



 **Bulk Seed Handling**

Seed Chariot® Bulk Tender
Models 2620/3620

Part No. 27088

Foreword

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

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

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

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



Product Information

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

- Machine name
- Model number
- Serial number

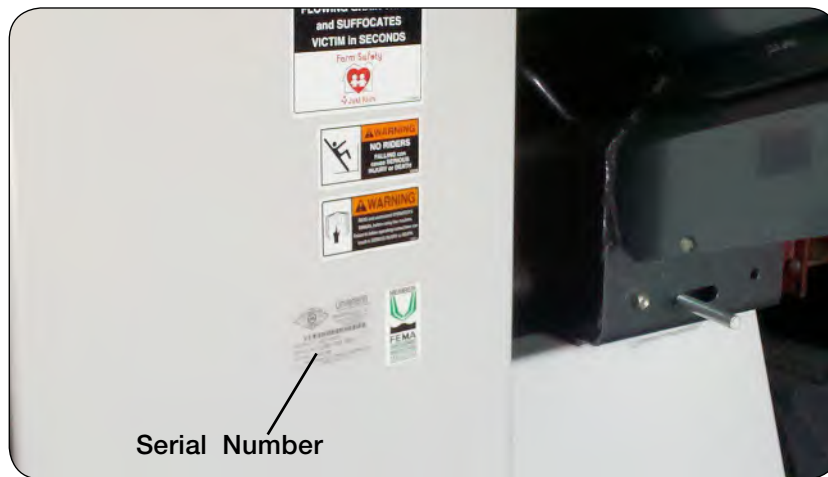
All products manufactured by Unverferth Mfg. Co., Inc. are warranted to be free from material and workmanship defects for one full year from time of consumer delivery. Your local dealer will gladly assist you with any warranty questions.

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

Purchase Date _____ Model _____ Serial No. _____

Dealer _____ City _____

Dealer Contact _____ Phone _____



IMPORTANT

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

Table of Contents

Section I Safety

General Hazard Information	1-2
Safety Decals.....	1-3
Following Safety Instructions.....	1-4
Before Servicing or Operating.....	1-4
During Operation.....	1-5
Before Transporting.....	1-5
During Transport	1-6
Prepare for Emergencies.....	1-6
Wearing Protective Equipment.....	1-6

Section II Set-Up

Pre-Delivery Checklist.....	2-2
Seed Chariot® Assembly.....	2-2
Assemble Hitch/Gooseneck to Undercarriage	2-3
Ladder Installation.....	2-4
Scale Pkg #26858 (Optional) Model 640XL.....	2-5
DG3520 Auto-Shutoff Scale #2012585CG (Optional).....	2-6
6' - 10' Long Discharge Spout #22578 (Optional).....	2-17
Electric Winch (Optional).....	2-18
Two Function Wireless Remote Kit #2012586CG (Optional)	2-19
Ag Package Decal Placement.....	2-20

Section III Operation

Preparing Towing Vehicle.....	3-2
Preparing Implement - Lubrication.....	3-2
Preparing Implement - Tires/Wheels	3-2
Connecting to Towing Vehicle	3-3
Transport Chains.....	3-3
Transporting	3-4
Engine Operation	3-5
Raising and Lowering Conveyor.....	3-6
Pivoting Conveyor or Auger Side-to-Side.....	3-6
Filling Planter or Drill.....	3-7
Ladder.....	3-8
Weather Guard Tarp.....	3-9
Electronic Scale Operation - Model 640XL (Optional).....	3-10
DG3520 Auto-Shutoff Scale (Optional).....	3-14
Spout Recommendations.....	3-17

Table of Contents

**Section IV
Maintenance**

Lubrication - Conveyor Bearings 4-2

Lubrication - Pivot Points 4-2

Lubrication - Wheel Bearings 4-2

Lubrication - Engine Oil Level 4-2

Conveyor Belt - Tension 4-3

Conveyor Belt - Tracking 4-4

Conveyor Belt - Adjusting Tension 4-4

Belt Replacement 4-5

Optional Stretcher Assembled to Belt 4-6

Brake Cleaning and Inspection - Brake Lubrication 4-7

Brake Cleaning and Inspection - Magnets 4-7

Brake Cleaning and Inspection - Shoes and Linings 4-8

Brake Drum Inspection 4-8

Troubleshooting Brakes 4-9

Bearing Inspection 4-9

Bearing Lubrication 4-9

How to Measure Amperage 4-10

How to Measure Voltage 4-11

Battery Warranty 4-11

Power Pak 4-12

Storage 4-13

Troubleshooting 4-14

Front Undercarriage Electrical Schematic 4-15

Undercarriage Lighting & Brake Electrical Schematic — #25046 4-16

Conveyor Control Electrical Schematic — #2012611 4-17

Charge From Truck Electrical Schematic — #29410 4-18

Switch Electrical Schematic — #2012612 4-19

DG3520 Auto-Shutoff Scale Harness Schematic — #2012605 4-20

DG3520 Ignition Adapter Harness Schematic — #2002965 4-22

Wire Harness 23' Extension — #2012677 4-22

Wheel Torque Chart & Tire Specifications - Wheel Torque Requirements 4-23

Wheel Torque Chart & Tire Specifications - Tire Pressure 4-23

Wheel Torque Chart & Tire Specifications - Tire Warranty 4-23

Complete Torque Chart 4-24

Table of Contents

**Section V
Parts**

Windows, Decals, & Touch-Up Paint	5-2
Triple Axle Undercarriage, Hitch, Fender & Wheel Components	5-4
Tandem Axle Undercarriage, Hitch, Fender & Wheel Components	5-8
Seed Door Components	5-11
Undercarriage Electrical Components.....	5-12
Electric Breakaway Components.....	5-13
Discharge Conveyor Components - For 6" Tube Conveyor	5-14
Discharge Conveyor Components - For 8" Tube Conveyor	5-16
Idler Intake End Components - For 6" Tube Conveyor.....	5-18
Idler Intake End Components - For 8" Tube Conveyor.....	5-20
Conveyor Drive Assembly & Hopper Components.....	5-22
Auger Drive Assembly & Hopper Components.....	5-26
Auger Discharge End Components	5-30
Gooseneck Hitch Components (Optional).....	5-32
Tarp & Ladder Components - Model 2620	5-34
Tarp & Ladder Components - Model 3620	
Prior to Serial No. D58960100.....	5-36
Beginning with Serial No. D58960100	5-40
Manual Winch Components.....	5-44
Electric Winch Components (Optional).....	5-46
Spare Tire (Optional).....	5-48
Non-Scale Components.....	5-50
Scale Components — Model 640XL (Optional)	5-51
DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)	5-52
Telescopic Spout Components (Optional).....	5-54
AG Package (Option) - SMV, SIS Decals, & Reflectors	5-55

Section I Safety

General Hazard Information	1-2
Safety Decals	1-3
Following Safety Instructions	1-4
Before Servicing or Operating	1-4
During Operation	1-5
Before Transporting	1-5
During Transport.....	1-6
Prepare for Emergencies	1-6
Wearing Protective Equipment.....	1-6

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

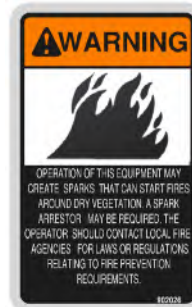
- REPLACE LOST, DAMAGED, PAINTED, OR UNREADABLE DECALS IMMEDIATELY. IF PARTS THAT HAVE DECALS ARE REPLACED, ALSO MAKE SURE TO INSTALL NEW DECALS. THESE DECALS INFORM AND REMIND THE OPERATOR WITH OPERATIONAL INFORMATION AND SAFETY MESSAGES.



Part No. 98350



Part No. 901478



Part No. 902026



Part No. 235161



Part No. 95008



Part No. 901580



Part No. 98229



Part No. 9500345



Part No. 9500710



Part No. 97961



Part No. 97048



Part No. 95839



Part No. TA1-906109-0



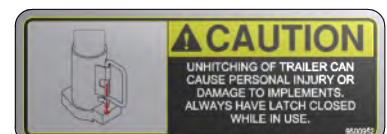
Optional Gooseneck



Part No. 97961







Part No. 9500953




Part No. 9500952

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 power unit and towing vehicle engine off and remove keys 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 the machine or towing vehicle. 
- Never enter a Seed Chariot® containing grain. Flowing grain traps and suffocates victims in seconds. 

Before Servicing or Operating

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

During Operation

- Regulate speed to working 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. (Image of machine contacting power line)
- Use extreme care when operating close to ditches, fences, or on hillsides.
- Do not leave towing vehicle unattended with engine running.
- Carbon monoxide can cause nausea, fainting or death. Do not operate engine in closed or confined area.
- Explosive fuel can cause fires and severe burns. Stop engine before filling fuel tank.
- Hot parts can cause severe burns. Do not touch engine while operating or just after stopping.
- Explosive gas from battery can cause fires and serious acid burns. Charge battery only in a well ventilated area. Keep sources of ignition away.
- Seed being transported may contain seed treatment. Read and follow all requirements for personal protective equipment and first aid as outlined on seed tags.

Before Transporting

- Secure transport chains to towing vehicle before transporting. DO NOT transport without chains.
- Install transport locks before transporting.
- Check for proper function of all available transport lights. Make sure that all reflectors are clean and in place on machine. Make sure that the SMV emblem and SIS decal are visible to approaching traffic.
- Check for proper function of all available transport lights. Make sure that all reflectors are clean and in place on machine.
- This implement may not be equipped with brakes. Ensure that the towing vehicle has adequate weight and braking capacity to tow this unit.
- Make sure auger is folded and vertical auger assembly is positioned in its narrowest configuration.
- Follow all federal, state and local regulations governing highway safety and transporting chemicals.

During Transport

- Comply with all laws governing highway safety when moving machinery.
- Use transport lights as required by all laws to adequately warn operators of other vehicles.
- Regulate speed to road conditions and maintain complete control.
- Maximum transport speed of this implement should never exceed 20 mph 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 mph during off-highway travel.
- Slow down before making sharp turns to avoid tipping. Drive slowly over rough ground and side slopes.
- 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.

Preparing for Emergencies

- Keep a first aid kit and properly rated fire extinguisher nearby.
- Keep emergency numbers for fire, rescue, and poison control personnel near the phone.



Wearing Protective Equipment

- Wear clothing and personal protective equipment appropriate for the job.
- Wear steel-toed shoes when operating.
- Wear hearing protection when exposed to loud noises.
- Do not wear additional hearing impairing devices such as radio headphones, etc.



Section II Set-Up

Pre-Delivery Checklist.....	2-2
Seed Chariot® Assembly.....	2-2
Assemble Hitch/Gooseneck to Undercarriage	2-3
Ladder Installation.....	2-4
Scale Package #26858 (Optional) Model 640XL.....	2-5
DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)	2-6
6' - 10' Long Discharge Spout #22578 (Optional)	2-17
Electric Winch (Optional).....	2-18
Two Function Wireless Remote Kit #2012586CG (Optional)	2-19
Ag Package Decal Placement.....	2-20

FOR TORQUE INFORMATION, PLEASE REFER TO THE MAINTENANCE SECTION

Pre-Operation Checklist

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

- Hardware tightened
- Machine lubricated
- Safety and operating procedures reviewed
- Field adjustment information reviewed
- Lubrication procedures reviewed
- Warranty information reviewed

WARNING

- **READ AND UNDERSTAND THE SAFETY RULES BEFORE OPERATING OR SERVICING THIS MACHINE. REVIEW THE “SAFETY” SECTION IN THIS MANUAL IF NECESSARY.**
- **TIPPING OR MOVEMENT OF THE MACHINE CAN CAUSE SERIOUS INJURY OR DEATH. BE SURE THE MACHINE IS SECURELY BLOCKED.**
- **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 THE UNIT.**
- **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 5,000 LBS. SPECIFIC LOAD RATINGS FOR INDIVIDUAL LOADS WILL BE GIVEN AT THE APPROPRIATE TIME IN THE INSTRUCTIONS.**
- **EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING THE IMPLEMENT.**

Seed Chariot® Assembly

This section contains instructions required for assembly of the Seed Chariot® tender.

For your safety, and the safety of others, use the proper tools and equipment, and always use safe working procedures. Refer to these instructions before starting any work on the machine.

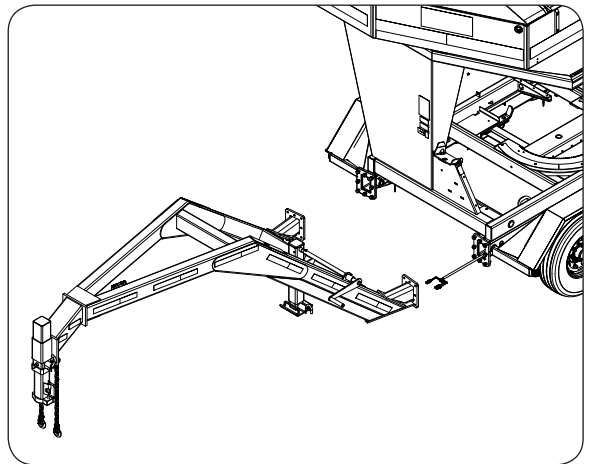
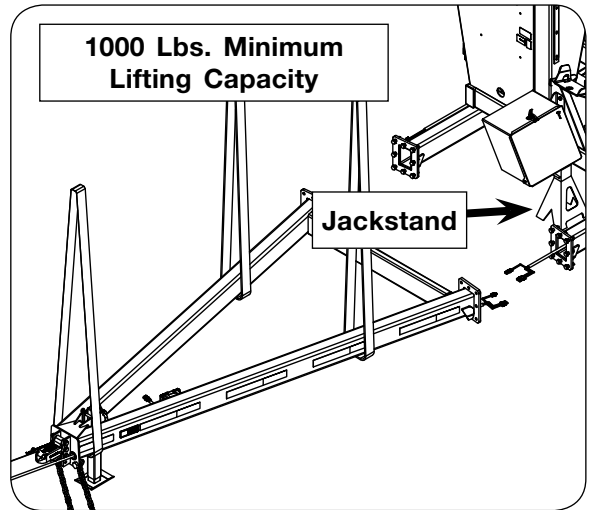
IMPORTANT

- *The procedures for assembling this unit are intended for two or more people.*

For ease of assembly, install all hardware loosely until the assembly is complete and then tighten according to the Torque Chart in the Maintenance Section of this manual.

Assemble Hitch/Gooseneck to Undercarriage

1. If the Seed Chariot® tender was shipped with a hitch/gooseneck installed, torque 5/8"-11 UNC retaining hardware to 120-135 ft.-lbs. If the tender was shipped without a hitch/gooseneck installed, proceed to step 2.
2. Place jackstand rated for minimum 1000 lbs. capacity under front of undercarriage frame. Raise hitch using a safe lifting device with a minimum 1000 lbs. capacity, and place the hitch/gooseneck in line with the undercarriage.
3. Connect the electrical connections, and push extra wire harness into tubes. Move hitch against undercarriage frame being careful not to pinch the wiring harness.
4. Bolt the hitch/gooseneck to undercarriage using 5/8"-11UNC x 2 1/4" capscrews (9390-125), 5/8" stainless steel flat washers (903108), and 5/8"-11UNC locknuts (9801). Torque 5/8"-11UNC hardware to 120-135 ft.-lbs.
5. Verify the function of the lighting. See Maintenance section for the schematic, if needed.

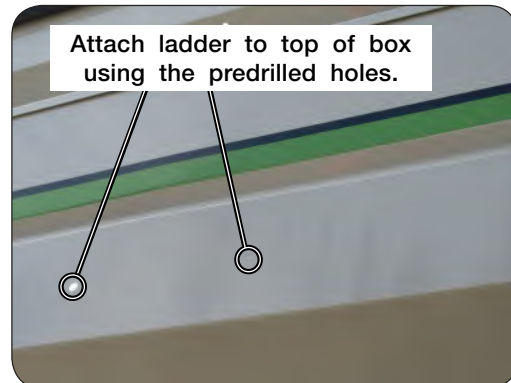
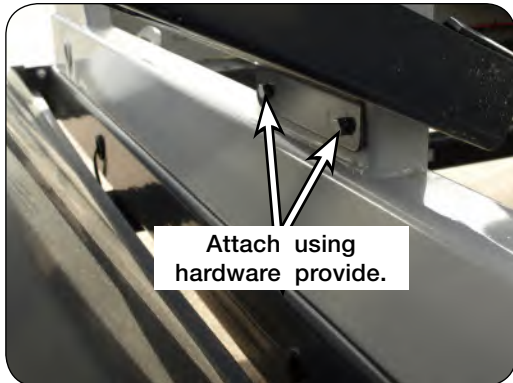


Ladder Installation

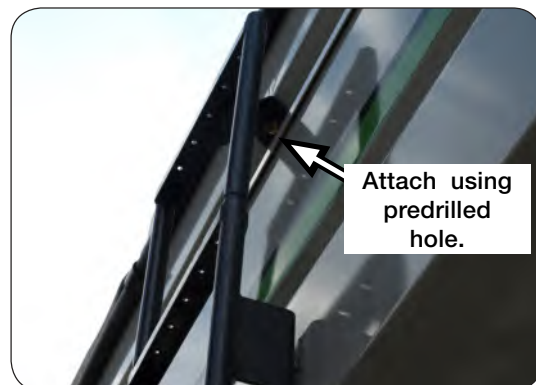
WARNING

- TO PREVENT PERSONAL INJURY OR DEATH, ALWAYS ENSURE THAT THERE ARE PEOPLE WHO REMAIN OUTSIDE THE SEED CHARIOT® TENDER TO ASSIST THE PERSON WORKING INSIDE, AND THAT ALL SAFE WORK PLACE PRACTICES ARE FOLLOWED. THERE IS RESTRICTED MOBILITY AND LIMITED EXIT PATHS WHEN WORKING INSIDE THE IMPLEMENT

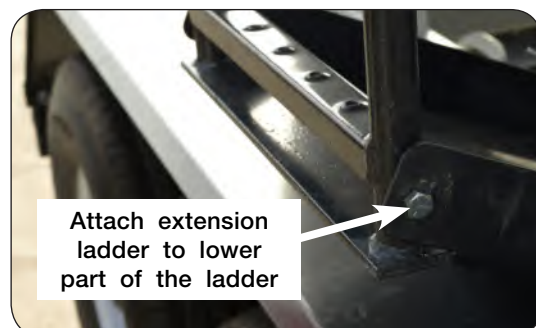
1. Remove the ladder and components from inside the tank.
2. Attach the extension bracket to the frame using the hardware provided.



3. Attach the middle portion of the ladder to the right side of the box, using the predrilled holes at the top. Secure in place using capscrews (9390-100), washers (9405-088) and locknuts (9800).
4. Slide the upper portion of the ladder into the top of the middle portion of the ladder. Attach the upper portion to the tank using the predrilled hole.

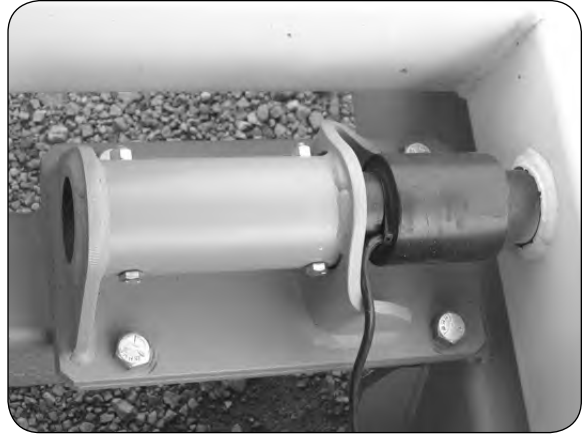


5. Remove bolt holding extension ladder in and discard. It is used for shipping only. Attach ladder to the lower extension lower part of the ladder using capscrews (9390-058) and locknuts (9928).



Scale Package #26858 (Optional) - Model 640XL

Remove two hold down brackets from one side of the box. Assemble load cell (902063) into scale bracket (29477CG) using two 3/8"-16UNC x 3 3/4" capscrews (9390-066) and 3/8"-16UNC top locknuts (9928). The load cells must be assembled so the 'TOP' indicator on the load cell is located to the top of the bracket or rotate the load cell so the "bending direction" decal on the end of the bar points down. Using a safe lifting device with minimum 5000 lb. lift capacity, carefully lift one side of the box approximately 1". Slide the load cell into the bushing on the inside of the box. Fasten the bracket down to the undercarriage using the four 5/8"-11UNC x 2 capscrews (9390-124) and 5/8"-11UNC top locknuts (9801). Repeat this process for all four corners of the box.

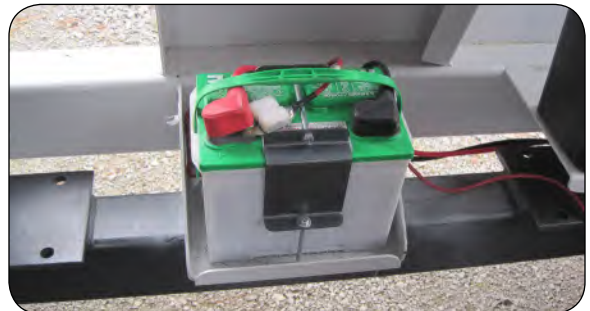


Route the load cell cables along the inside edge of the box and fasten using the cable ties (9000106). Be certain the cables will not get pinched or worn.

Assemble the scale enclosure (28945CG) to the front of the box using two 1/2"-13UNC x 1 1/2" capscrews (9390-101) and 1/2"-13UNC locknuts (9800).



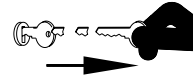
Route cables from the load cells into the opening at the bottom of the enclosure and connect to the scale indicator (902062) ports. Connect power cord (902087) to indicator, and fasten indicator into enclosure using two 1/4" x 3/4" bolts (9390-003) and lock nuts (9928).



Connect the scale power cord to the battery at the rear of the implement.

DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)

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

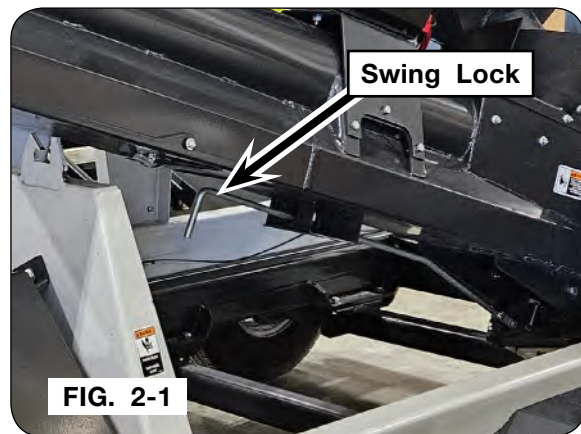


Models equipped with Dinamica Wireless Remote

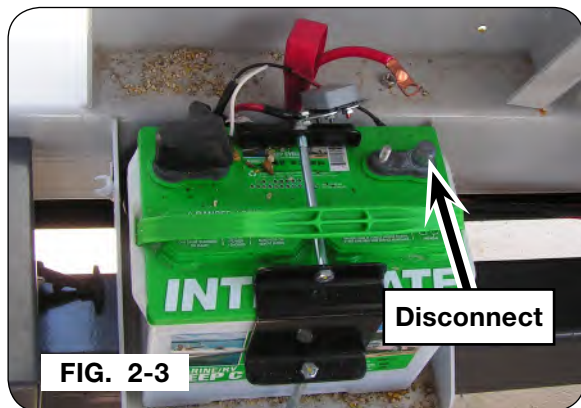
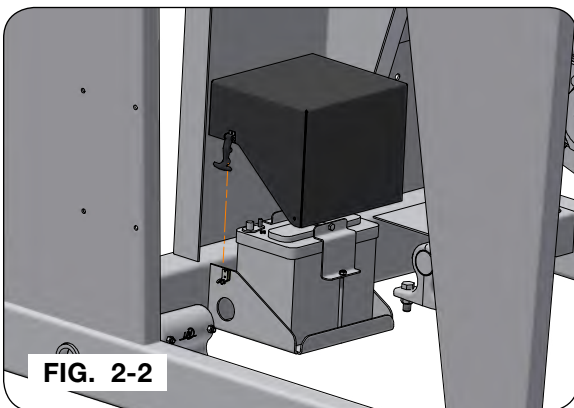
If the seed tender is equipped with a DG wireless remote, the wiring harness and primary driver are already installed.

Models without DG Wireless Remote

2. Raise the conveyor from the transport rest and position the conveyor for best access to the engine. Make sure the conveyor swing lock is locked into the transport rest.



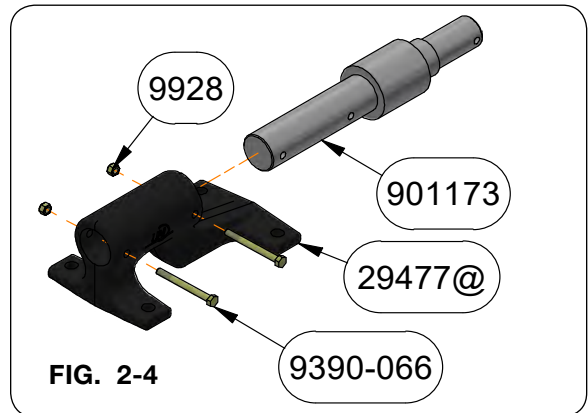
3. Remove the battery cover. FIG 2-2
4. Disconnect the RED/positive lead from the seed tender battery. FIG 2-3



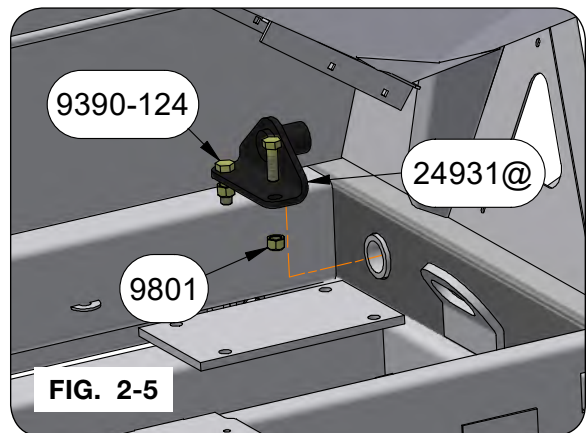
DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)

5. Assemble load cell (901173) into scale bracket (29477B) using two 3/8"-16UNC x 3 3/4" capscrews (9390-066) and 3/8"-16UNC top locknuts (9928).

-Tighten capscrews (9390-066) and locknuts (9928) just enough to engage locknut and the bolt still freely spins in the casting. The load cells must be assembled so the 'STOP' indicator on the load cell is located to the top of the bracket or rotate the load cell so the "bending direction" decal on the end of the bar points down. FIG 2-4



6. Remove and discard the 5/8"x2" capscrews (9390-124), 1/2" locknuts (9801) and the hold down brackets from one side of the box. FIG 2-5



7. Using a safe lifting device rated at a minimum of 5000 lbs., carefully lift the loose side of the box approximately 1".

8. Slide the load cell into the bushing on the inside of the box and fasten the bracket down to the undercarriage using the four 5/8"-11UNC x 2 capscrews (9390-124) and 5/8"-11UNC top locknuts (9801). Repeat this process for all four corners of the box. FIG. 2-6

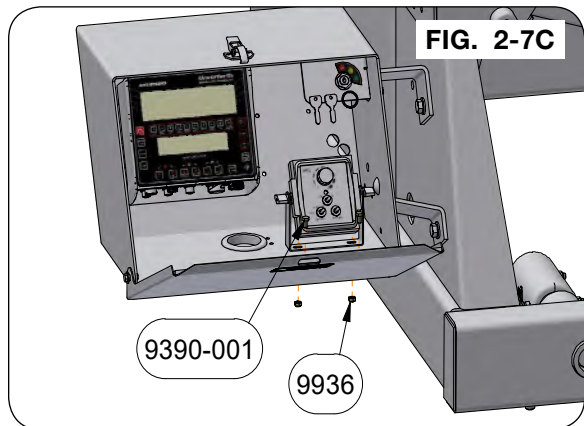
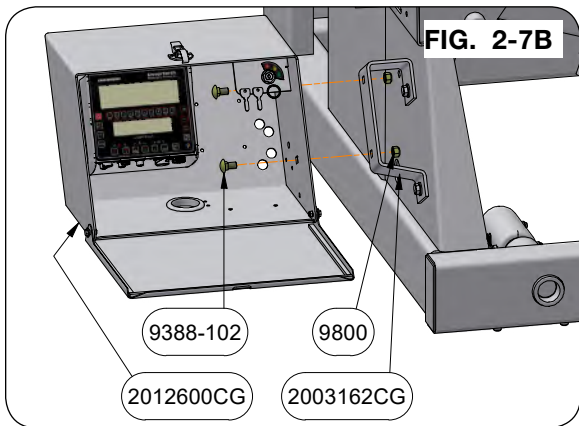
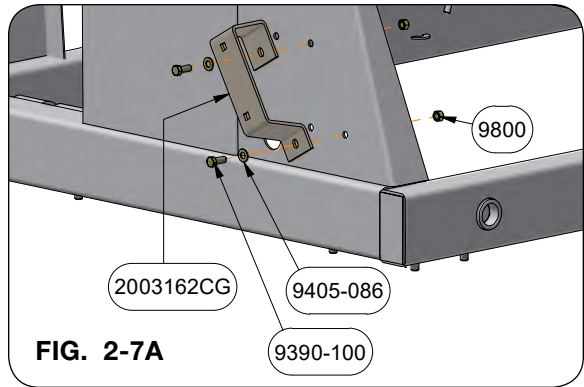
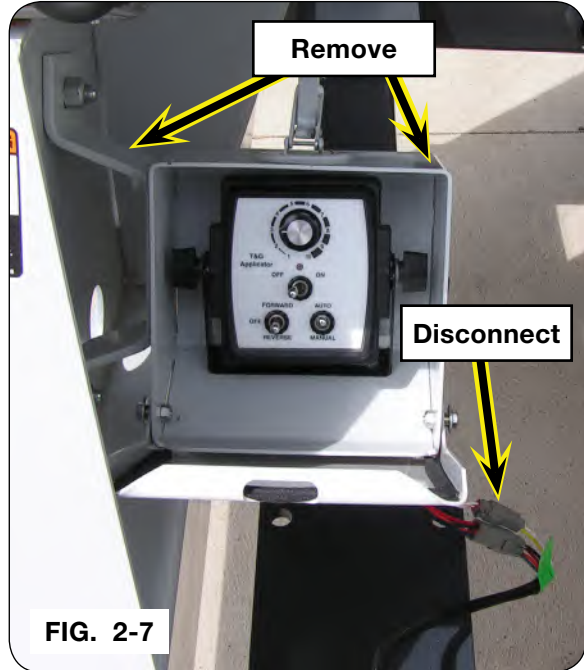


9. Route the load cell cables along the inside edge of the frame to where the scale enclosure will be located and fasten using the cable ties (9000106). Be certain the cables will not get pinched or worn.

DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)

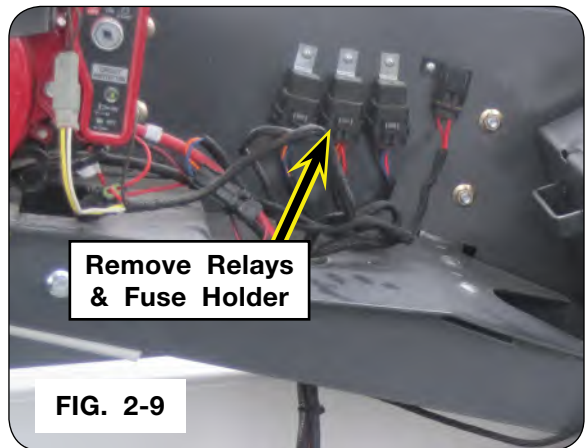
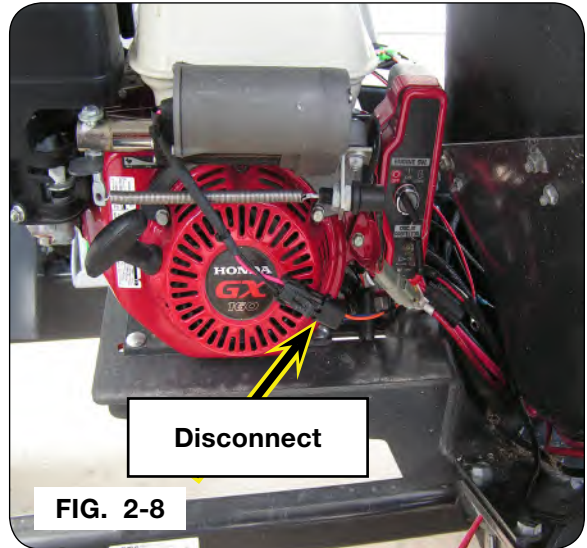
10. Seed Tender Equipped With Talc Applicator

- A. Disconnect the talc applicator controller from the wiring harness as shown in FIG. 2-7. Remove and save the talc controller, mounting bracket and hardware from the talc applicator enclosure. Remove the enclosure, mounting bracket and hardware and discard.
- B. Attach the side mount bracket (2003162CG) where the applicator controller enclosure side mount bracket was located (2 forward most holes) with the provided cap screws 1/2-13UNCx1" (9390-100), 1/2" flat washers (9405-086) & 1/2" locknuts (9800) and torque to spec. FIG. 2-7A.
- C. Using carriage bolts 1/2-13UNCx1" (9388-102) and 1/2" locknuts (9800), attach scale enclosure assembly (2012600CG) to the side mount bracket (2003162CG), so that the bottom of the remote enclosure assembly will be horizontal when mounted on the seed tender and torque to spec. FIG. 2-7B.
- D. Reinstall the talc controller, mounting bracket and hardware, from the talc applicator enclosure, into the new enclosure and reconnect the talc applicator controller to the wiring harness. FIG. 2-7C.

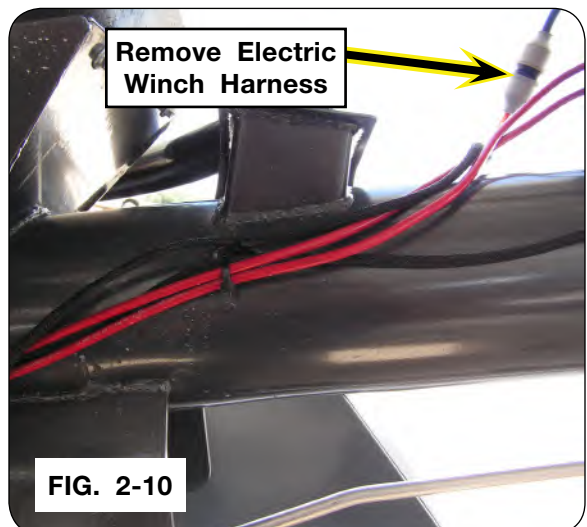


DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)

11. Disconnect the throttle control from the throttle actuator and remove the throttle control harness, relays and fuse holder (FIG. 2-81 & FIG. 2-9). The throttle actuator is to remain attached to the engine, it will be reused.

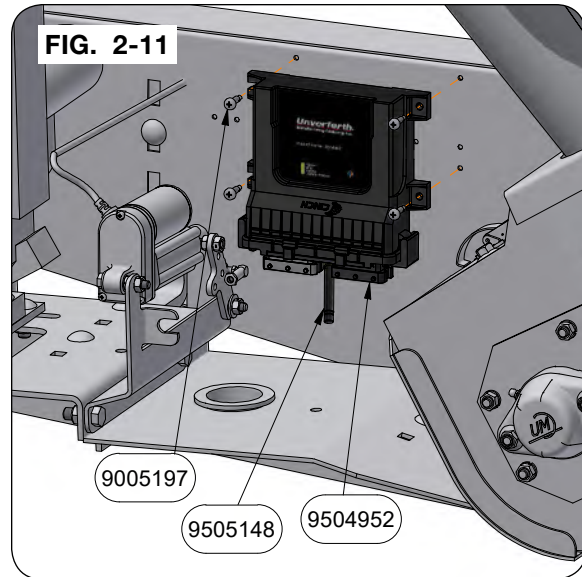


NOTE: If the unit is equipped with the electric winch, the winch controls shown in FIG. 2-10 are to be disconnected and removed.

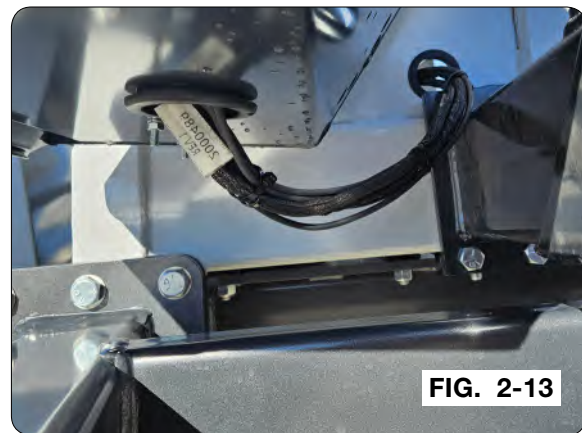


DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)

12. Install antenna (9505148) onto primary driver (9504952).
13. Attach the primary driver to the driver belt shield using four (4) self drilling/tapping screws #10-16x3/4" (9005197) as shown in FIG. 2-11. Torque to 10-12 In-lbs.

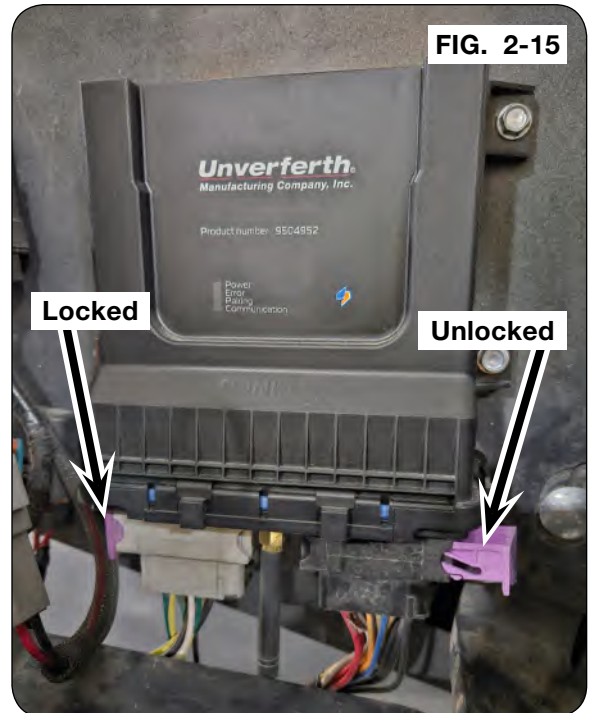


14. Starting at the battery, route wiring harness around and up through engine mount to the primary driver and engine connections. With the remainder of harness, leaving enough slack for the conveyor to pivot, follow battery cables down and along left hand tube up to the front standard. Secure the wiring harness to the frame and to the battery cables using cable ties (94037) as shown in FIG. 2-12 & FIG. 2-13.

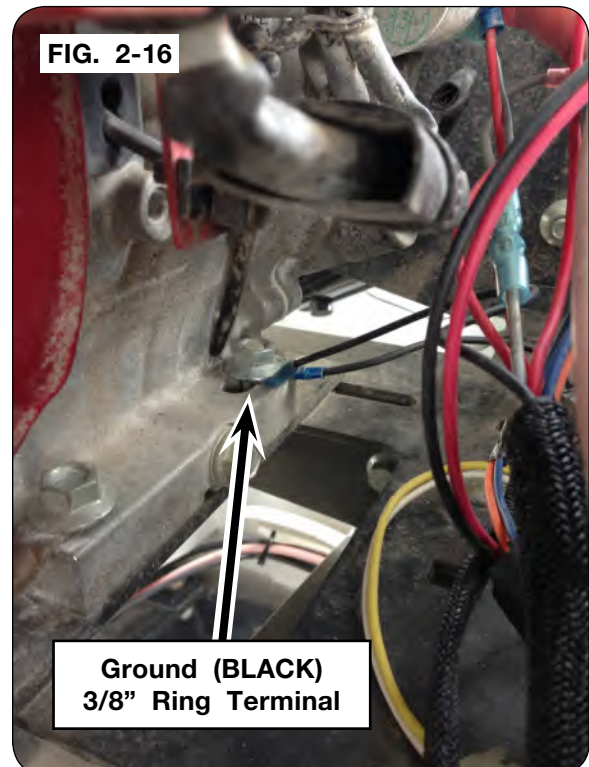


DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)

15. Attach the mating connector to the rear of the key switch. Attach the primary driver connectors to the bottom of the primary driver. Make sure that both connector locks are fully inserted and can be heard to click into place. FIG. 2-14 & FIG. 2-15.

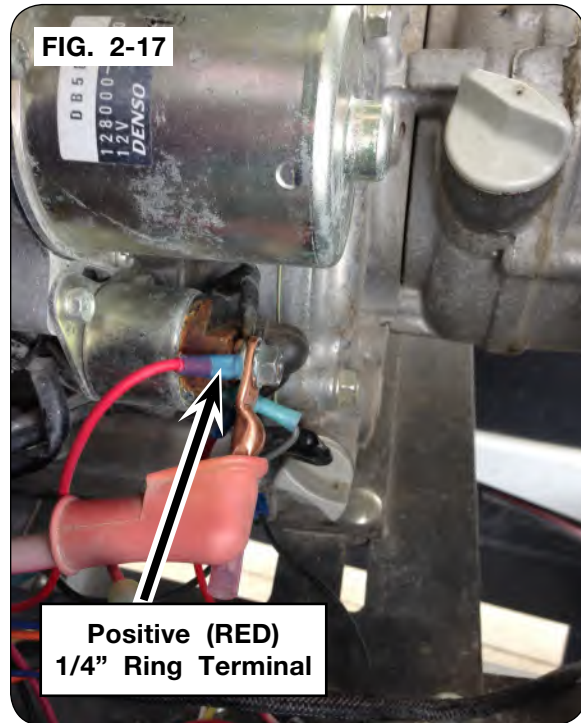


16. At the engine, attach the black wire with the 3/8" ring terminal to the engine mounting bolts as shown in FIG. 2-16.



DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)

17. Attach the red wire with the 1/4" ring terminal to the positive battery terminal on the starter, see FIG. 2-17.



Follow steps 18 through 21 for an eight inch conveyor.

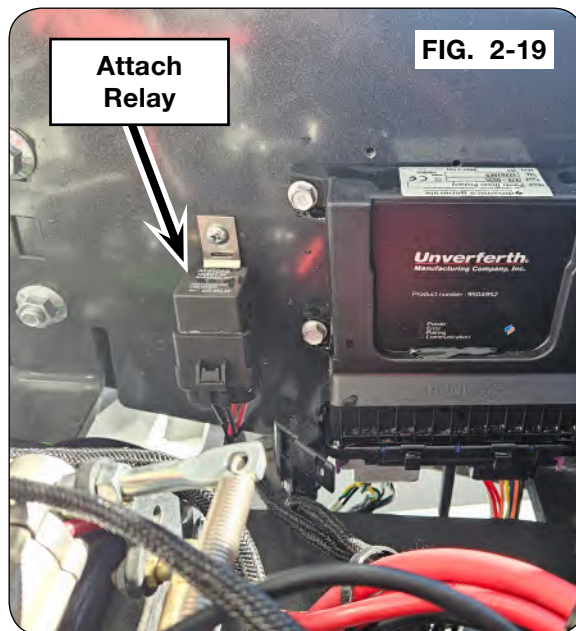
Follow steps 22 & 23 for a six inch conveyor.

18. Remove the heat shrink tubing from the gray wire with the 1/4" female spade terminal. Remove the wire from the 1/4" male spade terminal on the starter solenoid and attach this gray wire to the starter solenoid as shown in FIG. 2-18.

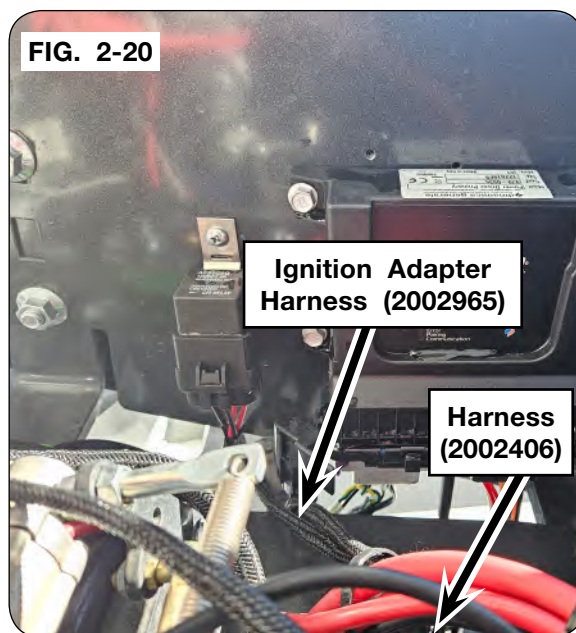


DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)

19. Using one of the pan head screws #10-16 x 1/2" (9001396) from the original throttle relays attach ignition adapter harness (2002965) to the belt shield as shown in FIG. 2-19.



20. Remove dust cover from two pin power connector on wiring harness (2002406) and attach mating connector on ignition adapter harness (2002965), see FIG. 2-20.



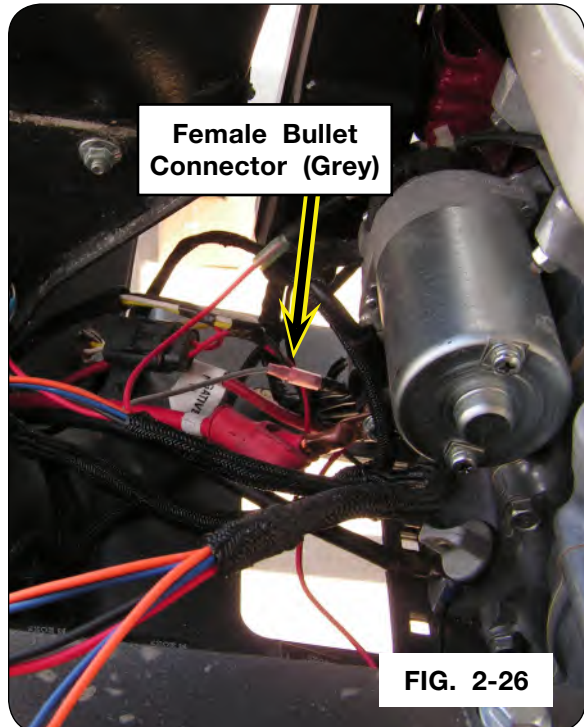
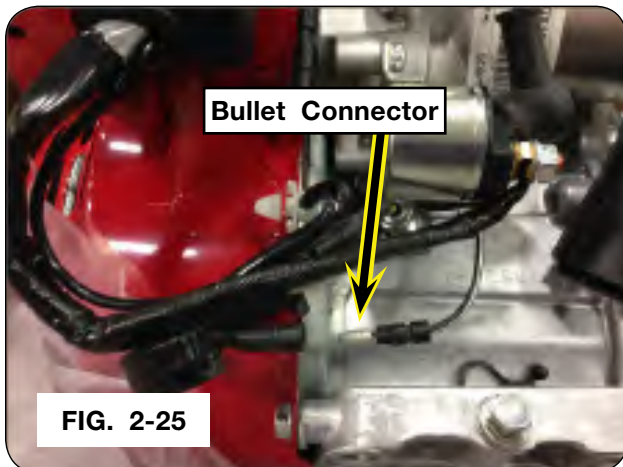
DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)

21. On the engine locate the two wires that lead to the magneto, these are located under the fuel tank. Disconnect the two wires from the Honda key switch and attach them to the two mating connectors on ignition adapter harness as shown in FIG. 2-24.



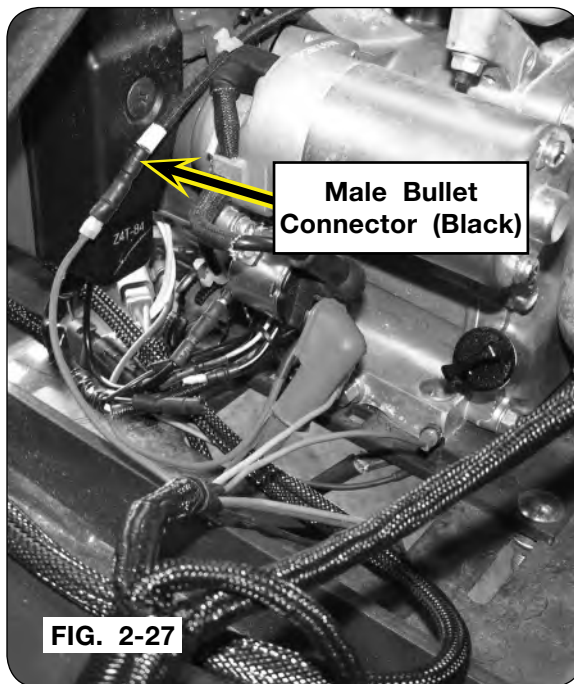
Follow steps 22 & 23 for a six inch conveyor.

22. Remove the heat shrink tubing from the grey wire with the female bullet connector. The starter solenoid on this engine has a short lead wire, follow this wire to locate a bullet connection as shown in FIG. 2-25. Disconnect the black wire with the white stripe and attach the gray wire as shown in FIG. 2-26.



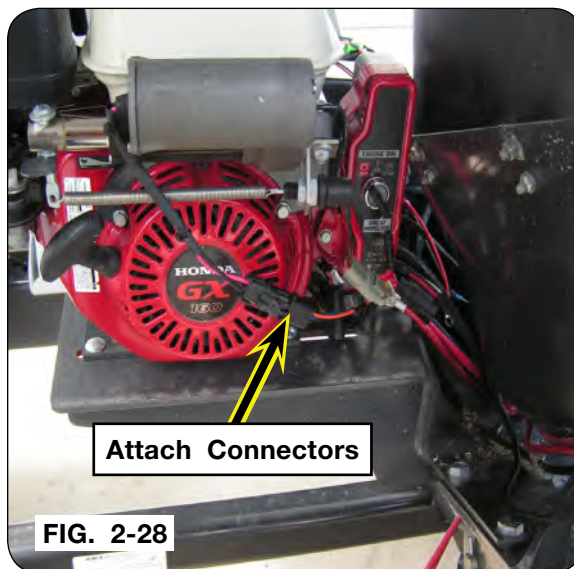
DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)

23. Remove the heat shrink tubing from the black wire with the male bullet connector, attach this wire to the single wire leading under the fuel tank to the engine magneto, see FIG. 2-27.



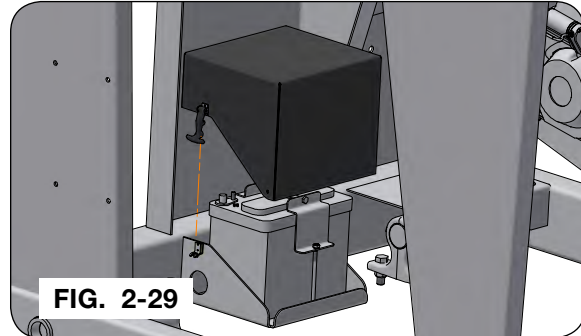
Following steps apply to all seed tenders.

24. Locate the two-pin contact weather pack shroud with orange and blue wires and connect this to the throttle actuator as shown in FIG. 2-28.



DG3520 Auto-Shutoff Scale Pkg#2012585CG (Optional)

25. Reattach battery cables and replace battery cover. FIG. 2-28 & FIG. 29.

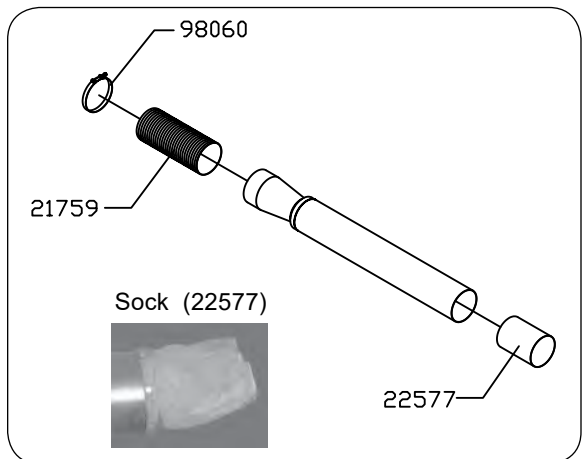
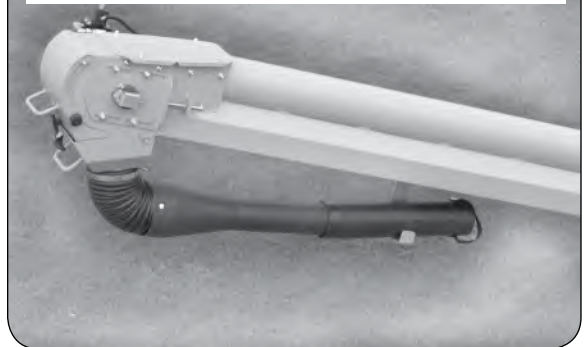


26. See OPERATING section for start up and operating instructions.

6' - 10' Long Discharge Spout #22578 (Optional)

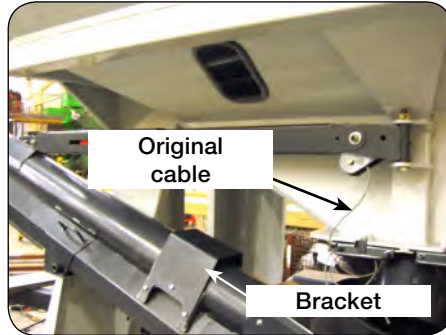
1. Lower the conveyor to approximately 4-5 feet off the ground.
2. Remove the standard spout from the conveyor by loosening the T-bolt clamp ring.
3. Slip the optional telescopic spout with the T-bolt clamp ring (98060) over the conveyor tube end and tighten.

STANDARD 4' TO 6' SPOUT #95870

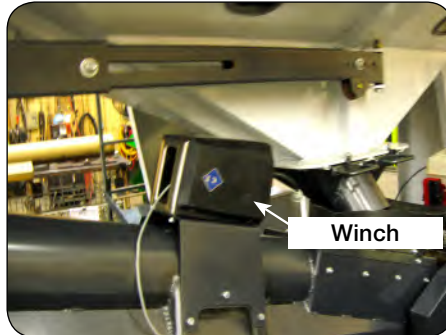


Electric Winch Kit #28474 (Optional)

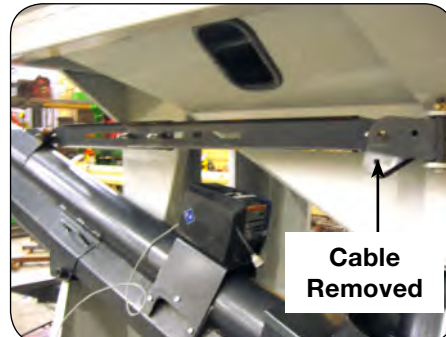
1. With the conveyor resting in the transport position, remove all tension from the cable and remove the hand winch and existing winch bracket.
2. Install the bracket for the electric winch using 3/8" x 1" bolts and locknuts.



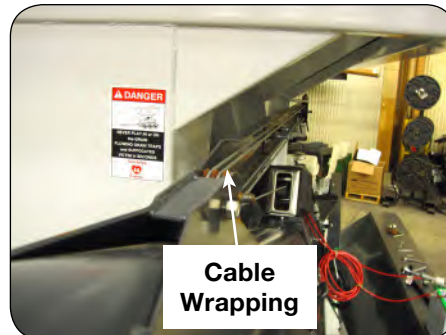
3. Install the electric winch onto the bracket using 3/8" x 1" bolts and locknuts.
4. Remove the outer cable covering by removing the 1/2" locknuts from the end pins.



5. Completely remove the cable that was used with the hand winch.



6. Wrap the cable beginning with the conveyor end. Start under the pulley, back to the anchor end, repeat and secure at the conveyor end using the 1/2" bolt and locknut.



7. Reinstall the cable covers and secure with the 1/2" bolts and locknuts.



Two-Function Wireless Remote Kit (Optional)

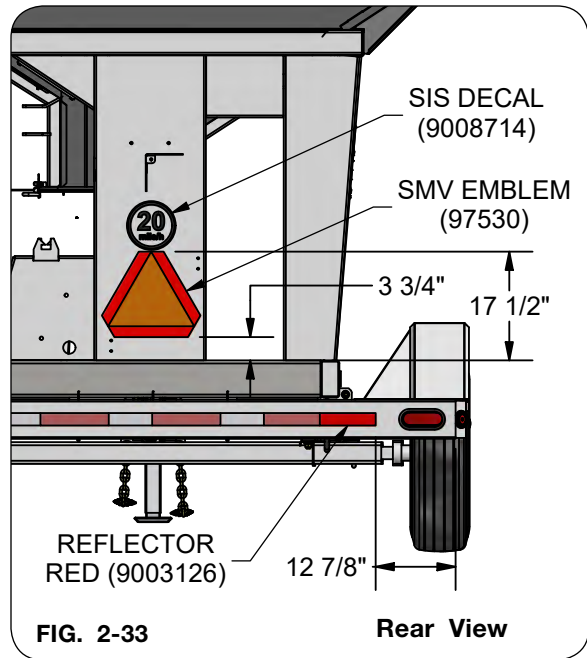
Wireless remote control package controls conveyor unloading speed and raises and lowers the conveyor if the unit is equipped with electric winch option.

Refer to your Two-Function Wireless Remote manual for set up, operating, and maintenance information.

