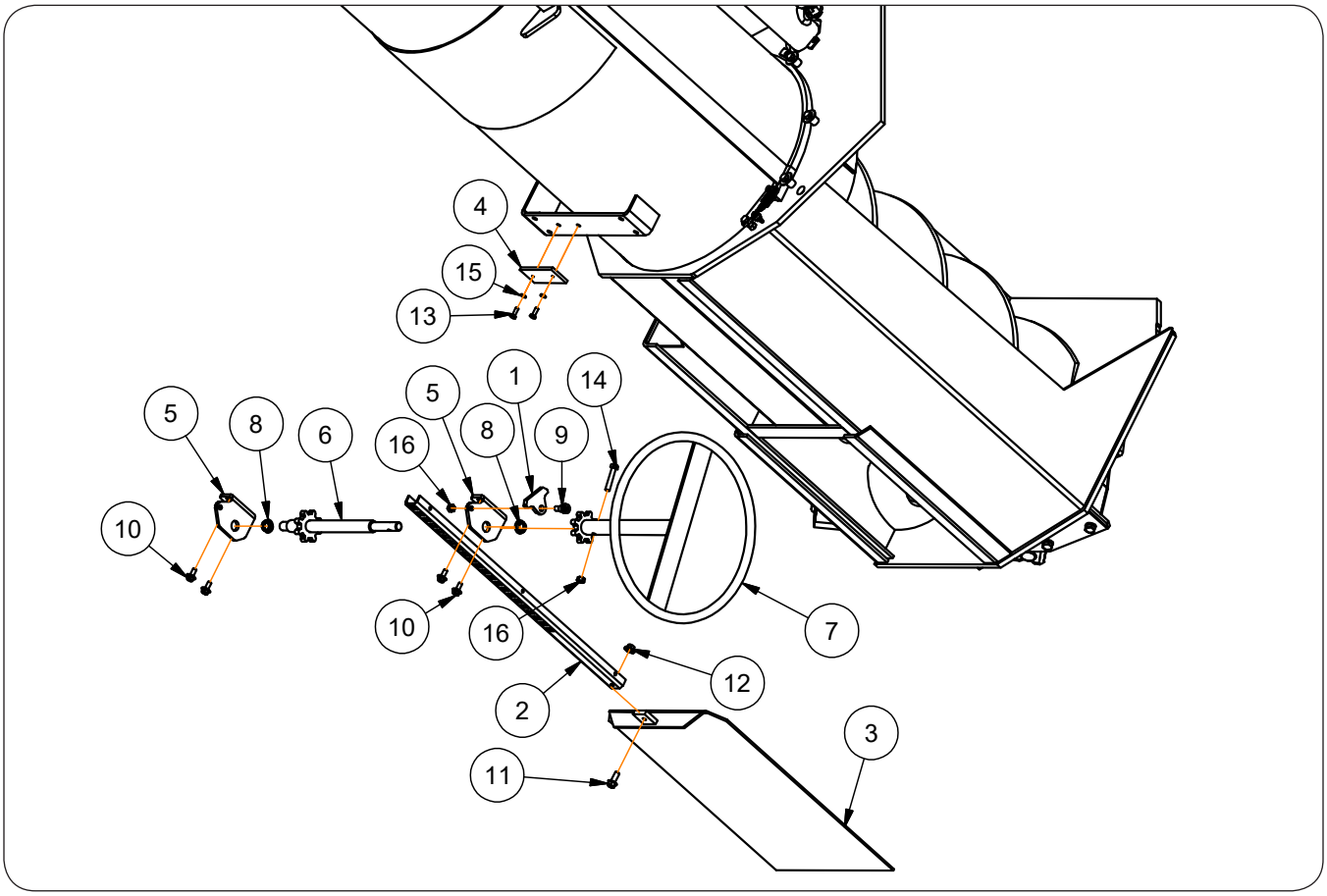
Lower Auger Components

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

ITEM	PART NUMBER	DESCRIPTION	QTY	NOTES
1	9006107	Amber Light - Micro Dot - LED	1	
2	286850B	Cover, Joint =BLACK=	1	
3	95585	Capscrew/Large Flange 3/8"-16UNC x 3/4"	3	Grade 5
4	268217	Rubber Gasket	1	
5	268218	Plate-Cover	1	
6	95012	U-Joint	1	
7	288811	Drive Dog, Double Lobe	1	
8	91263	Nut/Large Flange 3/8"-16UNC	3	
9	281209B	Auger Tube Adapter =BLACK=	1	
10	281620B	Hanger Bearing Weldment =BLACK=	1	
11	286436	Auger Drive Plate Assembly (5-Pin)	1	Includes Items 12 & 13
12	9007000	Pin-Drive, Headed	5	
13	902614-236	Spiral Pin 1/2" Dia. x 2 1/4" (Heavy Duty)	1	
14	286795B	Lower Auger Weldment =Black=	1	
15	804572	Pin 1" Dia. x 3 1/2"	2	
16	9002812	Gearbox 45°	1	
17	9004731	Pillow Block Bearing 2 1/2" Bore	1	
18	9004764	90° Elbow	1	
19	9004765	Hex Pipe Nipple	1	
20	9005363	Cylinder-Welded, 2 1/2 x 36"	1	
	9005409	Seal Kit	-	
21	92805B	Dust Cover =BLACK=	1	
22	93426	Zerk-Grease 1/8-27 NPT	2	
23	9390-057	Capscrew 3/8"-16UNC x 1 1/2"	3	Grade 5
24	9390-100	Capscrew 1/2"-13UNC x 1 1/4"	8	Grade 5
25	9390-122	Capscrew 5/8"-11UNC x 1 1/2"	2	Grade 5
26	9390-136	Capscrew 5/8"-11UNC x 6"	2	Grade 5
27	9391-046	Cotter Pin 3/16" Dia. x 2"	4	
28	9394-006	Hex Nut 3/8"-16UNC	3	
29	9404-021	Lock Washer 3/8"	3	
30	9404-025	Lock Washer 1/2"	8	
31	9404-029	Lock Washer 5/8"	2	
32	9405-076	Flat Washer 3/8" USS	6	
33	9405-116	Flat Washer 1" SAE	4	
34	9801	Locknut/Top 5/8"-11UNC	2	
35	9874	90° Elbow 9/16-18 JIC Male x 3/4-16 O-Ring Male	2	
36	91268	Bushing-Tension 1 1/4" OD	1	

Cleanout Door Assembly

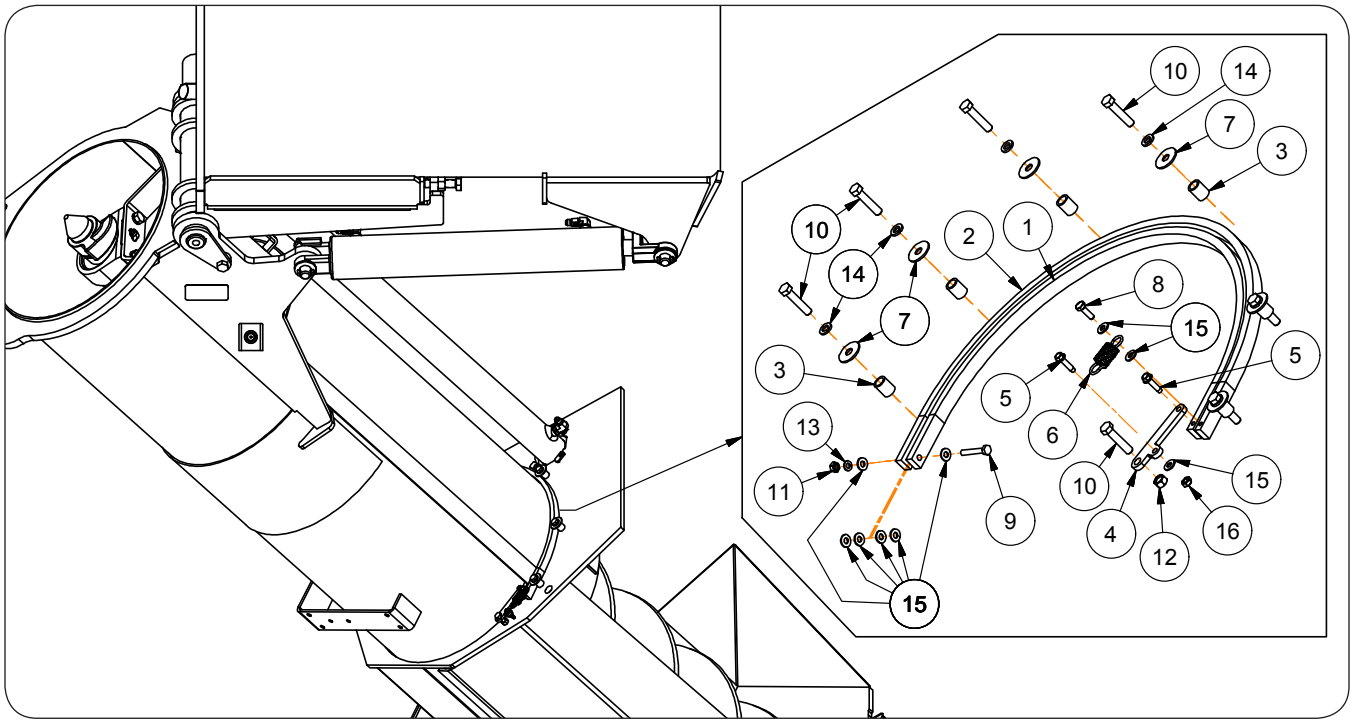
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
1	Plate - Lock =BLACK=	268313B	1	
2	Plate - Door Rack =BLACK=	268316B	1	
3	Door Weldment =BLACK=	286799B	1	
4	Pad - Wear	286801	1	
5	Plate - Door Lift =BLACK=	286802B	2	
6	Door Lift/Shaft Weldment	268901	1	
7	Door Lift/Wheel Weldment =BLACK=	268904B	1	
8	Bushing-Split	9003411	2	
9	Shoulder Bolt-1/2" Dia. x 1/2”	9006181	1	
10	Flange Screw 5/16”-18UNC x 3/4”	91256	4	
11	Flange Screw 3/8”-16 x 1”	91262	1	
12	Nut/Large Flange 3/8”-16UNC	91263	9	
13	Capscrew 1/4”-20UNC x 3/4”	9390-003	4	
14	Capscrew 3/8”-16UNC x 2”	9390-059	2	
15	Lock Washer 1/4	9404-017	6	
16	Top Locknut 3/8”-16UNC	9928	2	

