




BRENT Grain Handling

AVALANCHE® DOUBLE-AUGER
GRAIN CART
MODEL 2596

Serial Number B38650100 & Higher

Part No. 276464

Foreword

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

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

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

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



Product Information

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

- Machine name
- Model number
- Serial number

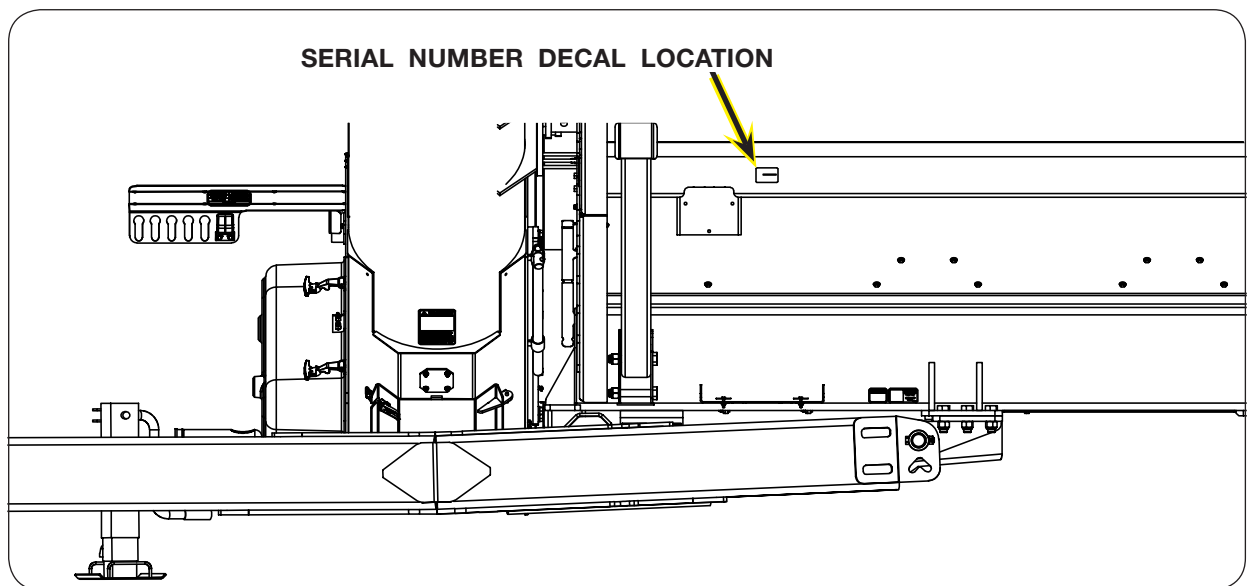
All products manufactured by Unverferth Mfg. Co., Inc. are warranted to be free from material and workmanship defects for one full year from time of consumer delivery. Your local dealer will gladly assist you with any warranty questions.

Please fill out and retain this portion for your records. The serial number decal is located at the left-front corner of your grain cart.

Purchase Date _____ Model _____ Serial No. _____

Dealer _____ City _____

Dealer Contact _____ Phone _____



IMPORTANT

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

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FOR SCALE INFORMATION, PLEASE REFER TO YOUR SCALE MANUAL.

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FOR UHARVEST INFORMATION, PLEASE REFER TO YOUR UHARVEST MANUAL.

FOR ELECTRIC TARP INFORMATION, PLEASE REFER TO YOUR ELECTRIC TARP MANUAL.

FOR WATER DELIVERY SYSTEM INFORMATION, PLEASE REFER TO YOUR WATER DELIVERY SYSTEM MANUAL.

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General Hazard Information

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

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

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

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



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

SIGNAL WORDS



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



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



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

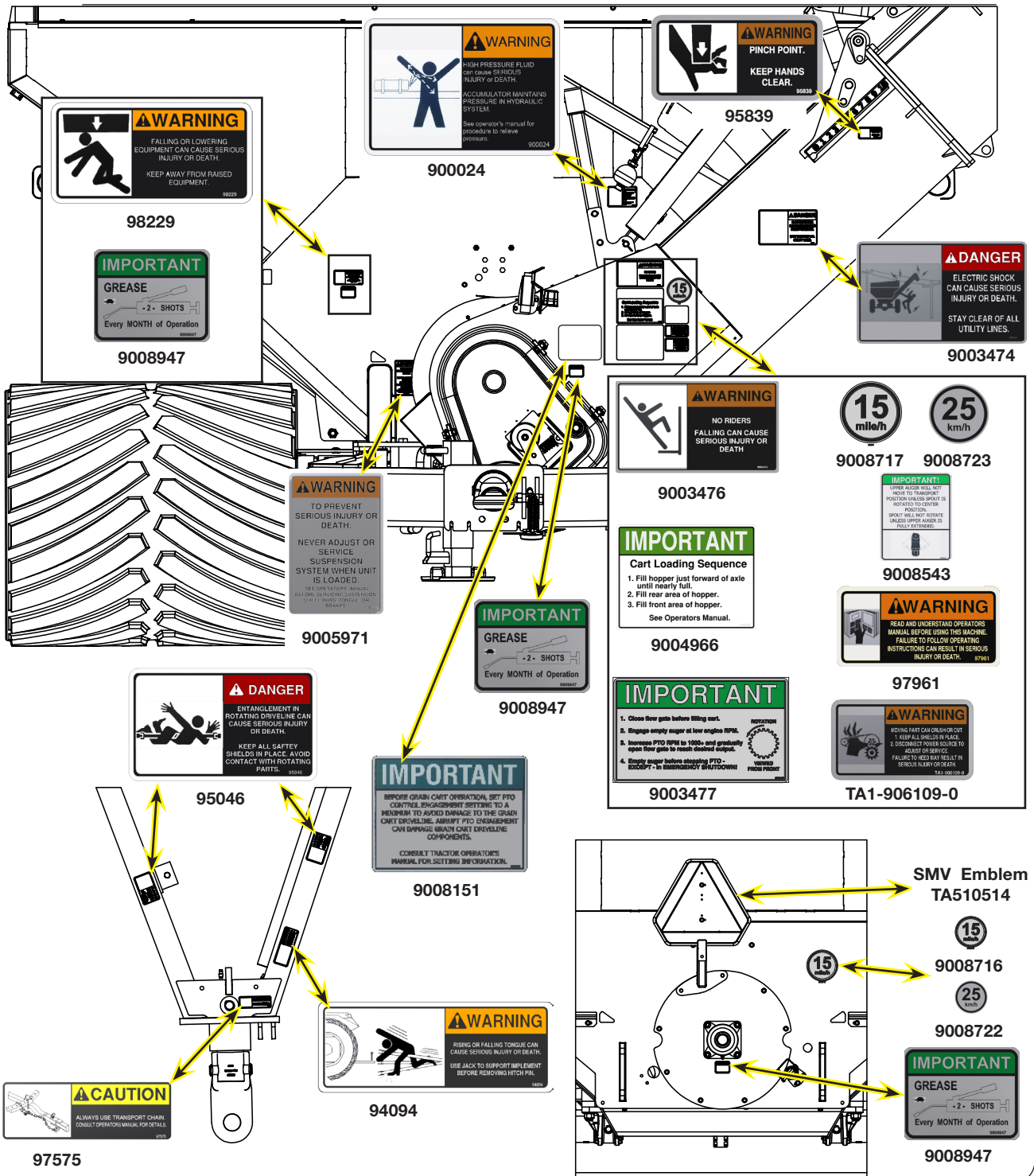


Is used for instruction on operating, adjusting, or servicing a machine.

Safety Decals

⚠ WARNING

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



Safety Decals



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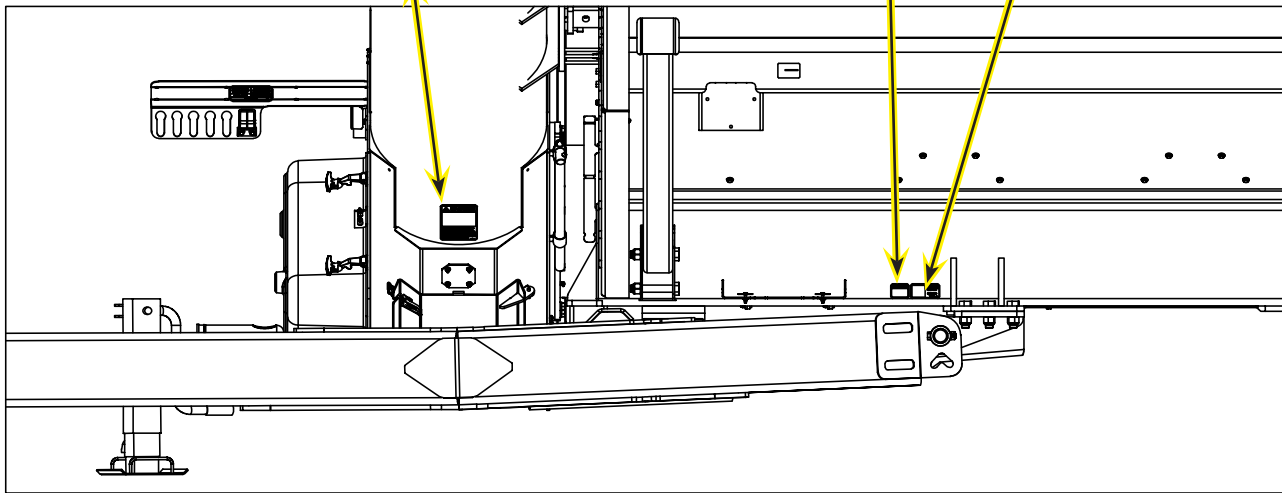
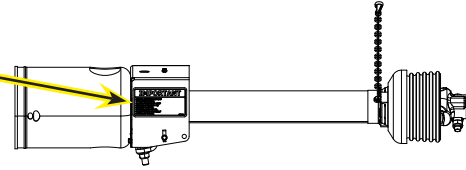
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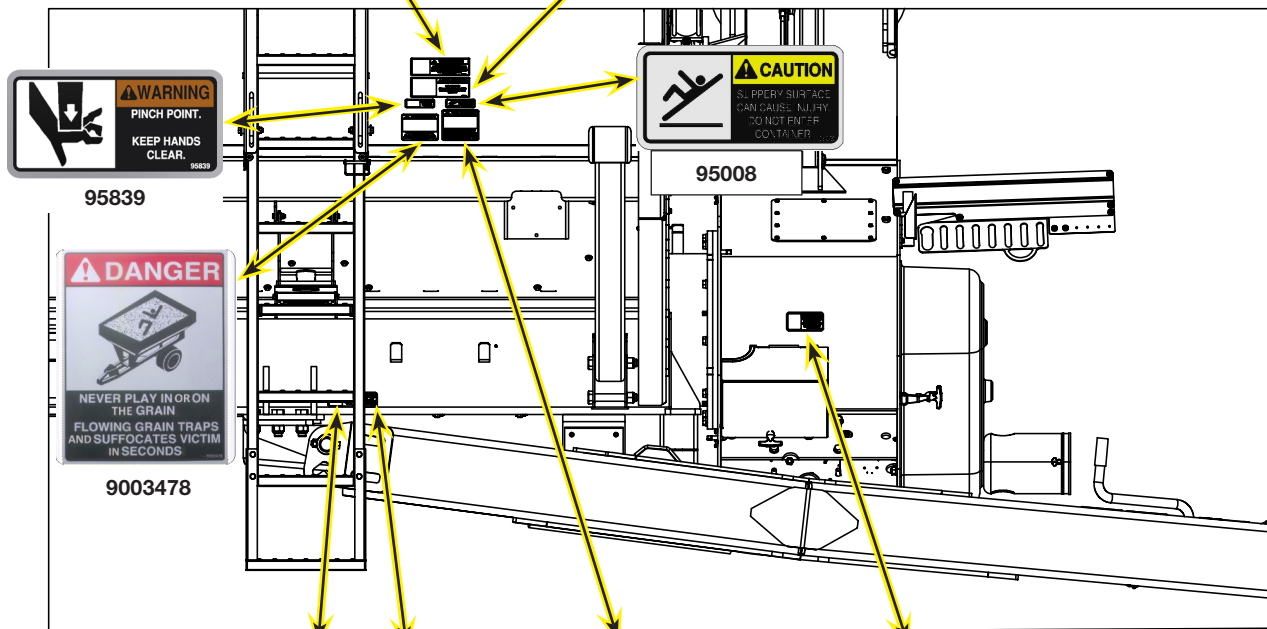
Safety Decals



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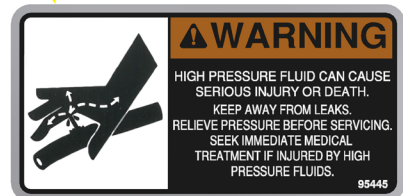
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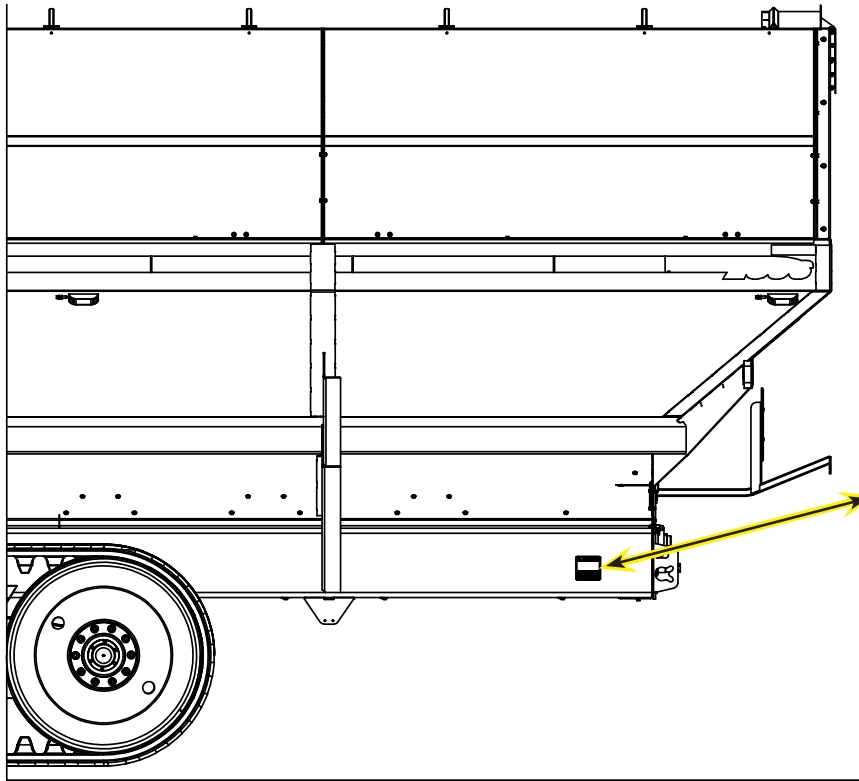


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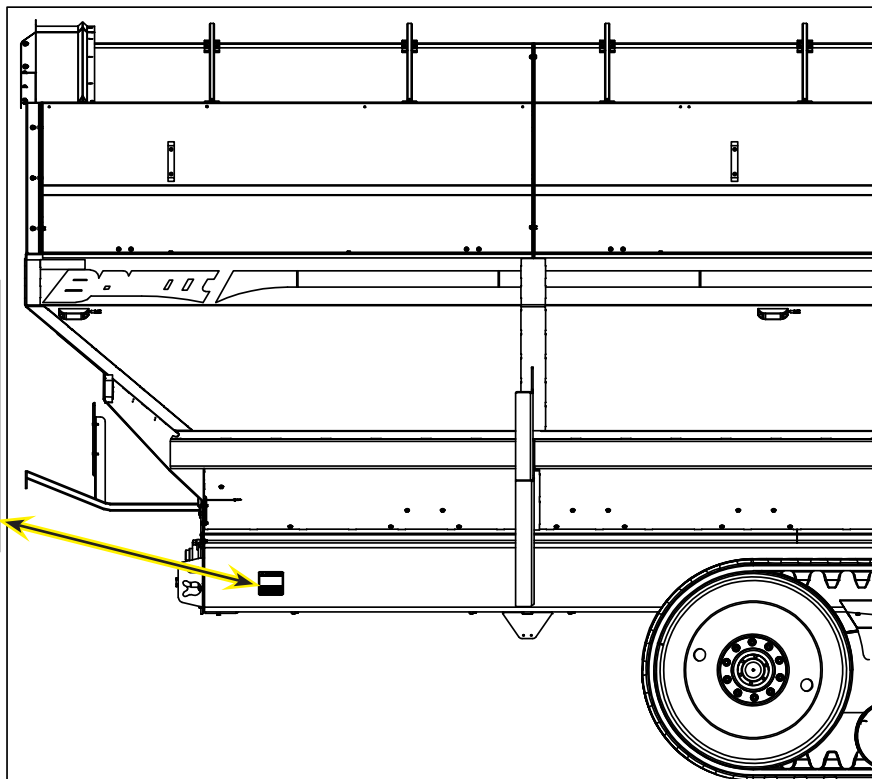


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Safety Decals







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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.
- Add sufficient ballast to tractor to maintain steering and braking control at all times. Do not exceed tractor's lift capacity or ballast capacity.

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 are 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.

During Operation

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



Before Transporting

- Secure transport chain to towing vehicle before transporting. **DO NOT** transport without chain.
- 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 is not equipped with brakes. Ensure that the towing vehicle has adequate weight and braking capacity to tow this unit.

During Transport

- Comply with all laws governing highway safety when moving machinery.
- Use transport lights as required by all laws to adequately warn operators of other vehicles.
- Regulate speed to road conditions and maintain complete control.
- Maximum transport speed of this implement should never exceed 15 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 r.p.m. PTO speed.
- Disengage the PTO, stop the tractor engine, and remove key from ignition before making inspections, or performing maintenance and repairs.
- Inspect the driveline, quick disconnect, overload shear-bolt limiter or clutch, and shielding often. Repair immediately. Use replacement parts and attaching hardware equivalent to the original equipment. Only alterations described in this manual for overall length adjustment are allowed. Any other alteration is prohibited.
- Avoid excessively long hardware or exposed and protruding parts which can snag and cause entanglement.
- Lubricate the driveline as recommended in the MAINTENANCE section.
- Keep hoses, wiring, ropes, etc. from dangling too close to the driveline.
- Install driveline and shields according to recommended lengths and attaching methods with recommended hardware. The driveline shield should rotate independently a full rotation and telescope freely. The retaining chain must be secured to the implement safety shield.
- Adjust drawbar to height and length recommended in the OPERATION section.
- Use caution when turning to avoid contact between tractor tires and driveline.
- Check the length of the telescoping members to insure the driveline will not bottom out or separate when turning and/or going over rough terrain.
- Proper extended and collapsed lengths of the telescoping PTO shaft must be verified before first operation with each and every tractor. If the extended length of the PTO shaft is insufficient, it may become uncoupled during operation and cause serious injury or death from contact with uncontrolled flailing of PTO shaft assembly components.

Pressurized Oil

- Relieve the hydraulic system of all pressure before adjusting or servicing. See hydraulic power unit manual for procedure to relieve pressure.

- High-pressure fluids can penetrate the skin and cause serious injury or death. Use cardboard or wood to detect leaks in the hydraulic system. Seek medical treatment immediately if injured by high-pressure fluids. 

- Accumulators used in this hydraulic system can retain fluid under pressure even after tractor hydraulic valve is placed in FLOAT. See tractor operators manual for procedure to relieve pressure.

- 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:
 - o End fittings damaged, displaced, or leaking.
 - o Outer covering chafed/cut or wire reinforcing exposed.
 - o Outer covering ballooning locally.
 - o Evidence of kinking or crushing of the flexible part of a hose.

Preparing for Emergencies

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



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



Wearing Protective Equipment

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



- Wear steel-toed shoes when operating.



- Wear hearing protection when exposed to loud noises.



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

 **WARNING**
Cancer and reproductive harm-
www.P65Warnings.ca.gov

Section II

Set Up

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FOR WATER DELIVERY SYSTEM INFORMATION, PLEASE REFER TO YOUR WATER DELIVERY SYSTEM 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.

- Set or Calibrate tractor PTO control engagement to MINIMUM setting. Refer to tractor operator's manual for setting information.
- Remove auger spout cylinder stop.
- Verify track has been aligned and is properly conditioned. (If applicable)
- Lubricate all grease fittings and check gearbox oil level.
- Inspect cleanout door assembly for play or movement, refer to "Vertical & Horizontal Clean-Out Door Operation" in the OPERATION section.
- Verify all safety decals are correctly located and legible. Replace if damaged.
- Verify all reflective decals are correctly located.
- Check SMV decal and SIS decals are in place, clean and visible.
- Verify transport lights are working properly.
- Verify PTO length, see "Verify Telescoping PTO Shaft Length" in MAINTENANCE section.
- Align and properly tension belts/chains. See "Belt Tightener Adjustment" and "V-Belt Alignment" in MAINTENANCE section.
- Ensure safety screens over horizontal auger are in place and properly secured.
- Install transport chains and torque hardware 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.

Basic 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 ARE RESTRICTED MOBILITY AND LIMITED EXIT PATHS WHEN WORKING INSIDE THE IMPLEMENT.

- HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS.

- RELIEVE THE HYDRAULIC SYSTEM OF ALL PRESSURE BEFORE ADJUSTING OR SERVICING. SEE THE HYDRAULIC POWER UNIT OPERATOR'S MANUAL FOR PROPER PROCEDURES.

- HYDRAULIC SYSTEM MUST BE PURGED OF AIR BEFORE OPERATING TO PREVENT SERIOUS INJURY OR DEATH.

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

- 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.

- 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 7,000 LBS. SPECIFIC LOAD RATINGS FOR INDIVIDUAL LOADS WILL BE GIVEN AT THE APPROPRIATE TIME IN THE INSTRUCTIONS.



Basic Cart Set Up (continued)

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

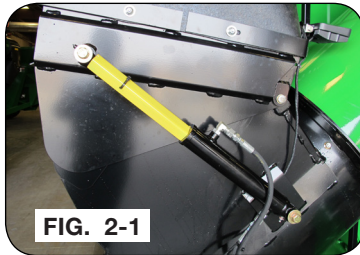


Auger Spout Cylinder Stop Removal

Remove and discard the stop on the spout tilt cylinder at the front of the cart, before operating the spout. (FIG. 2-1 & 2-2)

IMPORTANT

- *Cylinder stop must be removed before operating the auger spout. Failure to remove stop will result in damage to the cylinder and spout.*



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.

Track Set Up

Track Nuts

CAUTION

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

Basic Cart Set Up (continued)

IMPORTANT

- *The horizontal cleanout door lynch pin (9005305) is shipped in the toolbox and grain cart tongue is in transport position from the factory. Closing the horizontal cleanout doors with the tongue in transport position will cause damage to cleanout doors and components.*

Repositioning Tongue

1. Using a safe lifting device rated at a minimum of 7,000 lbs., raise the front of the cart.
2. Remove and save the 1"-8UNC x 6" cap-screw (9390-195) and 1"-8UNC elastic locknut (9398-026) (FIG. 2-3). Rotate the support stand weldment (276748B) down. Reinstall the 1"-8UNC x 6" capscrew (9390-195) and 1"-8UNC elastic locknut (9398-026) (FIG. 2-4). Repeat process on the opposite side of the grain cart.

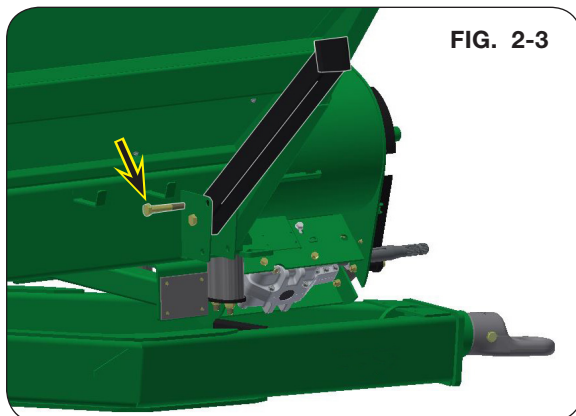


FIG. 2-3

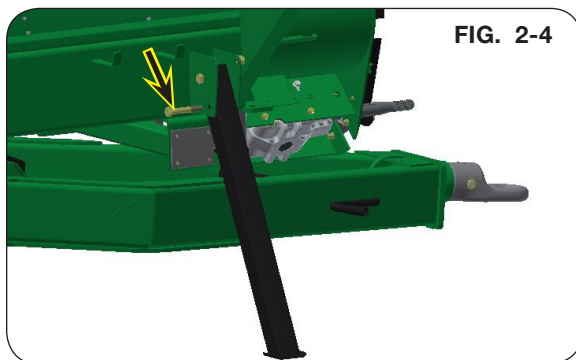
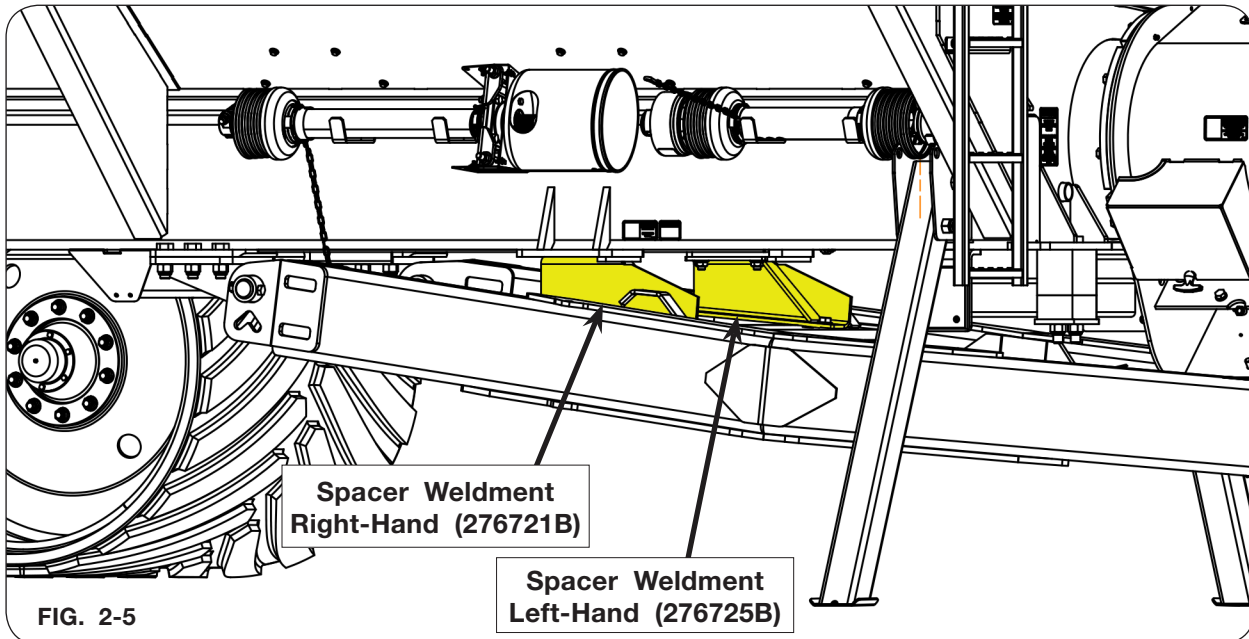


FIG. 2-4

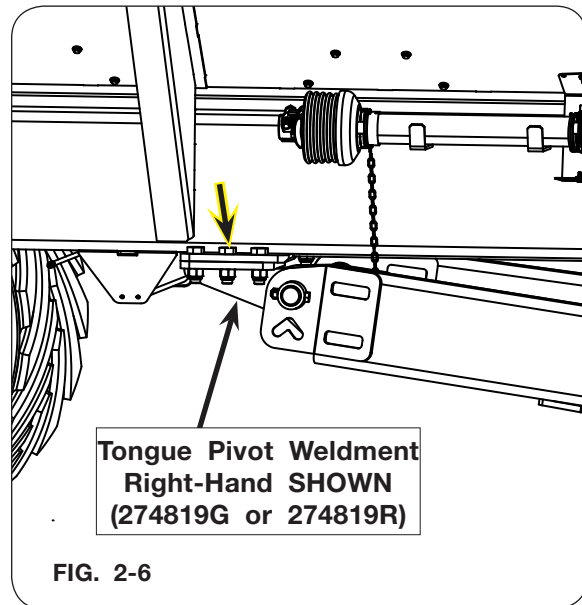


Basic Cart Set Up (continued)

3. Use stands rated for a minimum of 2,000 lbs. to support the tongue.
4. Remove and discard the 3/4"-10UNC locknuts (9003399), 3/4" SAE flat washers (9405-104), 3/4"-10UNC x 2 1/4" capscrews (9390-146), and spacer weldments (left-hand 276725B and right-hand 276721B) from the tongue weldment. (FIG. 2-5)

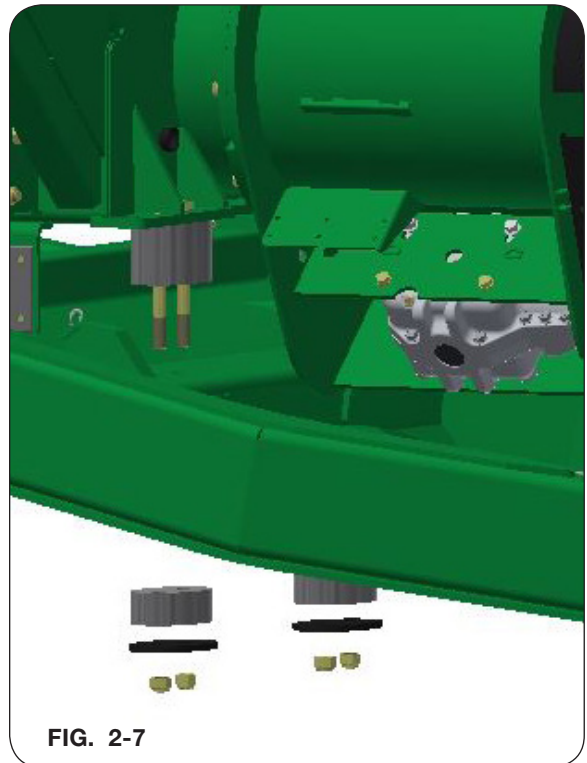


5. Remove and save the 1"-14UNS x 3" cap-screws (9390-409) and 1"-14UNS elastic lock nuts (9008441) from the tongue pivot weldments (left-hand 274818G or 274818R; right-hand 274819G or 274819R). (FIG. 2-6)

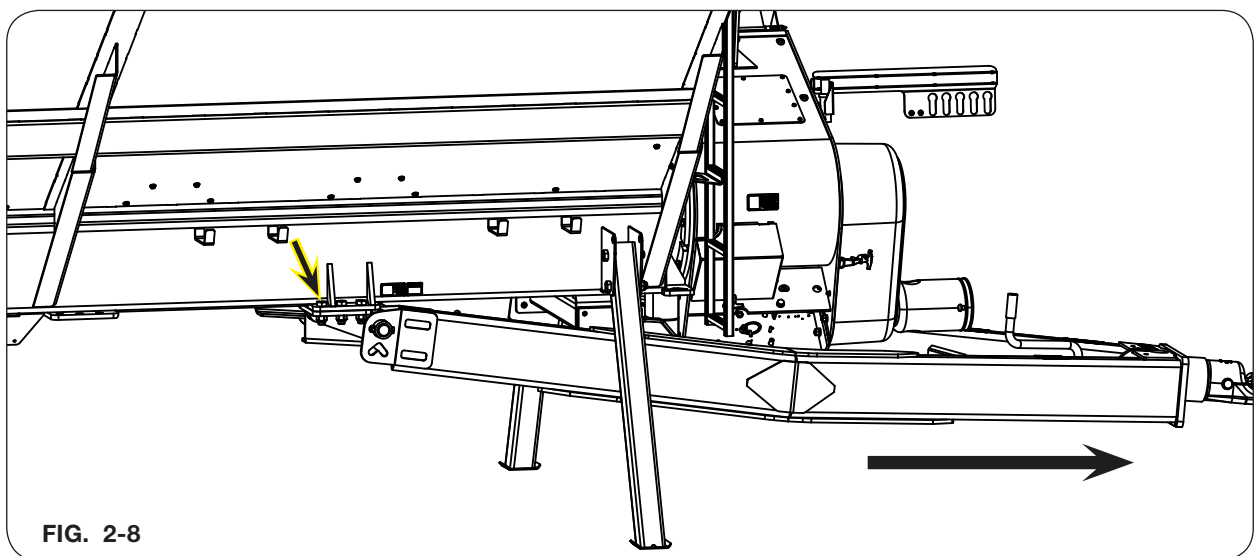


Basic Cart Set Up (continued)

6. Remove and save the 1"-8UNC x 10 1/2" capscrews (9390-465), spring retainer plates (271687B), both urethane springs (9006456 and 9006457), and 1"-8UNC elastic lock nuts (9398-026). (FIG. 2-7)



7. Using a safe lifting device rated at a minimum of 2,000 lbs., slide the tongue weldment forward until the holes in the tongue pivot weldments align with the holes in the grain cart. (FIG. 2-8)
8. Secure the tongue pivot weldment to the cart with 1"-14UNS x 3" capscrews (9390-409) and 1"-14UNS elastic lock nuts (9008441). (FIG. 2-8)



Basic Cart Set Up (continued)

- Place the urethane springs (9006456), and spring retainer plates (271687B) under the tongue weldment and secure to the grain cart with urethane springs (9006457) 1"-8UNC x 10 1/2" capscrews (9390-465) and 1"-8UNC elastic lock nuts (9398-026) (FIG. 2-9). Tighten until rubber bumpers are compressed approximately 1/4".

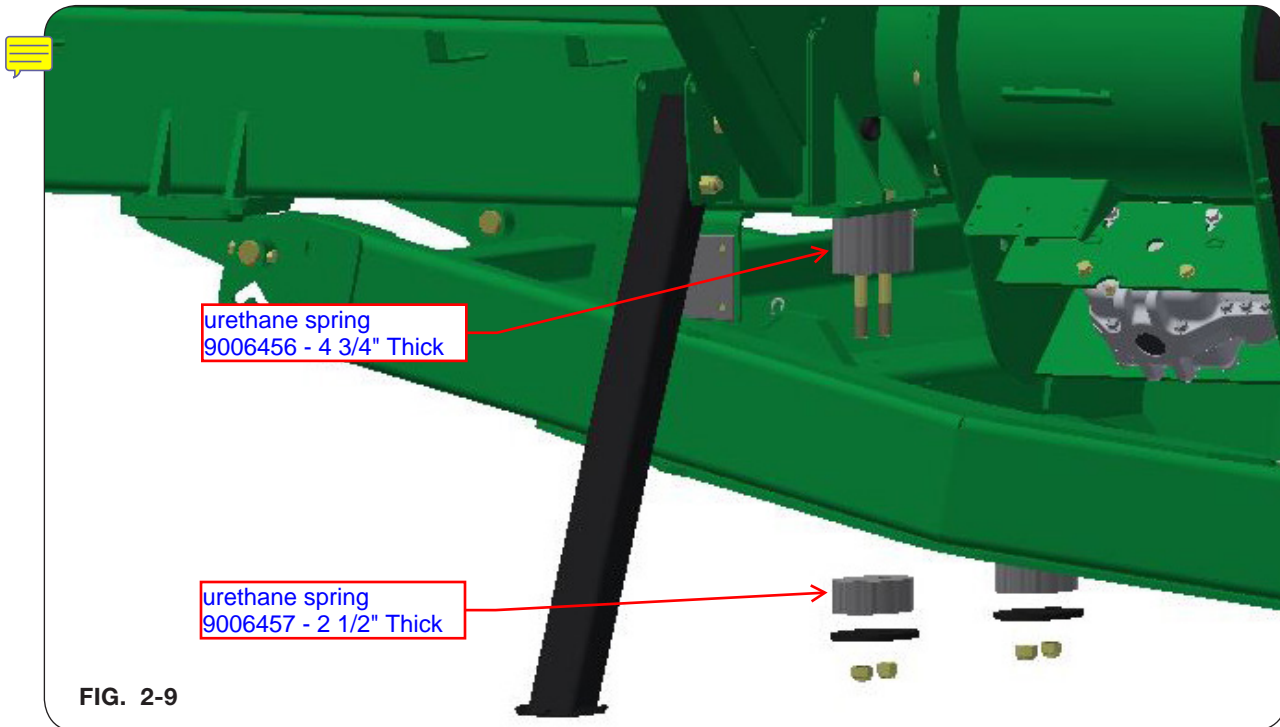


FIG. 2-9

10. STANDARD JACKSTAND

Rotate and lower the grain cart jackstand. (FIG. 2-10)

HYDRAULIC JACK OPTION

Use the tractor hydraulics to lower the jackstand.

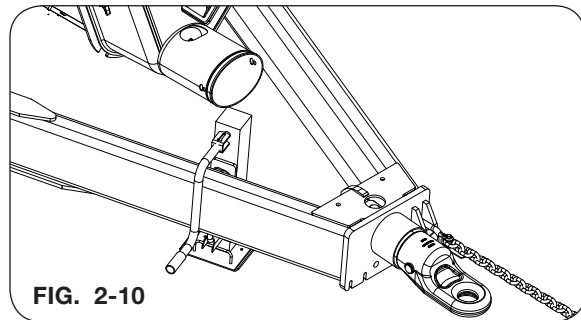


FIG. 2-10

- Remove the 1"-8UNC x 6" capscrew (9390-195) and 1"-8UNC elastic locknut (9398-026). Rotate the support stand weldment (276748B) up. Reinstall the 1"-8UNC x 6" capscrew (9390-195) and 1"-8UNC elastic locknut (9398-026). Repeat process on the opposite side of the grain cart. (FIG. 2-11)

- Lower grain cart onto jackstand.

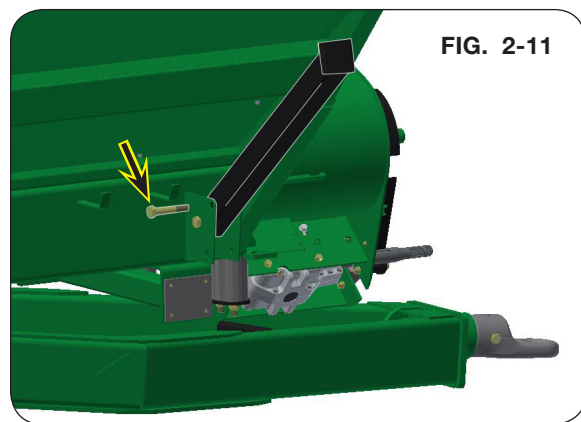


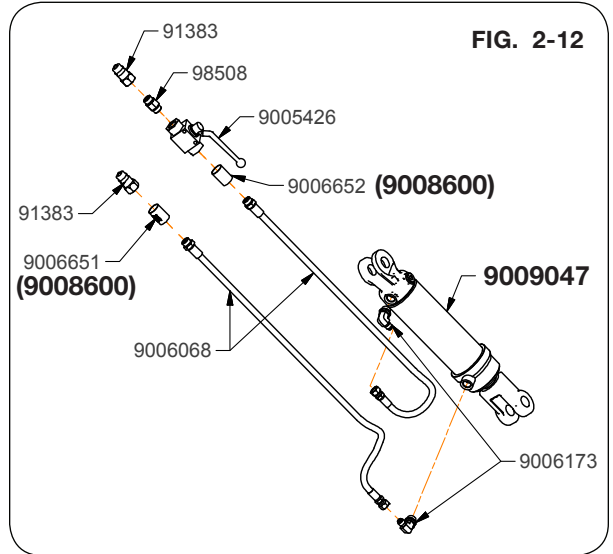
FIG. 2-11

Basic Cart Set Up (continued)

Optional Hydraulic Jack

1. Assemble hoses (9006068) and fittings to cylinder (9009047) as shown in FIG. 2-12. The valve needs to be assembled to the hose on the base end of the cylinder. Assemble the fittings on the cylinder so they face each other, then store the hydraulic hoses on the hose caddy.

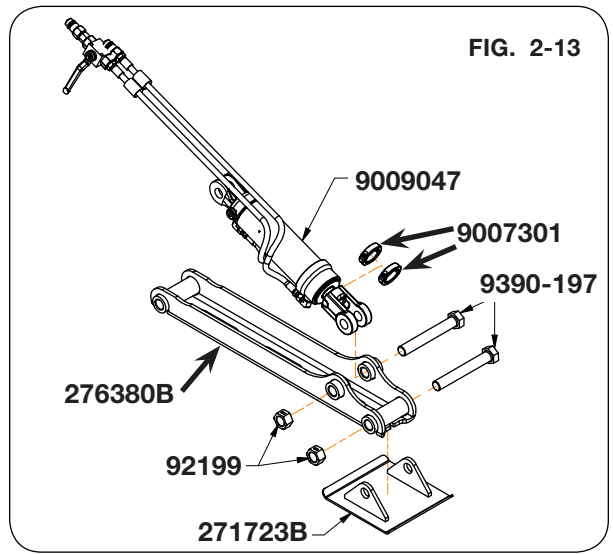
NOTE: For units SN B40240100 and higher, sleeve hose markers - raise and lower jack (9006651 and 9006652) are replaced with hose grips - black - raise and lower jack (9008600 Qty. 2)



2. Attach shaft collars (9007301) to the rod end of the cylinder as shown in FIG. 2-13.
3. Assemble the cylinder (9009047) and jack foot (271723B) to the jack leg weldment (276380B) as shown in FIG. 2-13 using 1"-8UNC x 7" capscrew (9390-197) and 1"-8UNC locknut (92199).

NOTE: Ensure all jack leg weldment (276380B) joints can pivot freely, especially jack foot (271723B).

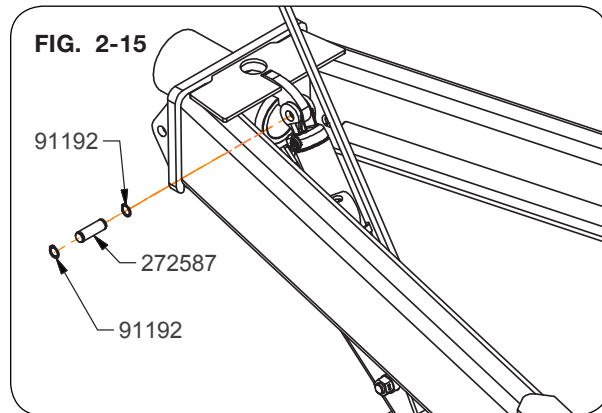
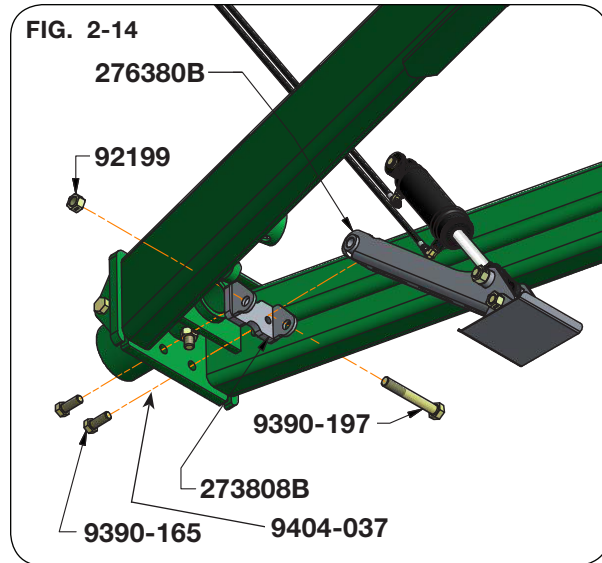
4. Tighten 1" hardware to jack leg weldment. (FIG. 2-13)



Basic Cart Set Up (continued)

Optional Hydraulic Jack (continued)

5. Mounting bracket (273808B) must be attached to the jack leg weldment (276380B) using 1"-8UNC x 7" capscrew (9390-197) and 1"-8UNC locknut (92199), before mounting to the tongue of the cart. (FIG. 2-14)
6. Tighten 1" hardware to jack leg weldment and allow the joint to pivot. (FIG. 2-14)
7. Then attach the mounting bracket (273808B) to the back side of the front hitch plate with two 7/8"-9UNC x 2 1/4" capscrews (9390-165) and 7/8" lock washers (9404-037). See FIG. 2-14.
8. Torque 7/8" hardware to 330 ft.-lbs. (FIG. 2-14)
9. Align the base end of the cylinder with the lug on the top of the tongue and assemble the cylinder pin (272587) and snap rings (91192) shown in FIG. 2-15.
10. Cycle the hydraulic cylinder several times to ensure that the air is purged from the cylinder.

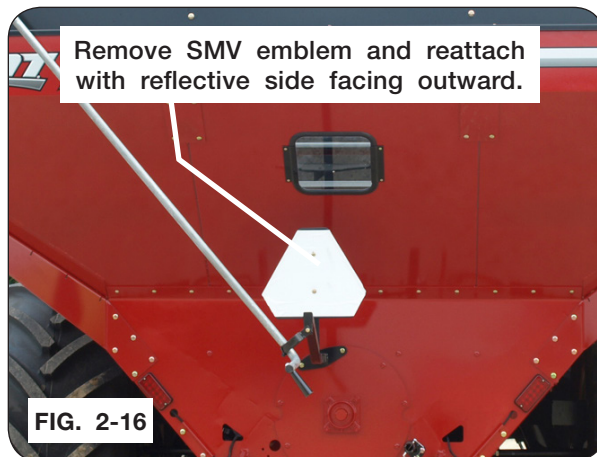


Basic Set Up (continued)

SMV Emblem & SIS Decal

The reflective surface of the SMV must face rearward. This may require removal of film protecting the reflective surface or removing and reinstallation of the SMV.

When reinstalling the SMV make sure that it is mounted with the wide part of the SMV at the bottom. (FIG. 2-16)



For the SIS decals (one on the front and one on the rear of the cart) make sure both decals are clean and visible. (FIG. 2-17)

For front and rear M.P.H. SIS decals, order 9008717 & 9008716.

For front and rear K.P.H. SIS decals, order 9008723 & 9008722.



Basic Cart Set-Up (continued)

Driveline Set Up



- **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.**

IMPORTANT

- *Prior to hitching grain cart to tractor drawbar, drawbar MUST be set at 20" from end of PTO shaft to center of hitch pin. dimension (A) in picture. Failure to do so will result in driveline damage. (FIG. 2-18)*

Clean and grease the implement gearbox splined shaft. Gearbox shaft guard has access doors for installing and removing of driveline.

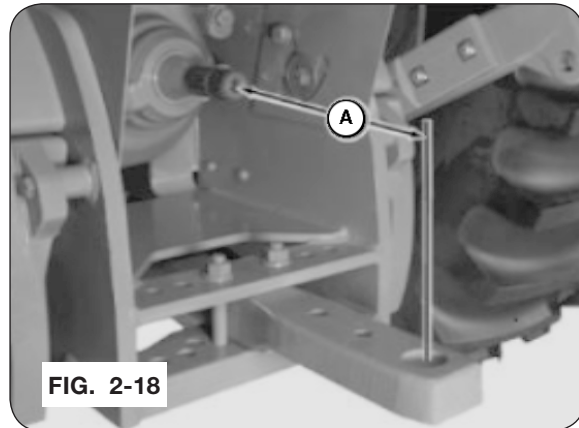


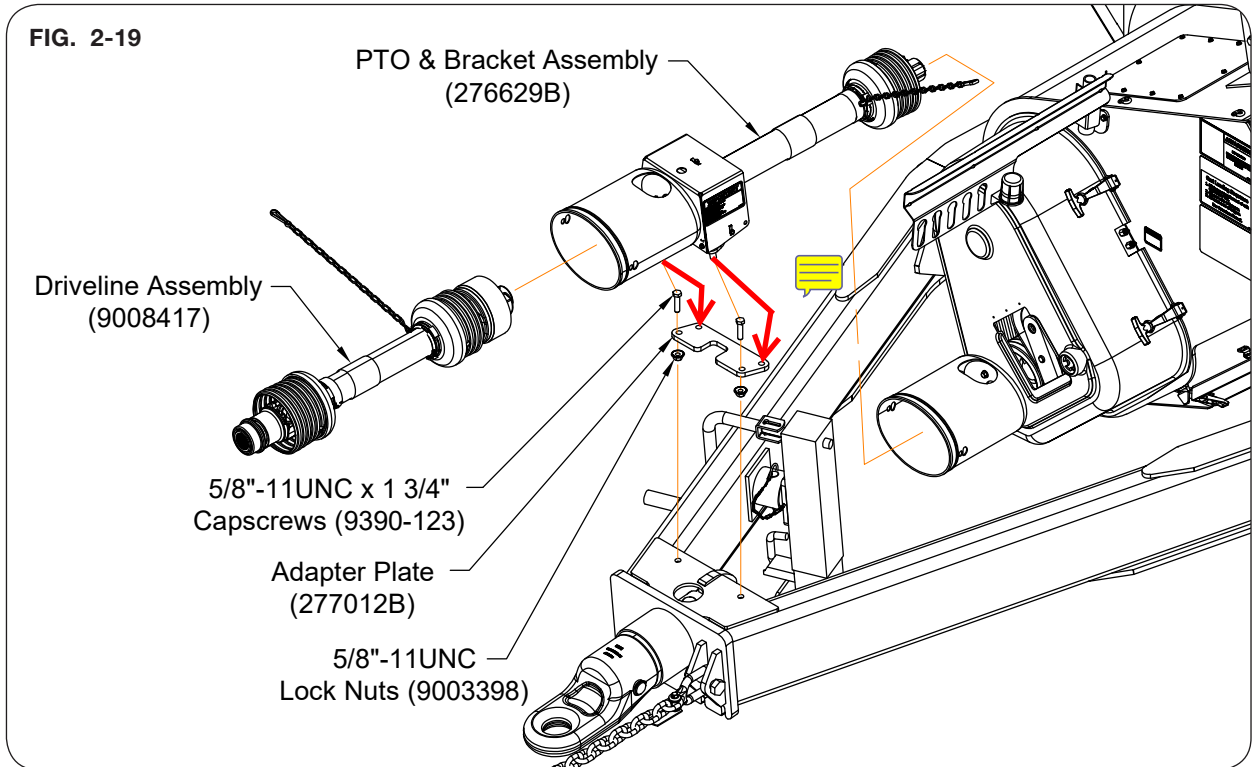
FIG. 2-18

Basic Set Up (continued)

Driveline Set Up (continued)

NOTE: Ensure mounting holes on the adapter plate (277012B) are offset to left-hand side of the tongue. (FIG. 2-19)

Attach the PTO and bracket assembly (276629B) yoke end to the implement gearbox splined shaft. Attach the other end to the adapter plate (277012B) bolted on the tongue weldment with capscrews and lock nuts. (FIG. 2-19)

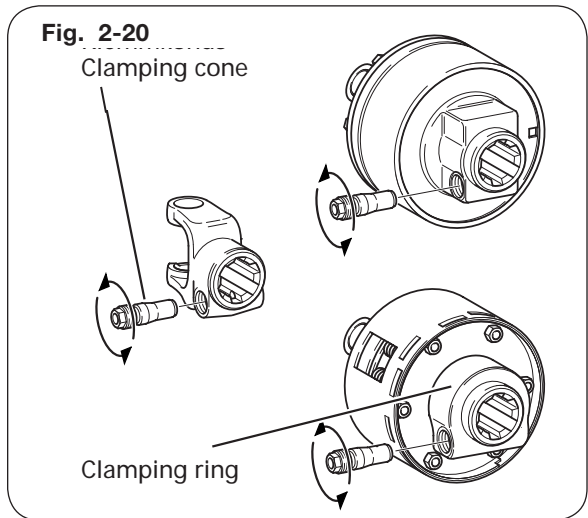


Engage the driveline assembly (9008417) cut-out clutch end onto the PTO and bracket assembly (276629B) splined shaft end until retaining groove of PTO and bracket shaft aligns with clamping cone hole. (FIG. 2-19)

Insert clamping cone into threaded hole, hand tighten. Torque cone to 75 ft.-lb. (FIG. 2-20)

NOTE: See MAINTENANCE section - PTO Quick Disconnect - for disassembly instructions.

Attach the anti-rotation chains on each driveline and verify that each of the shields can turn one revolution. (FIG. 2-19)



Basic Cart Set Up (continued)

Horizontal Cleanout Door Inspection

WARNING

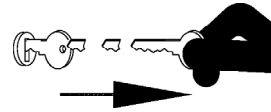
- MOVING OR ROTATING COMPONENTS CAN CAUSE SERIOUS INJURY OR DEATH. ENSURE SERVICE COVERS, CHAIN/BELT COVERS AND CLEANOUT DOORS ARE IN PLACE AND SECURELY FASTENED BEFORE OPERATING UNIT.
- KEEP HANDS CLEAR OF PINCH POINT AREAS.
- TIPPING OR MOVEMENT OF THE MACHINE CAN CAUSE SERIOUS INJURY OR DEATH. BE SURE THE MACHINE IS SECURELY BLOCKED.
- EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING THE IMPLEMENT.

NOTE: For cleanout door assembly operation, refer to “Vertical & Horizontal Cleanout Door Operation” in the OPERATION section.

NOTE: This procedure is a two-person process. One person operates the tensioner handle while the second person inspects the horizontal cleanout doors.

1. Park the unit on a firm, level surface. Block the wheels/tracks on the machine to keep the unit from moving. Set the vehicle parking brake, shut off the engine and remove the ignition key.
2. Use the tensioner handle, located on the left-hand side of the grain cart, behind the first panel to open and close the horizontal cleanout doors.
3. Insert tensioner handle into cleanout door receiver coupler on the rear panel, and remove lynch pin from rockshaft. Keep lynch pin.
4. Rotate tensioner handle clockwise to open the doors. (Fig. 2-21 & 2-22)
5. Clean the door area of debris that may prevent the door from shutting completely. (Fig. 2-21 & 2-22)
6. Inspect the cleanout door and rockshaft for loose hardware. Do not torque hardware. (Fig. 2-21 & 2-22)

(Continued on next page.)



Basic Cart Set Up (continued)

Horizontal Cleanout Door Inspection

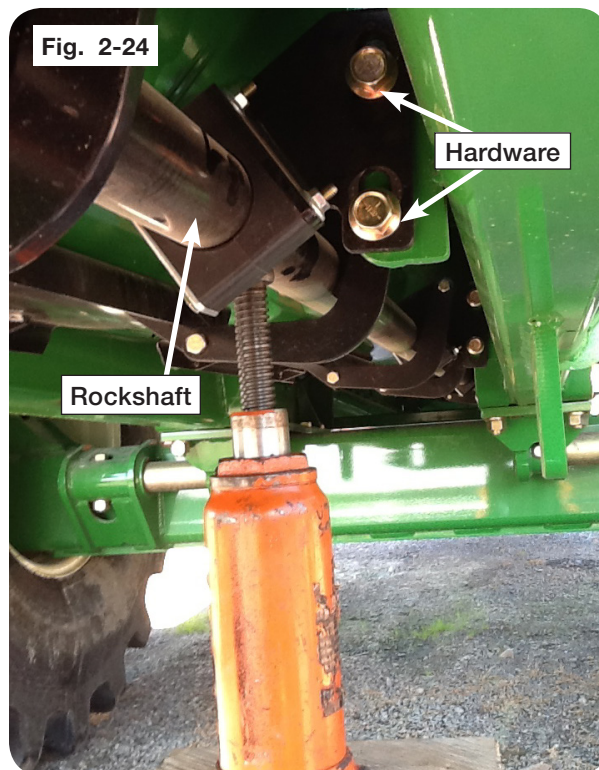
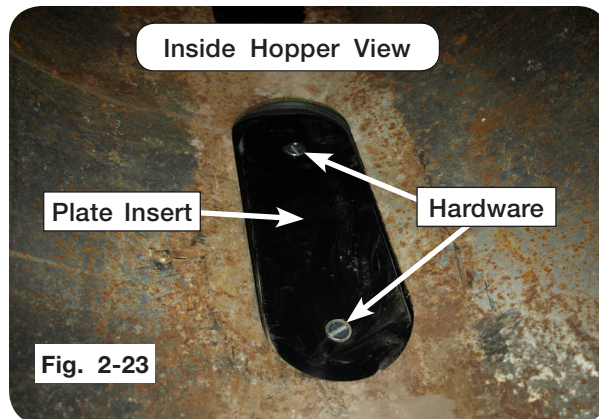
7. If plate insert needs adjustment, loosen the two flat head machine screws holding the plate in position. (Fig. 2-23)
8. Ensure the plate inserts are aligned and fit into the belly pan cut-outs. (Fig. 2-23)

NOTE: As the tensioner handle is rotated counter-clockwise near the end of the close position, the coiled springs will extend to apply pressure to cleanout doors. If the doors do not close or visual door perimeter gaps are present, adjust the front to rear rockshaft starting at step 9. If doors close, go to step 13.

9. Loosen all the hardware in the slotted brackets connecting the cleanout door rockshaft to the grain cart tube. (Fig. 2-24)
10. Starting at the front of the cart, using a jack, push the rockshaft up and toward the runner tube. (Fig. 2-24)

NOTE: Ideal distance between the runner tube and rockshaft is 3 1/4".

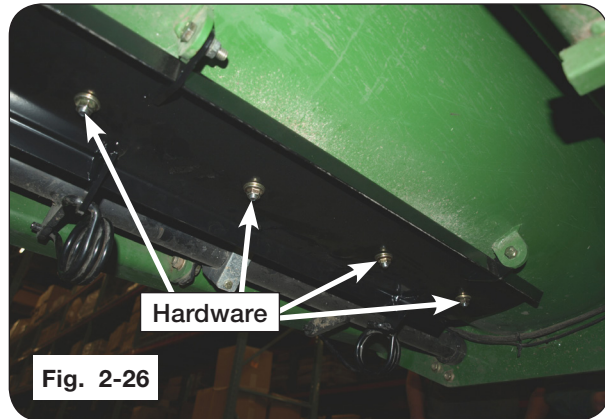
11. When the rockshaft is in position, torque the hardware previously loosened to 28 ft.-lbs.
12. Continue repositioning the rockshaft moving toward the back of the cart.