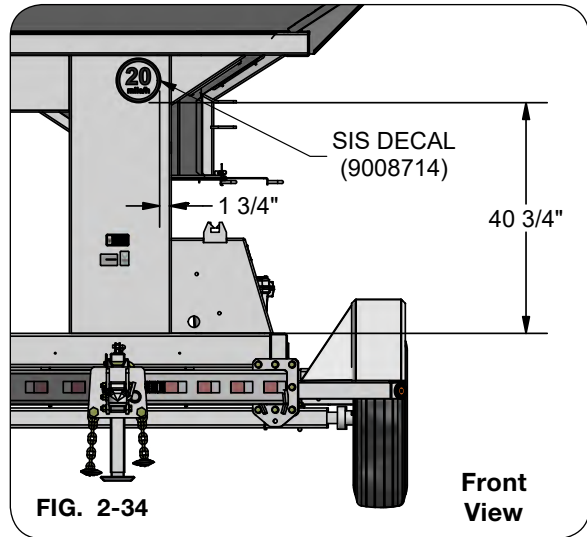


AG Package Decal Placement

1. Center and attach the SMV Emblem (95730) to the rear of the unit 3 3/4" from the frame. FIG. 2-33
2. Center and attach the SIS decal (9008714) to the rear of the unit 17 1/2" from the bottom of the frame. FIG. 2-33
3. Attach the red reflector (9003126) 12 7/8" from the right-hand side of the bumper. FIG. 2-33

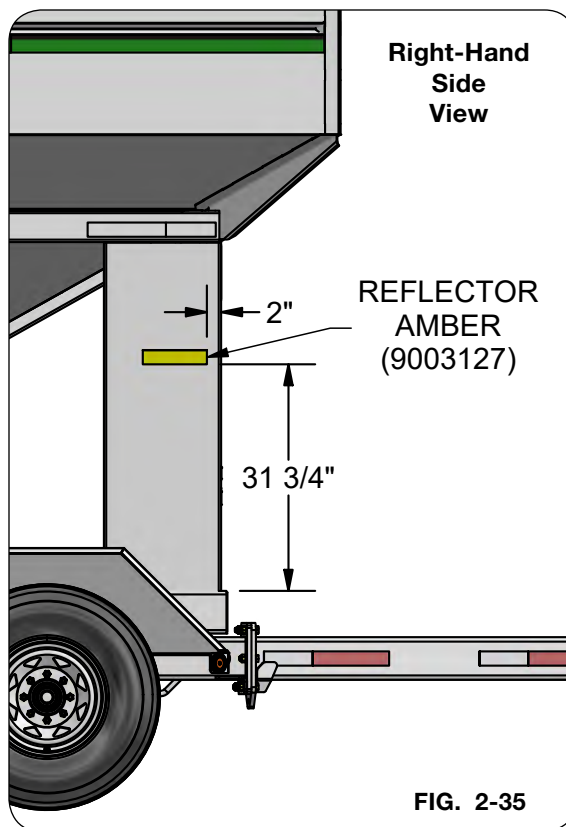


4. Attach the SIS decal (9008714) to the front of the unit 40 3/4" from the frame and 1 3/4" from the side of the panel as shown in FIG. 2-34.

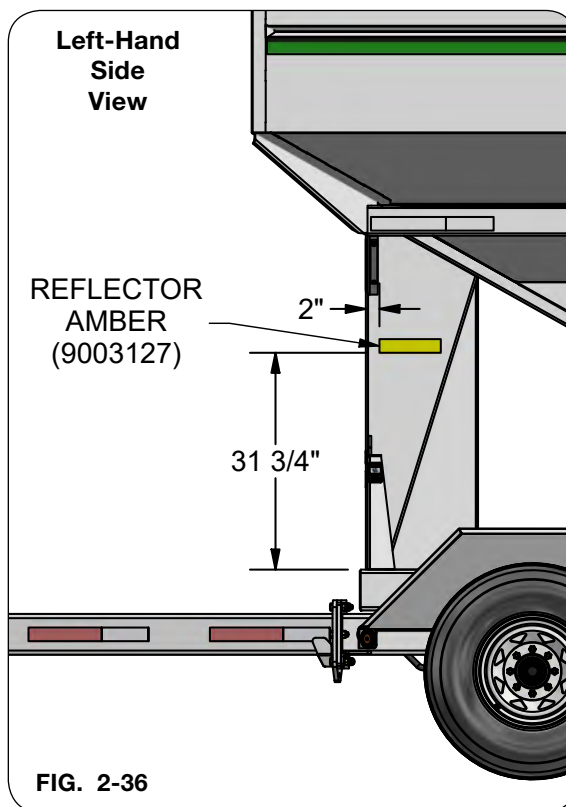


AG Package Decal Placement (continued)

- 5. Place the amber reflector (9003127) 31 3/4" from the frame and 2" from the front on the right-hand side of the unit. FIG. 2-35



- 6. Place the amber reflector (9003127) 31 3/4" from the frame and 2" from the front on the left-hand side of the unit. FIG. 2-36



Notes

Section III Operation

Preparing Towing Vehicle	3-2
Preparing Implement - Lubrication.....	3-2
Preparing Implement - Tires/Wheels	3-2
Connecting to Towing Vehicle.....	3-3
Transport Chains	3-3
Transporting.....	3-4
Engine Operation.....	3-5
Raising and Lowering Conveyor	3-6
Pivoting Conveyor or Auger Side-to-Side.....	3-6
Filling Planter or Drill.....	3-7
Ladder	3-8
Weather Guard Tarp.....	3-9
Electronic Scale Operation - Model 640XL (Optional)	3-10
DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)	3-14
Spout Recommendations.....	3-17

Refer to your Two-Function Wireless Remote manual #2012706 for more information.

Refer to your DG3520 Auto-Shutoff Scale instruction sheet #2012601 for more information.

Preparing Towing Vehicle

Before operating the implement, refer to the towing vehicle's operator's manual for information concerning safe methods of operation, hitch capacities, hitch adjustments, tire inflation and undercarriage braking operation.

The vehicle must be equipped with proper electric undercarriage braking components. Check the vehicle brakes and transport lights. Make sure they are in proper working order.

Do not exceed the towing vehicle's GVWR (Gross Vehicle Weight Rating) or GCWR (Gross Combination Weight Rating), or the maximum hitch load.

Estimated weights of the fully loaded Seed Chariot® are:

Model 3620

Gross Vehicle Weight Rating is 25,000 lbs.
Loaded tongue weight is 1,000 lbs.

Model 2620

Gross Vehicle Weight Rating is 19,500 lbs.
Loaded tongue weight is 1,000 lbs.

These are estimates. The loaded tongue weight will vary greatly based on the height of the hitch, and the variation in the terrain that the Seed Chariot® tender is being pulled across.

Towing vehicle hitch - ball or pintle hook, must be heavy enough to carry the load of the Seed Chariot® tender.

Preparing Implement

Lubrication

Lubricate as outlined in the Maintenance section.

Refer to this operator's manual for the proper fluid levels in the engine.

Tires/Wheels

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

CAUTION

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

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

Connecting to Towing Vehicle

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.**

The Seed Chariot® undercarriage is designed to be connected to a towing vehicle utilizing either the pintle hitch, 2 5/16" ball hitch or a clevis hitch.

Back the towing vehicle up to the undercarriage and align the vehicle's ball or pintle hook with the coupler or ring on the undercarriage. Lower the jack to set the undercarriage down on the ball or pintle hook. Latch the coupler so the connection is secure. Pivot the jack to the transport position and pin in place.

Connect the electrical plug from the undercarriage to the towing vehicle. Check the routing of the electrical cord to be certain it is long enough to pivot when turning, but not too long to touch or rub the ground during transport.

Connect the undercarriage brake breakaway cable to the towing vehicle. Do not connect this directly to the hitch. It needs to be connected in a place that will still be attached, even if the ball or pintle coupler fails.

Transport Chains

CAUTION

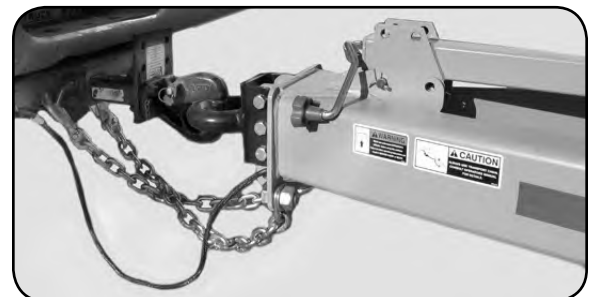
- **ALWAYS USE THE TRANSPORT CHAINS WHEN TRANSPORTING THE IMPLEMENT. FAILURE TO USE THE CHAINS COULD CAUSE PERSONAL INJURY OR DAMAGE IF THE IMPLEMENT BECOMES DISENGAGED.**

Transport chains should have a minimum rating equal to the gross weight of the implement and all attachments. Allow no more slack in the chains than necessary to permit turning.

Cross the chains when connecting as shown in the photo to the right.

IMPORTANT

- *Replace the transport chains if any link or end fitting is broken, stretched or damaged. DO NOT WELD TRANSPORT CHAINS.*



Transporting

DANGER

- CONTACT WITH UTILITY LINES CAN CAUSE SERIOUS INJURY OR DEATH. DO NOT OPERATE THE TENDER NEAR UTILITY LINES.



WARNING

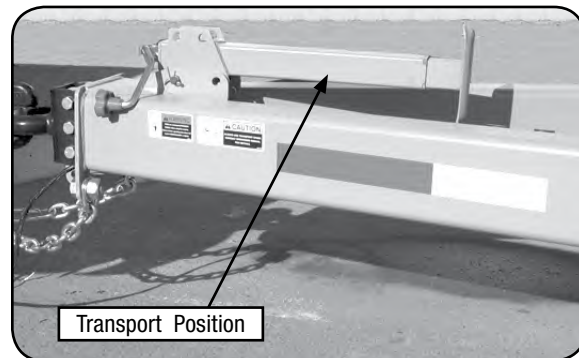
- ALWAYS TRAVEL AT A SPEED THAT PERMITS COMPLETE CONTROL OF THE TOWING VEHICLE AND IMPLEMENT.
- THE REAR HOPPER OF THE SEED TENDER BOX SHOULD ALWAYS BE EMPTIED FIRST. THIS WILL MAINTAIN THE WEIGHT ON THE HITCH OF THE TOWING VEHICLE. EMPYTING THE FRONT HOPPER FIRST WITH THE REAR HOPPER FULL COULD RESULT IN NEGATIVE TONGUE WEIGHT ON THE UNDERCARRIAGE AND REDUCED CONTROL WHEN TOWING.

CAUTION

- USE APPROVED TRANSPORT LIGHTS AND REFLECTORS WHEN TRANSPORTING AT NIGHT, DURING PERIODS OF POOR VISIBILITY, AND AS REQUIRED BY LOCAL LAW.

IMPORTANT

- *Before the unit is transported, be sure the jack stand is in the 'Transport Position'.*



When transporting on public roads, the conveyor needs to be latched in the forward position, extending over the tongue of the undercarriage. Transporting the implement with the conveyor latched in the rearward position does not comply with lighting and conspicuity marking requirements.

The center of gravity on the Seed Chariot® box is higher than a typical undercarriage. Use extreme caution when making turns and entering/exiting fields.

Comply with all state and local laws governing highway safety and regulation when moving machinery on public roads.

Be sure the reflectors and lights are in place and clearly visible to approaching traffic.

Engine Operation

WARNING

- **EXPLOSIVE FUEL CAN CAUSE FIRES AND SEVERE BURNS. STOP THE ENGINE BEFORE FILLING THE FUEL TANK.**
- **CARBON MONOXIDE CAN CAUSE SEVERE NAUSEA, FAINTING OR DEATH. DO NOT OPERATE THE ENGINE IN A CLOSED OR CONFINED AREA.**
- **HOT PARTS CAN CAUSE SEVERE BURNS. DO NOT TOUCH THE ENGINE WHILE OPERATING OR JUST AFTER STOPPING.**
- **EXPLOSIVE GASES FROM THE BATTERY CAN CAUSE FIRES AND SEVERE ACID BURNS. CHARGE THE BATTERY ONLY IN A WELL VENTILATED AREA. KEEP SOURCES OF IGNITION AWAY.**
- **OPERATION OF THIS EQUIPMENT MAY CREATE SPARKS THAT CAN START FIRES AROUND DRY VEGETATION. A SPARK ARRESTOR MAY BE REQUIRED. THE OPERATOR SHOULD CONTACT LOCAL FIRE AGENCIES FOR LAWS OR REGULATIONS RELATING TO FIRE PREVENTION REQUIREMENTS. THE SPARK ARRESTOR MUST BE PURCHASED SEPARATELY AND CAN BE FOUND IN THE PARTS SECTION NEAR THE END OF THIS MANUAL.**

IMPORTANT

- *When the engine is not in use, turn the fuel lever to the <OFF> position. Leaving the fuel valve on could cause carburetor flooding, fuel in the crankcase or fuel leakage. See photos to the right.*
- *Do not use ether or other starting aids to start the engine. Damage to the engine will occur.*
- *Use only clean fuel. Contaminates in the fuel may cause damage to the engine or loss of performance.*

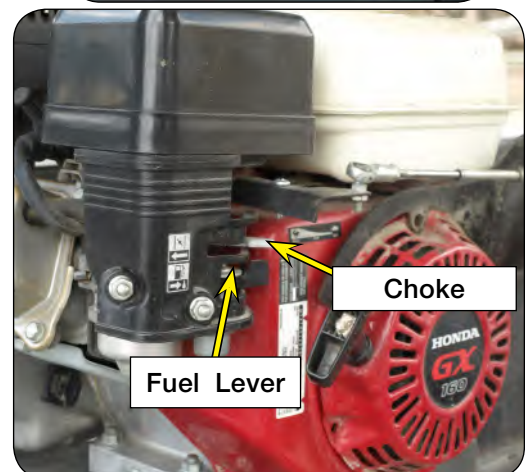
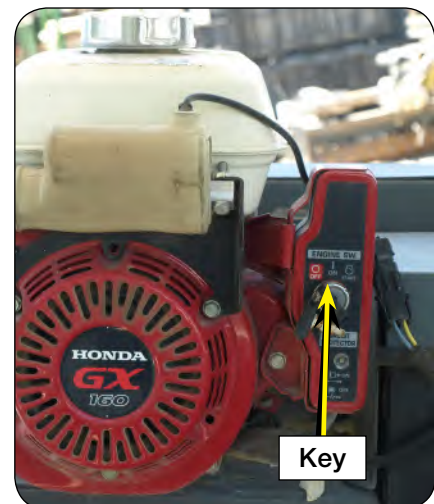
NOTE: Installation instructions for the spark arrestor can be found in the Honda engine manual.

Starting Engine:

Turn the fuel shut-off valve to the <ON> position. Apply the choke, and turn the key or pull recoil rope to start the engine. Once the engine is running, turn the choke off and increase the throttle speed.

In extremely cold weather, it is best to allow the engine to warm up before operating at full throttle speed.

See the engine operator's manual for more detailed information on engine operation.



Raising and Lowering Conveyor or Auger

IMPORTANT

- Be certain clearance to rafters, walls, etc. exists before operating the conveyor.
- Always hold the transport latch lever to the side when raising the conveyor.

For the manual operation, hold the latch lever to the side, and crank the winch to raise the conveyor out of transport. The conveyor can then be raised and lowered by cranking the winch in or out.

For the electric winch, hold the latch lever to the side and press the “IN” (up) button on the electric winch handle. The conveyor can then be raised by pressing the “IN” (up) button, and lowered by pressing the “OUT” (down) button.

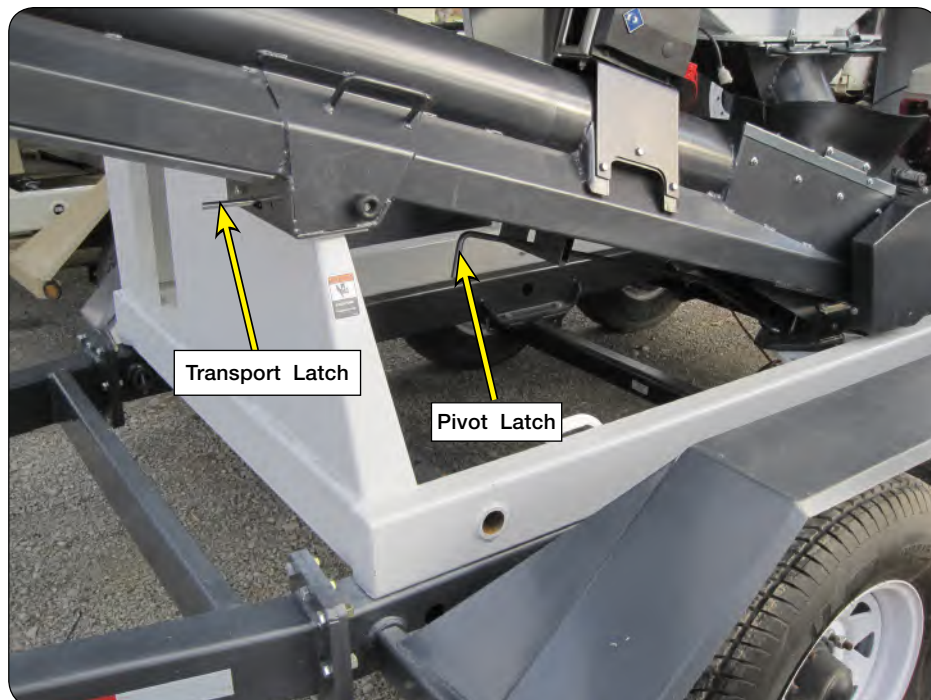
Pivoting Conveyor or Auger Side-to-Side

CAUTION

- WHEN THE SEED TENDER IS PARKED ON AN INCLINE, THE CONVEYOR MAY PIVOT AS SOON AS THE LATCH IS RELEASED. INADVERTENT MOVEMENT OF THE CONVEYOR MAY CAUSE PERSONAL INJURY.

Hold the conveyor latch lever to the side, and raise the conveyor out of the transport position. Pull the pivot lock up and swing the conveyor to the side.

The conveyor pivot can be left to swing freely, or it can be latched in place.



Filling Planter or Drill

⚠ WARNING

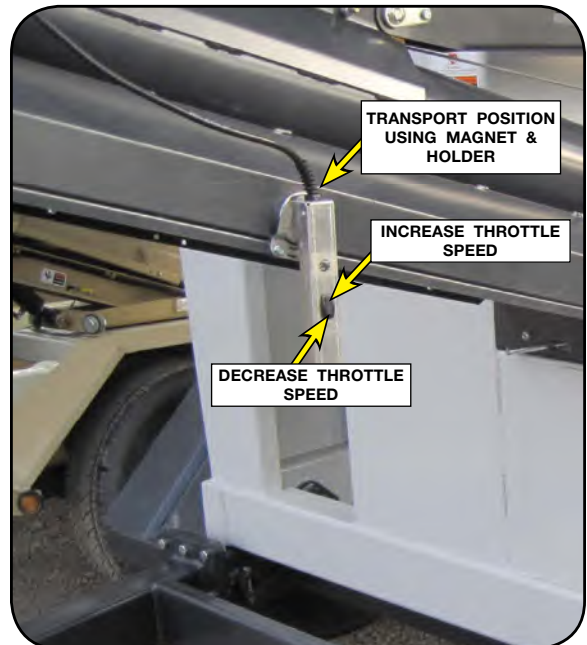
- **THE REAR HOPPER OF THE SEED TENDER BOX SHOULD ALWAYS BE EMPTIED FIRST. THIS WILL MAINTAIN WEIGHT ON THE HITCH OF THE TOWING VEHICLE. EMPTYING THE FRONT HOPPER FIRST WITH THE REAR HOPPER FULL COULD RESULT IN NEGATIVE TONGUE WEIGHT ON THE UNDERCARRIAGE AND REDUCED CONTROL OF THE UNDERCARRIAGE WHEN TOWING.**

The conveyor On/Off is controlled by a centrifugal clutch on the engine. Increasing the engine speed will engage the clutch and turn the conveyor on. Continuing to increase the engine speed will increase the belt/auger flighting speed. Decreasing the engine speed will slow the belt/auger flighting, and eventually disengage the clutch to turn the conveyor off. Engine speed is controlled by a switch on the hand-held controller.

Press the UP arrow to increase engine speed to engage the conveyor centrifugal clutch and increase belt speed. Press the DOWN arrow to decrease engine speed and disengage the centrifugal clutch.

Position the Seed Chariot® tender next to the planter so the conveyor discharge will be over the planter box. Raise the conveyor to the desired discharge height, and pivot to the location over the planter. Place the telescoping spout over the planter box. Start the engine and open the flow door(s) to begin the flow of seed. Increase the engine throttle speed to start the conveyor.

Fill the box to the desired level, and turn the conveyor off by decreasing the throttle speed. Repeat the process until each box/hopper is filled. Adjusting the engine speed regulates the conveyor speed.



IMPORTANT

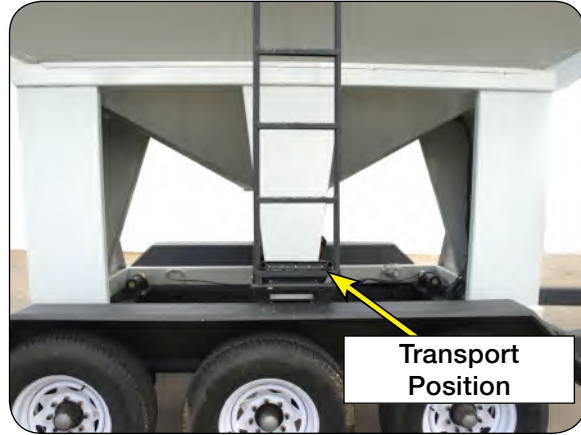
- *Do not let the telescoping spout rest in the bottom of the seed box. Seed will rapidly build up and plug the conveyor, resulting in potential damage to the belt.*

It is recommended that the conveyor be emptied once the planter is filled. Do this by closing the door(s) on the Seed Chariot® box shortly before the last planter box is full, and let the conveyor empty out.

Leaving seed in the conveyor for short periods of time will not damage the conveyor, nor will it hinder starting/stopping the conveyor when it is full, but over time, seed could begin to settle resulting in hard starting of the conveyor.

Ladder

1. To use the ladder, extend the lower extension ladder from the transport position by sliding the bottom rung out until it stops. Lower the extension ladder towards the ground.
2. When not using the ladder, be sure to raise the lower extension ladder upward and slide back into the transport position.



Weather Guard Tarp

Always use adequate caution when operating the tarp.

If the 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 end caps.

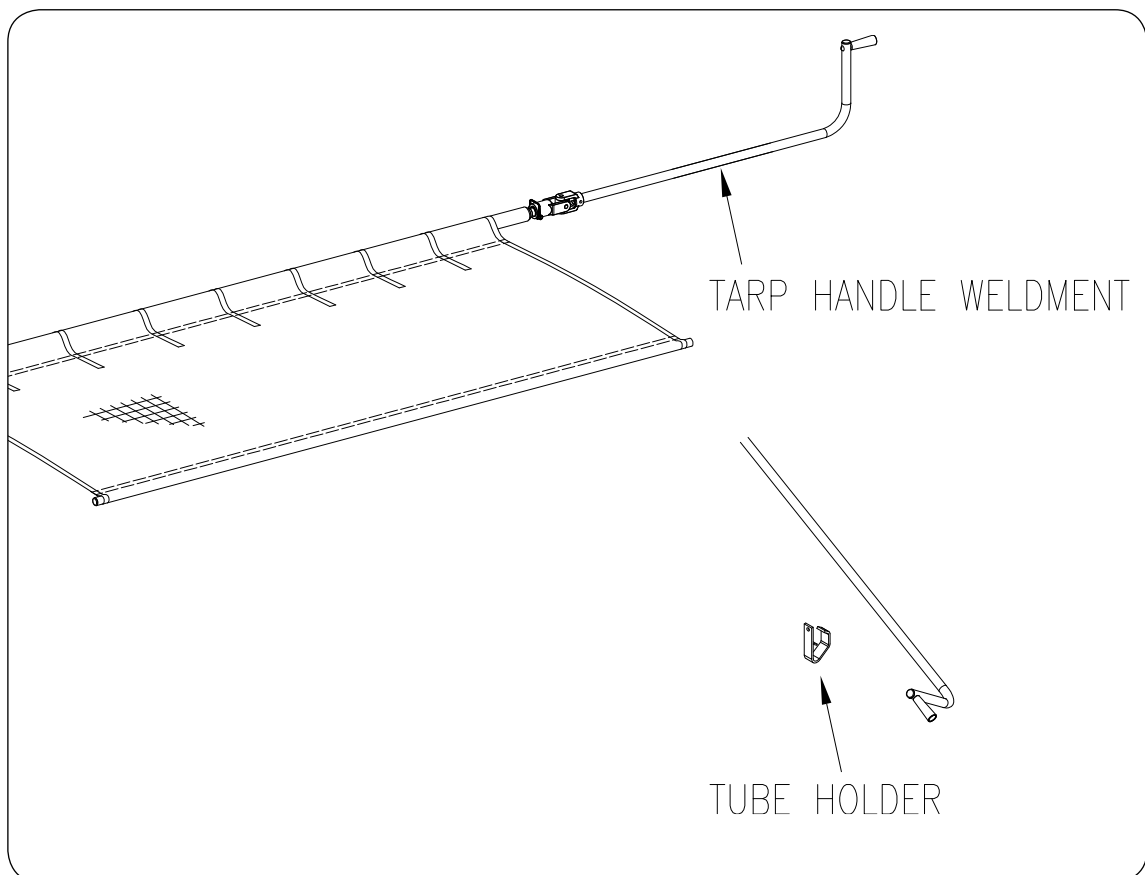
The tarp should be fully opened when loading and unloading.

The tarp should be fully opened or completely closed during field operation.

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

Procedure

1. Remove the lynch pin from the handle bracket weldment.
2. Using both hands, carefully remove the tarp handle weldment from the tube handle bracket weldment.
3. Raise the tarp handle weldment high in the air and at the rear of the box.
4. Roll the tarp to the desired location - fully open or fully closed position.
5. Walk the tarp handle weldment out then back towards the middle to tighten the tarp and position it in the handle bracket weldment. Re-insert the lynch pin.



Electronic Scale Operation - Model 640XL (Optional)

The following instructions can also be found in your scale/indicator user's manual.

Key Functions

ON/OFF

Pressed to power on or off the indicator.

RM

Pressed to access memory channel. Also used to increment numbers during the numeric entry procedure.

M+

Pressed to accumulate weights. Also used to decrement numbers during the numeric entry procedure.

TARE

Pressed to tare the weight on the scale.

G/N

Pressed to toggle between gross and net weight.

HOLD/MENU

Press and hold to display weight. Press again to release the hold mode. Also used to move to the right in the menu structure and to move the numeric entry cursor one space to the right.

PRINT/SELECT

Press to send data to an attached data collection device, printer, TDM or computer. Also used to move down in the menu structure.

ZERO/CLEAR

Press to zero G/N weight. Also used to clear memory channels.



Zeroing & Weighing

1. Press ON
Display shows HELLO, then the current weight value is displayed.
2. Press G/N and access gross mode...
Live scale weight is displayed in the G/N weighing mode.
3. Remove all material from the scale and press ZERO/CLEAR
0 is displayed, and the system is zeroed.

Gross/Tare/Net Weighing

1. After zeroing and weighing, place the material to be tared on the scale...
Weight of the material is displayed
2. Press the TARE key to tare the weight from the display...
0 weight is displayed and the NET annunciator lights to indicate there is an active tare weight.
3. Place the material to be weighed on the scale...
Net weight is displayed.

Electronic Scale Operation - Model 640XL (Optional) (continued)

Gross/Tare/Net Weighing (continued)

4. Remove the weighed material from the scale (leaving the tared item).
5. Repeat steps 2 through 5 for each weighing using the same tare weight.
6. To remove the tare weight, press the G/N key to return to gross weigh mode, then press the ZERO/CLEAR key...

The tare weight is removed and you can repeat this process to weigh more material with a different tare.

Print All Memory Channels

1. Press RM^...

Latest memory channel is displayed.

2. Press PRINT/SELECT for 2 beeps (2 seconds)

PR-ALL is momentarily displayed and information is transmitted.

3. Indicator returns to gross weighing mode.

The indicator will only print out memory channels that have accumulated weight amounts.

How to Configure Filtering

If you need to adjust the filtering on your Model 640 to counteract excessive movement or vibration on the scale system, follow these steps to access the FILTER menu item of the Setup menu and make needed changes.

1. Access the Setup menu from the G/N mode. To do so, press and hold the HOLD/MENU key for three beeps (3 seconds), then release...

SET.PAS is displayed

2. Use the numeric entry procedure to enter the password 640. Press PRINT/SELECT to accept it...

640 is shown

3. Press PRINT/SELECT once more...

CONFIG is displayed.

4. Repeatedly press the HOLD/MENU key until...

FILTER is displayed. There are two parts to filtering; Constant and Window. How to set these is explained on the next page.

Electronic Scale Operation - Model 640XL (Optional) (continued)

How to Configure Filtering (continued)

5. Press the PRINT/SELECT key twice...

The current CONSTANT value is shown. Press the HOLD/MENU key to increase the value. Increasing this value causes the indicator to ignore increasing amounts of weight change on the scale. This means small changes can be ignored at a relatively small CONSTANT value. To filter larger changes out, choose a larger CONSTANT value. (Choices are OFF to 10, Default=2)

6. When the value you want to try is displayed, press the PRINT/SELECT key...

Your choice is selected and CONST is displayed.

7. Press the HOLD/MENU key...

WINDOW is displayed. This is where you will set the threshold window of the filter parameter. You can enter 0 to full capacity.

8. Press the PRINT/SELECT key...

Current setting for the threshold window is displayed.

9. Use the numeric entry procedure to enter a new value. Press the PRINT/SELECT key to accept it...

WINDOW is displayed.

10. Repeatedly press the G/N key until you return to the gross weighing mode.

Check the function of the indicator. If the weight display does not act in a manner to your liking, repeat steps 1 through 9 until the indicator functions as desired.

Display Messages

The following are the messages that may appear on the display and what they mean:

Message	Meaning
HELLO	Message displayed on power-up sequence for 3 seconds.
-----	UPPER DASHES, Indicator is in a state of overcapacity, or analog input is too high.
-----	LOWER DASHES, Indicator is in a state of under capacity, or analog input is too low.
NO TARE	Displayed when you press the G/N key and there is no tare weight established.
PRINT	Indicator is transmitting data. Appears after pressing the print key for a second.
LO-BAT	Alternates on the display between current mode and LOBAT when input voltage is between 9-10 volts.
HOLD	Used when moving a portable system.
L XXX	XXXX = weigh value Displayed when the indicator is in AUTO-LOC mode and has locked on a weight.