Flow Door Seals

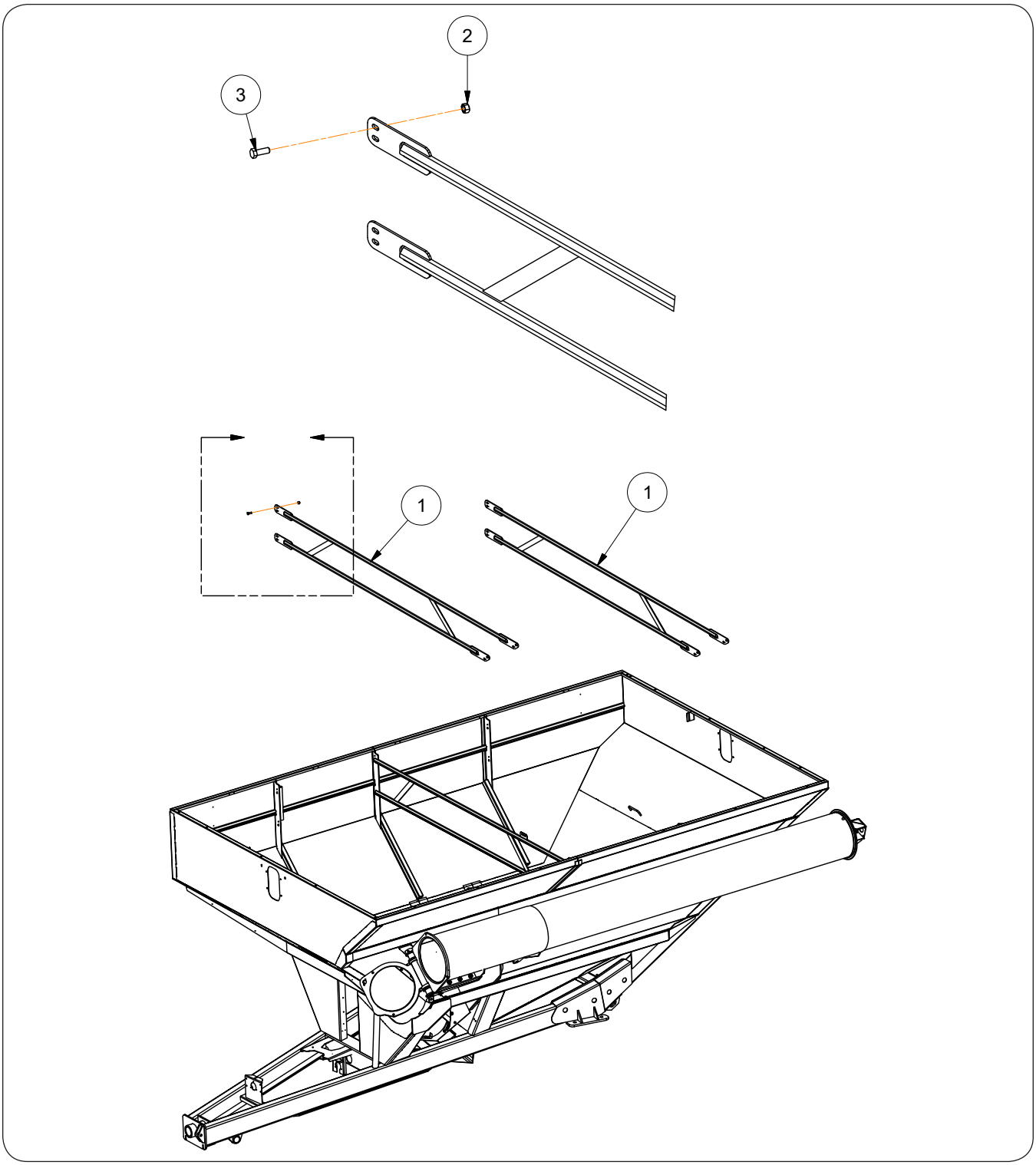
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
1	Seal - Poly	281312	1	
2	Seal - Poly	281313	1	
3	Spacer Bushing =Green=	281257G	6	
	Spacer Bushing =Red=	281257R		
4	Spring Bracket =Green=	281258G	1	
	Spring Bracket =Red=	281258R		
5	Screw, 1/4-20UNC x 1 (Self-Threading)	9004355	2	
6	Spring	9004375	1	
7	Fender Washer, 3/8	9004537	6	
8	Capscrew, 1/4-20UNC x 7/8 G5	9390-004	1	
9	Capscrew, 1/4-20UNC x 1 3/4 G5	9390-008	1	
10	Capscrew, 3/8-16UNC x 1 3/4 G5	9390-058	7	
11	Hex Nut, 1/4-20UNC G5	9394-002	1	
12	Hex Nut, 3/8-16UNC G5	9394-006	1	
13	Lock Washer, 1/4	9404-017	1	
14	Lock Washer, 3/8	9404-021	6	
15	Flat Washer 1/4	9405-062	7	
16	Lock Nut, 1/4-20UNC	9936	1	

Internal Bracing Components

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



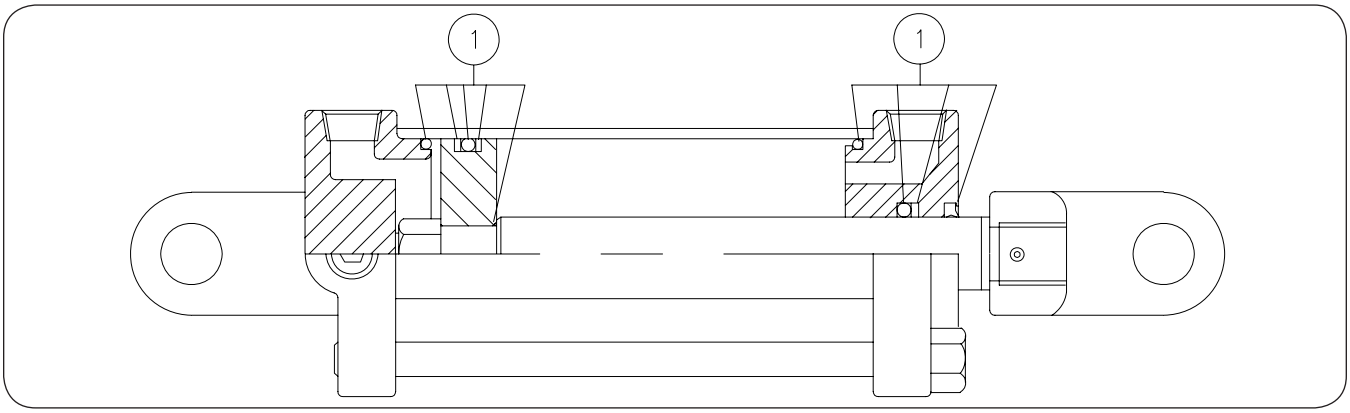
ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	281943B	Cross Brace Weldment =Black=	2	
2	9002058	Flange Nut 1/2-13UNC	16	
3	91266	Flange Screw 1/2-13UNC x 1 1/2 Gr.5	16	

Notes

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

Cylinders — 3 1/2” x 20” (Auger Fold)

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

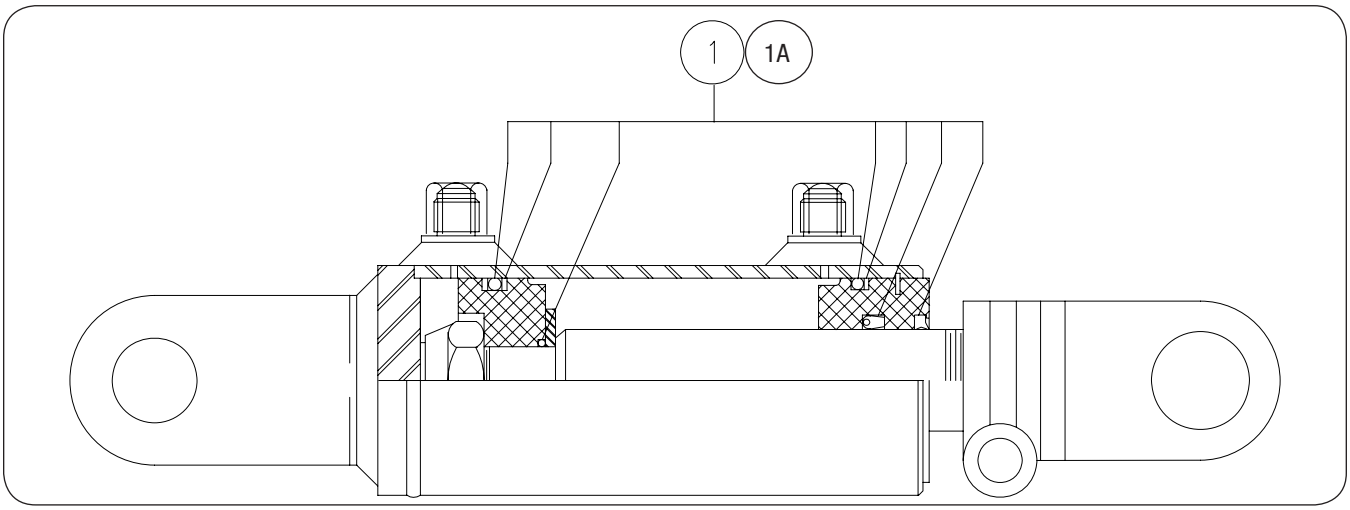


ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
	Cylinder, Complete	9007639	1	
1	Seal Kit	9006942	1	

Cylinders — 2 1/2” x 36” (Flow Door)

ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
	Cylinder, Complete	9005363	1	
1	Seal Kit	9005409	1	

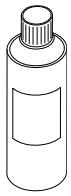
Cylinders — (Discharge Spout)



ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
	Cylinder, Complete - 1 1/2” x 4”	9003789	1	For SN B37940099 and Lower
1	Seal Kit	9005419	1	
	Cylinder, Complete - 1 1/2” x 6”	9008152	1	For SN B37940100 and Higher
1A	Seal Kit	9008341	1	

Touch-Up Paint

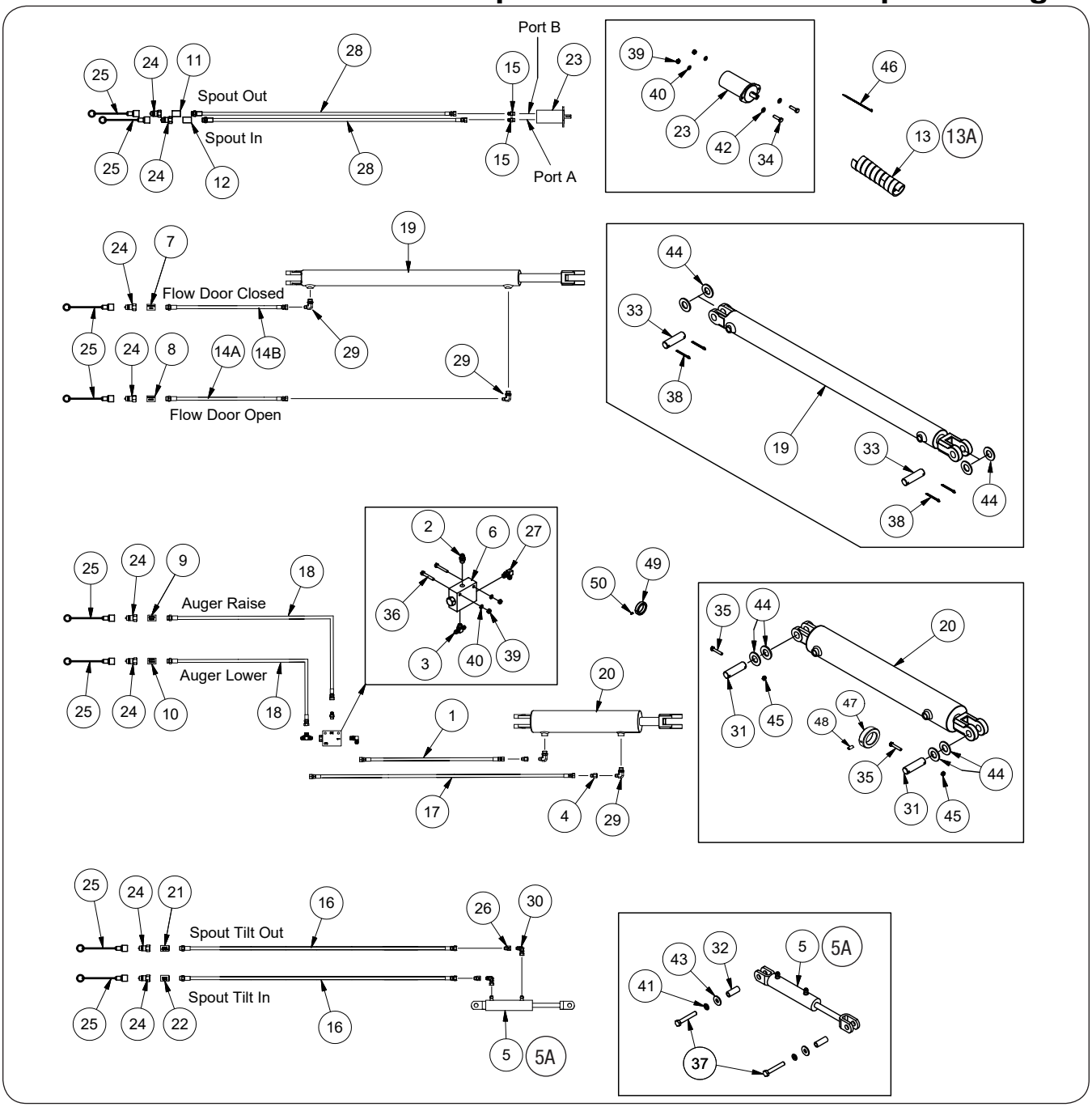
Please visit www.unverferth.com/parts/ for the most current parts listing.