Basic Cart Set Up (continued)

Horizontal Cleanout Door Inspection

13. Rotate the tensioner handle counter-clockwise to close the doors allowing the plate to fit and seal into the belly pan opening. (Fig. 2-25 & 2-26)
14. Open the doors and torque plate hardware to 17 ft.-lbs. (Fig. 2-26)
15. Close the doors and ensure all doors seal. (Fig. 2-26)
16. Insert lynch pin into rockshaft and return handle to storage location.



Basic Cart Set Up (continued)

Upper Ladder Extension to Operating Position

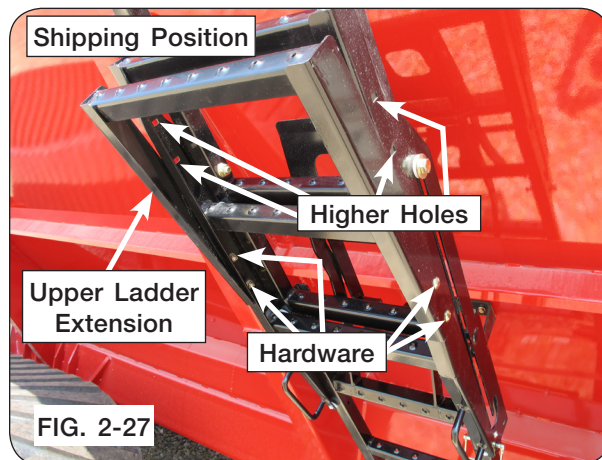
WARNING

- FALLING OR LOWERING EQUIPMENT CAN CAUSE SERIOUS INJURY OR DEATH. KEEP EVERYONE AWAY FROM EQUIPMENT WHEN SUSPENDED, RAISING, OR LOWERING.
- KEEP HANDS CLEAR OF PINCH POINT AREAS.
- DO NOT ALLOW ANYONE TO RIDE ON THE LADDER. MAKE SURE EVERYONE IS CLEAR BEFORE OPERATING MACHINE OR TOWING VEHICLE.
- 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 ARE RESTRICTED MOBILITY AND LIMITED EXIT PATHS WHEN WORKING INSIDE THE IMPLEMENT.
- NEVER ENTER A CART CONTAINING GRAIN. FLOWING GRAIN TRAPS AND SUFFOCATES VICTIMS IN SECONDS.

NOTE: Ensure ladder and steps are free from snow/debris before changing ladder positions and climbing.

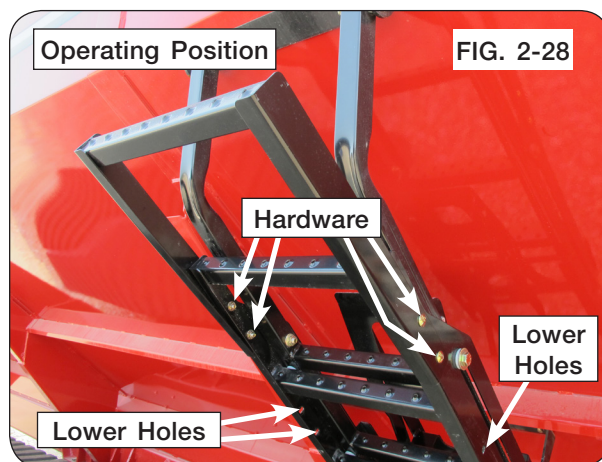
NOTE: To change ladder assembly positions, refer to “Ladder Operation” in the OPERATION section.

1. Move the upper ladder extension (289707B) from shipping position by removing the 5/16”-18UNC x 3/4” carriage bolts (9388-024), 5/16” flat washers (9405-064) and 5/16”-18UNC lock nuts (9008441). Keep hardware for next step. (FIG. 2-27)



2. Using hardware from step 1, attach upper ladder extension to the higher set of holes to be in operating position. (FIG. 2-27 & FIG. 2-28)

3. Torque hardware to 17 ft.-lbs.



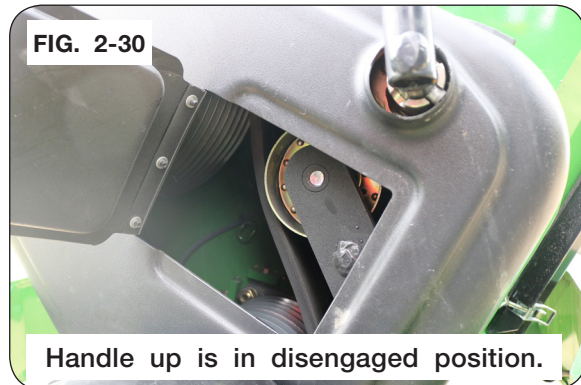
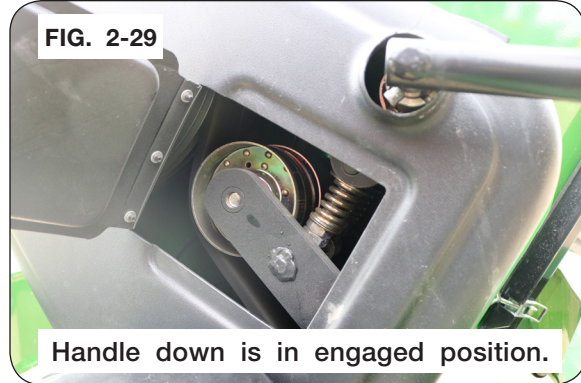
Basic Cart Set Up (continued)

Belt Engagement

⚠ WARNING

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

The unit is shipped without the tension applied to the belts. To engage the tensioner use the belt tensioner handle, located on the left-hand side of the grain cart, behind the first panel. Verify the belts are correctly aligned and are seated in both sheaves. If belt hangs over edge of sheave, detention idler, adjust and retention idler.



Basic Set Up (continued)

Operational Check

⚠ WARNING

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

IMPORTANT

- Before running the auger pivot, the vertical auger clean-out door must be closed to prevent machine damage.

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

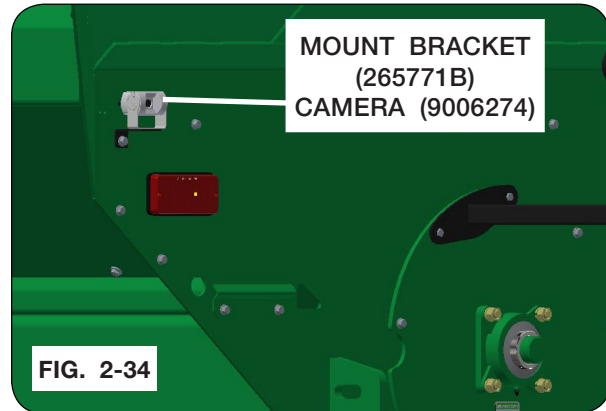
1. Lights - Work and Turn
2. Flow Door
3. Flow Door Indicator
4. Auger Fold
5. Auger Pivot
6. Spout Rotate & Pivot (if applicable)
7. Auger Startup & Shut-down



Video System Set-Up (Optional)

Rear Bracket Location (2596 Grain Cart Only)

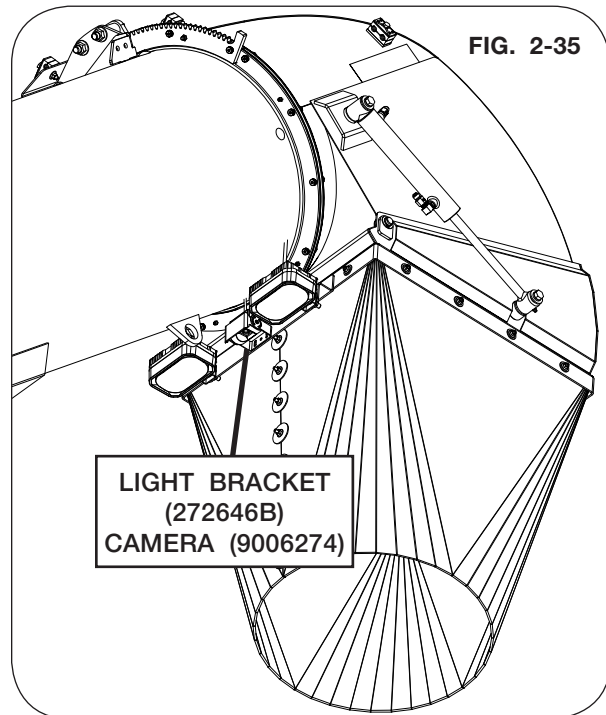
1. Attach mount bracket (265771B) to the rear undercarriage plate, as shown in FIG. 2-34.
2. Assemble camera (9006274) to the camera mount bracket.
3. Connect the 65' cable wire (9004513) to the camera.
4. Route the cable down to the left-hand side of the runner and out the front of the cart. ENSURE THERE IS ENOUGH SLACK AT THE JOINTS TO PREVENT OVEREXTENDING THE WIRE WHEN FOLDING. Use zip ties (9000107) to attach the cable to the runner as necessary. (FIG. 2-34)



NOTE: If more cable length is needed, connect 16' camera cable (9007174).

Vertical Auger Work Light Location

1. Assemble camera (9006274) to the light bracket (272646B), as shown in FIG. 2-35.
2. Connect the 65' cable wire (9004513) to the camera.
3. Route the cable down along the vertical auger the front of the cart. ENSURE THERE IS ENOUGH SLACK AT THE JOINTS TO PREVENT OVEREXTENDING THE WIRE WHEN FOLDING. Use zip ties (9000107) to attach the cable to the vertical auger tube as necessary. (FIG. 2-35)



NOTE: If more cable length is needed, connect 16' camera cable (9007174).

Section III

Operation

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FOR SCALE INFORMATION, PLEASE REFER TO YOUR SCALE MANUAL.
FOR TRACK INFORMATION, PLEASE REFER TO YOUR TRACK MANUAL.
FOR UHARVEST INFORMATION, PLEASE REFER TO YOUR UHARVEST MANUAL.
FOR ELECTRIC TARP INFORMATION, PLEASE REFER TO YOUR ELECTRIC TARP MANUAL.
FOR WATER DELIVERY SYSTEM INFORMATION, PLEASE REFER TO YOUR WATER DELIVERY
SYSTEM MANUAL.

Operating Checklist

- Read and understand all safety precautions before operating cart.
- R.V. antifreeze needs to be completely flushed from the Water Delivery System and disposed of properly. Make certain the Water Delivery System only contains water before placing the Water Delivery System in service. (If applicable)
- Set or Calibrate tractor PTO control engagement to MINIMUM setting. Refer to tractor operator's manual for setting information.
- Verify track has been aligned and is properly conditioned. (If applicable)
- Lubricate all grease fittings and check gearbox oil level.
- Inspect cleanout door assembly for play or movement, refer to "Vertical & Horizontal Clean-Out Door Operation" in the OPERATION section.
- Test operation and functionality of flow door indicator, auger fold, auger pivot, spout rotate, and spout tilt.
- Verify all reflective decals are correctly located.
- Check SMV sign and SIS decals are clearly visible with the cart attached to the tractor.
- Verify transport lights are working properly. Check and follow all regulations before towing on a road or highway.
- Verify that hitch height and length when attached to the tractor are sufficient to prevent severe bends in PTO U-joint angles.
- Verify PTO length, see "Verify Telescoping PTO Shaft Length" in MAINTENANCE section.
- Align and properly tension belts/chains. See "Belt Tightener Adjustment" and "V-Belt Alignment" in MAINTENANCE section.
- Ensure safety screens over horizontal auger are in place and properly secured.
- Install transport chains and torque hardware to specification. See "Transport Chain Connection" in OPERATION section.
- Test run the augers. See "Auger Operation" in OPERATION section.

Preparing Tractor

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

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

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

Tractor drawbar should be adjusted so that the distance from the end of the PTO shaft on the tractor to the center line of the hitch pin is 20". If this is not done, the driveline on the cart will be damaged.

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

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

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

(Continued on next page)

Preparing Tractor (continued)

NOTE: The grain cart hitch and tractor drawbar must be of the same Category.

CAUTION

- **USE OF NON-MATCHING CATEGORY HITCH AND TRACTOR DRAWBAR CONNECTION WILL RESULT IN POOR HITCH PERFORMANCE AS WELL AS DAMAGE TO TRACTOR, IMPLEMENT OR BOTH.**

Hitch pin sizes for each Category to help identify which Category drawbar you have.

Category 5 — 2 3/4" Dia. (70 mm)

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

Preparing Cart

Perform the service checks 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.

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.

Track Wheels

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.**

Lubrication

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

Video System (Optional)

IMPORTANT

- *Do not operate video system below 15°F. Damage to video system can occur.*

The video system includes its own operation instruction sheet.

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 2 3/4" hitch pin (CAT 5) diameter must only be used with a clevis-type tractor drawbar.

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

Lock tractor drawbar in center position.

Set tractor drawbar length to 20" from the end of the tractor PTO shaft to center of hitch tang pinhole.

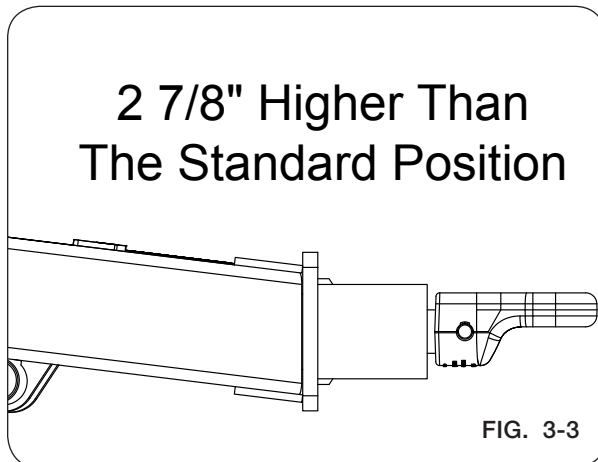
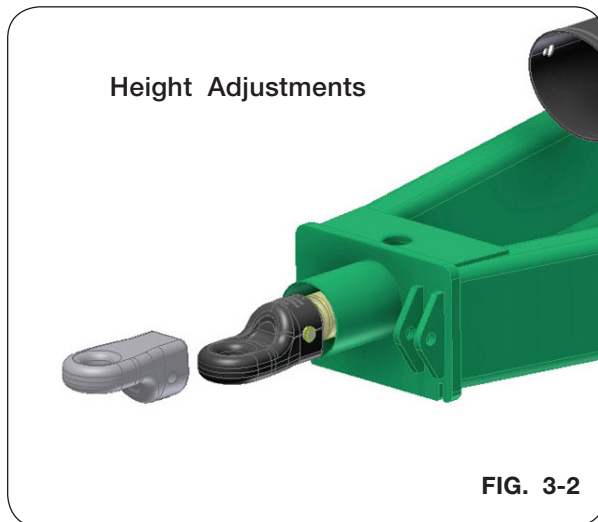
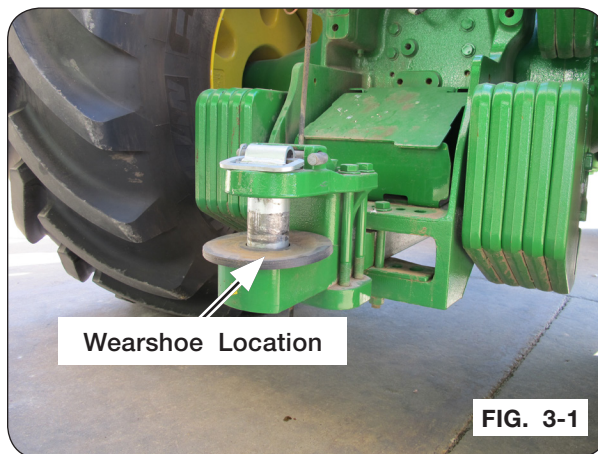
Before inserting hitch pin, apply wearshoe (281899 - CAT 5) between tractor hitch and grain cart hitch (Figure 3-1).

WARNING

- **CRUSHING CAN CAUSE SERIOUS INJURY OR DEATH. DO NOT STAND BETWEEN TOWING VEHICLE AND IMPLEMENT WHEN HITCHING. ALWAYS ENGAGE PARKING BRAKE AND STOP ENGINE BEFORE INSERTING HITCH PINS OR SECURING LATCHES.**

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

NOTE: Hitch tang can be flipped providing a drawbar connection height difference of 2 7/8" (Figure 3-2 & 3-3). Position the hitch tang 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 hitch tang is flipped, the driveline clearances need to be reviewed.



Hitching to Tractor (continued)

WARNING

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

Jack Usage

Use jack to support an empty grain cart, never a loaded grain cart. Always have a loaded grain cart hooked to tractor. Attach jack to right inside frame using pin and hair pin. Pivot the jack 90 degrees and reinstall pin for field use. (Fig. 3-4)

IMPORTANT

- After cart is hitched to tractor, pivot jack to storage location.

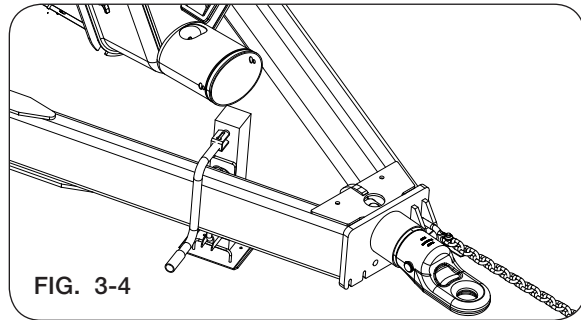


FIG. 3-4

Hitching to Tractor (continued)

Optional Hydraulic Jack Usage

WARNING

- HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS.

IMPORTANT

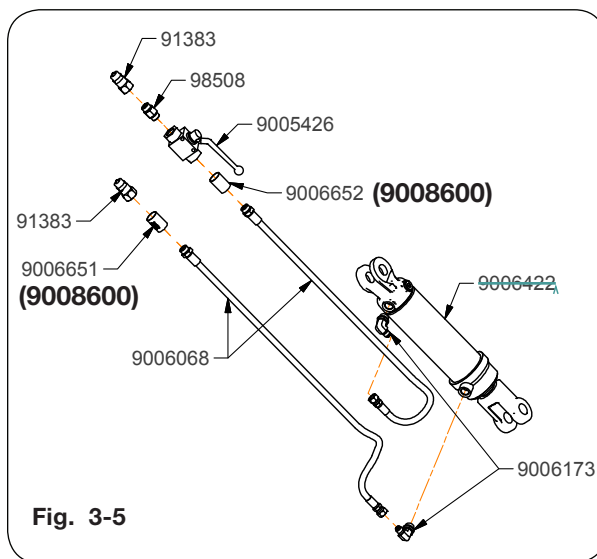
- After cart is hitched to tractor, attach hydraulic hoses to tractor and retract hydraulic cylinder to store hydraulic jack between the frame rails.

NOTE: For units SN B40240100 and higher, sleeve hose markers - raise and lower jack (9006651 and 9006652) are replaced with hose grips - black - raise and lower jack (9008600 Qty. 2)

Use hydraulic jack to support an empty grain cart, never a loaded grain cart. Always have a loaded grain cart hooked to tractor.

Always close the manual valve for the hydraulic jack for in-field use and when unhitched from the tractor.

1. Remove hoses from storage slots.
2. Attach jack cylinder hose couplers to tractor.
3. Open valve to allow hydraulic flow.
4. Use tractor hydraulic valve to extend cylinder and lift tongue.
5. Once attached to tractor drawbar, retract cylinder to lower tongue and to raise jack into storage position.
6. Close valve and then disconnect hose couplers from tractor.
7. Place hose couplers into storage caddy. Be sure to route hoses to clear PTO driveline during operation.
8. Check for leaks.



Hitching to Tractor (continued)

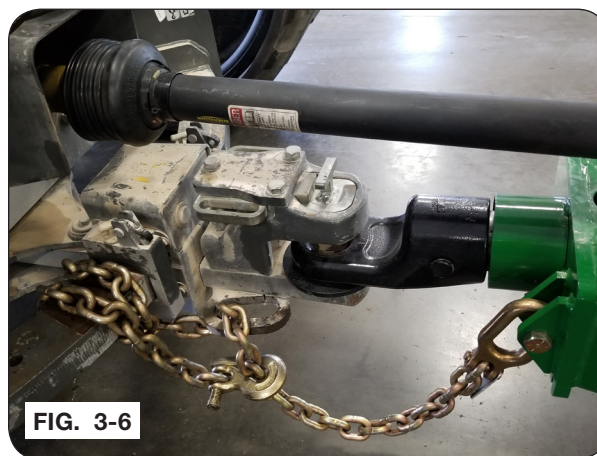
Transport Chain Connection

CAUTION

- ALWAYS USE TRANSPORT CHAIN WHEN TRANSPORTING IMPLEMENTS. FAILURE TO USE A TRANSPORT CHAIN COULD CAUSE PERSONAL INJURY OR DAMAGE IF CART BECOMES DISENGAGED.
- REPLACE TRANSPORT CHAIN IF ANY LINK OR END FITTING IS BROKEN, STRETCHED OR DAMAGED. DO NOT WELD TRANSPORT CHAIN.

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. 3-6 shows how the transport chain must be installed between the tractor and grain cart.

Transport chain should have a minimum rating equal to the gross weight of the implement and all attachments. 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.



Hitching to Tractor (continued)

Hydraulic Connections

Clean hydraulic hose couplers before connecting to the tractor. For convenience, this unit is equipped with color hose grips attached to the hydraulic hoses. This will help in identifying the hose function and correct hook up. (FIG. 3-7)

For steering tandem, attach hydraulic hoses labeled “TURN LEFT” and “TURN RIGHT” into tractor hydraulic remote. Connect hydraulic hose “TURN LEFT” to extend port, and “TURN RIGHT” to retract port.

Color	Function
Red	Flow Door Open and Close
Yellow	Spout Tilt In and Out
Tan	Joystick or Spout Rotate
Green	Auger Fold and Unfold
Blue	Auger Pivot Up and Down
Black	Jack Raise and Lower
Orange	Water Pump
Optional	Hydraulic Pressure and Return

After initial set-up or replacement of any hydraulic component on the cart, air must be removed from the cart’s hydraulic system. Reference “Hydraulic System - Purge Hydraulic System” section in the MAINTENANCE section.

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

(Continued on next page)

Hitching to Tractor (continued)

Hydraulic Connections

Before disconnecting hoses from tractor, place tractor in park and shut PTO off, operate auger fold and tilt to the lowest positions. Where possible, remove hydraulic pressure loads and avoid potential pressure buildup in the lines from long storage periods such as upper auger not in rest position. If equipped with hydraulic jack, extend jack to desired position, turn valve to closed position. See tractor operator's manual for proper procedure to relieve pressure from the lines. After SCV pressures have been relieved and tractor engine is off, disconnect hoses from tractor. Install couplers into storage slots provided. (FIG. 3-7 & 3-8)



Hitching to Tractor (continued)

Towing

Ensure that the towing vehicle has adequate weight and braking capacity to tow this implement. See the towing vehicle manual for towing capacity. Never tow a loaded grain cart over public roads.

Maximum speed of cart should never exceed 15 m.p.h. Do not exceed 10 m.p.h. during off-highway travel. Do not exceed 8 m.p.h. when cart is fully loaded.

Secure drawbar pin with a locking device and lock tractor drawbar in centered position.

The PTO drive shaft needs to be placed in the storage position on the tongue or properly attached to the tractor. See “Coupling The Cut-Out Clutch” in SET UP section and “PTO Shaft and Clutch” in MAINTENANCE section before connecting the PTO drive shaft 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.

Regulate speed to road conditions and maintain complete control.

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.

Slow down before making sharp turns to avoid tipping. Drive slowly over rough ground and side slopes.

Always have auger folded back into storage/transport position when auger is not in use. (FIG. 3-9)



FIG. 3-9

Transport Position
Shown

Hitching to Tractor (continued)

Electrical Connections

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

NOTE: 7-pin connector must be plugged into the tractor in order for the spout system to operate.

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

This unit is equipped with Side Marker lights for enhanced visibility. These lights will have different functionality depending upon the tractor lighting selection.

If the tractor field lights switch is on; the Side Marker lights and the amber turn signal lights are on solid and will not flash.

If the flashers and/or turn signal is on; the Side Marker lights flash in unison with their respective side's amber turn lamp.

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.

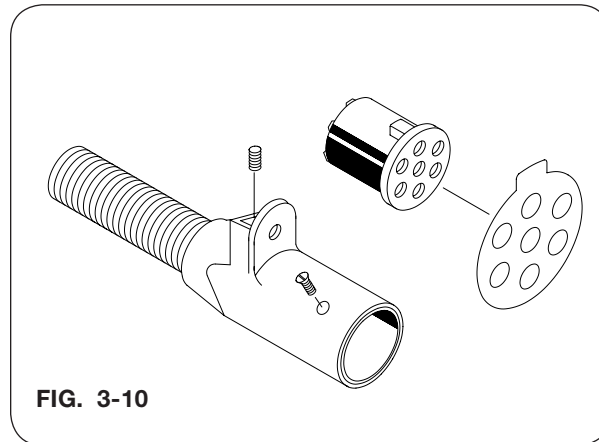


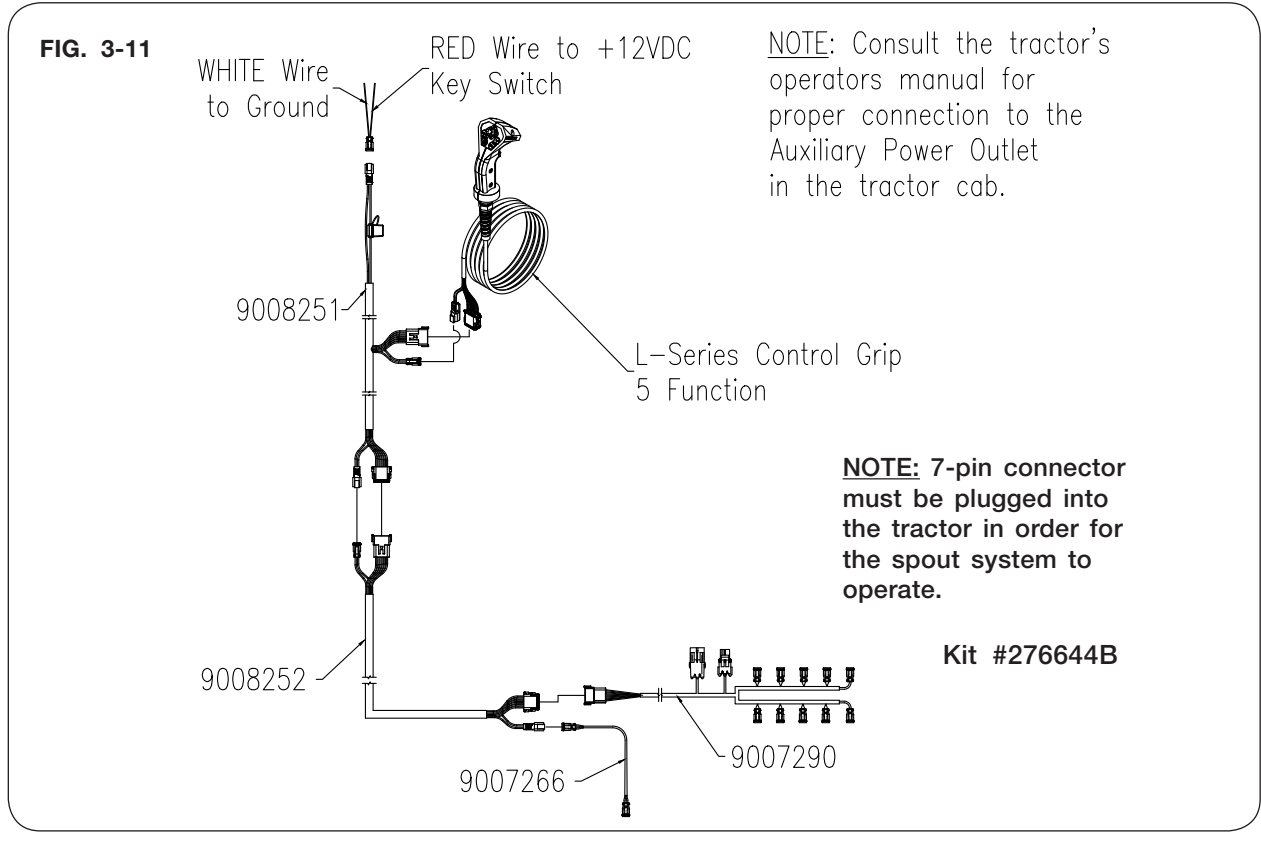
FIG. 3-10

Optional Electric Over Hydraulic Operation 5 Function Serial Number B39490100 & Higher

Before operating cart, familiarize yourself with the functions associated with the joystick controller by operating with an empty cart.

The joystick comes with a mounting pin allowing storage inside the tractor cab when not in use.

1. Connect the red wire from power harness (9008251) to a key-switched +12VDC power supply. (Fig. 3-11)
2. Connect the white wire from power harness (9008251) to ground. (Fig. 3-11)



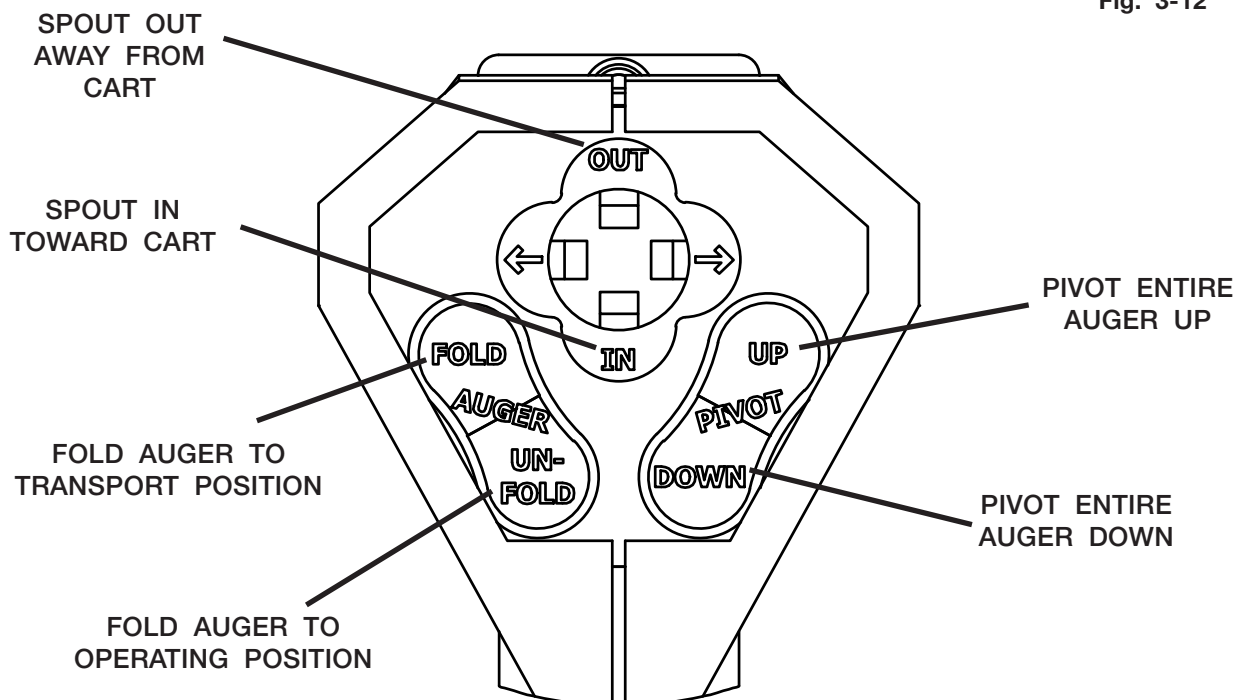
Optional Electric Over Hydraulic Operation 5 Function (continued) Serial Number B39490100 & Higher

3. Connect the Hydraulic Pressure and Return hoses to the tractor SCV remote so that the Pressure line is able to be put in continuous detent.
4. Place the remote in continuous detent so that the Hydraulic Pressure hose is pressurized and set the hydraulic flow to a maximum 6 gal/min to minimum 4 gal/min.
5. To fold auger out from transport to operating position, push down the auger unfold button on joystick face until the upper and lower auger are engaged and fold linkage is over center.
See Fig. 3-12.

NOTE: Joystick has a double tap feature, which allows the operator to quickly double tap a function in order to operate it for a set time. If the auger fold or auger unfold buttons are double tapped, the function will stay on for 60 seconds to complete the full cycle without holding the buttons down. Pressing either of those buttons during these timed cycles will CANCEL the cycle. This double tap feature only applies to auger fold and unfold functions.

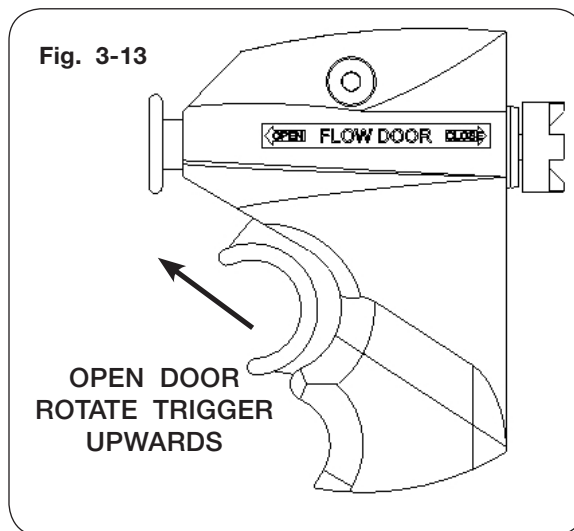
6. To pivot spout OUT away from cart, push hat switch toward OUT. Hold the switch until desired position is achieved. See Fig. 3-12.
7. To pivot spout IN toward cart, push hat switch toward IN. Hold the switch until desired position is achieved. See Fig. 3-12.
8. To pivot the entire auger UP, press and hold the auger pivot UP button until the desired height is achieved. See Fig. 3-12.
9. To pivot the entire auger DOWN, press and hold the auger pivot DOWN button until the desired height is achieved. See Fig. 3-12.

Fig. 3-12

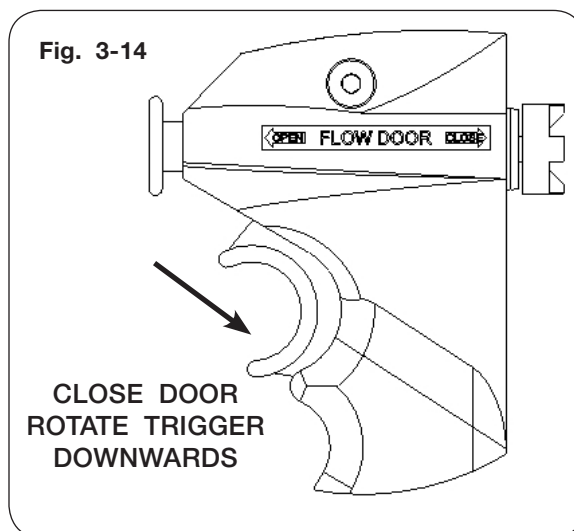


Optional Electric Over Hydraulic Operation 5 Function (continued)
Serial Number B39490100 & Higher

10. To open flow door, rotate the switch upwards. Observe flow door indicator to determine when to release trigger and stop flow door movement. See Fig. 3-13.



11. To close flow door, rotate the switch downwards. Observe the flow door indicator and release trigger when door is closed to desired position. See Fig. 3-14.



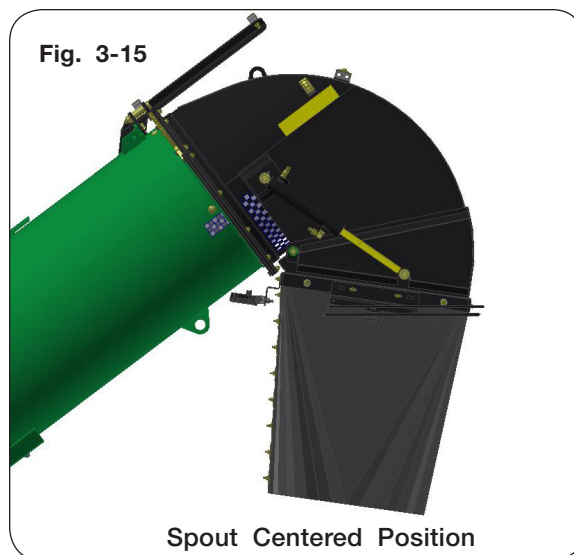
12. To fold auger from operating position to transport position:

A. Rotate spout to centered position. Align the checker flag decals to locate center as shown in Fig. 3-15.

B. Press auger FOLD button on joystick.

C. Hold FOLD button until upper auger is on field rest or in transport position.

13. Once unloading is complete, stop hydraulic flow. **ALWAYS** stop continuous detent when auger functions are not required or active.



**Manual Override for Optional Electric Over Hydraulic System
Serial Number B39490100 & Higher**

⚠ WARNING

- MOVING OR ROTATING AUGER COMPONENTS CAN CAUSE SERIOUS INJURY OR MACHINE DAMAGE. BEFORE OPERATING MANUAL OVERRIDE(S), ENSURE EVERYONE IS AWAY FROM THE SPOUT AND THAT THE SPOUT WILL NOT CONTACT ANY OTHER PARTS OF THE GRAIN CART. ALL CONTROL SWITCHES ARE DEACTIVATED WHILE UTILIZING MANUAL OVERRIDE(S).
- MOVING OR ROTATING PTO COMPONENTS CAN CAUSE SERIOUS INJURY OR DEATH. DO NOT OPERATE PTO WHILE UTILIZING MANUAL OVERRIDE(S).

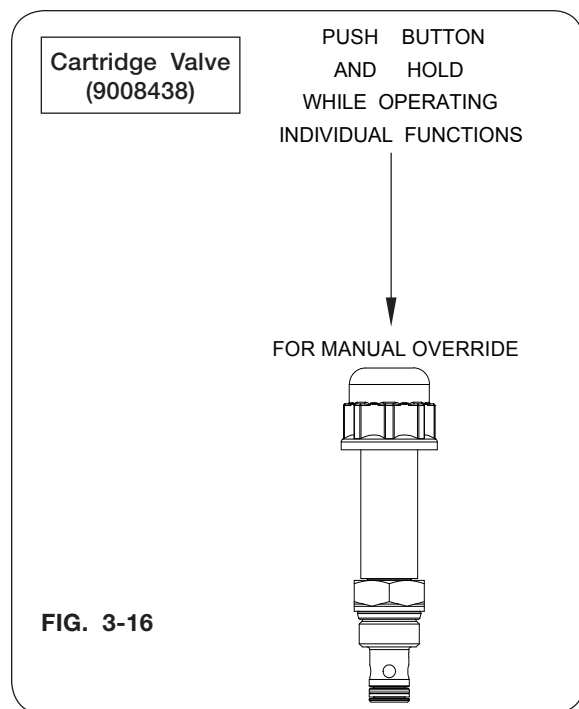
NOTE: Manual override operation is intended for emergency use **ONLY** and is not intended for continuous operation.

NOTE: 7-pin connector must be plugged into the tractor in order for the spout system to operate.

1. Park the empty grain cart on a firm and level surface. Block the tires/tracks on the machine to keep it from moving. Set the tractor's parking brake.
2. Connect the Hydraulic Pressure and Return hoses to the tractor SCV remote so that the Pressure line is able to be put in continuous detent.

NOTE: Center rotating spout before activating auger fold.

3. To operate the manual override functions, place the tractor SCV remote in continuous detent so that the Hydraulic Pressure hose is pressurized.
4. Remove cover plate (272606B) from the bottom of the lower auger housing to access the EOH block assembly.
5. Push and hold the manual override button on valve (9008438). (FIG. 3-16)



**Manual Override for Optional Electric Over Hydraulic System
Serial Number B39490100 & Higher**

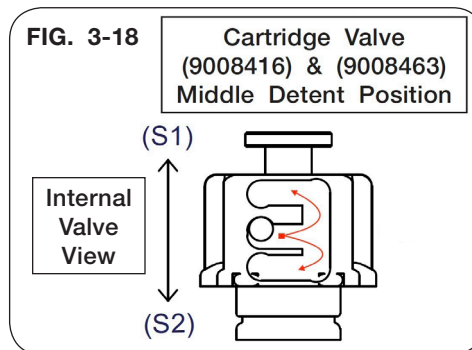
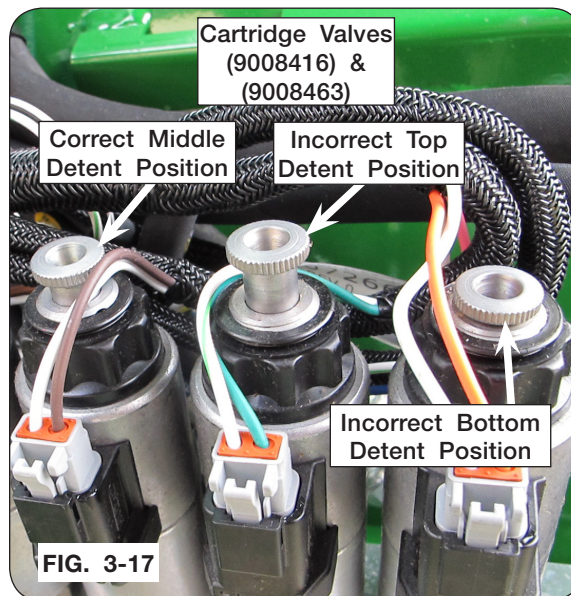
6. While holding the manual override button, operate the desired function on valve (9008416) & (9008463) by rotating the manual override knurled knob from the locked neutral position. (FIG. 3-17 & 3-18)
7. Push or pull the knob to operate the valve function in the desired direction. (FIG. 3-18)
8. Once the desired position is reached, release manual override button on valve (9008438).

NOTE: Cartridge valve (9008416) & (9008463) must be locked in the middle detent position to function properly. (FIG 3-17 & 3-18)

9. Return knurled knob to center and lock valve (9008416) & (9008463) in position. (FIG. 3-17 & 3-18)

NOTE: Refer to “Troubleshooting” for EOH, vertical auger and/or rotating spout issues in the OPERATION section.

10. Turn off hydraulic circuit when done. Correct electric/hydraulic system before continued use. Consult your dealer for service and parts.



Troubleshooting

Problem	Possible Cause	Corrective Action
No Electric Over Hydraulic (EOH) Functions work	Not getting 12 Volt power supply to the power harness in the tractor	Check the connections to the main power harness in the tractor cab, and check the 5 AMP fuse in the fuse holder of the main power harness. Replace fuse if necessary.
	Not getting good connection at Deutch connectors in the harnesses	Unplug the Deutsch connectors at the hitch point and in the extension harness (if used). Clean up the connectors with electrical contact cleaner. Make sure the connectors are aligned correctly and re-connect them.
	Not pressurizing the correct hydraulic hose	Make sure the quick couplers are properly connected to the tractor SCV and the Hydraulic Pressure line is being pressurized when engaging the tractor SCV.
Auger unfolds, but won't fold back in to transport position	Rotating Spout is not in the folding position	Rotate the spout so it is positioned straight down or forward in order to fold the auger into transport position.
	Rotating spout switch is faulty or out of adjustment	Make sure the spout is in the centered position. Press and hold the manual override button on the electric over hydraulic (EOH) valve on the auger fold cylinder while someone operates the hydraulic remote to fold the auger back to the transport position. Inspect the switch assembly near the rotating spout cylinder. The clearance between the end of the proximity switch and the barrel of the rotating spout cylinder must not exceed 1/4".
Auger unfolds part way and stops	Debris in the EOH block on the auger fold cylinder	Fold auger, remove the Coil and the cartridge valve on the EOH valve block. Remove any debris and reinstall cartridge and coil.
	Rotating Spout switch is out of adjustment or has been activated.	With the auger folded in to the lower transport rest, have someone depress and hold the switch at the vertical auger hinge plate. Use any means necessary to depress the switch without placing your hands or other body parts near the pinch points. With the switch depressed, rotate the spout to the folding position.

Troubleshooting (continued)

Problem	Possible Cause	Corrective Action
Spout rotate does not operate	7 pin connector is not plugged into tractor.	Plug in 7 pin connector to same power source as the 5 function controller.
	Proximity Switch at the auger hinge is not getting Power or Ground.	Check power and ground to the proximity switch harness on the vertical auger.
Rotating spout will not function	Proximity switch located at the hinge plate is not adjusted correctly.	This proximity switch has a 1/4" effective operating range. The upper auger hinge plate needs to be within that range when it is unfolded in to the operating position. Adjust the proximity switch in or out in order for the sensor to activate when it is in the operating position.
	Switch located at the hinge plate of the vertical auger is not getting power, ground or is defective	Check the ground wire on the top plate of the lower vertical auger and on the left hand standard just behind the front plate of the harness. Unplug the 3 pin connector on the hinge plate proximity switch. With a multi-meter or test light, confirm that the pin in socket B has +12V constant power and socket A has +12V when the sensor is activated.
One single function will not work	Defective coil on the EOH valve for that function	Loosen the cap for the coils associated with that function on the EOH valve. Depress the button on the remote, and determine if the coils are getting magnetized. Inspect the wiring connectors to these coils, and replace the coil if necessary.
	Defective valve on the EOH valve for that function	Remove the coil and the cartridge valve on the EOH valve block for that function. Replace the valve if it doesn't operate when the coil is magnetized.
	Debris in the EOH block at the base of the vertical auger	Remove the coil and the cartridge valve on the EOH valve block. Remove any debris and reinstall cartridge and coil.
Functions continue to operate after the button on the remote is released	Tractor hydraulic flow is set too high	Turn tractor hydraulic flow down so that flow doesn't exceed 6 gallons per minute.
	Defective valve on the EOH valve for that function	Remove the Coil and the cartridge valve on the EOH valve block for that function, and replace the cartridge.

Vertical & Horizontal Cleanout Door Operation

⚠ WARNING

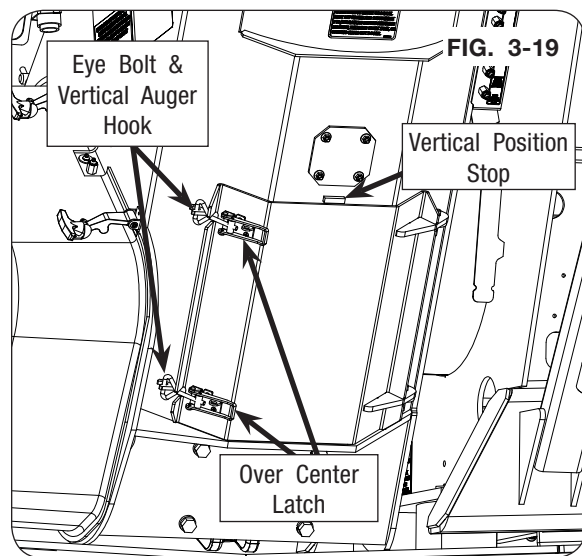
- MOVING OR ROTATING COMPONENTS CAN CAUSE SERIOUS INJURY OR DEATH. ENSURE SERVICE COVERS, CHAIN/BELT COVERS AND CLEANOUT DOORS ARE IN PLACE AND SECURELY FASTENED BEFORE OPERATING UNIT.
- KEEP HANDS CLEAR OF PINCH POINT AREAS.
- TIPPING OR MOVEMENT OF THE MACHINE CAN CAUSE SERIOUS INJURY OR DEATH. BE SURE THE MACHINE IS SECURELY BLOCKED.
- EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING THE IMPLEMENT.

NOTE: Raise the vertical auger to ensure clearance between cleanout door and tongue in order to open and remove the cleanout door from the vertical lower auger.

Vertical Cleanout Door

1. Park the empty grain cart on a firm and level surface. Block the tires/tracks on the machine to keep it from moving. Set the tractor's parking brake, shut-off the engine, remove the ignition key and disconnect the PTO shaft.
2. To completely close cleanout door, ensure the vertical auger cleanout door top edge clears the vertical position stop (key stop). (FIG. 3-19)
3. Attach eye bolt ends of over center latches to the hooks on the vertical auger. (FIG. 3-19)
4. Clasp the over center latch handles to lock the door in the closed position. (FIG. 3-19)
5. Inspect and verify cleanout door perimeter for gaps. Ensure all grain dust and filings are removed that may prevent the door from shutting completely.
6. If gaps are present, unclasp the over center latch and tighten eye bolt to improve door seal contact on the vertical auger.
7. Rehook eye bolt to vertical auger and clasp the over center latch.

NOTE: Repeat closing the door and inspection, as necessary.

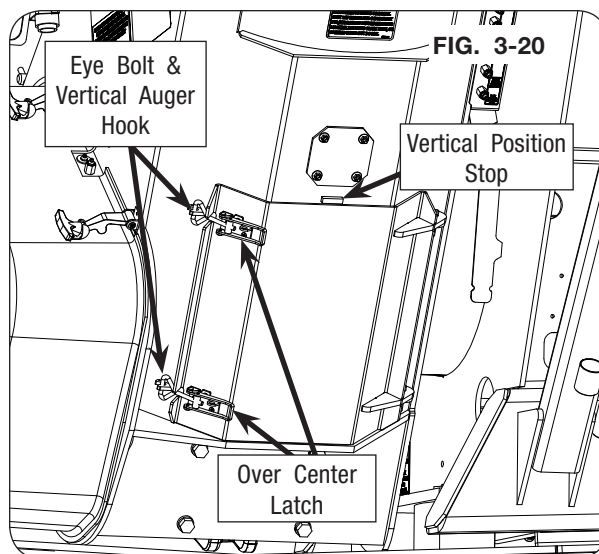


Vertical & Horizontal Cleanout Door Operation (continued)

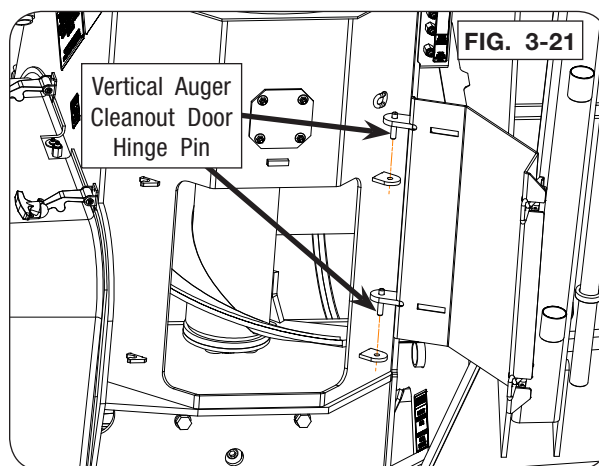
Vertical Cleanout Door

NOTE: Remove the vertical auger cleanout door to improve vertical auger cleaning.

8. To open and remove the vertical auger cleanout door, unclasp the over center latch. (FIG. 3-20)
9. Unhook the eye bolt from the vertical auger and open the cleanout door. (FIG. 3-20)



10. The hinge on the vertical auger cleanout door is set on a pin. Lift and remove the cleanout door from the vertical auger. Keep vertical auger cleanout door. (FIG. 3-21)
11. Inspect and verify all debris is removed from inside the vertical auger housing.
12. Reattach the vertical cleanout door to the vertical auger.

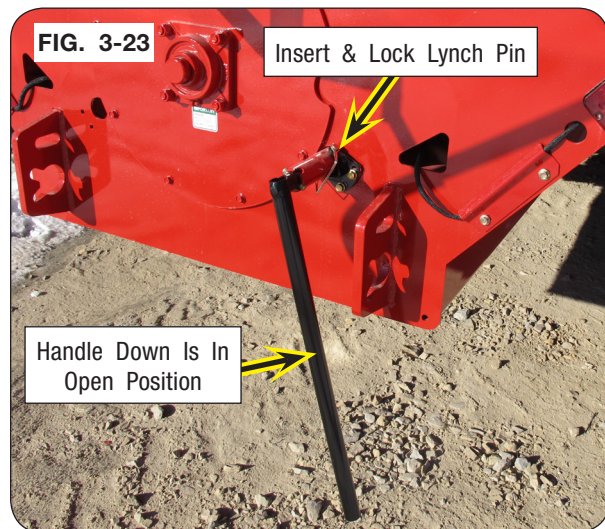
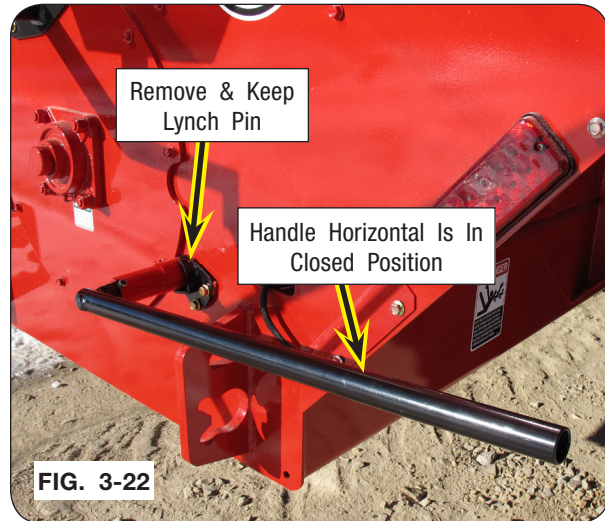


Vertical & Horizontal Cleanout Door Operation (continued)

Horizontal Cleanout Door

Use the tensioner handle, located on the left-hand side of the grain cart, behind the first panel to open and close the horizontal cleanout doors.

1. Insert tensioner handle into the cleanout door receiver coupler on the rear panel, and remove lynch pin from rockshaft. Keep lynch pin. (FIG. 3-22)
 2. Rotate the tensioner handle clockwise to open the cleanout doors. (FIG. 3-23)
 3. Insert and lock lynch pin into rockshaft. (FIG. 3-23)
 4. Inspect and verify all debris is removed that may prevent the doors from shutting completely. (FIG. 3-24)
- NOTE:** If cleanout doors do not function properly, refer to “Horizontal Cleanout Door Inspection” in SET UP section for more information.
5. Remove lynch pin from rockshaft and rotate handle counter-clockwise and clockwise to check for smooth door operation.



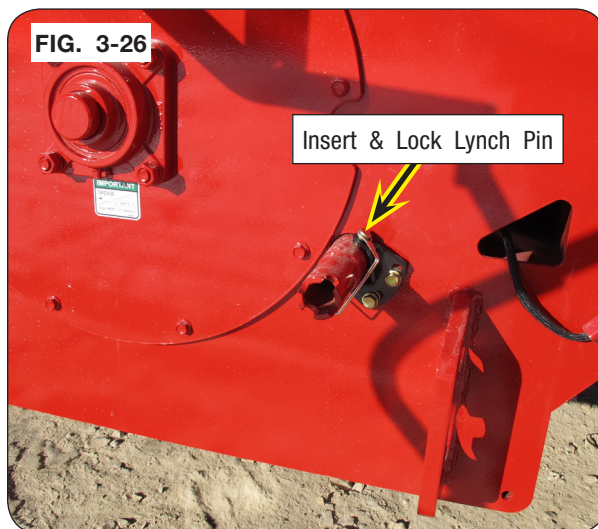
Vertical & Horizontal Cleanout Door Operation (continued)

Horizontal Cleanout Door

6. Rotate handle counter-clockwise to close doors and ensure all doors seal. (FIG. 3-25)



7. Insert and lock lynch pin into rockshaft and return handle to storage location. (FIG. 3-26)



Auger Operation

PTO Driven Auger

DANGER

- ELECTROCUTION WILL CAUSE SERIOUS INJURY OR DEATH. ELECTROCUTION CAN OCCUR WITHOUT DIRECT CONTACT. KEEP AWAY FROM ALL ELECTRICAL LINES AND DEVICES.



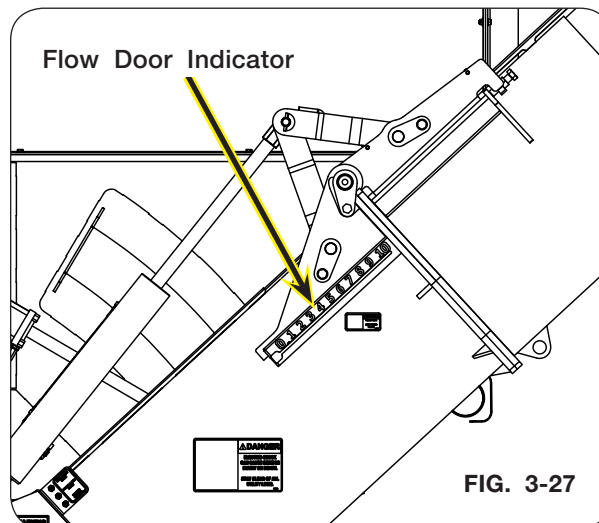
WARNING

- 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.
- 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 ARE LIMITED MOBILITY AND EXIT PATHS WHEN WORKING INSIDE THE IMPLEMENT.

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

NOTE: If spout rotate moves out of center, the auger will not unfold to unloading position. The spout must be manually rotated to center position. See “Manual Override for Optional Electric Over Hydraulic System” in the OPERATION section.

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 and over-center latch to fully engage.
3. Engage PTO at low engine RPM, then increase engine RPM until 1000 PTO RPM is reached.
4. Open flow control door to desired unloading rate. Numbers on the auger tube provide a point of reference for operator convenience. (Fig. 3-27)
5. To slow or stop grain flow, close flow door, rather than reducing tractor RPM. Close flow door fully when unloading is complete.



NOTE: If an overload occurs, see “Auger Overload Procedure.”