Electronic Scale Operation - Model 640XL (Optional) (continued)

Display Messages (continued)

The following are the messages that may appear on the display and what they mean:

Message	Meaning
+RANGE	Displayed when the weight input exceeds 8 mV/V.
-RANGE	Displayed when the weight input exceeds -8 mV/V.
SHTDWN	Shown on the display prior to shutting the indicator off after the sleep timer has expired, or when you press the ON/OFF key. (10 seconds before the sleep timer shuts down, the alarm will beep several times).
CAN'T	Displayed when attempting to access too large of a numeral.

Editing the A-List

Menu Navigation



Moves right in the menu structure.



Moves up in the menu structure.



Selects displayed option and moves up/down in menu structure at

If the application requires alphanumeric channel names, go through the memory channel list, and edit their descriptions accordingly. Example, if you want to record seed tender loads from five different fields, then create a list of FIELD1, FIELD2, ...FIELD3. Now the custom names of the memory channels can be used, otherwise all memory channels will be the default descriptions of MEM.001, MEM.002, etc.

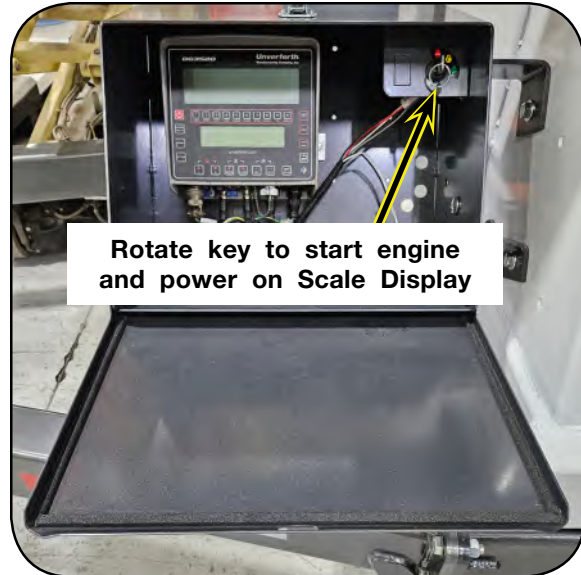
1. From the G/N mode, press HOLD/MENU for 2 beeps...
A-LIST is shown on the display
2. Press the PRINT/SELECT key...
EDIT is displayed
3. Press PRINT/SELECT again and...
MEM.001 is displayed, or the last memory channel accessed.

If reviewing the memory channel list, to edit, get to the displayed channel by pressing and holding on the HOLD/MENU key, or use the RM^ key in conjunction with the HOLD/MENU key to go directly to a memory channel to edit its name. Example: Press PM^ three times to reach 2, and then press PRINT/SELECT and MEM.002 will be displayed on the screen.

4. Press G/N three times to return to G/N weighing mode.

DG3520 Auto-Shutoff Scale

1. With the unit attached to the towing vehicle, park the unit on a firm, level surface and set the parking brake.
2. Turn fuel shut-off valve to <ON> position.
3. Open the enclosure lid, apply engine choke if required, and start the engine. Once the engine is running, place the choke in the off position.
4. Position the conveyor to dispense seed.



NOTE: At each power on, the scale starts from the last used mode

Manual Mode

In the manual mode, the operator is able to manually start and stop the conveyor. The total weight (lbs) in the seed tender is displayed in the upper display.

5. Throttle up the engine to start the conveyor.
6. Bring engine to idle stop the conveyor.

DG3520 Auto-Shutoff Scale (continued)

Auto-Shutoff Mode

In the Auto-Shutoff mode, the operator is able to set a desired weight (lbs) to be unloaded. This mode is available for the 2620/3620 models only.

5. Press the AUTO/MAN button. The word "AUTO", along with the last preset weight, will appear in the lower display.
6. Key the desired weight (lbs) to be unloaded into the top display and press the ENTER or SAVE button. This will be saved until it is changed. Powering off DOES NOT clear the preset weight.
7. Press START to begin the auto-cycle. A double "carrot" will be displayed in the top left of the upper display. Throttle up the engine to start the conveyor.
8. When the preset weight is reached, the engine will throttle down, bringing the conveyor to a stop.
9. Throttle up the engine to begin another cycle.
10. Press the STOP button to finish the Auto-Shutoff cycle.

The remaining weight (lbs) in the seed tender is displayed on the upper display after the cycle ends.

- The operator can press the STOP button and stop the conveyor at anytime.

NOTE: In the event the target weight is more than the remaining weight, an alarm message will show. By pressing ENTER, the remaining weight will become the new preset until changed. The alarm preset can be declined by pressing the RESET button and manually changed.

11. Be sure to fully empty the conveyor. Once the conveyor is empty, shut the engine off and close the enclosure cover.

NOTE: If the auto shut off is consistently dispensing too much /little seed, adjust the tolerance setting in the DG Indicator. See DG Operator manual for proper procedure.

IMPORTANT

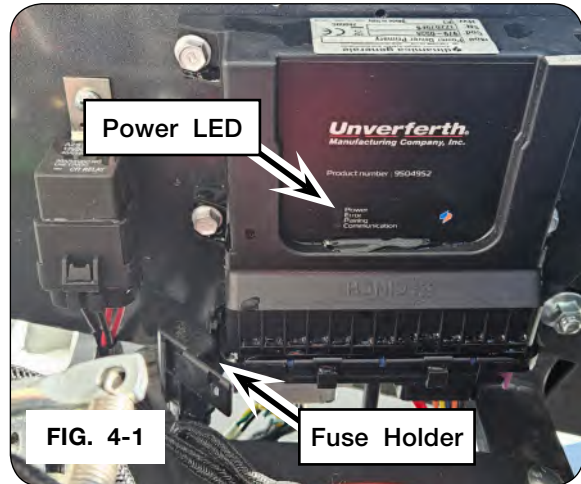
- *Do not let telescoping spout rest in bottom of seed box. Seed will rapidly build up and plug conveyor, resulting in potential damage to belt.*

DG3520 Auto-Shutoff Scale (continued)

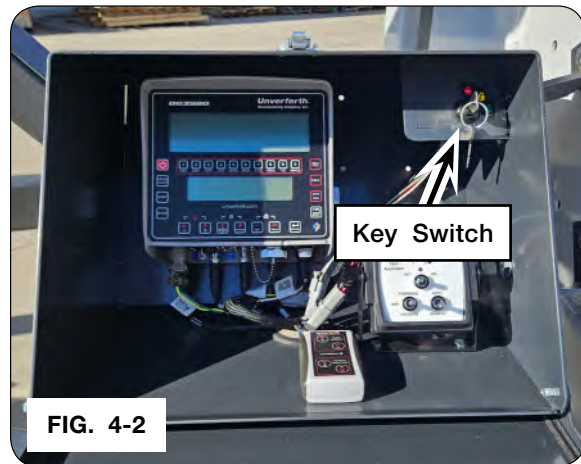
Troubleshooting

If the unit fails to operate:

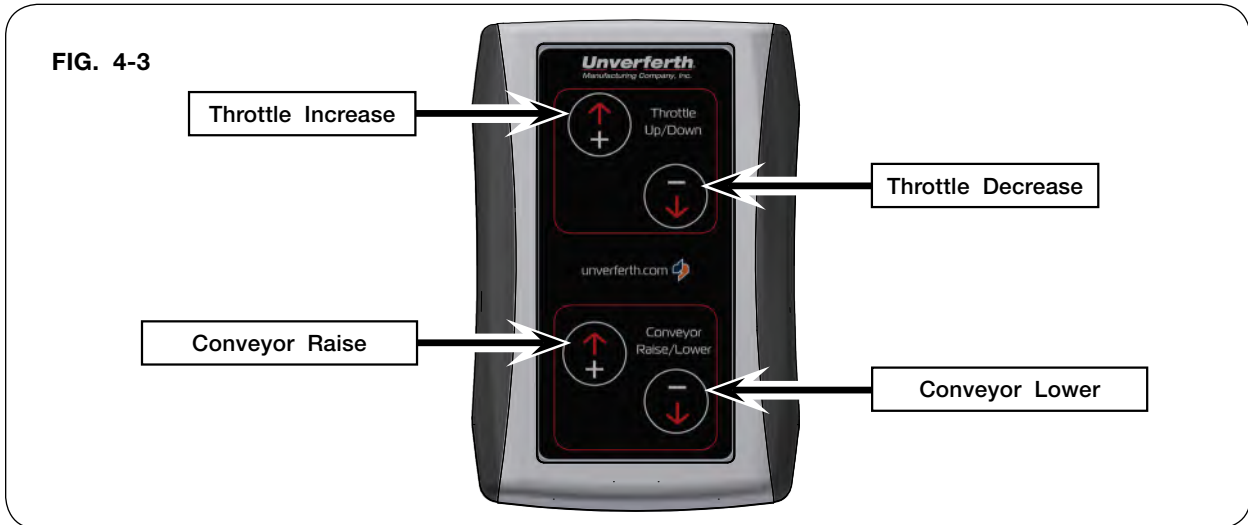
1. Verify the "Power" LED is on. FIG. 4-1.
2. Check/replace the fuse. FIG. 4-1.
3. Check/replace "AA" batteries in remote control.
4. Check Seed Tender battery voltage and that all wiring is properly connected.



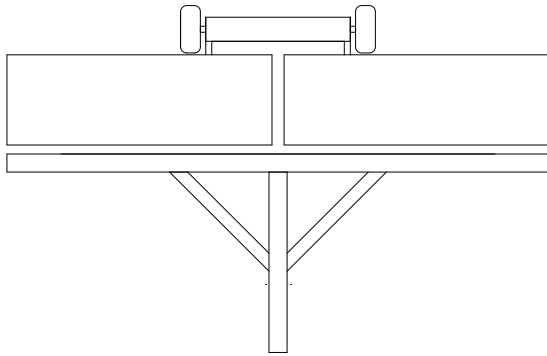
5. Turn the key switch off and then rotate it back to the on position (FIG. 4-2). Actuate the throttle buttons on the remote control (FIG. 4-3). Look and listen to see if throttle actuator moves in and out. If the actuator doesn't move, verify that the wiring is properly connected and that there is voltage present at the throttle actuator.



6. Depress the conveyor raise/lower buttons (FIG. 4-3), if no response, check that the winch/lift actuator harness is properly connected and that there is voltage present.



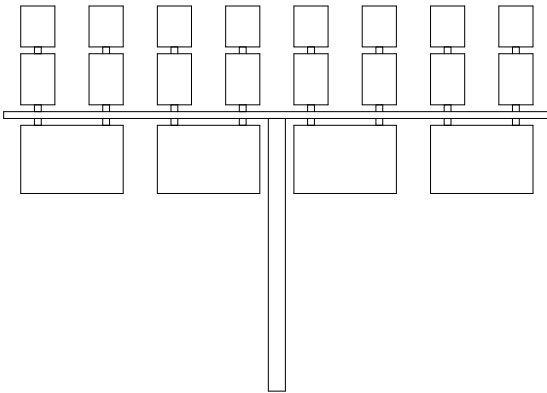
Spout Recommendations



Standard 2-Stage Spout

Provides adequate spout length for easy filling. The shorter 2-stage is optimum for maneuvering within the drill compartments.

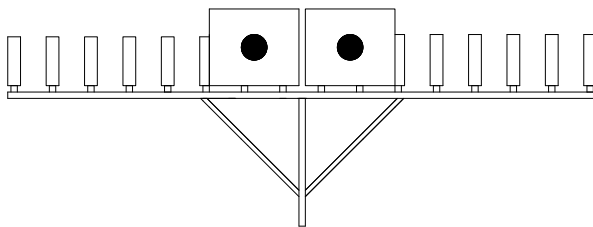
Part numbers:	Min. - Max.
27629 - 6" Diameter	3.5' - 5'
25532 - 8" Diameter	3.5' - 5'



Optional 3-Stage Spout

For extra reach and easy filling; Optimum length for virtually any size individual box planter.

Part numbers:	Min. - Max.
22578 - 6" Diameter	5' - 9'
29782 - 8" Diameter	6' - 11'



Optional 4' Flex Spout*

For the fastest filling and to prevent any flow restriction or backfeeding that can potentially occur with other spouts.

Part numbers:
TAAU14170 - 6" Diameter x 48"
901544 - 8" Diameter x 48"

*Case 1200 Bulk Fill Planter requires the 2-stage spout.

Notes

Section IV Maintenance

Lubrication - Conveyor Bearings	4-2
Lubrication - Pivot Points	4-2
Lubrication - Wheel Bearings	4-2
Lubrication - Engine Oil Level	4-2
Conveyor Belt - Belt Tension	4-3
Conveyor Belt - Belt Tracking	4-4
Conveyor Belt - Adjusting Belt Tension	4-4
Belt Replacement	4-5
Optional Stretcher Assembled to Belt	4-6
Brake Cleaning and Inspection - Brake Lubrication	4-7
Brake Cleaning and Inspection - Magnets	4-7
Brake Cleaning and Inspection - Shoes and Linings	4-8
Brake Drum Inspection	4-8
Troubleshooting Brakes	4-9
Bearing Inspection	4-9
Bearing Lubrication	4-9
How to Measure Amperage	4-10
How to Measure Voltage	4-11
Battery Warranty	4-11
Power Pak	4-12
Storage	4-13
Troubleshooting	4-14
Front Undercarriage Electrical Schematic	4-15
Undercarriage Lighting & Brake Electrical Schematic — #25046	4-16
Conveyor Control Electrical Schematic — #2012611	4-17
Charge From Truck Electrical Schematic — #29410	4-18
Switch Electrical Schematic — #2012612	4-19
DG3520 Auto-Shutoff Scale Harness Schematic — #2012605	4-20
DG3520 Ignition Adapter Harness Schematic — #2002965	4-22
Wire Harness 23' Extension — #2012677	4-22
Wheel Torque Chart & Tire Specifications - Wheel Torque Requirements	4-23
Wheel Torque Chart & Tire Specifications - Tire Pressure	4-23
Wheel Torque Chart & Tire Specifications - Tire Warranty	4-23
Complete Torque Chart	4-24

Lubrication

Lubricate with an SAE multi-purpose grease. All fittings must be free from dirt and paint to insure entry of lubricant inside the bearing.

Conveyor and Auger Bearings

Lubricate these bearings every 100 hours of operation and at the end of each season before storage. Use only one stroke of grease per bearing.

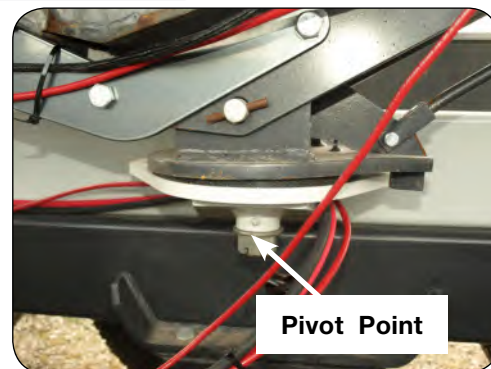
CAUTION

- DO NOT USE A HIGH-PRESSURE GREASE GUN TO LUBRICATE THE CONVEYOR BEARINGS, AS DAMAGE TO THE BEARING SEAL COULD OCCUR.

NOTE: Excessive lubrication of these bearings will result in premature failure.

Pivot Points

Lubricate the pivot points on the pivoting arm every 50 hours of operation and at the end of each season.



Wheel Bearings

The wheel bearings should be cleaned, repacked and adjusted every 12 months or 12,000 miles, whichever comes first. Use a number 2 wheel bearing grease to repack the bearings and adjust the bearing to a free-rolling fit with no end play.

Engine Oil Level

Check the motor oil level in the engine daily. See the Engine operator's manual for details on oil levels, oil types and service intervals.

Conveyor Belt

WARNING

- **MOVING OR ROTATING COMPONENTS CAN CAUSE SERIOUS INJURY OR DEATH. USE EXTREME CARE WHEN INSPECTING AND ADJUSTING BELT TRACKING.**

Proper belt tension and correct 'tracking' of the belt are critical to maintaining the belt for years of worry-free use. Belt tension and tracking should be checked at the beginning of each season. Belt alignment should be checked after the initial use, then after the first 2 hours use, and after every adjustment of the belt tension/alignment. Once the belt tracking is set, it will be necessary to check the alignment after every 8 hours of use.

Belt Tension

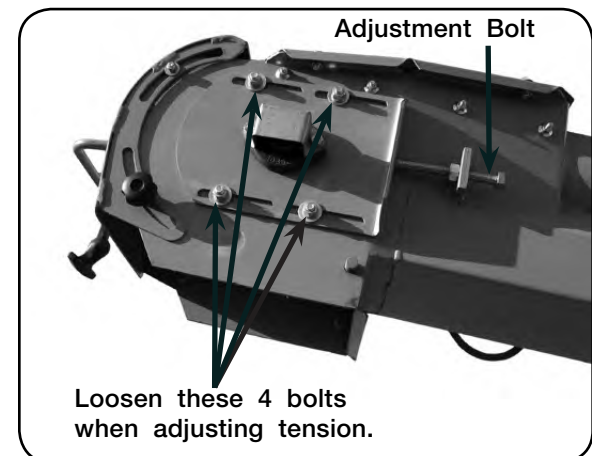
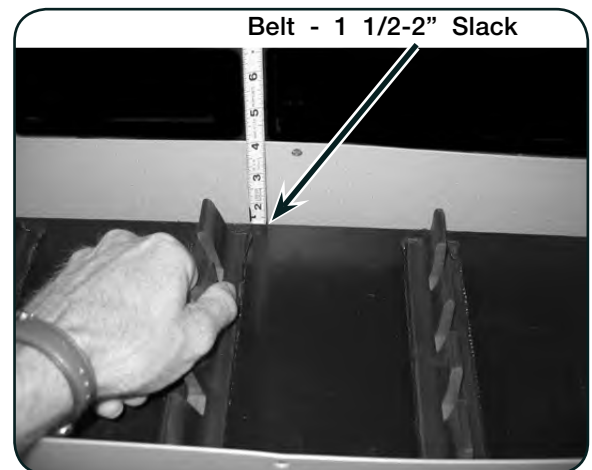
Belt tension is inspected by removing the lower cover panel from the conveyor, and gently pulling on the conveyor belt. The belt should have approximately 1 1/2 - 2" of slack at the center.

Belt tension is adjusted at the discharge end of the conveyor. Loosen, **DO NOT REMOVE**, the four 3/8" bolts on each side of the conveyor. Use the two adjusting bolts to adjust the belt to the proper tension.

It is important to move both sides the same distance. Too much tension on the belt will stretch the splice link and greatly reduce belt life. Too little tension on the belt could result in belt slipping on the drive pulley. Replace the bottom cover panel and continue to check the belt tracking before re-tightening the four bolts on each side of the conveyor.

IMPORTANT

- *Belt tracking must be done every time tension is adjusted.*



Conveyor Belt (continued)

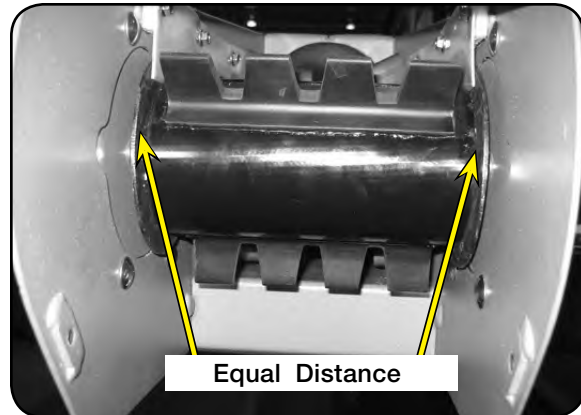
Belt Tracking

⚠ WARNING

- **ENTANGLEMENT WITH MOVING PARTS CAN CAUSE SERIOUS INJURY OR DEATH. USE EXTREME CARE WHEN INSPECTING AND ADJUSTING BELT TRACKING. AVOID PERSONAL ATTIRE SUCH AS LOOSE FITTING CLOTHING, SHOESTRINGS, DRAWSTRINGS, PANTS CUFF, LONG HAIR, ETC., THAT MAY BECOME ENTANGLED IN MOVING PARTS.**

The conveyor belt must always run at the center of the pulley in both the intake and discharge end. Improper tracking of the belt will result in excessive wear to the edge of the belt, and will greatly reduce belt life. Check the belt tracking every 8 hours of use, and every time belt tension is adjusted.

Inspect the tracking of the belt at the discharge end by removing the lower spout, pivoting the deflector up and looking up at the belt and pulley. The belt should be in the center of the pulley.



Adjust by loosening, **DO NOT REMOVE**, the four bolts on the side of the conveyor. Operate the conveyor at a slow speed, and tighten or loosen the adjustment bolt until the belt is running in the center of the pulley.

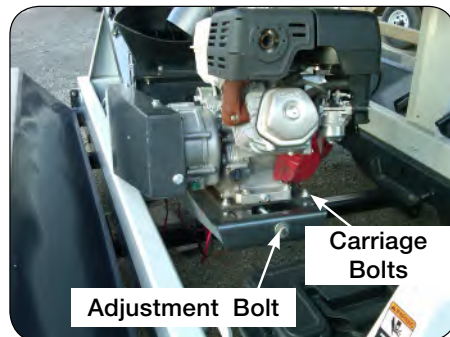
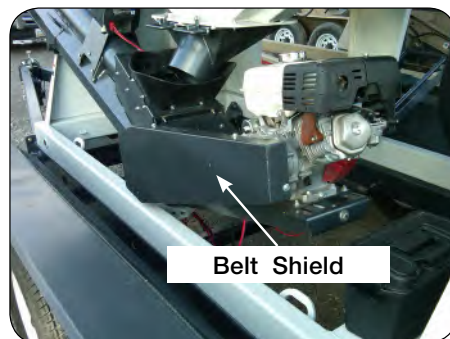
Tighten all bolts on the side of the conveyor, and lock the adjustment bolts into place.

Adjusting Drive Belt Tension

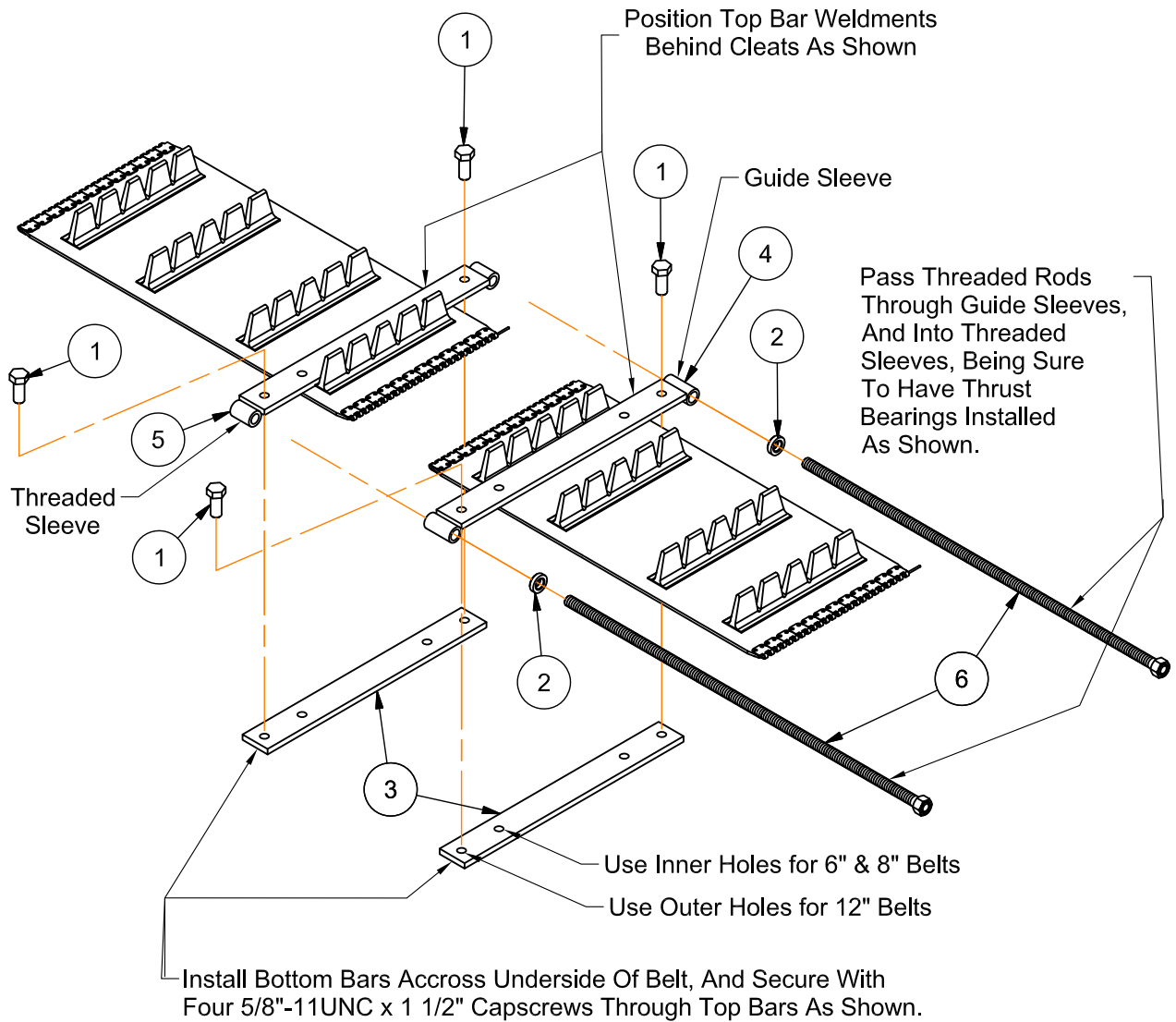
⚠ WARNING

- **MOVING OR ROTATING COMPONENTS CAN CAUSE SERIOUS INJURY OR DEATH. USE EXTREME CARE WHEN INSPECTING AND ADJUSTING BELT TRACKING.**

1. With the engine turned off, and key removed, remove the belt shield by removing the 5/16" bolts to access the drive belt.
2. Loosen the engine by loosening (do not remove) four carriage bolts.
3. Loosen the lock nut on the adjustment bolt and tighten the belt by turning the adjustment bolt.
4. Once the tension is set, tighten the bolts on the engine plate, and re-inspect the tension.
5. Lock the adjustment bolt in place with the lock nut.
6. Re-install the shield.