PAINT	SPRAY
Black	97013
Green	97015
Red	97301
Primer, Gray	9500082
Off White	97016

Hydraulics

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



ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	Hose 1/4 x 78 (9/16-18 JIC Female x 9/16-18 JIC Female)	9000925	1	
2	Adapter (9/16-18 JIC Male x 9/16-18 O-Ring Male)	9001495	1	
3	Tee (9/16-18 JIC Male x 9/16-18 O-Ring Male x 9/16-18 JIC Male)	9001710	1	
4	Reducer	9002199	2	
5	Hydraulic Cylinder 1 1/2 x 4	9003789	1	For SN B37940099 & Lower
	Seal Kit	9005419	-	
5A	Hydraulic Cylinder 1 1/2 x 6	9008152	1	For SN B37940100 & Higher
	Seal Kit	9008341	-	
6	Pilot Operated Check Valve Block	9003990	1	
7	Sleeve, Hose Marker (RED, Flow Door Close)	9003996	1	
8	Sleeve, Hose Marker (RED, Flow Door Open)	9003995	1	

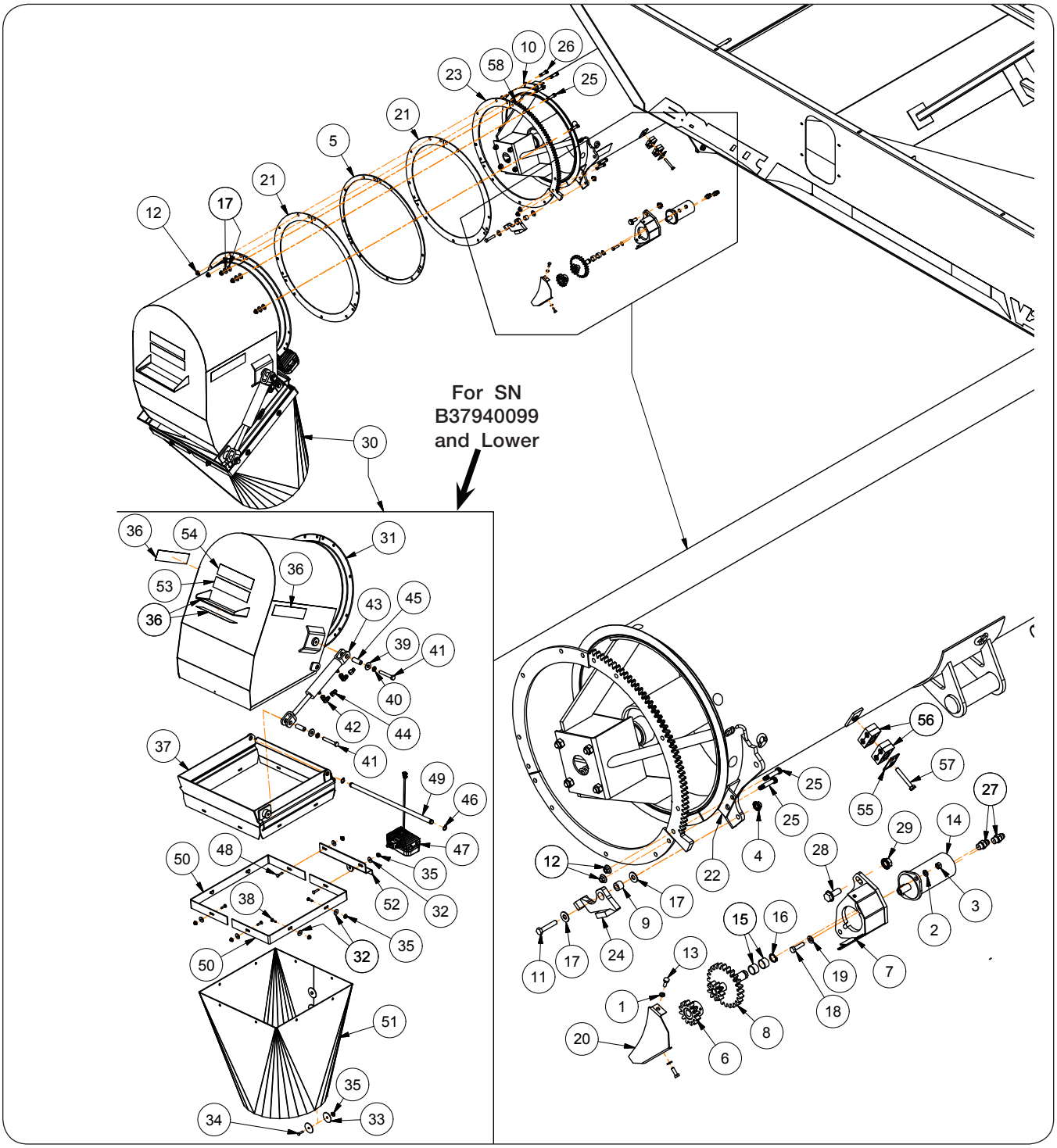
Hydraulics

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

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
9	Sleeve, Hose Marker (GREEN, Auger Raise)	9003997	1	
10	Sleeve, Hose Marker (GREEN, Auger Lower)	9003998	1	
11	Sleeve, Hose Marker (YELLOW, Spout Out)	9003999	1	
12	Sleeve, Hose Marker (YELLOW, Spout In)	9004000	1	
13	Spiral Hose Wrap	9004075	4	Specify in Feet
13A	Hose Wrap	9003848		
14	Hose 1/4 x 295 (9/16-18 JIC Female x 3/4-16 O-Ring Male)	9004121	2	
15	Adapter	9004393	2	
16	Hose 1/4 x 500 (90° Elbow 9/16-18 JIC Female x 3/4-16 O-Ring Male)	9004540	2	For SN B40910099 & Lower
	Hose 1/4 x 540 (9/16-18 JIC Female x 3/4-16 O-Ring Male)	9008347		For SN B40910100 & Higher
17	Hose 1/4 x 100 (9/16-18 JIC Female x 9/16-18 JIC Female)	9004774	1	For SN B40910099 & Lower
	Hose 1/4 x 54 (9/16-18 JIC Female x 9/16-18 JIC Female)	9003114		For SN B40910100 & Higher
18	Hose 1/4 x 209 (90° Elbow 9/16-18 JIC Female x 3/4-16 O-Ring Male)	9005297	2	For SN B40910099 & Lower
	Hose 1/4 x 295 (9/16-18 JIC Female x 3/4-16 O-Ring Male)	9004121		For SN B40910100 & Higher
19	Flow Door Cylinder 2 1/2 x 36	9005363	1	
	Seal Kit	9005409	-	
20	Hydraulic Cylinder, 3 1/2 x 20 - 3000 PSI	9007639	1	
	Seal Kit	9006942	-	
21	Sleeve, Hose Marker (WHITE, Spout Tilt Out)	9003999	1	
22	Sleeve, Hose Marker (WHITE, Spout Tilt In)	9004000	1	
23	Spout Hydraulic Motor	9007626	1	
24	Male Coupler 3/4-16 Female O-Ring	91383	8	
25	Dust Cap	91511	8	
26	Adapter (9/16-18 JIC Female x 9/16-18 JIC Male)	95193	2	w/.030 Restrictor
27	90° Elbow (9/16-18 JIC Male x 9/16-18 O-Ring Male)	97445	1	
28	Hose 1/4 x 468 (90° Elbow 9/16-18 JIC Female x 3/4-16 O-Ring Male)	98059	2	For SN B40910099 & Lower For Spout Hydraulic Motor
	Hose 1/4 x 510 (9/16-18 JIC Female x 3/4-16 O-Ring Male)	9008346		For SN B40910100 & Higher For Spout Hydraulic Motor
29	90° Elbow (9/16-18 JIC Female x 3/4-16 O-Ring Male)	9874	4	
30	90° Elbow (9/16-18 JIC Female x 9/16-18 JIC Male)	9876	2	
31	Pin Replacement Kit	291468	2	For SN B37430099 & Lower
	Pin 1" Dia. x 4 7/8"	291988		For SN B37430100 & Higher
32	Sleeve/Bushing	285290	2	
33	Pin 1" Dia. x 3 1/2 (For Auger & Door Cylinders)	804572	2	
34	Capscrew 5/16-18UNC x 1 1/4	9390-031	2	Grade 5
35	Capscrew 5/16-18UNC x 1 1/2	9390-032	2	Grade 5
36	Capscrew 5/16-18UNC x 2	9390-034	2	Grade 5
37	Capscrew 1/2-13UNC x 3 1/4	9390-108	2	Grade 5
38	Cotter Pin 3/16" Dia. x 2	9391-046	4	
39	Hex Nut 5/16-18UNC	9394-004	2	
40	Lock Washer 5/16"	9404-019	2	
41	Lock Washer 1/2"	9404-025	2	
42	Flat Washer 5/16" SAE	9405-068	2	
43	Flat Washer 1/2" USS	9405-088	2	
44	Flat Washer 1" SAE	9405-116	10	
45	Locknut 5/16-18UNC	9807	2	
46	Cable Tie 21 1/2"	9000104	4	
	Cable Tie 7 1/2"	9000106	22	
	Cable Tie 14 1/2"	9000107	8	
47	Cylinder Stop Bushing	291257B	1	
48	Set Screw, 1/4-20UNC x 1/2"	9399-060	1	
49	Top Plate	9003814	6	
50	Clamp Pair	9003816	6	