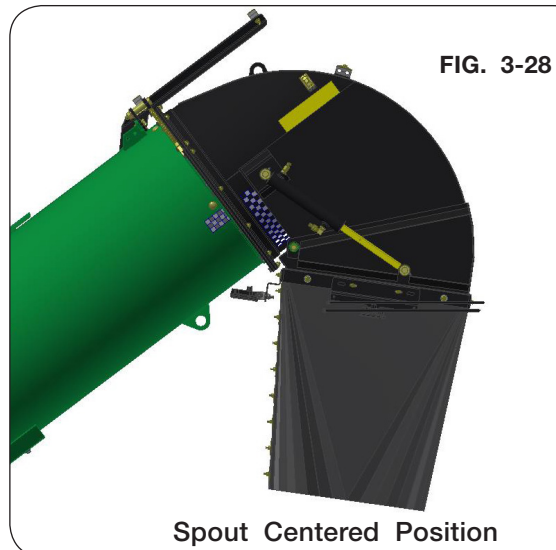
NOTE: It is not recommended to disengage auger with flow control door open. Auger system will require substantially more torque to start, placing extra stress on both cart and tractor driveline.

Cart is equipped with baffles that can be adjusted to accommodate the flow of different materials and/or the torque demands associated with different materials. See the SET UP section for the procedure.

Auger Operation (continued)

6. When auger is empty, reduce PTO rpm to idle, and stop PTO.
7. After PTO has come to a complete stop, align the checker flag decals to center spout as shown in FIG. 3-28.
8. Once spout is centered, fold auger to the transport position or field position.

NOTE: Spout can be TILTED to any position, but must be ROTATED to center for auger to fold.



Auger Operation (continued)

Auger Overload Procedure

IMPORTANT

- Extensive operation while the clutch is slipping may damage drive components.

NOTE: When over loading occurs, drivelines equipped with cut-out clutch will make a “clicking” noise when torque has been exceeded. Immediately shut off PTO and shut the flow door.

NOTE: Once PTO RPM has significantly decreased, cut-out clutch will automatically reset.

1. Close flow door.
2. With the PTO off and driveline stopped, disengage the belt tensioner using the belt tensioner handle, this disengages the horizontal auger from the drivetrain. (FIG. 3-29)
3. Restart and engage the tractor PTO at low engine RPM.
4. Increase engine RPM until 850 to 1,000 PTO RPM is reached to empty the vertical auger.
5. Once vertical auger is empty, stop PTO.
6. With the tractor PTO off and driveline stopped, reengage the belt tensioner using the belt tensioner handle. Return handle to storage. (FIG. 3-30)
7. Restart and engage the tractor PTO at low engine RPM.
8. Increase engine RPM until 850 to 1,000 PTO RPM is reached to empty the drag auger.

NOTE: If the grain cannot be relieved by above method, open bottom clean out doors (see “Vertical & Horizontal Clean-Out Door Operation” in this section) to remove grain from auger before repeating these steps to clean out auger.



Auger Operation (continued)

Vertical Auger Fold

⚠ WARNING

- DO NOT STAND ON LADDER OR FRAME UNLESS TRACTOR ENGINE IS TURNED OFF AND KEYS ARE REMOVED FROM THE IGNITION.

Actuate hydraulic auger fold circuit to pivot vertical auger between transport and operating positions. When unfolding auger, allow sufficient time for cylinder to rotate the outside fold link into an over-center position. (FIG. 3-31)

NOTE: Auger spout will not rotate until auger is fully extended and auger will not fold until the spout is centered.



FIG. 3-31

Transport Position Shown

Ladder Operation - For SN B40560100 & Higher

⚠ WARNING

- FALLING OR LOWERING EQUIPMENT CAN CAUSE SERIOUS INJURY OR DEATH. KEEP EVERYONE AWAY FROM EQUIPMENT WHEN SUSPENDED, RAISING, OR LOWERING.
- KEEP HANDS CLEAR OF PINCH POINT AREAS.
- DO NOT ALLOW ANYONE TO RIDE ON THE LADDER. MAKE SURE EVERYONE IS CLEAR BEFORE OPERATING MACHINE OR TOWING VEHICLE.
- 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 ARE RESTRICTED MOBILITY AND LIMITED EXIT PATHS WHEN WORKING INSIDE THE IMPLEMENT.
- NEVER ENTER A CART CONTAINING GRAIN. FLOWING GRAIN TRAPS AND SUFFOCATES VICTIMS IN SECONDS.

NOTE: Ensure ladder and steps are free from snow/debris before changing ladder positions and climbing.

NOTE: Ensure upper ladder extension is attached to higher holes on the ladder. Reference “Upper Ladder Extension to Operating Position” section in the SET UP section.

NOTE: Always use lock pin in the working and storage position to lock the ladder extension. The lock pin can be inserted in either left-hand or right-hand ladder hole. (FIGS. 3-32 & 3-33)



Ladder Operation - For SN B40560100 & Higher (continued)

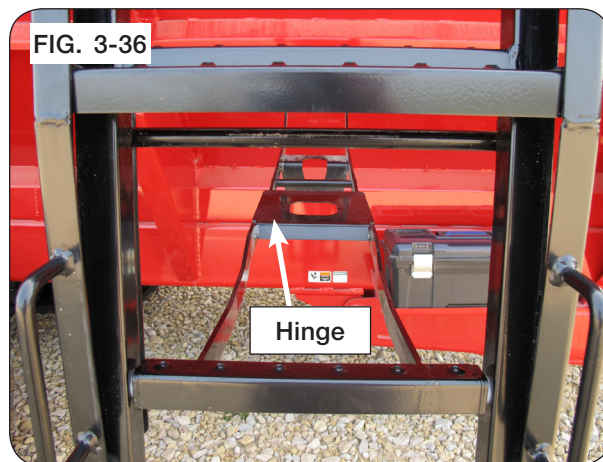
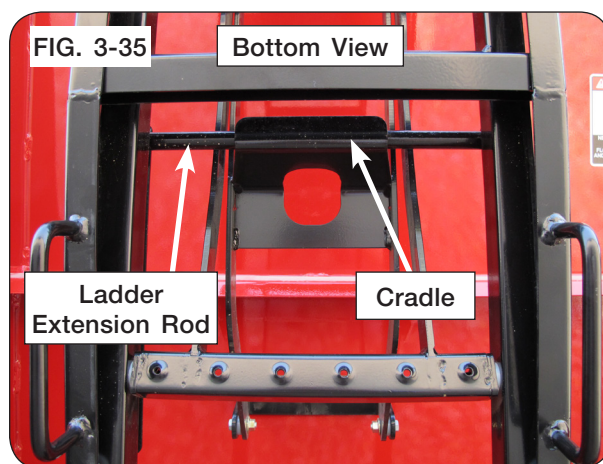
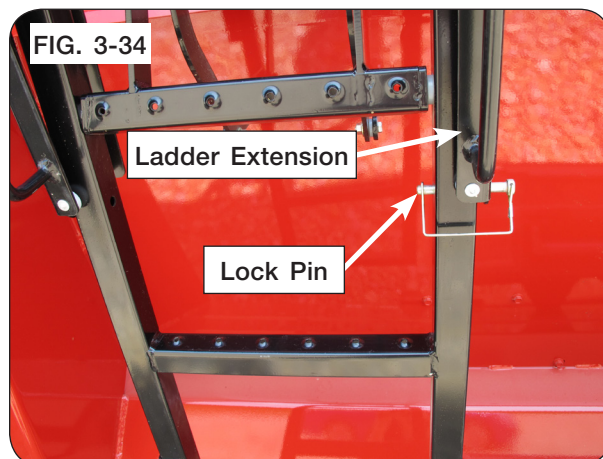
Storage to Working Position

1. Standing in front of ladder, place hands on outside ladder handles.
2. Keep one hand on ladder handle and with opposite hand, remove lock pin from ladder extension. Retain for future use. (FIG. 3-34)
3. With hands back on ladder handles, push ladder towards hopper bin and lift ladder extension to unseat ladder extension rod from the cradle. (FIG. 3-35)

CAUTION

- THE LADDER IS NOW FREE TO PIVOT.

4. Slowly swing ladder outward until hinge is fully extended and locks in the working position. (FIG. 3-36)



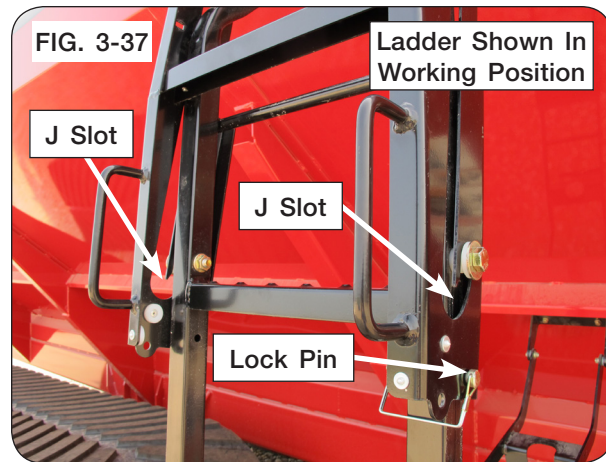
Ladder Operation - For SN B40560100 & Higher (continued)

Storage to Working Position

5. Lift and seat ladder extension into shorter leg of “J slot”. (FIG. 3-37)
6. Using lock pin from step 2, insert lock pin into ladder extension and ladder. (FIG. 3-37)

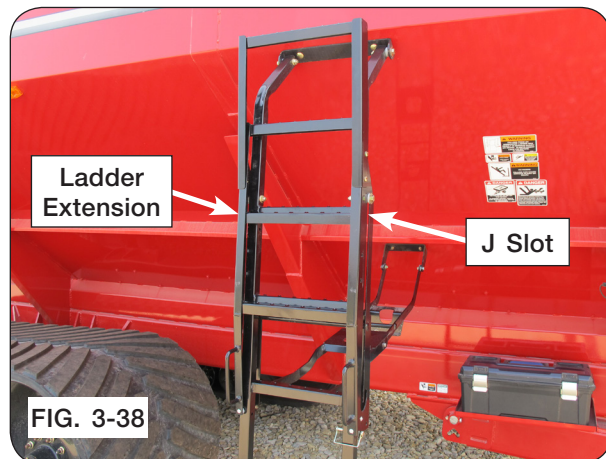
⚠ WARNING

- FALLING FROM AN UNSECURED LADDER MAY CAUSE SERIOUS INJURY OR DEATH. ALWAYS INSERT LOCK PIN BEFORE CLIMBING.



Working to Storage Position

7. Standing in front of ladder, place hands on outside ladder handles.
8. Keep one hand on ladder handle and with opposite hand, remove lock pin from ladder extension. Retain for future use. (FIG. 3-37)
9. With hands back on ladder handles, lift and unseat ladder extension from shorter leg of “J slot”. (FIG. 3-37)
10. Lower ladder extension until fully seated in longer leg of “J slot”. (FIG. 3-38)



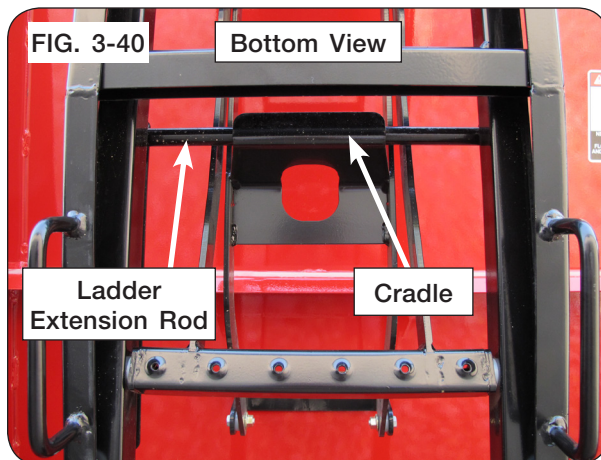
11. Keep one hand on ladder handle and with opposite hand, reach between ladder rungs and grab the ladder hinge hole. (FIG. 3-39)
12. Slowly lift ladder hinge until the ladder starts folding.
13. Remove hand from ladder hinge hole and place onto ladder handle.
14. Slowly push ladder towards hopper bin.



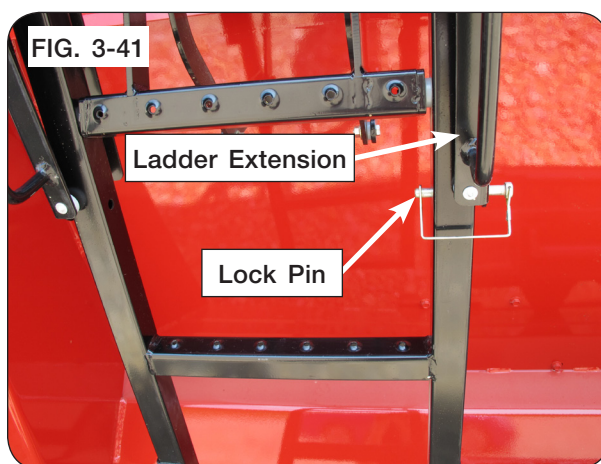
Ladder Operation - For SN B40560100 & Higher (continued)

Working to Storage Position

15. Lower ladder extension and seat ladder extension rod onto the cradle. (FIG. 3-40)



16. Using lock pin from step 8, insert lock pin into ladder extension and ladder. (FIG. 3-41)



Weather Guard Tarp

WARNING

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

IMPORTANT

- *Do not open or close tarp while moving or in high wind conditions. Damage to the tarp may occur.*
- *Tarp should not be used if it is torn or the bungee cords are frayed or show damage. If water pools on the tarp, 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 nobody 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)

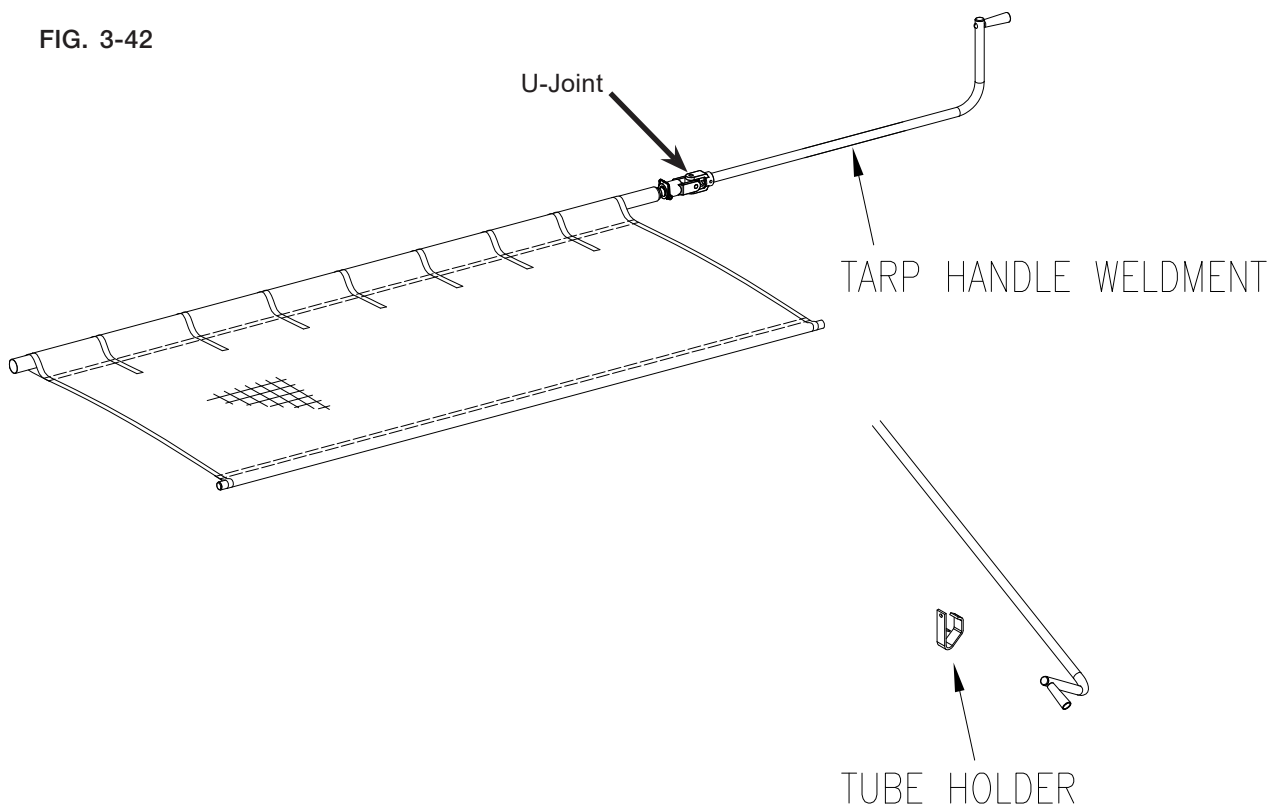
Procedure

1. Using both hands, carefully remove crank from holder. (FIG. 3-42)
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 U-joint may need to be re-indexed on tarp tube to achieve correct tension.

4. Place crank in holder.
5. To open tarp, turn the main tarp tube counter clockwise until the tarp is fully open. Place crank in crank holder.

FIG. 3-42



Notes

Section IV

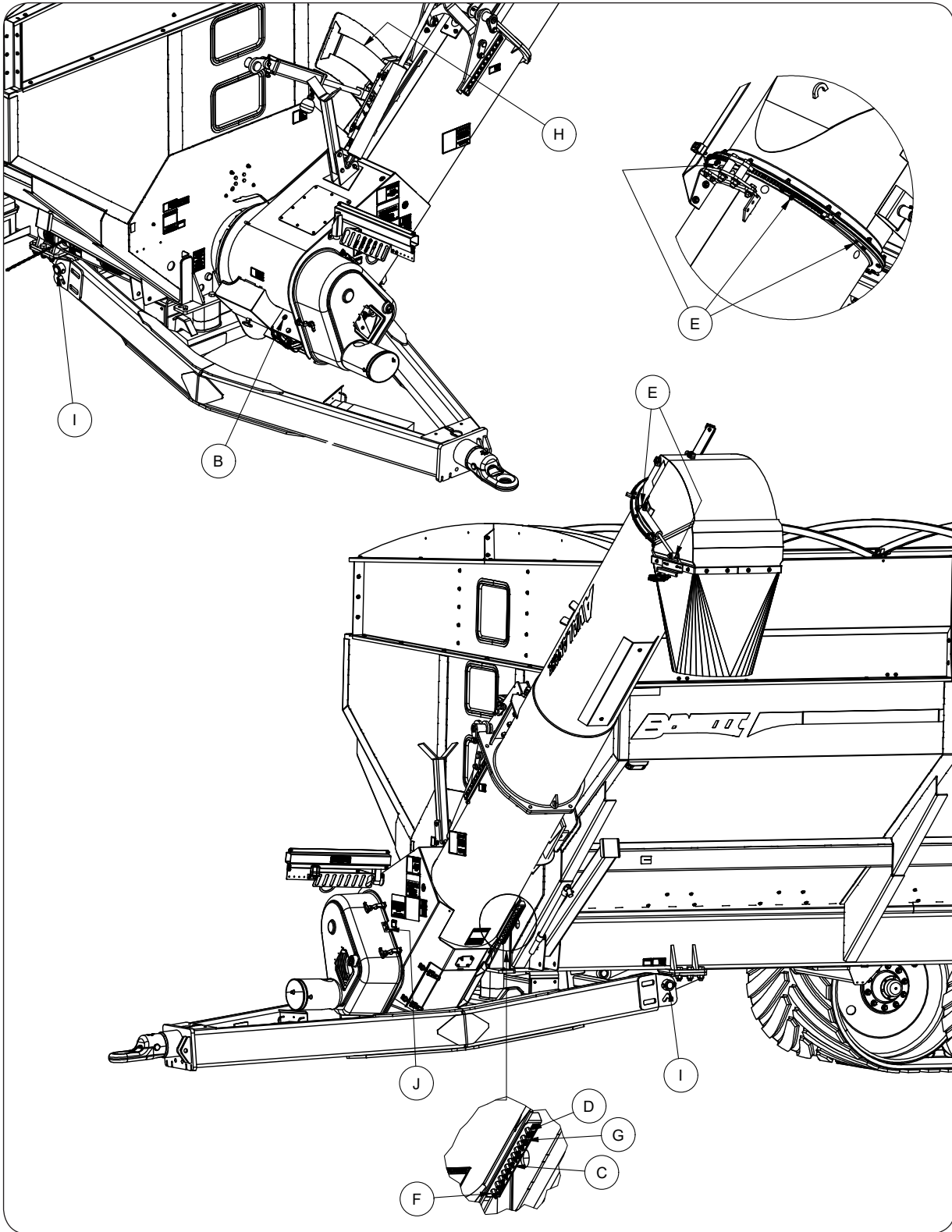
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FOR SCALE INFORMATION, PLEASE REFER TO YOUR SCALE MANUAL.
FOR TRACK INFORMATION, PLEASE REFER TO YOUR TRACK MANUAL.
FOR UHARVEST INFORMATION, PLEASE REFER TO YOUR UHARVEST MANUAL.
FOR ELECTRIC TARP INFORMATION, PLEASE REFER TO YOUR ELECTRIC TARP MANUAL.
FOR WATER DELIVERY SYSTEM INFORMATION, PLEASE REFER TO YOUR WATER DELIVERY
SYSTEM MANUAL.

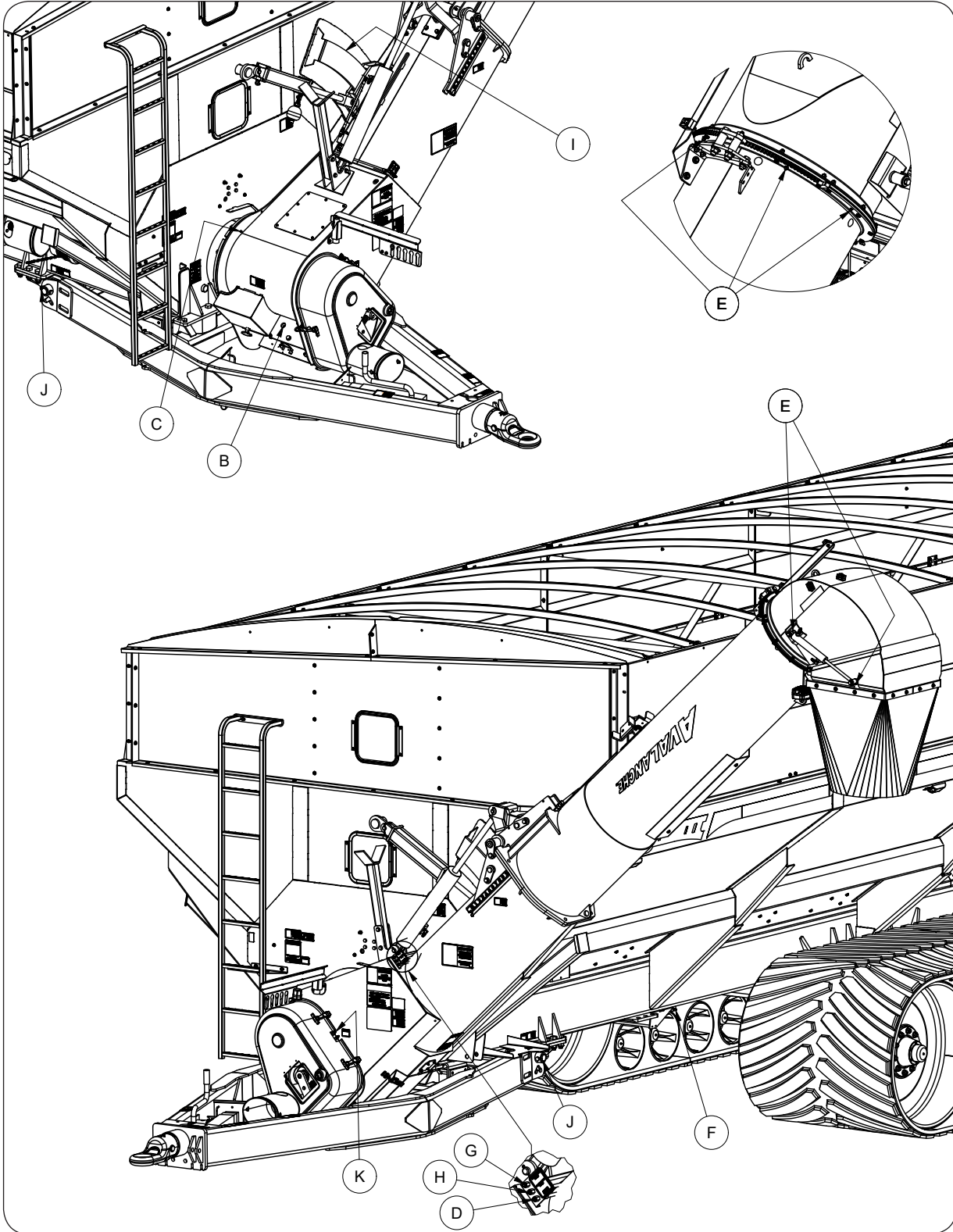
Lubrication - For SN B40560100 & Higher

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.



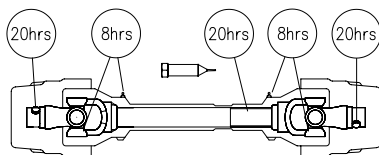
Lubrication - For SN B40560099 & Lower

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.



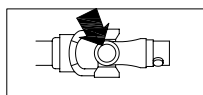
Lubrication - For SN B40560099 & Lower (continued)

LUBRICATION INSTRUCTIONS FOR DRIVE LINE

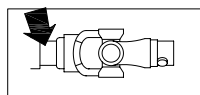


8hrs

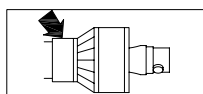
20hrs



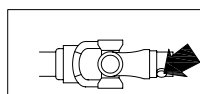
Cross journal



Inner tube



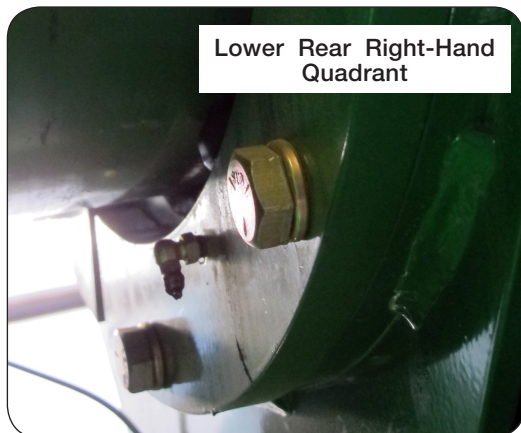
Shield retaining bearing



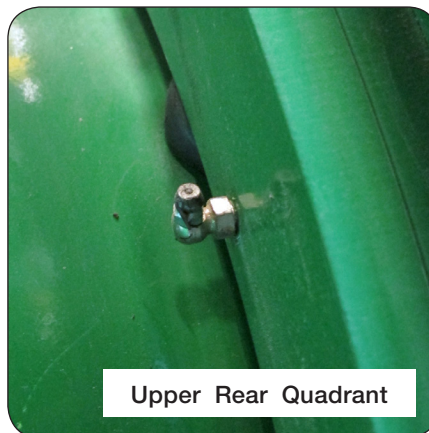
Push-pin set

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

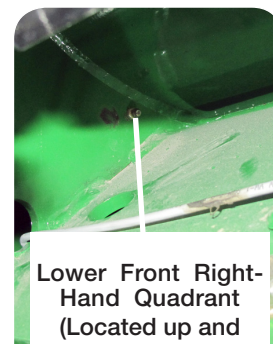
Lower Auger Pivot Housing Grease Points



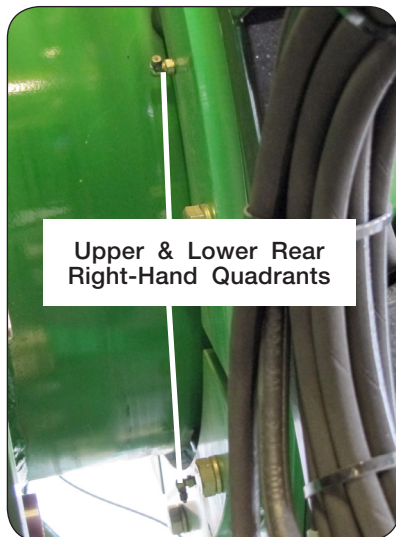
Lower Rear Right-Hand Quadrant



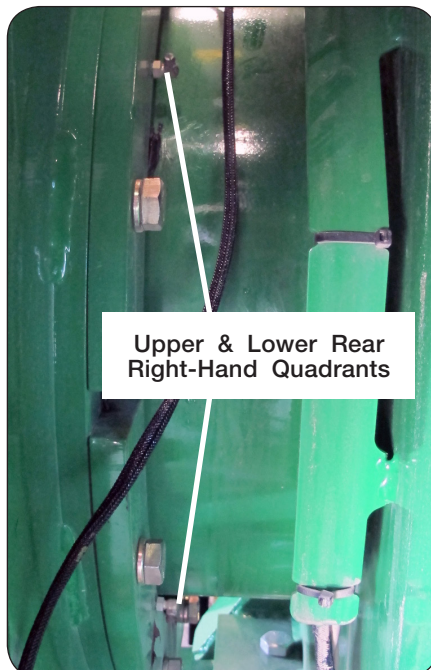
Upper Rear Quadrant



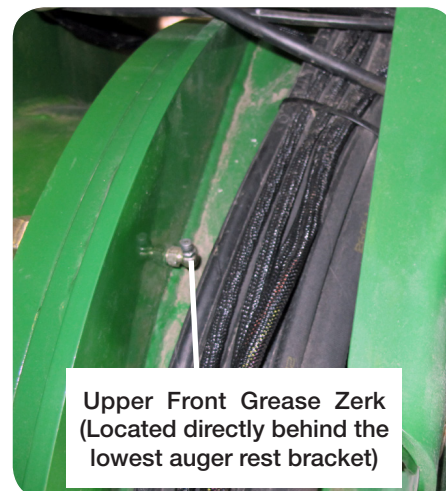
Lower Front Right-Hand Quadrant (Located up and behind the electro/hydraulic valve)



Upper & Lower Rear Right-Hand Quadrants



Upper & Lower Rear Right-Hand Quadrants



Upper Front Grease Zerk (Located directly behind the lowest auger rest bracket)

Lubrication - For SN B40560099 & Lower (continued)

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

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

The lubrication locations and recommended schedule are as follows:

ITEM	DESCRIPTION	POINT	LUBRICANT	QTY	HOURS
A	PTO Driveshafts - Upper Driveshaft - 2 Grease Points - Lower Driveshaft - 1 Grease Point	3	EP-2	1 Shot	See Chart in Previous Page
B	Gearbox -- Remove Cover - Check oil level every 2 weeks. Replace oil every season.	1	EP80W90	Approx 85 oz.	Once Every Season
C	Front Horizontal Auger Bearing & Gearbox Support Bearing	2	EP-2	1 Shot	Weekly
D*	Hanger Bearing - Vertical Lower Auger *See note below.	1	EP-2	2 Shots*	Monthly
E	Top Bearing - Vertical Upper Auger	1	EP-2	1 Shot	Each Season
F	Horizontal Auger End & Center Bearings	3	EP-2	2 Shots	Monthly
G	Auger Pivot Rings - Rear Auger Hinge	2	EP-2	2 Shots	Daily
H	Auger Pivot Pin - Front Auger Hinge	2	EP-2	2 Shots	Daily
I	Grease Slide Plate	1	EP-2	1 Shot	Each Season
J	Tongue Pivot Bushing	2 (one per side)	EP-2	2 Shots	Monthly
K	Drive Bearings	3	EP-2	2 Shots	Monthly

***NOTE:** Hanger bearing contains hydraulic shut-off grease zerk (9005240) with pressure relief to prevent over-greasing that could push bearing seals out. If grease is coming out of the relief on the zerk this is normal and the bearing contains enough grease.

Hydraulic System

Refer to parts section for hydraulic component detail listing.

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

Replacing Hoses/Fittings/Cylinders:

1. Use replacement hoses, fittings, and cylinders from your Unverferth Manufacturing dealer which are rated for 3,000 psi.
2. Do not use hoses, fittings and cylinders that have pipe threads.
3. Do not use Teflon tape or thread sealant on JIC or O-ring fittings. Tighten fittings according to “Torque Chart” in this section.
4. When replacing hoses, always allow sufficient slack to permit hoses to move through the full range of motion of the cylinders.
5. Always purge the hydraulic system after servicing.

Purge Hydraulic System

WARNING

- **HYDRAULIC SYSTEM MUST BE PURGED OF AIR BEFORE OPERATING TO PREVENT SERIOUS INJURY OR DEATH.**
- **RELIEVE HYDRAULIC SYSTEM OF ALL PRESSURE BEFORE ADJUSTING OR SERVICING. SEE THE HYDRAULIC POWER UNIT OPERATOR’S MANUAL FOR PROPER PROCEDURES.**
- **HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS.**
- **KEEP CLEAR OF PINCH POINT AREAS.**



Purge air from system as follows:

- A. Disconnect the rod end of all cylinders in a circuit and block up cylinders so the rod can completely extend and retract without contacting any other component.
- B. 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.
- C. Check oil reservoir in hydraulic power source and refill as needed.
- D. Pressurize system again to reverse the motion of step B. Maintain pressure on system for at least 5 seconds after cylinder rods stop moving. Check that cylinders have fully extended or retracted.
- E. Check for hydraulic leaks using cardboard or wood. Tighten connections according to directions in Torque Chart.
- F. Repeat steps B, C, D, and E 3-4 times.
- G. Depressurize hydraulic system and connect cylinder rod clevises to their mating lugs.

IMPORTANT

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

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

Hydraulic System (continued)

Relieving Hydraulic Pressure

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

Bleeding Procedure For EOH System

WARNING

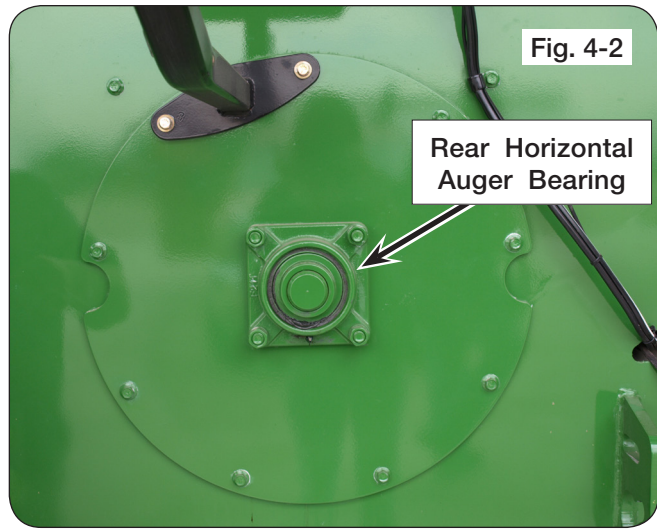
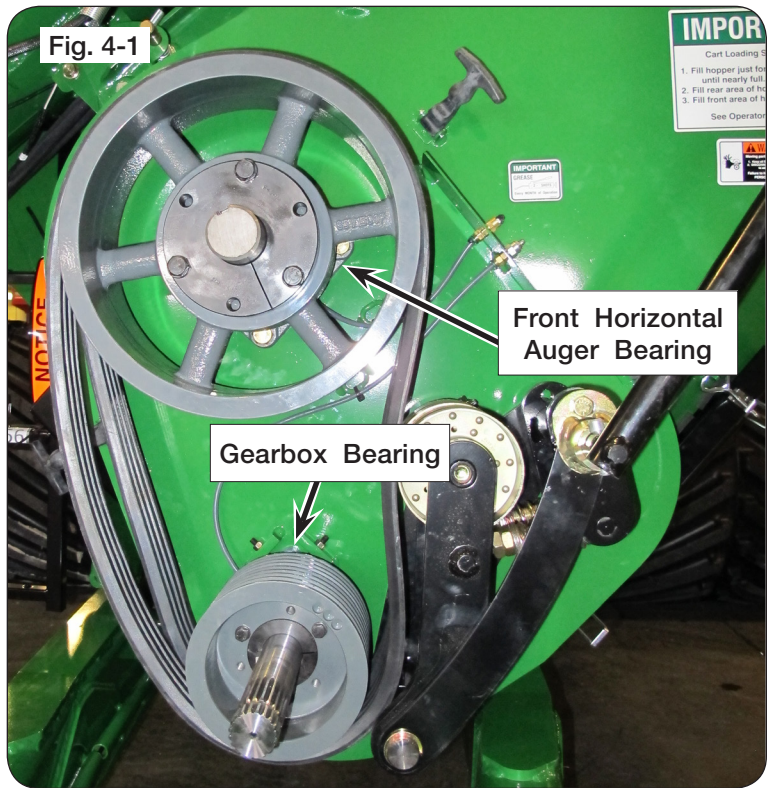
- **RELIEVE THE HYDRAULIC SYSTEM OF ALL PRESSURE BEFORE ADJUSTING OR SERVICING. SEE THE HYDRAULIC POWER UNIT OPERATOR'S MANUAL FOR PROPER PROCEDURES.**
- **HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS.**
- **EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.**

Open and close the flow door. Unfold and fold the vertical auger. Operate the spout tilt, spout rotate, and auger tilt. Perform these functions several times.

Auger Driveline Bearings

IMPORTANT

- Periodically check set screws in all bearings at either end of the driveline for tightness. (FIG. 4-1 & 4-2)



Gearbox with Sight Glass

When checking the oil level of the gearbox, the vertical auger should be tilted all the way down.

For adequate lubrication, the oil should be visible in the sight glass. Fill with oil to the sight glass only. (FIG. 4-3)

Maximum gearbox life:

Check oil level every 2 weeks.

Replace oil every season with approximately 85 oz. 80W90 EP lubricant.

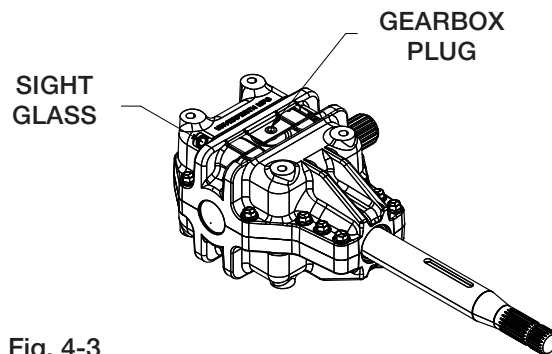


Fig. 4-3

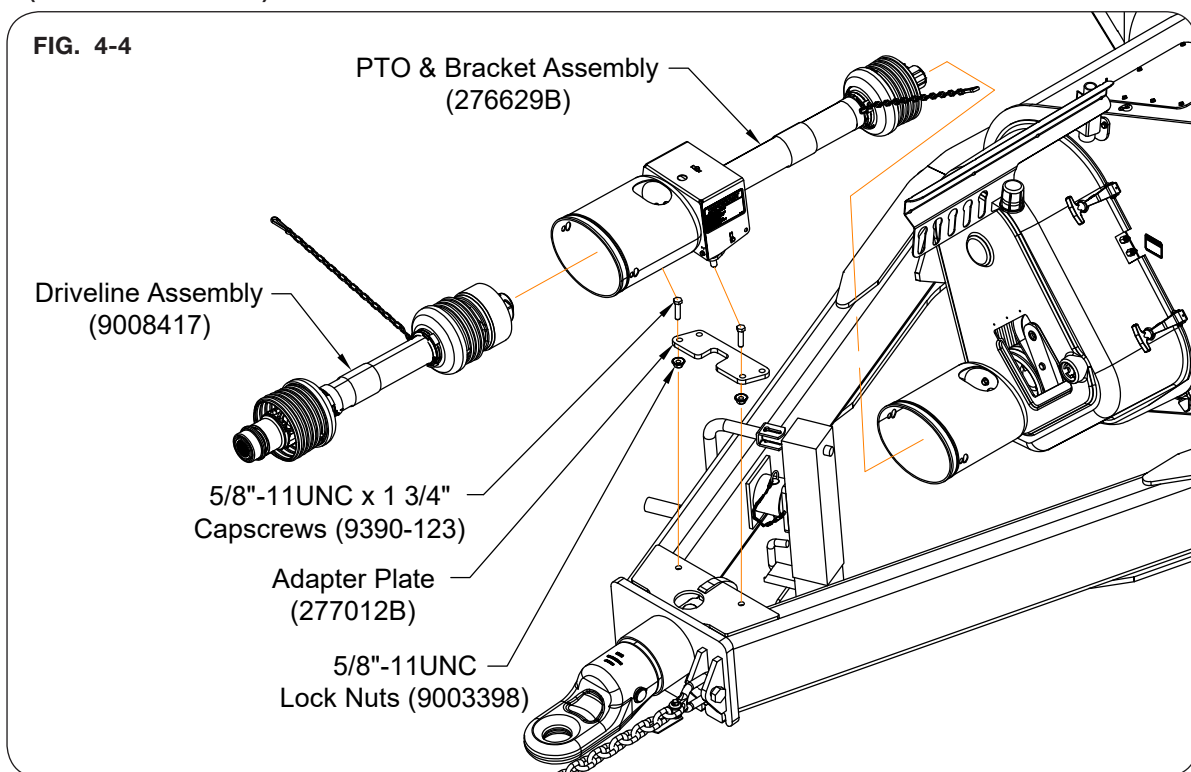
Driveline Removal

⚠ WARNING

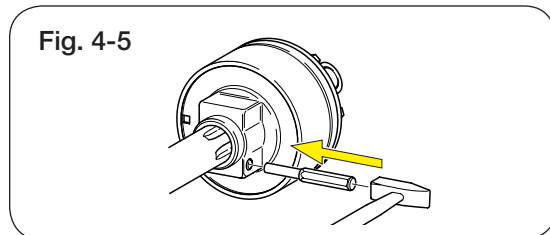
- MOVING OR ROTATING COMPONENTS CAN CAUSE SERIOUS INJURY OR DEATH. ALWAYS DISCONNECT POWER SOURCE BEFORE SERVICING. ENSURE SERVICE COVERS, CHAIN/BELT COVERS AND CLEAN-OUT DOOR(S) ARE IN PLACE AND SECURELY FASTENED BEFORE OPERATING UNIT.

Gearbox shaft guard has access doors for installing and removing of driveline.

1. Remove the driveline assembly (9008417) cut-out clutch end from the PTO and bracket assembly (276629B) splined shaft end by removing the attaching clamping cone. (FIG. 4-4 and 4-5)



2. Use a hammer and punch and moderately hit the end of clamping cone, as shown. Back off the clamping cone 1/2 turn. Continue alternating punch and unscrewing clamping cone until clamping cone can be removed by hand. (FIG. 4-5)



3. Remove the PTO and bracket assembly (276629B) yoke end from the implement gearbox splined shaft. Remove the other end from the adapter plate (277012B) bolted on the tongue weldment with capscrews and lock nuts. (FIG. 4-4)
4. Once the PTO and bracket assembly is removed, clean and grease the implement gearbox splined shaft.
5. Secure PTO and bracket assembly and driveline assembly to right-hand side cart brackets.

Seasonal Storage

Always open flow door, horizontal and vertical auger cleanout doors to remove any remaining grain and to allow moisture to dry.

Wash machine inside and out before storing to remove dirt and debris that can draw and collect moisture. When using pressure washers maintain an adequate distance so not to force water into bearings.

Lubricate machine at all points outlined.

Repaint all areas where paint has been removed to keep rust from developing. Rust will affect grain flow.

Coat exposed cylinder piston rods with rust preventative material if applicable.

Inspect machine for parts that may need to be replaced so they may be ordered in the off season.

If unit is equipped with a scale indicator or electric hydraulic controls, store these indoors in a dry location.

Close the tarp to keep debris out of the hopper.



Auger System

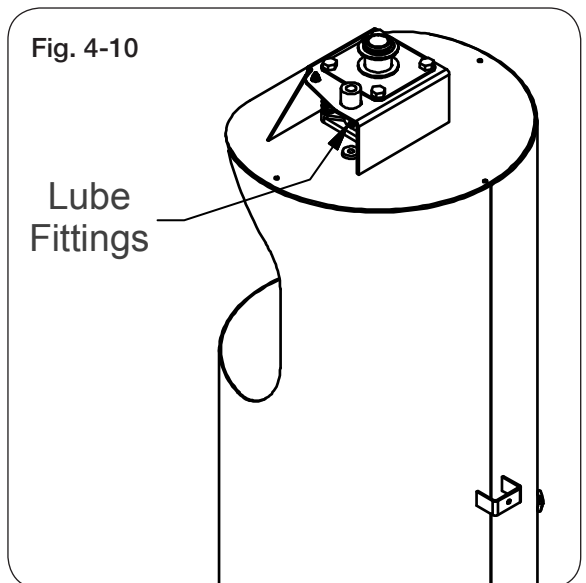
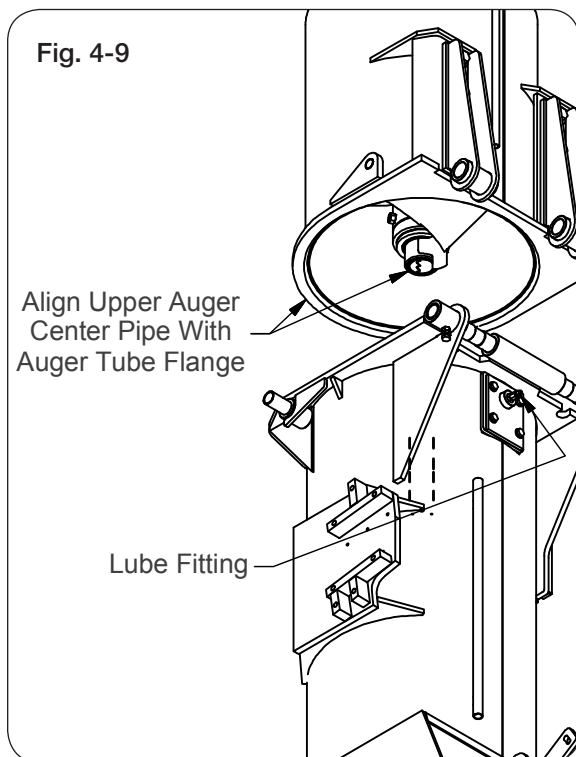
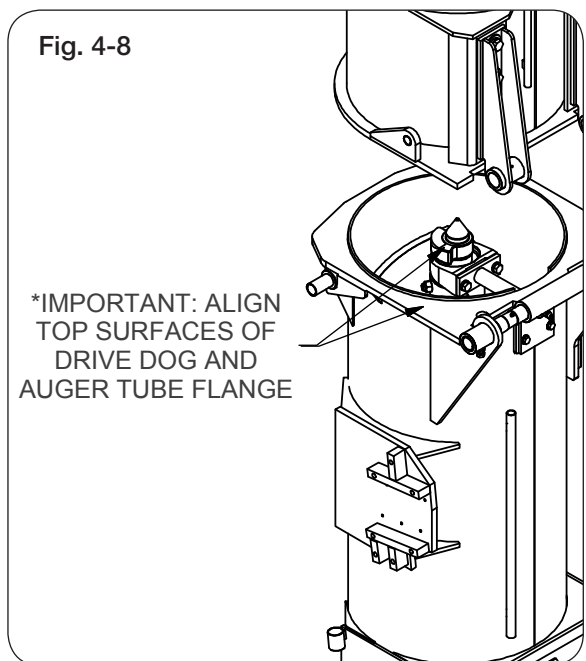
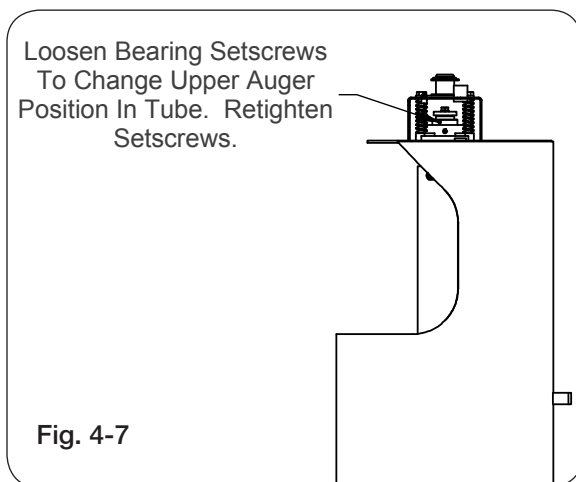
Vertical Auger

Annually check all bolts, nuts, and set screws. Perform lubrication as specified.

Before servicing the vertical auger, park the unit on a firm, level surface. Block the wheels/tracks to keep the machine from moving. Raise vertical auger to discharge position and close horizontal auger flow door. Set the tractor parking brake, turn off tractor engine, remove ignition key, and disconnect PTO shaft and hydraulic lines from tractor.

NOTE: The lower auger position is indexed from the drive dog / tube flange hinge surface as shown. (Fig. 4-8)

NOTE: Hanger bearing contains zerk (9005240) with pressure relief to prevent over-greasing that could push bearing seals out. If grease comes out of the relief on the zerk, this is normal and the bearing has enough grease. (Fig. 4-9)

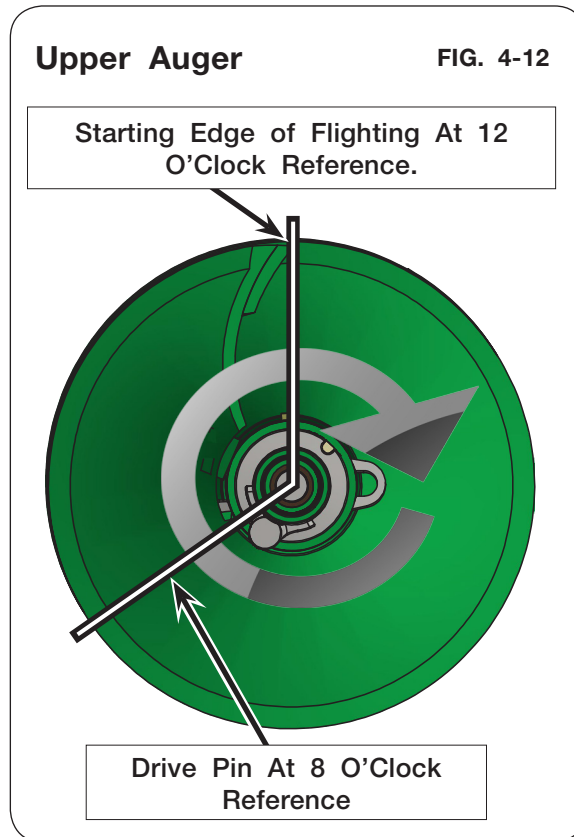
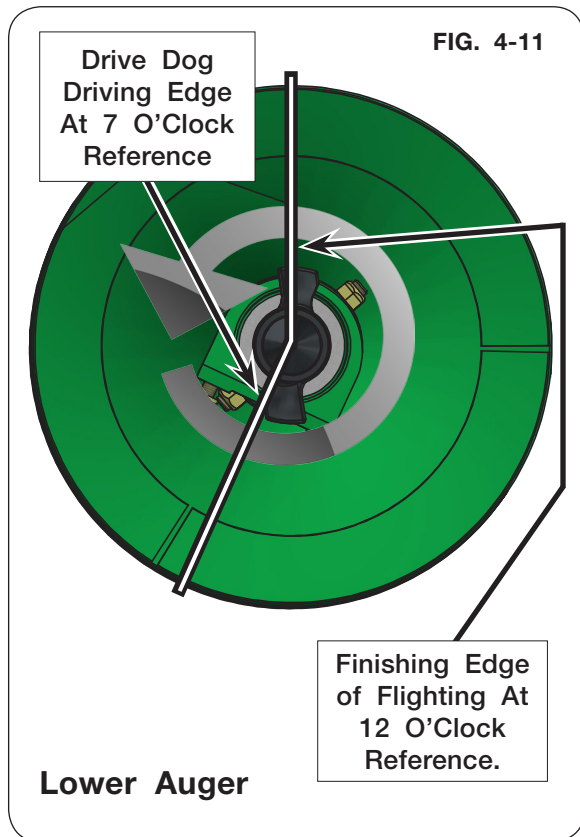


Auger System (continued)

Vertical Auger Timing

1. For the lower vertical 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 7 o'clock position.

NOTE: Looking down at the lower flighting (FIG. 4-11) the auger rotation will be counter-clockwise. When looking up at the upper flighting (FIG. 4-12) the auger rotation will be clockwise.



2. For the upper auger, use the starting edge of the flighting as a 12 o'clock reference. Position the driven edge of the drive pin at the 8 o'clock position. See Fig. 4-12.
3. When engaged, the upper flighting should immediately follow the lower flighting.

Auger System (continued)

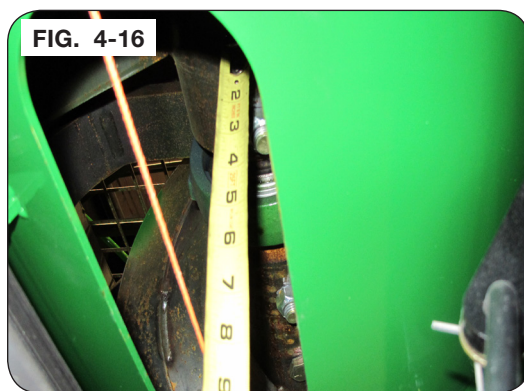
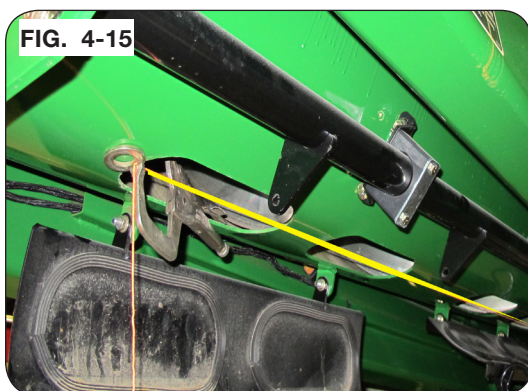
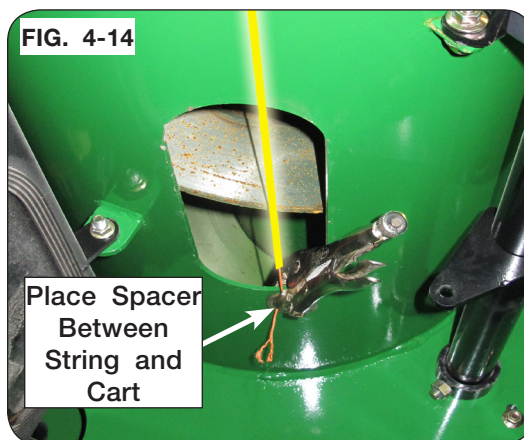
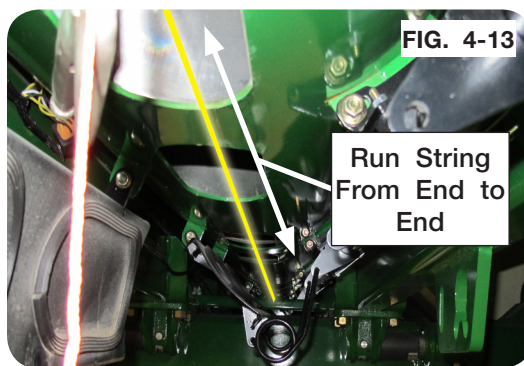
Horizontal Auger

Annually check all bolts, nuts, and set screws. Perform lubrication as specified.

Horizontal Auger Height Measurement

4. Run a string from the front of the cart to the back, above the cleanout doors and linkages as shown in FIG. 4-13.
5. Attach the string to the bottom of the belly pan in the front side of the front opening. Place a 3/8"-1/2" spacer under the belly pan and clamp the string to the center of the opening as shown in FIG. 4-14.
6. Attach the opposite end of the string to the back side of the rear belly pan opening. Place the same thickness of spacer as was used on the front in between the string and the belly pan. Pull the string tight and clamp to the center of the opening. (FIG. 4-15)
7. Measure the distance from the string to the bottom of the flighting center pipe in between the flighting pitch. take a measurement through the front opening and the rear opening. If the measurement in the front and rear is different, add a shim under the smaller dimensioned end between the string and the belly pan so the measurements are the same.
8. Measure the string to the auger tube either in front or behind the hanger bearing. If this dimension is 1/8" greater than the measurement taken in the front and rear, shims are required on top of the center hanger bearing. (FIG. 4-16)

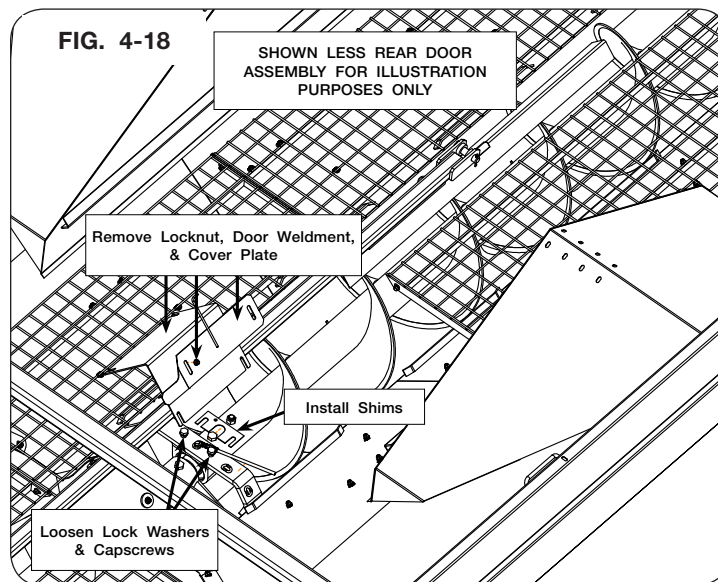
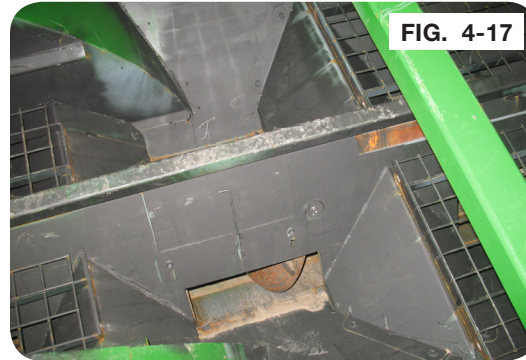
NOTE: The shims are 1/8" thick each. Add as needed. Shims are available from your Brent dealer.