Belt Replacement

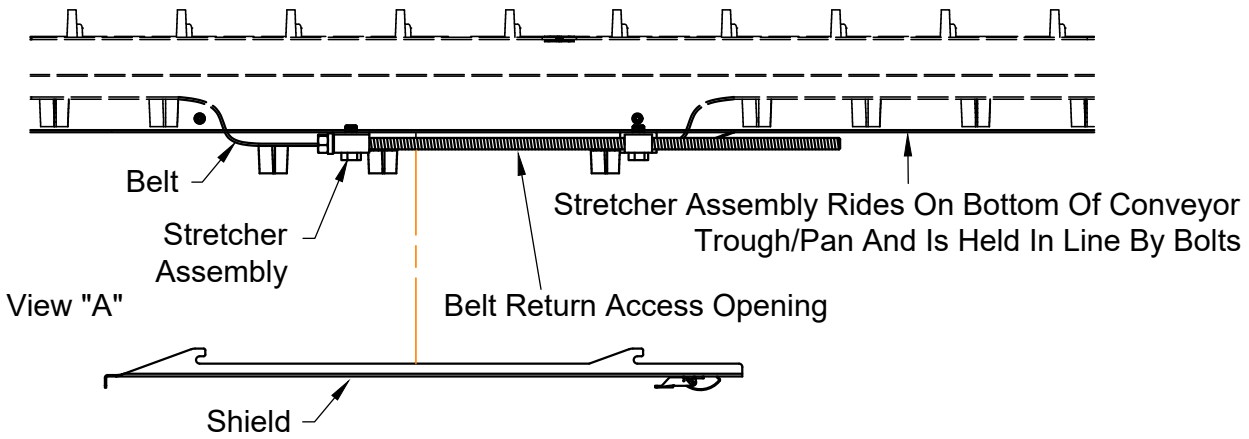
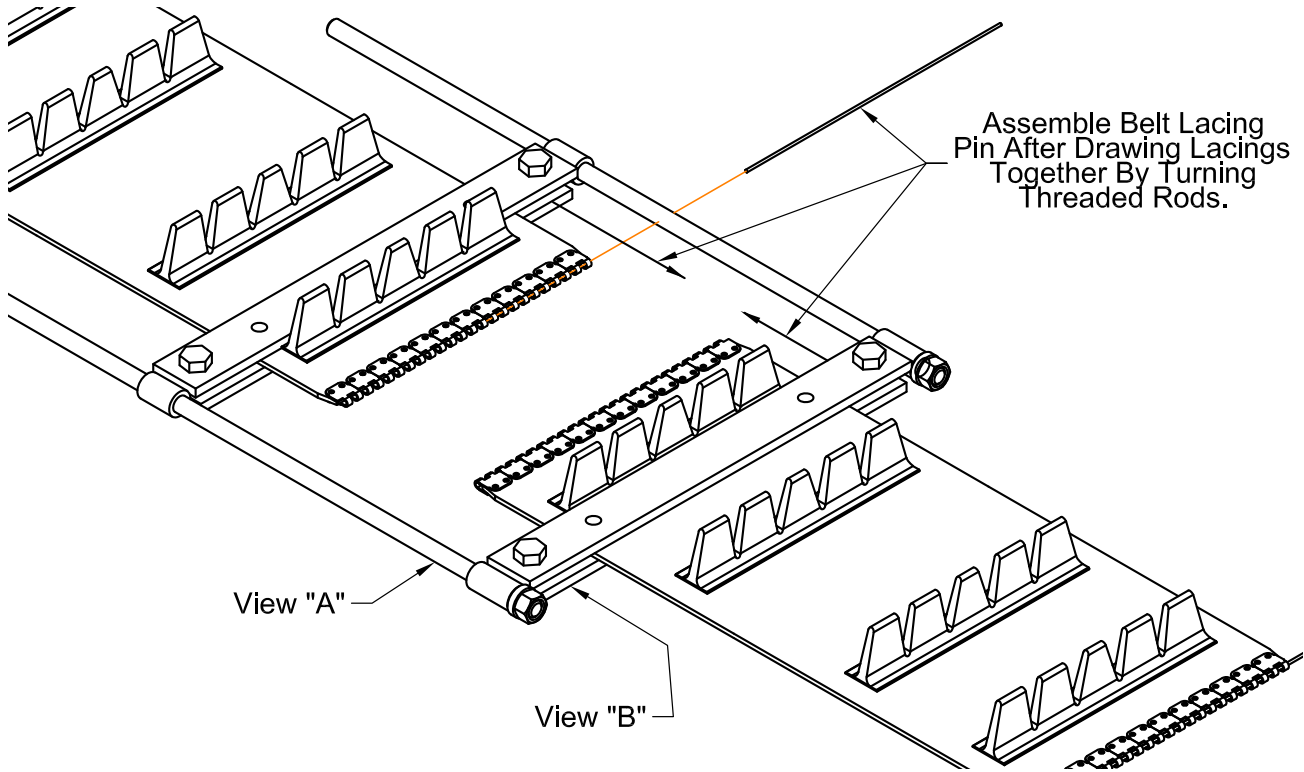


ITEM	PART NO.	QTY	DESCRIPTION
	TA4-114400-0	1	BELT INSTALLATION TOOL
1	9390-122	4	CAPSCREW, 5/8"-11UNC x 1 1/2 LG. GRADE 5
2	TA0-903118-0	2	BEARING, BALL THRUST, 5/8" I.D.
3	TA1-114401-0	2	BOTTOM BAR
4	TA2-114404-0	1	PLAIN TOP BAR WELDMENT
5	TA2-114406-0	1	THREADED TOP BAR WELDMENT
6	TA2-114408-0	2	THREAD ROD WELDMENT
	TA4-114400-0	1	BELT INSTALLATION TOOL KIT

Belt Replacement (Optional) (Continued)

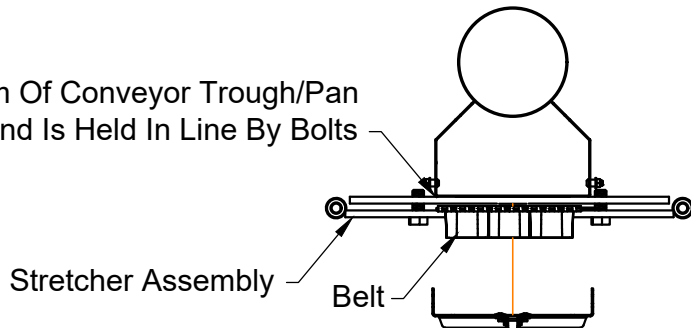
Stretcher Assembled to Belt

FOR ILLUSTRATION ONLY



View "B"

Stretcher Assembly Rides On Bottom Of Conveyor Trough/Pan And Is Held In Line By Bolts



Brake Cleaning and Inspection

Your undercarriage brakes must be inspected and serviced immediately if a loss of performance is experienced. With normal use, servicing at one year intervals is usually adequate. With increased usage, this work should be performed more frequently as required. Magnets and shoes must be changed when they become excessively worn or scored, a condition which can reduce vehicle braking. Clean the backing plate, magnet arm, magnet, and brake shoes. Make certain that all the parts removed are replaced in the same brake and drum assembly. Inspect for any loose or worn parts, stretched or deformed springs and replace as necessary.

WARNING

- **POTENTIAL ASBESTOS DUST HAZARD - SOME BRAKE LININGS MAY CONTAIN ASBESTOS DUST, WHICH HAS BEEN LINKED TO SERIOUS OR FATAL ILLNESSES. CERTAIN PRECAUTIONS NEED TO BE TAKEN WHEN SERVICING BRAKES:**

1. Avoid creating or breathing dust.
2. Avoid machining, filing or grinding the brake linings.
3. Do not use compressed air or dry brushing for cleaning (dust can be removed with a damp brush).

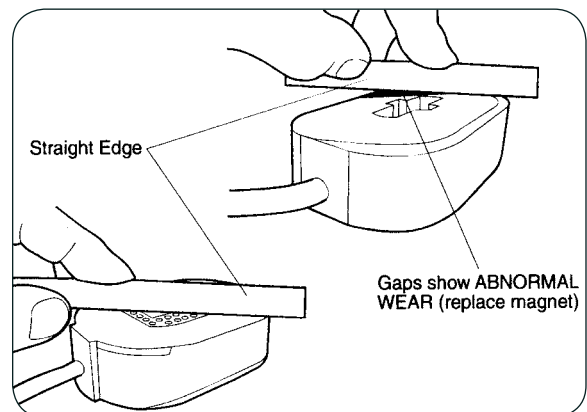
Brake Lubrication

Before reassembling, apply a light film of grease or anti-seize compound on the brake anchor pin, the actuating arm bushing and pin, and the areas on the backing plate that are in contact with the brake shoes and magnet lever arm. Apply a light film of grease on the actuating block mounted on the actuating arm.

NOTE: Do not get grease or oil on the brake linings, drums or magnets.

Magnets

Your electric brakes are equipped with high quality electromagnets that are designed to provide the proper input force and friction characteristics. Your magnets should be inspected and replaced if worn unevenly or abnormally. Use a straightedge to check magnet condition. For best results, the magnet should be flat. Even if wear is normal as indicated by your straightedge, the magnets should be replaced if any part of the magnet coil has become visible through the friction material facing of the magnet. It is also recommended that the drum armature surface be refaced when replacing magnets. Magnets should also be replaced in pairs - both sides of an axle.



Brake Cleaning and Inspection (continued)

Shoes and Linings

A simple visual inspection of your brake linings will tell if they are usable. Replacement is necessary if the lining is worn (to within 1/16" or less), contaminated with grease or oil, or abnormally scored or gouged. Hairline heat cracks are normal in bonded linings and should not be cause for concern. When replacement is necessary, it is important to replace both shoes on each brake and both brakes on the same axle. This will help retain the "balance" of your brakes.

After replacement of the brake shoes and linings, the brakes must be re-burnished to seat in the new components. This should be done by applying the brakes 20 to 30 times from an initial speed of 40 m.p.h., slowing the vehicle to 20 m.p.h. Allow ample time for brakes to cool between applications. This procedure allows the brake shoes to seat in to the drum surface.



Brake Drum Inspection

There are two areas of the brake drum that are subject to wear and require periodic inspection. These two areas are the drum surface where the brake shoes make contact during stopping and the armature surface where the magnet contacts (only in electric brakes).

The drum surface should be inspected for excessive wear or heavy scoring. If worn more than .020" oversized, or the drum has worn out of round by more than .015", then the drum surface should be re-machined. If scoring or other wear is greater than .090" on the diameter, the drum must be replaced. When turning the drum surface, the maximum diameter is as follows:

- 7" Brake Drum - 7.090"
- 10" Brake Drum - 10.090"
- 12" Brake Drum - 12.090"

The machined inner surface of the brake drum that contacts the brake magnet is called the armature surface. If the armature surface is scored or worn unevenly, it should be refaced to a 120 micro inch finish by removing not more than .030" of material. To insure proper contact between the armature face and the magnet face, the magnets should be replaced whenever the armature surface is refaced and the armature surface should be refaced whenever the magnets are replaced.

NOTE: It is important to protect the wheel bearing bores from metallic chips and contamination which result from drum turning or armature refacing operations. Make certain that the wheel bearing cavities are clean and free of contamination before reinstalling the bearing and seals. The presence of these contaminants will cause premature wheel bearing failure.

Troubleshooting Brakes

Most electric brake malfunctions, that cannot be corrected by either brake adjustments or synchronization adjustments, can generally be traced to electrical system failure. Voltmeters and ammeters are essential tools for proper troubleshooting of electric brakes. Mechanical causes are ordinarily obvious, i.e. bent or broken parts, worn out linings or magnets, seized lever arms or shoes, scored drums, loose parts, etc. Please consult the following troubleshooting charts in this section of the manual to determine the causes and solutions for common problems found in undercarriage braking systems.

CAUTION

- **BEST BRAKING PERFORMANCE IS ACHIEVED WITH A CONTROLLER SETTING THAT IS JUST SHORT OF WHEEL LOCK UP OR SLIDE. OVERLY AGGRESSIVE BRAKING WHICH RESULTS IN WHEEL LOCK UP AND SLIDING, CAN CAUSE A DANGEROUS LOSS OF CONTROL AND RESULT IN PERSONAL INJURY OR DEATH.**

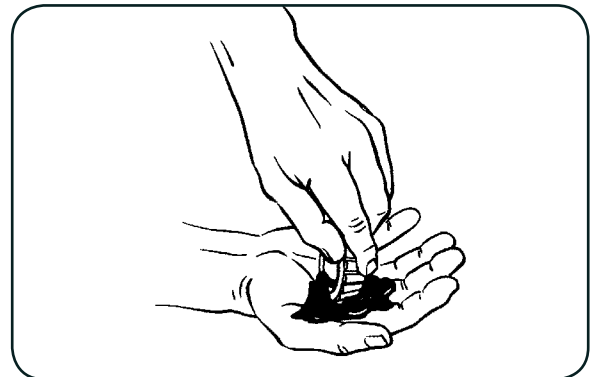
Bearing Inspection

Wash all grease and oil from the bearing cone using a suitable solvent. Dry the bearing with a clean, lint-free cloth and inspect each roller completely.

Bearing Lubrication

Along with bearing adjustment, proper lubrication is essential to the proper function and reliability of your undercarriage axle. Bearings should be lubricated every 12 months or 12,000 miles. The method to repack the bearing cones is as follows:

1. Place a quantity of grease into the palm of your hand.
2. Press a section of the widest end of the bearing into the outer edge of the grease pile closest to the thumb forcing grease into the interior of the bearing.
3. Repeat this while rotating the bearing from roller to roller.
4. Continue this process until you have the entire bearing completely filled with grease.
5. Before reinstalling, apply a light coat of grease on the bearing cup.



How to Measure Amperage

System amperage is the current flowing in the system when all the magnets are energized. The amperage will vary in proportion to the voltage. The engine of the tow vehicle should be running with the undercarriage connected when checking the undercarriage braking system. One place to measure system amperage is at the BLUE wire of the controller which is the output to the brakes. The BLUE wire must be disconnected and the ammeter put in series into the line. System amperage draw should be as noted in the table to the right.

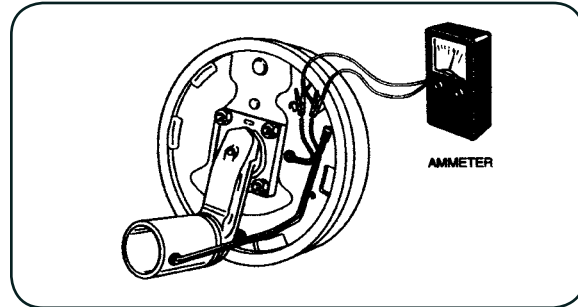
Make sure your ammeter has sufficient capacity and note polarity to prevent damaging your ammeter. If a resistor is used in the brake system, it must be set at zero or bypassed completely to obtain the maximum amperage reading. Individual amperage draw can be measured by inserting the ammeter in the line at the magnet you want to check. Disconnect one of the magnet lead wire connectors and attach the ammeter between the two wires. Make sure that the wires are properly reconnected and sealed after testing is completed. The most common electrical problem is low or no voltage and amperage at the brakes. Common causes of this condition are:

1. Poor electrical connections
2. Open circuits
3. Insufficient wire size
4. Broken wires
5. Blown fuses (fusing of brakes is not recommended)
6. Improperly functioning controllers or resistors

Another common electrical problem is shorted or partially shorted circuits (indicated by abnormally high system amperage). Possible causes are:

1. Shorted magnet coils
2. Defective controllers
3. Bare wires contacting a grounded object

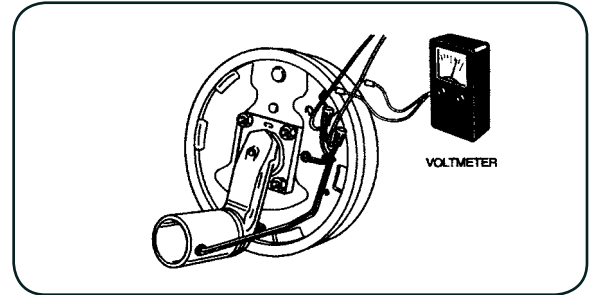
Finding the cause of a short circuit in the system is done by isolating one section at a time. If the high amperage reading drops to zero by unplugging the undercarriage, then the short is in the undercarriage. If the amperage reading remains high with all the brake magnets disconnected, the short is in the undercarriage wiring. All electrical troubleshooting procedures should start at the controller. Most complaints regarding brake harshness or malfunction are traceable to improperly adjusted or nonfunctional controllers. See your controller manufacturer's data for proper adjustment and testing procedures. For best results, all the connection points in the brake wiring should be sealed to prevent corrosion. Loose or corroded connectors will cause an increase in resistance which reduces the voltage available for the brake magnets.



Brake Size	Amps/Magnet	Two Brakes	Four Brakes	Six Brakes	Magnet Ohms
7 x 1¼	2.5	5.0	10.0	15.0	3.9
10 x 1½	3.0	6.0	12.0	18.0	3.2
10 x 2¼	3.0	6.0	12.0	18.0	3.2
12 x 2	3.0	6.0	12.0	18.0	3.2
12¼ x 2½	3.0	6.0	12.0	18.0	3.2

How to Measure Voltage

System voltage is measured at the magnets by connecting the voltmeter to the two magnet lead wires at any brake. This may be accomplished by using a pin probe inserted through the insulation of the wires. The engine of the towing vehicle should be running when checking the voltage so that a low battery will not affect the readings. Voltage in the system should begin at 0 volts and, as the controller bar is slowly actuated, should gradually increase to about 12 volts. If the controller does not produce this voltage control, consult your controller manual. The threshold voltage of a controller is the voltage applied to the brakes when the controller first turns on. Lower threshold voltage will provide for smoother braking. If the threshold voltage is too high, the brakes may feel grabby and harsh.



Battery Warranty

Interstate Battery:
www.interstatebatteries.com
800-CRANKIT

Power Pak

For general maintenance and servicing of power pak unit.

NOTE: Engines are warranted for 3 years. For maintenance of engine and warranty information, refer to Operator's Manual provided with engine. Following are Websites to locate engine dealers and service centers:

BRIGGS & STRATTON

US www.vanguardpower.com

Please provide Briggs & Stratton with the following engine information:

14 MAX HP/24.9 CU IN; 25V3

HONDA

US www.engines.honda.com

Canada www.honda.ca

Please provide Honda with the following engine information:

11.7 HP/23.7 CU IN; GX390 UT2QNR2

WARNING

- **CARBON MONOXIDE CAN CAUSE SEVERE NAUSEA, FAINTING OR DEATH. DO NOT OPERATE ENGINE IN A CLOSED OR CONFINED AREA.**
- **EXPLOSIVE FUEL CAN CAUSE FIRES AND SEVERE BURNS. STOP ENGINE BEFORE FILLING FUEL TANK.**
- **HOT PARTS CAN CAUSE SEVERE BURNS. DO NOT TOUCH ENGINE WHILE OPERATING TO PREVENT SERIOUS INJURY OR DEATH.**

Storage

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

After use, clean out box, conveyor, and hopper. Remove all seed, and pressure wash to remove road dirt, seed treatment, etc.

Check bolts for tightness. Inspect for damaged or worn parts. Check valves, motor, hoses, and fittings for leaks. Check hoses for wear. Replace or repair items as needed.

Repaint any chipped or scraped areas, and store inside away from livestock.

Charge battery before storage. Lack of charge may result in the battery freezing and breaking over the winter.

Once engine is shut off, turn the battery disconnect switch to the off position. Prepare the engine for storage. Refer to the engine operator's manual for details.

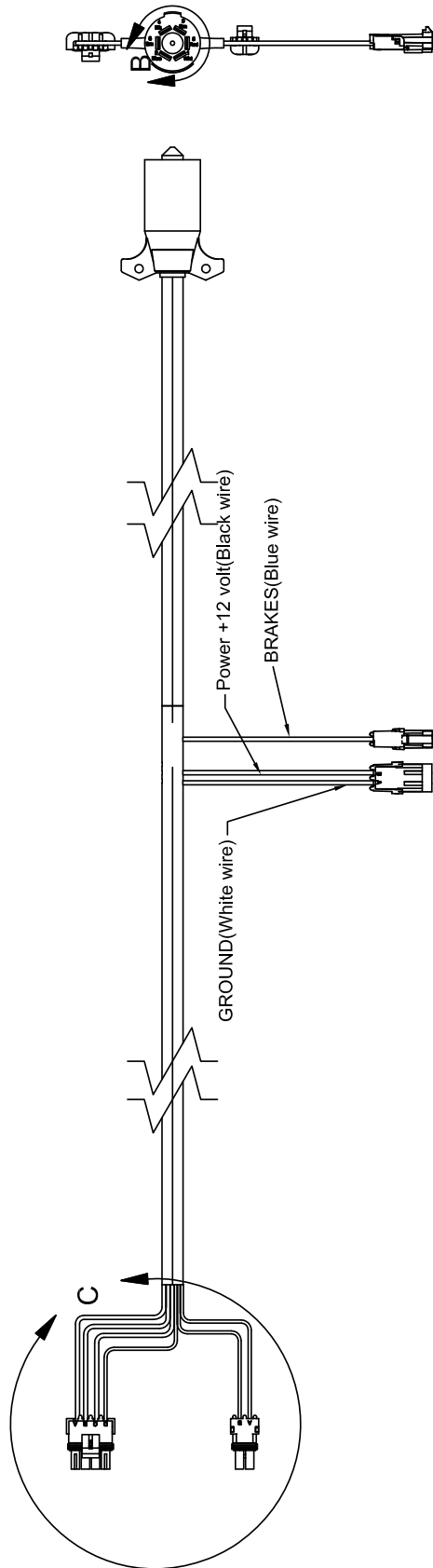
Replace all worn, torn or faded decals and reflectors.

It is recommended to check the conveyor belt tension after storage and before belt operation. Damage to the belt can occur.

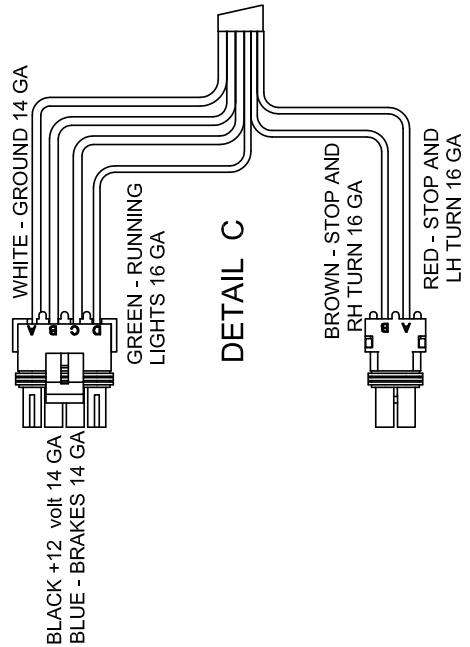
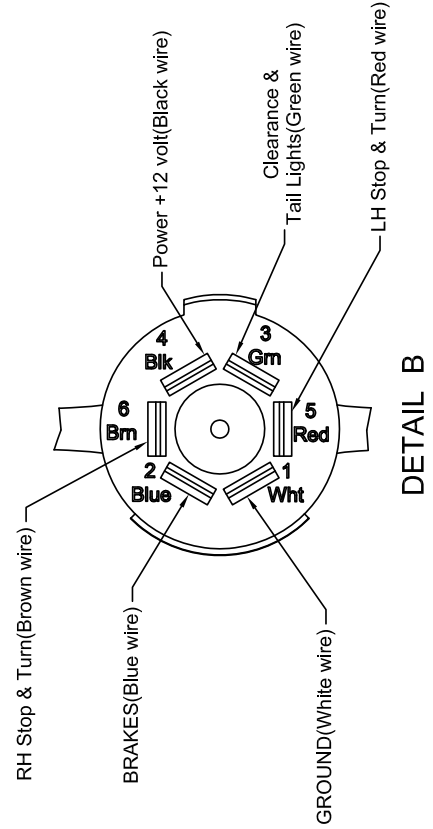
Troubleshooting

PROBABLE CAUSE	CORRECTION
UNDERCARRIAGE SWAYING, TIRE WEAR, LIGHTS	
Unit sways during travel Tires show excessive wear Wheel makes grinding or squeaking noise Tail lights are not functioning	Check tire pressure Check tongue and steering hardware, tighten appropriately Check tire pressure Service wheel bearings Check wires and connections Replace lamps
CONVEYOR WILL NOT TURN OVER OR DEVELOP PROPER SPEED OR TORQUE	
Conveyor jammed Engine running too slow	Shut-off and lock-out power, open clean-out door and remove excess material (make sure swivel spout is clear) Increase the throttle speed
Conveyor belt slipping	Increase the belt tension - See Adjusting Belt Tension in the Maintenance section
Drive belt slipping	Increase the tension on the drive belt - See Adjusting Drive Belt Tension
AUGER WILL NOT TURN OVER OR DEVELOP PROPER SPEED OR TORQUE	
Auger jammed Engine Running too Slow	Shut-off and lock-out power, open clean-out door and remove excess material (make sure discharge spout is clear) Increase the throttle speed
Drive belt slipping	Increase the tension on the drive belt - See Adjusting Drive Belt Tension
BELT EDGES SHOWING EXCESSIVE WEAR	
Belt tracking incorrect	Adjust tracking as detailed in Maintenance section
Poly seals on intake and/or discharge end worn.	Replace poly seals

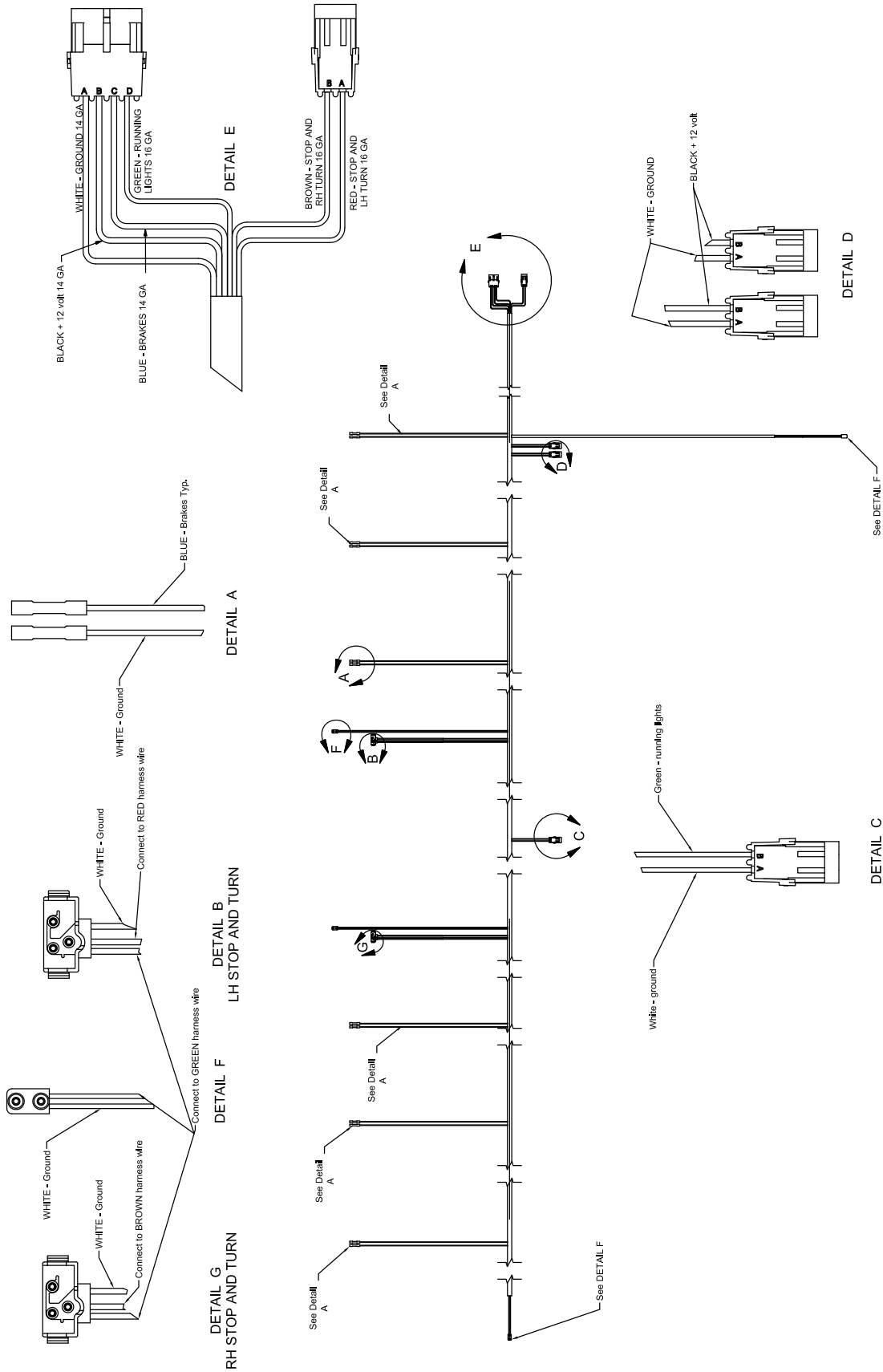
Front Undercarriage Electrical Schematic — #25045



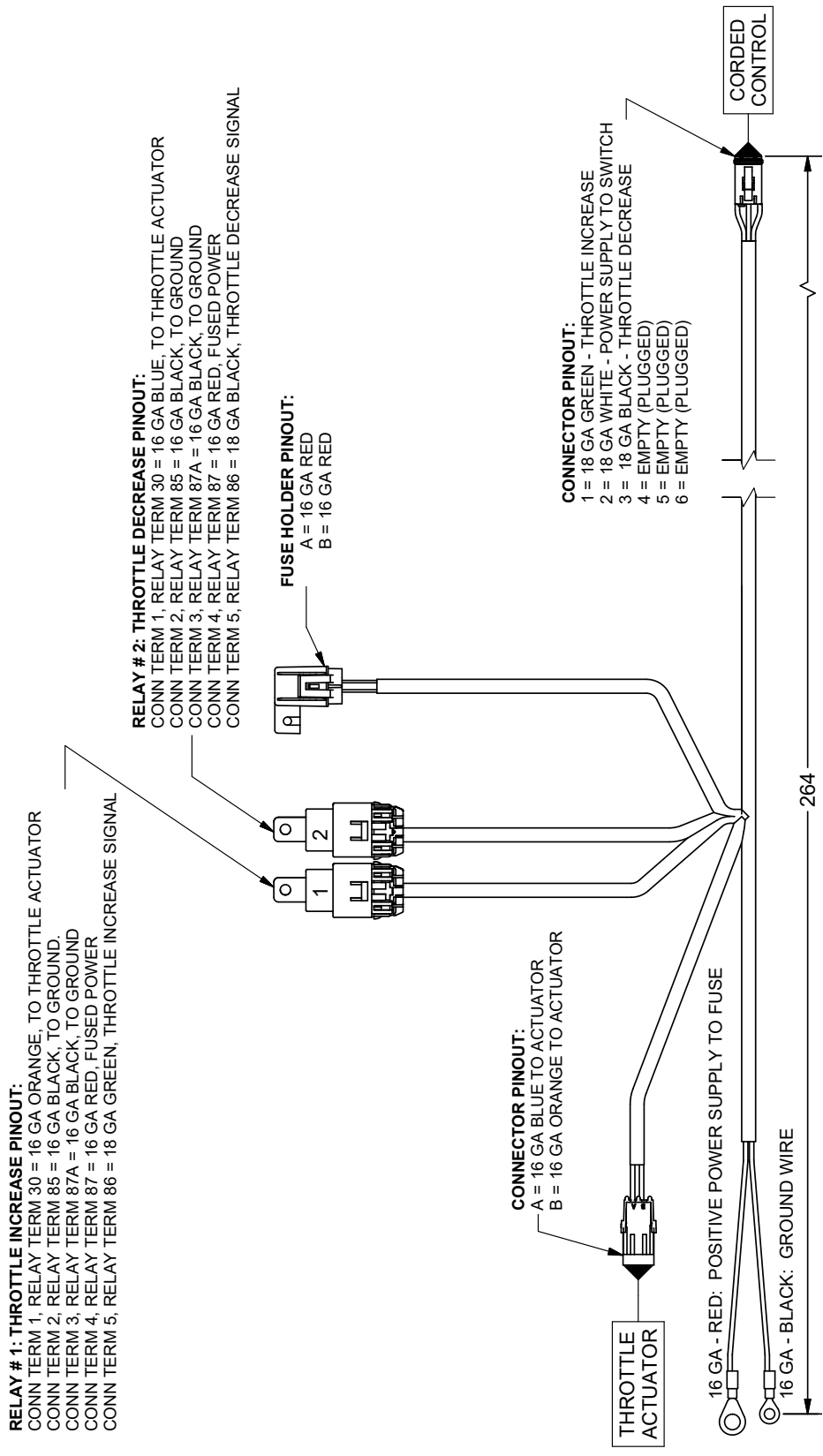
AS VIEWED FROM INSERTION END OF CONNECTOR