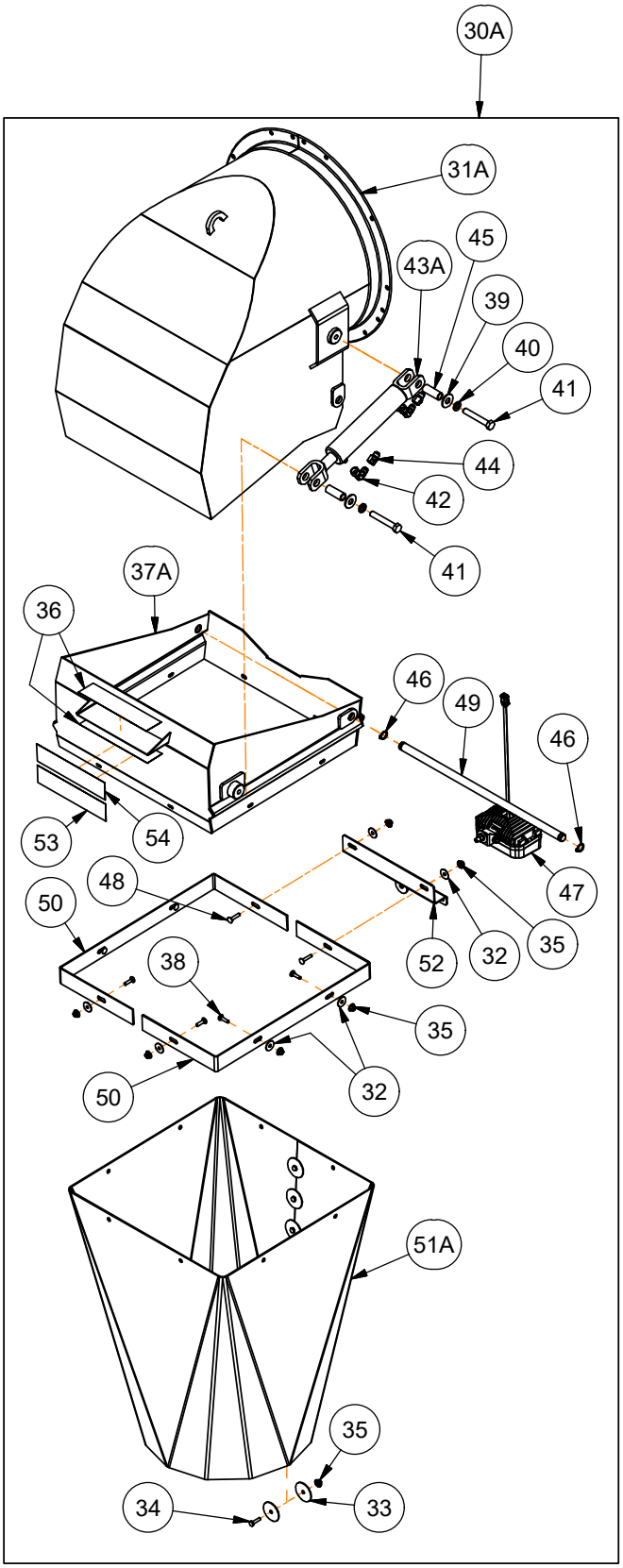
Directional Spout

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



Directional Spout - SN B37940100 and Higher

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	DESCRIPTION	PART NUMBER	QTY.	NOTES
1	Lock Washer 1/4"	9404-017	6	
2	Lock Washer 5/16"	9404-019	4	
3	Hex Nut 5/16"-18UNC	9394-004	4	
4	Nut/Large Flange 3/8"-16UNC	91263	9	
5	Pad-Pivot, 20 1/2" ID x 3/16"	272717	3	
6	Gear Weldment	272840	1	
7	Spur Gear Mount Weldment =BLACK=	288385B	1	
8	Gear & Shaft Weldment	272844	1	
9	Bushing-Pivot, Lock	290882	1	
10	Plate-Stop =BLACK=	272855B	1	
11	Capscrew 3/8"-16UNC x 2"	9390-059	2	
12	Hex Nut/Large Flange 5/16"-18UNC	91257	17	
13	Capscrew 1/4"-20UNC x 3/4"	9390-003	4	
14	Motor-Hydraulic 3.07 CID, 5.28 GPM, 2 Bolt Flange Mount	9007626	1	
15	Self-Lubricating Bushing	9003809	2	
16	Snap Ring 3/4"	9003810	1	
17	Flat Washer 3/8" USS	9405-076	18	
18	Capscrew 5/16"-18UNC x 1 1/4"	9390-031	2	
19	Flat Washer 5/16" SAE	9405-068	2	
20	Panel-Cover =BLACK=	288384B	1	
21	Pad-Pivot, 19" ID x 1/8"	272710	6	
22	Plate-Stop =BLACK=	290884B	1	
23	Pad-Pivot, 19" ID x 1/4"	272716B	2	
24	Stop Weldment =BLACK=	288214B	1	
25	Shoulder Bolt 3/8" Dia. x 1 1/4", Socket Head, 5/16"-18UNC	9007837	6	
26	Shoulder Bolt 3/8" Dia. x 1", Socket Head, 5/16"-18UNC	9007843	2	
27	Adapter 9/16-18 JIC Male x 9/16-18 O-Ring w/Restrictor	9004393	2	.055 Restrictor
28	Flange Screw 1/2"-13UNC x 1 1/4"	91266	1	
29	Flange Nut 1/2"-13UNC	91267	1	
30	Hood Assembly =BLACK=	272713B	1	For SN B37940099 & Lower
30A		291641B	1	For SN B37940100 & Higher
31	Hood Weldment =BLACK=	272952B	1	For SN B37940099 & Lower
31A		272944B	1	For SN B37940100 & Higher
32	Flat Washer 1/4" (Fender Washer)	9405-066	8	
33	Fender Washer 5/16" ID	94763	14	For SN B37940099 & Lower
			16	For SN B37940100 & Higher
34	Capscrew 1/4"-20UNC x 1"	9390-005	7	For SN B37940099 & Lower
			8	For SN B37940100 & Higher
35	Hex Nut/Large Flange 1/4"-20UNC	97189	15	For SN B37940099 & Lower
			16	For SN B37940100 & Higher
36	Reflector AMBER	9003127	4	For SN B37940099 & Lower
			2	For SN B37940100 & Higher
37	Spout Weldment =BLACK=	272821B	1	For SN B37940099 & Lower
37A		272951B	1	For SN B37940100 & Higher
38	Carriage Bolt 1/4"-20UNC x 1"	9388-003	6	
39	Flat Washer 1/2" USS	9405-088	2	
40	Lock Washer 1/2"	9404-025	2	
41	Capscrew 1/2"-13UNC x 3 1/4"	9390-108	2	
42	90° Elbow 9/16-18 JIC Male x 9/16-18 JIC Female	9876	2	
43	Hydraulic Welded Cylinder 1 1/2 x 4	9003789	1	For SN B37940099 & Lower
43A	Hydraulic Welded Cylinder 1 1/2 x 6	9008152	1	For SN B37940100 & Higher

(Continued on next page)

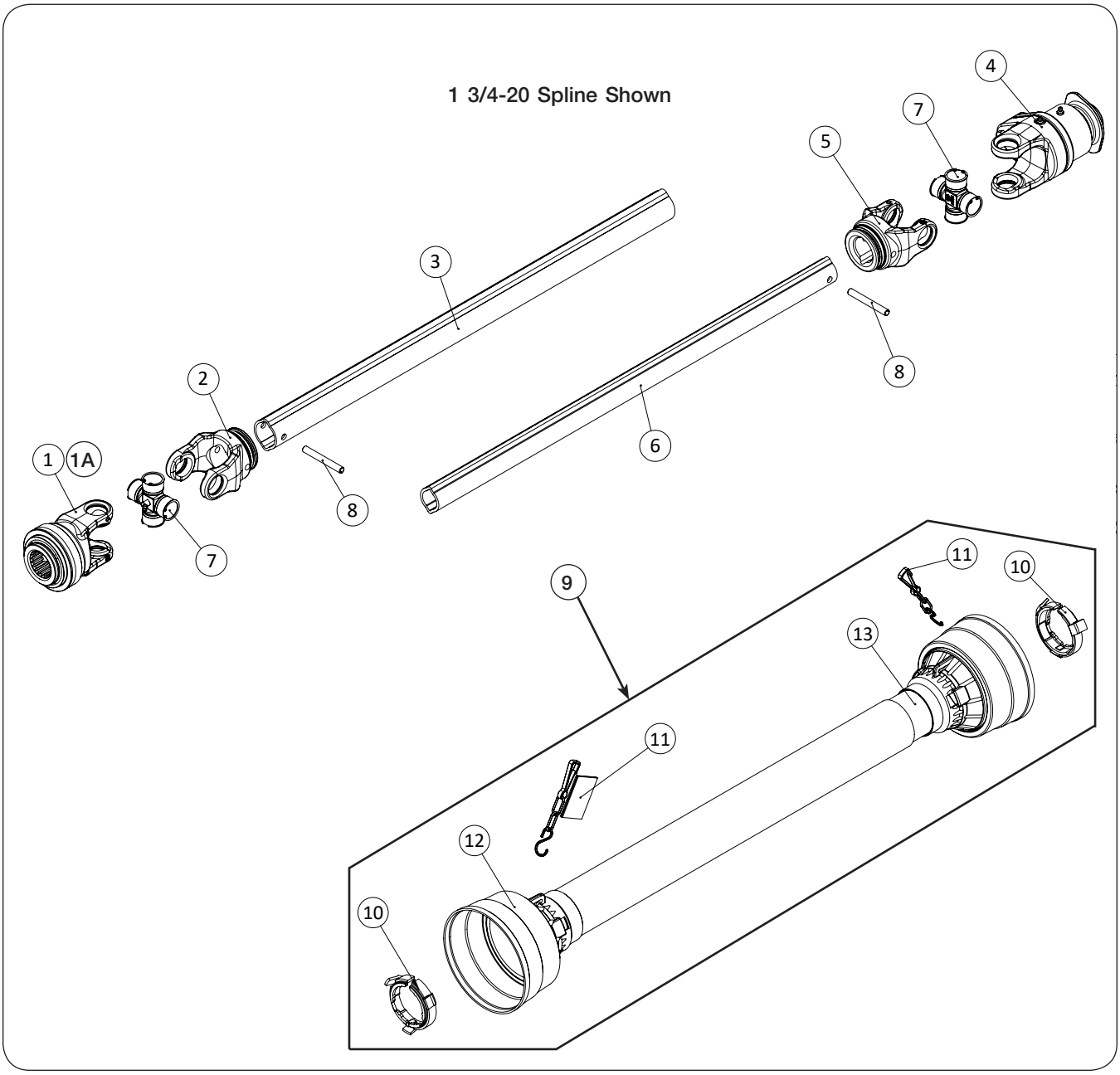
Directional Spout (continued)

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

ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
44	Adapter 9/16-18 JIC Female x 9/16-18 JIC Male w/Restrictor	95193	2	
45	Bushing-Sleeve 2.0625" Long	285290	2	
46	Snap Ring 3/4"	9003810	2	
47	Light-Work, LED	9007186	1	For SN B40910099 & Lower
		9008957		For SN B40910100 & Higher
48	Carriage Bolt 1/4"-20UNC x 1 1/4"	9388-004	2	
49	Shaft-Pivot 3/4" Dia. x 21 17/32"	272865	1	
50	Plate-Chute Strap =BLACK=	272866B	2	
51	Rubber Chute	9007826	1	For SN B37940099 & Lower
51A		9008391	1	For SN B37940100 & Higher
52	Bracket-Light =BLACK=	272841B	1	
53	Fluorescent Orange Decal	9003125	1	
54	Reflector RED	9003126	1	
55	Clamp Top Plate	9003814	1	
56	Poly Clamp Pair (0.55)	9003816	2	
57	Capscrew 5/16"-18UNC x 2 1/4"	9390-035	1	
58	Spout Pivot Gear	287885	1	

PTO Assembly Shear-Bolt Clutch - For SN B41980100 & Higher

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



PTO Assembly Shear-Bolt Clutch - For SN B41980100 & Higher

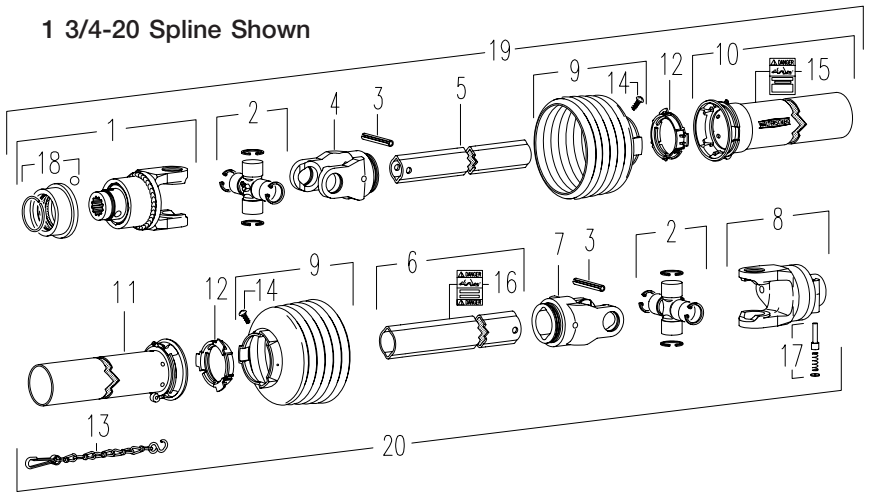
Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	DESCRIPTION	PART NO.	QTY	NOTES
	PTO Assembly Complete	9008526	1	1 3/4"-20 Spline Includes Front and Rear Half Assemblies (Benzi America PTO)
	PTO Assembly Complete	9009253	1	1 3/8"-21 Spline (Optional) Includes Front and Rear Half Assemblies (Benzi America PTO)
	Driveline Front Half Assembly	9009248	1	1 3/4"-20 Spline Includes Items 1 - 3 and 7 - 13
		9009285	1	1 3/8"-21 Spline (Optional) Includes Items 1A - 3 and 7 - 13
	Driveline Rear Half Assembly	9009249	1	All Splines Includes Items 4 - 13
1	Yoke Assembly	9009033	1	1 3/4"-20 Spline
1A		9009254	1	1 3/8"-21 Spline
2	Outer Yoke	9009036	1	
3	Outer Profile Tube w/ Pin Hole	9009039	1	
4	End Yoke / Overrunning Clutch	9009034	1	
5	Inner Yoke	9009035	1	
6	Inner Profile Tube w/ Pin Hole	9009040	1	
7	U-Joint Cross Kit	9009037	1	
8	Tension Pin	9008794	1	
9	Safety Guard Assembly	9009041	1	Includes Items 10-13
10	Guarding Cone Retainer Clip Package	9009044	1	Package of 2
11	Chain	9009046	2	
12	Outer Guard Half	N/A	1	
13	Inner Guard Half	N/A	1	

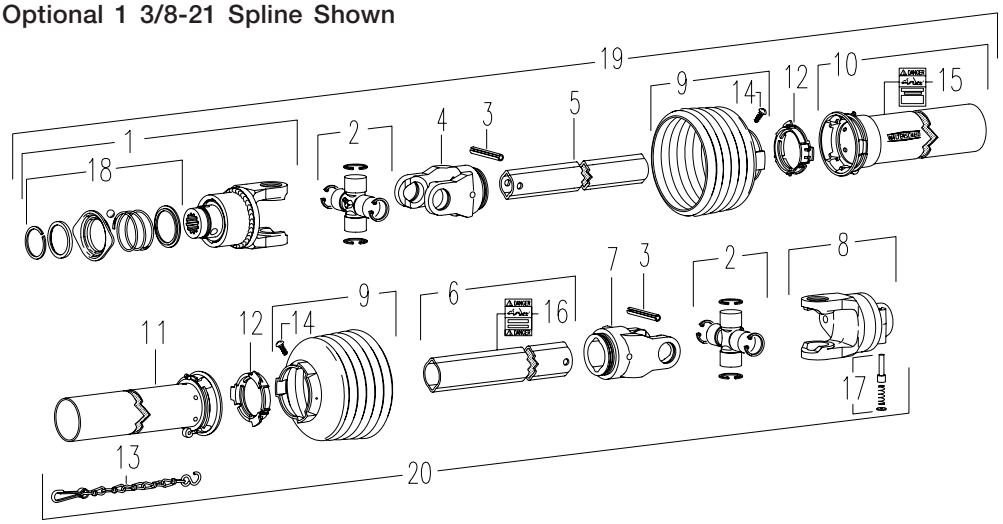
PTO Assembly Shear-Bolt Clutch - For SN B41980099 & Lower