Auger System (continued)

Hanger Bearing Height Adjustment

9. Remove the center screens inside the hopper by removing the 3/8" hardware holding them in place. (FIG. 4-17)
10. Remove the restrictor weldment on the auger tent at the opening above the hanger bearing. (FIG. 4-18)
11. Loosen the two 5/8"x2" capscrews. It is not necessary to remove this hardware if two or fewer shims are being installed. Install the shims from the backside between the bearing and the bracket as shown in FIG. 4-18.



12. If more than two shims are necessary to set the bearing height, replace the 5/8" x 1 3/4" capscrews with the 5/8" x 2" capscrews supplied in the kit.
13. Re-measure the distance from the flighting tube to the string making sure the string is pulled tight. If the measurements are all within 1/8", the string can be removed.
14. Reassemble the restrictor weldment and screens on the inside of the cart.
15. Reassemble the cleanout door linkages on the front and rear doors.
16. Close cleanout doors and reassemble the cleanout door lock pin.
17. Ensure all personnel and tools are removed from the cart and reconnect the cart to the tractor.
18. Run the auger starting at a low RPM and increase speed to max RPM to make sure the auger flighting does not make contact with the belly pan or flow doors.

Baffle Adjustment

WARNING

- TO PREVENT PERSONAL INJURY OR DEATH, ALWAYS ENSURE THAT THERE ARE PEOPLE WHO REMAIN OUTSIDE THE CART TO ASSIST THE PERSON WORKING INSIDE THE CART, AND THAT ALL SAFE WORKPLACE PRACTICES ARE FOLLOWED. THERE ARE RESTRICTED MOBILITY AND LIMITED EXIT PATHS WHEN WORKING INSIDE THE CART.
- 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.

Refer to the following reasons for baffle adjustment:

NOTE: To unload the cart evenly from front to back the openings should increase in height from back to front.

1. If higher flow is desired and torque is not the limiting factor, raise each baffle to an incremental amount and rerun.
2. If more material remains at the back of the cart towards the end of the unloading cycle, the back baffles should be adjusted upward in incremental amounts and rerun.
3. If more material remains at the front of the cart towards the end of the unloading cycle, the back baffles should be adjusted downward in incremental amounts and rerun.
4. If the cart requires more torque than what is available at times during the unloading cycle, then all baffles should be adjusted downward in incremental amounts.

Baffle Adjustment (continued)

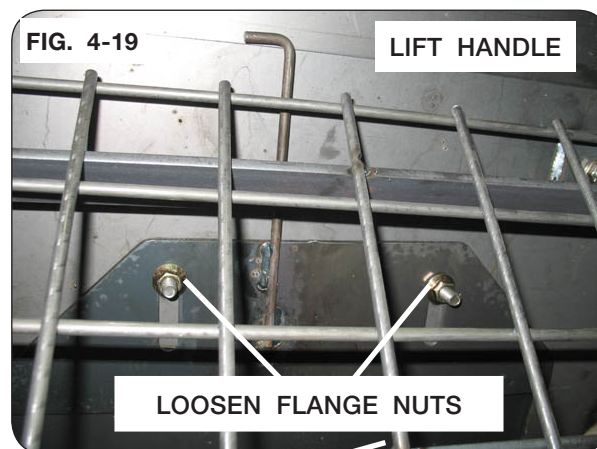
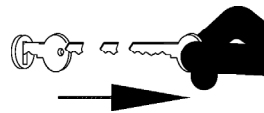
The horizontal auger baffles are factory-set at the lowest position. This position results in the lowest power requirements and longest flighting life. Once grain has been run through the unit, adjustments can be made to achieve the ideal unloading performance.

Before making any baffle adjustments, close horizontal auger flow door. Securely block the grain cart, set the tractor parking brake, turn off tractor engine and remove ignition key.

If a higher flow is desired and torque is not a factor, loosen the (2) flange nuts on each baffle, see figure 4-19. Use the lift handle to raise each baffle to the desired position, retighten both flange nuts, see figures 4-19 & 4-20.

NOTE: DO NOT REMOVE ANY SCREEN PANELS. The flange nuts are best accessed using an extended socket wrench and 9/16" socket through the screen panel openings.

NOTE: Screen removed in figure 4-20 for illustration only.



5-Pin Driver 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.

- 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 1,000 LBS. SPECIFIC LOAD RATINGS FOR INDIVIDUAL LOADS WILL BE GIVEN AT THE APPROPRIATE TIME IN THE INSTRUCTIONS.

NOTE: Open the flow gates all the way.

1. Park the unit on a firm, level surface. Block the wheels to keep the machine from moving. Set the vehicle parking brake, shut off the engine and remove the ignition key and disconnect the PTO shaft or hydraulic drivelines from the tractor.



2. Remove the bolts in both middle grates inside the cart. Remove the grates. (Figure 4-21)

NOTE: Retain all hardware for reassembly.

3. Disconnect grease line. (Figure 4-22)
4. Remove the hanger bearing bolts on each side of the auger.
5. Remove capscrews and lock washers holding bearing onto the hanger bearing plate.

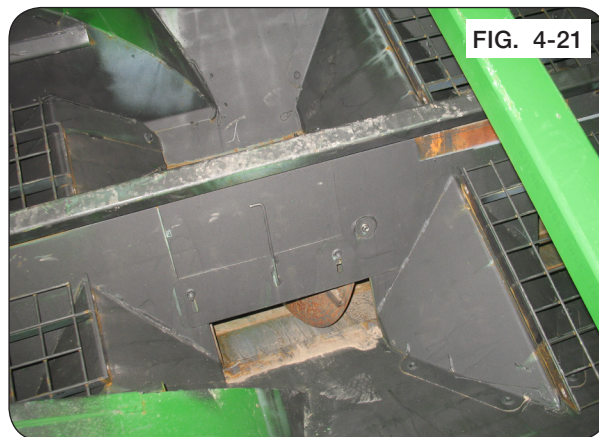


FIG. 4-21

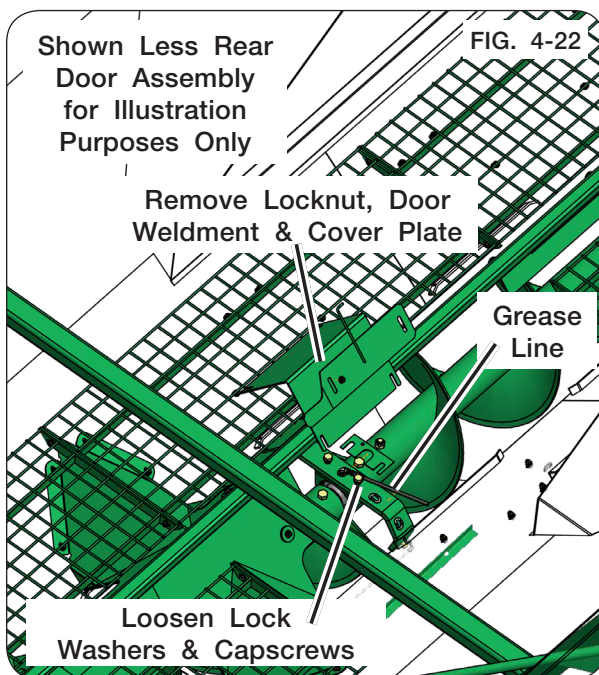
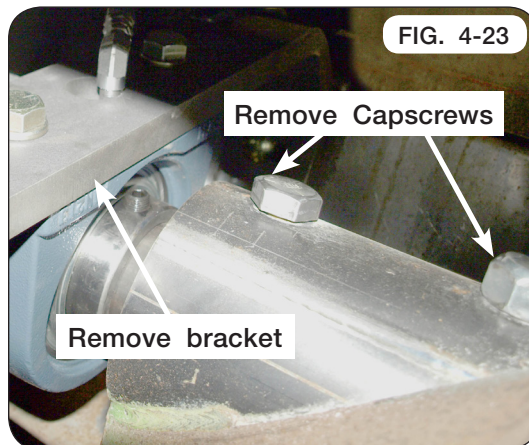


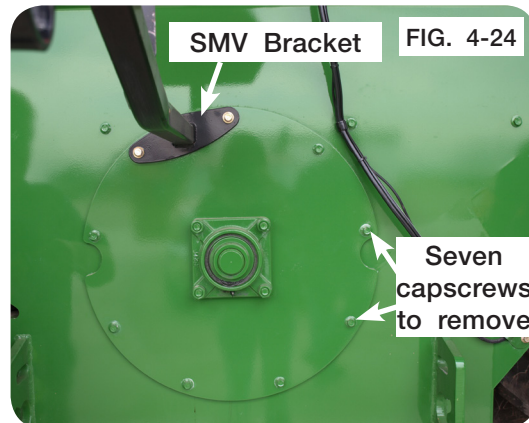
FIG. 4-22

5-Pin Driver Replacement (continued)

6. Remove the hanger bearing bracket to allow access to work on the bearing and shaft. Remove two center tube connecting capscrews in the horizontal auger. (Figure 4-23)

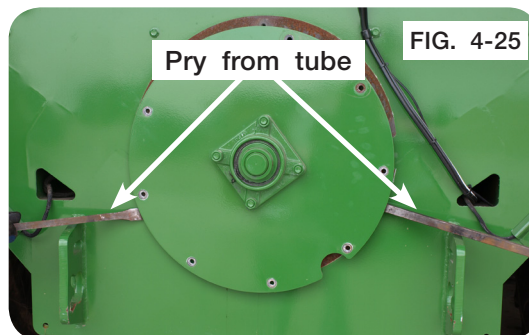


7. Remove the SMV bracket located on the rear auger cover. (Figure 4-24)



8. Remove the capscrews from the auger cover. (Figure 4-24)

9. Pry the auger from the auger tube. (Figure 4-25)

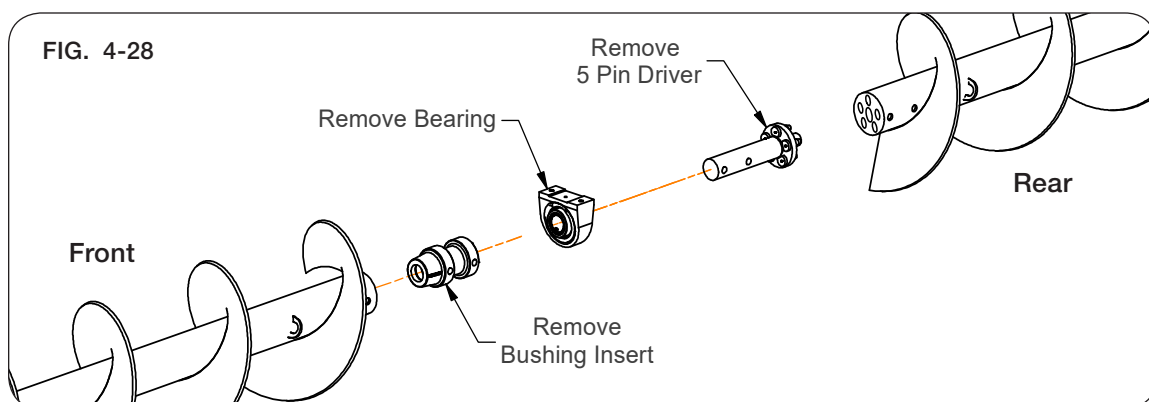
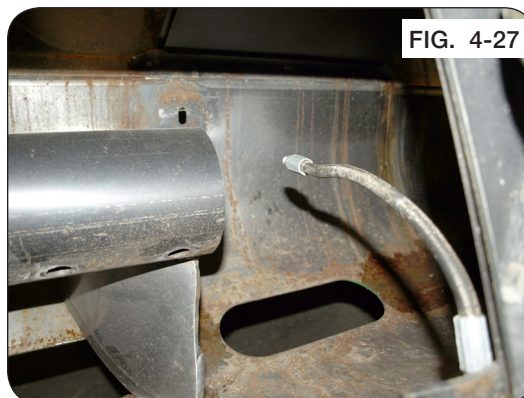


10. Using a safe lifting device rated for a minimum 1,000 lbs., pull the rear auger out 3 feet using a strap. (Figure 4-26)

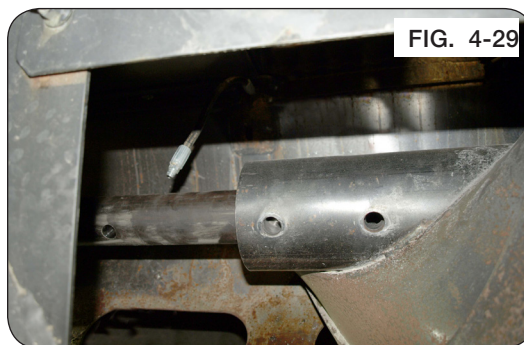


5-Pin Driver Replacement (continued)

11. Remove the original 5-pin driver, bearing and the bushing insert. (Figure 4-27 & Figure 4-28)
12. Discard 5-pin driver.

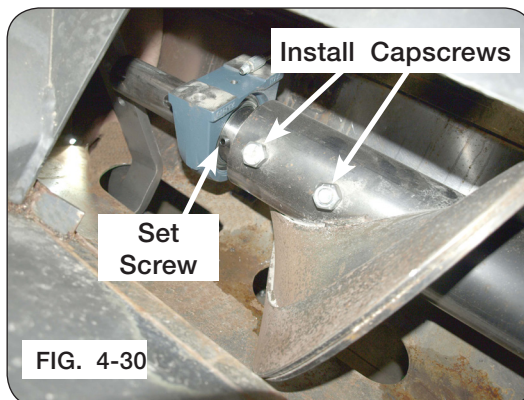


13. Substantially coat bushing insert with anti-seize.
14. Slide bushing insert into front auger and ensure tube holes are aligned. (Figure 4-28 & Figure 4-29)



NOTE: Make sure the set screws on bearing are towards the front of the cart. (Figure 4-30)

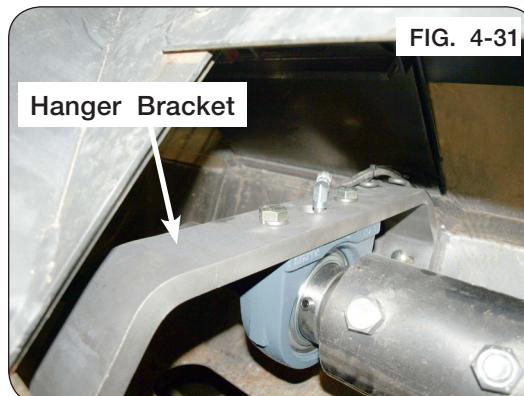
15. Slide bearing onto 5-pin driver. (Figure 4-30)
16. Insert new 5-pin driver into front auger and ensure tube holes are aligned.
17. Install front capscrews, spacer bushings and locknuts 180 degrees from each other and assemble spacer bushings on threaded side of capscrews. Hand tighten hardware. (Figure 4-30)



5-Pin Driver Replacement (continued)

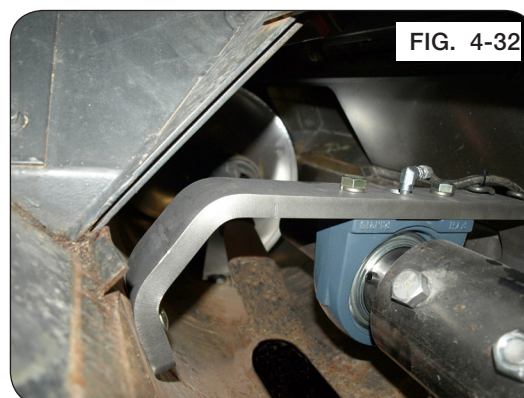
18. Install hanger bracket. Leave the capscrews loose attaching hanger bracket to the cart. Attach hanger bracket to the bearing. (Figure 4-31)

19. Reattach grease line components. (Figure 4-31)

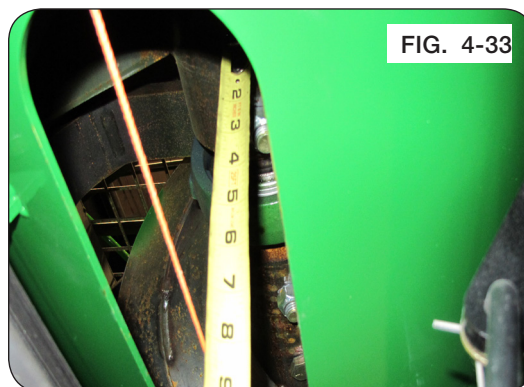


NOTE: Rear auger fighting should lead the front auger fighting.

20. Slide the rear auger forward. Align the pins and holes with the rear auger pipe. (Figure 4-32)



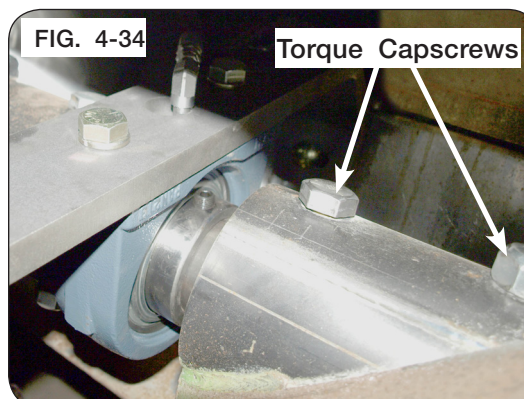
21. Extend a string tightly from front to rear to check horizontal auger alignment. Measure the string to the auger tube either in front or behind the hanger bearing. If this dimension is 1/8" greater than the measurement taken in the front and rear, shims (8GA - 286419B or 12GA - 286424B) are required on top of the center hanger bearing. Ideally the center measurement should be equal to or 1/8" lower than the measurements on the ends of the augers. (Figure 4-33)



NOTE: The shims are 1/8" thick each. Add as needed. See "Auger System - Horizontal Auger Height Measurement" in MAINTENANCE section for more details.

22. Torque hanger bracket capscrews to 130 ft.-lbs. See Figure 4-31.

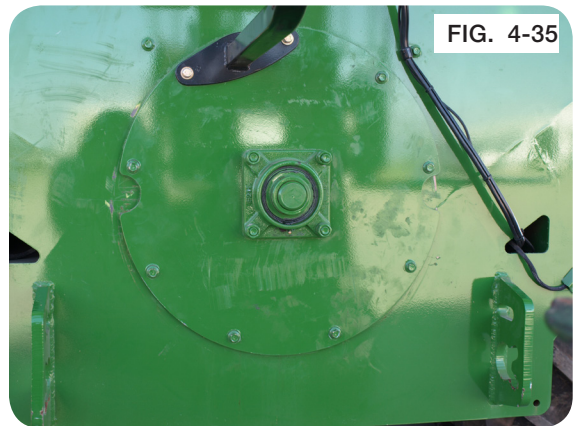
23. Torque front auger capscrews to 200 ft.-lbs. (Figure 4-34)



5-Pin Driver Replacement (continued)

24. Reattach the rear auger cover and SMV bracket back onto the cart. (Figure 4-35)

25. Reinstall ALL the grates.



Belt Tightener Adjustment

IMPORTANT

- Do not use belt dressing.
- Keep grease and oil off of belt and pulleys.

NOTE: Pulleys do not need to be removed to remove/replace belt.

Due to prolonged use, belt wear may be evident causing slack. To correct this, follow these steps.

1. Park the unit on firm, level surface. Block the wheels to keep the machine from moving. Set the vehicle parking brake, shut-off the engine, and remove the ignition key from the towing vehicle.



WARNING

- 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.

2. Remove PTO assembly from gearbox input shaft.
3. Detension the belt as outlined in OPERATION section. Open the cover guard access door and check if the belt tensioner handle is engaged or disengaged. If required, engage belt tensioner handle to seat belt into the pulleys.



Belt Tightener Adjustment (continued)

4. Remove cover, disengage belt tensioner handle and inspect belts for misalignment, loose parts and cracks. Replace if necessary with a matched set. (Fig. 4-11)



Belt Tightener Adjustment (continued)

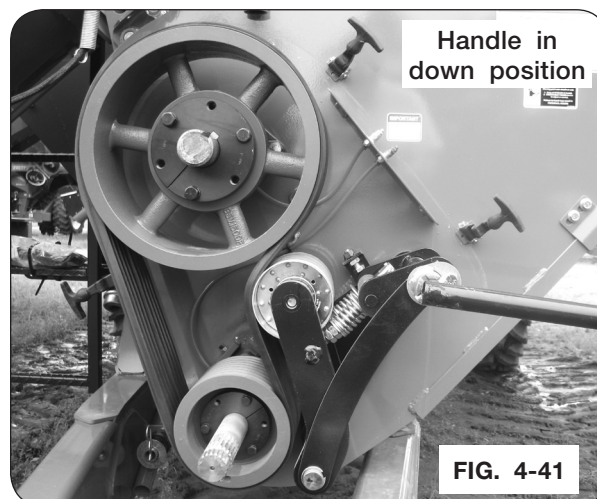
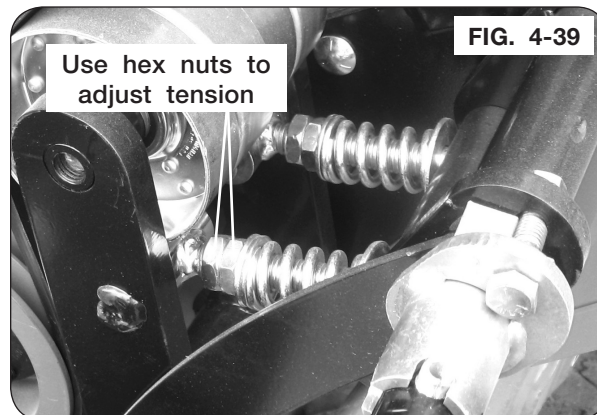
5. Belt tension is adjusted with hex nuts below the spring. All belt tension **MUST** be released from linkage. Loosen outer hex nut and adjust inner nut to establish a 3 1/16" pre-load dimension between the heavy washers. Tighten the outer hex nut against inner nut to lock position. (Fig. 4-39)
6. Check the lower belt pulley to ensure belt is aligned in their grooves and with the belt tensioner handle, engage the roller/idler linkage against the belt and over-center stop. The compressed spring should now be approximately 1 3/4" between the washers and generating a force of approximately 480 lbs. against the belt. (Fig. 4-40)
7. Release and tighten belt multiple times to confirm positions and final adjustments. See Fig. 4-40 and Fig. 4-41.
8. Tighten belt to retain them into the lower pulley for cover guard assembly. Reinstall the cover guard and the PTO shaft to the gearbox input shaft. Clear work area and test run drivetrain for 3 minutes at no greater than 1000 RPM.

WARNING

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

9. Disengage PTO and turn off tractor. Through the cover access door, check the compressed spring length is approximately 1 3/4" between the washers and check each belt for uniform tension. If more adjustment is needed, refer to Steps 5 through 7. If no additional spring adjustment is available, then both belts must be replaced with a new matched set.

NOTE: Always replace belts in matched sets.



V-Belt Alignment

1. Pulleys must be aligned with the fixed idler. Belts should be centered on idler for longest belt life. (Fig. 4-42)
2. After tightening taper-lock bushing hardware, lay a straight edge across face of the drive and driven belt pulleys to ensure alignment between the grooves on the pulleys.

Split Tapered Bushings

Check annually for tight engagement to drive-shaft. Torque three bolts progressively to values shown:

- 1 3/4" Bore (Gearbox) - 30 ft.-lbs.
- 2 1/4" Bore (Horizontal Auger) - 75 ft.-lbs.

Some gap must remain between flange & hub when bushing is properly tightened.

To remove from shaft, remove capscrews and insert them in tapped holes in bushing flange. Tighten progressively until bushing disengages.



Verify Telescoping PTO Shaft Length

⚠ WARNING

- 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 NOT SUFFICIENT, IT MAY BECOME UNCOUPLED IN OPERATION AND CAUSE SERIOUS INJURY OR DEATH FROM CONTACT WITH UNCONTROLLED FLAILING OF PTO SHAFT ASSEMBLY COMPONENTS.

IMPORTANT

- 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.

Consult your OEM dealer for recommended drawbar and PTO set up.

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.

Check the length of the telescoping members to ensure the driveline will not bottom out or separate when turning and/or going over rough terrain.

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. 4-43).

Enter here: _____ (1)

(Verify that outer tube does not bottom out on surrounding plastic shield components).

2. Pull apart PTO telescoping shaft ends and measure lengths "T" & "C" (Fig. 4-44)

Add "T" + "C" measurements together

Enter total here: _____ (2)

3. Calculate maximum recommended extended length:

- a. Subtract line 1 from line 2

Enter here: _____ (a)

- b. Divide line (a) by 2

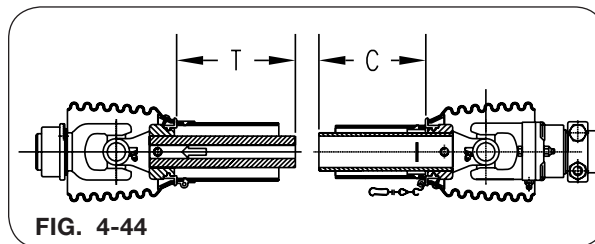
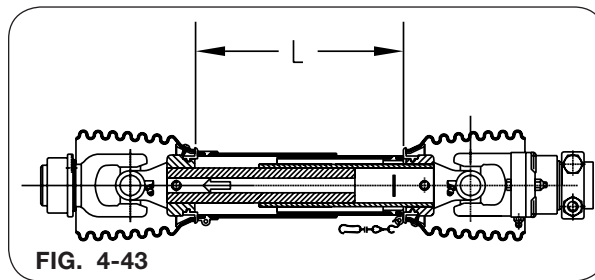
Enter here: _____ (b)

- c. Add line (b) to line 1.

Enter here: _____ (c)

- d. Subtract 3 inches from line (c)

Enter here: _____ (d)



This is the maximum recommended extended length.

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 the tightest turning angle, relative to the cart (Fig. 4-45).
7. Measure the length “L” from the 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 the length of the PTO shaft by cutting the 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. 4-46)

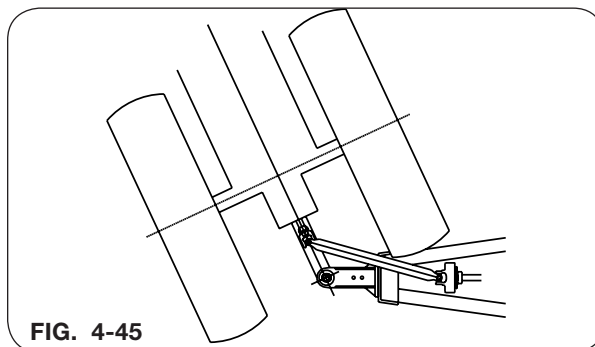


FIG. 4-45

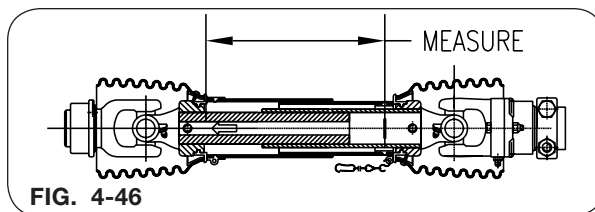
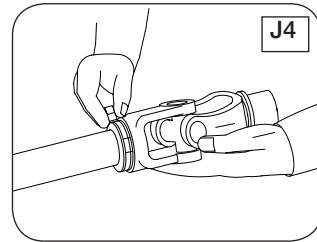
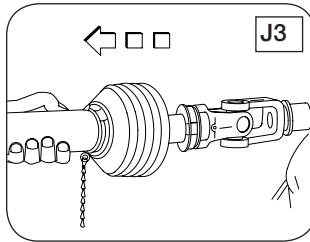
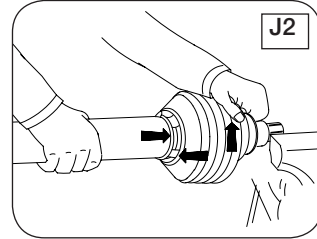
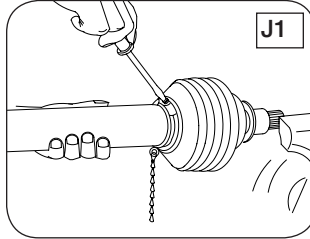


FIG. 4-46

PTO Shaft and Clutch

To Dismantle Guard (Figs. J1 - J4)

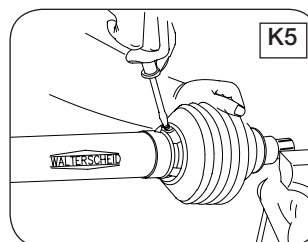
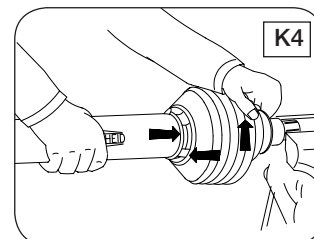
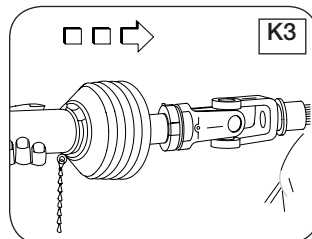
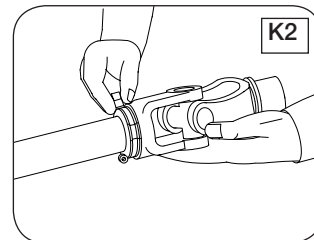
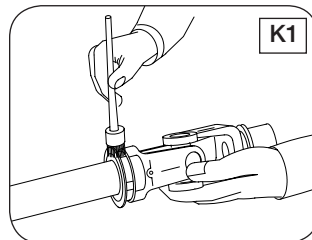
1. Remove locking screw.
2. Align bearing tabs with cone pockets.
3. Remove half-guard.
4. Remove bearing ring.



PTO Shaft and Clutch (continued)

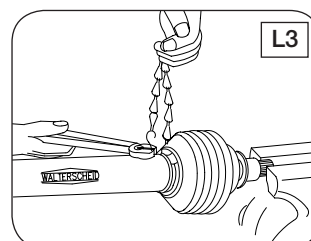
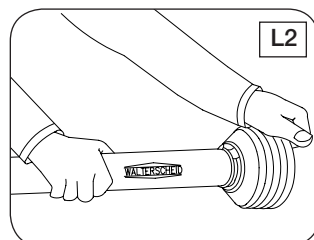
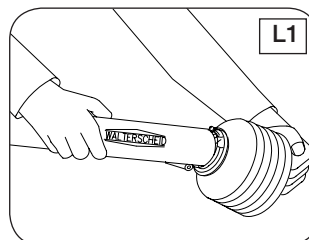
To Assemble Guard (Figs. K1 - K5)

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.



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 80o C / 180o 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).

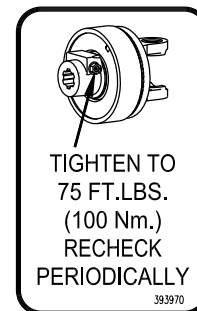
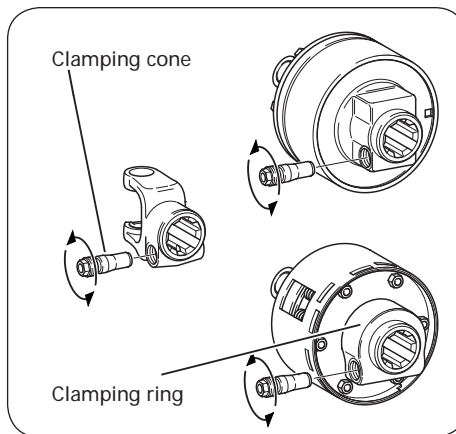
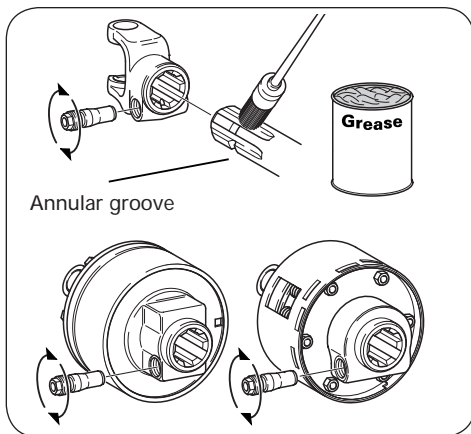


PTO Quick Disconnect

Coupling

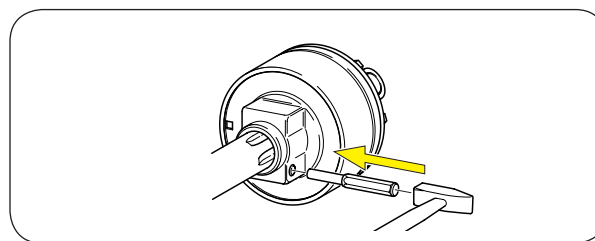
Slide clamp yoke or cut-out clutch onto connecting shaft. Make sure the location hole for the clamping cone is positioned above the annular groove of the connecting shaft. Screw appropriate clamping cone into the location hole. Slightly moving the clamp yoke or clutch to and from in the axial direction 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. Retighten the clamping cone as necessary. Torque clamping cone to 75 ft.-lbs.

When over loading occurs, the clutch disengages and will repeatedly attempt to reset. The clutch will create a repeated “clicking” noise when resetting. Torque demand must decrease for clutch to reset. Refer to "Auger Overload Procedure" in OPERATION section for details.



Uncoupling

First dislodge the clamping cone with a punch and hammer from its current position. Un-screw the clamping cone a partial turn. Use the punch and hammer again to help alleviate the torque resistance on the wrench, if necessary. After a few cycles, the clamping cone will move freely with low torque resistance for the removal process.



Tarp Troubleshooting Inspection & Maintenance

PROBLEM	SOLUTION
TARP SAGS IN MIDDLE AREAS	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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.

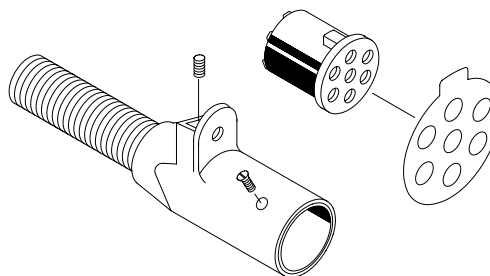
Tears in tarp should be addressed before further tarp operation. If water pools on tarp, adjust tension of tarp cables and/or arm springs.

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

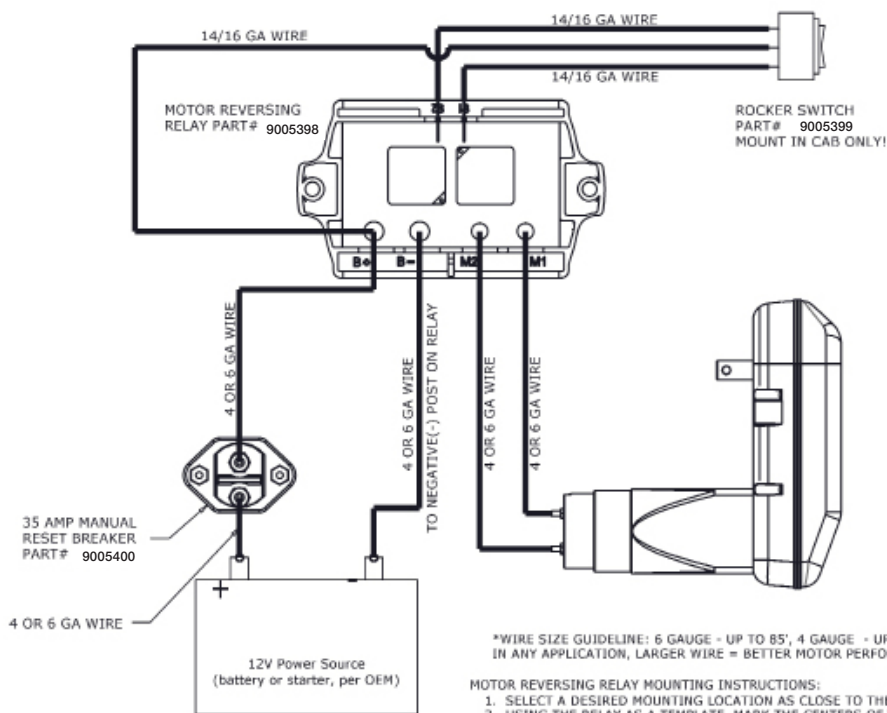
GRAIN CART WIRES

- White -- Ground
- Green -- Right Amber Flashing Lamp
- Yellow -- Left Amber Flashing Lamp
- Brown -- Amber Clearance and Red Tail Lights (Low Filament)
- Red -- Red Brake Lights (High Filament)
- Black -- Work Lights
- Blue -- NOT USED



SAE SEVEN-POINT CONNECTOR PLUG

220912



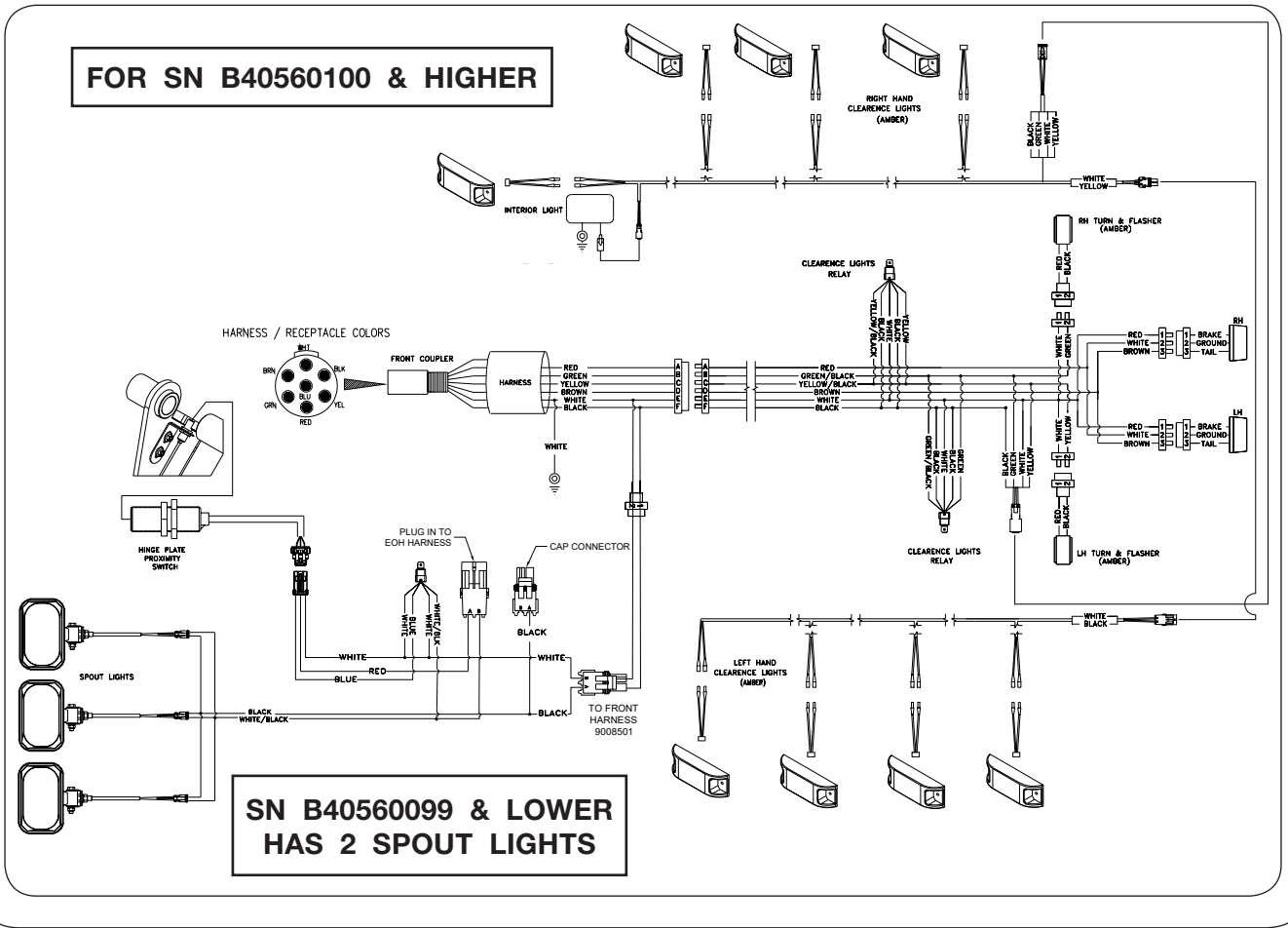
*WIRE SIZE GUIDELINE: 6 GAUGE - UP TO 85', 4 GAUGE - UP TO 135'.
IN ANY APPLICATION, LARGER WIRE = BETTER MOTOR PERFORMANCE.

MOTOR REVERSING RELAY MOUNTING INSTRUCTIONS:

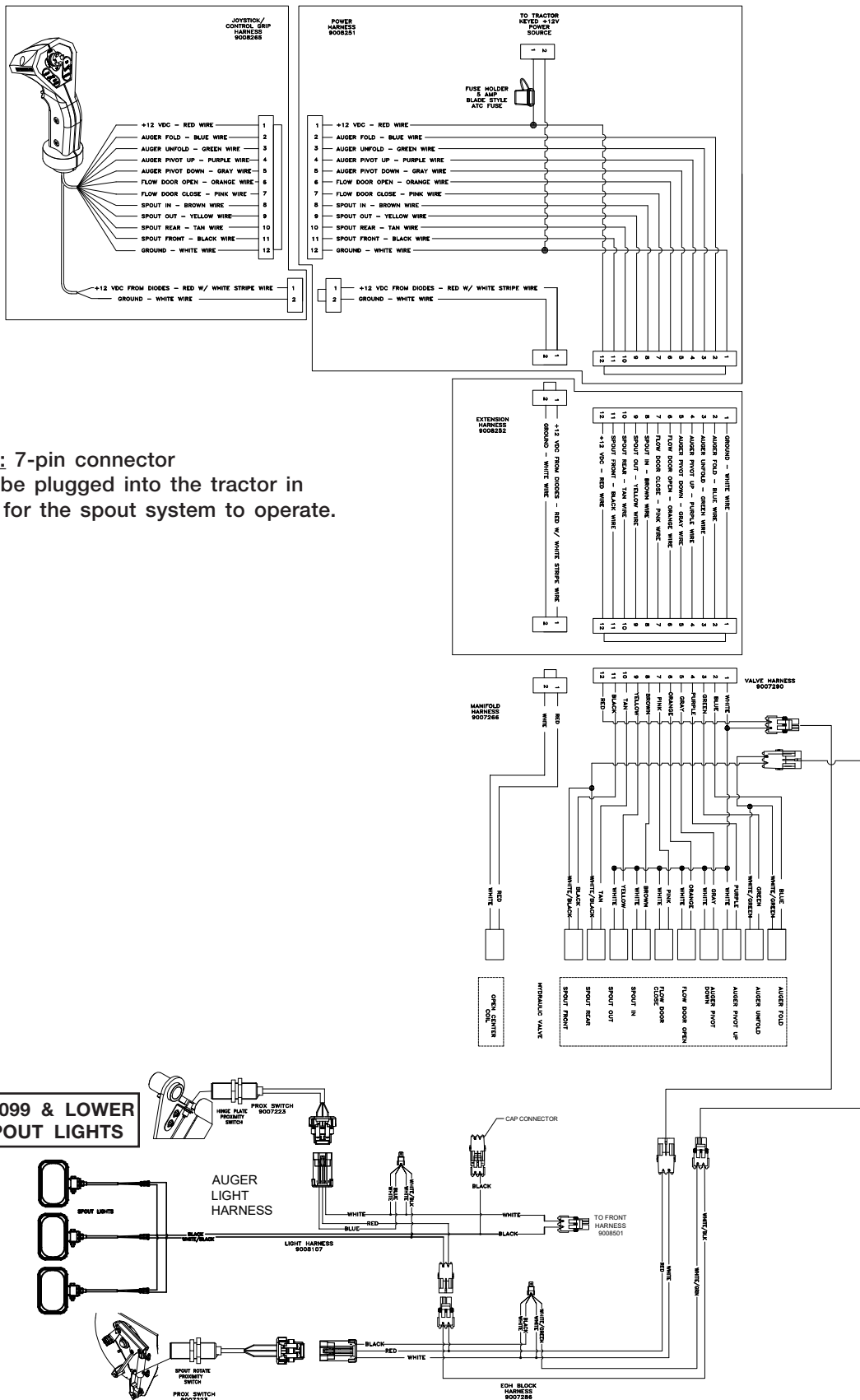
1. SELECT A DESIRED MOUNTING LOCATION AS CLOSE TO THE BATTERY AS POSSIBLE.
2. USING THE RELAY AS A TEMPLATE, MARK THE CENTERS OF THE MOUNTING HOLES.
3. USING A 1/4" DRILL BIT, DRILL THE HOLES MARKED IN THE PREVIOUS STEP.
4. MOUNT THE RELAY USING THE PROVIDED BOLTS AND NUTS.
5. WIRE THE RELAY ACCORDING TO THE WIRING DIAGRAM.
6. APPLY DIELECTRIC GREASE TO ALL ELECTRICAL CONNECTIONS.

2596 Electric Tarp

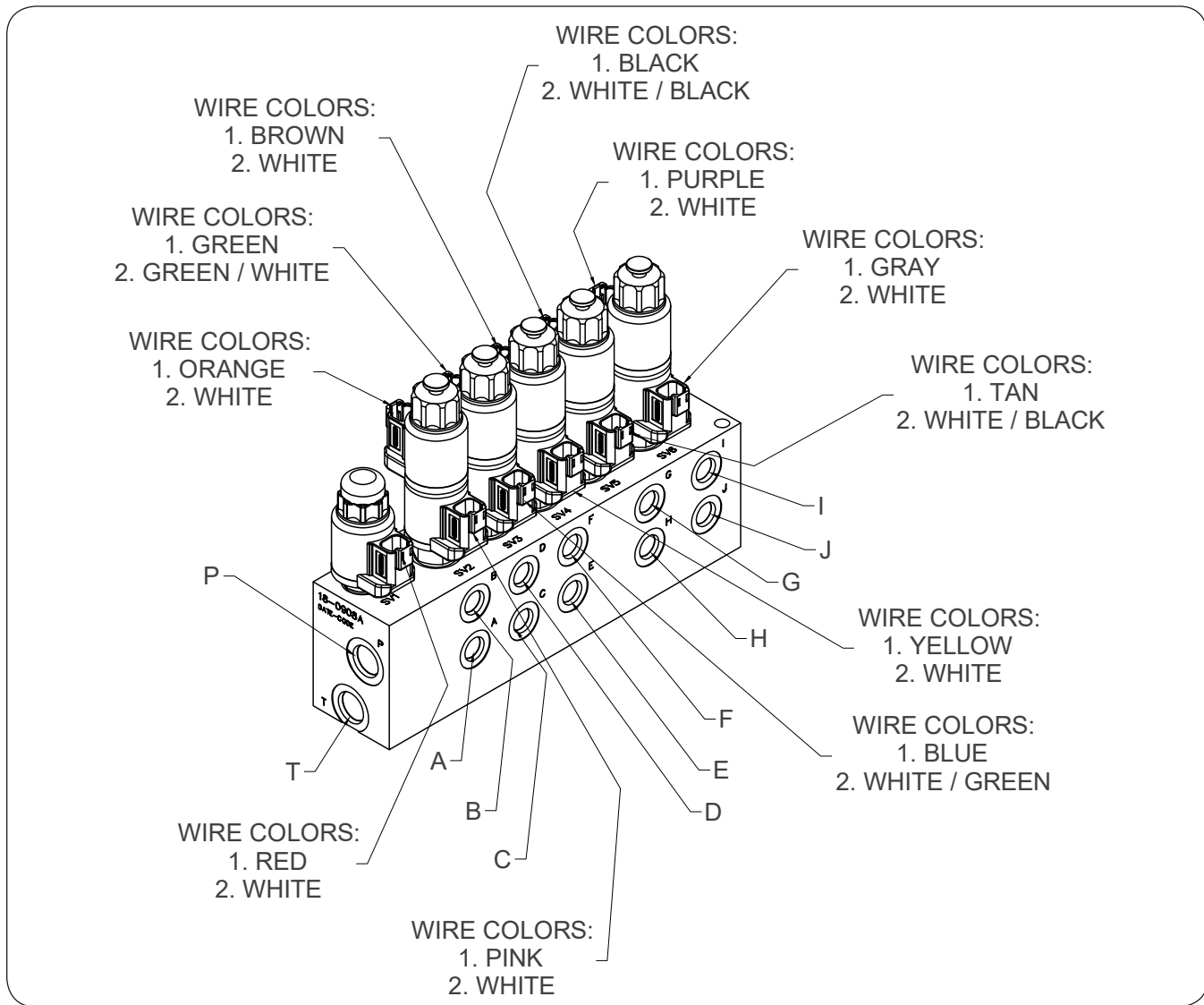
Electrical System Schematic



**Electrical Over Hydraulic (EOH) System Schematic 5 Function (Opt.)
SN B40560100 & Higher**

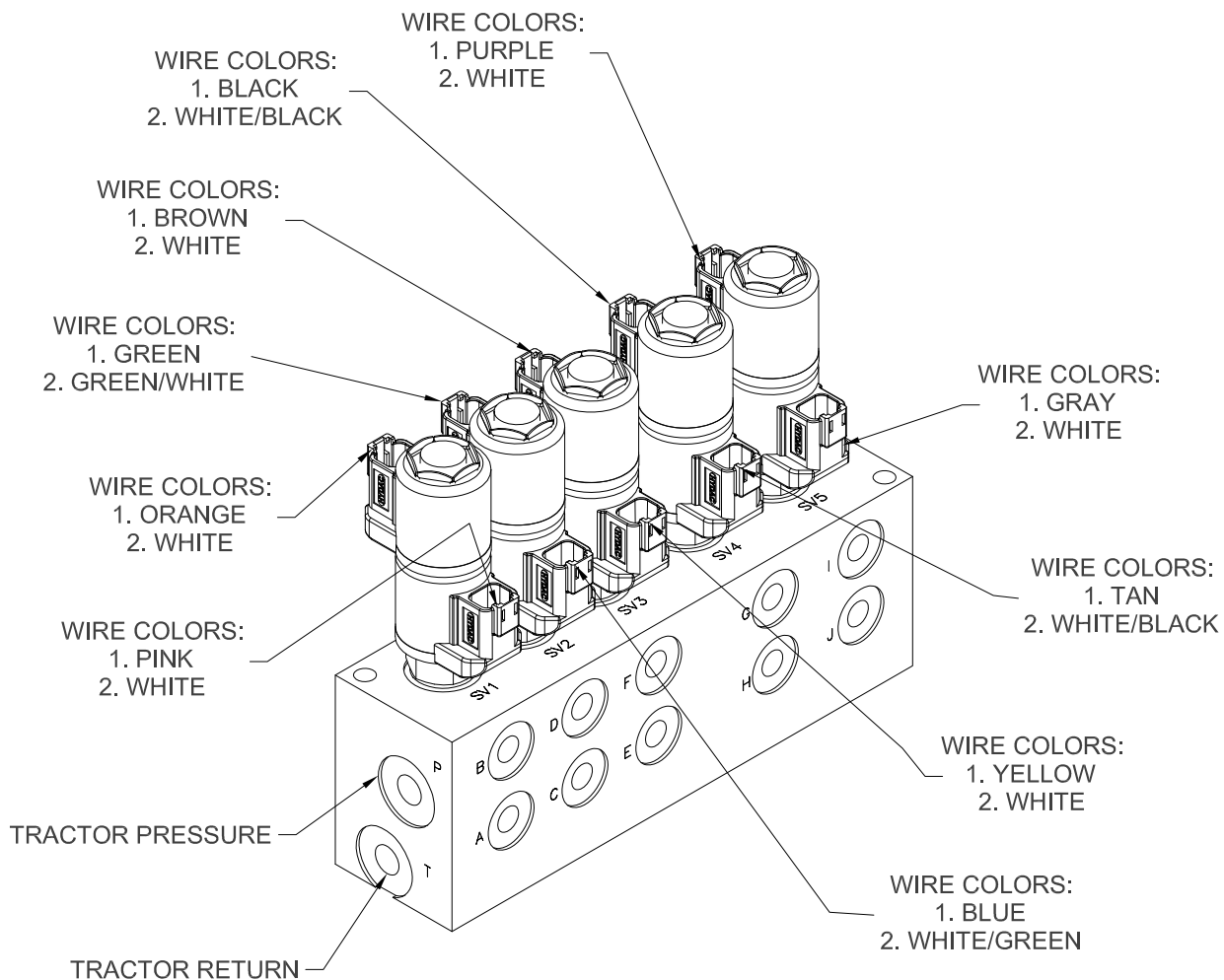


**Optional Electric Over Hydraulic Valve Electric Schematic
5 Spool SN B39490100 & Higher**



PORT	END OF CYLINDER	FUNCTION
A	BUTT END	Flow Door
B	RAM END	Flow Door
C	RAM END	Auger Fold
D	BUTT END	Auger Fold
E	RAM END	Spout Tilt Out
F	BUTT END	Spout Tilt In
G	RAM END	Spout Rotate Back
H	BUTT END	Spout Rotate Front
I	BUTT END	Auger Tilt Down
J	RAM END	Auger Tilt Up
P		Tractor Pressure
T		Tractor Return

**Optional Electric Over Hydraulic Valve Electric Schematic
5 Spool SN B39490099 & Lower**



PORT	END OF CYLINDER	FUNCTION
A	BUTT END	FLOW DOOR
B	RAM END	FLOW DOOR
C	RAM END	AUGER FOLD
D	BUTT END	AUGER FOLD
E	RAM END	SPOUT TILT
F	BUTT END	SPOUT TILT
G	RAM END	SPOUT ROTATE
H	BUTT END	SPOUT ROTATE
I	BUTT END	AUGER TILT
J	RAM END	AUGER TILT
P		TRACTOR PRESSURE
T		TRACTOR RETURN

Track Wheels

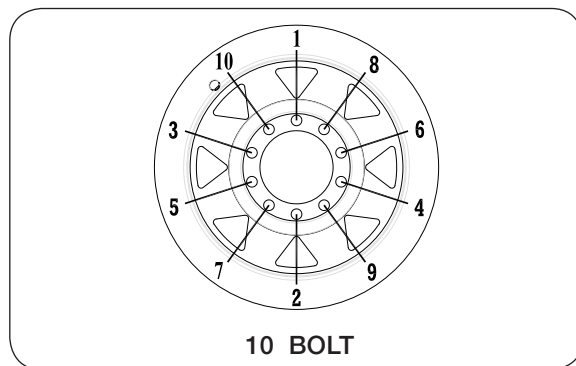
Torque Requirements

⚠ 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 track 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.




10 BOLT

DIAGRAM 1

Complete Torque Chart

Capscrews - Grade 5

NOTE:

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

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

IMPORTANT

- Follow these torque recommendations except when specified in text.

Complete Torque Chart

Capscrews - Grade 8

NOTE:

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



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

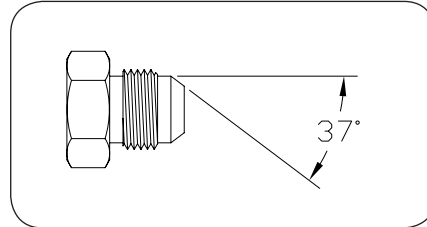
IMPORTANT

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

Hydraulic Fittings - Torque and Installation

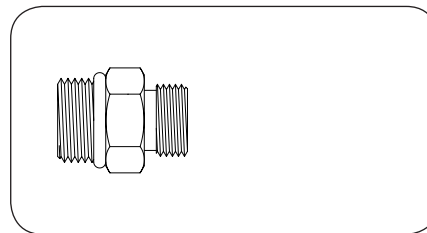
SAE Flare Connection (J. I. C.)

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.



Section V

Parts

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

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FOR SCALE INFORMATION, PLEASE REFER TO YOUR SCALE MANUAL.

FOR TRACK INFORMATION, PLEASE REFER TO YOUR TRACK MANUAL.

FOR UHARVEST INFORMATION, PLEASE REFER TO YOUR UHARVEST MANUAL.