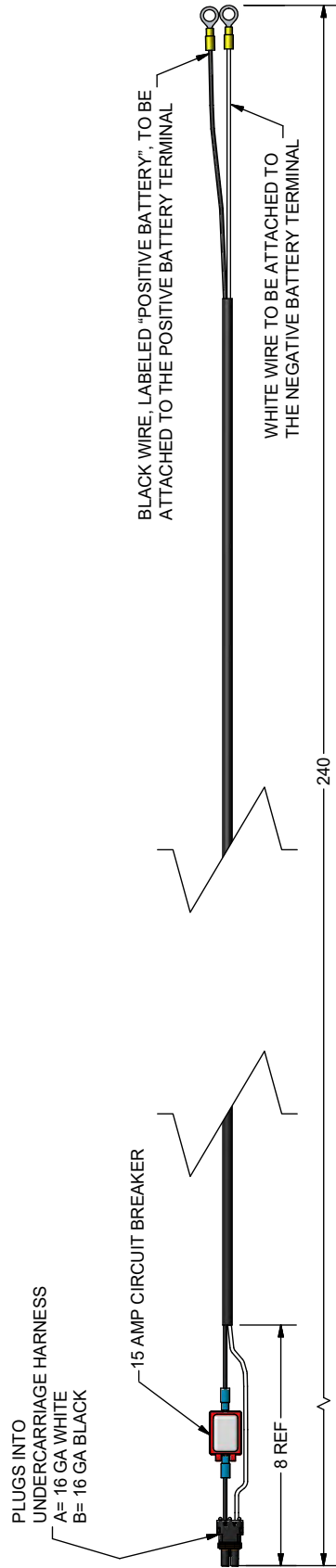
Undercarriage Lighting & Brake Electrical Schematic — #25046



Conveyor Control Electrical Schematic #2012611

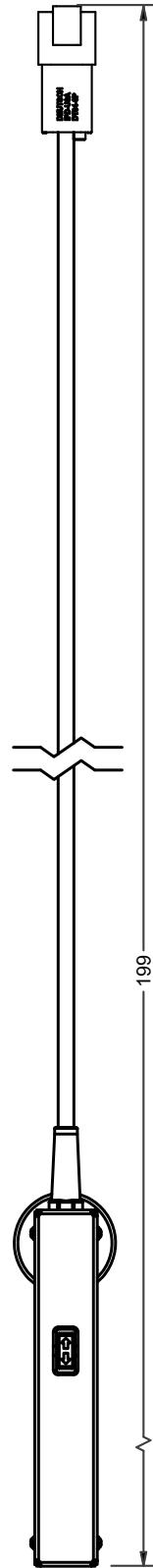
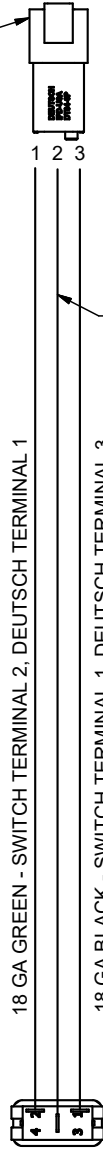


Charge From Truck Electrical Schematic — #29410



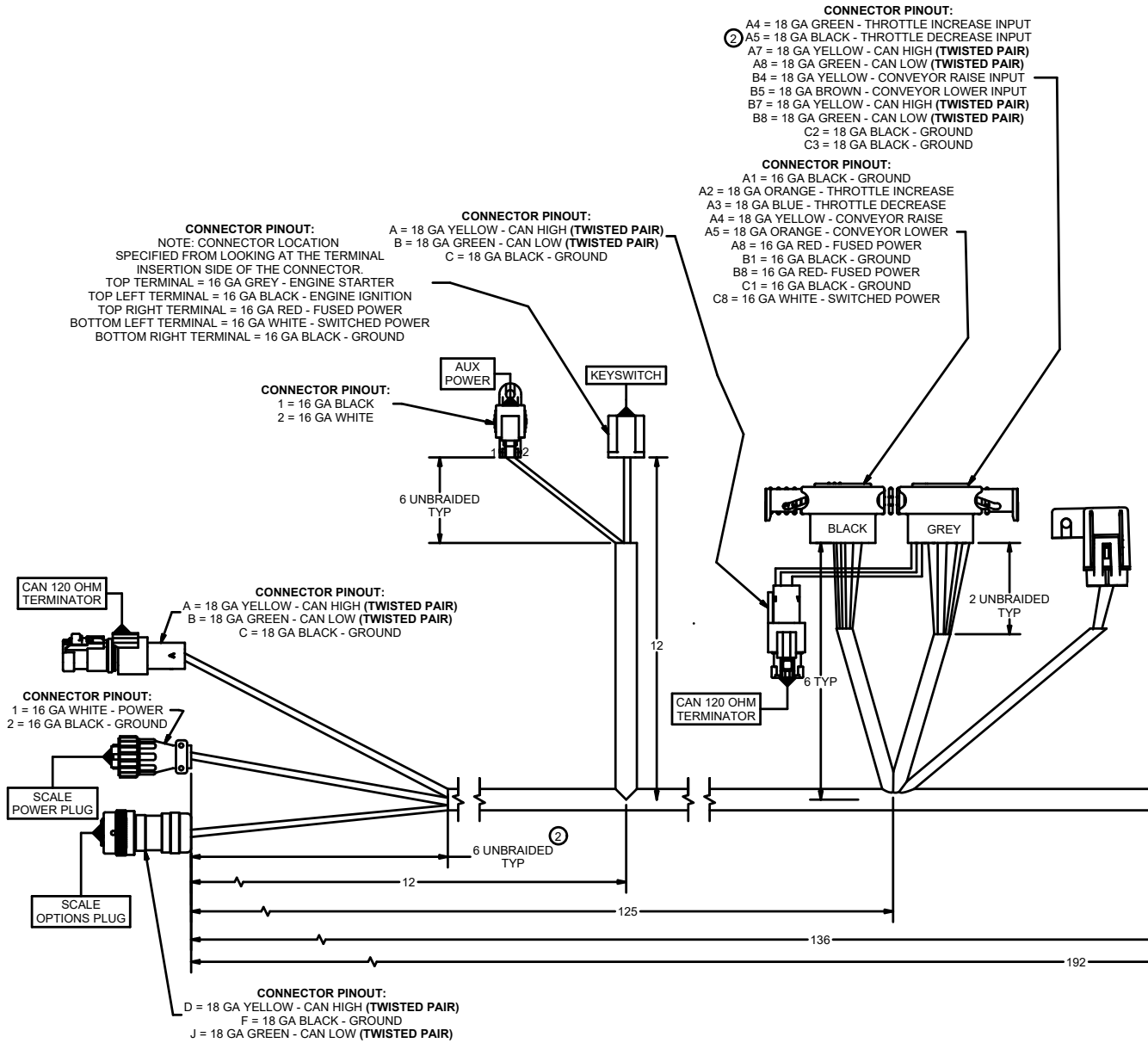
Switch Electrical Schematic — # 2012612

CONNECTOR PINOUT:
1 = 18 GA GREEN - THROTTLE INCREASE
2 = 18 GA WHITE - FUSED POWER
3 = 18 GA BLACK - THROTTLE DECREASE



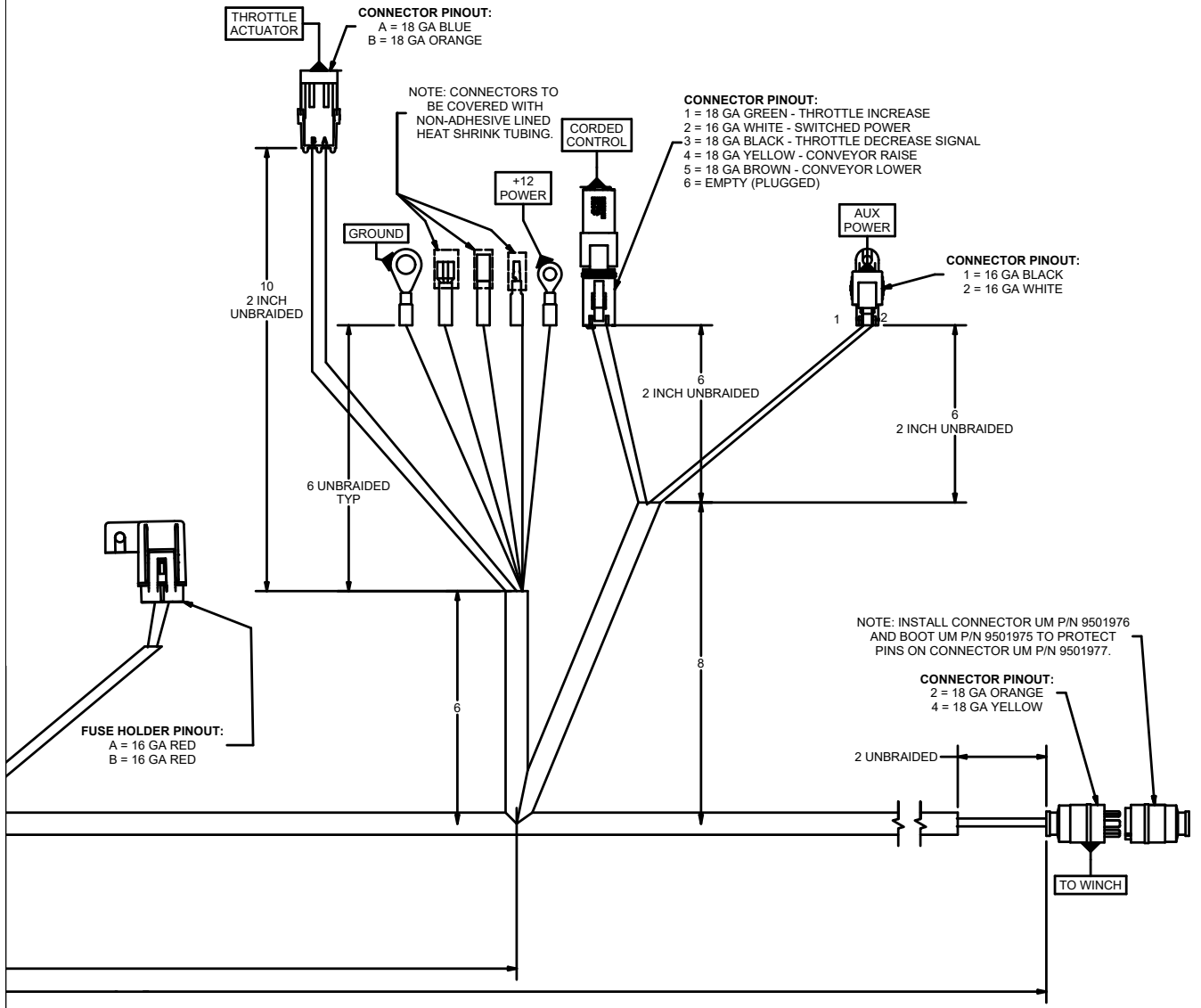
DG3520 Auto-Shutoff Scale Wiring Schematic

Wiring Harness #2012605



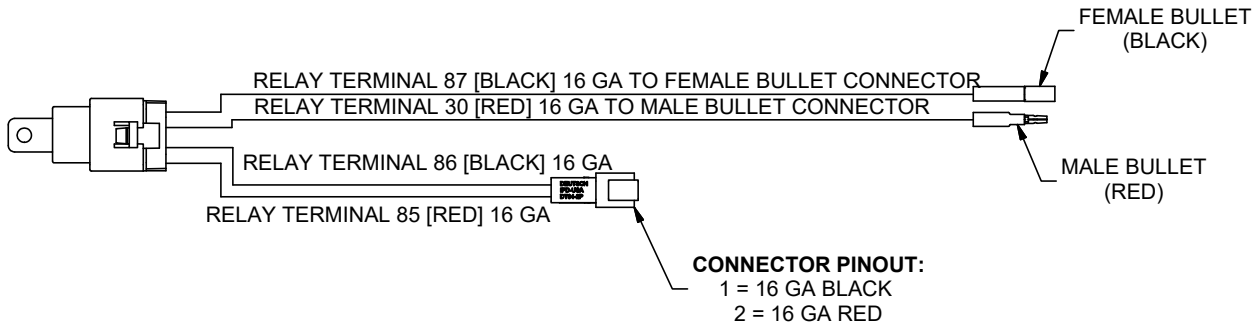
DG3520 Auto-Shutoff Scale Wiring Schematic (continued)

Wiring Harness #2012605 - continued

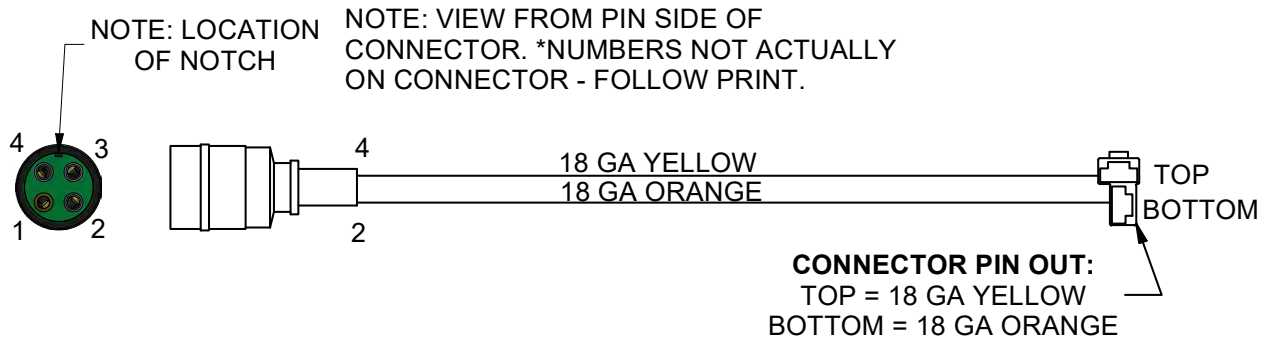


DG3520 Auto-Shutoff Scale Wiring Schematic (continued)

Ignition Adapter Harness #2002965



Electric Actuator Adapter Harness #2012613



Wheel Torque Chart & Tire Specifications

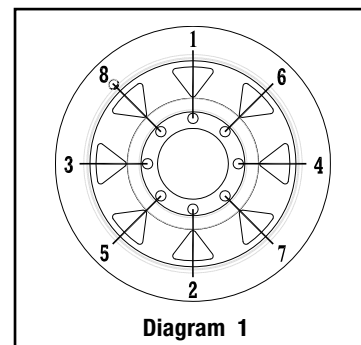
Wheel Torque Requirements

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 INITIAL USE, AFTER ONE HOUR OF USE, AFTER FIRST LOAD, AND EACH LOAD UNTIL WHEEL NUTS/BOLTS MAINTAIN TORQUE VALUE. CHECK TORQUE EVERY 10 HOURS OF USE THEREAFTER. AFTER EACH WHEEL REMOVAL START TORQUE PROCESS FROM BEGINNING. WARRANTY IS VOID ON ANY DAMAGE CAUSED BY IMPROPERLY TORQUED WHEEL NUTS/BOLTS.

Failure to check the torque before the first use may damage the wheel nut/bolt seats. Once the seats are damaged, it will become impossible to keep nuts/bolts tight. Tighten the nuts/bolts to the applicable torque value shown to the right. 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
9/16-18 (UNF)	110 FT.-LBS.



Tire Pressure

The following is to be used as a general guide for tire inflation and figures can vary depending on specific brand of tire used. It is important that the tires are inspected after the unit is loaded. The tire should stand up with no side-wall buckling or distress as the tire rolls. Do not exceed the maximum recommended tire pressure.

235/80R16 LRE....100 PSI maximum
 235/85R16 LRE....80 PSI maximum
 (All tire pressures in PSI)

Tire Warranty

For questions regarding new tire warranty, please contact your local equipment tire dealer. Used tires carry no warranty. The following are phone numbers and websites for your convenience:

Greenball
www.greenball.com
 Phone 866-767-9637

Carlisle
www.carlisletire.com
 Phone 800-260-7959
 Fax 800-352-0075

Kenda
www.kendatire.com
 Phone 800-225-4714
 Fax 614-866-9805

Complete Torque Chart

Capscrews - Grade 5

NOTE:

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



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

IMPORTANT

- Follow these torque recommendations except when specified in text.

Complete Torque Chart

Capscrews - Grade 8



NOTE:

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

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

IMPORTANT

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

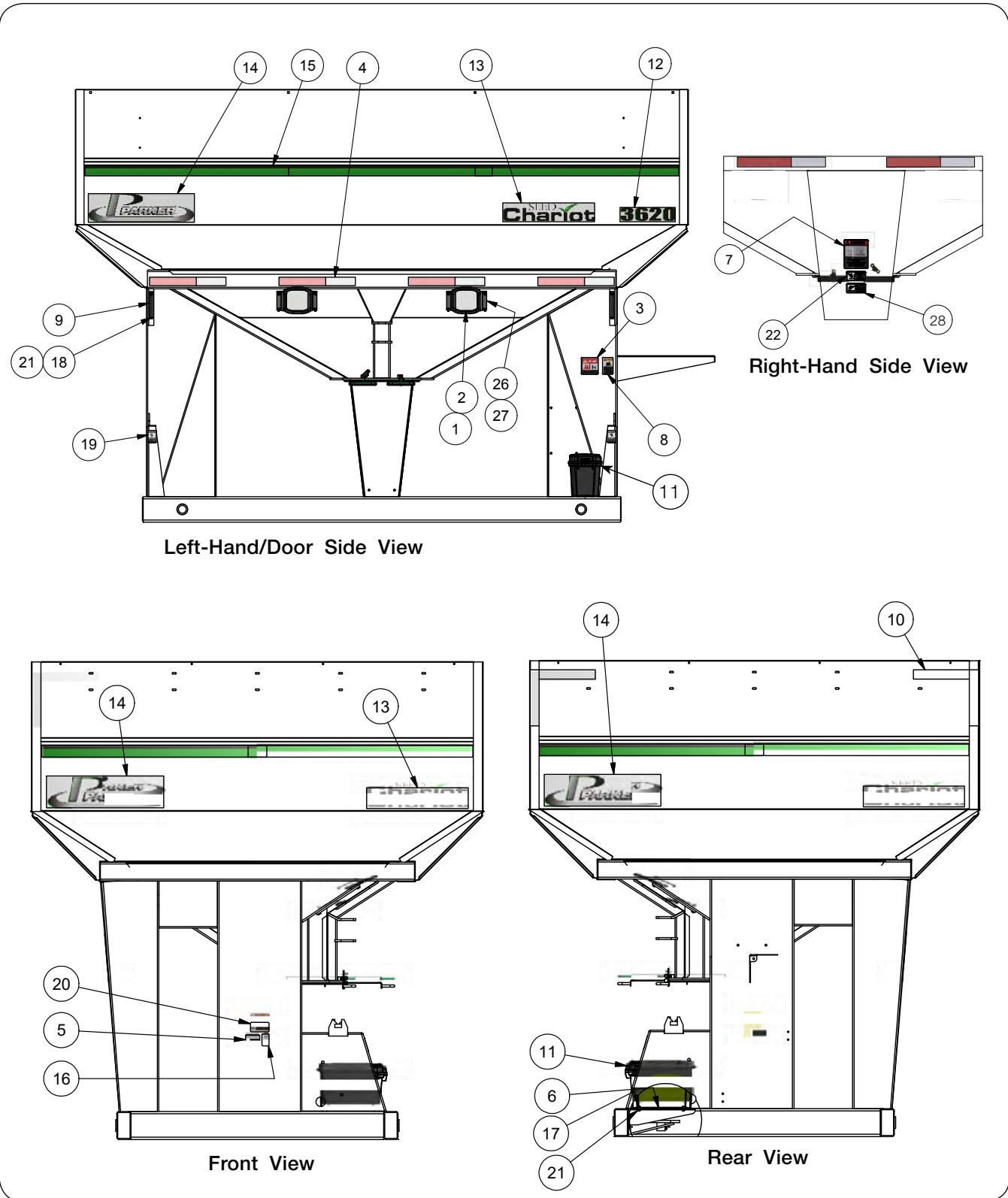
Section V Parts

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

Windows, Decals, & Touch-Up Paint	5-2
Triple Axle Undercarriage, Hitch, Fender & Wheel Components	5-4
Tandem Axle Undercarriage, Hitch, Fender & Wheel Components	5-8
Seed Door Components	5-11
Undercarriage Electrical Components.....	5-12
Electric Breakaway Components.....	5-13
Discharge Conveyor Components - For 6" Tube Conveyor	5-14
Discharge Conveyor Components - For 8" Tube Conveyor	5-16
Idler Intake End Components - For 6" Tube Conveyor.....	5-18
Idler Intake End Components - For 8" Tube Conveyor.....	5-20
Conveyor Drive Assembly & Hopper Components.....	5-22
Auger Drive Assembly & Hopper Components.....	5-26
Auger Discharge End Components	5-30
Gooseneck Hitch Components (Optional).....	5-32
Tarp & Ladder Components - Model 2620	5-34
Tarp & Ladder Components - Model 3620	
Prior to Serial No. D58960100.....	5-36
Beginning with Serial No. D58960100	5-40
Manual Winch Components.....	5-44
Electric Winch Components (Optional).....	5-46
Spare Tire (Optional).....	5-48
Non-Scale Components	5-50
Scale Components — Model 640XL (Optional)	5-51
DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)	5-52
Telescopic Spout Components (Optional).....	5-54
AG Package (Option) - SMV, SIS Decals, & Reflectors	5-55

Windows, Decals, & Touch-Up Paint

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



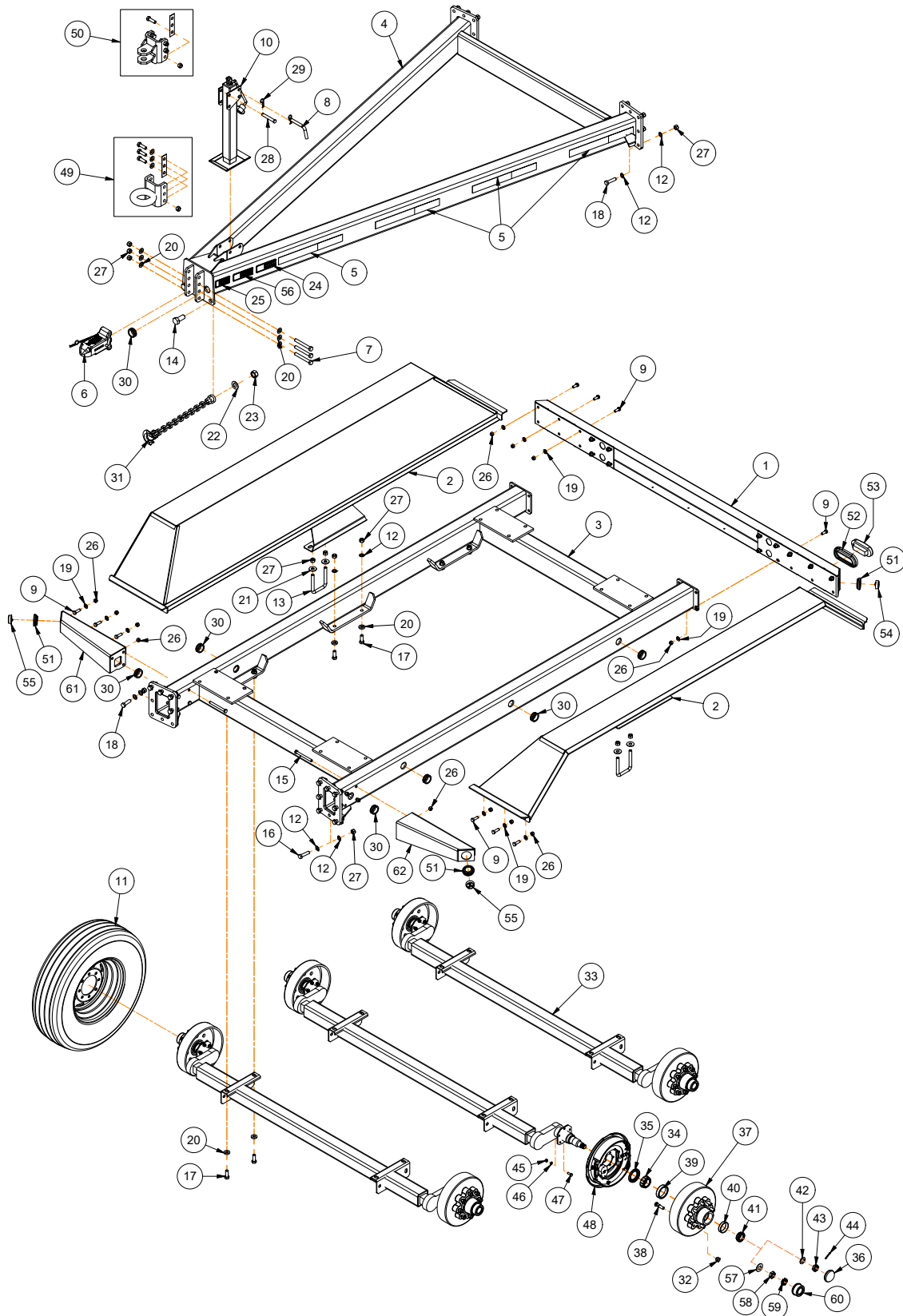
Windows, Decals, & Touch-Up Paint

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	102608	Window	2	
2	102693	Weatherstrip	2	
3	235161	Decal, DANGER (Flammable...)	1	
4	25003	Conspicuity Marking (11" Red / 7" White)	8	
5	N/A	Serial # Decal	1	
6	27741B	Strap	1	
7	901580	Decal, DANGER (Never Play In/On the Grain...)	1	
8	902026	Decal, WARNING (Sparks...)	1	
9	902172	UHMW Strip	2	
10	902362	Conspicuity Marking (12" White)	4	
11	902456	Tool Box / Manual Holder	1	
12	902931	Decal, Model 2620	2	Not Pictured
	902932	Decal, Model 3620		
13	902933	Decal, Seed Chariot®	4	
14	902934	Decal, PARKER Logo	4	
15	902936	Decal, Stripe	10	
16	91605	Decal, FEMA	1	
17	9390-028	Capscrew 5/16"-18UNC x 3/4"	2	
18	9390-030	Capscrew 5/16"-18UNC x 1"	4	
19	97048	Decal, WARNING (Pinch Point...)	2	
20	97961	Decal, WARNING (Read & Understand...)	1	
21	9807	Locknut 5/16"-18UNC	6	
22	98350	Decal, WARNING (No Riders...)	1	
23	93705	Clear Silicone Caulk	A/R	Not Shown
24	9500271	Spray Can - Charcoal Grey	A/R	Not Shown
25	902996	Spray Can - Dove Grey	A/R	Not Shown
26	2002566B	Window Retainer Bracket	4	
27	97189	Hex Nut/Large Flange 1/4"-20UNC	8	
28	95008	Decal, CAUTION (Slippery Surface...)	1	

Triple Axle Undercarriage, Hitch, Fender & Wheel Components

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



Triple Axle Undercarriage, Hitch, Fender & Wheel Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	24847CG	Light Bar Weldment	1	
2	2012485CG	Fender LH Weldment	2	
3	2010809CG	Triple Axle Undercarriage Weldment	1	
4	2009898CG	Hitch Weldment	1	
5	25003	Conspicuity Marking (11" Red/7" White)	12	
6	9500289CG	Ball Hitch 2 5/16" w/Grease Zerk	1	
	2000357CG	Ball Hitch Kit with Mounting Hardware		
	91160	Grease Zerk	-	
7	9390-134	Capscrew 5/8"-11UNC x 5"	3	Grade 5
8	84979	Bent Pin 5/8" Dia. With Hairpin Cotter	1	
9	9390-101	Capscrew 1/2"-13UNC x 1 1/2"	20	Grade 5
10	902326	Jack Stand Weldment 8000 Lbs.	1	
11	902702	Carlisle Wheel & Tire 6x16 (ST235/85R16)	6	
	9504685	Kenda Wheel & Tire 6x16 (ST235/85R16)		
12	903108	Flat Washer 5/8" USS	44	Stainless Steel
13	91070	U-Bolt 5/8"-11UNC x 5"	2	
14	91299-184	Capscrew 1"-8UNC x 2 1/4"	2	Grade 8
15	9390-113	Capscrew 1/2"-13UNC x 5"	6	Grade 5
16	9390-126	Capscrew 5/8"-11UNC x 2 1/2"	6	Grade 5
17	9390-123	Capscrew 5/8"-11UNC x 1 3/4"	12	Grade 5
18	9390-125	Capscrew 5/8"-11UNC x 2 1/4"	10	Grade 5
19	9405-086	Flat Washer 1/2" SAE	28	
20	9405-098	Flat Washer 5/8" SAE	6	
21	9405-100	Flat Washer 5/8" USS	4	Plated
22	9405-116	Flat Washer 1" SAE	2	
23	9663	Locknut 1"-8UNC	2	
24	9500710	Decal, CAUTION (Always Use Transport Chains..)	1	
25	97961	Decal, WARNING (Read & Understand...)	1	
26	9800	Locknut 1/2"-13UNC	26	
27	9801	Locknut 5/8"-11UNC	35	
28	9805	Clevis Pin 5/8" Dia. x 4"	1	
29	9806	Hairpin Cotter .148" Dia.	1	
30	98487	Rubber Grommet	12	
31	98792	Transport Chain w/Hook	2	
32	901669	Tapered Nut 9/16"-18UNF	48	
33	901099B	Torsion Axle Assembly w/ Elec Brakes	3	Includes Hub & Spindle Asy