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

1 3/4-20 Spline Shown



Optional 1 3/8-21 Spline Shown



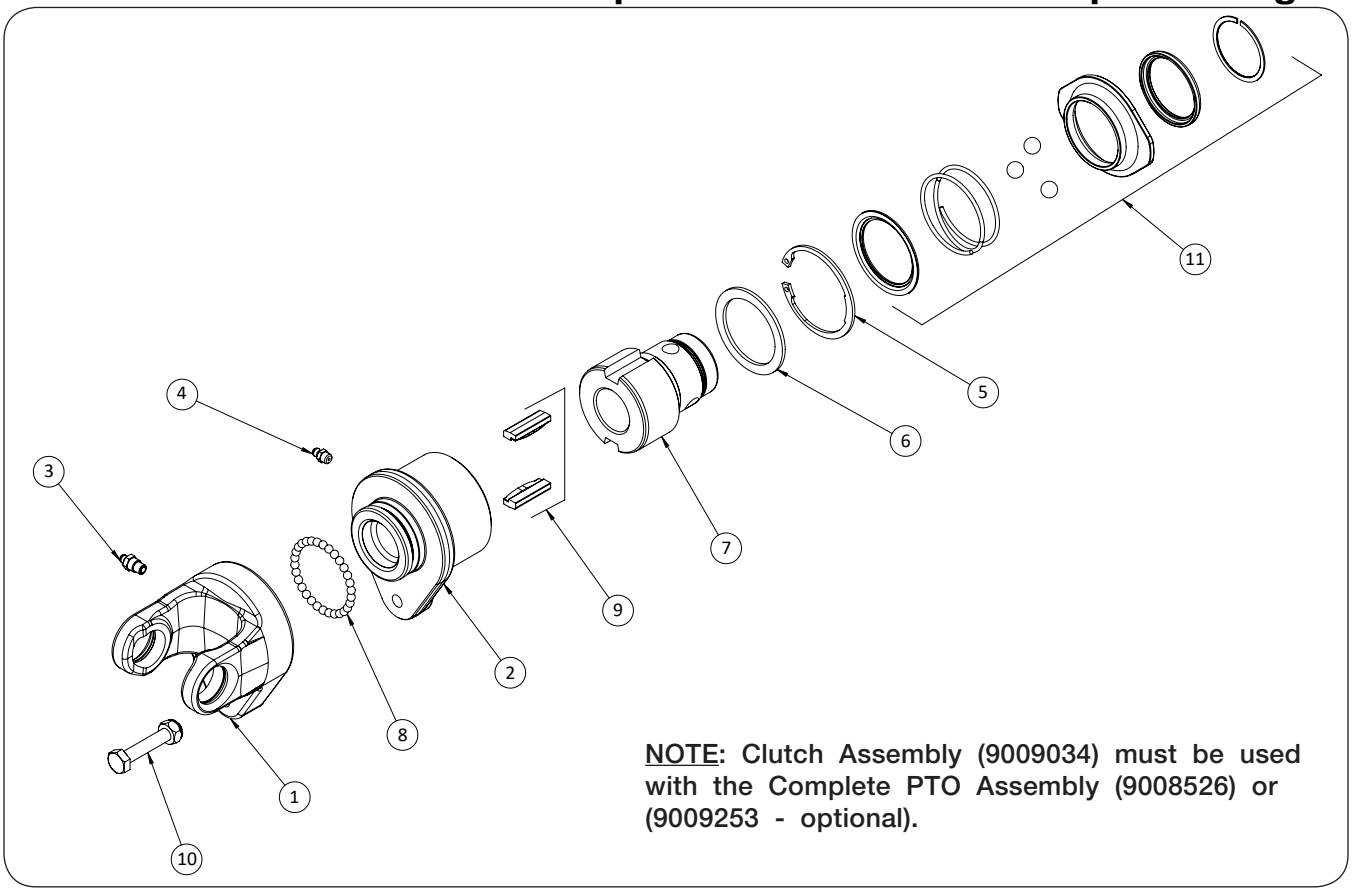
PTO Assembly Shear-Bolt Clutch - For SN B41980099 & Lower

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

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
	PTO Assembly Complete	9004767	1	1 3/4-20 Spline (GKN Walterscheid PTO)
	PTO Assembly Complete	9004766	1	1 3/8-21 Spline (Optional) (GKN Walterscheid PTO)
1	End Yoke / Overrunning Clutch	9004778	1	1 3/4-20 Spline
	End Yoke / Overrunning Clutch	9004777	1	1 3/8-21 Spline (Optional)
2	Cross & Bearing Kit	93857	2	
3	Spring Pin	93859	2	
4	Front Inboard Yoke	93858	1	
5	Inner Profile	9004274	1	
6	Outer Profile	94837	1	
7	Rear Inboard Yoke	93862	1	
8	Shear Clutch Complete	9004170	1	1 3/8-21 Spline
9	Shield Cone, Black 6-Rib	93863	2	
10	Outer Shield Tube w/Cap	94839	1	
11	Inner Shield Tube w/Cap	94840	1	
12	Bearing Ring	92373	2	
13	Safety Chain	92374	1	
14	Screw	92372	2	
15	Decal, “Danger / Out”	92377	1	
16	Decal, “Danger / Inn”	92378	1	
17	Quick Disconnect Kit for Shear Clutch	92362	1	
18	Quick Disconnect Kit for Overrunning Clutch	93856	1	1 3/4-20 Spline
	Quick Disconnect Kit for Clutch	92393	1	1 3/8-21 Spline (Optional)
19	Front Half PTO for Shear Clutch	9004771	1	1 3/4-20 Spline
	Front Half PTO for Shear Clutch	9004770	1	1 3/8-21 Spline (Optional)
20	Rear Half PTO / Shear Clutch	9004136	1	

Shear-Bolt Clutch Assembly - For SN B41980100 & Higher

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



NOTE: Clutch Assembly (9009034) must be used with the Complete PTO Assembly (9008526) or (9009253 - optional).

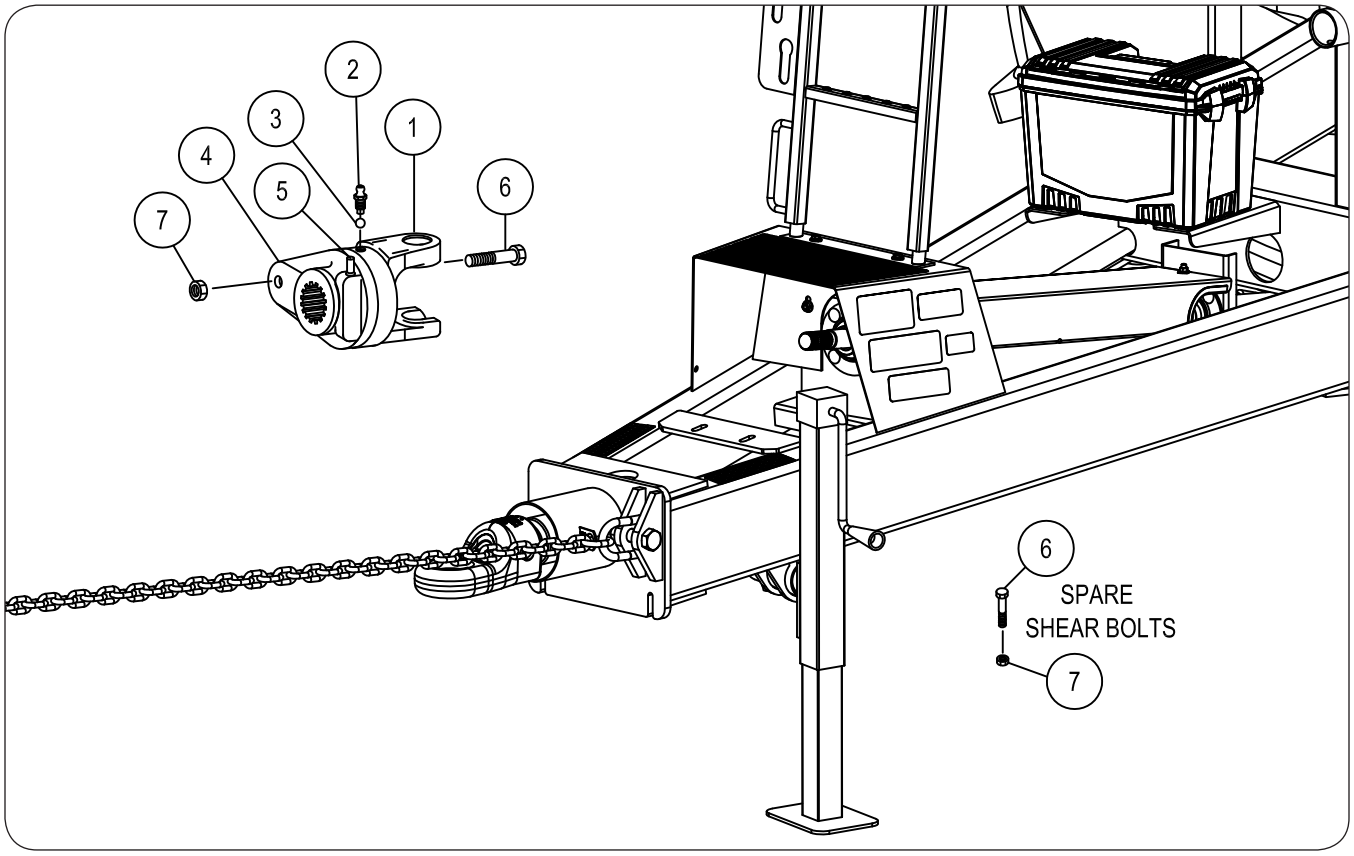
IMPORTANT

- *USE GENUINE OEM REPLACEMENT PART. Incorrect part may cause shear function to occur too soon causing inconvenience or too late resulting in damage to driveline and auger components. Tighten to specified torque value.*
- *Torque to 57 Ft.-Lbs.*

ITEM	DESCRIPTION	PART NO.	QTY	NOTES
	Shear-Bolt Clutch	9009034	1	For SN B41980100 & Higher Includes Items 1 - 11 (Benzi America Clutch)
1	Flange Yoke - Shear Bolt	9009322	1	
2	Hub Housing with Welded Flange	9009323	1	
3	Grease Zerk, M10 x 1	9009324	1	
4	Grease Zerk, M8 x 1	9008788	1	
5	Circlip	9009326	1	
6	Shim	9009327	1	
7	Overrunning Clutch Hub	9009328	1	
8	Ball Bearing	9009329	30	
9	Spring Pack, Overrunning Clutch	9009330	1	
10	Bolt Set - M10 x 60 mm	9009331	1	See notes*
11	Quick Disconnect Kit	9009332	1	