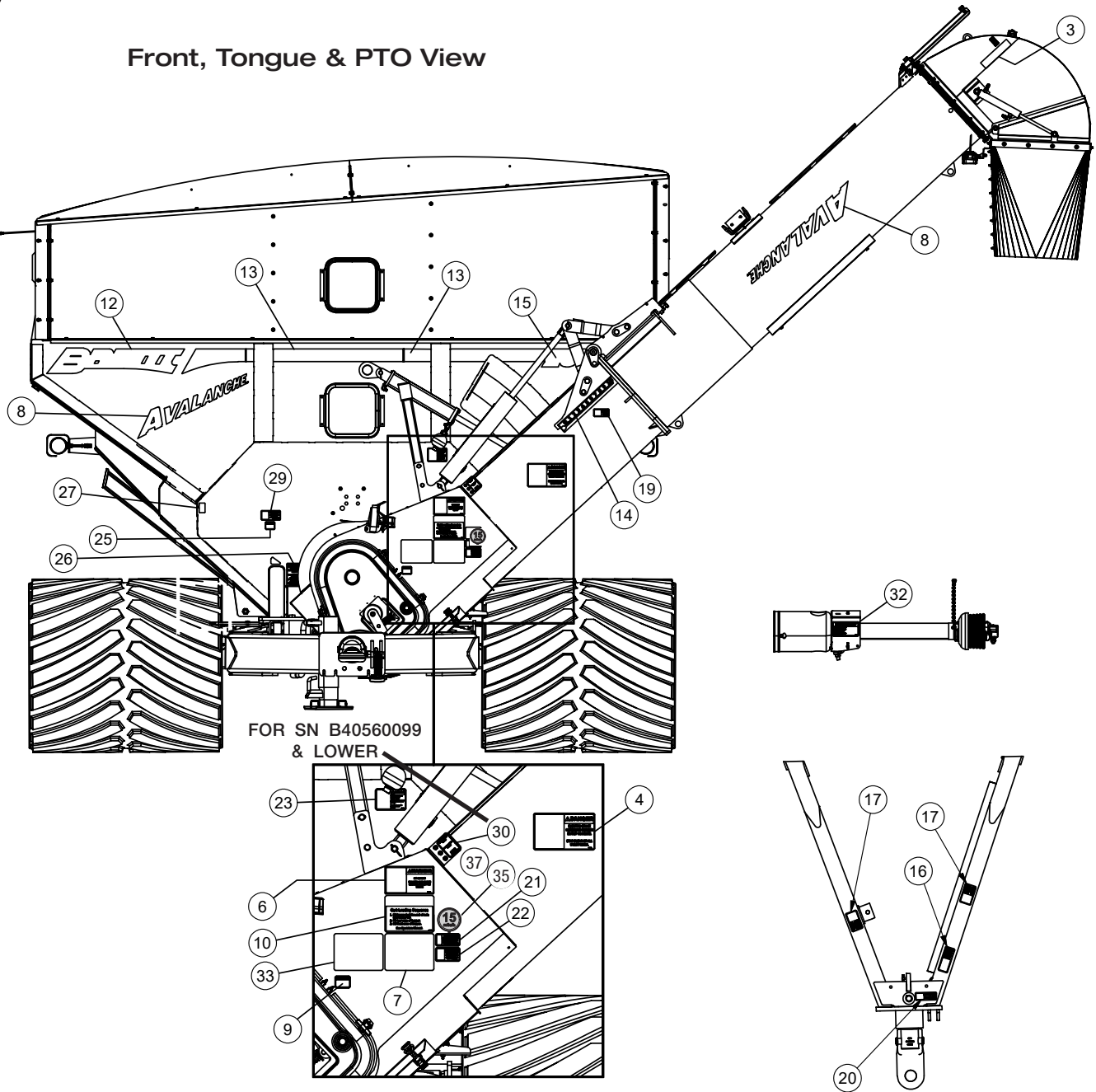
FOR ELECTRIC TARP INFORMATION, PLEASE REFER TO YOUR ELECTRIC TARP MANUAL.

FOR WATER DELIVERY SYSTEM INFORMATION, PLEASE REFER TO YOUR WATER DELIVERY SYSTEM MANUAL.

Decals

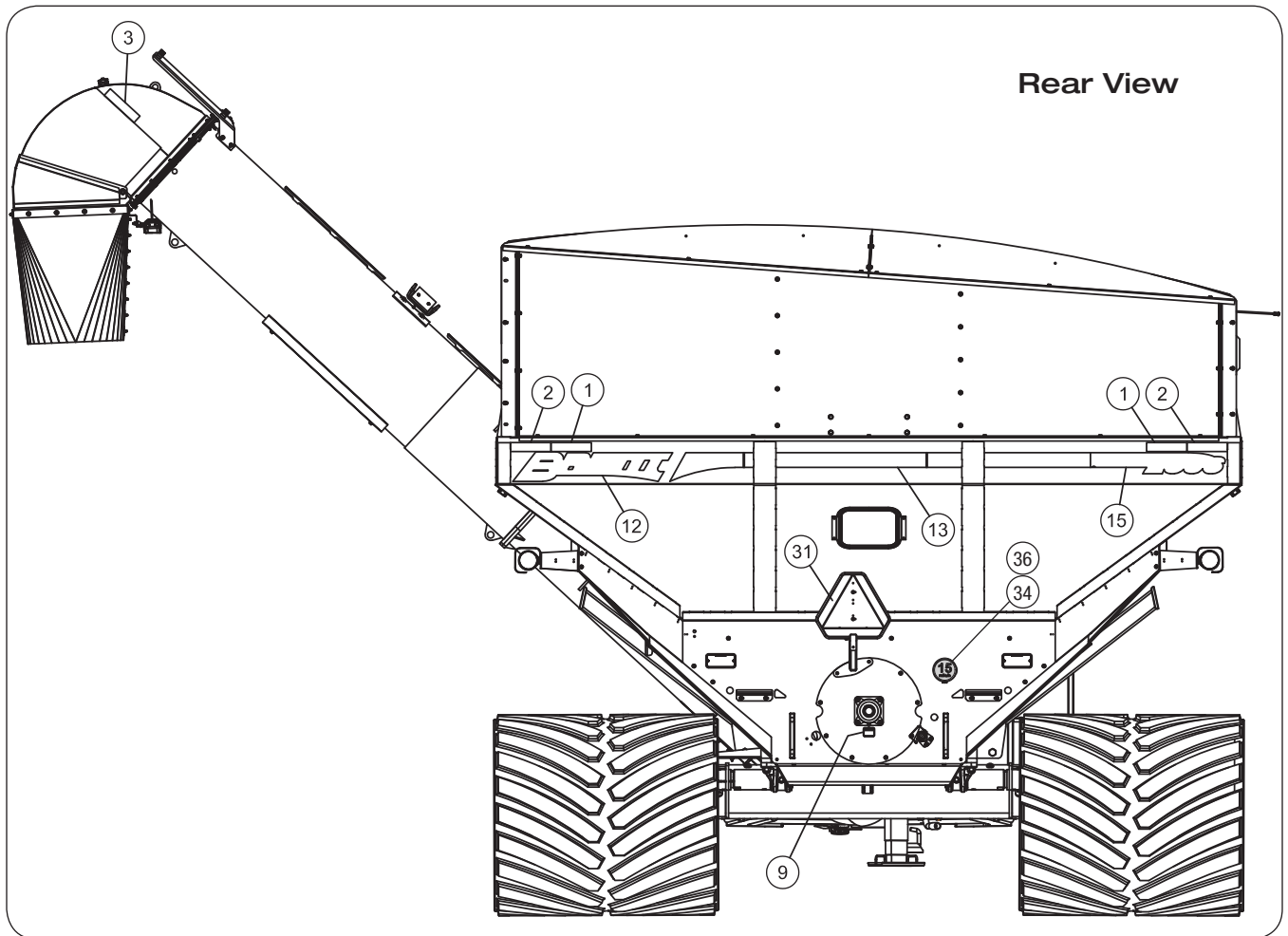
Please visit www.unverferth.com/parts/ for the most current parts listing.

Front, Tongue & PTO View



Decals (continued)

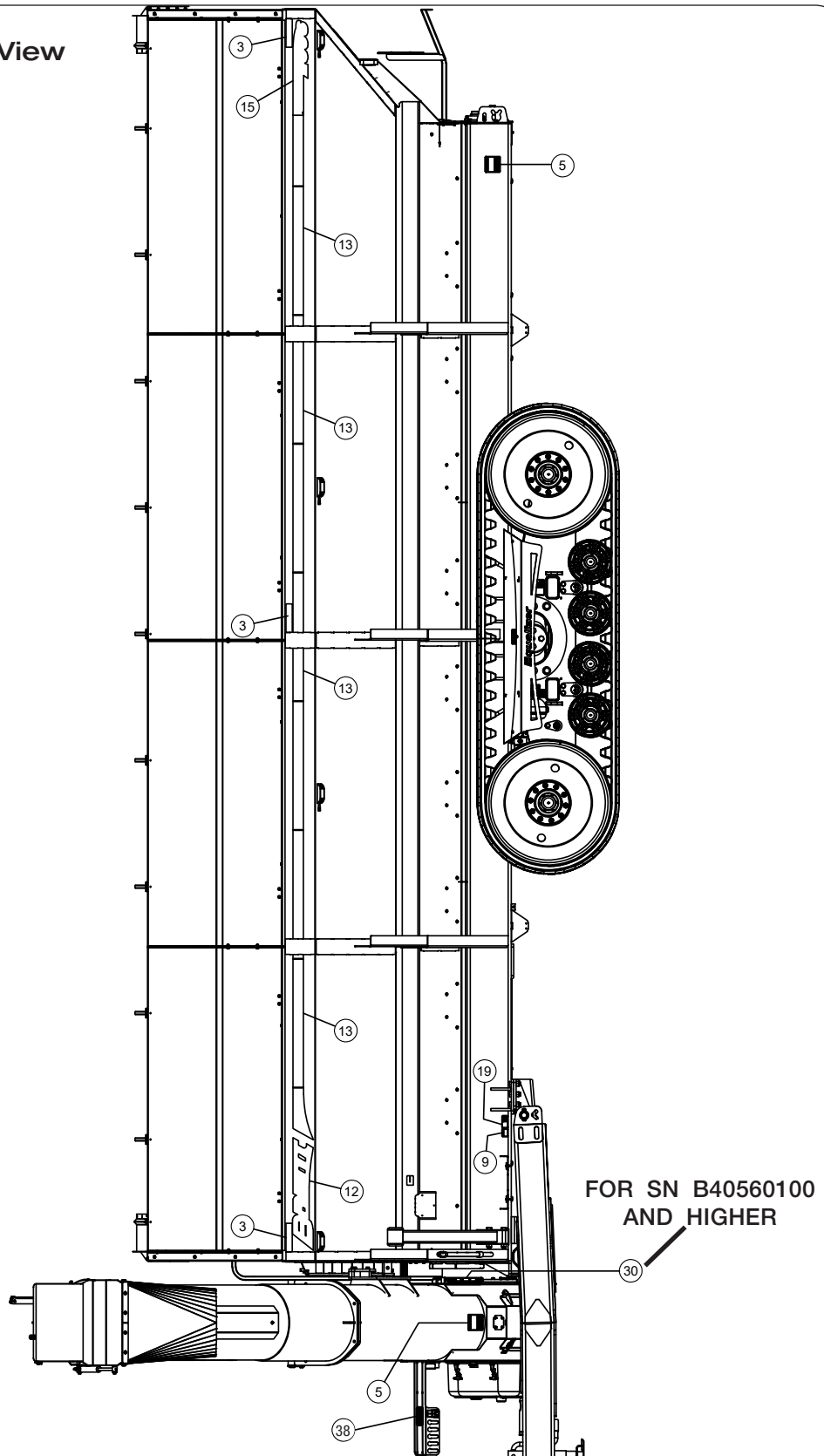
Please visit www.unverferth.com/parts/ for the most current parts listing.



Decals (continued)

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

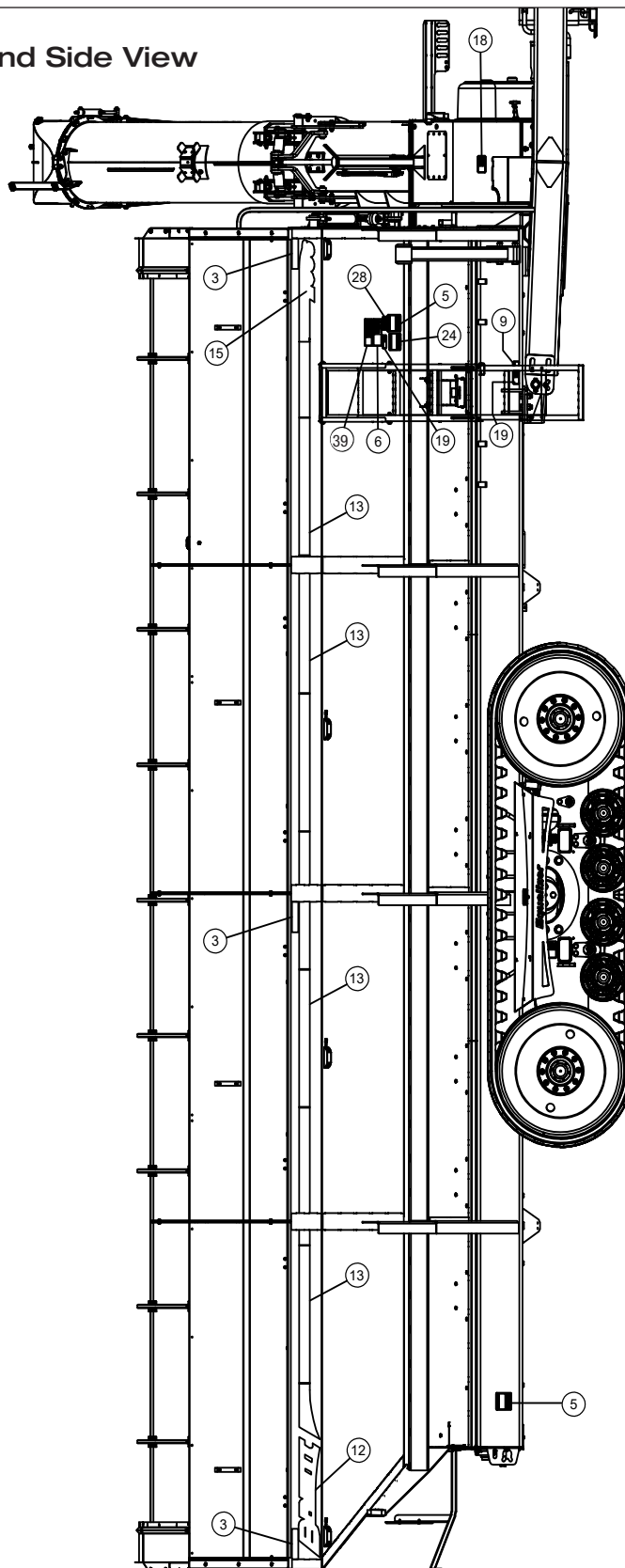
Left-Hand Side View



Decals (continued)

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

Right-Hand Side View



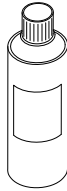
Decals (continued)

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	9003125	Reflector 2x9 =FLUORESCENT=	2	
2	9003126	Reflector 2x9 =RED=	2	
3	9003127	Reflector 2x9 =AMBER=	7	
4	9003474	Decal, DANGER (Electrical Lines)	1	
5	9003475	Decal, DANGER (Rotating or Moving Parts)	4	
6	9003476	Decal, WARNING (No Riders)	2	
7	9003477	Decal, IMPORTANT (Operation)	1	
8	9004271	Decal, Avalanche	2	
9	9008947	Decal, Grease	4	
10	9004966	Decal, Cart Loading Sequence	1	
12	9006588	Decal, Brent Logo	4	
13	9006589	Decal, Stripe	20	
14	9006601	Decal, Flow Door	1	
15	9008173	Decal, 2596	4	
16	94094	Decal, WARNING (Tongue Rise or Fall)	1	
17	95046	Decal, DANGER (Entanglement)	2	
18	95445	Decal, WARNING (High Pressure Oil)	1	
19	95839	Decal, WARNING (Pinch Point)	3	
20	97575	Decal, CAUTION (Transport Chains)	1	
21	97961	Decal, WARNING (Read Manual)	1	
22	TA1-906109-0	Decal, WARNING (Moving Parts Crush/Cut)	1	
23	900024	Decal, WARNING (High-Pressure Oil)	1	
24	9003478	Decal, DANGER (Never Play In Or On The Grain)	1	
25	9008947	Decal, Grease Every Month	1	
26	9005971	Decal, WARNING (Suspension System)	1	
27	91605	Decal, FEMA	1	
28	95008	Decal, CAUTION (Slippery Surface)	1	
29	98229	Decal, WARNING (Falling or Lowering Equipment)	1	
30	9008925	Decal, Grease Bank	1	For SN B40560100 & Higher
	9008486			For SN B40560099 & Lower
31	TA510514	SMV Emblem	1	
32	9008470	Decal, IMPORTANT (Hitching Grain Cart to Tractor)	1	
33	9008151	Decal, IMPORTANT (PTO Engagement)	1	
34	9008716	Decal, Rear SIS 15MPH	1	
35	9008717	Decal, Front SIS 15MPH	1	
36	9008722	Decal, Rear SIS 25KPH	1	
37	9008723	Decal, Front SIS 25KPH	1	
38	9008594	Decal, Hose Legend	1	For SN B40240100 & Higher
39	9009168	Decal, WARNING (Ladder Lock Pin)	1	

Touch-Up Paint

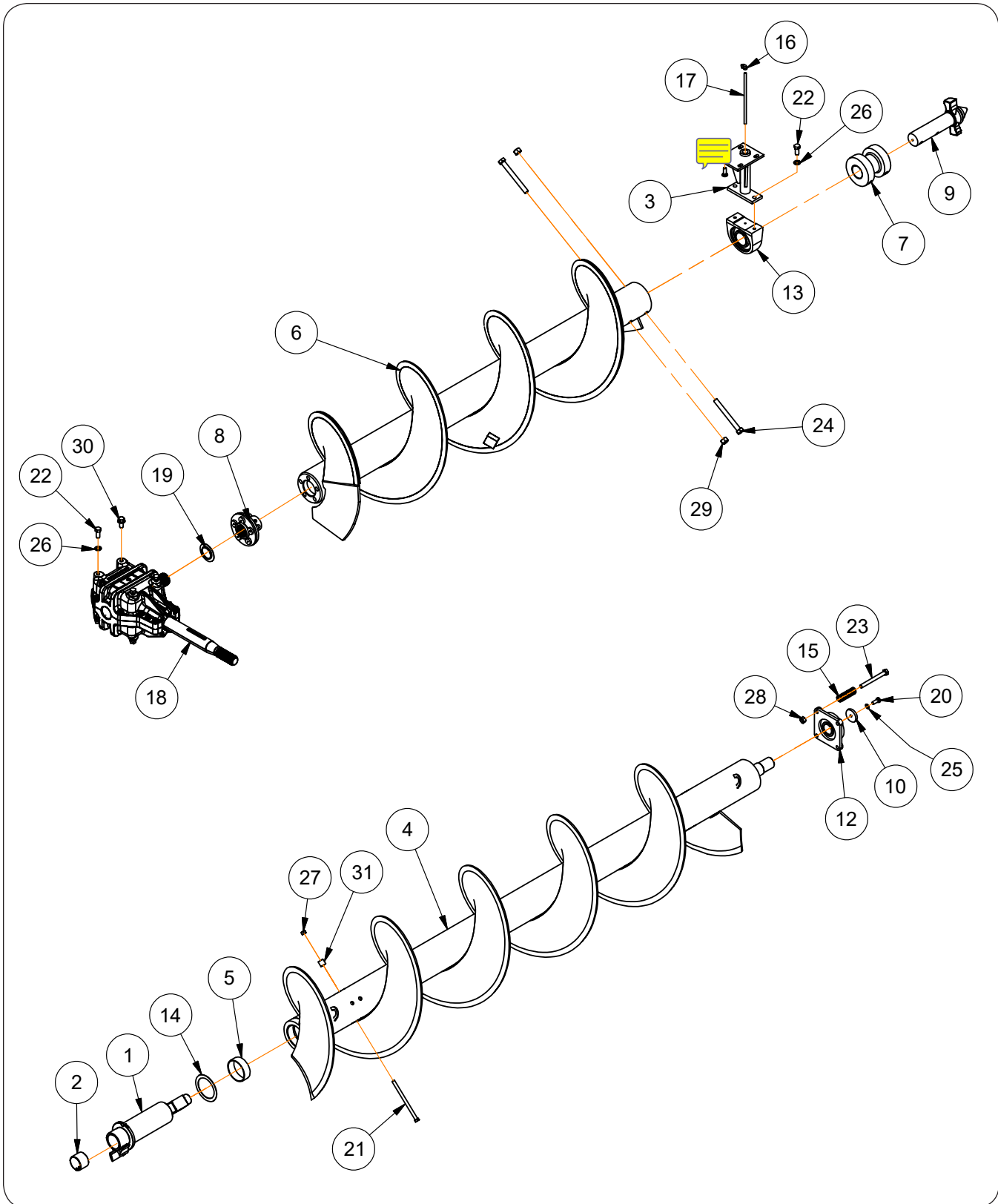
Please visit www.unverferth.com/parts/ for the most current parts listing.



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

Vertical Auger Flighting Components

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



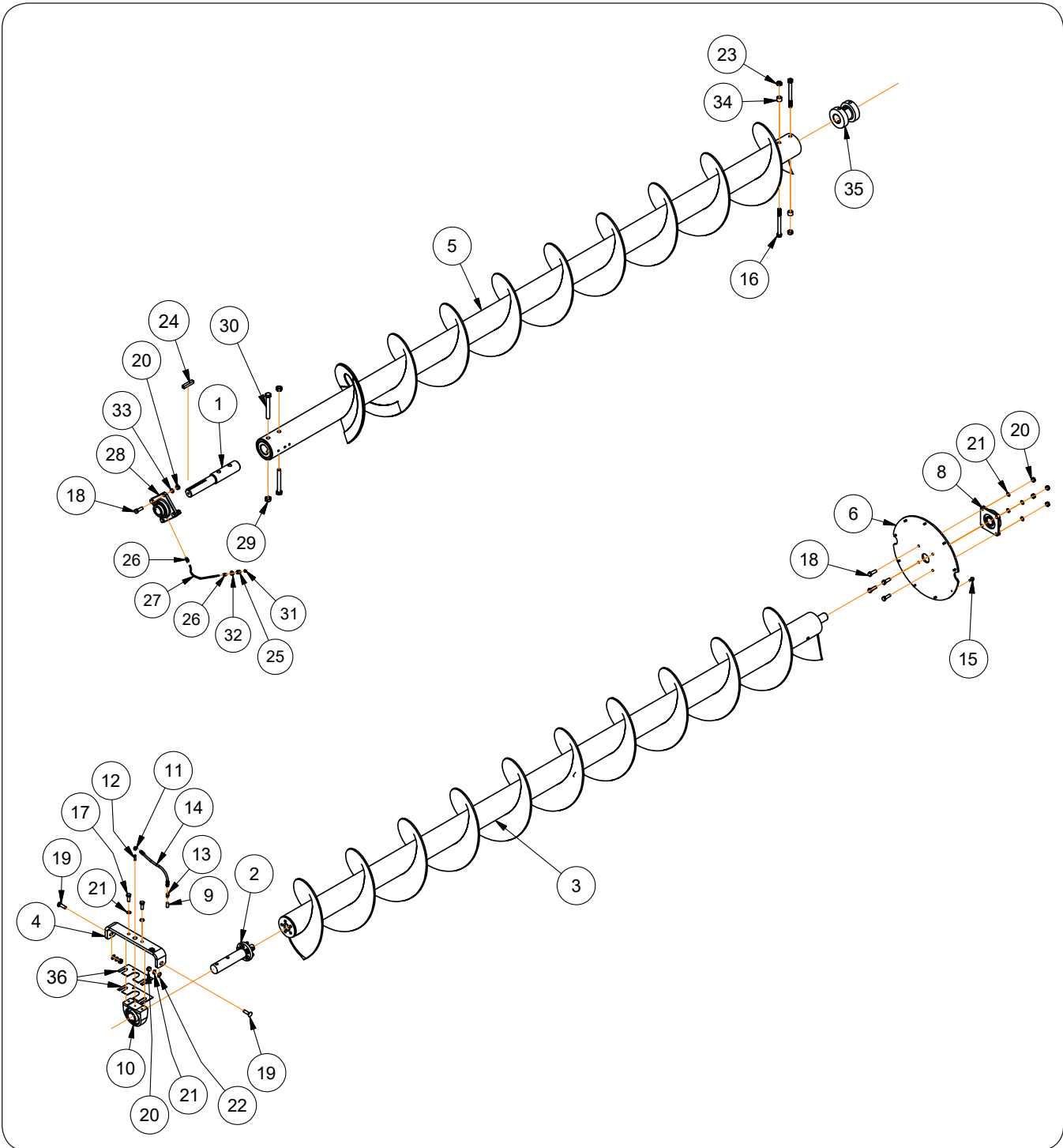
Vertical Auger Fighting Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	281283	Soft Start Assembly	1	
2	9003230	Split Bushing 2 3/4 OD x 2 1/2 ID x 2	1	
3	293422B	Bearing Bracket Weldment =Black=	1	For SN B39490100 & Higher
	273124B			For SN B39490099 & Lower
4	276548B	Upper Auger Weldment =Black=	1	
5	9004877	Split Bushing 4.25 OD x 4.011 ID	-	Not Shown
6	287826B	Lower Auger Replacement Kit =Black=	1	Fits 1 3/4-20 Spline Gearbox Shaft
7	283515	Auger Tube Adapter	1	
8	287802	Drive Plate Assembly (5-Pin)	1	
9	288813	Drive Dog Casting	1	
10	407699	Washer Plate, 2 1/2" Dia.	1	
12	9002492	Bearing 2" Dia. Flanged	1	
13	9004731	Pillow Block Bearing, 2 1/2" Bore	1	
14	9004878	Self Lubricating Washer	1	
15	9004899	Spring - 10 Coils	4	
16	9004764	90° Elbow 1/8" NPTF Female	1	
17	9005793	Grease Pipe	1	
18	9007366	Gearbox 1 3/4-20 Spline Input Shaft 2 1/4-17 Spline Output Shaft	1	See "Gearbox" in this section for parts.
19	9007377B	Dust Cover =Black=	1	
20	9390-100	Capscrew, 1/2"-13UNC x 1 1/4" G5	1	
21	9390-119	Capscrew, 1/2"-13UNC x 8" G5	1	
22	9390-122	Capscrew, 5/8"-11UNC x 1 1/2" G5	8	
23	9390-136	Capscrew, 5/8"-11UNC x 6" G5	4	
24	9390-159	Capscrew, 3/4"-10UNC x 7" G5	2	
25	9404-025	Lock Washer, 1/2"	1	
26	9404-030	Lock Washer, 5/8"	8	
27	9800	Locknut, 1/2"-13UNC Grade 5	1	
28	9801	Locknut, 5/8"-11UNC Grade 5	4	
29	9802	Locknut, 3/4"-10UNC Grade 5	2	
30	903161-063	Flange Screw, 5/8"-11UNC x 1 1/4" G5	2	
31	410511	Spacer Bushing	1	

Horizontal Auger Components - For SN B40560100 & Higher

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



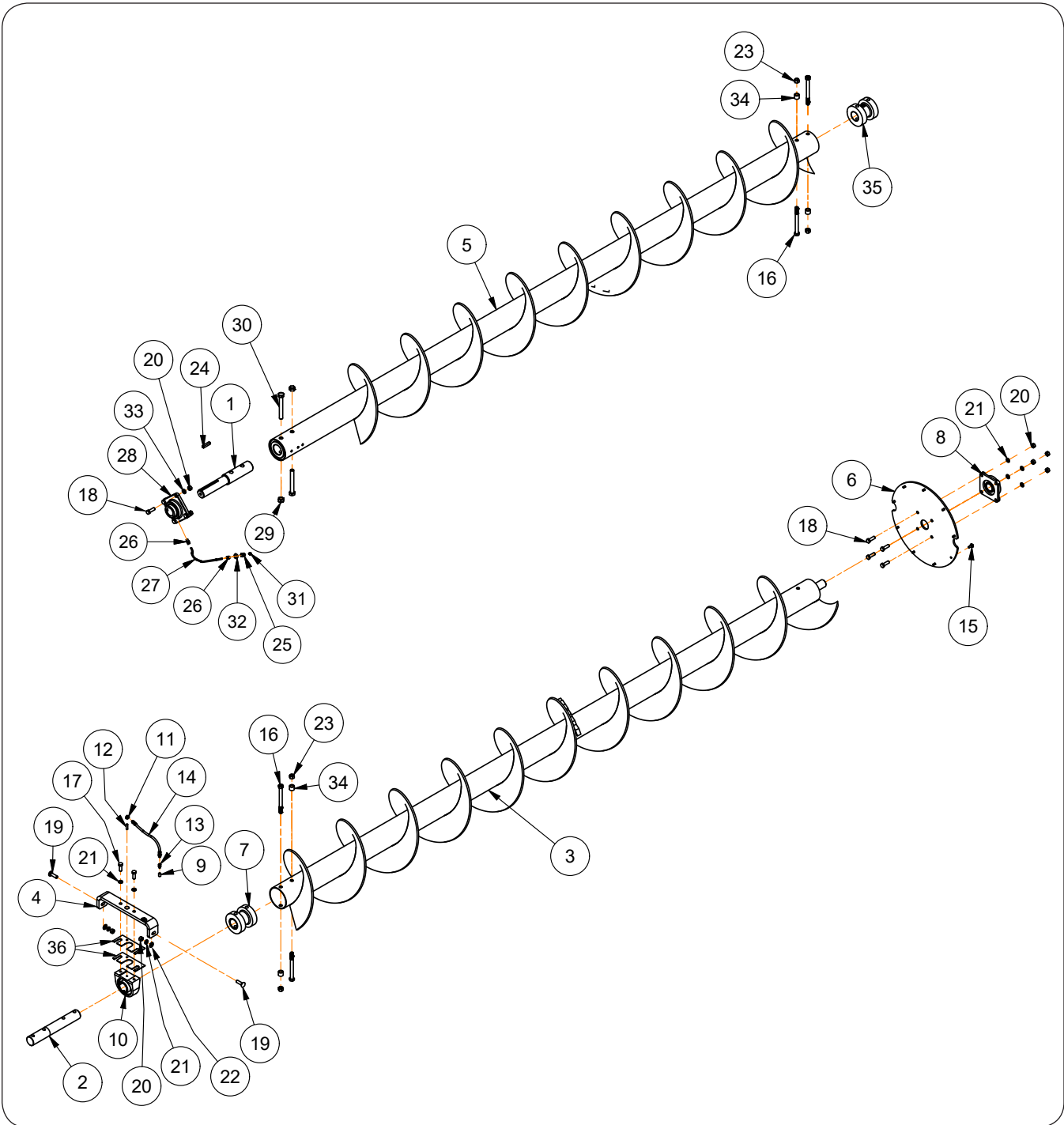
Horizontal Auger Components - For SN B40560100 & Higher

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	273779	Auger Shaft 2 1/2 Dia. x 18	1	
2	293957	Auger Coupler Shaft Weldment	1	
3	295271B	Rear Flighting Weldment =Black=	1	For SN B42070100 & Higher
4	286382B	Bearing Mount Bar =Black=	1	
5	295269B	Front Flighting Weldment = Black=	1	For SN B42070100 & Higher Includes Items 5, 16, 23, 29, 30, 34, 35
6	283097G	Cover Plate =Green=	1	
	283097R	Cover Plate =Red=		
8	9002492	Bearing 2" Dia. Flanged	1	
9	9002538	Coupling Pipe 1/8NPT	1	
10	9004731	Bearing - Pillow Block	1	
11	9004764	90° Elbow Pipe	1	
12	9006964	Hex Pipe Nipple	1	
13	9002479	Adapter	1	
14	9006965	Grease Hose 1/8" x 15" (3000 PSI)	1	
15	91262	Large Flange Screw 3/8"-16UNC x 1"	9	Grade 5
16	91299-161	Capscrew, 3/4"-10UNC x 8"	4	Grade 8
17	9390-123	Capscrew 5/8"-11UNC x 1 3/4"	2	Grade 5
18	9390-124	Capscrew 5/8"-11UNC x 2"	4	Grade 5
19	9388-136	Carriage Bolt, 5/8"-11UNC x 2 1/4"	2	Grade 5
20	9394-014	Hex Nut, 5/8"-11UNC	10	Grade 5
21	9404-029	Lock Washer 5/8"	8	
22	9405-098	Flat Washer 5/8" SAE	2	
23	9802	Lock Nut/Top, 3/4-10UNC	2	Grade B
24	9002562	Key 1/2 x 1/2 x 2 1/2	1	
25	9003949	Pipe Coupling	1	
26	9005073	Quicklinc Fitting 1/4" Tube x 1/8NPT Straight	2	
27	9005074	Nylon Tube 1/4" OD	1	
28	9005565	Flange Bearing 4-Bolt, 2 1/4" ID	1	
29	91141	Locknut 7/8-9UNC	2	
30	91299-178	Capscrew 7/8"-9UNC x 7"	2	Grade 8
31	93426	Grease Zerk	1	
32	9405-076	Flat Washer 3/8" USS	1	
33	9404-030	Lock Washer 5/8" Heavy-Duty	4	
34	283895B	Spacer Bushing	2	
35	295031	Auger Adapter Casting	1	
36	286424	Bearing Shim Plate	A/R	

Horizontal Auger Components - For SN B40560099 & Lower

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



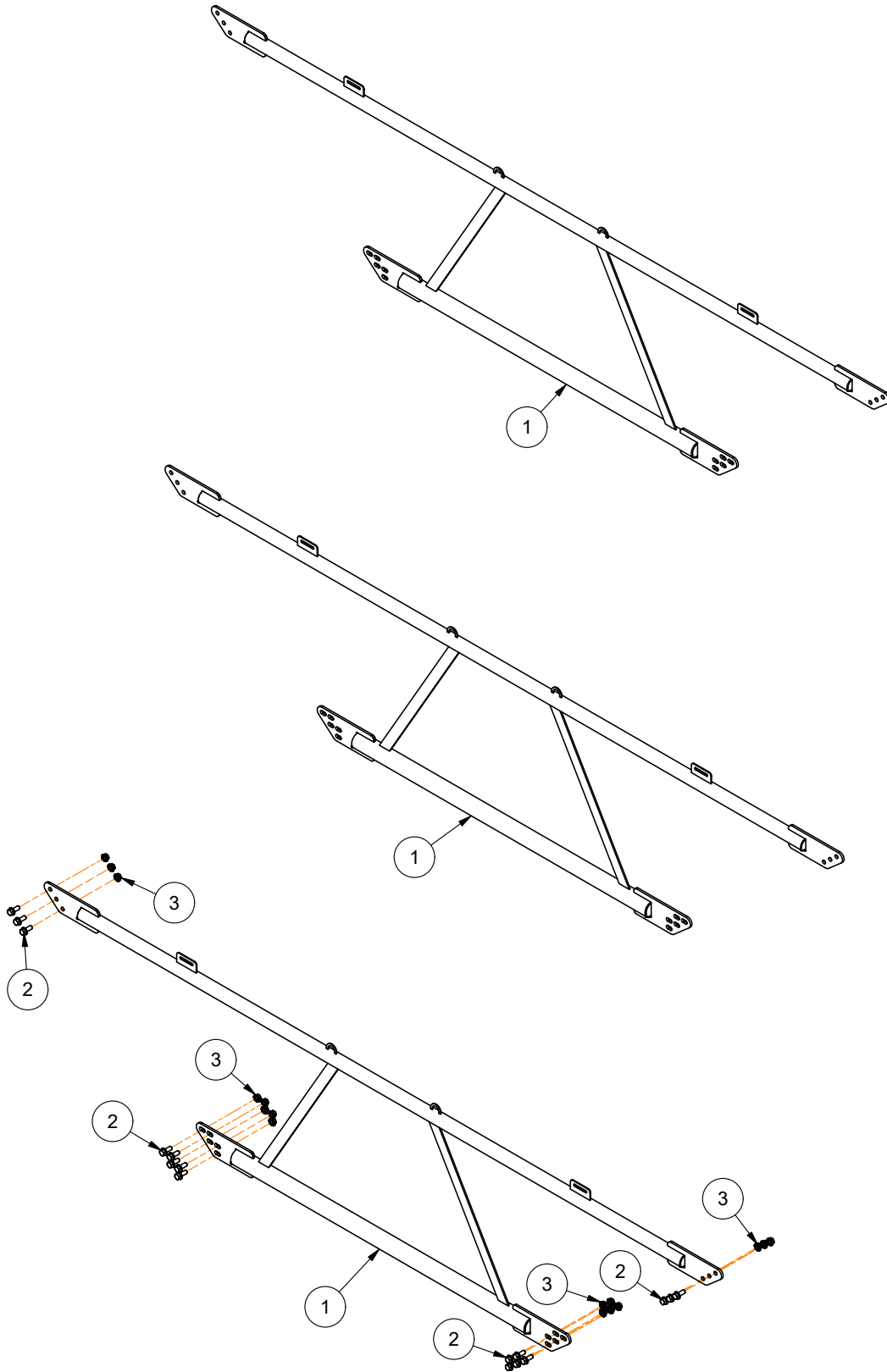
Horizontal Auger Components - For SN B40560099 & Lower

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	273779	Auger Shaft 2 1/2 Dia. x 18	1	
2	286379	Auger Drive Shaft 2 1/2" Dia.	1	
3	295741B	Rear Flighting Weldment =Black=	1	
4	286382B	Bearing Mount Bar =Black=	1	
5	295269B	Front Flighting Weldment =Black=	1	Includes Items 5, 16, 23, 29, 30, 34, 35
6	283097G	Cover Plate =Green=	1	
	283097R	Cover Plate =Red=		
7	283515	Auger Tube Adapter	1	
8	9002492	Bearing 2" Dia. Flanged	1	
9	9002538	Coupling Pipe 1/8NPT	1	
10	9004731	Bearing - Pillow Block	1	
11	9004764	90° Elbow Pipe	1	
12	9006964	Hex Pipe Nipple	1	
13	9002479	Adapter	1	
14	9006965	Grease Hose 1/8" x 15" (3000 PSI)	1	
15	91262	Large Flange Screw 3/8"-16UNC x 1"	9	Grade 5
16	91299-161	Capscrew, 3/4"-10UNC x 8"	4	Grade 8
17	9390-123	Capscrew 5/8"-11UNC x 1 3/4"	2	Grade 5
18	9390-124	Capscrew 5/8"-11UNC x 2"	4	Grade 5
19	9388-136	Carriage Bolt, 5/8"-11UNC x 2 1/4"	2	Grade 5
20	9394-014	Hex Nut, 5/8"-11UNC	10	Grade 5
21	9404-029	Lock Washer 5/8"	8	
22	9405-098	Flat Washer 5/8" SAE	2	
23	9802	Lock Nut/Top, 3/4-10UNC	2	Grade B
24	9002562	Key 1/2 x 1/2 x 2 1/2	1	
25	9003949	Pipe Coupling	1	
26	9005073	Quicklinc Fitting 1/4" Tube x 1/8NPT Straight	2	
27	9005074	Nylon Tube 1/4" OD	1	
28	9005565	Flange Bearing 4-Bolt, 2 1/4" ID	1	
29	91141	Locknut 7/8-9UNC	2	
30	91299-178	Capscrew 7/8"-9UNC x 7"	2	Grade 8
31	93426	Grease Zerk	1	
32	9405-076	Flat Washer 3/8" USS	1	
33	9404-030	Lock Washer 5/8" Heavy-Duty	4	
34	283895B	Spacer Bushing	2	
35	295031	Auger Adapter Casting	1	
36	286424	Bearing Shim Plate	A/R	

Hopper Cross Brace Components

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



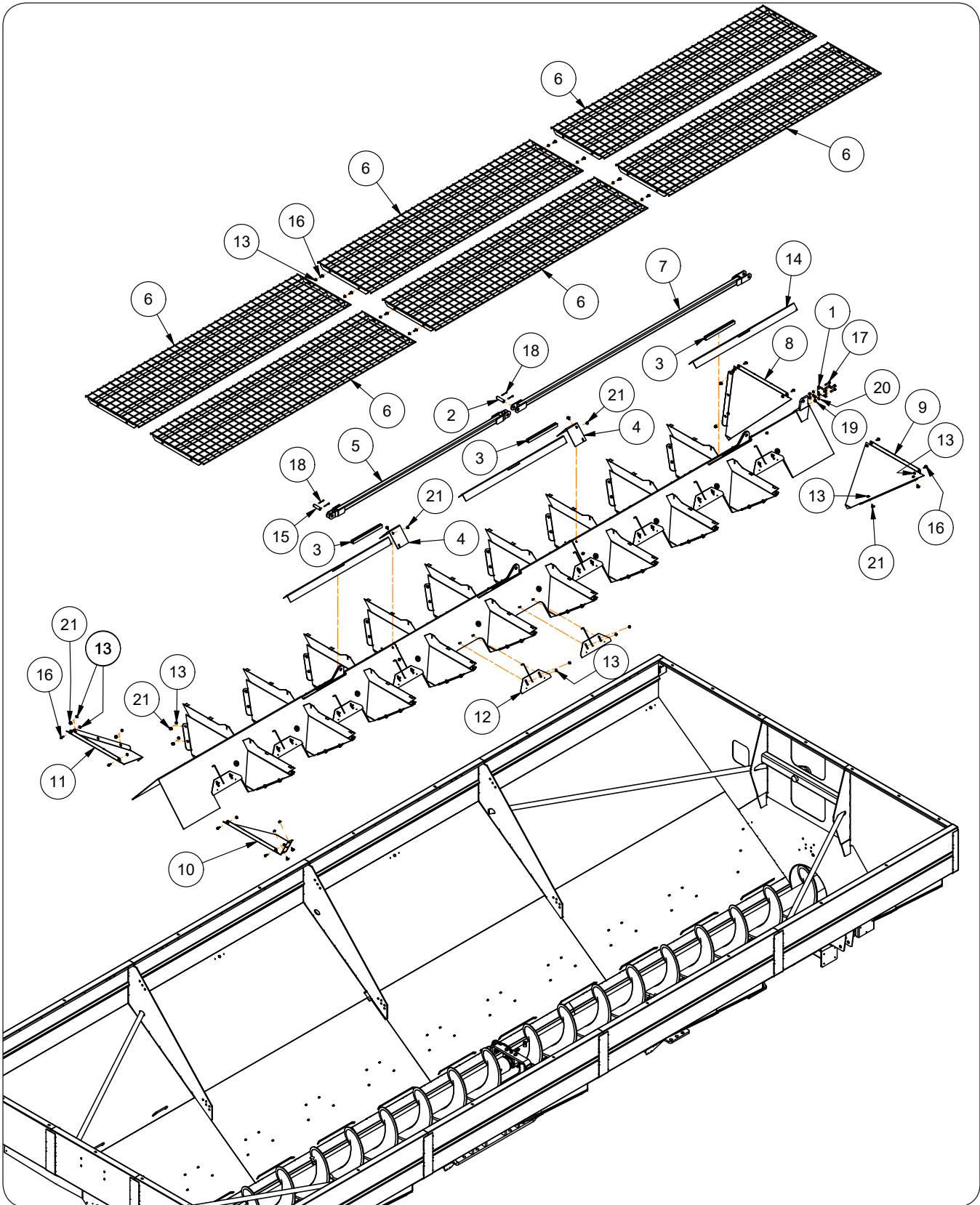
Hopper Cross Brace Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	294359B	Cross Brace Weldment =Black=	3	For SN B40560100 & Higher
	276702B			For SN B40560099 & Lower
2	903161-064	Flange Screw 5/8"-11UNC x 1 1/2"	48	
3	9502324	Serrated Flange Nut 5/8"-11UNC	48	

Hopper Flow Door Components

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



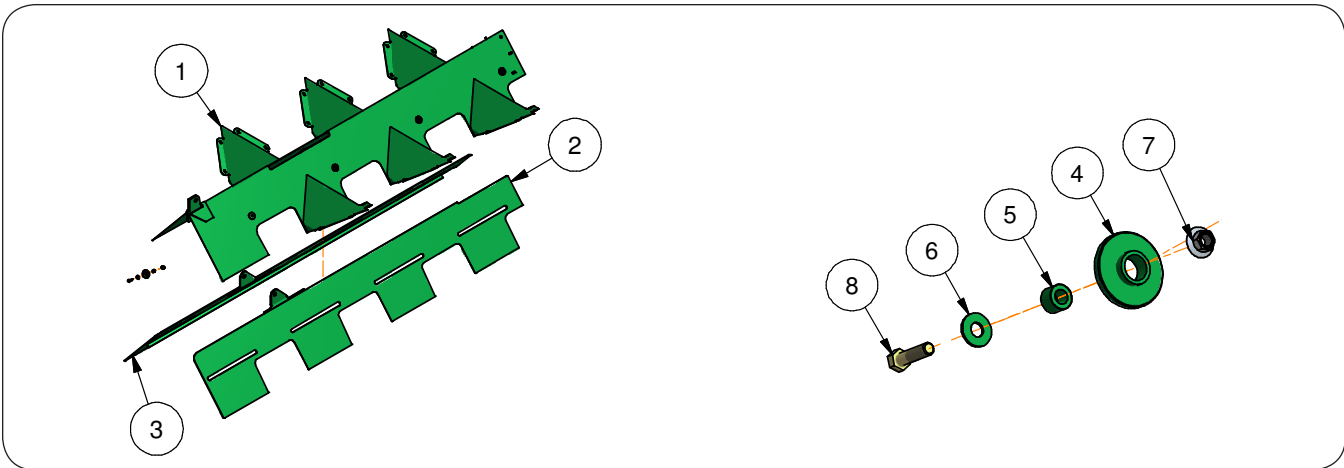
Hopper Flow Door Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	271054	Cylinder Mount Plate	1	
2	271112	Idler Pin 1" Dia. x 4"	1	
3	271331B	Seal Plate =Black=	6	
4	272141B	Cover Plate =Black=	2	
5	273314B	Rear Flow Door Linkage Weld't =Black=	1	
6	294372B	Screen Weldment =Black=	6	
7	274675B	Front Flow Door Linkage Weld't =Black=	1	
8	276581B	Front LH Baffle =Black=	1	
9	276582B	Front RH Baffle =Black=	1	
10	276583B	Rear RH Baffle =Black=	1	
11	276584B	Rear LH Baffle =Black=	1	
12	284721B	Restrictor Weldment =Black=	4	
13	9008159	Locknut, 3/8-16UNC	117	
14	282187B	Tent Hole Cover Plate =Black=	3	
15	804572	Cylinder Pin 1 x 3 1/2	1	
16	91262	Large Flange Screw 3/8-16 UNC x 1	25	Grade 5
17	9390-103	Capscrew 1/2-13 UNC x 2	4	Grade 5
18	9391-046	Cotter Pin 3/16 Dia. x 2	4	
19	9394-010	Hex Nut 1/2-13 UNC	4	Grade 5
20	9404-025	Lock Washer 1/2	4	
21	95585	Large Flange Screw 3/8-16 UNC x 3/4	92	Grade 5

Flow Door Components — Front Flow Door

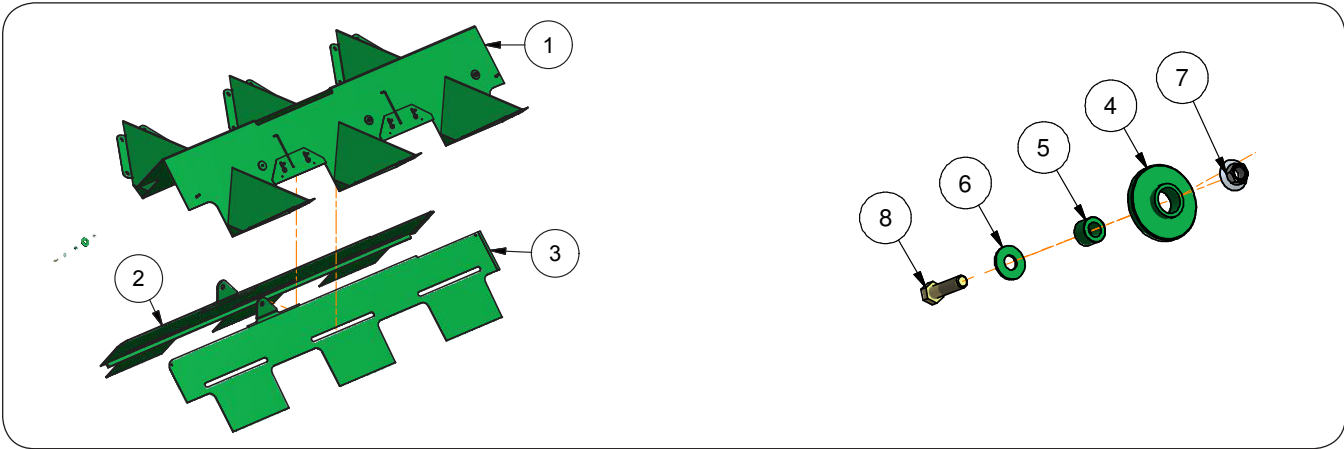
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	294368B	Front Tent Weldment	1	For SN B40560100 & Higher
	276586B			For SN B40560099 & Lower
2	274624B	Front LH Door Weldment	1	
3	274625B	Front RH Door Weldment	1	
4	284168	Bushing 2 1/4 OD x 49/64 ID x 0.500	8	
5	284169	Bushing 3/4 OD x 7/16 ID x 0.531	8	
6	9005471	Flat Washer 3/8 (Hardened)	8	
7	9008159	Top Lock Nut 3/8-16 UNC Gr.5	8	
8	91299-057	Cap screw 3/8-16UNC x 1 1/2 Gr.8	8	

Flow Door Components — Middle Flow Door

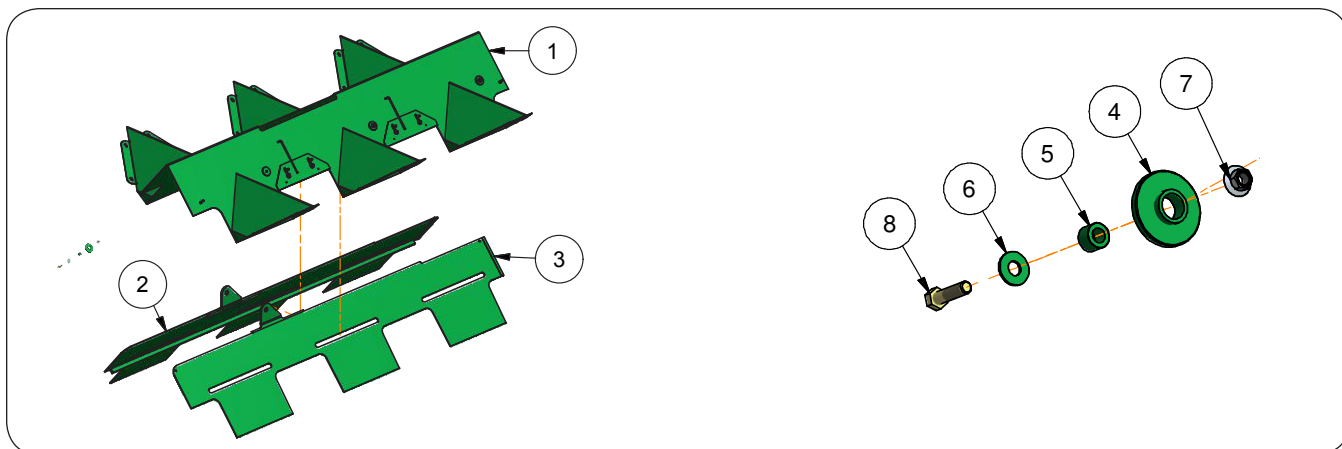
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	294369B	Middle Tent Weldment	1	For SN B40560100 & Higher
	276589B			For SN B40560099 & Lower
2	273246B	Middle RH Door Weldment	1	
3	273247B	Middle LH Door Weldment	1	
4	284168	Bushing 2 1/4 OD x 49/64 ID x 0.500	6	
5	284169	Bushing 3/4 OD x 7/16 ID x 0.531	6	
6	9005471	Flat Washer 3/8 (Hardened)	6	
7	9008159	Top Lock Nut 3/8-16 UNC Gr.5	6	
8	91299-057	Cap screw 3/8-16UNC x 1 1/2 Gr.8	6	

Flow Door Components — Rear Flow Door

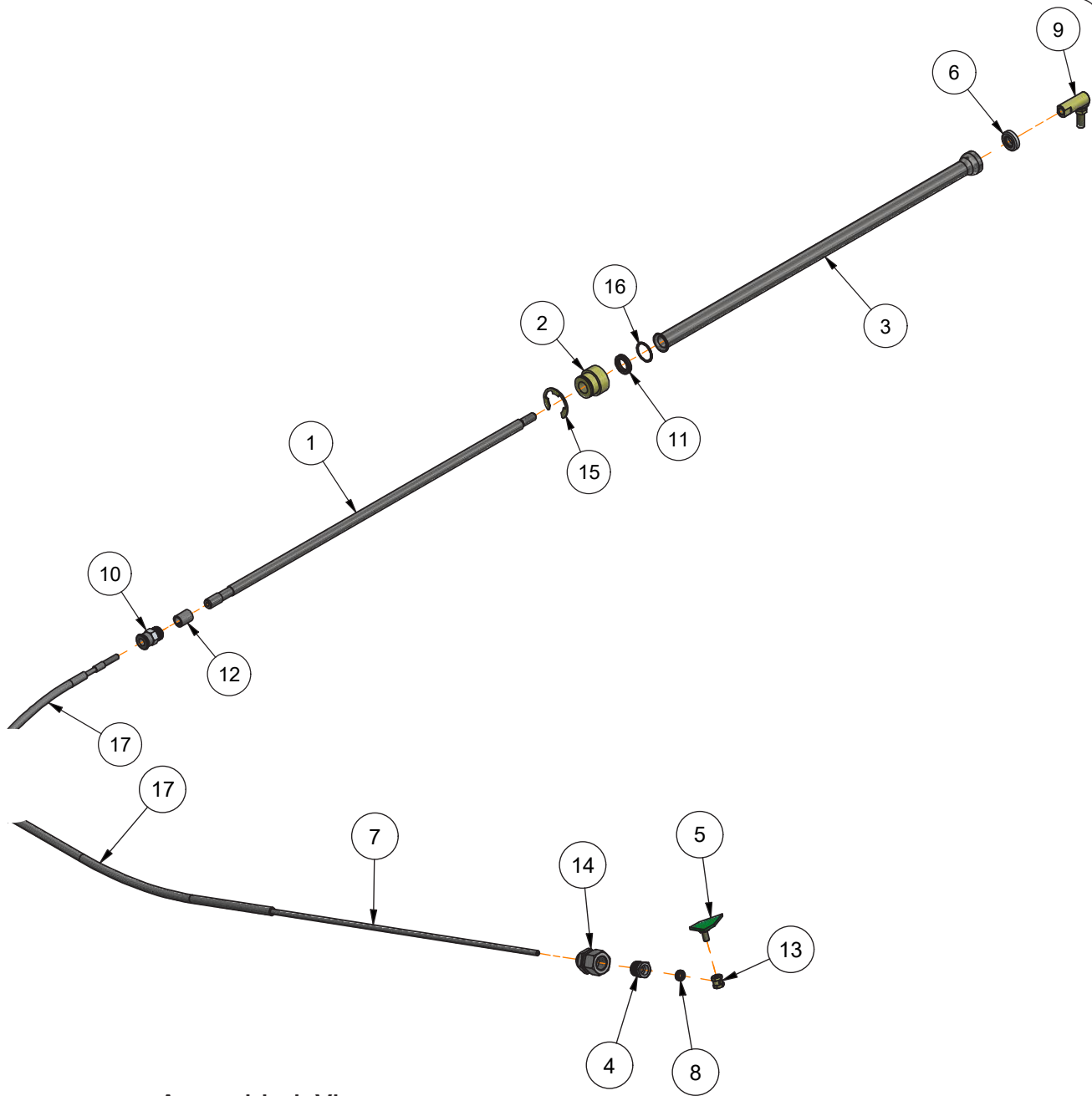
Please visit www.unverferth.com/parts/ for the most current parts listing.



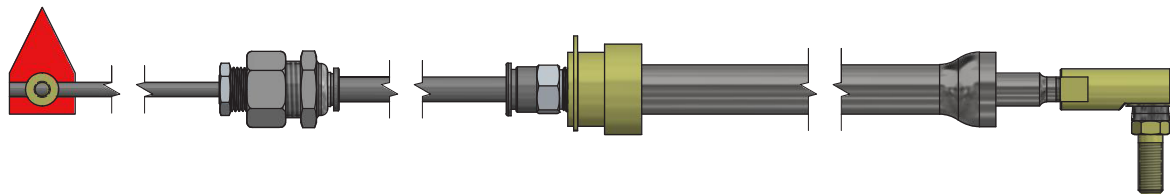
ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	294370B	Rear Tent Weldment	1	For SN B40560100 & Higher
	276591B			For SN B40560099 & Lower
2	274629B	Rear LH Door Weldment	1	
3	274630B	Rear RH Door Weldment	1	
4	284168	Bushing 2 1/4 OD x 49/64 ID x 0.500	6	
5	284169	Bushing 3/4 OD x 7/16 ID x 0.531	6	
6	9005471	Flat Washer 3/8 (Hardened)	6	
7	9008159	Top Lock Nut 3/8-16 UNC Gr.5	6	
8	91299-057	Capscrew 3/8-16UNC x 1 1/2 G8	6	

Indicator Assembly

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



Assembled View



Indicator Assembly

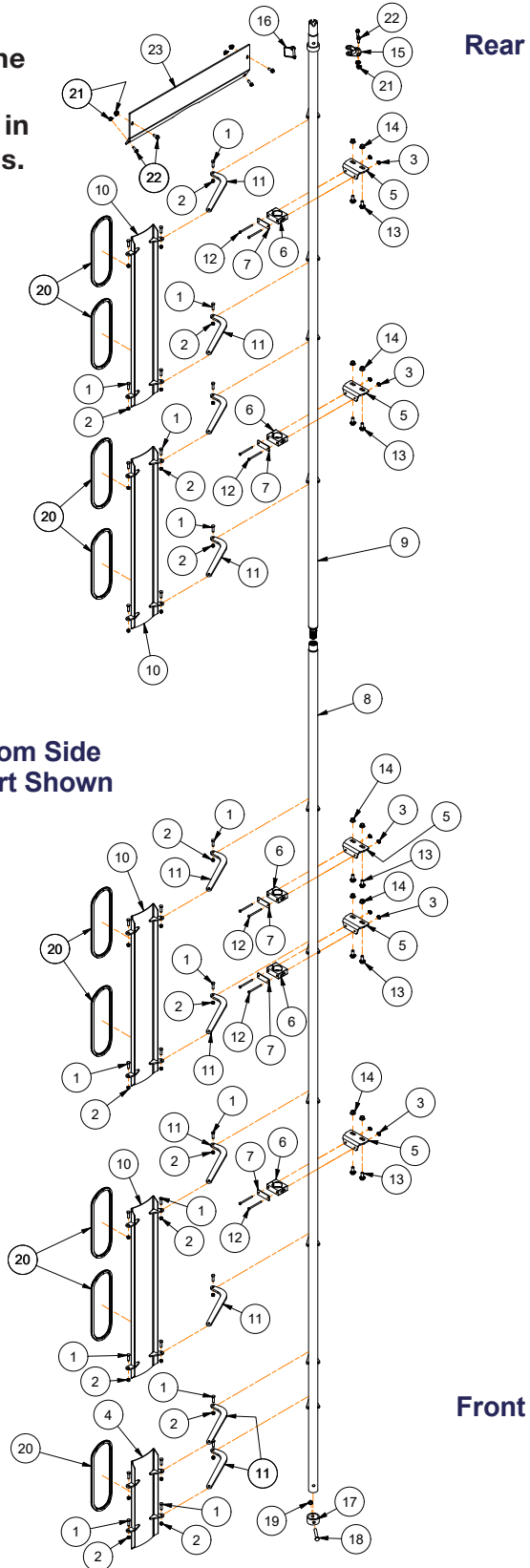
Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	271584	Complete Indicator Assembly	1	Includes Items 1 through 17
1	271582	Push Rod Indicator	1	
2	271585	Bushing - Coupler	1	
3	271589	Cable Tube (Push Rod)	1	
4	271593	Reducer Bushing	1	
5	271595R	Flow Door Indicator =Red=	1	
6	9006610	Seal (Wiper)	1	
7	9006611	Inner Cable (Conduit) - 3/16	1	
8	9008612	Seal (Shaft)	1	
9	9006630	Rod End, 3/8"	1	
10	9006634	Connector Fitting	1	
11	9006635	Quad Ring	1	
12	9006636	Wear Ring	1	
13	271597	Wire Stop	1	
14	9006640	Hose Fitting	1	
15	9006641	Snap Ring	1	
16	9006644	Retaining Ring - Internal	1	
17	271586	Plastic Tubing - 81"	1	

Clean Out Door Components

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

NOTE: Item #16
lynch pin 9005305 is in the
toolbox from the factory.
See “Basic Cart Set Up” in
SET UP section for details.