(Continued on next page)

Triple Axle Undercarriage, Hitch, Fender & Wheel Components

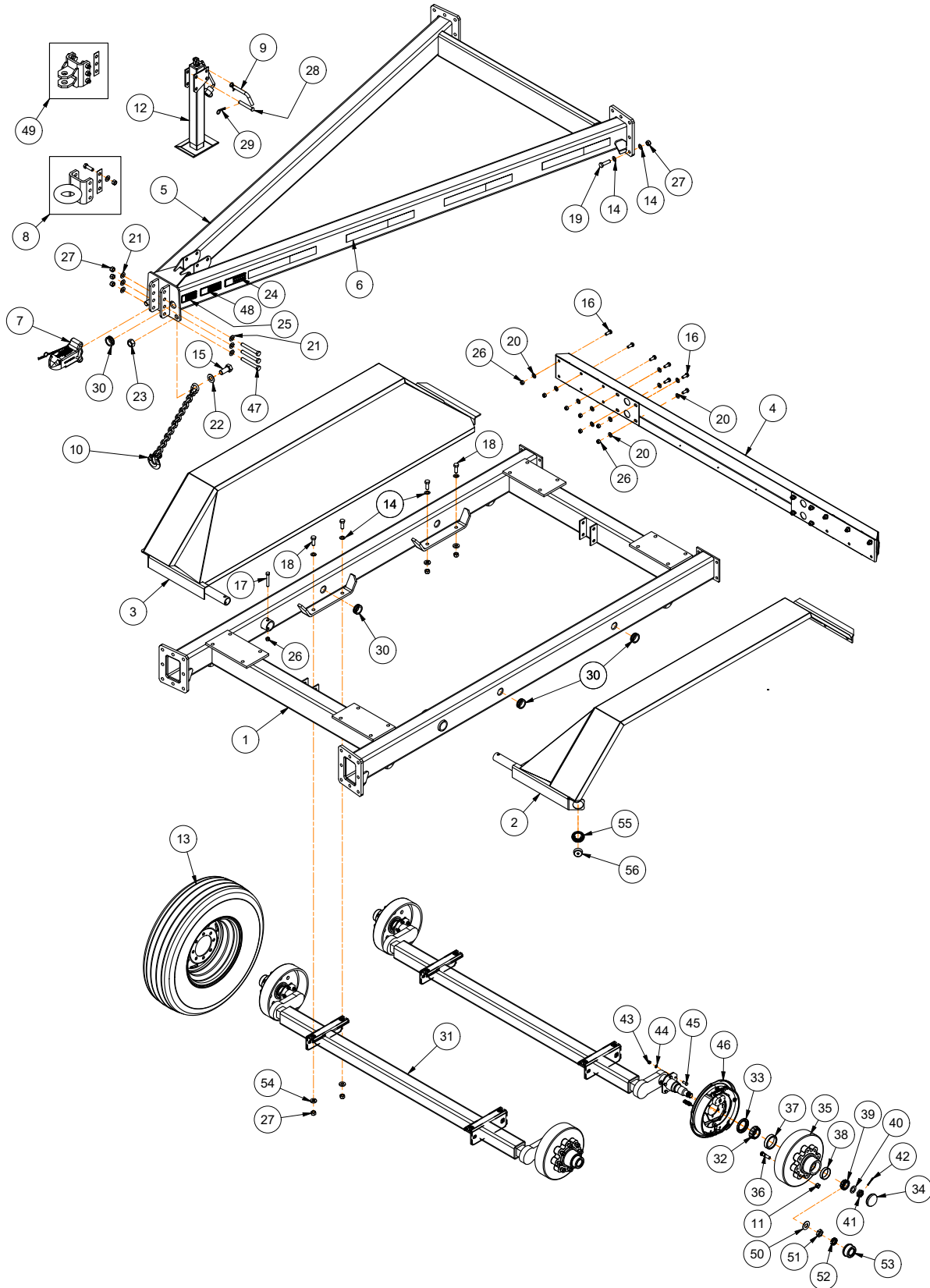
Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
34	91822	Inner Bearing Cone 1.75 I.D.	6	
35	901509	Seal 3 3/8" O.D. x 2 1/8 I.D. Single Lip	6	
36	91887	Hub Cap	6	
37	901686	Hub 8 Bolt/Drum Subassembly	6	Includes Items 40, 41, 42
38	901667	Stud Bolt 9/16"-18UNF x 2.82"	48	Grade 8
39	91812	Bearing Cup 3.265 O.D.	6	Ref #25520
40	92687	Bearing Cup 2.717 O.D.	6	Ref #14276
41	91824	Outer Bearing Cone 1.25 I.D.	6	
42	901586	Spindle Washer 1.67 O.D. x 1 I.D.	6	
43	97344	Spindle Slotted Jam Nut 1"-14UNS	6	
44	9391-035	Cotter Pin 5/32" Dia. x 1 1/2"	6	
45	9394-006	Hex Nut 3/8"-16UNC	30	
46	9404-021	Lock Washer 3/8"	30	
47	9390-055	Capscrew 3/8"-16UNC x 1"	30	
48	97348	Electric Brake Cluster LH	3	Shown
	97349	Electric Brake Cluster RH	3	
49	2000265B	Optional Pintle Hitch Kit	-	
50	2000264B	Optional Clevis Hitch Kit	-	
51	900956	Grommet Open-Back	4	
52	97182	Grommet for Panel Light	2	
53	97180	Light/RED 2 Filament, 3 Prong	2	
54	900955	Light/RED Incandescent, 2 Prong	2	
55	900954	Light/AMBER Incandescent, 2 Prong	2	
56	9500345	Decal, CAUTION (Towing...)	1	
57	9503189	"D" Spindle Washer	6	
58	9503187	Jam Nut 15/16"-9UNC	6	
59	9503186	Nut Retainer	6	
60	9502856	Hub Cap	6	
61	2010803CG	Fender Mount RH Weldment	1	
62	2010800CG	Fender Mount LH Weldment	1	

Notes

Tandem Axle Undercarriage, Hitch, Fender & Wheel Components

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



Tandem Axle Undercarriage, Hitch, Fender & Wheel Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	24687CG	Tandem Axle Undercarriage Weldment	1	
2	24772CG	Fender LH Weldment	1	
3	24773CG	Fender RH Weldment	1	
4	24847CG	Light Bar Weldment	1	
5	2009898CG	Hitch Weldment	1	
6	25003	Conspicuity Marking (11" Red/7" White)	10	
7	2000357CG	Ball Hitch Kit with Mounting Hardware	1	
8	2000265B	Optional Pintle Hitch Kit	-	
9	84979	Bent Pin 5/8" Dia. With Hairpin Cotter	1	
10	98792	Transport Chain w/Hook	2	
11	901669	Tapered Nut 9/16"-18UNF	32	
12	902326	Jack Stand Weldment 8000 Lbs.	1	
13	902702	Carlisle Wheel & Tire 6 x 16 (ST235/85R16)	4	
	9504685	Kenda Wheel & Tire 6 x 16 (ST235/85R16)		
14	903108	Flat Washer 5/8" USS	40	Stainless Steel
15	91299-183	Capscrew 1"-8UNC x 2"	2	Grade 8
16	9390-100	Capscrew 1/2"-13UNC x 1 1/4"	14	Grade 5
17	9390-108	Capscrew 1/2"-13UNC x 3 1/4"	2	Grade 5
18	9390-123	Capscrew 5/8"-11UNC x 1 3/4"	8	Grade 5
19	9390-125	Capscrew 5/8"-11UNC x 2 1/4"	16	Grade 5
20	9405-086	Flat Washer 1/2" SAE	22	
21	9405-098	Flat Washer 5/8" SAE	6	
22	9405-116	Flat Washer 1" SAE	2	
23	9663	Locknut 1"-8UNC	2	
24	9500710	Decal, CAUTION (Do Not Tow Without...)	1	
25	97961	Decal, WARNING (Read & Understand...)	1	
26	9800	Locknut 1/2"-13UNC	16	
27	9801	Locknut 5/8"-11UNC	27	
28	9805	Clevis Pin 5/8" Dia. x 4"	1	
29	9806	Hairpin Cotter .148" Dia.	1	
30	98487	Rubber Grommet	8	
31	901099B	Torsion Axle Assembly w/ Elec. Brakes	2	Includes Hub & Spindle Asy
32	91822	Inner Bearing Cone 1.75 I.D.	4	
33	901509	Seal 3 3/8" O.D. x 2 1/8" I.D. Single Lip	4	
34	91887	Hub Cap	4	
35	901686	Hub 8 Bolt/Drum Subassembly	4	Includes Items 39, 40, 41
36	901667	Stud Bolt 9/16"-18UNF x 2.82"	32	Grade 8

(Continued on next page)

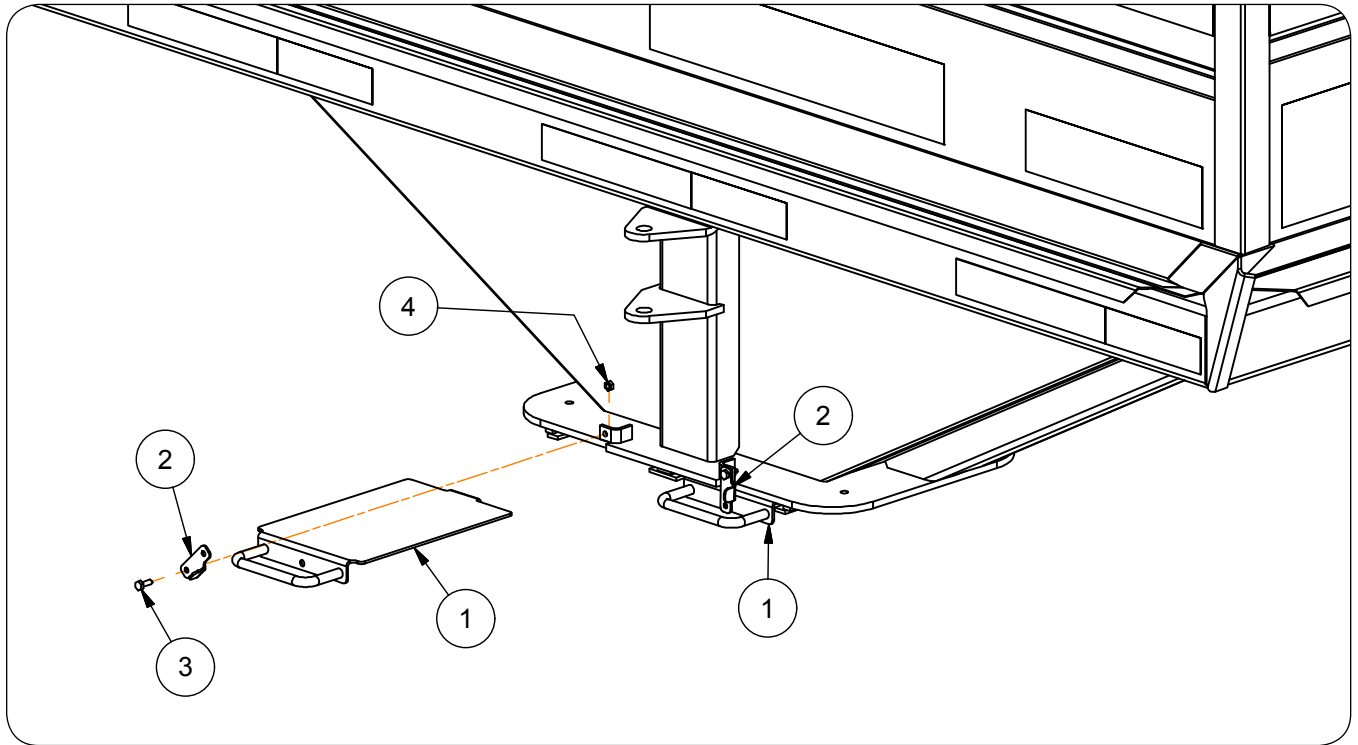
Tandem Axle Undercarriage, Hitch, Fender & Wheel Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
37	91812	Bearing Cup 3.265" O.D.	4	Ref #25520
38	92687	Bearing Cup 2.717" O.D.	4	Ref #14276
39	91824	Outer Bearing Cone 1.25" I.D.	4	
40	901586	Spindle Washer 1.67" O.D. x 1" I.D.	4	
41	97344	Spindle Slotted Jam Nut 1"-14UNS	4	
42	9391-035	Cotter Pin 5/32" Dia. x 1 1/2"	4	
43	9394-006	Hex Nut 3/8"-16UNC	16	
44	9404-021	Lock Washer 3/8"	16	
45	9390-055	Capscrew 3/8"-16UNC x 1"	16	
46	97348	Electric Brake Cluster LH	1	Shown
	97349	Electric Brake Cluster RH	1	
47	9390-134	Capscrew 5/8"-11UNC x 5"	3	Grade 5
48	9500345	Decal, CAUTION (Towing...)	1	
49	2000264B	Optional Clevis Hitch Kit	-	
50	9503189	"D" Spindle Washer	4	
51	9503187	Jam Nut 15/16"-9UNC	4	
52	9503186	Nut Retainer	4	
53	9502856	Hub Cap	4	
54	9746	Flat Washer 5/8"	8	
55	900956	Grommet Open-Back	2	
56	900954	Light/AMBER Incandescent, 2 Prong	2	

Seed Door Components

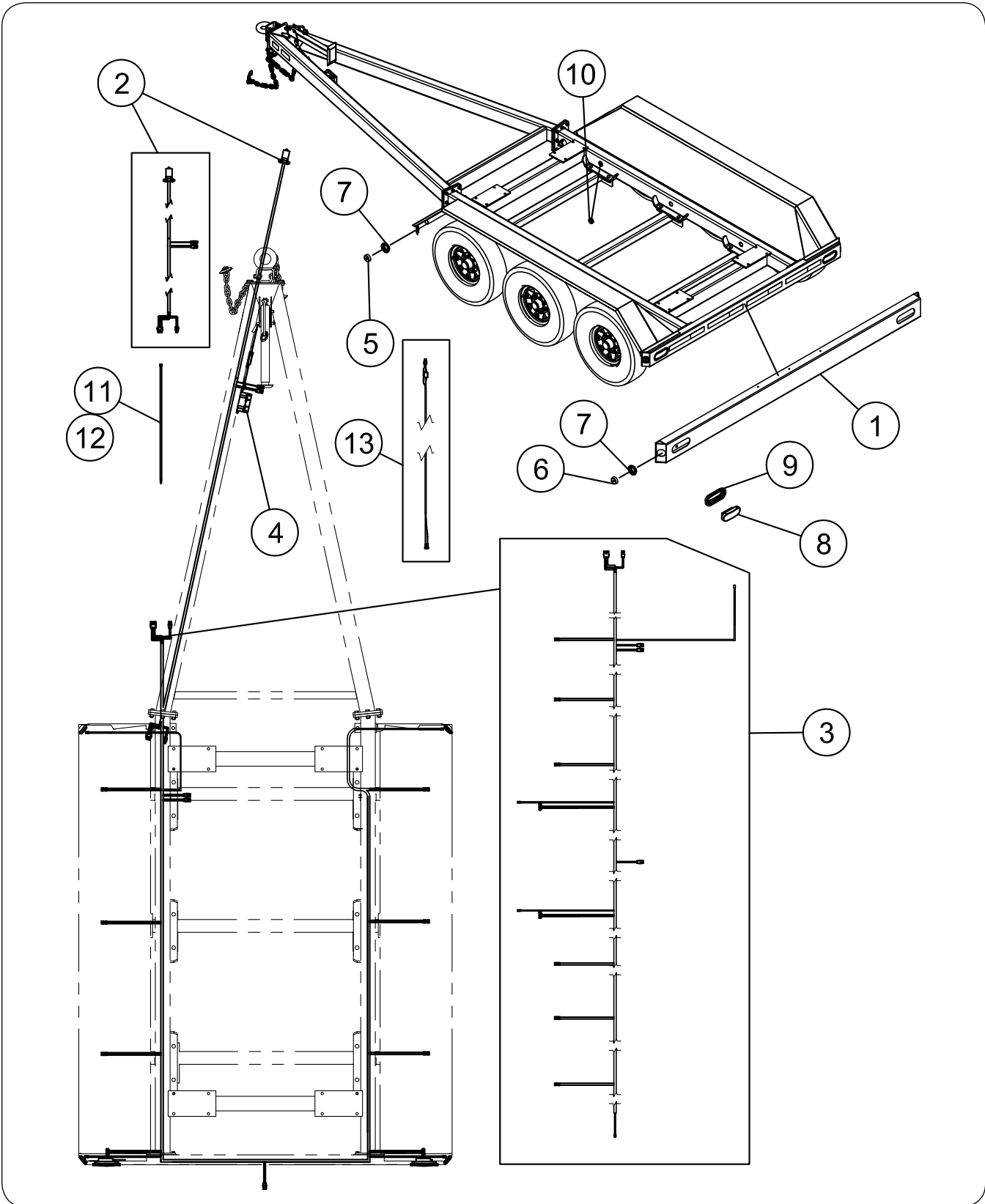
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	25932CG	Door Weldment =CHARCOAL GREY=	2	
2	25977B	Latch =BLACK=	2	
3	9390-003	Capscrew 1/4"-20UNC x 3/4"	2	Grade 5
4	9936	Locknut 1/4"-20UNC	2	

Undercarriage Electrical Components

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



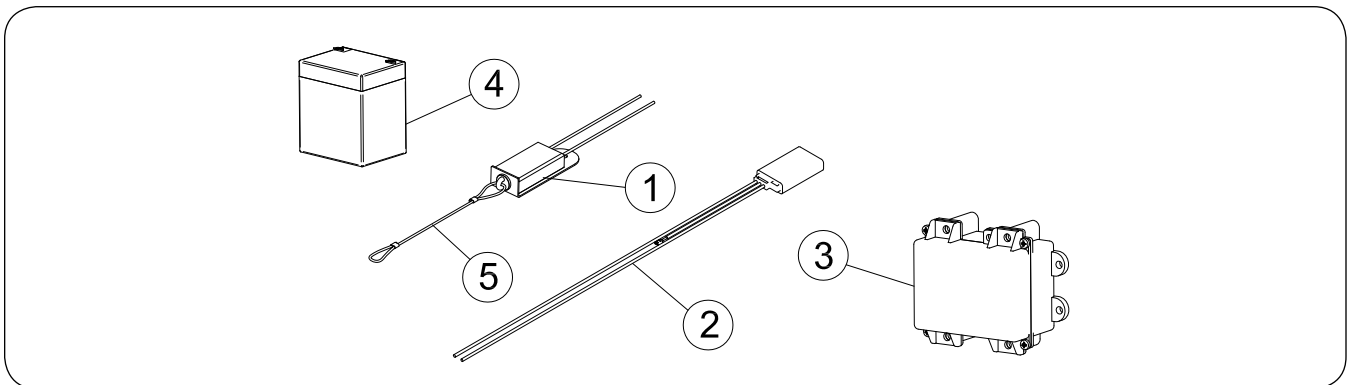
Undercarriage Electrical Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	24847CG	Light Bar Weldment	1	
2	25045	Wiring Harness - 165" Front	1	
3	25046	Wiring Harness - 338" Rear	1	
4	-	Electric Breakaway Kit	-	See Below
5	900954	Light/Amber (2 Prong)	2	
6	900955	Light/Red (2 Prong)	2	
7	900956	Grommet Open Back	4	
8	97180	Light/Red (3 Prong)	2	
9	97182	Grommet for Panel Light	2	
10	98487	Grommet 1 3/8" Dia.	7	
11	94038	Cable Tie 32" Long	A/R	
12	99599	Cable Tie 8.39" Long	A/R	Fir Tree Mount
13	29410	Battery Charging Wiring Harness	1	

Electric Breakaway Components

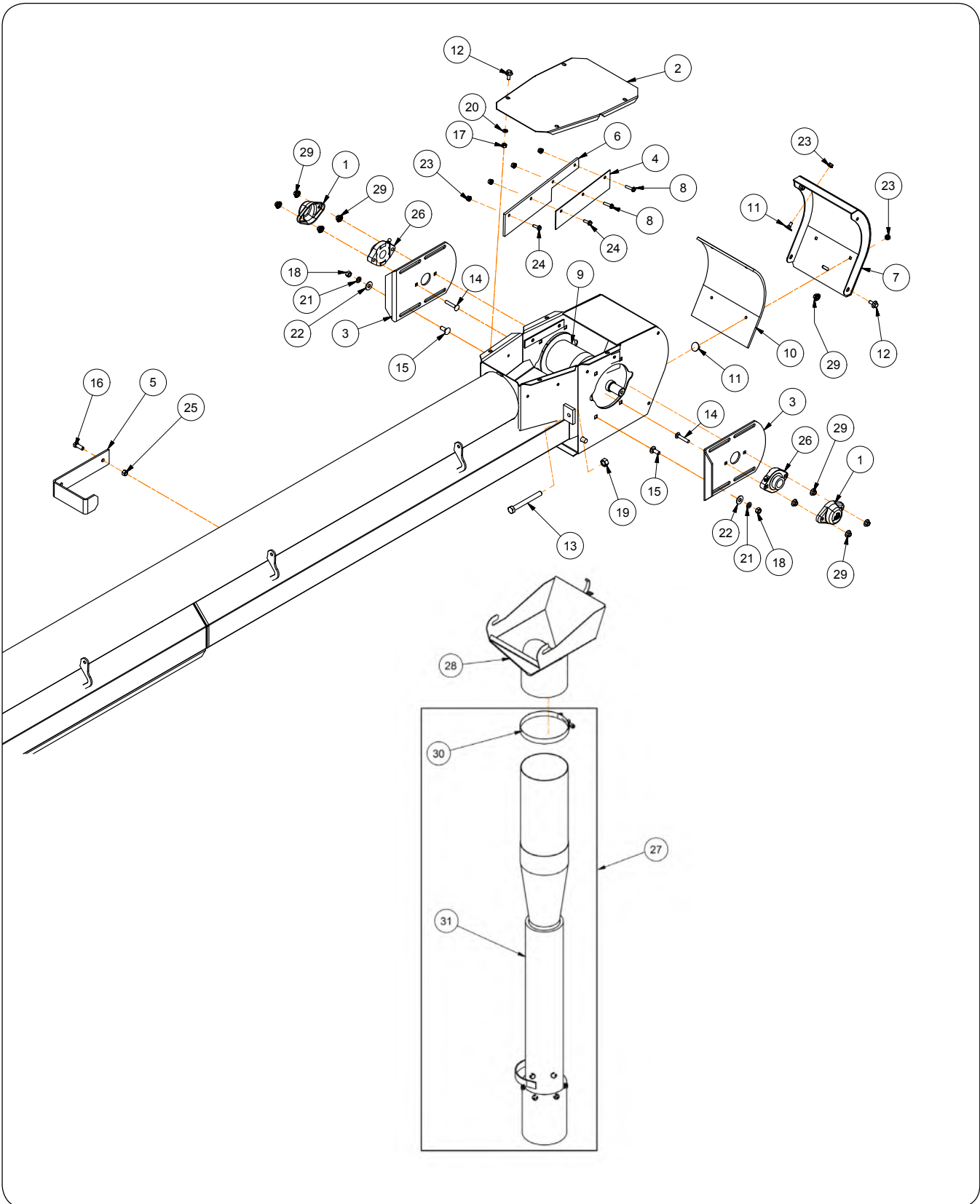
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	900786	Breakaway Electric Switch w/Pull Pin	1	
2	900787	Battery 12V Charger	1	
3	902179	Battery Box w/Decals	1	
4	900789	Battery 12V Rechargeable	1	5.0 AMP-HR
5	901950	Pull Cord Breakaway Switch	1	
6	902764	Battery with Charger & Box (NOT SHOWN)	1	Includes Items 2, 3, & 4

Discharge Conveyor Components - For 6" Tube Conveyor

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



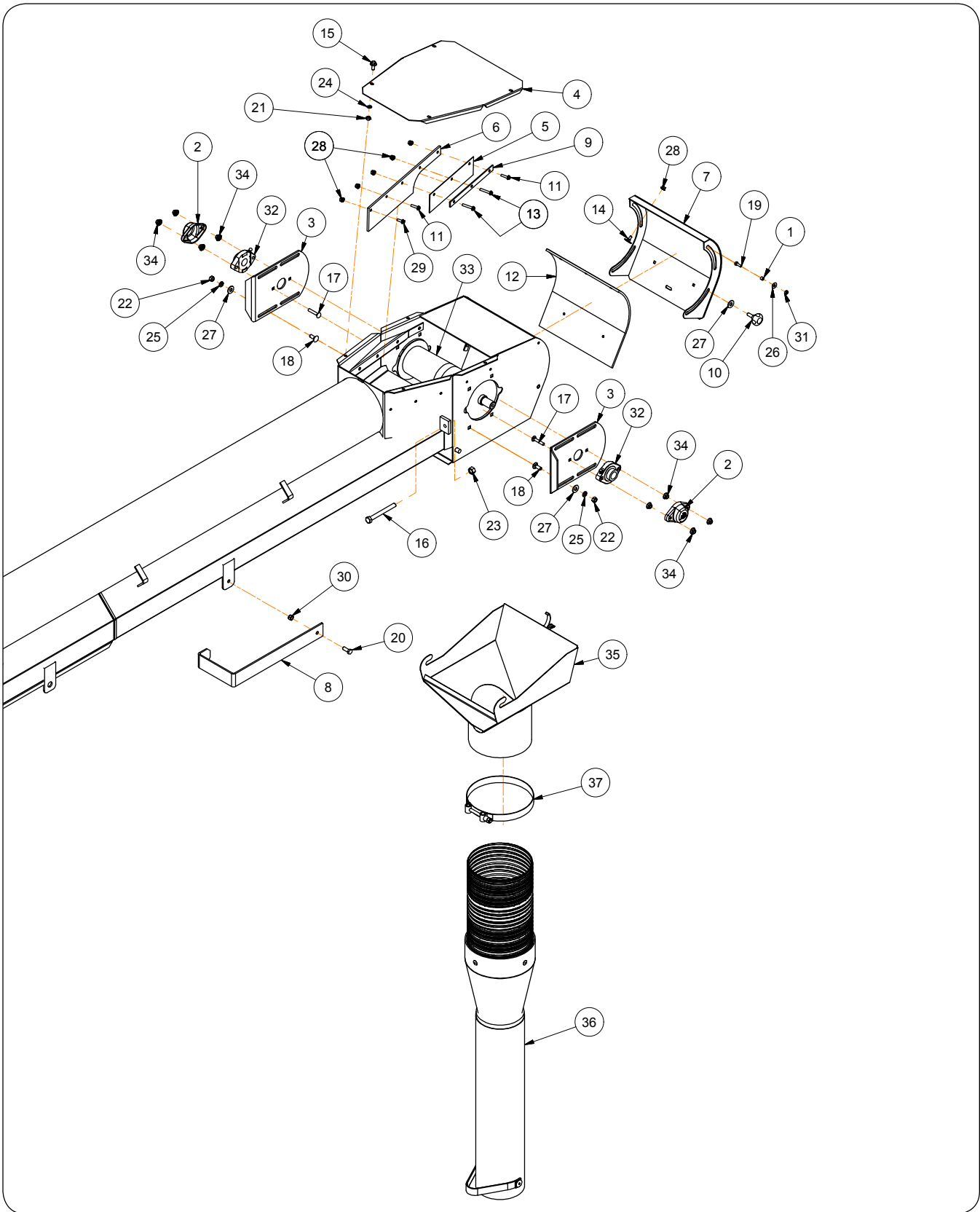
Discharge Conveyor Components - For 6" Tube Conveyor

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	9500310	Idler Cover	2	
2	23918CG	Top Shield/Cover	1	
3	23994CG	Adjustment Plate	2	
4	24260	Seal	2	
5	24414CG	Spout Bracket	1	
6	24755	Poly Strip	2	
7	26580CG	Deflector Weldment	1	
8	901101	Flange Screw 1/4"-20UNC x 1"	4	
9	901662	Idler Pulley	1	
10	901723	Neoprene	1	
11	902006	Elevator Bolt 1/4"-20UNC x 3/4"	4	
12	91256	Large Flange Screw 5/16"-18UNC x 3/4"	4	
13	93400	Capscrew 1/2"-13UNC x 4 1/2"	1	Grade 5-Full Threaded
14	9388-027	Carriage Bolt 5/16"-18UNC x 1 1/2"	4	Grade 5
15	9388-051	Carriage Bolt 3/8"-16UNC x 1"	8	Grade 5
16	9390-055	Capscrew 3/8"-16UNC x 1"	1	Grade 5
17	9394-004	Hex Nut 5/16"-18UNC	4	
18	9394-006	Hex Nut 3/8"-16UNC	8	
19	9394-010	Hex Nut 1/2"-13UNC	2	
20	9404-019	Lock Washer 5/16"	4	
21	9404-021	Lock Washer 3/8"	8	
22	9405-076	Flat Washer 3/8" USS	8	
23	97189	Large Flange Hex Nut 1/4"-20UNC	8	
24	97420	Flange Screw 1/4"-20UNC x 3/4"	4	
25	9928	Locknut 3/8"-16UNC	1	
26	TA0-903088-0	Bearing w/Flange 1" I.D.	2	
27	28953CG	Telescopic Spout Assembly	1	Includes Items 30 & 31
28	26585CG	Spout Weldment	1	
29	91257	Flange Nut 5/16"-18UNC	8	
30	98060	Camp/T-Bolt	1	
31	27629	Telescopic Spout 60" Long	1	