Shear-Bolt Clutch Assembly - For SN B41980099 & Lower

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



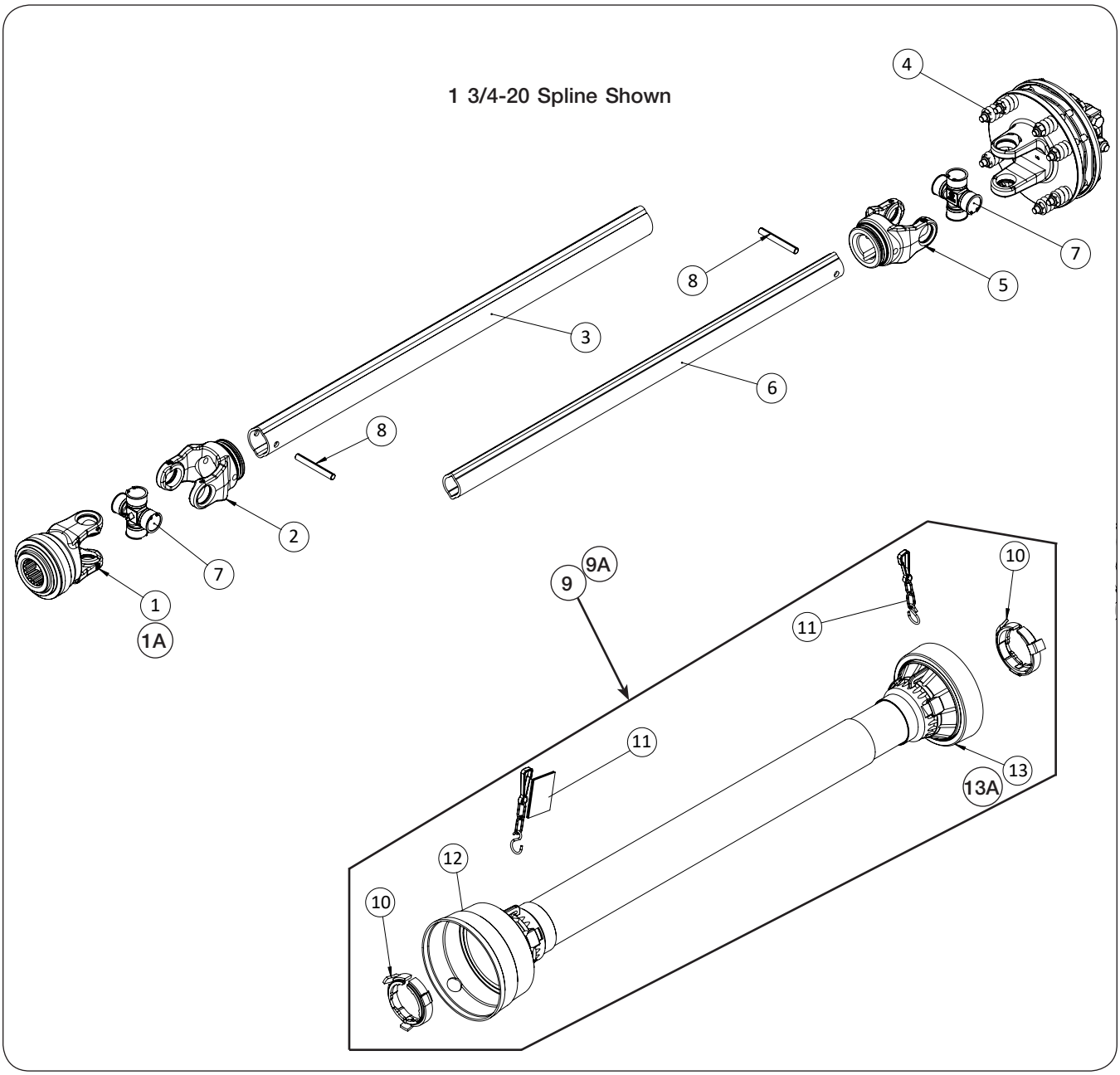
IMPORTANT

- *USE GENUINE OEM REPLACEMENT PART. Incorrect part may cause shear function to occur too soon causing inconvenience or too late resulting in damage to driveline and auger components. Tighten to specified torque value.*
- *Torque to 57 Ft.-Lbs.*

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
	Shear-Bolt Clutch	9004170	1	For SN B41980099 & Lower Includes Items 1 - 7 (GKN Walterscheid Clutch)
1	Shear Yoke	9003710	1	
2	Grease Zerk	95256	1	
3	Ball	95257	24	
4	Housing, Splined	9003884	1	
5	Quick Disconnect Pin Kit	92362	1	
6	Bolt, M10 x 60 Gr. 10.9	94910-015	1	Qty. 6 in toolbox - See note*
7	Locknut, M10	9003645	1	Qty. 6 in toolbox - See note*

PTO Assembly Friction Clutch - For SN B41980100 & Higher

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



PTO Assembly Friction Clutch - For SN B41980100 & Higher

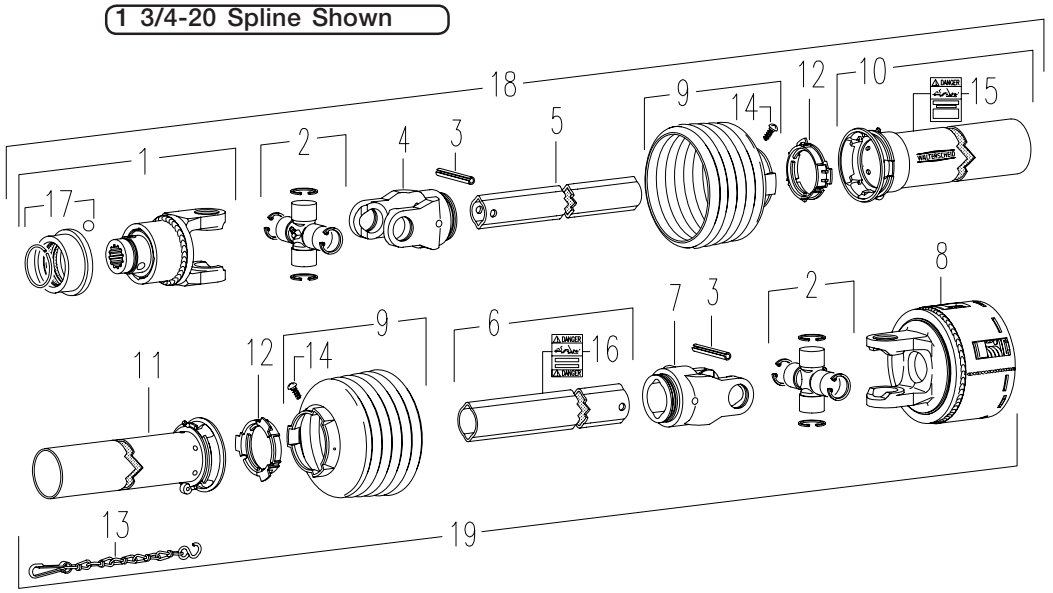
Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	DESCRIPTION	PART NO.	QTY	NOTES
	PTO Assembly Complete	9009258	1	1 3/4"-20 Spline Includes Front and Rear Half Assemblies (Benzi America PTO)
	PTO Assembly Complete	9009257	1	1 3/8"-21 Spline Includes Front and Rear Half Assemblies (Benzi America PTO)
	Driveline Front Half Assembly	9009248	1	1 3/4"-20 Spline Includes Items 1 - 3 and 7 - 13
		9009285	1	1 3/8"-21 Spline (Optional) Includes Items 1A - 3 and 7 - 13
	Driveline Rear Half Assembly	9009287	1	All Splines Includes Items 4 - 9A, 10 - 12, & 13A
1	Yoke Assembly	9009033	1	1 3/4"-20 Spline
1A		9009254	1	1 3/8"-21 Spline
2	Outer Yoke	9009036	1	
3	Outer Profile Tube w/ Pin Hole	9009039	1	
4	Friction Clutch with Overrunning Clutch	9009256	1	For SN B41980100 & Higher
5	Inner Yoke	9009035	1	
6	Inner Profile Tube w/ Pin Hole	9009040	1	
7	U-Joint Cross Kit	9009037	1	
8	Tension Pin	9008794	1	
9	Safety Guard Assembly	9009041	1	Includes Items 10-13
9A		9009286	1	Includes Items 10-13A
10	Guarding Cone Retainer Clip Package	9009044	1	Package of 2
11	Chain	9009046	2	
12	Outer Guard Half	N/A	1	
13	Inner Guard Half	N/A	1	
13A		9009288	1	

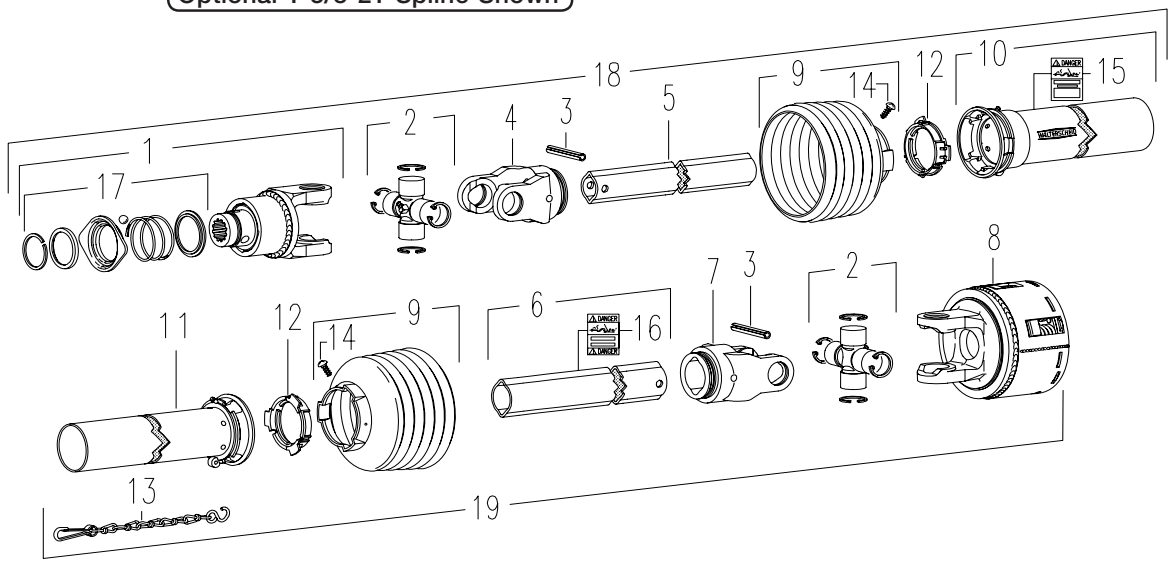
PTO Assembly Friction Clutch - For SN B41980099 & Lower

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

1 3/4-20 Spline Shown



Optional 1 3/8-21 Spline Shown



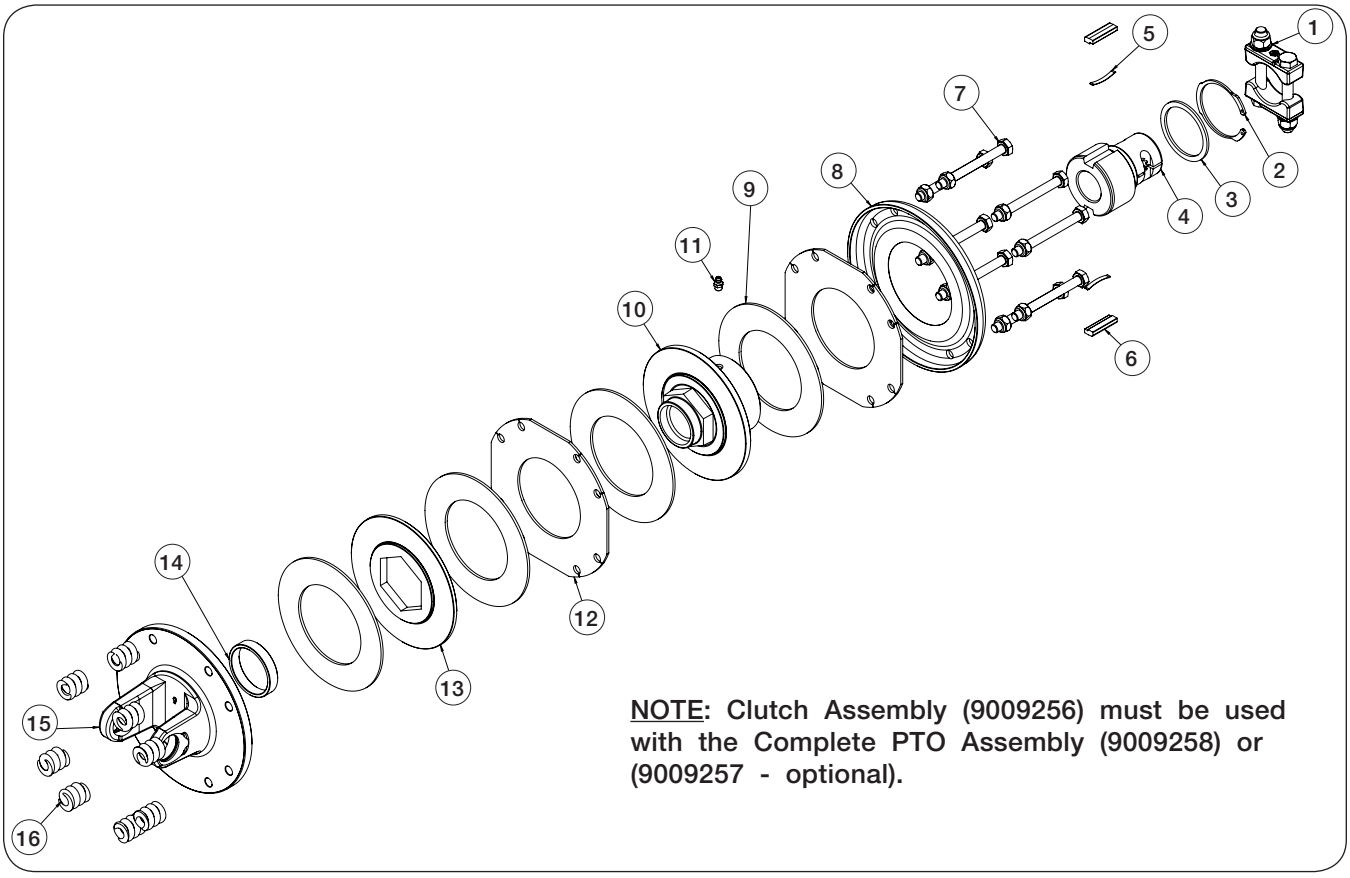
PTO Assembly Friction Clutch - For SN B41980099 & Lower