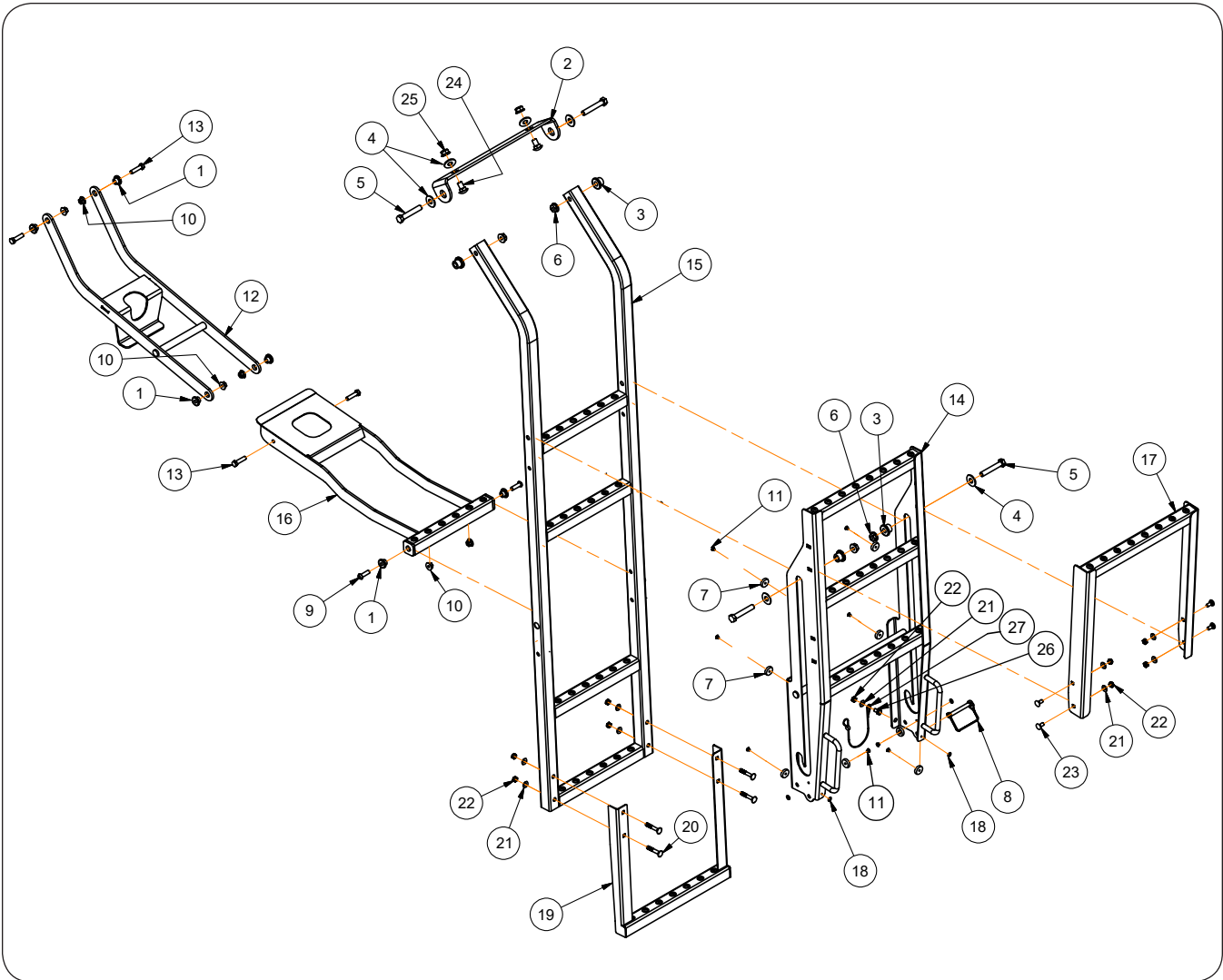
Clean Out Door Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	9390-056	Capscrew 3/8"-16UNC x 1 1/4"	30	Grade 5
2	9928	Locknut 3/8"-16UNC	30	
3	97189	Large Flange Hex Nut 1/4"-20UNC	10	
4	273748B	Cleanout Door Weldment =Black=	1	
5	273741B	Door Pivot Plate =Black=	5	
6	9006351	Clamp Pair	5	
7	9006352	Top Plate	5	
8	N/A	Front Link Arm Weldment =Black=	1	
9	N/A	Rear Link Arm Weldment =Black=	1	
10	273730B	Cleanout Door Weldment =Black=	4	
11	273734B	Door Linkage =Black=	10	
12	9390-015	Capscrew 1/4"-20UNC x 3 1/2"	10	Grade 5
13	91266	Flange Screw 1/2"-13UNC x 1 1/4"	10	Grade 5
14	91267	Flange Nut 1/2"-13UNC	10	
15	273753B	Door Latch Weldment =Black=	1	
16	9005305	Lynch Pin 3/8" Dia. x 3"	1	
17	271566B	Stop Bushing =Black=	1	
18	9390-108	Capscrew 1/2"-13UNC x 3 1/4"	1	Grade 5
19	94981	Locknut 1/2"-13UNC	1	
20	9007108	Gasket w/Adhesive Backing for Clean-Out Door	AR	Specify in Feet
21	91263	Nut/Large Flange 3/8"-16UNC	6	
22	91262	Flange Screw 3/8"-16UNC x 1" G5	6	
23	276349B	Support Plate	1	

Ladder Components - For SN B40560100 & Higher

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



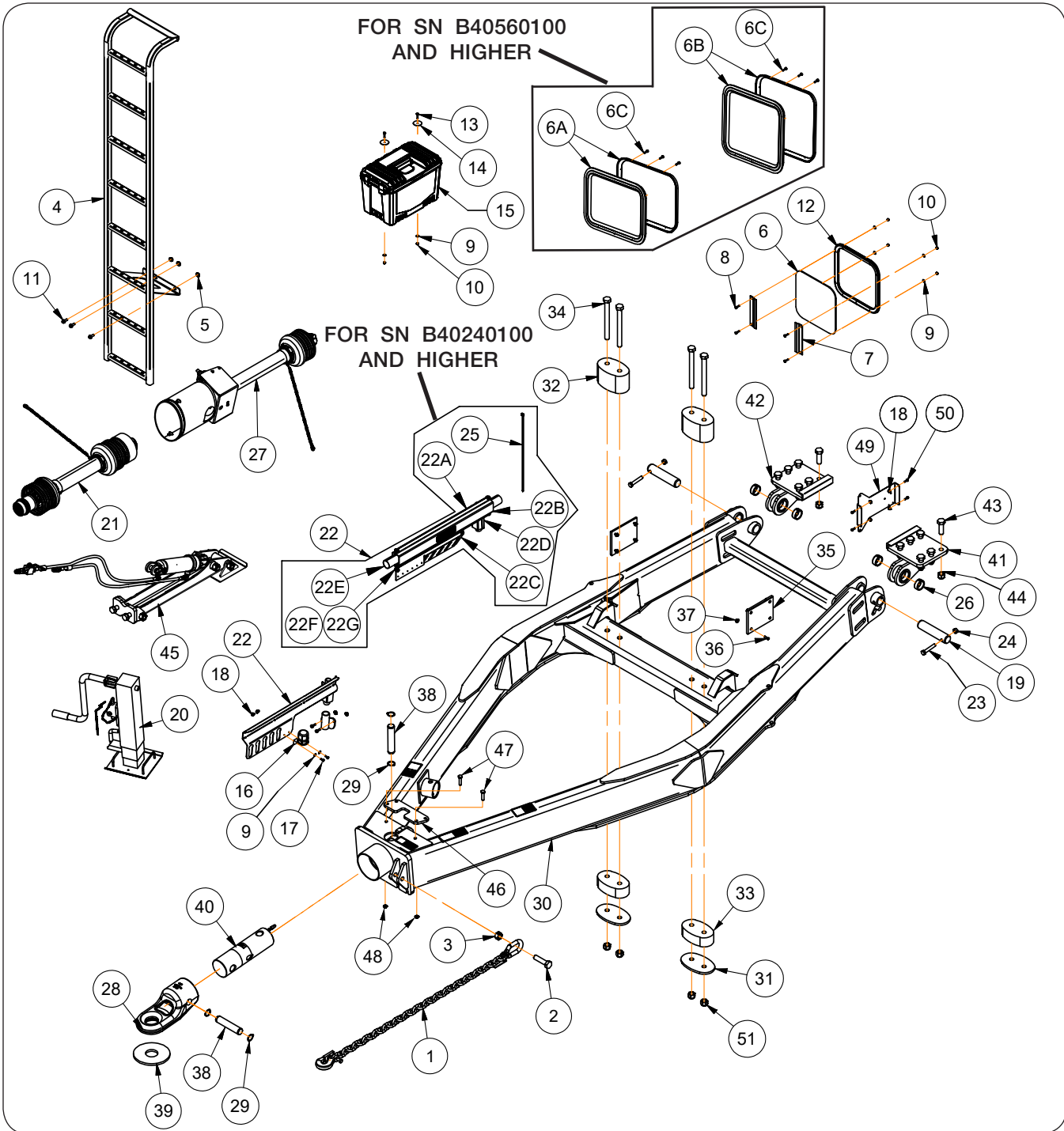
Ladder Components - For SN B40560100 & Higher

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	2003029	Nylon Bushing, .625" OD x .406" ID x .380"	6	
2	289294B	Plate-Bracket, Ladder	1	
3	2003030	Nylon Bushing, .875" OD x .531" ID x .563"	4	
4	9405-088	Flat Washer, 1/2" USS	6	
5	9390-107	Capscrew, 1/2"-13UNC x 3" G5	4	
6	9003397	Lock Nut/Top, 1/2"-13UNC	4	
7	TA620384	Plastic Stop, 1" Dia. x .250"	8	
8	9005305	Lynch Pin 3/8" Dia. x 3"	1	
9	99985	Button Head Socket, 3/8"-16UNC x 1 1/4"	2	
10	9008159	Lock Nut/Top, 3/8"-16UNC	6	
11	9003503	Rivet 3/16 X 1/4	8	
12	289717B	Ladder Link Weldment	1	
13	9390-057	Capscrew, 3/8"-16UNC x 1 1/2" G5	4	
14	289328B	Ladder Extension Weldment	1	
15	289326B	Ladder Weldment	1	
16	289280B	Step Weldment	1	
17	289707B	Ladder Extension Weldment	1	
18	9004998	Rivet Burr 3/16"	4	
19	289844B	Ladder Weldment	1	
20	9388-029	Carriage Bolt, 5/16"-18UNC x 2" G5	4	
21	9405-064	Flat Washer, 5/16" ID (1/4" Nominal) USS	9	
22	901527	Lock Nut/Center, 5/16"-18UNC	9	
23	9388-024	Carriage Bolt, 5/16"-18UNC x 3/4" G5	4	
24	9388-102	Carriage Bolt, 1/2"-13UNC x 1"	2	
25	91267	Flange Nut, 1/2"-13UNC	2	
26	9390-027	Capscrew, 5/16"-18UNC x 5/8" G5	1	
27	97879	Nylon Lanyard	1	

Hitch & Ladder Components

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



ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	9004898	Transport Chain 41,000#	1	
2	91299-191	Capscrew 1-8UNC x 4	1	Grade 8
3	92199	Locknut 1-8UNC	1	
4	276393B	Ladder Weldment =Black=	1	
5	91263	Nut/Large Flange 3/8-16UNC	3	For SN B40560099 & Lower
6A	9008857	Front Window & Trim Assembly 14 15/32" x 19 21/32"	2	
6B	9008680	Rear Window & Trim Assembly 17 7/32" x 19 21/32"	1	For SN B40560100 & Higher
6C	9008933	Pan Head Phillips Screw 8-18UNC x 1/2"	36	

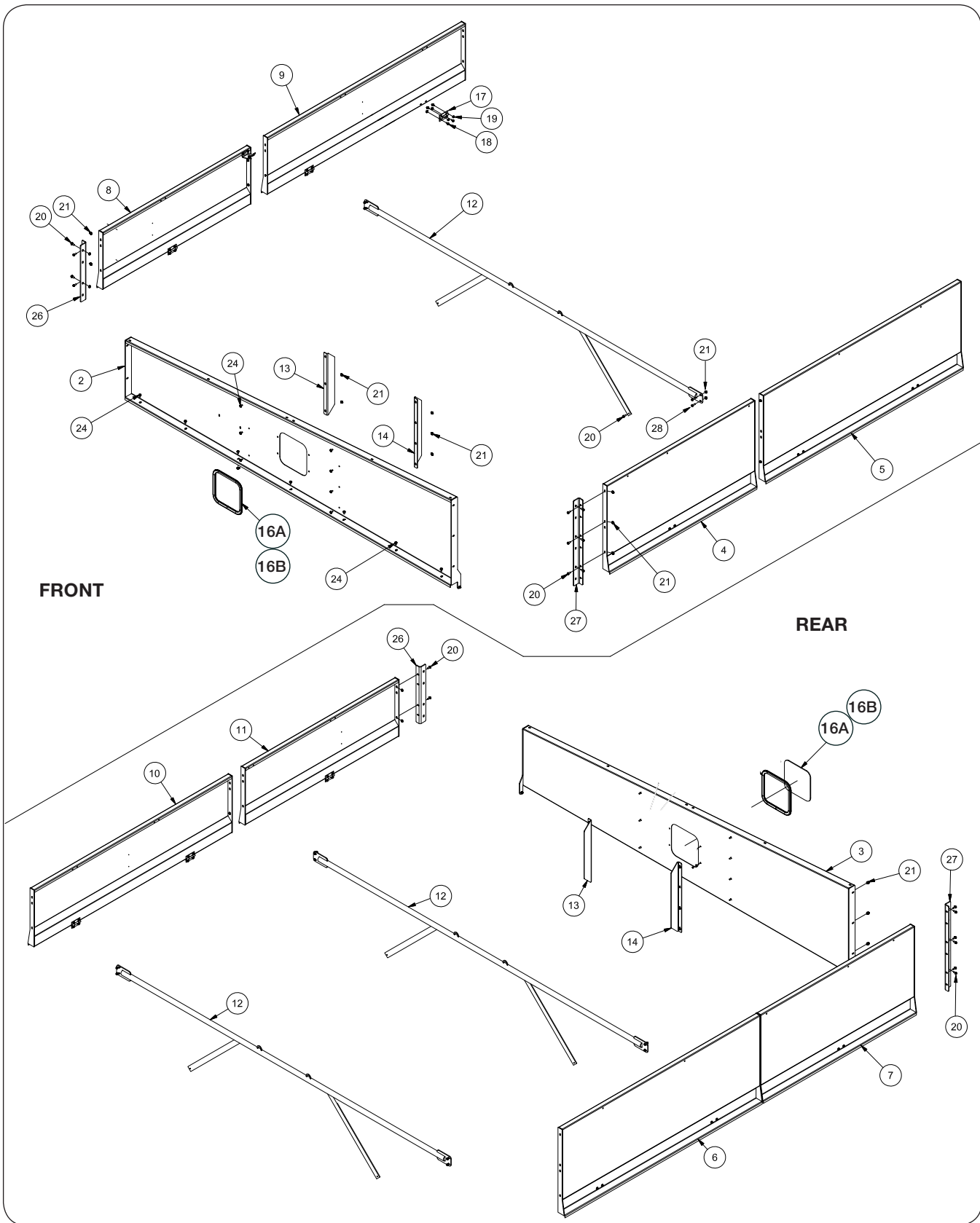
Hitch & Ladder Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
6	9002544	Window (Clear Tempered)	1	For SN B40560099 & Lower
7	294121B	Window Bracket =Black=	2	For SN B40560100 & Higher
	250461B			Rear Hopper Slope Only
8	9390-005	Capscrew 1/4-20UNC x 1	4	For SN B40560099 & Lower
9	9405-064	Flat Washer 1/4"	6	Grade 5
10	9936	Locknut 1/4-20UNC	6	
11	91262	Capscrew 3/8"-16UNC x 1" G5	3	For SN B40560099 & Lower
12	271952	Window Molding	1	For SN B40560099 & Lower
13	9390-006	Capscrew 1/4"-20UNC x 1 1/4"	2	Grade 5
14	94763	Fender Washer	2	
15	9008634	Toolbox - 26"	1	For SN B39490100 & Higher
	9005850	Storage Box		For SN B39490099 & Lower
16	9001968	Trailer Connector Holder	1	
17	9390-003	Capscrew 1/4"-20UNC x 3/4"	2	Grade 5
18	97189	Large Flange Hex Nut 1/4"-20UNC	6	
19	276335	Tongue Pin 2" Dia. x 8 7/8"	2	
20	9005011	Jack 7,000# Capacity with Pin	1	
	9007632	Jack Pin, 7/8" Dia. w/Chain	1	NOT SHOWN
21	9008417	Driveline Assembly Complete	1	1 3/4-20 Spline, W2500
22	294128B	Hose Caddy Replacement Kit =Black=	1	For SN B40240100 & Higher
	272639B			Includes Items 22A - 22G, 25
22A	294083B	Hose Caddy Weldment =Black=	1	
22B	294085B	Hose Caddy Cover =Black=	1	
22C	294086	Hose Retainer	1	
22D	9000787	Trim - Edge	1/2	Specify in Feet
22E	9003848	Hose Wrap	3	Specify in Feet
22F	91256	Large Flange Capscrew 5/16-18UNC x 3/4 Grade 5	6	
22G	91267	Flange Nut, 1/2-13UNC Grade 5	6	
23	9390-130	Capscrew 5/8"-11UNC x 3 1/2"	2	Grade 5
24	95905	Lock Nut/Ctr 5/8"-11UNC	2	
25	9000104	Cable Tie, 21 1/2" Lg	A/R	
26	9005473	Split Tension Bushing 2 3/8" OD x 2" ID x 1"	4	
27	276629B	PTO & Bracket Assembly	1	
28	282337B	Cast Hitch 4.5" Load Bar =Black= CAT 5	1	
29	97289	Retaining Ring 1 1/2"	4	
30	276310G	Tongue Weldment =Green=	1	
	276310R	Tongue Weldment =Red=		
31	271687B	Spring Retainer Plate =Black=	2	
32	9006456	Polyurethane Spring 4 3/4" Thick	2	
33	9006457	Polyurethane Spring 2 1/2" Thick	2	
34	9390-465	Capscrew 1"-8UNC x 10 1/2"	4	Grade 5
35	273237	Nylon Wear Pad	2	
36	903171-662	Screw Flat Countersunk Head Phillips 5/16"-18UNC x 1 1/4"	8	
37	91257	Flange Nut 5/16"-18UNC	8	
38	274864	Hitch Pin 1 1/2" Dia. x 7 3/8"	2	
39	281899	Wearshoe - Hitch, CAT 5	1	
40	9008023	Load Bar 4 1/2" Dia. with 16 ft. Cable CAT 5	1	
41	274818G	Tongue Pivot Weldment Left-Hand =Green=	1	
	274818R	Tongue Pivot Weldment Left-Hand =Red=		
42	274819G	Tongue Pivot Weldment Right-Hand =Green=	1	
	274819R	Tongue Pivot Weldment Right-Hand =Red=		
43	9390-409	Capscrew 1"-14UNS x 3" G5	12	
44	9008441	Elastic Lock Nut 1"-14UNS	12	
45	276645B	Optional Hydraulic Jack Kit (Black)	1	
46	277012B	Adapter Plate =Black=	1	
47	9390-123	Capscrew 5/8"-11UNC x 3/4" G5	2	
48	9003398	Locknut 5/8"-11UNC	2	
49	289382B	GCM Mounting Bracket =Black=	1	
50	97420	Flange Screw 1/4-20UNC x 3/4	4	Grade 5
51	9398-026	Locknut 1-8UNC	4	

Sideboard Components - For SN B40560100 and Higher

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



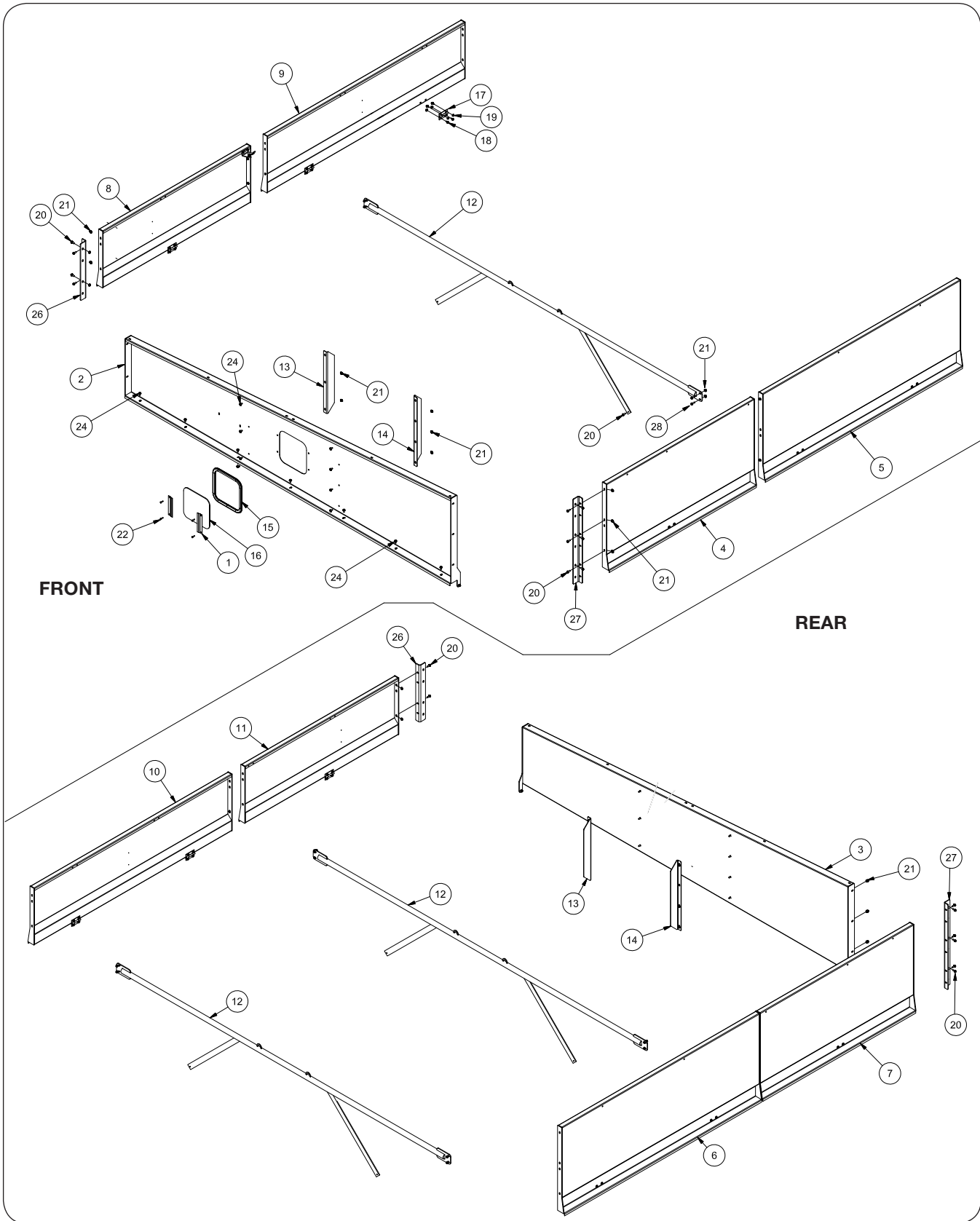
Sideboard Components - For SN B40560100 and Higher

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

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
2	294356B	Front Board Replacement Kit =Black=	1	Includes Items 16A & 16B
3	294357B	Rear Board Replacement Kit =Black=	1	
4	294332B	Front LH Board Weldment =Black=	1	
5	294334B	2nd LH Board Weldment =Black=	1	
6	294336B	3rd LH Board Weldment =Black=	1	
7	294338B	Rear LH Board Weldment =Black=	1	
8	294341B	Front RH Board Weldment =Black=	1	
9	294343B	2nd RH Board Weldment =Black=	1	
10	294345B	3rd RH Board Weldment =Black=	1	
11	294347B	Rear RH Board Weldment =Black=	1	
12	294362B	Sideboard Brace Weldment =Black=	3	
13	294365B	Plate - Side Board Brace =Black=	2	
14	294364B	Plate - Side Board Brace =Black=	2	
16A	9008680	Window and Trim Assembly	2	
16B	9008933	Pan Head Phillips Screw 8-18UNC x 1/2"	24	
17	9004626	Hinge	16	
18	91256	Screw/Large Flange, 5/16-18 UNC x 3/4	64	Grade 5
19	91257	Hex Nut/Large Flange, 5/16-18 UNC	64	Grade 5
20	91262	Screw/Large Flange, 3/8-16 UNC x 1	46	Grade 5
21	91263	Hex Nut/Large Flange, 3/8-16 UNC	72	Grade 5
24	95585	Capscrew/Large Flange 3/8-16 UNC x 3/4	14	Grade 5
26	294358B	Plate - Sideboard Corner	2	
27	294538B	Plate - Sideboard Corner	2	
28	9003259	Flange Screw 3/8"-16UNC x 1 1/4"	12	

Sideboard Components - For SN B40560099 and Lower

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



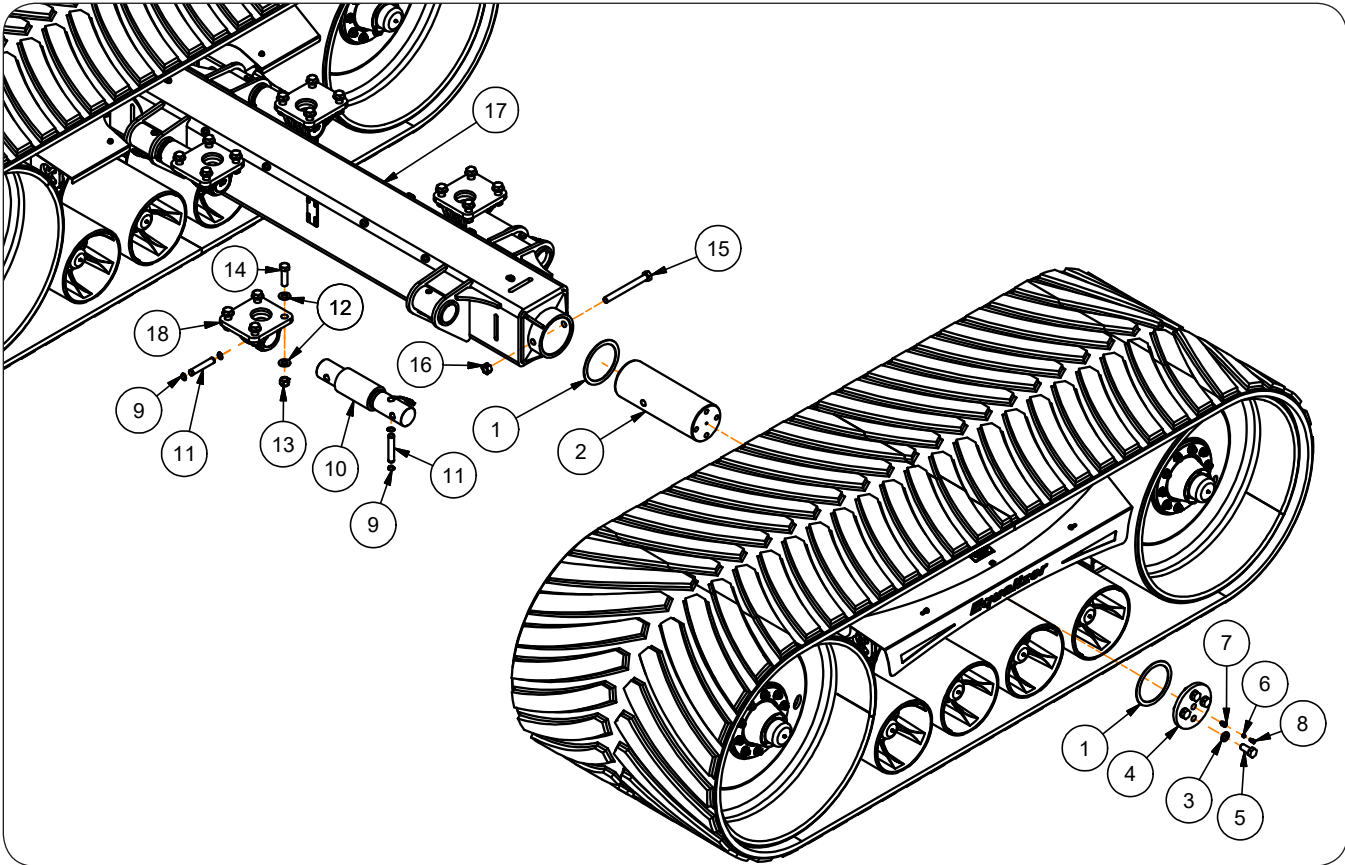
Sideboard Components - For SN B40560099 and Lower

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

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	250461B	Window Bracket =Black=	2	
2	294118B	Front Board Weldment =Black=	1	
3	294119B	Rear Board Weldment =Black=	1	
4	276364B	Front LH Board Weldment =Black=	1	
5	276366B	2nd LH Board Weldment =Black=	1	
6	294336B	3rd LH Board Weldment =Black=	1	
7	294338B	Rear LH Board Weldment =Black=	1	
8	276354B	Front RH Board Weldment =Black=	1	
9	276356B	2nd RH Board Weldment =Black=	1	
10	294345B	3rd RH Board Weldment =Black=	1	
11	294347B	Rear RH Board Weldment =Black=	1	
12	274798B	Sideboard Brace Weldment =Black=	3	
13	276378B	Plate - Side Board Brace =Black=	2	
14	276379B	Plate - Side Board Brace =Black=	2	
15	271952	Window Molding 48 3/4" Lg.	1	
16	9002544	Window	1	
17	9004626	Hinge	16	
18	91256	Screw/Large Flange, 5/16-18 UNC x 3/4	64	Grade 5
19	91257	Hex Nut/Large Flange, 5/16-18 UNC	64	Grade 5
20	91262	Screw/Large Flange, 3/8-16 UNC x 1	46	Grade 5
21	91263	Hex Nut/Large Flange, 3/8-16 UNC	72	Grade 5
22	9390-005	Capscrew 1/4-20 UNC x 1	4	Grade 5
23	9405-064	Flat Washer 1/4 USS	4	
24	95585	Capscrew/Large Flange 3/8-16 UNC x 3/4	14	Grade 5
25	9936	Locknut/Top 1/4-20 UNC	4	Grade 5
26	276397B	Plate - Sideboard Corner	2	
27	276398B	Plate - Sideboard Corner	2	
28	9003259	Flange Screw 3/8"-16UNC x 1 1/4"	12	

Track Axle Mounting Components

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



Track Axle Mounting Components

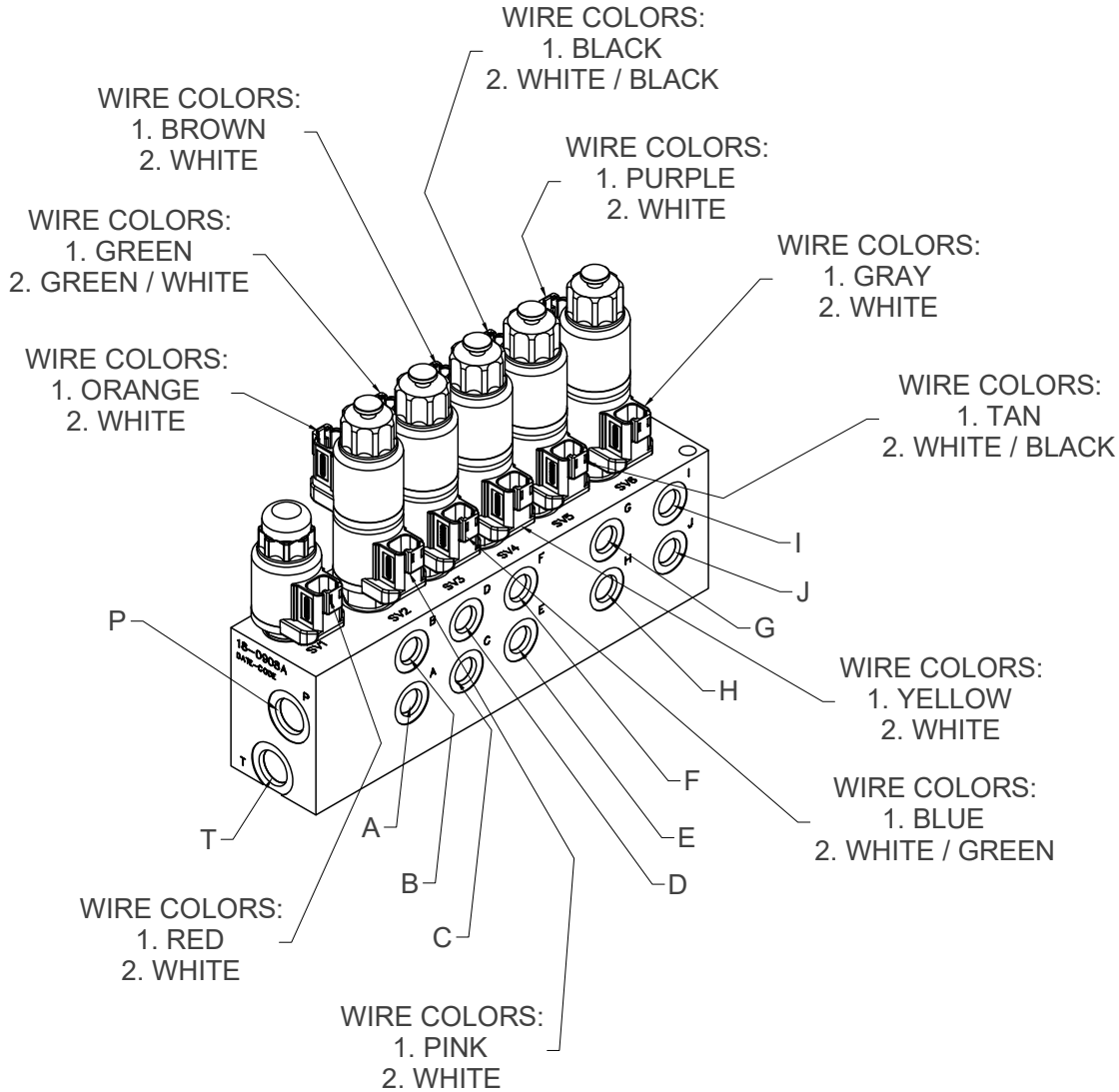
Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	282690	Washer 8 1/2" OD	4	
2	282102	Track Pivot Shaft 7" Dia.	2	
3	9404-041	Lock Washer 1"	8	
4	282689B	Cover Plate	2	
5	9390-184	Capscrew 1"-8UNC x 2 1/4"	8	Grade 5
6	93426	Grease Zerk	2	
7	9006816	Adapter 1/8"NPT	2	
8	9006785	90° Adapter	2	
9	91192	Retaining Ring 1"	16	
10	9008448	Load Bar 3 1/2" Dia. w/ 30 Ft. Cable	4	
11	282876	Pin 1" Dia. x 5 1/2"	8	
12	804685	Hardened Flat Washer 1"	32	
13	9008441	Elastic Lock Nut 1"-14UNS	16	
14	91299-1458	Capscrew 1"-14UNS x 3 1/2"	16	Grade 8
15	9390-464	Capscrew 1"-8UNC x 10"	2	Grade 5
16	92199	Lock Nut 1-8UNC	2	
17	267797B	Axle Weldment =Black=	1	
18	268838B	Axle Mount Casting =Black=	4	

FOR TRACK INFORMATION, PLEASE REFER TO YOUR TRACK MANUAL.

**EOH Valve Functions and Wire Locations 5 Spool (Optional)
For SN B39490100 & Higher**

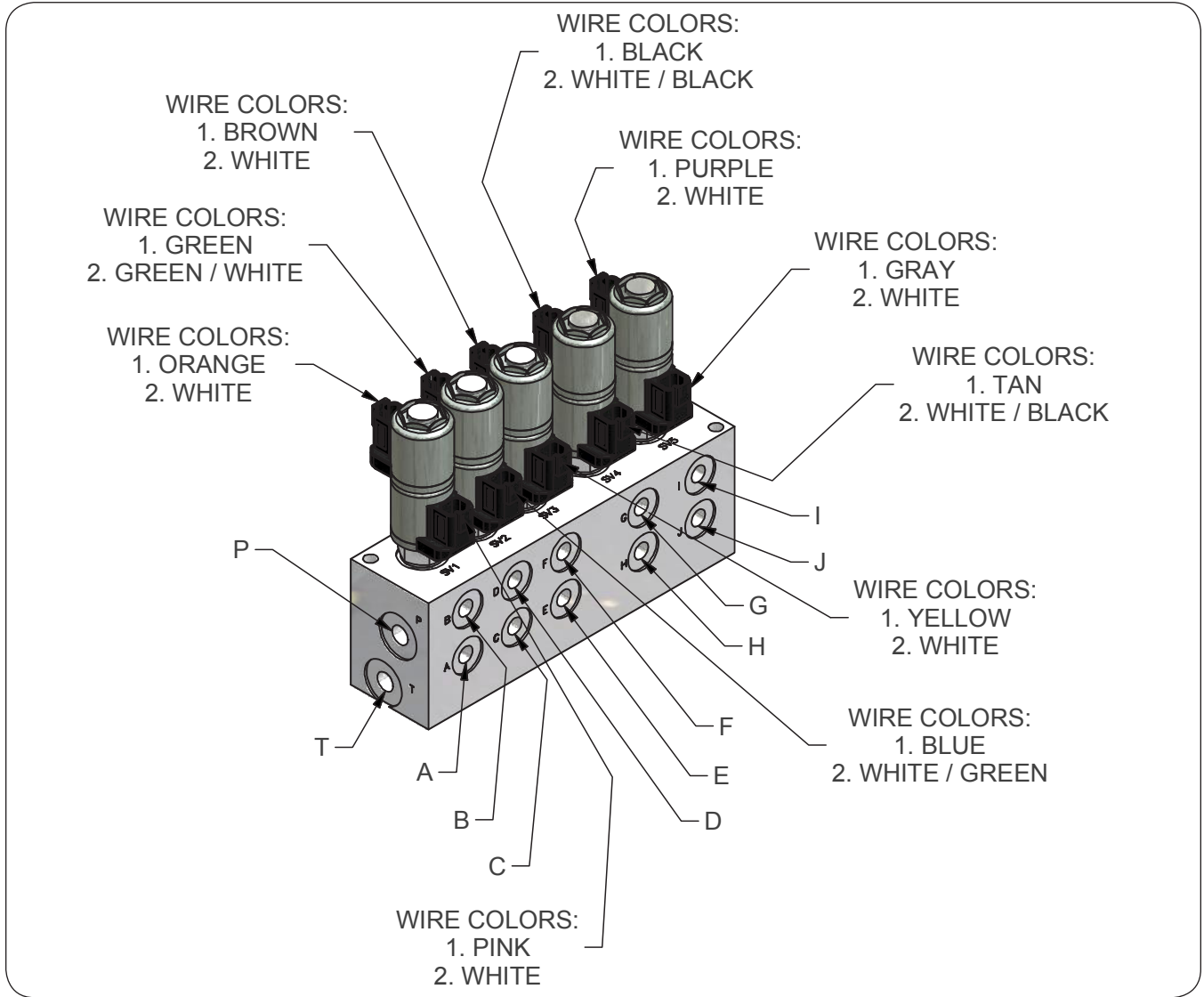
Please visit www.unverferth.com/parts/ for the most current parts listing.



PORT	END OF CYLINDER	FUNCTION
A	BUTT END	Flow Door
B	RAM END	Flow Door
C	RAM END	Auger Fold
D	BUTT END	Auger Fold
E	RAM END	Spout Tilt Out
F	BUTT END	Spout Tilt In
G	RAM END	Spout Rotate Back
H	BUTT END	Spout Rotate Front
I	BUTT END	Auger Tilt Down
J	RAM END	Auger Tilt Up
P		Tractor Pressure
T		Tractor Return

**EOH Valve Functions and Wire Locations 5 Spool (Optional)
For SN B39490099 & Lower**

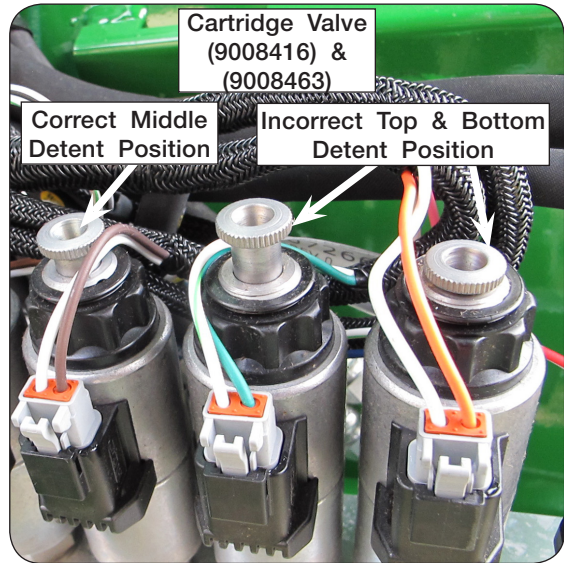
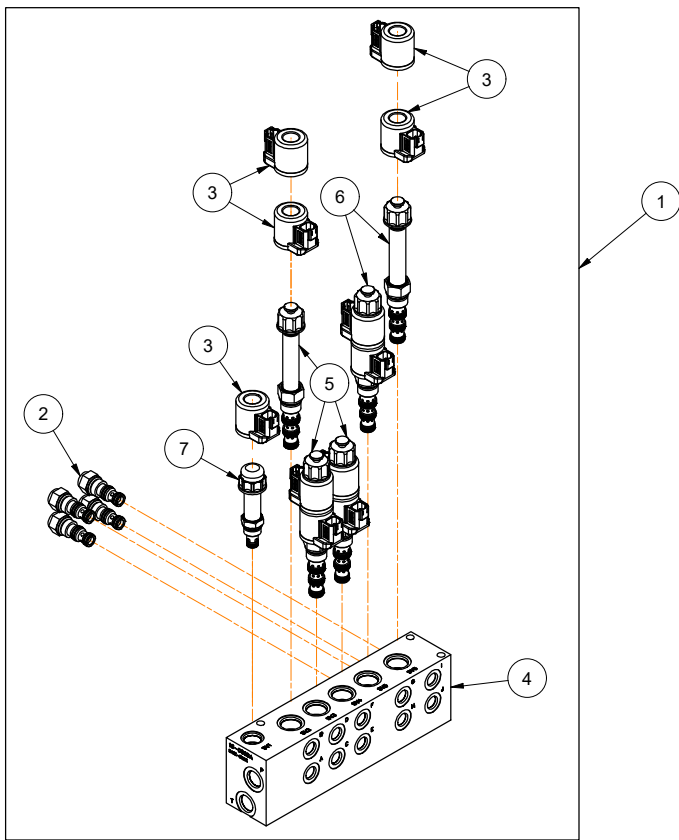
Please visit www.unverferth.com/parts/ for the most current parts listing.



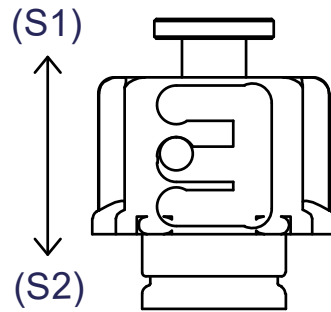
PORT	END OF CYLINDER	FUNCTION
A	BUTT END	Flow Door
B	RAM END	Flow Door
C	RAM END	Auger Fold
D	BUTT END	Auger Fold
E	RAM END	Spout Tilt Out
F	BUTT END	Spout Tilt In
G	RAM END	Spout Rotate Back
H	BUTT END	Spout Rotate Front
I	BUTT END	Auger Tilt Down
J	RAM END	Auger Tilt Up
P		Tractor Pressure
T		Tractor Return

EOH Valve Assembly Components 5 Spool (Optional) For SN B39490100 & Higher

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

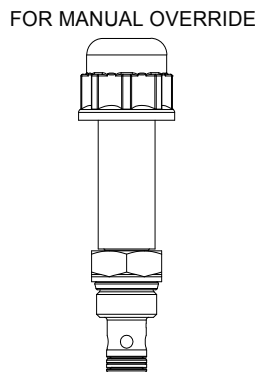


Cartridge Valve
(9008416) & (9008463)
Middle Detent Position



PUSH BUTTON
AND HOLD
WHILE OPERATING
INDIVIDUAL FUNCTIONS

Cartridge Valve
(9008438)



NOTE: Refer to “Manual Override for Optional Electric Over Hydraulic System” in OPERATION section.

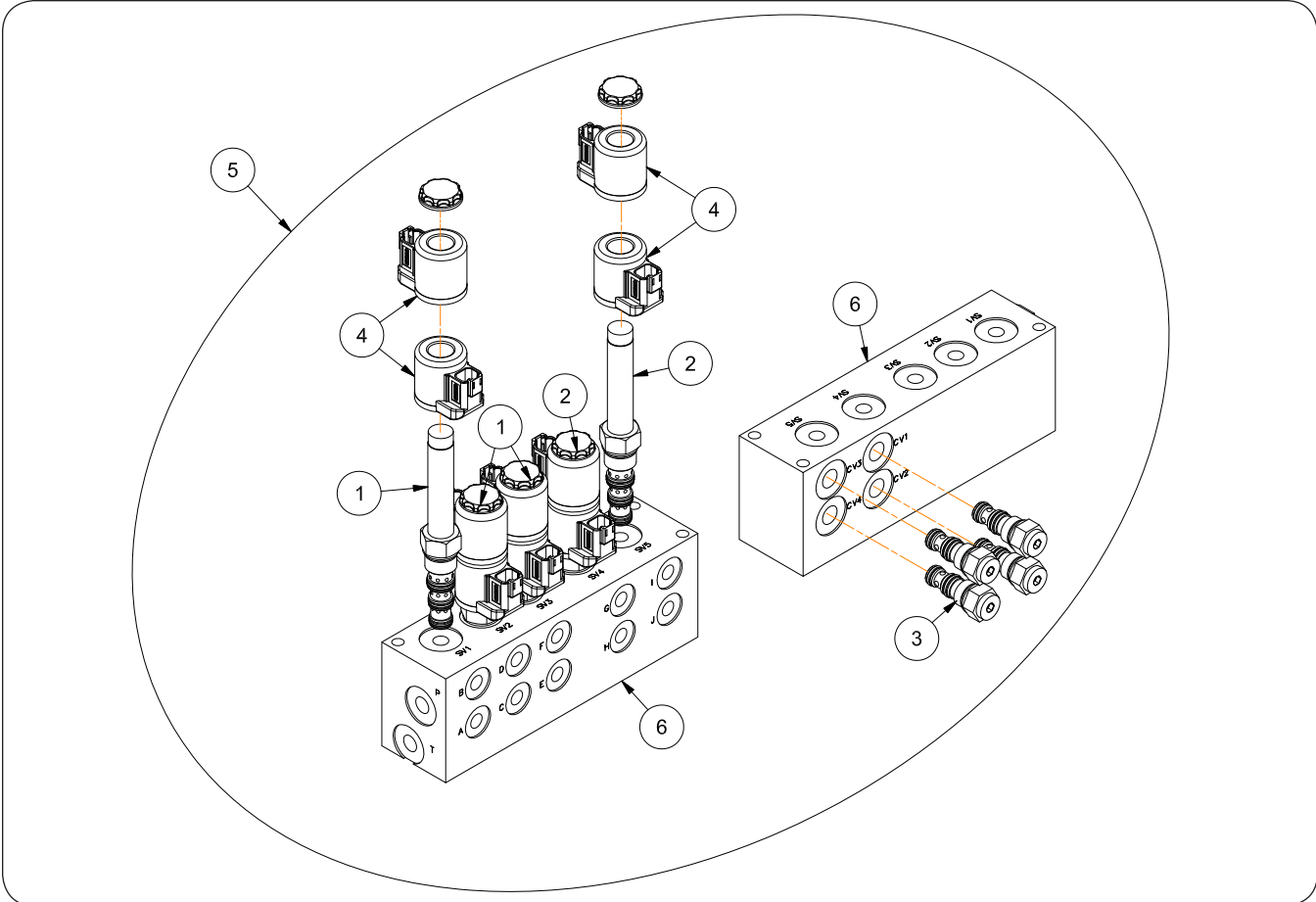
**EOH Valve Assembly Components 5 Spool (Optional)
For SN B39490100 & Higher**

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

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	293416	EOH Block Assembly - 5 Spool Replacement Kit	1	Includes Items 2-7 and Instruction Sheet
2	9003856	Pilot Check Valve	4	
3	9005769	Coil - 12 VDC DN-40	11	
4	9008667	Manifold Block - 5 Spool	1	
5	9008416	Cartridge Valve - 4 Way, 3 Position - Closed Center w/Detented Manual Override	3	Includes Retaining Cap
	9003906	Seal Kit	-	
6	9008463	Cartridge Valve - 4 Way, 3 Position - Open Center w/Detented Manual Override	2	Includes Retaining Cap
	9003906	Seal Kit	-	
7	9008438	Cartridge Valve - 2 Way, 2 Position w/Push Type Manual Override	1	
	9003904	Seal Kit	-	

**EOH Valve Assembly Components 5 Spool (Optional)
For SN B39490099 & Lower**

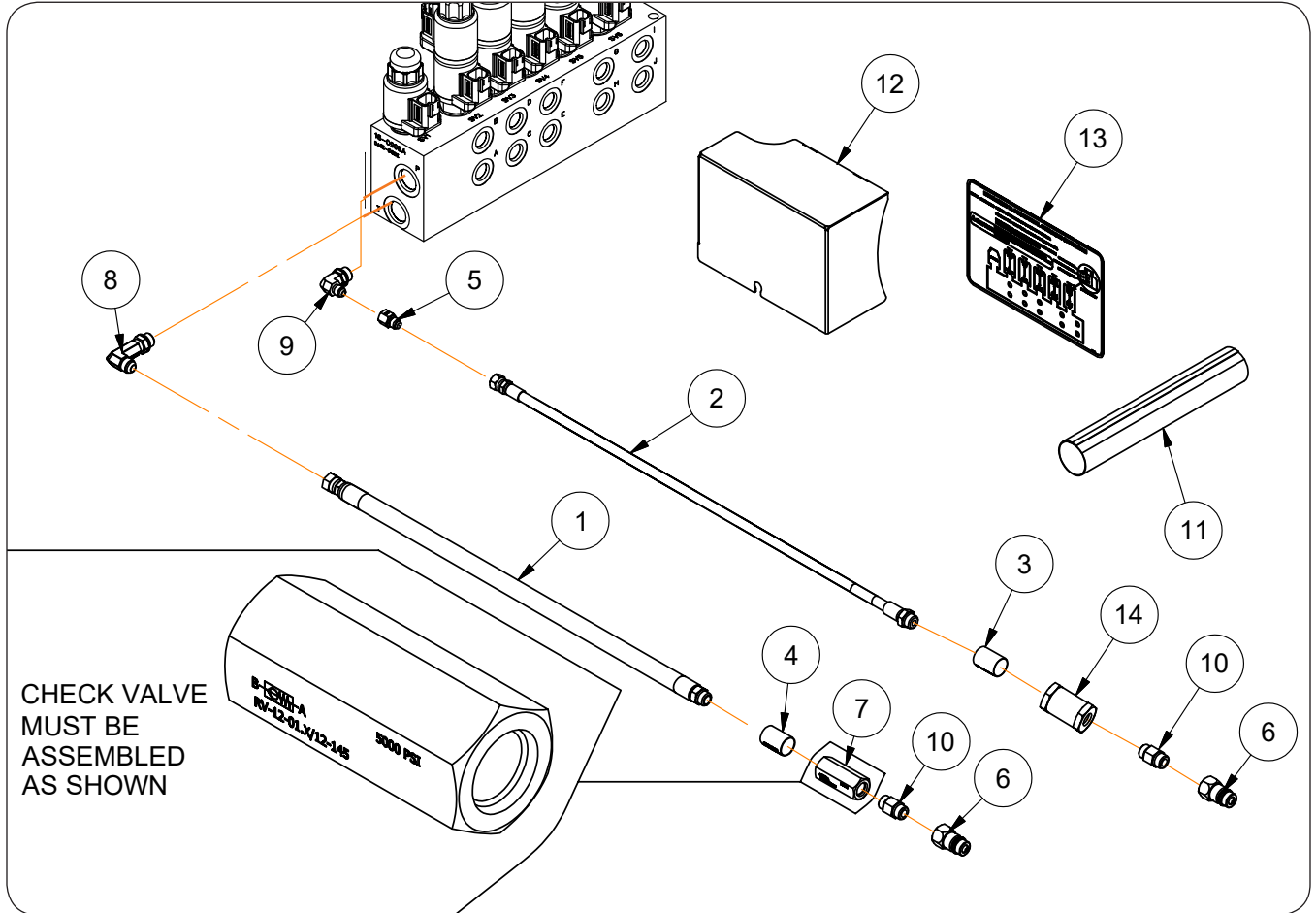
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	9008416	Cartridge Valve - 4 Way, 3 Position - Closed Center	3	Includes Retaining Cap
2	9008463	Cartridge Valve - 4 Way, 3 Position - Open Center	2	Includes Retaining Cap
3	9003856	Pilot Check Valve	4	
4	9005769	Coil - 12 VDC DN-40	10	
5	9005837	5 Spool Hydraulic Block Assembly	1	
6	9005951	Manifold Block - 5 Spool	1	

EOH Tractor Circuit Hydraulic Components (Optional)

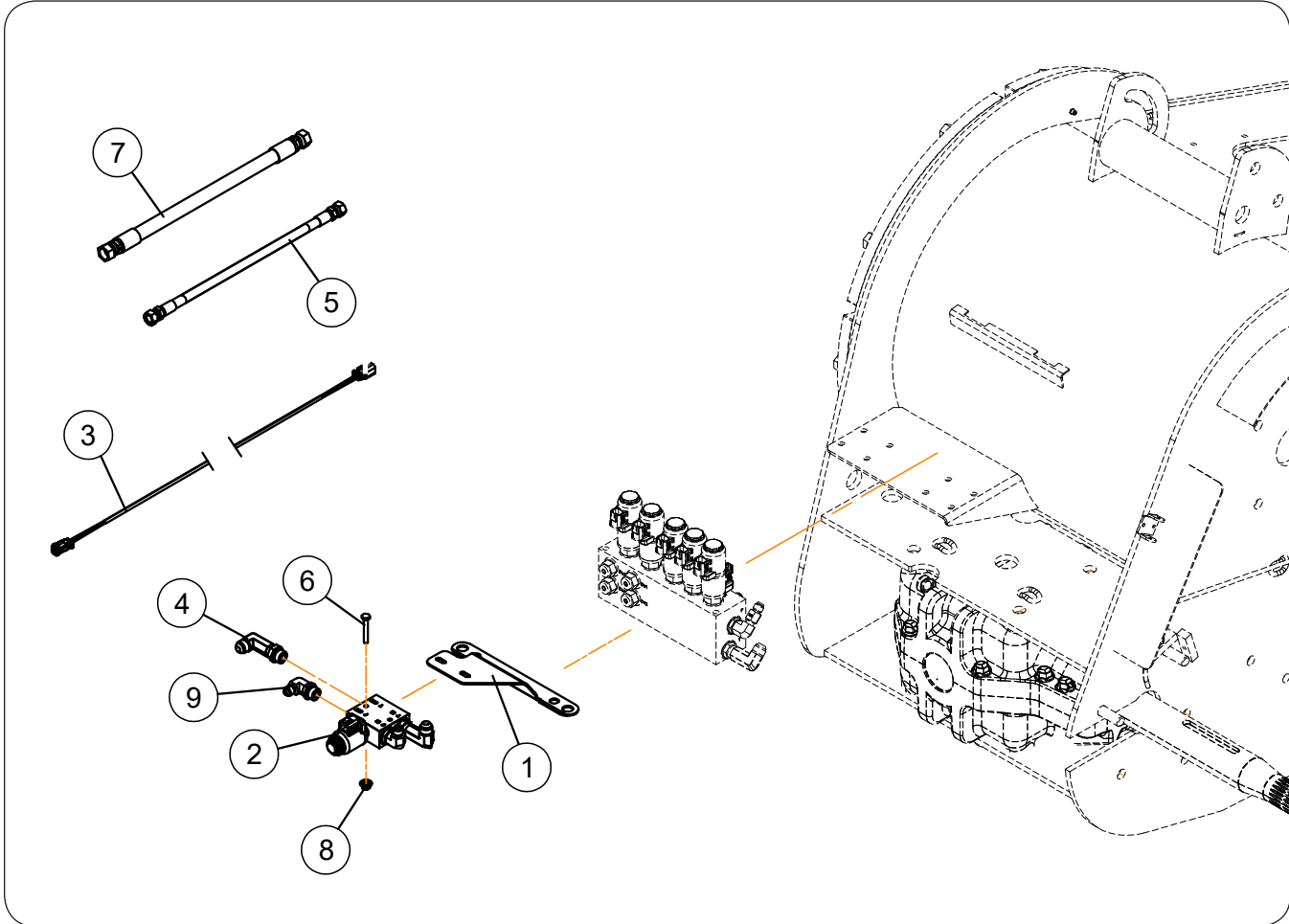
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	95802	Hydraulic Hose, 1/2 x 205" - 3000 PSI	1	
2	9005574	Hydraulic Hose, 1/4 x 208" - 3000 PSI	1	
3	9008601	Hose Grips - Tan (Pair) - Hydraulic Pressure	1	Solid Tan - Cylinder Extended (For SN B40240100 & Higher)
	9005982	Hydraulic Pressure Hose Marker		(For SN B40240099 & Lower)
4	9008601	Hose Grips - Tan (Pair) - Hydraulic Return	1	Half Tan/Half Gray - Cylinder Retracted (For SN B40240100 & Higher)
	9005983	Hydraulic Return Hose Marker		(For SN B40240099 & Lower)
5	9006527	JIC Tube Reducer, 9/16-18 UNF Male x 9/16-18 UNF Female	1	
6	91383	Male Tip Coupling, 3/4-16	2	
7	9006994	Check Line Valve 145 PSI	1	
8	901568	90° Elbow 3/4-16 JIC Male x 3/4-16 O-Ring ADJ Male	1	
9	9874	90° Elbow 9/16-18 JIC Male x 3/4-16 O-Ring ADJ Male	1	
10	98508	Adapter 3/4-16 O-Ring Male x 3/4-16 O-Ring Male	2	
11	9003848	Velcro Hose Wrap, 2" I.D. x 127" Lg.	1	
12	272606B	Valve Cover Plate	1	Also Order Item #13
13	9008564	Decal, CAUTION (Valve Block)	1	Add To Inside Cover Plate #12
14	9005403	120 Micron Hydraulic Filter	1	

Open Center Components Included with EOH Option

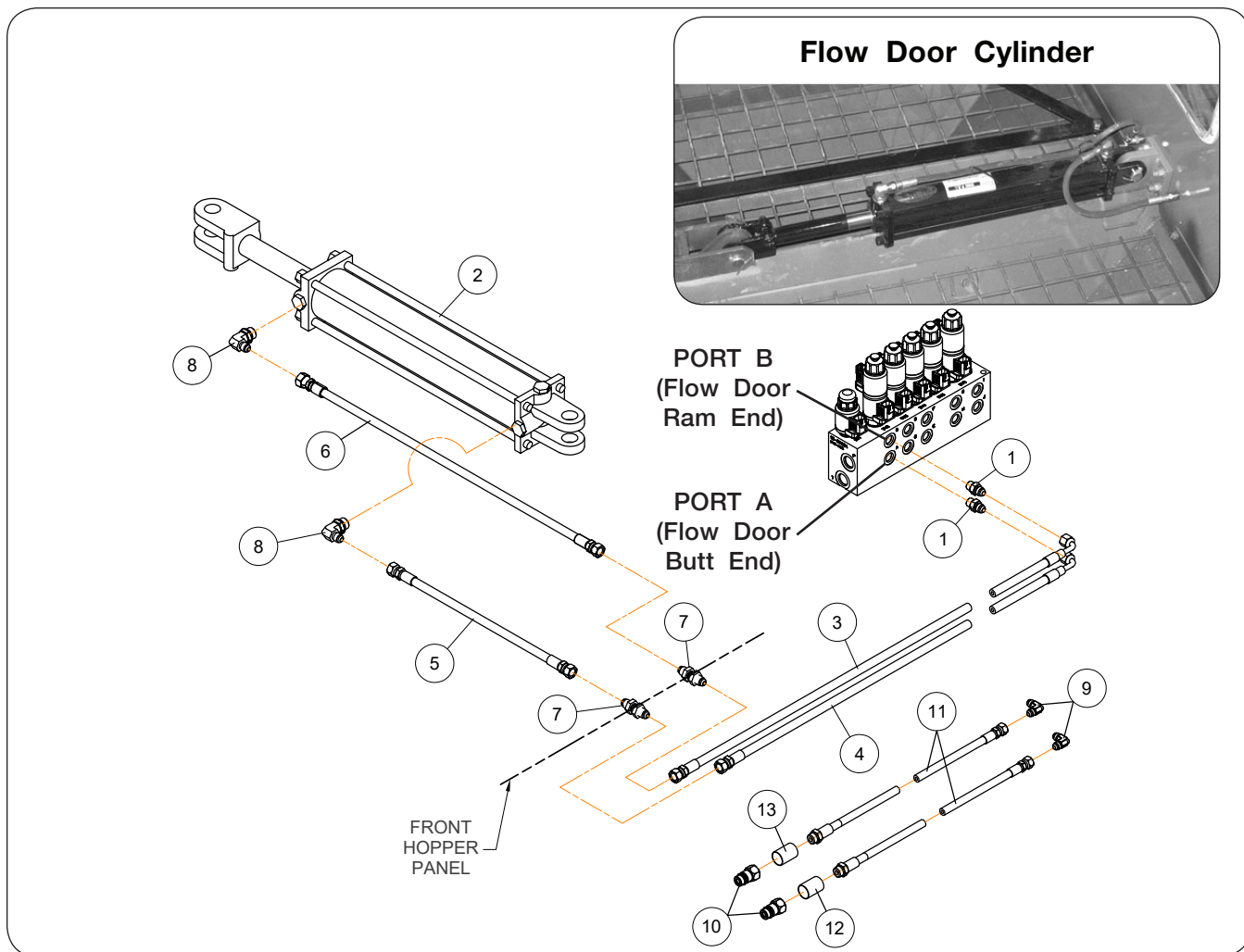
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	286532B	Valve Bracket Plate =Black=	1	For SN B39490099 & Lower
2	9007238	Open Center Manifold Assembly	1	For SN B39490099 & Lower
3	9007266	Wire Harness, 218 5/16" (2 Pin Diverter)	1	
4	901568	Elbow, 90° 3/4-16 JIC x 3/4-16 Male OR Boss Extra Long	2	For SN B39490099 & Lower
5	93472	Hydraulic Hose, 1/4 x 16 - 3000 PSI	1	For SN B39490099 & Lower
6	9390-008	Capscrew, 1/4-20UNC x 1 3/4 Gr.5	2	For SN B39490099 & Lower
7	94752	Hydraulic Hose, 1/2 x 16 3/4	1	For SN B39490099 & Lower
8	97189	Large Flange Hex Nut, 1/4-20UNC	2	For SN B39490099 & Lower
9	9874	Elbow, 90° 9/16-18 JIC Male x 3/4-16 OR ADJ Male	2	For SN B39490099 & Lower

Flow Door Circuit Hydraulic Components

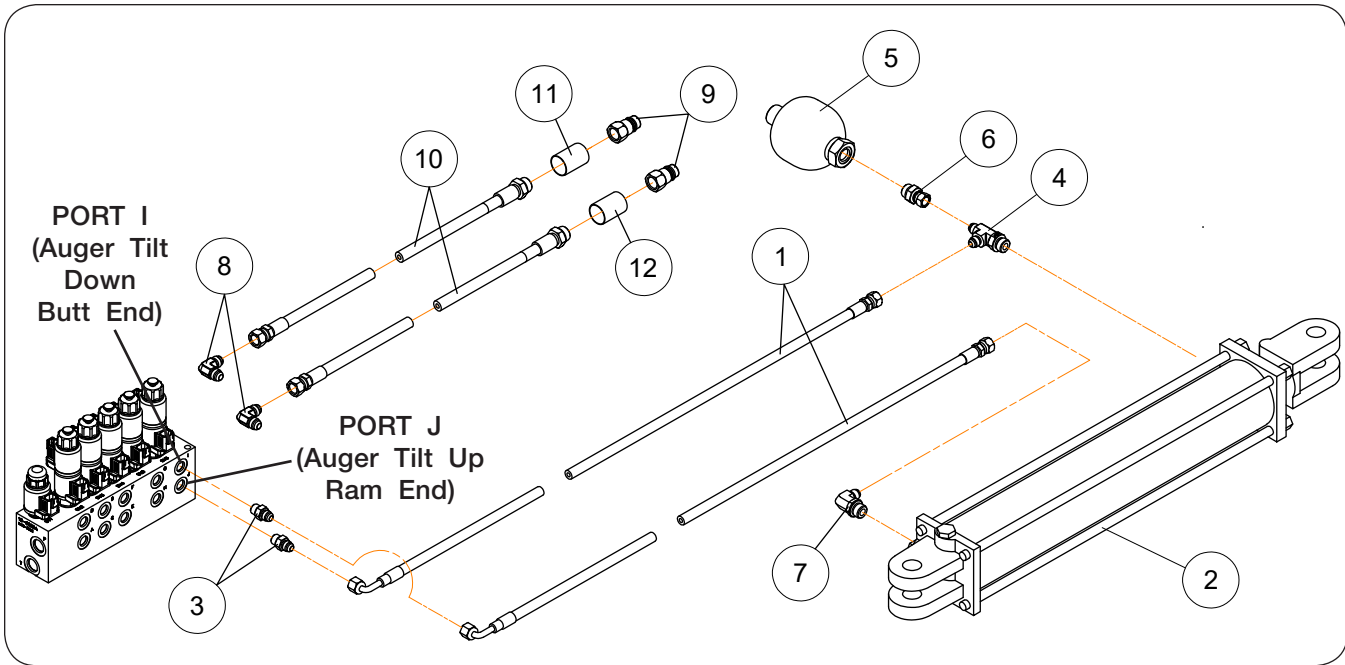
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	9001495	Adapter, 9/16-18 JIC Male x 9/16-18 OR Male	2	Optional
2	9002575	Hydraulic Cylinder, 3 x 16" - 3000 PSI	1	
3	9004442	Hydraulic Hose, 1/4 x 54" - 3000 PSI	1	
4	9006607	Hydraulic Hose, 1/4 x 50" - 3000 PSI	1	
5	93472	Hydraulic Hose, 1/4 x 16" - 3000 PSI	1	
6	9002888	Hydraulic Hose, 1/4 x 27" - 3000 PSI	1	
7	95192	Bulkhead Union, 9/16-18 JIC Male x 9/16-18 JIC Male	2	
8	9874	Elbow, 90° 9/16-18 JIC Male x 3/4-16 OR ADJ Male	2	
9	9897	Elbow, 90° 9/16-18 JIC Male x 9/16-18 JIC Male	2	
10	91383	Male Tip Coupling, 3/4-16	2	
11	9005574	Hydraulic Hose, 1/4 x 208" - 3000 PSI	2	
12	9008596	Hose Grips - Red (Pair) - Flow Door Open	1	Solid Red - Cylinder Extended (For SN B40240100 & Higher)
	9003995	Hose Marker Sleeve - Flow Door Open		(For SN B40240099 & Lower)
13	9008596	Hose Grips - Red (Pair) - Flow Door Close	1	Half Red/Half Gray - Cylinder Retracted (For SN B40240100 & Higher)
	9003996	Hose Marker Sleeve - Flow Door Close		(For SN B40240099 & Lower)

Auger Tilt Hydraulic Components

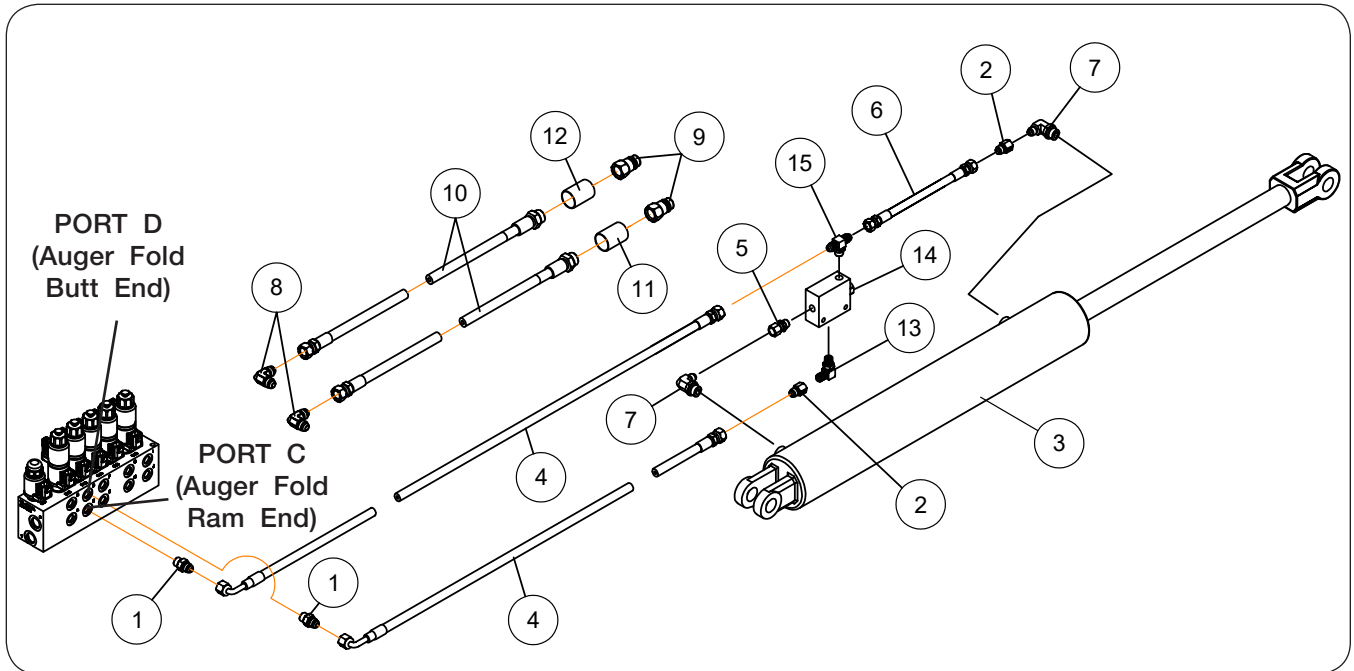
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	9000925	Hydraulic Hose, 1/4 x 78" - 3000 PSI	2	
2	9008456	Hydraulic Cylinder, 3 1/2 x 16 - 3000 PSI	1	
3	9001495	Adapter, 9/16-18 JIC Male x 9/16-18 OR Male	2	Optional
4	9002155	Tee, 9/16-18 JIC Male x 3/4-16 OR ADJ Male	1	
5	9002719	Accumulator - 1800 PSI	1	
6	9002720	Adapter, 3/4-16 OR Male x 9/16-18 JIC Female	1	
7	9874	Elbow, 90° 9/16-18 JIC Male x 3/4-16 OR ADJ Male	1	
8	9897	Elbow, 90° 9/16-18 JIC Male x 9/16-18 JIC Male	2	
9	91383	Male Tip Coupling, 3/4-16	2	
10	9005574	Hydraulic Hose, 1/4 x 208" - 3000 PSI	2	
11	9008599	Hose Grips - Blue (Pair) - Auger Pivot Up	1	Solid Blue - Cylinder Extended (For SN B40240100 & Higher)
	9004001	Hose Marker Sleeve - Auger Pivot Up		(For SN B40240099 & Lower)
12	9008599	Hose Grips - Blue (Pair) - Auger Pivot Down	1	Half Blue/Half Gray - Cylinder Retracted (For SN B40240100 & Higher)
	9004002	Hose Marker Sleeve - Auger Pivot Down		(For SN B40240099 & Lower)

Auger Fold Hydraulic Components

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

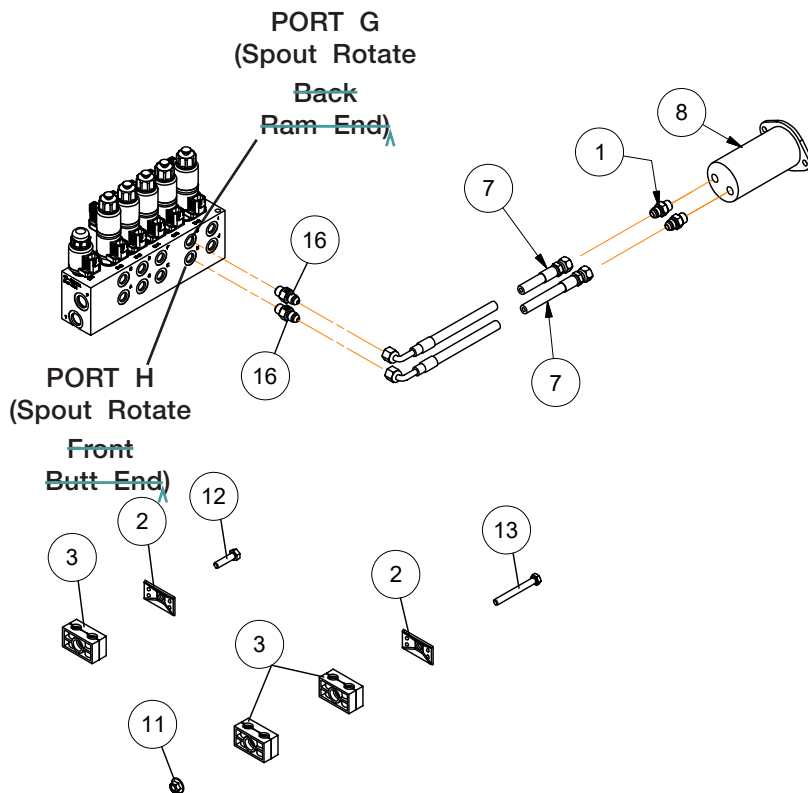


ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	9001495	Adapter, 9/16"-18 JIC Male x 9/16"-18 OR Male	9	Optional
2	9002199	Reducer, 9/16"-18 JIC Female x 9/16"-18 JIC Male	2	
3	9007639	Hydraulic Cylinder, 3 1/2" x 20" - 3000 PSI	1	
	9006942	Seal Kit	-	
4	9005864	Hydraulic Hose, 1/4" x 66" - 3000 PSI	2	
5	9002446	Adapter, 9/16"-18 Male O-Ring x 9/16"-18 JIC Female	1	
6	93472	Hydraulic Hose, 1/4" x 16" - 3000 PSI	1	
7	9874	Elbow, 90° 9/16"-18 JIC Male x 3/4"-16 OR ADJ Male	2	
8	9897	Elbow, 90° 9/16"-18 JIC Male x 9/16"-18 JIC Male	2	
9	91383	Male Tip Coupling, 3/4"-16	2	
10	9005574	Hydraulic Hose, 1/4" x 208" - 3000 PSI	2	
11	9008597	Hose Grips - Green (Pair) - Auger Raise	1	Solid Green - Cylinder Extended (For SN B40240100 & Higher)
	9003997	Hose Marker Sleeve - Auger Raise		(For SN B40240099 & Lower)
12	9008597	Hose Grips - Green (Pair) - Auger Lower	1	Half Green/Half Gray - Cylinder Retracted (For SN B40240100 & Higher)
	9003998	Hose Marker Sleeve - Auger Lower		(For SN B40240099 & Lower)
13	97445	Elbow, 90° 9/16"-18 JIC Male x 9/16"-18 O-Ring ADJ Male	1	
14	9003990	Pilot Operated Check Valve with 3 Ports	1	
15	9001710	Tee 9/16"-18 JIC Male x 9/16"-18 JIC Male x 9/16"-18 O-Ring Male	1	

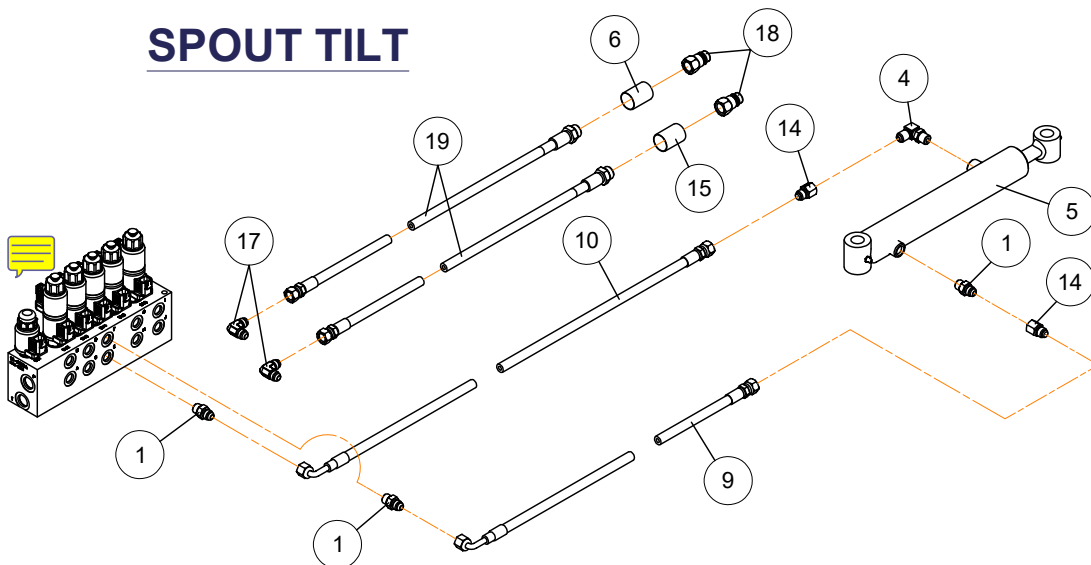
EOH Spout Rotate & Tilt Hydraulic Components (Optional)

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

OPTIONAL SPOUT ROTATE



SPOUT TILT



EOH Spout Rotate & Tilt Hydraulic Components (Optional)

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

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	9001495	Adapter, 9/16-18 JIC Male x 9/16-18 OR Male	5	
2	9003814	Clamp Top Plate, 1/4 x 1 1/8 x 2 1/16	4	
3	9003816	Clamp, Polypropylene	4	
4	97445	Elbow, 90° 9/16-18 JIC Male x 9/16-18 O-Ring ADJ Male	1	
5	9005135	Hydraulic Cylinder, 1 1/2 x 8 - 3000 PSI	1	
6	9008598	Hose Grips - Yellow (Pair) - Spout Out	1	Solid Yellow - Cylinder Extended (For SN B40240100 & Higher)
	9003999	Hose Marker Sleeve - Spout Out		(For SN B40240099 & Lower)
7	9003347	Hydraulic Hose, 1/4 x 224" - 3000 PSI	2	
8	9007626	Hydraulic Motor	1	
9	9006694	Hydraulic Hose, 1/4 x 314" - 3000 PSI	1	
10	9006695	Hydraulic Hose, 1/4 x 324 1/2" - 3000 PSI	1	
11	91257	Large Flange Hex Nut, 5/16-18UNC Grade 5	2	
12	9390-031	Capscrew, 5/16"-18UNC x 1 1/4" G5	2	
13	9390-034	Capscrew, 5/16"-18UNC x 2" G5	2	
14	95193	Adapter, 9/16-18 JIC Female x 9/16-18 JIC Male	2	
15	9008598	Hose Grips - Yellow (Pair) - Spout In	1	Half Yellow/Half Gray - Cylinder Retracted (For SN B40240100 & Higher)
	9004000	Hose Marker Sleeve - Spout In		(For SN B40240099 & Lower)
16	98435	Adapter, 9/16-18 JIC Male x 9/16-18 O-Ring Male	2	
17	9897	Elbow, 90° 9/16-18 JIC Male x 9/16-18 JIC Male	2	
18	91383	Male Tip Coupling, 3/4-16	2	
19	9005574	Hydraulic Hose, 1/4 x 208" - 3000 PSI	2	

Cylinders

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

Auger Flow Door Cylinder

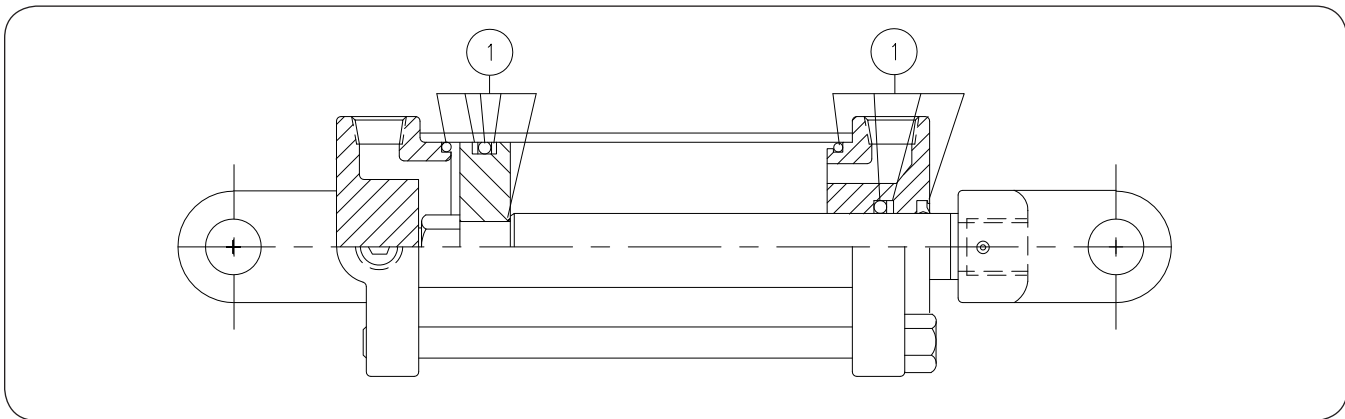
ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	9002575	Cylinder 3 x 16	1	3/4-16 O-Ring Ports (3000 PSI)
1	9003772	Seal Kit	1	

Auger Fold Cylinder

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	9007639	Cylinder 3 1/2 x 20	1	3/4-16 O-Ring Ports (3000 PSI)
1	9006942	Seal Kit	1	

Auger Tilt Cylinder

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	9008456	Cylinder 3 1/2 x 16	1	3/4-16 O-Ring Ports (3000 PSI)
1	95393	Seal Kit	1	



Cylinders

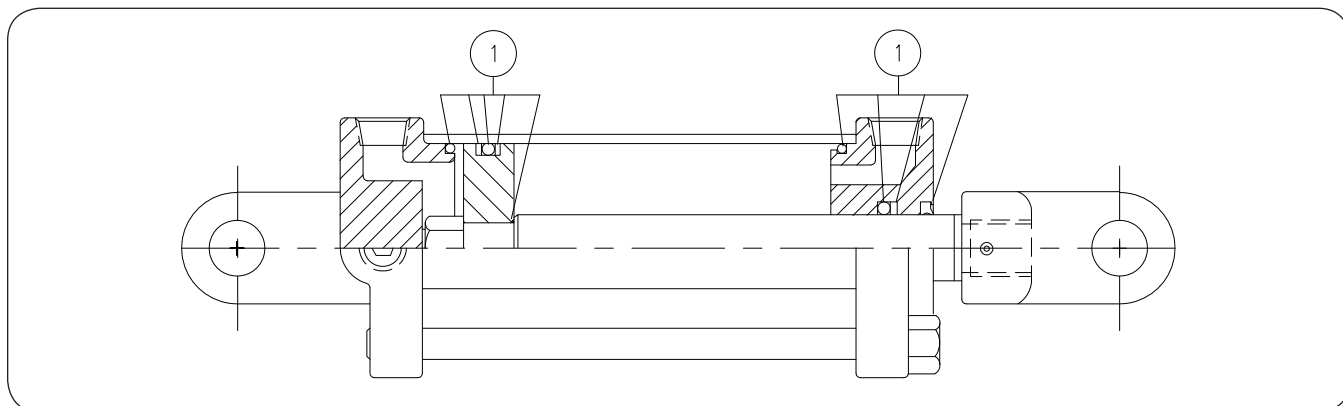
Please visit www.unverferth.com/parts/ for the most current parts listing.

Auger Spout Tilt Cylinder

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	9005135	Cylinder 1 1/2 x 8	1	#6 9/16-18 O-Ring Ports (3000 PSI)
1	9005419	Seal Kit	1	

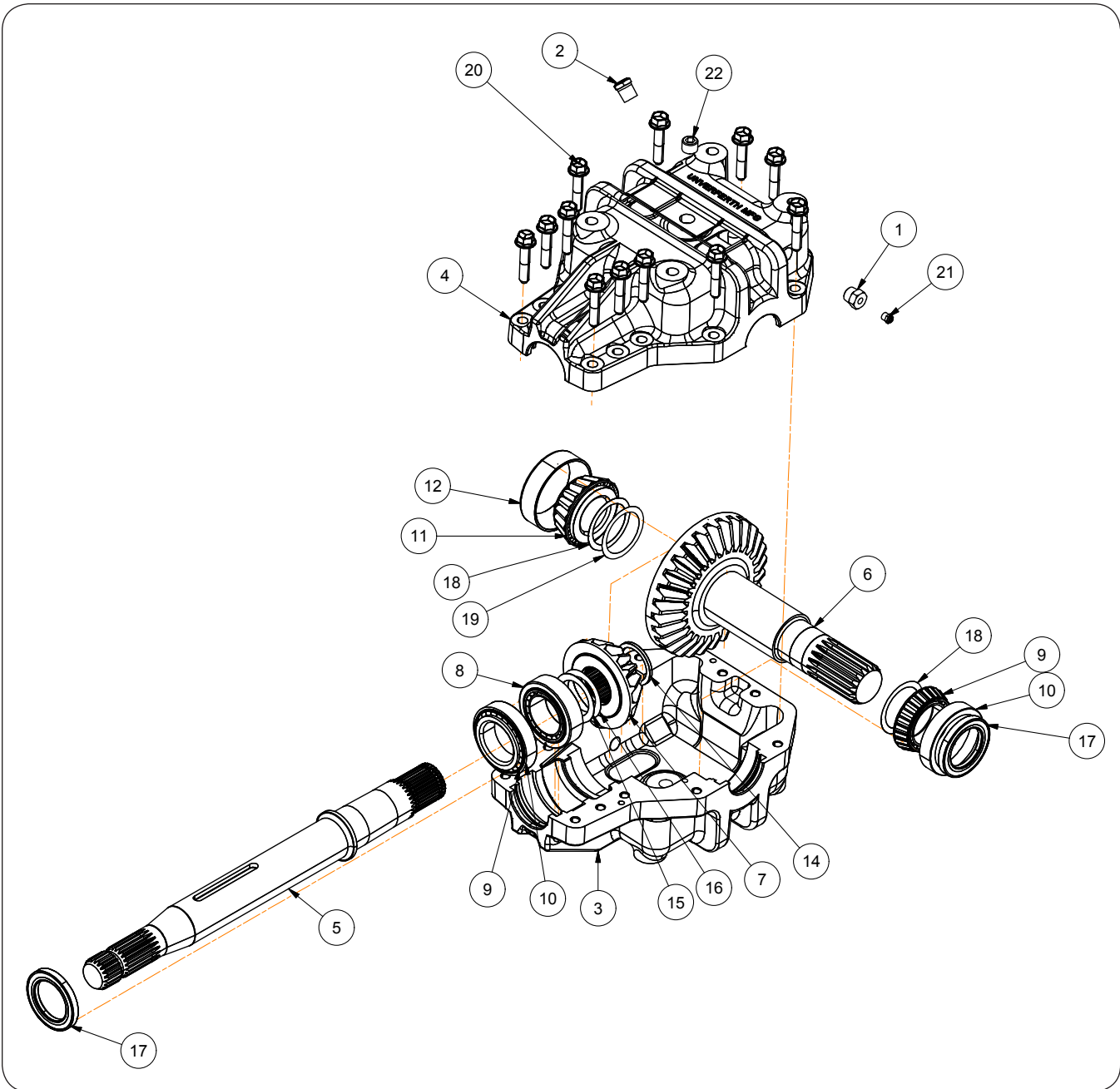
Optional Jack Cylinder - 3 1/2" x 8"

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	9009047	Cylinder, Complete	1	
1	9007880	Seal Kit	1	



Gearbox Components

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



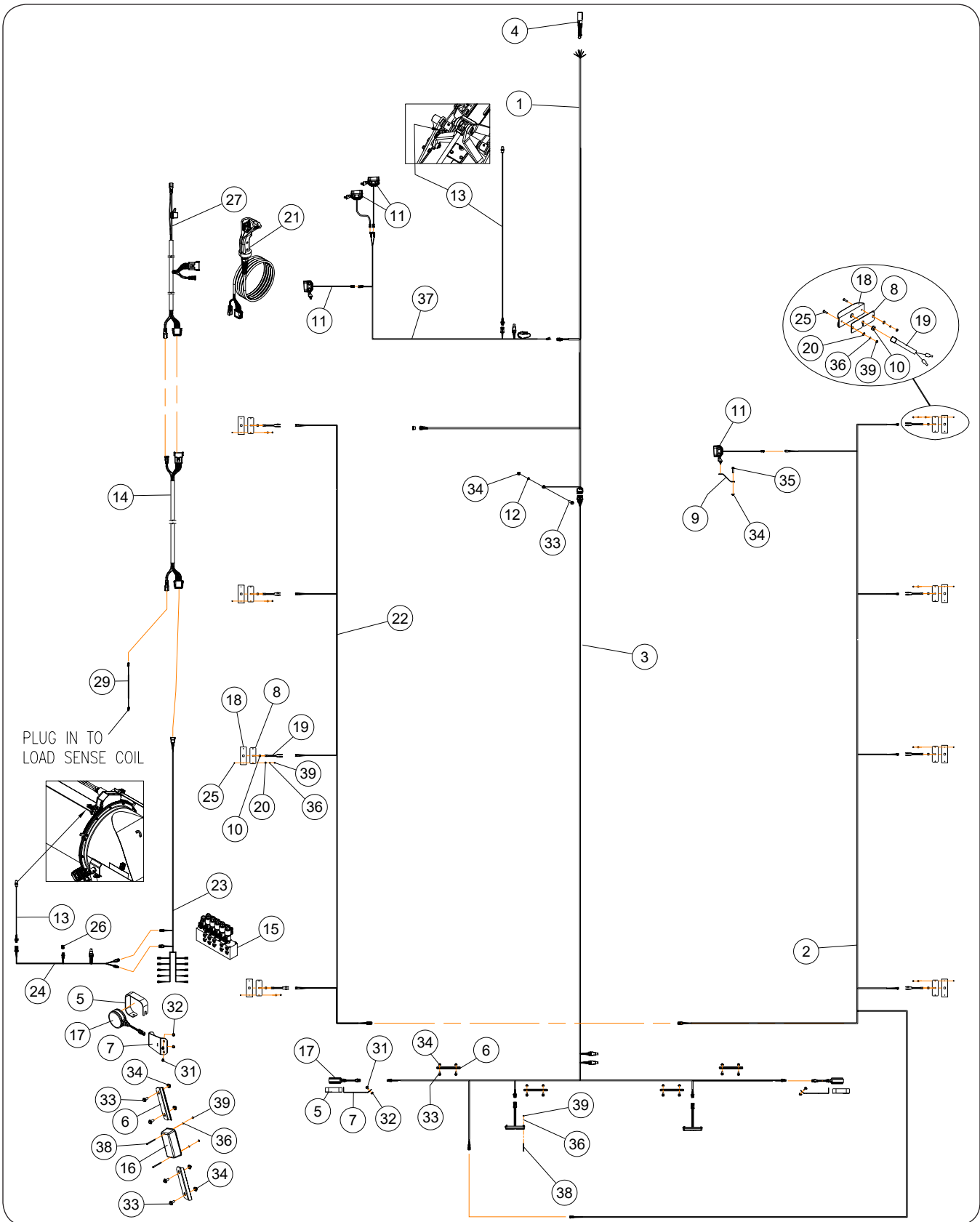
Gearbox Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	9007366	Gearbox Complete	1	Includes Items 1 through 22
1	9003453	Reducer Bushing, 1/2-14 NPTF M x 1/8-27 NPTF F	1	
2	9006381	Glass Sight Plug	1	
3	9007492	Gearbox Housing Q800 w/Taped Holes	1	
4	9007493	Gearbox Housing Q800 w/Through Holes	1	
5	9007494	Gearbox Shaft 2 1/4" Dia.	1	
6	9007495	Gear Shaft Assembly 29 Tooth, 2 1/4-17 Spline	1	
7	9007496	Gear 16 Tooth Splined	1	
8	9007497	Bearing Cup & Cone Set, 3.740 OD x 1 1/4	1	
9	9007498	Bearing Cone 2 1/4 ID x 1	2	
10	9007499	Bearing Cup 3.8437 OD x 0.7812	2	
11	9007500	Bearing Cone 2 ID x 1.5312	1	
12	9007501	Bearing Cup 4.125 OD	1	
13	9007502	End Cap	1	
14	9007503	Retaining Ring - External 2" Nominal Shaft Dia.	1	
15	9007504	Shim - 0.025	1	
16	9007505	Shim - 0.030	1	
17	9007508	Shaft Seal	2	
18	9007511	Shim - 0.005	2	
19	9007512	Shim - 0.003	1	
20	903161-060	Flange Screw 1/2-13UNC x 2 1/2	12	
21	92352	Pressure Relief	1	
22	95283	Plug	3	

Electrical Components - 5 Function Control Grip

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



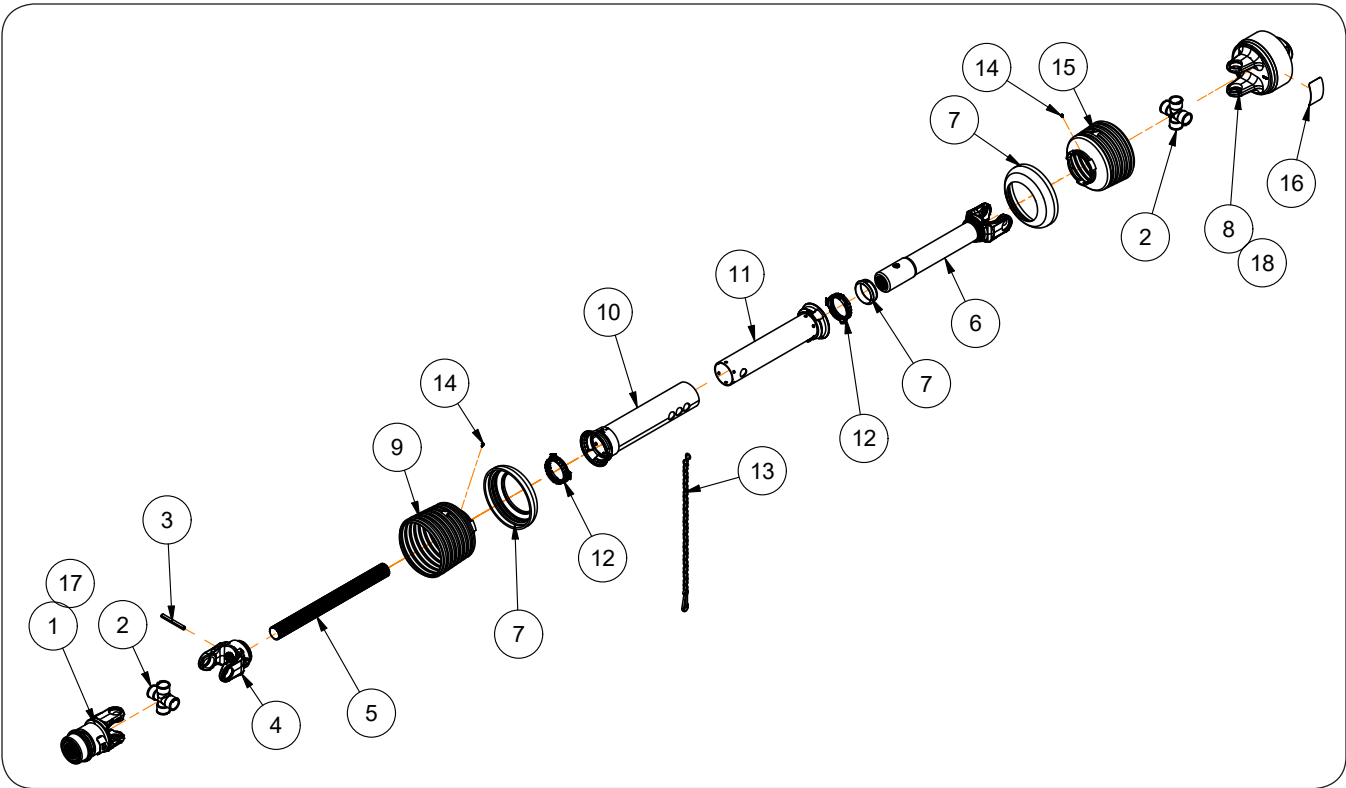
Electrical Components - 5 Function Control Grip

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	9008106	Front Harness - 260"	1	
2	9009032	Clearance Harness	1	For SN B40560100 & Higher
	9008177			For SN B40560099 & Lower
3	9008176	Rear Harness	1	
4	92450	7-Way Plug	1	
5	268678B	Light Guard Plate =Black=	2	
6	273371G	Harness Cover =Green=	4	
	273371R	Harness Cover =Red=		
7	273894B	Light Bracket =Black=	2	
8	273531B	Light Cover =Black=	8	
9	271574B	Lamp Mount Plate =Black=	1	
10	9001005	Rubber Grommet	9	
11	9008957	Work Flood Lamp (LED)	4	For SN B40560100 & Higher
	9007186		3	For SN B40560099 & Lower
12	9005688	External Tooth Lock Washer	1	
13	9007223	Proximity Switch	2	
14	9008252	Joystick Controller Extension Harness	1	
15	293416	EOH Block Assembly - 5 Spool Replacement Kit	1	
16	9006345	LED Lamp - Red	2	Includes Lamp, & Items 36, 38, & 39
	232169	LED Lamp - Red - Replacement Kit		
17	9005142	LED Lamp - Amber	2	
18	9005529	Amber Light	8	
19	9005542	Light Harness - 2 Wire	8	
20	9405-052	Flat Washer, 3/16	16	
21	9008265	L-Series Control Grip - 5 Function	1	
22	9008178	Clearance Harness	1	
23	9007290	"T" Main Wiring Harness - 189"	1	
24	9007286	Wiring Harness - 205" EOH for Proximity Switch	1	
25	903172-346	Pan Head Phillips Screw, #10-32UNF x 3/4"	16	
26	252386	Plug Assembly, 2 Pin Shroud	1	
27	9008251	Harness - Joystick Power	1	
29	9007266	Wire Harness, 218 5/16" (2 Pin Diverter)	1	
31	91256	Large Flange Screw 5/16"-18UNC x 3/4"	4	
32	91257	Flange Nut 5/16"-18UNC	4	
33	91262	Flange Screw 3/8"-16UNC x 1" G5	9	
34	91263	Large Flange Nut, 3/8-16UNC	10	Grade 5
35	95785	Flange Screw 3/8"-16UNC x 1 1/2"	1	
36	9404-013	Lock Washer, #10	20	
37	9008956	Switch Harness	1	For SN B40560100 & Higher
	9008107			For SN B40560099 & Lower
38	903172-350	Pan Head Phillips Screw, #10-32UNF x 1 1/4"	4	
39	9830-016	Hex Nut, #10-32	20	Grade 2

Cut Out Clutch PTO Assembly

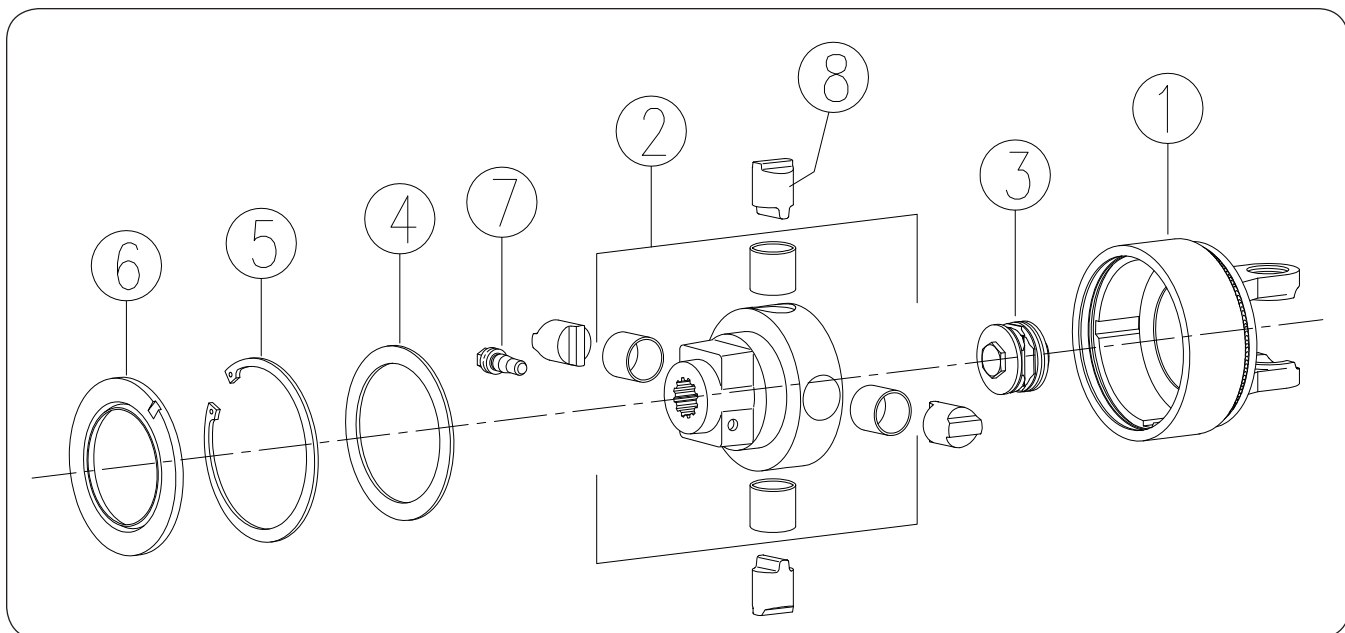
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	9008417	PTO Assembly Complete	-	Includes Items 1-18
		PTO Front Half Assembly 1 3/4-20 Spline	1	
		PTO Rear Half Assembly 1 3/4-20 Spline	1	
1	9005234	Over-Running PTO Clutch Assembly	1	
2	92529	Cross & Bearing Kit	2	
3	9002609	Spring Pin 10x90	2	
4	9008478	Inboard Yoke S4	1	
5	9008479	Inner Profile	1	
6	9008482	Inboard Yoke, Tube, & Sleeve	1	
7	9002513	Reinforcing Collar	1	
8	9005235	Cut Out Clutch (3200 N-m Setting)	1	1 3/4-20 Spline 1000RPM
9	9008481	Shield Cone 8 Rib	1	
10	9008480	Outer Shield Tube Oval	1	
11	9008483	Inner Shield Tube Oval	1	
12	92373	Bearing Ring	2	
13	92374	Safety Chain	1	
14	92372	Screw	2	
15	93866	Shield Cone 6 Rib	1	
16	9005233	Decal K64	1	"Tighten to 75 Ft.-Lbs."
17	93856	Quick-Disconnect Kit	1	1 3/4-20 Spline w/Metal Collar
18	9005253	Cut Out Clutch Lock Assembly	1	

Cut Out Clutch Components

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

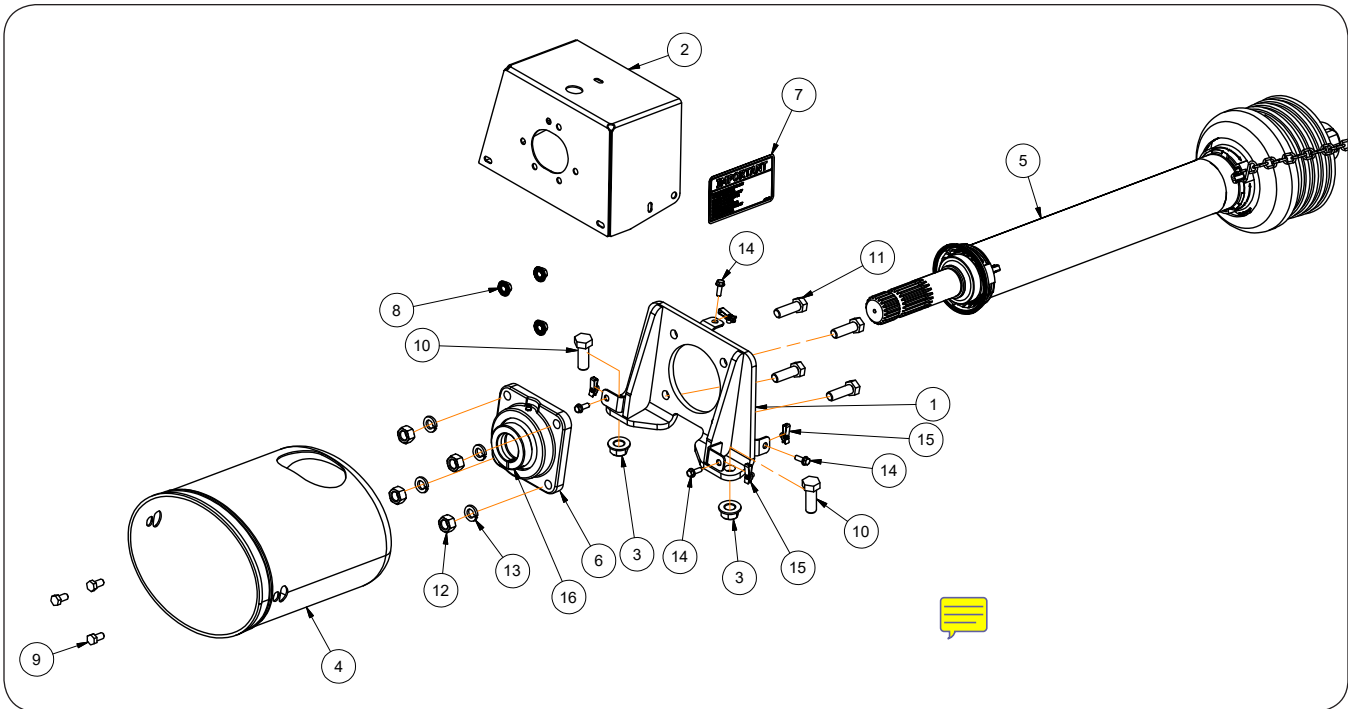


NOTE: Cut Out Clutch (9005235) must be used with the Complete PTO Assembly (9008417). This will not work with the Standard PTO Assembly (9005245).