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

ITEM	DESCRIPTION	PART NO.	QTY	NOTES
	PTO Assembly Complete	9004769	1	1 3/4-20 Spline (GKN Walterscheid PTO)
	PTO Assembly Complete	9004768	1	1 3/8-21 Spline (Optional) (GKN Walterscheid PTO)
1	End Yoke / Overrunning Clutch	9004778	1	1 3/4-20 Spline
	End Yoke / Overrunning Clutch	9004777	1	1 3/8-21 Spline (Optional)
2	Cross & Bearing Kit	93857	2	
3	Spring Pin	93859	2	
4	Front Inboard Yoke	93858	1	
5	Inner Profile	9004274	1	
6	Outer Profile	94837	1	
7	Rear Inboard Yoke	93862	1	
8	Friction Clutch Complete	9004275	1	1 3/8-21 Spline
9	Shield Cone, Black 6-Rib	93863	2	
10	Outer Shield Tube w/Cap	94839	1	
11	Inner Shield Tube w/Cap	94840	1	
12	Bearing Ring	92373	2	
13	Safety Chain	92374	1	
14	Screw	92372	2	
15	Decal, “Danger / Out”	92377	1	
16	Decal, “Danger / Inn”	92378	1	
17	Quick Disconnect Kit for Overrunning Clutch	93856	1	1 3/4-20 Spline (ONLY)
	Quick Disconnect Kit for Clutch	92393	1	1 3/8-21 Spline (ALL)
18	Front Half PTO	9004771	1	1 3/4-20 Spline
	Front Half PTO	9004770	1	1 3/8-21 Spline (Optional)
19	Rear Half PTO / Friction	9004212	1	

Friction Clutch Assembly - For SN B41980100 & Higher

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



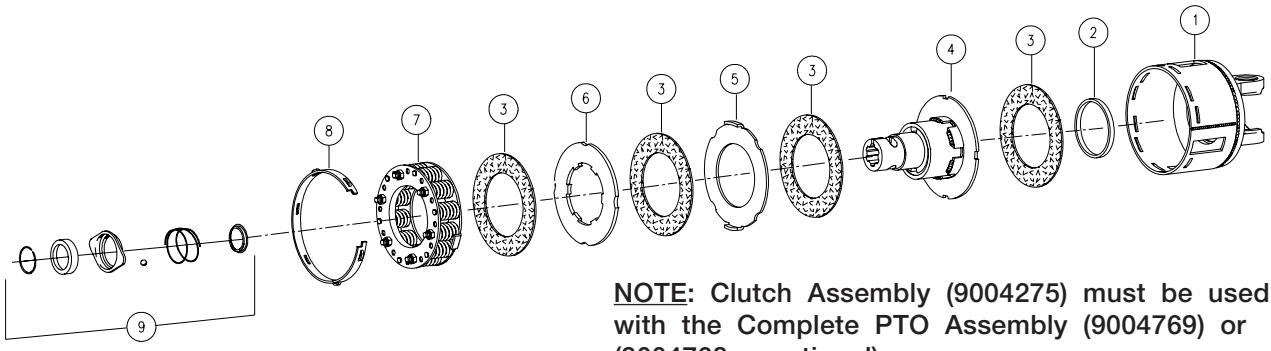
NOTE: Clutch Assembly (9009256) must be used with the Complete PTO Assembly (9009258) or (9009257 - optional).

NOTE: The clutch is preset at the factory and should not require adjustment. See "PTO Locking Systems" in the MAINTENANCE section for specific clutch information.

ITEM	DESCRIPTION	PART NO.	QTY	NOTES
	Friction Clutch with Overrunning Clutch	9009256	1	For SN B41980100 & Higher Includes Items 1 - 16 (Benzi America PTO)
1	Clamp Bridge Kit	9009325	1	
2	Circlip	9009333	1	
3	Hub Washer	9009334	1	
4	Overrunning Clutch Hub	9009335	1	
5	Leaf Spring	9009336	2	
6	Torque Limiter Key	9009337	2	
7	Bolt Set - M10 x 100 mm	9009338	8	
8	Friction Clutch Pressure Plate	9009339	1	
9	Friction Disk	9009340	4	
10	Hub Housing w/ Flange	9009349	1	
11	Grease Zerk, M8 x 1	9008788	1	
12	Friction Clutch Inner Plate	9009344	2	
13	Drive Plate w/ Hexagon	9009345	1	
14	Compression Spring Bushing	9009346	1	
15	Friction Clutch Flange Yoke	9009347	1	
16	Compression Spring	9009348	8	

Friction Clutch Assembly - For SN B41980099 & Lower

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



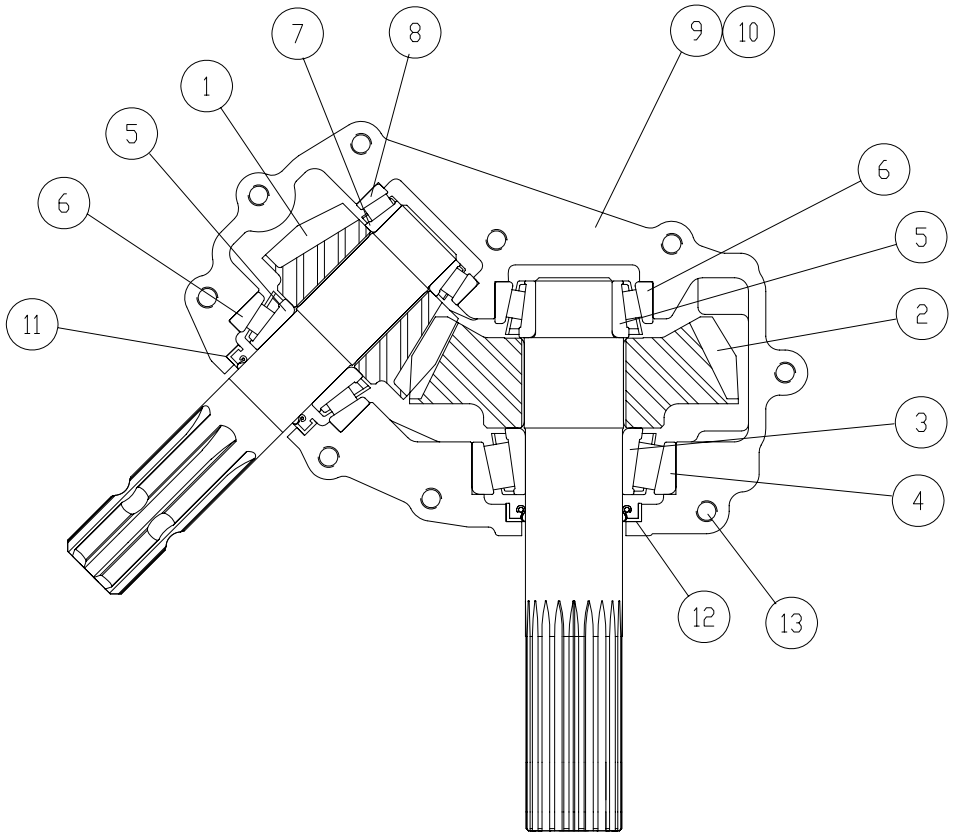
NOTE: Clutch Assembly (9004275) must be used with the Complete PTO Assembly (9004769) or (9004768 - optional).

NOTE: The clutch is preset at the factory and should not require adjustment. See "PTO Quick Disconnect" in the MAINTENANCE section for specific clutch information.

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
	Complete Clutch	9004275	1	For SN B41980099 & Lower Includes Items 1 - 9 (GKN Walterscheid Clutch)
1	Clutch Housing	9004276	1	
2	Ring	9002770	1	
3	Friction Disk	9002771	4	
4	Hub	9004277	1	
5	Drive Plate	9002780	1	
6	Drive Plate	9002781	1	
7	Spring Pack	9002782	1	
8	Setting Ring	9002783	1	
9	Quick Connect Flange Kit	92393	1	

45 Degree Gearbox

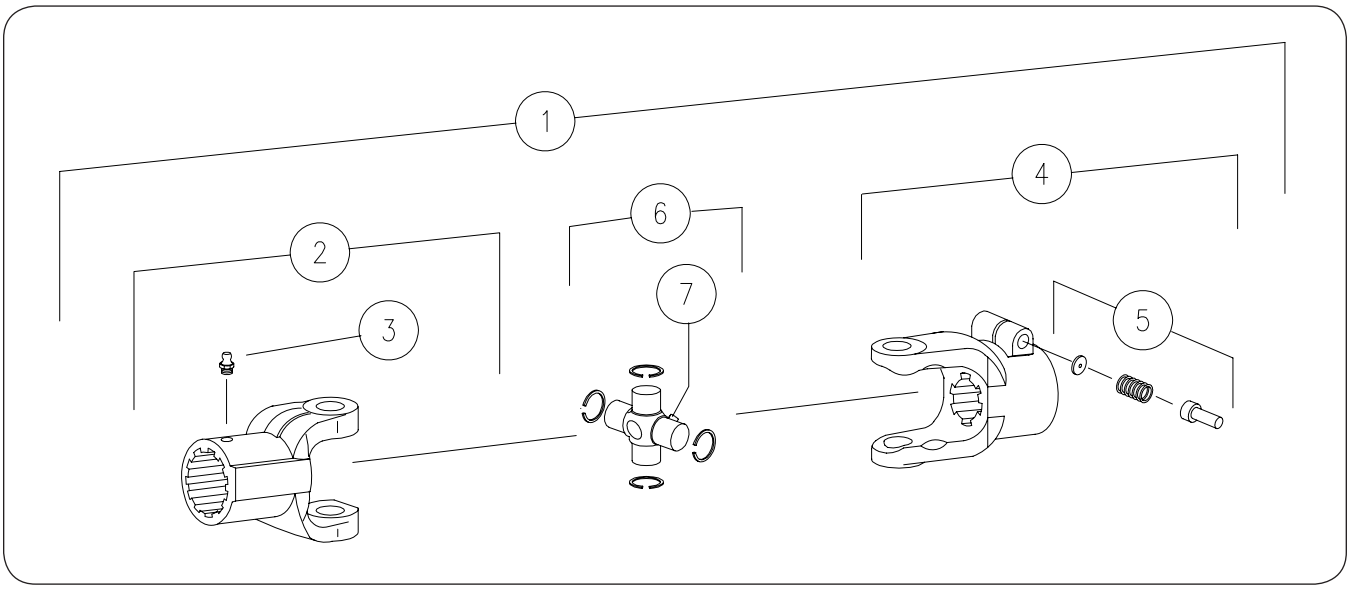
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
	Gearbox, Complete	9002812	1	Includes Items 1 thru 17
1	Shaft, Input	9001131	1	1.8:1 Gear
2	Shaft, Output	9001132	1	1.8:1 Gear
3	Bearing Cone	92697	1	Large
4	Bearing Cup	91151	1	Large
5	Bearing Cone	9001133	2	
6	Bearing Cup	9001134	2	
7	Bearing Cone	91816	1	Small
8	Bearing Cup	92896	1	Small
9	Casting w/ Tapped Holes - Model Q81 Gearbox	9003447	1	Use Kit #281885
10	Casting w/ Thru Holes - Model Q81 Gearbox	9003448	1	Not Shown - Use Kit #281885
9A	Casting w/ Thru Holes - Model Q145 Gearbox	9007299	1	Not Shown
10A	Casting w/ Tapped Holes - Model Q145 Gearbox	9007300	1	Not Shown
11	Seal	92688	1	Small
12	Seal	92702	1	Large
13	Capscrew, 3/8-16 UNC x 1 1/2	95281	9	
14	Pressure Relief, 5-PSI	92352	1	Not Shown
15	Plug, Plain	92350	3	Not Shown
16	Plug, 3/4" Npt	9001139	1	Not Shown
17	Hex Bushing Reducer	9003453	1	Not Shown