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	9005235	Cut Out Clutch (3500 N*m Setting)	-	Includes Items 1-8
1	9005247	Clutch Housing	1	
2	9005248	Clutch Hub 1 3/4-20 Spline	1	
3	9005249	Spring Pack	1	
4	9005250	Washer	1	
5	9005251	Retaining Ring	1	
6	9005252	Sealing Ring	1	
7	9005253	Clutch Clamp Cone Assembly	1	
8	9005254	Clutch Cam	4	

PTO & Bracket Assembly

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



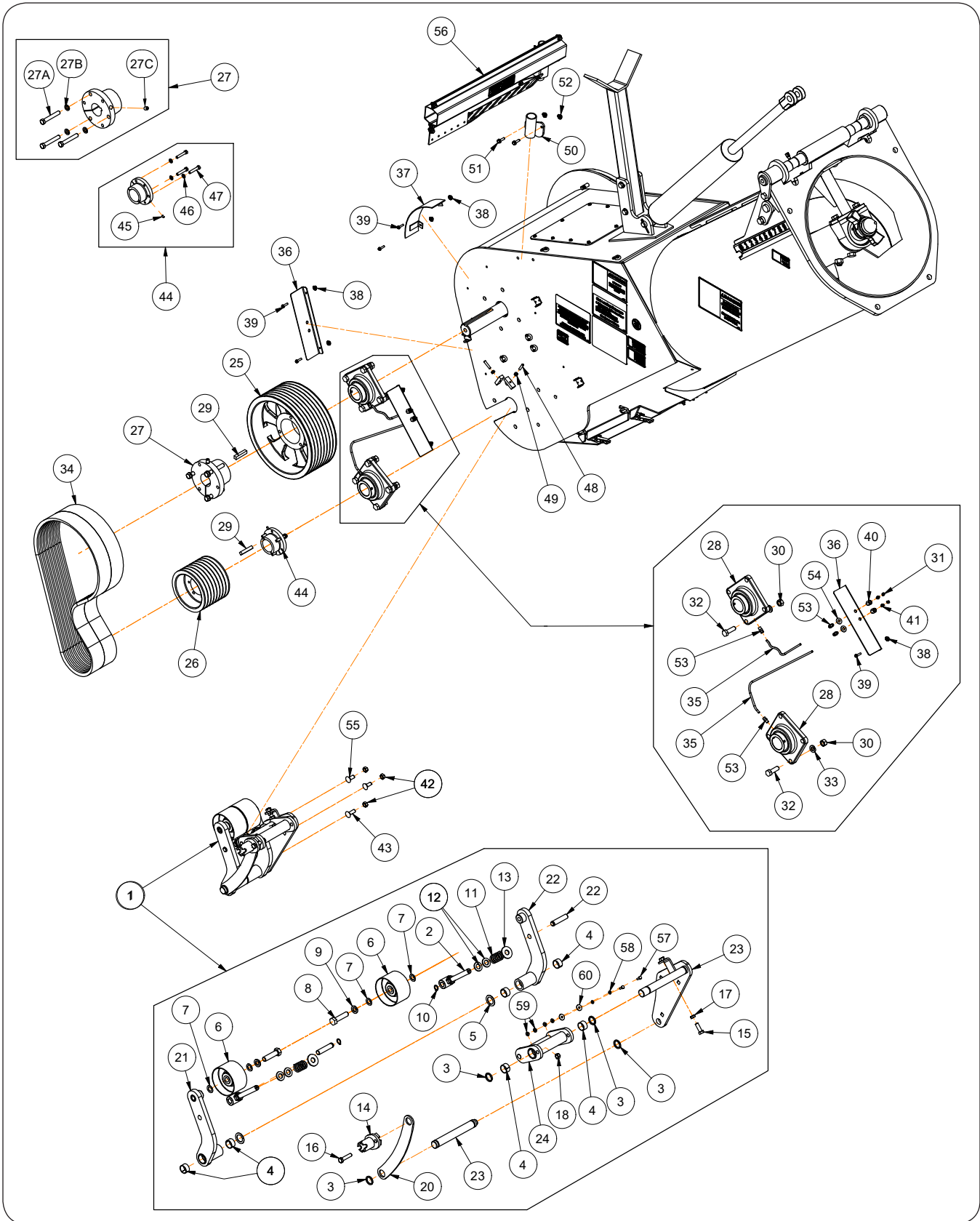
PTO & Bracket Assembly

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	276629B	PTO & Bracket Assembly	-	Includes Items 1-15
1	276401B	Bearing Bracket Weldment	1	
2	276409B	Bearing Cover Plate	1	
3	9003398	Lock Nut/Top 5/8"-11UNC	2	
4	9004918	PTO Bell Cover	1	
5	9008362	Drive Shaft 1 3/4-20 Splined Shaft, 1 3/4-20 Female Splined U-Joint	1	
6	9008455	Bearing 5 3/8" Square x 2 1/16" - 4 Bolt	1	
7	9008470	Decal, IMPORTANT (Drawbar)	1	
8	9928	Lock Nut, 3/8"-16UNC	3	
9	9390-053	Capscrew, 3/8"-16UNC x 3/4" G5	3	
10	9390-123	Capscrew, 5/8"-11UNC x 1 3/4" G5	2	
11	9390-494	Capscrew, 9/16-12UNC x 2" G5	4	
12	9394-012	Hex Nut, 9/16"-12UNC	4	
13	9404-027	Lock Washer, 9/16"	4	
14	97420	Flange Screw, 1/4"-20UNC x 3/4" G5	5	
15	TA500592	Cage Nut-Clip On	5	
16	9008677	Lock Collar 1.75" Bore	1	

Lower Auger Linkage Components

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



Lower Auger Linkage Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	283600B	Idler Assembly =Black=	1	
2	283605	Tensioner Rod Weldment	2	
3	94144	Retaining Ring 1 1/4	4	
4	9003635	Self-Lubricating Bushing, 1.4 OD x 1.25 ID x 3/4	6	
5	TA500397	Bushing, 1.875D x .074	2	
6	9005684	Idler Sub Assembly	2	
7	9005685	Machine Washer, 3/4	4	
8	9390-149	Capscrew, 3/4-10UNC x 3	2	Grade 5
9	9404-033	Lock Washer 3/4	2	
10	9003810	Snap Ring	2	
11	9005447	Compression Spring, 1.415 OD x 2 1/2	2	
12	9405-104	Flat Washer 3/4 SAE	4	
13	9405-106	Flat Washer 3/4 USS	2	
14	284703	Tensioner Bushing Weldment	1	
15	9390-101	Capscrew, 1/2-13UNC x 1 1/2	1	Grade 5
16	9390-104	Capscrew, 1/2-13UNC x 2 1/4	1	Grade 5
17	9395-010	Hex Jam Nut 1/2-13UNC	1	
18	94981	Locknut 1/2-13UNC	4	
20	283619B	Idler Brace Plate =Black=	1	
21	283603B	Idler Arm Weldment =Black=	1	
22	283602B	Idler Arm Weldment =Black=	1	
23	283601B	Idler Mount Weldment =Black=	1	
24	283604B	Tensioner Weldment =Black=	1	
25	9004590	Pulley, 15" Dia. x 5 13/16	1	
26	9004591	Pulley, 7 1/2" Dia. x 5 13/16	1	
27	9004813	Split Bushing Hardware Kit	1	Includes Items: 27A, 27B & 27C
27A	9006263	Bolt, 9/16-12UNC x 3 5/8	3	Grade 5
27B	9404-027	Lock Washer, 9/16	3	
27C	9399-086	Set Screw, 3/8-16UNC x 1/2	1	
28	9005565	Flanged Bearing 2 1/4 ID	2	Includes Set Screw & Zerk
	93426	Grease Zerk	1	
	9399-223	Set Screw 3/8-24UNF x 3/8	2	
29	9002562	Keystock 1/2 x 1/2 x 2 1/2	2	
30	9394-014	Hex Nut 5/8-11UNC	8	
31	9006849	Grease Zerk Cap	4	
32	9390-124	Capscrew, 5/8-11UNC x 2	8	Grade 5
33	9404-030	Split Lock Washer, 5/8	8	
34	281675	Drive Belt Set, 4 Strand (5V750)	2	

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Lower Auger Linkage Components (continued)

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
35	9005074	Hose/Type Nylon, 1/4" OD	2.5	Specify in Feet
36	273118B	Shield Plate =Black=	2	
37	273119B	Shield Weldment =Black=	1	
38	97189	Large Flange Hex Nut 1/4-20UNC	6	
39	901101	Flange Screw 1/4-20 UNC x 1	6	Grade 5
40	9003949	Hex Pipe Coupling	2	
41	93426	Grease Zerk 1/8 NPT	2	
42	94981	Locknut 1/2"-13UNC	3	
43	9388-104	Carriage Bolt, 1/2-13UNC x 1 1/2	1	Grade 5
44	9007376	Bushing, 4 5/8 OD x 2 1/4 ID x 2 1/16 w/ 1/2 Keyway & Capscrews	1	
45	9399-059	Set Screw, 1/4-20UNC x 3/8	1	
46	9404-021	Lockwasher, 3/8	3	
47	284262	Split Bushing Hardware Kit	1	Grade 5
48	9399-079	Set Screw 5/16-18UNC x 1 1/2 Cup Point/Hex Socket	2	
49	9394-004	Hex Nut 5/16-18UNC	2	
50	273121B	Bushing Weldment	1	
51	901044	Serrated Flange Bolt, 5/16-18UNC x 1	2	
52	91257	Large Flange Hex Nut, 5/16-18UNC	2	
53	9005073	Quicklinc Fitting	4	
54	9405-076	Flat Washer 3/8 USS	2	
55	9388-103	Carriage Bolt, 1/2"-13UNC x 1 1/4"	2	
56	294128B	Hose Caddy Replacement Kit	1	Refer to "Hitch & Ladder Components" Section
57	9390-003	Capscrew, 1/4-20UNC x 3/4	2	Grade 5
58	9404-017	Lock Washer, 1/4"	2	
59	9405-062	Flat Washer, 1/4" SAE	4	
60	9405-066	Flat Fender Washer, 1/4"	2	

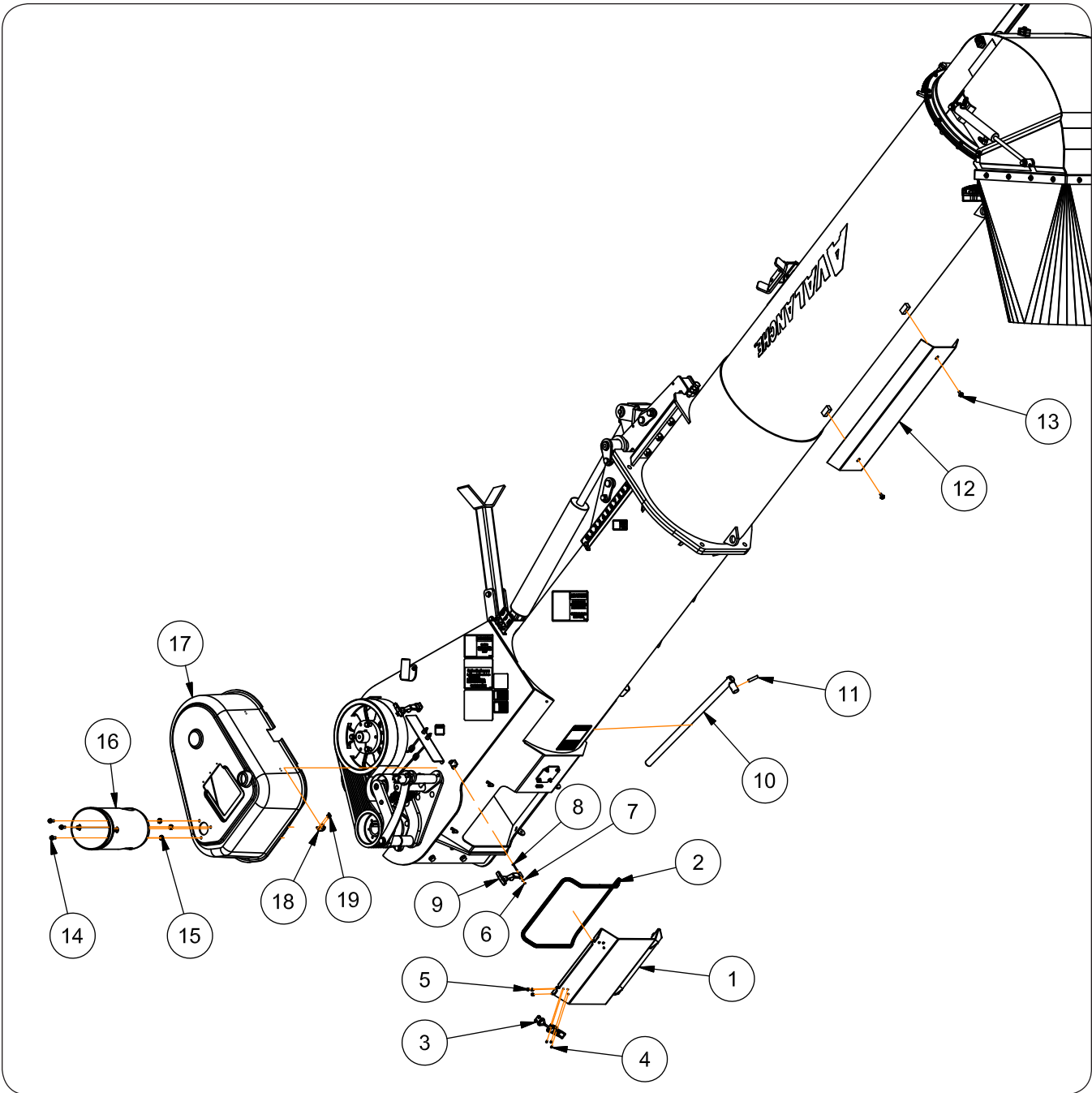
Notes

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Empty rounded rectangular box for notes.

Lower Auger Door & Cover Components

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



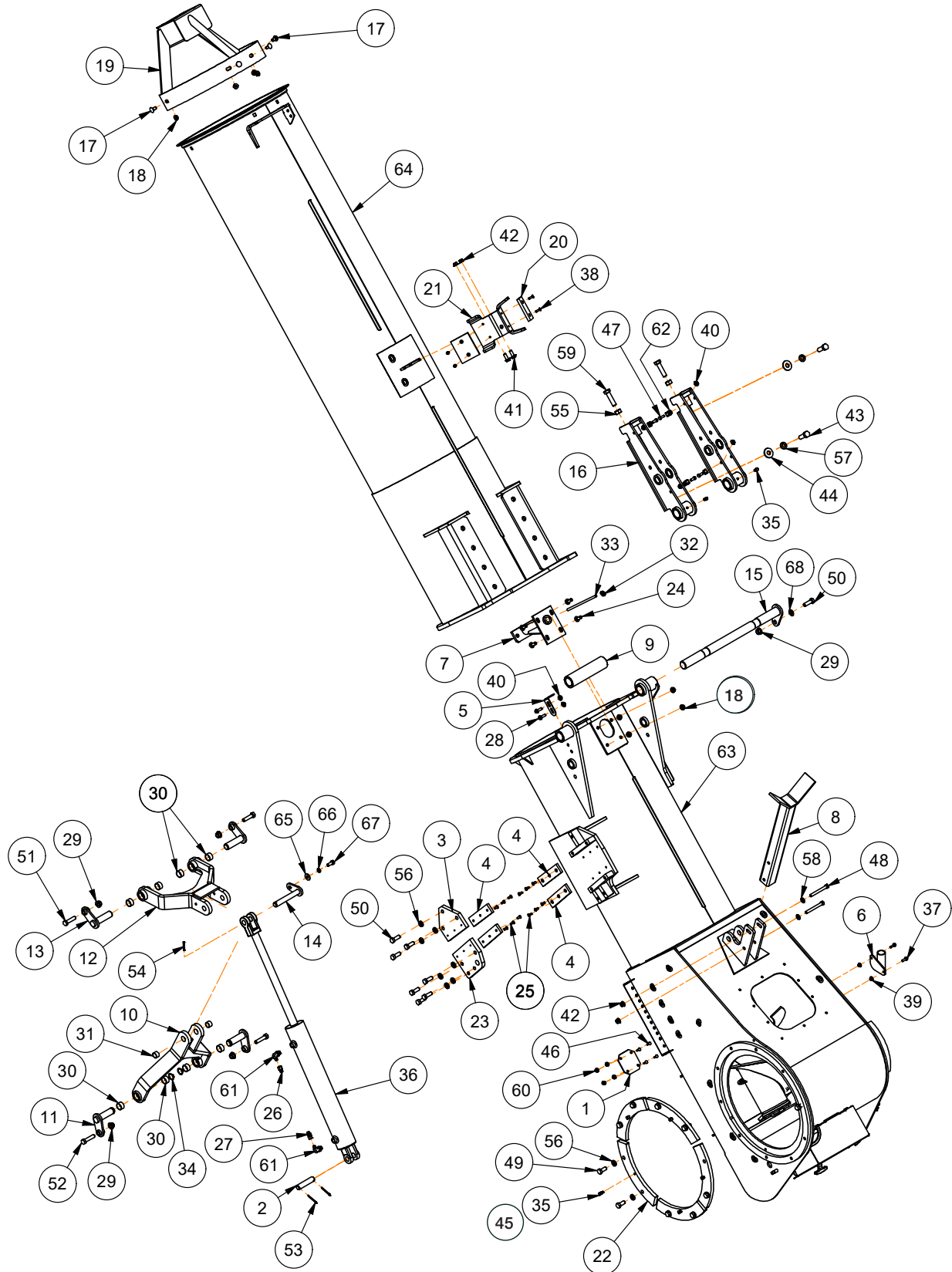
Lower Auger Door & Cover Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	276557B	Cleanout Door Weldment =Black=	1	
2	9007108	Gasket w/Adhesive Backing for Clean-Out Door	A/R	Specify in Feet
3	9006497	Draw Latch	2	
4	903171-574	Flat Countersunk Screw #10-24UNC Phillips Machine Screw	6	
5	902331	Serrated Flange Hex Nut #10-24UNC	6	
6	900068	Retainer for Draw Latch	3	
7	900067	Washer	3	
8	900066	Stud Pin	3	
9	900060	Handle for Draw Latch	3	
10	284714B	Locking Pipe Weldment with Roll Pin =Black=	1	
11	9392-208	Roll Pin 1/2" Dia. x 2	1	
12	284141G	Strike Plate =Green=	1	
	284141R	Strike Plate =Red=		
13	95585	Capscrew/Large Flange 3/8"-16UNC x 3/4" G5	2	
14	91262	Flange Screw 3/8"-16UNC x 1" G5	3	
15	91263	Nut/Large Flange 3/8-16UNC G5	3	
16	9004918	PTO Bell Cover	1	
17	9004729	Belt Cover/Shield	1	
18	900059	Flexible Draw Latch Asy w/Style R Keeper	3	
19	9004940	Pop Rivet	6	

Auger Tube Components

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



Auger Tube Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	2001446B	Cover Plate =Black=	1	
2	266285	Cylinder Pin 1" Dia. x 4 1/2	1	
3	271119B	Fold Plate 6 1/2 x 8 =Black=	1	
4	271124	Nylon Fold Slide 2 x 8	4	
5	272645B	Switch Bracket	1	
6	273121B	Bushing Weldment	1	
7	293422B	Bearing Bracket Weldment =Black=	1	For SN B39490100 & Higher
	273124B			For SN B39490099 & Lower
8	273255G	Auger Rest Weld't =Green=	1	
	273255R	Auger Rest Weld't =Red=		
9	273374G	Spacer/Bushing 2.5" OD x 1.75" ID x 9.9375" =Green=	1	
	273374R	Spacer/Bushing 2.5" OD x 1.75" ID x 9.9375" =Red=		
10	276479G	Fold Linkage Weldment =Green=	1	
	276479R	Fold Linkage Weldment =Red=		
11	276483	Pin Weldment	2	
12	276940G	Fold Linkage Weldment =Green=	1	For SN B39490100 & Higher
	276940R	Fold Linkage Weldment =Red=		
	276945G	Fold Linkage Weldment Replacement Kit =Green=	1	For SN B39490099 & Lower
	276945R	Fold Linkage Weldment Replacment Kit =Red=		
13	276493	Pin Weldment	2	
14	276941	Linkage Pin Weldment	1	For SN B39490100 & Higher
	276542	Pin 1" Dia. x 7"		For SN B39490099 & Lower
15	276561	Pivot Pin Weldment	1	
16	276593G	Auger Hinge Weldment =Green=	2	
	276593R	Auger Hinge Weldment =Red=		
17	9388-102	Carriage Bolt, 1/2"-13UNC x 1" G5	4	
18	9003397	Locking Flange Nut 1/2"-13UNC	8	
19	276507B	Hanger Bearing Weldment =Black=	1	
20	283335	Poly Auger Stop Pad	2	
21	283340G	Auger Rest Weldment =Green=	1	
	283340R	Auger Rest Weldment =Red=		
22	284464B	Pivot Flange, Retainer Plate =Black=	5	
23	284518B	Fold Plate =Black=	1	
24	9388-104	Carriage Bolt 1/2"-13UNC x 1 1/2" G5	4	For SN B39490100 & Higher
	9001529	Flange Screws 1/2-13UNC x 1		For SN B39490099 & Lower
25	9001688	Capscrew/Flat Head, 5/16-18UNC x 3/4	12	
26	9002199	Reducer w/.060 Restrictor	1	
27	9002446	Adapter 9/16-18 O-Ring Male x 9/16-18 JIC Female	1	
28	9003259	Flange Screw 3/8"-16UNC x 1 1/4" G5	2	
29	9003398	Lock Nut/Top 5/8"-11UNC	5	
30	9004396	Self Lube Bushing, 1.414" OD x 1.258" ID x 3/4"	8	

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Auger Tube Components (continued)

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
31	9004397	Self-Lubricating Bushing 1.131" OD x 1.008" ID x .75"	2	
32	9004764	90° Elbow 1/8" NPTF Female	1	
33	9005793	Grease Pipe 1/8" SCH40 x 11"	1	
34	9006084	Retaining Ring 1 1/4"	2	
35	9006785	90° Adapter 1/8" NPT	7	For SN B40560100 & Higher
36	9007639	Hydraulic Cylinder 3 1/2 x 20 (3000 PSI)	1	
37	901044	Flange Screw 5/16"-18UNC x 1" G5	2	
38	903171-660	Flat Countersunk Head/Machine Screw, 5/16"-18UNC x 1"	4	
39	91257	Large Flange Hex Nut, 5/16"-18UNC	2	
40	91263	Nut/Large Flange 3/8"-16UNC	6	
41	91266	Flange Capscrew, 1/2"-13UNC x 1 1/4"	2	
42	91267	Nut / Flange, 1/2-13UNC	4	
43	91299-146	Capscrew, 3/4"-10UNC x 2 1/4"	2	
44	9234PL	Flat Washer, 13/16 (Hardened)	2	
45	93415PL	90° Zerk 1/4-28 Threaded	7	For SN B40560099 & Lower
46	9388-003	Carriage Bolt, 1/4"-20UNC x 1" G5	4	
47	9390-055	Capscrew, 3/8"-16UNC x 1" G5	4	
48	9390-112	Capscrew, 1/2"-13 UNC x 4 1/2" G5	2	
49	9390-122	Capscrew, 5/8"-11UNC x 1 1/2" G5	10	
50	9390-124	Capscrew, 5/8"-11UNC x 2" G5	1	
51	9390-126	Capscrew, 5/8"-11UNC x 2 1/2" G5	2	
52	9390-127	Capscrew, 5/8"-11UNC x 2 3/4" G5	2	
53	9391-046	Cotter Pin, 3/16" Dia. x 2"	2	
54	9392-140	Roll Pin, 1/4" Dia. x 2"	1	
55	9394-016	Hex Nut, 3/4-10UNC G5	2	
56	9404-030	Lock Washer, 5/8"	17	
57	9404-034	Lock Washer, 3/4	2	
58	9405-086	Flat Washer 1/2" SAE	2	
59	94733	Capscrew, 3/4"-10UNC x 3" G5 Full Threaded	2	
60	97189	Hex Nut/Large Flange 1/4"-20UNC	4	
61	9874	90° Elbow 9/16-18 JIC Male x 3/4-16 O-Ring Male	2	
62	TA0-903850-0	Cable Clamp (1/2" OD)	4	
63	276684G	Lower Auger Housing Weldment =Green=	1	
	276684R	Lower Auger Housing Weldment =Red=		
64	276501G	Upper Auger Housing Weldment =Green=	1	
	276501R	Upper Auger Housing Weldment =Red=		
65	9405-088	Flat Washer 1/2"	1	
66	9404-025	Lock Washer 1/2"	1	
67	9390-100	Capscrew 1/2"-13UNC x 1 1/4"	1	
68	9405-098	Flat Washer 5/8" SAE	1	

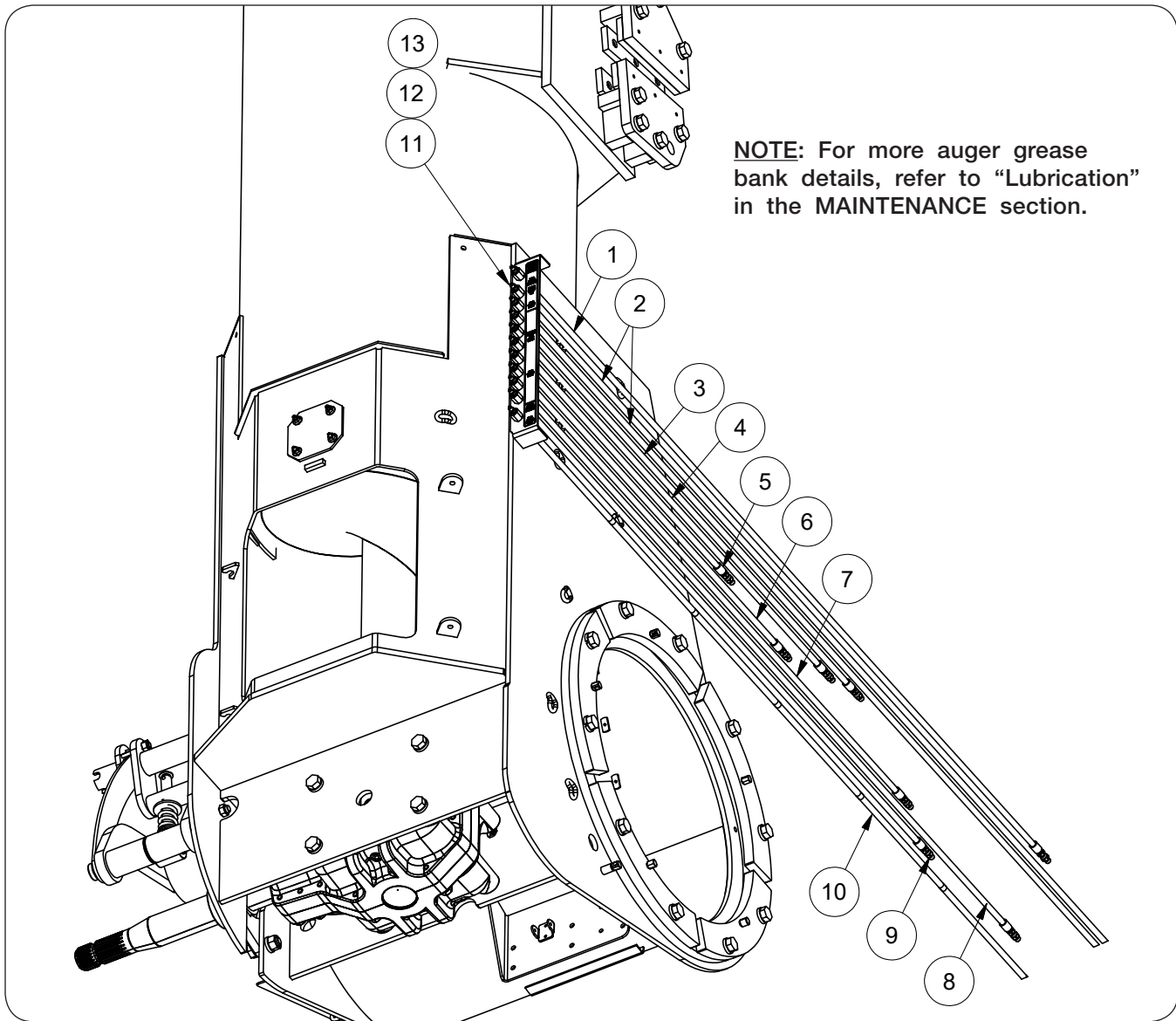
Notes

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Auger Grease Bank Components

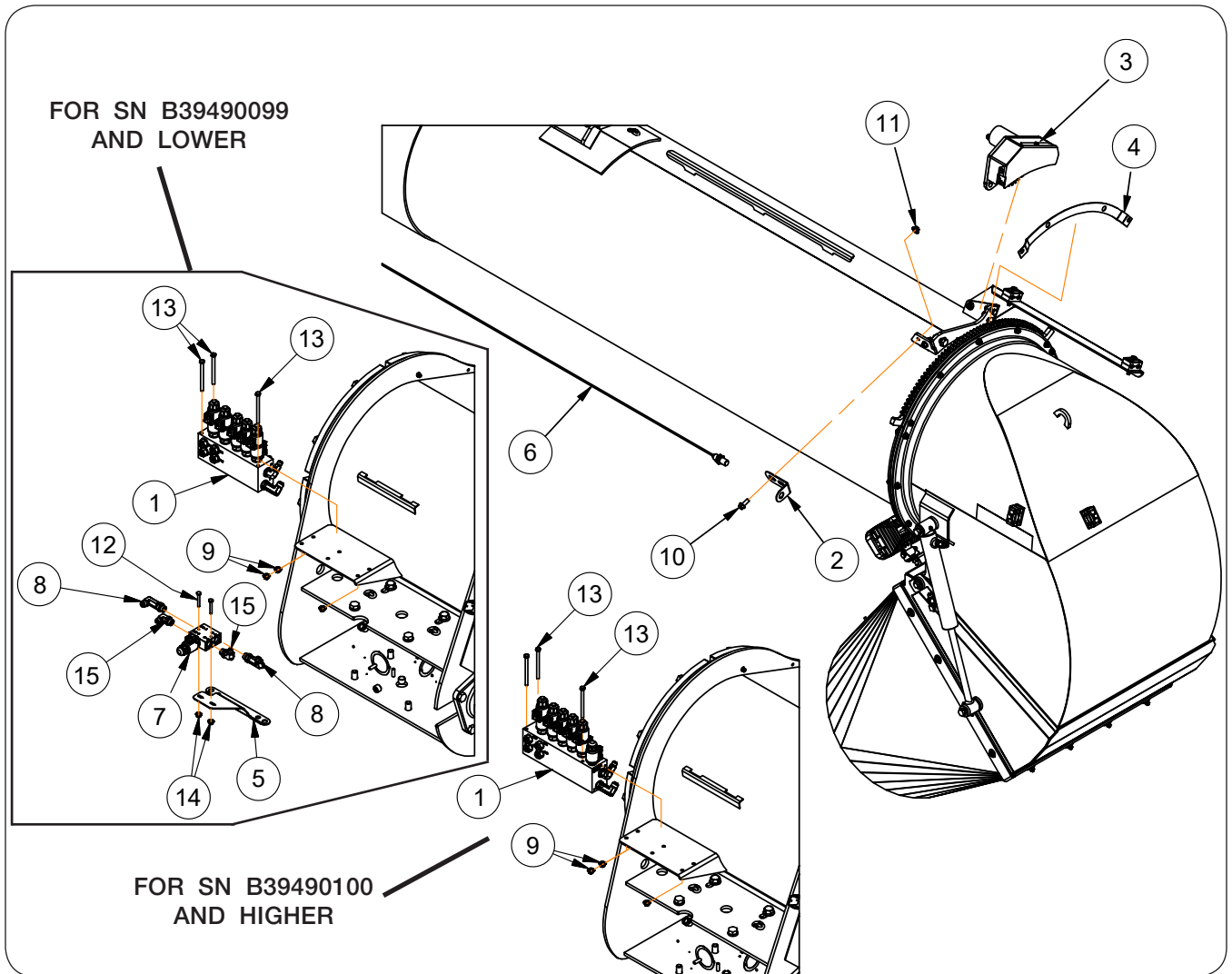
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	9008965	Grease Hose 3/16" x 74" (1/8" NPT)	1	Lower Vertical Auger Hanger Bearing
2	9008967	Grease Hose 3/16" x 126" (1/8" NPT)	2	Upper Auger Pivot Pin
3	9008961	Grease Hose 3/16" x 48" (1/8" NPT)	1	Vertical Auger Tilt Pivot Rings
4	9008960	Grease Hose 3/16" x 44" (1/8" NPT)	1	
5	9008958	Grease Hose 3/16" x 30" (1/8" NPT)	1	
6	9008959	Grease Hose 3/16" x 38" (1/8" NPT)	1	
7	9008962	Grease Hose 3/16" x 55" (1/8" NPT)	1	
8	9008964	Grease Hose 3/16" x 70" (1/8" NPT)	1	
9	9008963	Grease Hose 3/16" x 58" (1/8" NPT)	1	
10	9009052	Grease Hose 3/16" x 200" (1/8" NPT)	1	Drag Auger Center Bearing
11	9003949	Coupler 1/8" NPT	11	
12	93426	Grease Zerk	11	
13	9006849	Grease Zerk Cap	11	

Switch Assembly Components for Rotating Spout Option

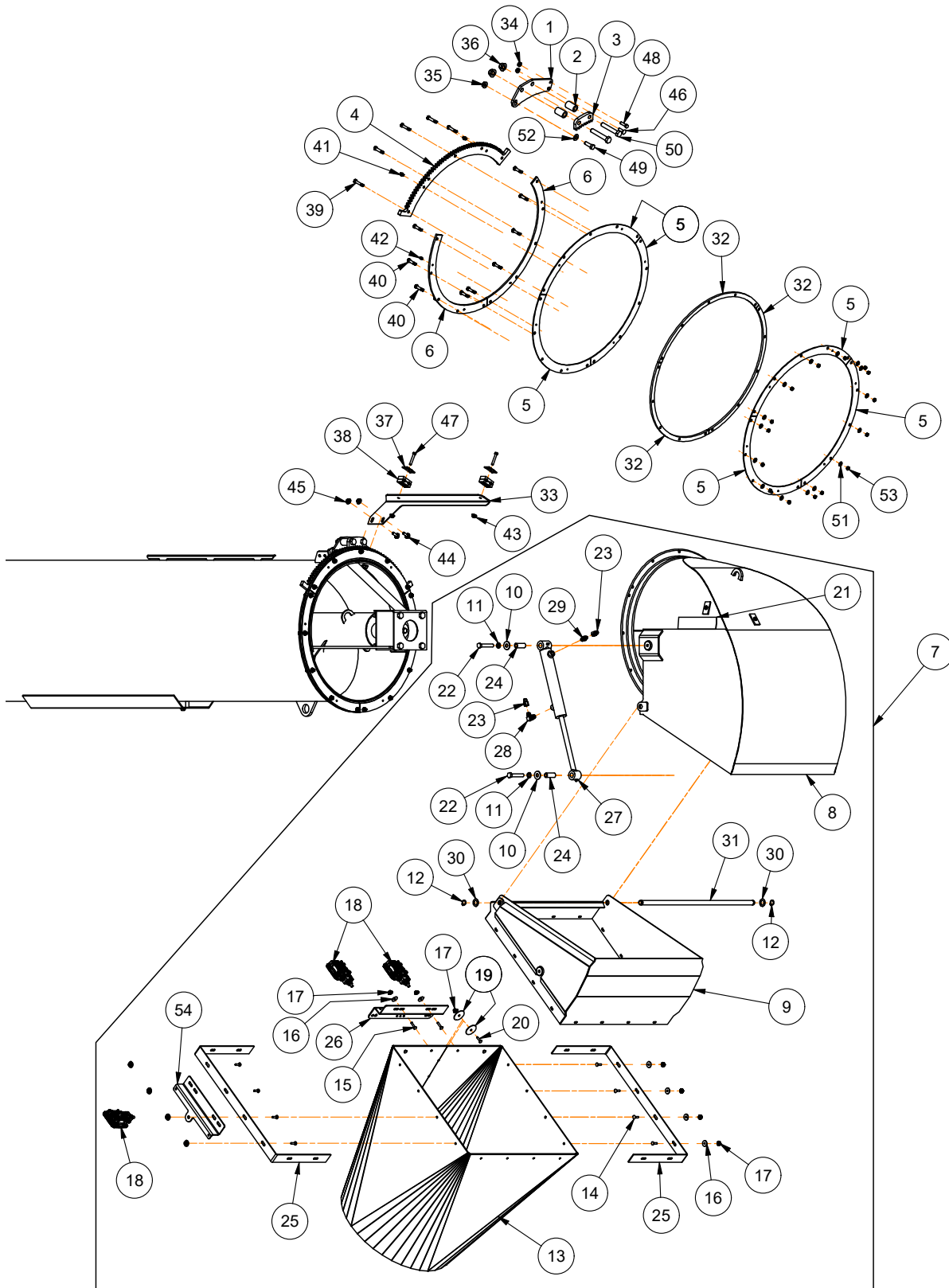
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	272618	Hydraulic Valve Assembly	1	
2	272645B	Switch Bracket	1	
3	276457B	Spout Motor Assembly	1	
4	276556B	Sensor Plate	1	
5	286532B	Valve Bracket	1	For SN B39490099 & Lower
6	9007223	Proximity Sensor with Connector	1	
7	9007238	Open Center Manifold Assembly	1	For SN B39490099 & Lower
8	901568	90° Elbow Extra Long 3/4-16 JIC Male x 3/4-16 Male O-Ring	2	For SN B39490099 & Lower
9	91257	Hex Nut/Large Flange 5/16"-18UNC	3	
10	91262	Flange Screw 3/8"-16UNC x 1" G5	2	
11	91263	Nut/Large Flange 3/8"-16UNC	2	
12	9390-008	Capscrew, 1/4"-20UNC x 1 3/4" G5	2	For SN B39490099 & Lower
13	9390-042	Capscrew, 5/16"-18UNC x 5" G5	3	
14	97189	Hex Nut/Large Flange 1/4"-20UNC	2	For SN B39490099 & Lower
15	9874	90° Elbow 9/16-18 JIC Male x 3/4-16 O-Ring Male	2	For SN B39490099 & Lower

Downspout Components

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



Downspout Components

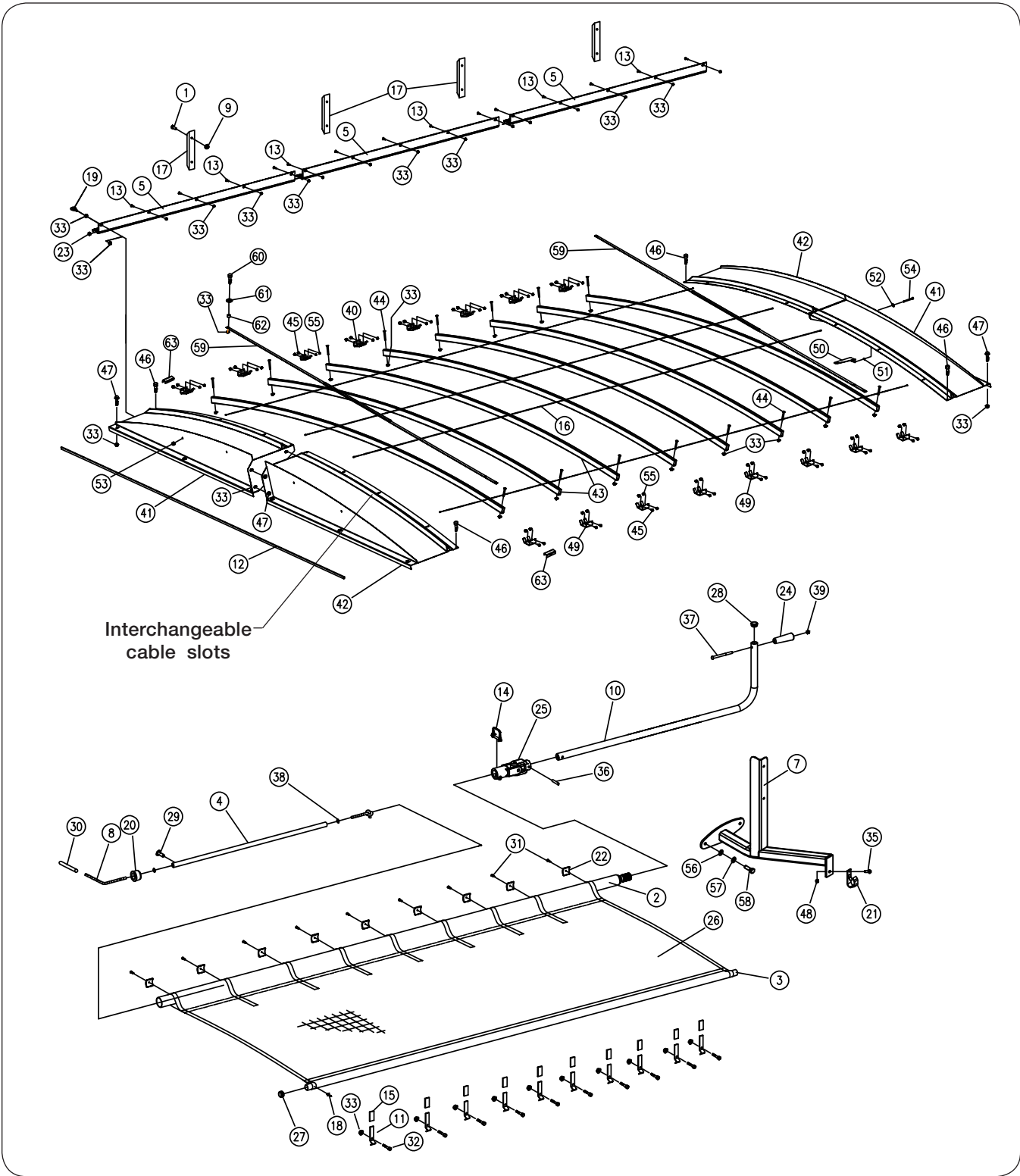
Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	276496B	Mount Lock Plate	1	
2	276497	Spacer/Bushing	2	
3	276498B	Lock plate	1	
4	276511	Rack Plate	1	
5	276512	Pivot Pad	6	
6	276513B	Spout Pivot Plate	2	
7	276999B	Spout Assembly	1	Includes items 8-31 and 54 (For SN B40560100 & Higher)
	276514B			Includes items 8-31 (For SN B40560099 & Lower)
8	276515B	Spout Weldment	1	
9	276526B	Spout Weldment	1	
10	9405-088	Flat Washer 1/2" USS	2	
11	9404-025	Lock Washer 1/2"	2	
12	9003810	Snap Ring 3/4"	2	
13	9008318	Rubber Chute	1	
14	9388-003	Carriage Bolt 1/4"-20UNC x 1" G5	14	
15	9388-004	Carriage Bolt 1/4"-20UNC x 1 1/4" G5	2	
16	9405-066	Flat Washer 1/4"	16	
17	97189	Hex Nut/Large Flange 1/4"-20UNC	24	
18	9008957	LED Work Light	3	(For SN B40560100 & Higher)
	9007186		2	(For SN B40560099 & Lower)
19	94763	Fender Washer	16	
20	9390-005	Capscrew 1/4"-20UNC x 1" G5	8	
21	9003127	Reflector 2 x 9 =AMBER=	2	
22	9390-107	Capscrew 1/2"-13UNC x 3" G5	2	
23	95193	Adapter with 0.030 Restrictor	2	
24	285290	Sleeve Bushing .75" OD x .532" ID x 1.938	2	
25	276531B	Chute Strap	2	
26	272646B	Light Bracket	1	
27	9005135	Cylinder 1 1/2 x 8	1	
28	97445	Elbow, 90° 9/16-18 JIC Male x 9/16-18 O-Ring ADJ Male	1	
29	9001495	Adapter 9/16-18 JIC Male x 9/16-18 O-Ring	1	
30	9005685	Washer 3/4" Dia.	2	
31	276530	Pivot Shaft 3/4" Dia. x 27	1	
32	276550B	Spacer Plate	3	
33	276577B	Hose Bracket	1	
34	9003396	Lock Nut/Top 3/8"-16UNC	2	
35	9003397	Lock Nut/Top 1/2"-13UNC	1	
36	9003398	Lock Nut/Top 5/8"-11UNC	7	
37	9003814	Clamp Top Plate	4	
38	9003816	Double Hose Clamp (Pair)	4	
39	9007837	Shoulder Bolt 3/8" Dia. Socket Head, 5/16"-18UNC x 1 1/4"	5	
40	9007843	Sholder Bolt 3/8" Dia. Socket Head, 5/16"-18UNC x 1"	10	
41	9008110	Zerk 1/8-27 with Cap	4	
42	91160	Zerk 1/4-28 STT	4	
43	91257	Hex Nut/Large Flange 5/16"-18UNC	4	
44	91262	Flange Screw 3/8"-16UNC x 1"	2	
45	91263	Nut/Large Flange 3/8"-16UNC	8	
46	9388-052	Carriage Bolt 3/8"-16UNC x 1 1/4"	1	
47	9390-034	Capscrew 5/16"-18UNC x 2" G5	2	
48	9390-056	Capscrew 3/8"-16UNC x 1 1/4" G5	1	
49	9390-101	Capscrew 1/2"-13UNC x 1 1/2" G5	1	
50	9390-131	Capscrew 5/8"-11UNC x 3 3/4" G5	2	
51	9405-064	Flat Washer 1/4" USS	15	
52	9405-086	Flat Washer 1/2" SAE	3	
53	9807	Lock Nut/Top 5/16"-18UNC	15	
54	272841B	Light Bracket	1	(For SN B40560100 & Higher)



Weather Guard Tarp Components

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



Weather Guard Tarp Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	274863B	Tarp Kit	-	Bow and End Caps NOT Included Includes Items 2-5, 8, 10, 11, 15, 18-38, 48, & 50
1	9004355	Screw 1/4-20UNC x 1 Self-Threading	8	
2	274867	Roll Tube Weldment	1	
3	274865	Fixed Tube Weldment	1	
4	221668	Pipe - 180"	1	
5	276377	Plate - Latch 129 1/2"	3	
7	273501B	Handle Bracket Weldment	1	
8	221722	Bungee 3/8" Dia. x 204"	1	
9	97189	Hex Nut/Large Flange 1/4-20UNC	8	
10	287944	Tarp Handle Weldment	1	
11	266689B	Tarp Short Stop Plate	11	
12	9000787	Trim-lok	A/R	14 feet
13	9005312	Torx Head Machine Screw 3/8-16UNC x 1	14	Grade 5
14	9005305	Lynch Pin 3/8" x 3"	1	
15	9003078	Cap - Plastic (2 x 3)	11	
16	9008179	Cable Assembly 373"	4	Holds up to 6
17	9005307	Poly Deflector 8"	4	
18	9003378	Rivet/Pop 3/16"	2	
19	9004548	Eye Bolt 3/8"-16UNC x 1 3/4"	1	
20	9004947	Plug 2"	1	
21	221770B	Handle Retainer Weldment	1	
22	9004949	U-Clamp	12	
23	9004968	Plug 1"	2	
24	9004969	Handle	1	
25	9004977	U-Joint w/ 1 3/8-21 Spline	1	
26	9008175	Tarp 188 x 385	1	
	9005581	Tarp Repair Kit	-	
27	9005088	Plug 1 1/8	2	
28	9005089	Plug 1 1/4	1	
29	9001396	Pan Head Screw #10-16 x 1/2"	1	
30	TA806225	Hose 1/2 EPDM	1	
31	9005197	Screw/Self Drilling #10-16 x 3/4 Pan Head	12	
32	91262	Screw/Large Flange 3/8-16UNC x 1	11	Grade 5
33	91263	Nut/Large Flange 3/8-16UNC	63	Grade 5
35	9390-055	Capscrew 3/8-16UNC x 1	1	Grade 5
36	9392-180	Roll Pin 3/8" Dia. x 2"	1	
37	903172-450	Pan Head 3/8"-16UNC x 4 1/2" Phillips	1	
38	9405-074	Flat Washer 3/8	2	

(Continued on next page)

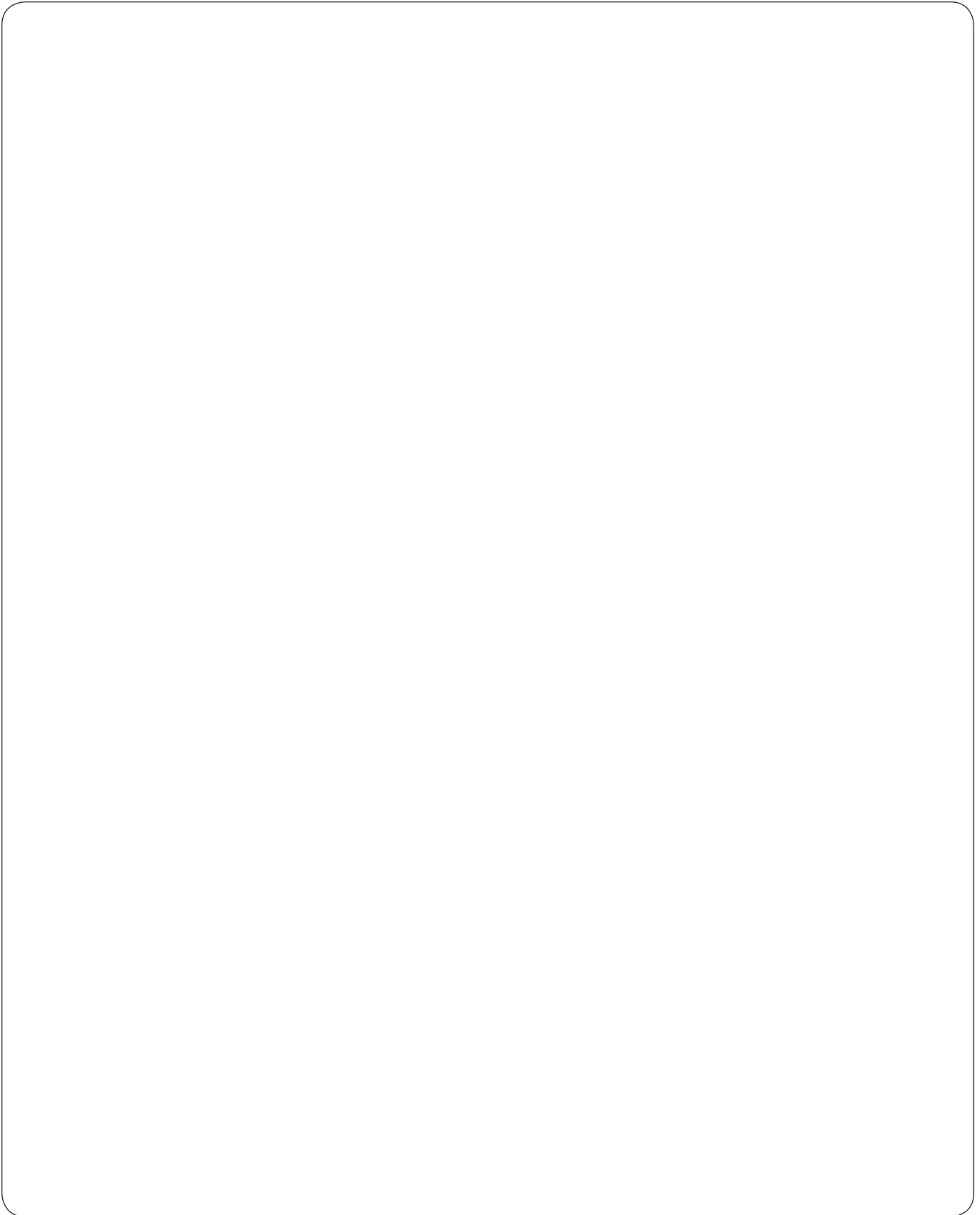
Weather Guard Tarp Components (continued)

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
39	9398-012	Elastic Stop Nut 3/8-16UNC	1	
40	283425B	RH Bracket For Side Boards/Tarp Bow Weldment	9	
41	273354B	RH-End Cap Weldment	2	
42	273353B	LH-End Cap Weldment	2	
43	291289B	Tarp Bow Weldment	9	
44	902703-046	Flat Socket Capscrew 3/8"-16UNC x 3"	18	
45	97604	Screw/Large Flange, 5/16-18 UNC x 1	36	For SN B41350100 & Higher
	91256	Screw/Large Flange, 5/16-18 UNC x 3/4		For SN B41350099 & Lower
46	9512	Screw/Self Drilling 1/4-14 x 1	4	
47	95585	Capscrew/Large Flange 3/8-16UNC x 3/4	18	Grade 5
48	9928	Locknut 3/8-16UNC	1	
49	283427B	LH Bracket For Side Boards/Tarp Bow Weldment	9	
50	281712B	Bracket Assembly	4	
51	9005688	Star Washer	4	
52	9005696	Fender Washer	4	
53	9005727	Plug	4	
54	TA0-907131-0	Capscrew 3/8-16UNC x 4 1/2 (Full Threaded)	4	
55	91257	Hex Nut/Large Flange, 5/16-18 UNC	36	
56	9405-074	Flat Washer 3/8"	2	
57	9404-021	Lock Washer 3/8"	2	
58	9390-056	Capscrew 3/8-16UNC x 1 1/4	2	Grade 5
59	9008952	Hurricane Strap For 14 FT Wide Hopper	2	
60	96972	Screw/Self Tapping 3/8"-16UNC x 1"	2	
61	9008972	Flat Washer, 3/8" Aluminum	4	
62	9008949	Tarp Strap Spacer Bushing	4	
63	294660B	Sideboard Doubler =Black=	18	For SN B41350100 & Higher

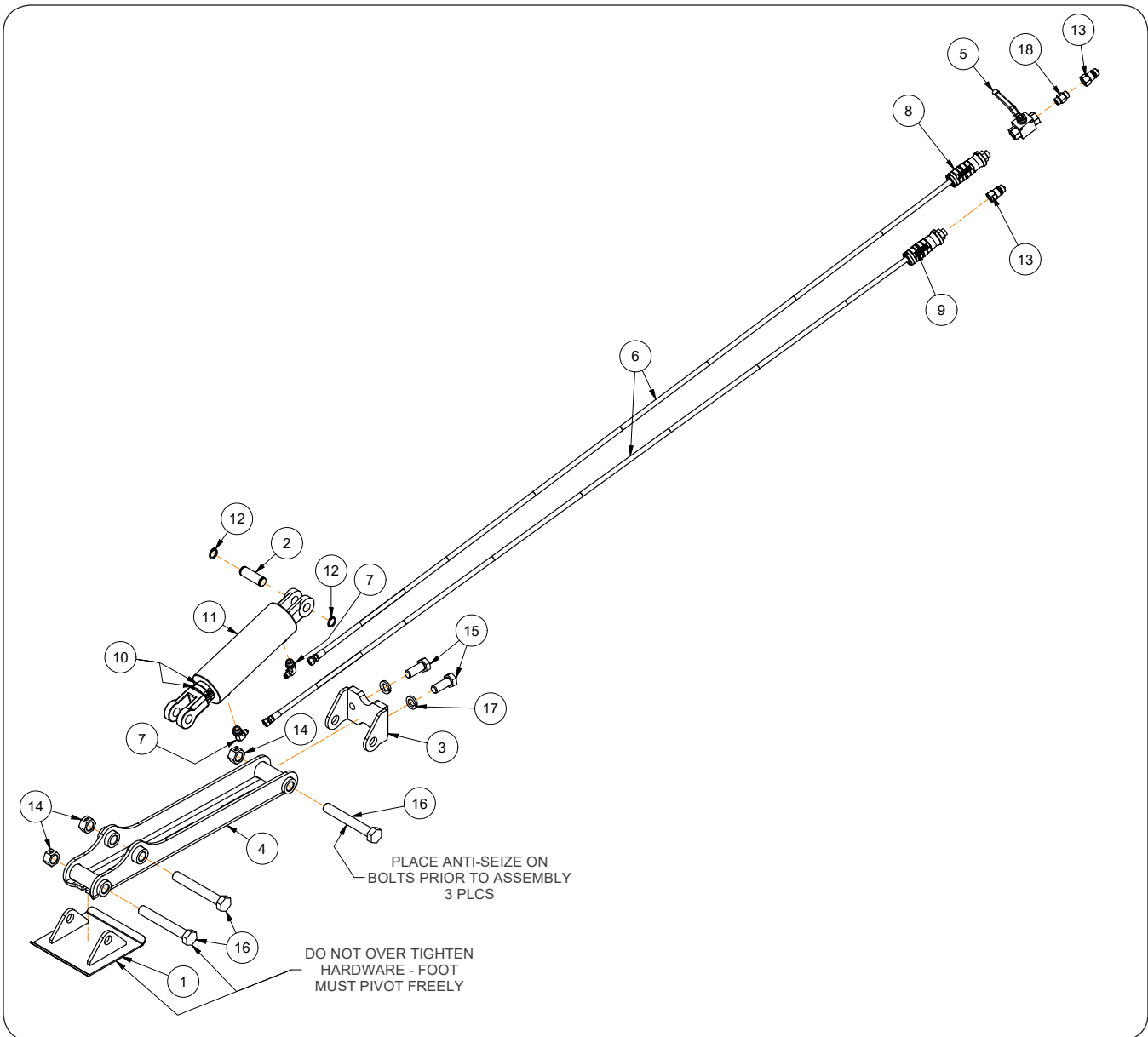
Notes

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



Hydraulic Jack - Kit #276645B (Optional)

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



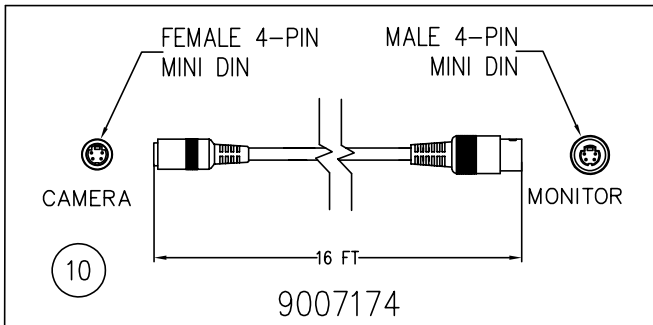
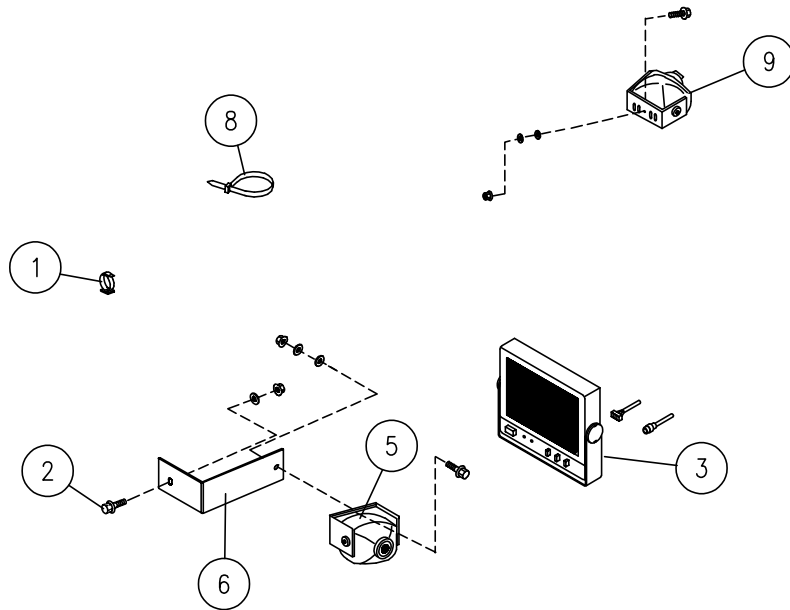
Hydraulic Jack - Kit #276645B (Optional)

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

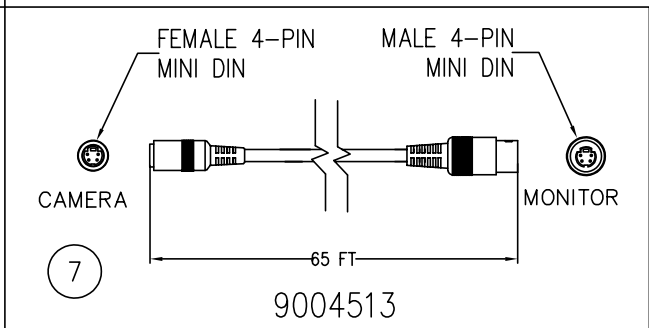
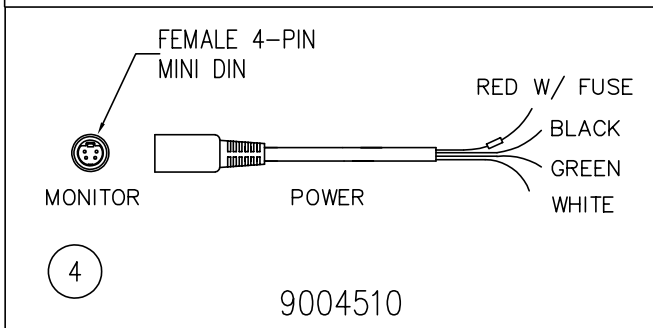
ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	271723B	Jack Foot Weldment =Black=	1	
2	272587	Pin, 1" Dia. x 3 1/8	1	
3	273808B	Jack Mount Weldment =Black=	1	
4	276380B	Jack Leg Weldment =Black=	1	
5	9005426	High Pressure Ball Valve	1	
6	9006068	Hydraulic Hose, 1/4 x 92" - 3000 PSI	2	
7	9006173	Elbow, 90°	2	
8	9008600	Hose Grips - Black (Pair) - Raise Jack	1	Solid Black - Cylinder Extended (For SN B40240100 & Higher)
	9006651	Sleeve Hose Marker - Raise Jack		(For SN B40240099 & Lower)
9	9008600	Hose Grips - Black (Pair) - Lower Jack	1	Half Black/Half Gray - Cylinder Retracted (For SN B40240100 & Higher)
	9006652	Sleeve Hose Marker - Lower Jack		(For SN B40240099 & Lower)
10	9007301	Shaft Collar - 1.25" Bore	2	
11	9009047	Hydraulic Cylinder, 3 1/2 x 8 - 3000 PSI	1	
12	91192	Retaining Ring, 1"	2	
13	91383	Male Tip Coupling	2	
14	92199	Center Locknut, 1-8UNC	3	
15	9390-165	Capscrew, 7/8-9UNC x 2 1/4 Grade 5	2	
16	9390-197	Capscrew, 1-8UNC x 7 Grade 5	3	
17	9404-037	Split Lock Washer, 7/8	2	
18	98508	Adapter, 3/4-16 OR Male x 3/4-16 OR Male	1	

Video System (Optional)

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



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



Video System (Optional)

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	265770	Video System Kit for Front View	1	Includes Items 1,2,3,4,5,6,7,8 and own Instruction Sheet
	9004506	Additional Camera for Rear View	1	Includes Items 6 & 7
1	TAAU14007	Snap Clip, Adhesive	10	
2	9512	Self-Drilling Screw 1/4-14 x 1	10	
3	9006273	Monitor, 7" LCD/LED	1	
4	9004510	Cable w/Fuse	1	
5	9006274	Camera	1	
6	265771B	Bracket	1	
7	9004513	Cable, 65'	1	
8	9000107	Cable Tie	AR	
9	9004506	Camera Kit for Rear View with 65' Cable	1	
10	9007174	Camera Cable, 16 ft.	1	



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