Driveline U-Joint Assembly

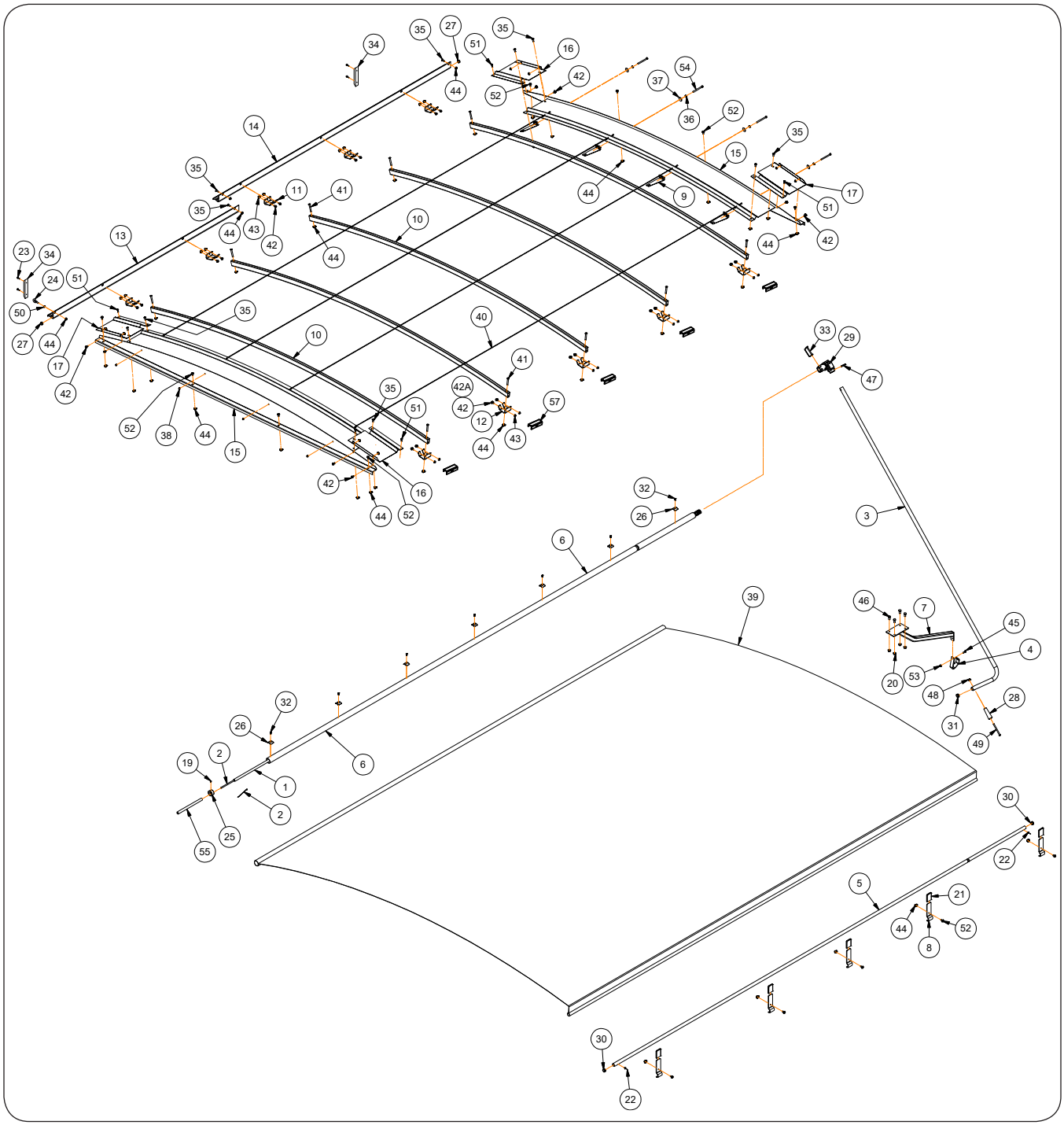
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
1	Complete U-Joint Assembly	95012	1	
2	Yoke	95010	1	
3	Grease Zerk, 1/4-28 UNF	91160	1	
4	Yoke, 1-3/8-6 Spline	95011	1	
5	Quick Disconnect Pin Kit	92362	1	
6	Cross & Bearing Kit	93857	1	
7	Grease Zerk	92365	1	

Weather Guard Tarp (Optional)

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



ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
	Tarp Kit w/End Caps	289679B	-	
1	PVC Tube	221668	1	
2	Bungee-3/8" x 204"	221722	1	
3	Crank, Roll-Over Tarp	221749	1	
4	Handle Retainer (Metal - Pinless)	221770B	1	
5	Fixed Tube	221808	1	
6	Roll Tube	221809	1	

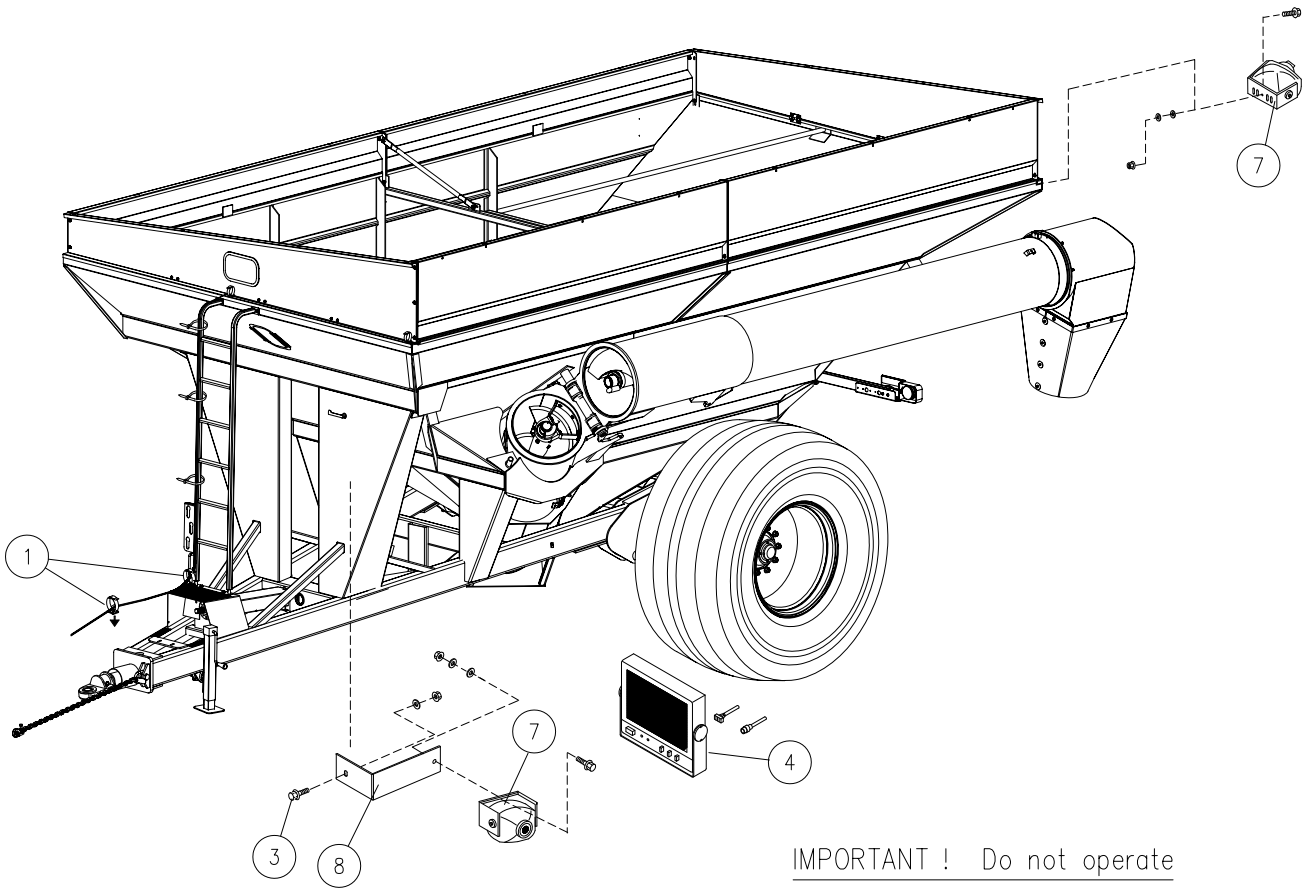
Weather Guard Tarp (Optional)

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

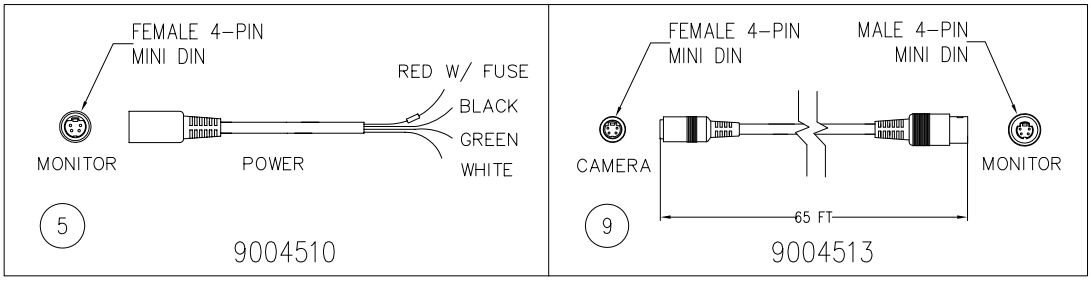
ITEM	DESCRIPTION	PART NUMBER	QTY.	NOTES
7	Crank Holder Tube	265706B	1	
8	Stop	266689B	8	
9	Bracket & U-Nut Assembly	281712B	4	
10	Bow Weldment	283424B	5	
11	Bow Bracket on Latch Plate Side	283425B	5	
12	Bow Bracket on Fixed Tube Side	283427B	5	
13	Latch Plate-Front, 92 7/16"	286829	1	
14	Latch Plate-Rear, 115 7/16"	286830	1	
15	End Cap Weldment, Front & Rear	286839B	2	
16	End Cap Panel	286842B	2	
17	End Cap Panel	286843B	2	
19	Pan Head Self-Drilling Screw #10-16 x 1/2	9001396	1	
20	Flange Nut, 1/2-13UNC	9002058	4	
21	Cap, Plastic	9003078	5	
22	Pop Rivet, 3/16 Large Flange	9003378	2	
23	Screw, Self-Tapping 1/4-20UNC x 1	9004355	4	
24	Eyebolt	9004548	1	
25	End Plug	9004947	1	
26	U-Clamp	9004949	7	
27	Plug-1"	9004968	2	
28	Plastic Handle	9004969	1	
29	U-Joint	9004977	1	
30	Plug-1 1/8"	9005088	2	
31	Plug-1 1/4"	9005089	1	
32	Screw, #10-16x3/4 Self Drilling	9005197	7	
33	Lynch Pin 3/8" Dia. x 3"	9005305	1	
34	Deflector	9005307	2	
35	Truss Head Screw 3/8-16UNC x 1	9005312	16	Grade 5
36	Lock Washer, 3/8" External Tooth	9005688	4	
37	Fender Washer, 3/8"	9005696	4	
38	Plug, 7/16	9005727	4	
39	Tarp, Fabric	9007638	1	166 x 203"
	Tarp Patch Kit	9005581	-	Not Shown
40	Cable Assembly, 192 1/2"	9007675	4	
41	Socket Flat Countersunk Capscrew 3/8"-16UNC x 3"	902703-046	10	
42A	Large Flange Screw, 5/8-16UNC x 1 Gr.5	97604	10	For SN B41980100 & Higher
42	Large Flange Screw 5/16"-18UNC x 3/4"	91256	18	For SN B41980100 & Higher
			28	For SN B41980099 & Lower
43	Flange Nut 5/16"-18UNC	91257	28	
44	Large Flange Nut, 3/8-16UNC	91263	35	
45	Capscrew 3/8-16UNC x 1	9390-055	1	Grade 5
46	Capscrew, 1/2-13UNC x 1	9390-099	4	
47	Roll Pin 3/8x2"	9392-180	1	
48	Elastic Stop Nut 3/8-16UNC	9398-012	1	Grade 5
49	Pan Head Phillips 3/8-16UNC x 4 1/2"	903172-450	1	
50	Flat Washer 3/8"	9405-074	2	
51	Self-Threading Screw, 1/4-14 x 1	9512	4	
52	Large Flange Capscrew, 3/8-16UNC x 3/4 Gr.5	95585	13	
53	Locknut, 3/8-16UNC	9928	1	
54	Capscrew, 3/8-16UNC x 4 1/2	TA0-907131-0	4	Grade 5
55	Hose 1/2 EPDM	TA806225	1	
56	Trimlok	9000787	11.75	Specify in Feet Not Shown
57	Sideboard Doubler =Black=	281936B	5	

Video System Option

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



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



Video System Option

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

ITEM	PART NUMBER	DESCRIPTION	QTY	NOTES
	265770	Video System Kit for Front View	1	Includes Items 1,3,4,5,7,8
	9004506	Additional Camera for Rear View	1	Includes Item 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

MEMBER

FEMA

FARM EQUIPMENT
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