Discharge Conveyor Components - For 8" Tube Conveyor

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



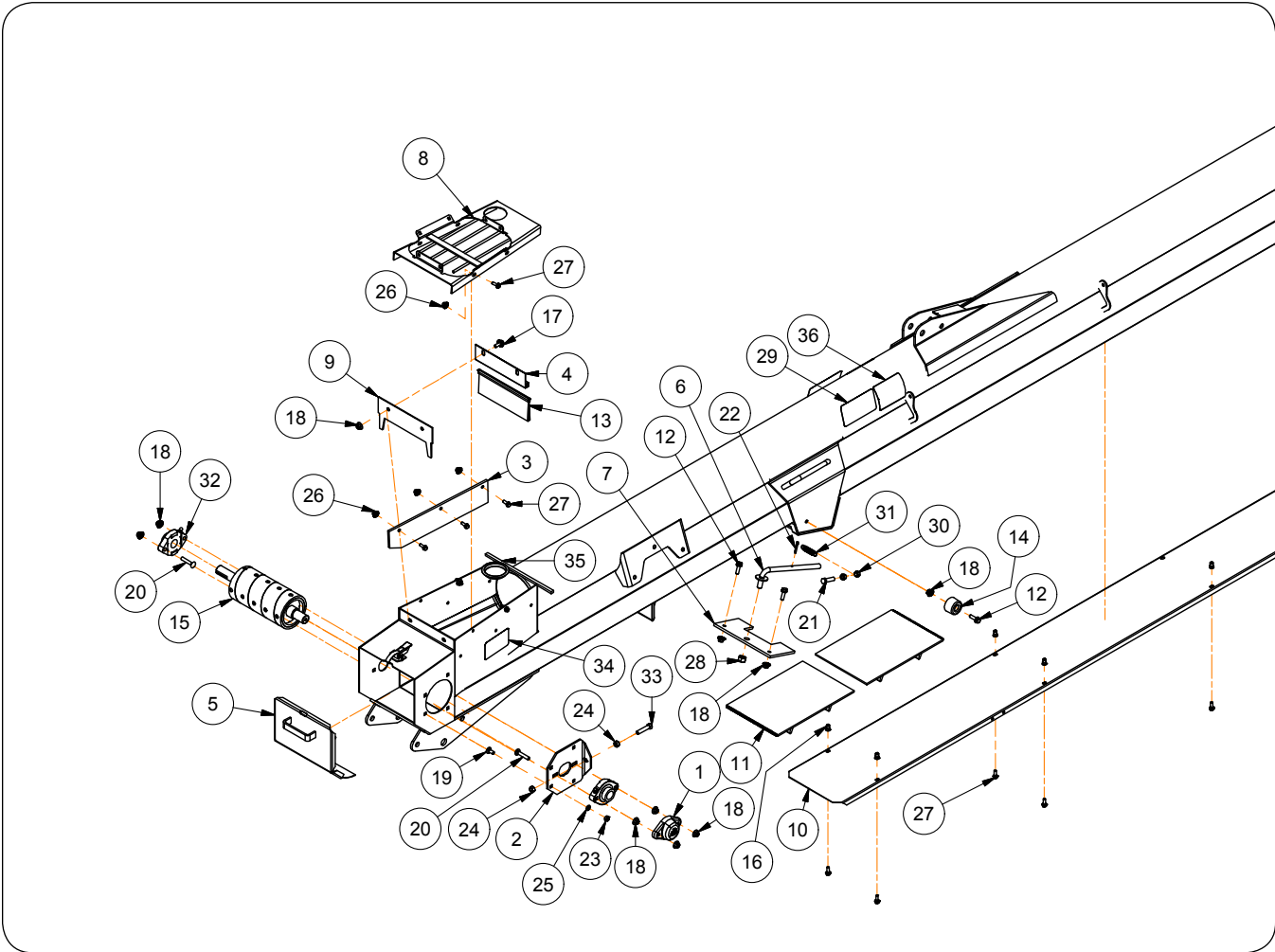
Discharge Conveyor Components - For 8" Tube Conveyor

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	22018	Bushing	2	
2	9500310	Idler Cover	2	
3	23994CG	Adjustment Plate	2	
4	25239CG	Top Shield/Cover	1	
5	25256	Seal	2	
6	25257	Poly Strip	2	
7	26223CG	Deflector Weldment	1	
8	26238CG	Strip/Bracket	1	
9	26432B	Strip	2	
10	901046	Knob	2	
11	901101	Flange Screw 1/4"-20UNC x 1"	4	
12	901724	Neoprene	1	
13	901831	Serrated Flange Screw 1/4"-20UNC x 1 1/2"	4	Grade 5
14	902006	Elevator Bolt 1/4"-20UNC x 3/4"	4	
15	91256	Large Flange Screw 5/16"-18UNC x 3/4"	4	
16	93400	Capscrew 1/2"-13UNC x 4 1/2"	2	Grade 5-Full Threaded
17	9388-027	Carriage Bolt 5/16"-18UNC x 1 1/2"	4	Grade 5
18	9388-051	Carriage Bolt 3/8"-16UNC x 1"	8	Grade 5
19	9390-003	Capscrew 1/4"-20UNC x 3/4"	2	Grade 5
20	9390-055	Capscrew 3/8"-16UNC x 1"	1	Grade 5
21	9394-004	Hex Nut 5/16"-18UNC	4	
22	9394-006	Hex Nut 3/8"-16UNC	8	
23	9394-010	Hex Nut 1/2"-13UNC	2	
24	9404-019	Lock Washer 5/16"	4	
25	9404-021	Lock Washer 3/8"	8	
26	9405-064	Flat Washer 1/4" USS	2	
27	9405-076	Flat Washer 3/8" USS	10	
28	97189	Large Flange Hex Nut 1/4"-20UNC	14	
29	97420	Flange Screw 1/4"-20UNC x 3/4"	2	
30	9928	Locknut 3/8"-16UNC	1	
31	9936	Locknut 1/4"-20UNC	2	
32	TA0-903088-0	Bearing w/Flange 1" I.D.	2	
33	902711	Idler Pulley	1	
34	91257	Flange Nut 5/16"-18UNC	8	
35	26284CG	Spout Weldment	1	
36	25532	Telescopic Spout	1	
37	901485	Clamp	1	

Intake End Components - For 6" Tube Conveyor

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



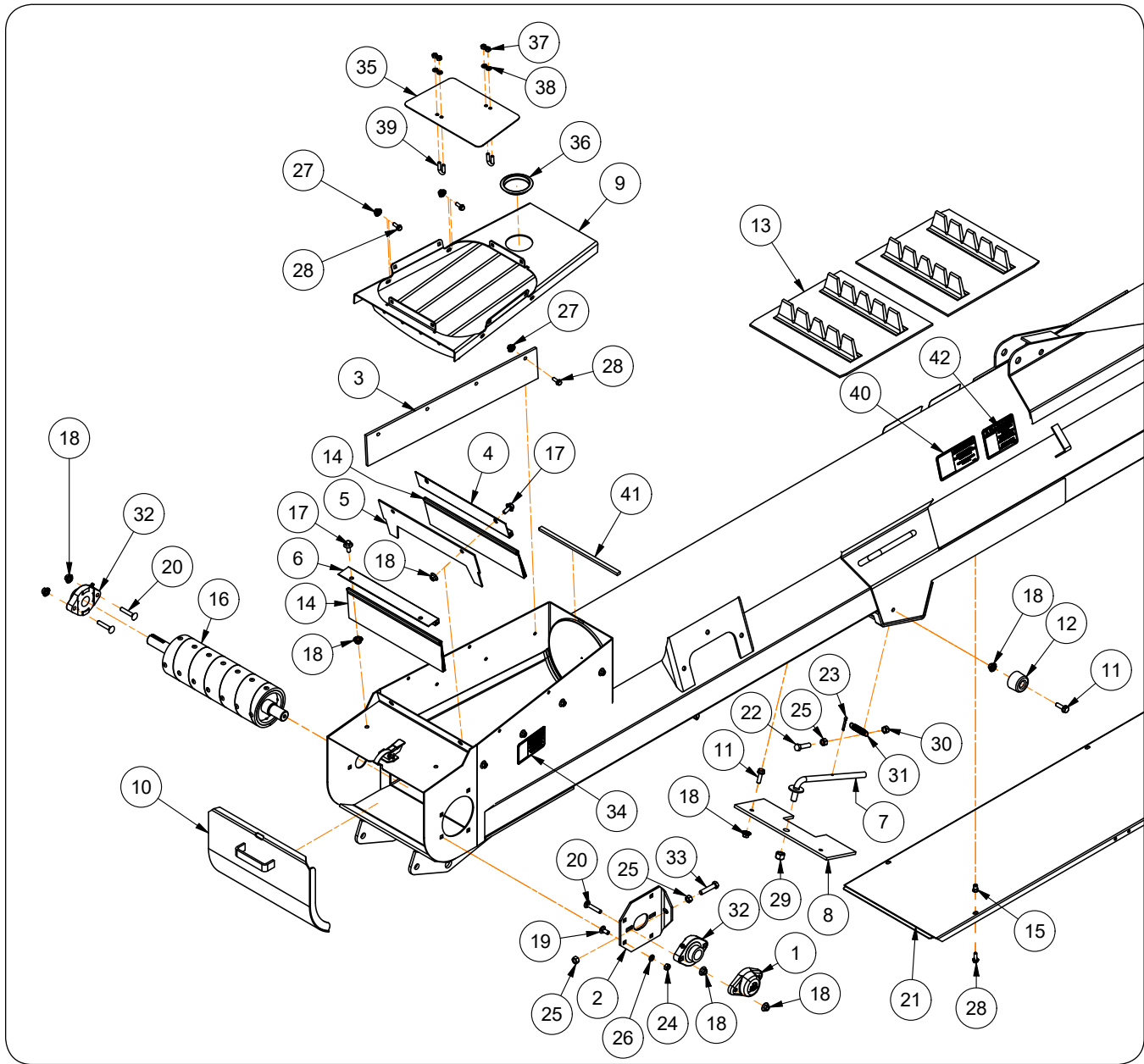
Intake End Components - For 6" Tube Conveyor

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	9500310	Idler Cover	3	
2	23912CG	Adjustment Plate	1	
3	24756	Poly Strip	2	
4	24964	Brush Holder	1	
5	26002CG	Cleanout Door Weldment	1	
6	26484	Lever Weldment w/ 1/2"-13UNC Threaded End	1	
7	26485	Rest Pad	1	
8	26688CG	Cover Weldment	1	
9	26865	Seal	1	
10	27258CG	Bottom Shield	1	
11	900779	Conveyor Belt	1	
	9500087	Belt Splice Pin For Clipper Style Splice	-	
	9501506	Belt Splice Kit	-	
12	901044	Serrated Flange Bolt 5/16"-18UNC x 1"	4	Grade 5
13	901111	Nylon Brush	1	
14	901169	Rubber Bumper	2	
15	901661	Drive Pulley	1	
	800713	Key		
16	902340	Rivet Nut 1/4"-20UNC	8	
17	91256	Large Flange Screw 5/16"-18UNC x 3/4"	10	
18	91257	Large Flange Hex Nut 5/16"-18UNC	24	
19	9388-024	Carriage Bolt 5/16"-18UNC x 3/4"	4	Grade 5
20	9500341	Carriage Bolt 5/16"-18UNC x 1 3/4"	8	Grade 5
21	9390-057	Capscrew 3/8"-16UNC x 1 1/2"	1	Grade 5
22	9391-033	Cotter Pin 5/32" Dia. x 1"	1	
23	9394-004	Hex Nut 5/16"-18UNC	8	
24	9394-006	Hex Nut 3/8"-16UNC	11	
25	9404-019	Lock Washer 5/16"	8	
26	97189	Large Flange Hex Nut 1/4"-20UNC	22	
27	97420	Flange Screw 1/4"-20UNC x 3/4"	22	
28	9800	Locknut 1/2"-13UNC	1	
29	98229	Decal, WARNING (Lower Equipment...)	2	
30	9928	Locknut 3/8"-16UNC	2	
31	99860	Spring	1	
32	TA0-903088-0	Bearing w/Flange 1" I.D.	4	
33	TA0-907104-0	Capscrew 3/8"-16UNC x 1 3/4" (Full Threaded)	1	Grade 5
34	TA1-906109-0	Decal, WARNING (Moving Parts...)	2	
35	900152	Foam Strip	A/R	
36	901478	Decal, DANGER (Electrocution...)	2	

Intake End Components - For 8" Tube Conveyor

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



ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	9500310	Idler Cover	3	
2	23912CG	Adjustment Plate	1	
3	25258	Seal	2	
4	25262	Brush Holder	1	
5	26243	Seal	1	
6	26308	Brush Holder	1	
7	26484	Lever Weldment w/ 1/2"-13UNC Threaded End	1	
8	28249	Rest Pad	1	

Intake End Components - For 8" Tube Conveyor

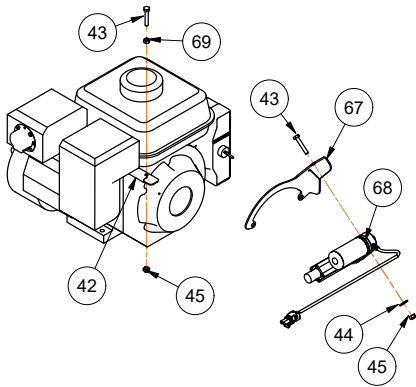
Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
9	28285CG	Cover Weldment	1	
10	28295CG	Clean Out Door Weldment	1	
11	901044	Serrated Flange Bolt 5/16"-18UNC x 1"	4	Grade 5
12	901169	Rubber Bumper	2	
13	901287	Conveyor Belt	1	
	9500087	Belt Splice Pin For Clipper Style Splice	-	
	TA4-100659-0	In Field Splice Repair For Alligator Splice	-	
14	901814	Nylon Brush	2	
15	902340	Rivet Nut 1/4"-20UNC	8	
16	902710	Drive Pulley	1	
	800713	Key	-	
17	91256	Large Flange Screw 5/16"-18UNC x 3/4"	8	
18	91257	Large Flange Hex Nut 5/16"-18UNC	22	
19	9388-024	Carriage Bolt 5/16"-18UNC x 3/4"	4	Grade 5
20	9500341	Carriage Bolt 5/16"-18UNC x 1 3/4"	8	Grade 5
21	28248CG	Bottom Shield	1	
22	9390-057	Capscrew 3/8"-16UNC x 1 1/2"	1	Grade 5
23	9391-033	Cotter Pin 5/32" Dia. x 1"	1	
24	9394-004	Hex Nut 5/16"-18UNC	8	
25	9394-006	Hex Nut 3/8"-16UNC	11	
26	9404-019	Lock Washer 5/16"	8	
27	97189	Large Flange Hex Nut 1/4"-20UNC	27	
28	97420	Flange Screw 1/4"-20UNC x 3/4"	22	
29	9800	Locknut 1/2"-13UNC	1	
30	9928	Locknut 3/8"-16UNC	2	
31	99860	Spring	1	
32	TA0-903088-0	Bearing w/Flange 1" I.D.	4	
33	TA0-907104-0	Capscrew 3/8"-16UNC x 1 3/4" (Full Threaded)	1	Grade 5
34	TA1-906109-0	Decal, WARNING (Moving Parts...)	2	
35	2001238CG	Baffle 6" x 9 29/32"	1	
36	9006919	Button Plug	1	
37	9394-002	Hex Nut 1/4"-20UNC	4	Grade 5
38	9404-017	Lock Washer 1/4"	4	
39	9500652	U-bolt 1/4"-20UNC x 9/16"	2	
40	98229	Decal, WARNING (Lower equipment...)	2	
41	900152	Tape/Black Foam Rubber	1	
42	901478	Decal, DANGER (Electrocution...)	2	

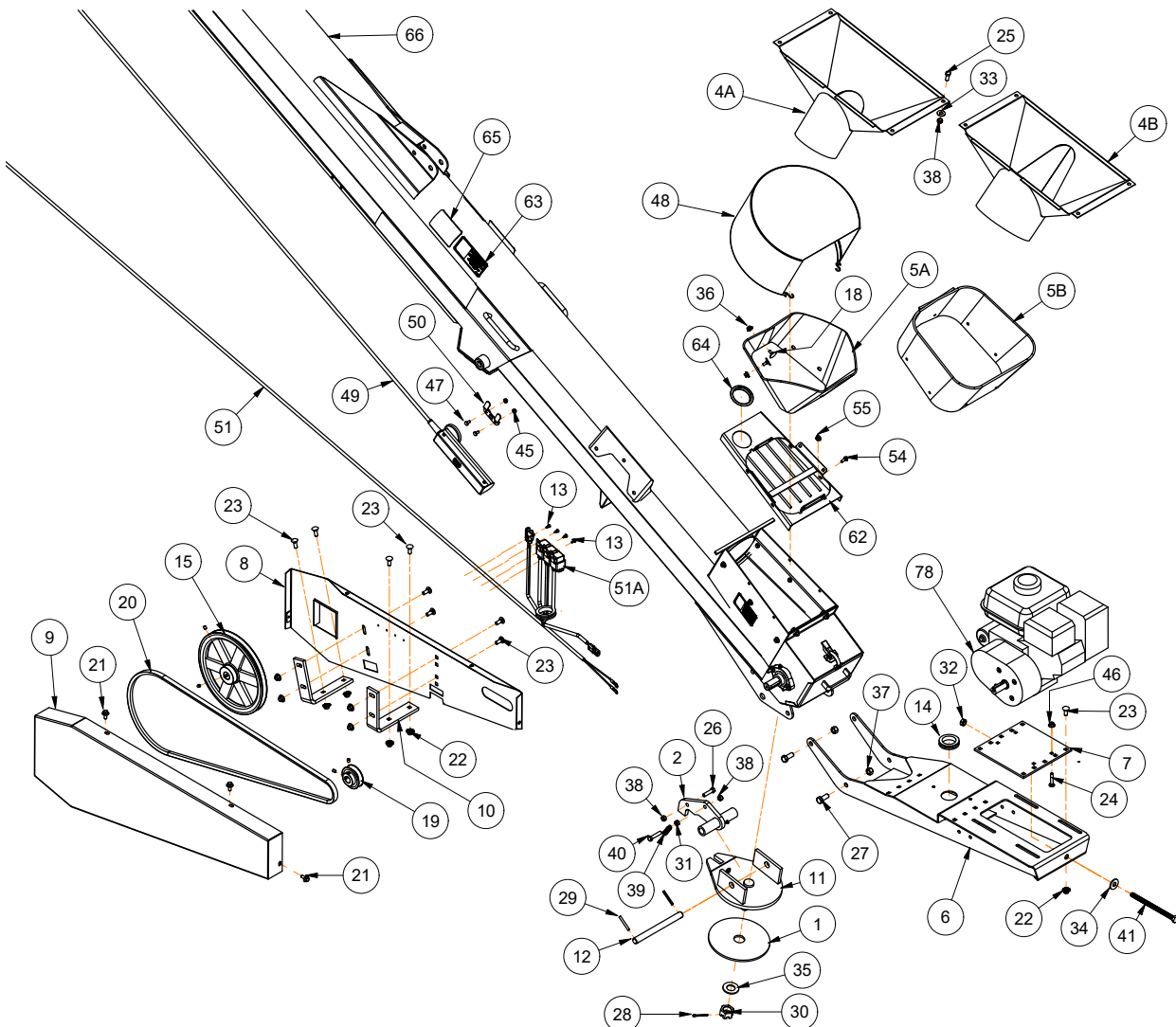
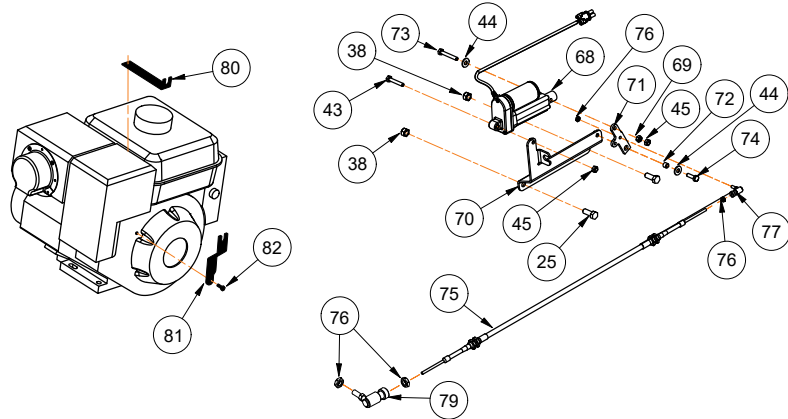
Conveyor Drive Assembly & Hopper Components

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

6" Tube Conveyor



8" Tube Conveyor



Conveyor Drive Assembly & Hopper Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	25882	Poly Washer 7 3/4" Dia.	1	
2	26100CG	Latch Weldment	1	
3	26103	Lever Weldment	1	
4A	26440CG	Chute Weldment 6" Dia.	1	For 6" Tube Conveyor
4B	2009123CG	Chute Weldment 8" Dia.		For 8" Tube Conveyor
5A	26689	Rubber Hopper (Shown)	1	For 6" Tube Conveyor
	28289	Rubber Hopper	1	For 8" Tube Conveyor w/6" Chute Wldmt
5B	2009292	Rubber Hopper	1	For 8" Tube Conveyor
6	28375CG	Engine Mount Weldment	1	
7	28377CG	Adjustment Plate	1	
8	28378CG	Shield Weldment	1	
9	28380CG	Shield Weldment	1	
10	28382CG	Bracket	2	
11	28410CG	Pivot Weldment	1	
12	28412	Pin 3/4" Dia. x 8 1/4"	1	
13	9001396	Pan Head Self Drilling Screw #10-16 x 1/2"	5	
14	900513	Grommet / Rubber 2" Dia.	2	
15	901659	Pulley/Sheave w/ Set Screws	1	
	9399-071	Set Screws 5/16"-18UNC x 3/8"	-	
16	901673	Honda Engine 4.8 Net HP Gas w/ Clutch Reduction Gearbox	1	For 6" Tube Conveyor
	902720	Honda Engine 8.5 Net HP Gas w/ Clutch Reduction Gearbox		For 8" Tube Conveyor
	903057	Key 7mm x 7mm	-	
	901333	Ignition Key Replacement	-	
17	901675	Grommet / Rubber 1" Dia.	1	
18	902006	Elevator Bolt 1/4"-20UNC x 3/4"	8	
19	902059	Pulley 2.95" Dia. w/ Set Screws	1	
	9399-071	Set Screws 5/16"-18UNC x 3/8"	-	
20	902756	V-Belt - 83" Outer Length	1	
21	91256	Large Flange Screw 5/16"-18UNC x 3/4"	4	
22	91263	Large Flange Nut 3/8"-16UNC	12	
23	9388-051	Carriage Bolt 3/8"-16UNC x 1"	12	Grade 5
24	9500341	Carriage Bolt 5/16"-18UNC x 1 3/4"	4	Grade 5
25	9390-055	Capscrew 3/8"-16UNC x 1"	4	Grade 5
26	9390-057	Capscrew 3/8"-16UNC x 1 1/2"	1	Grade 5
27	9390-100	Capscrew 1/2"-13UNC x 1 1/4"	4	Grade 5
28	9391-035	Cotter Pin 5/32" Dia. x 1 1/2"	1	

(Continued on next page)

Drive Assembly & Hopper Components (continued)

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
29	9392-140	Roll Pin 1/4" Dia. x 2"	2	
30	9393-020	Slotted Nut 1"-14UNS	1	Grade 2
31	9394-006	Hex Nut 3/8"-16UNC	1	
32	9395-010	Hex Jam Nut 1/2"-13UNC	1	
33	9405-076	Flat Washer 3/8" USS	5	
34	9405-088	Flat Washer 1/2" USS	1	
35	9405-116	Flat Washer 1" SAE	1	
36	97189	Large Flange Hex Nut 1/4"-20UNC	8	
37	9800	Locknut 1/2"-13UNC	4	
38	9928	Locknut 3/8"-16UNC	6	
39	99860	Extension Spring 2 1/4" Long	1	
40	TA0-907104-0	Capscrew 3/8"-16UNC x 1 3/4"	1	Full Threaded - Grade 5
41	TA0-907228-0	Capscrew 1/2"-13UNC x 7 1/2"	1	Full Threaded - Grade 5
42	26719CG	Angle for Actuator Assembly (Shown)	1	For 6" Tube Conveyor
43	9390-007	Capscrew 1/4"-20UNC x 1 1/2" G5	2	For 6" & 8" Tube Conveyor - Grade 5
	9390-005	Capscrew 1/4"-20UNC x 1" G5		For 8" Tube Conveyor - Grade 5
44	9405-064	Flat Washer 1/4" USS	2	
45	9936	Locknut 1/4"-20UNC	4	
46	91257	Flange Nut 5/16"-18UNC	4	
47	9390-001	Capscrew 1/4"-20UNC x 1/2" G5	2	
48	2000399	Vinyl Cover / Hopper Cover	1	
49	2012612	Switch Assembly 198"	1	
50	26505	Switch Retainer	1	
51	2012611	Wire Harness	1	Includes Item 51A
51A	97967	Relay w/Mounting Tab	3	
52	9390-057	Capscrew 3/8"-16UNC x 1 1/2" G5	1	
53	9394-006	Hex Nut 3/8"-16UNC	1	
54	97420	Flange Screw 1/4"-20UNC x 3/4"	22	Grade 5
55	97189	Large Flange Hex Nut 1/4"-20UNC	22	
56	TA1-906109-0	Decal, WARNING (Moving part can crush..)	2	
57	26485	Rest Pad 4" x 8 3/4"	1	
58	26484	Lever Weldment	1	
59	901044	Flange Screw 5/16"-18UNC x 1"	4	Grade 5
60	9391-033	Cotter Pin 5/32" Dia. x 1"	1	
61	901169	Rubber Bumper	2	
62	26688CG	Cover Weldment	1	

(Continued on next page)

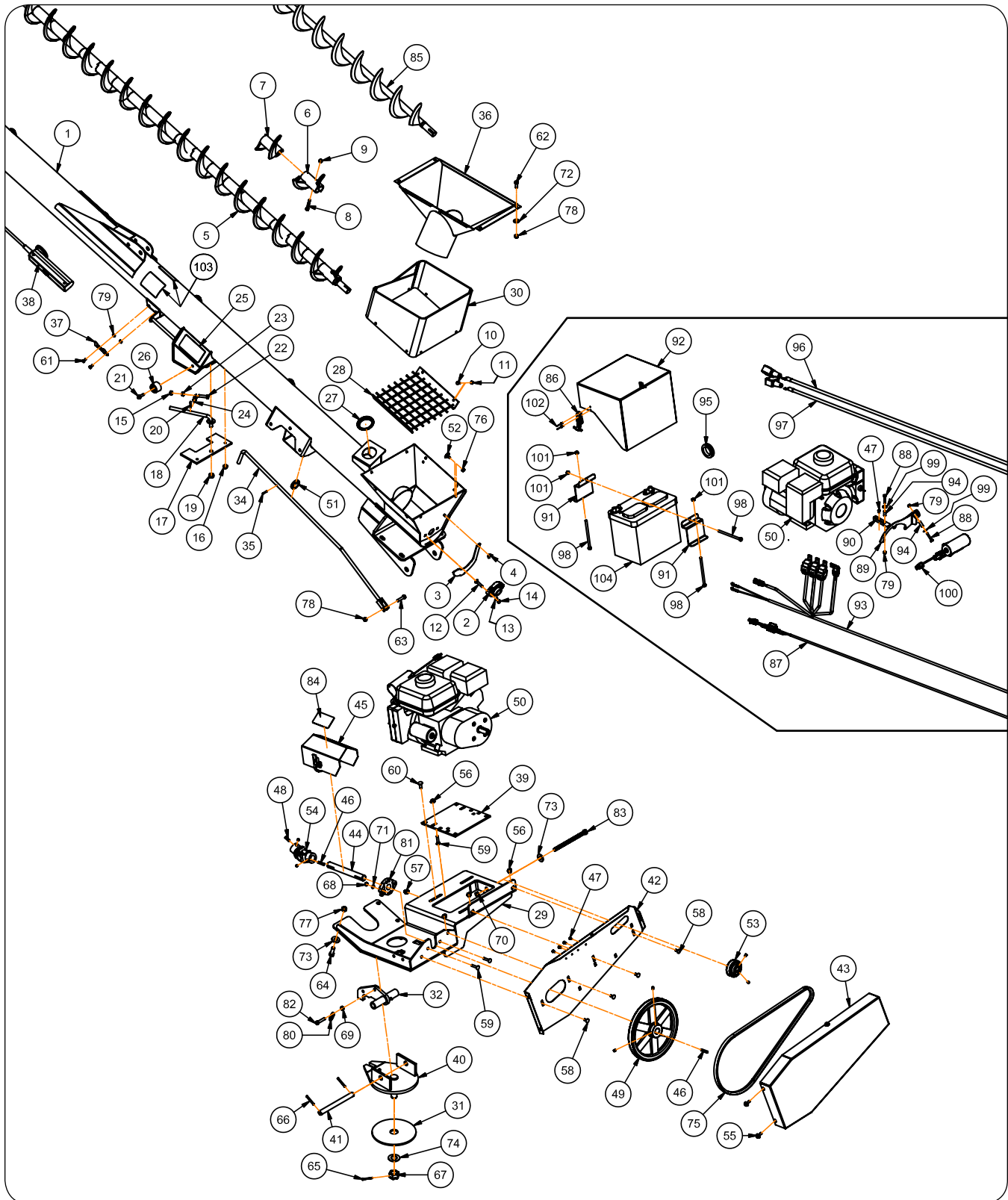
Drive Assembly & Hopper Components (continued)

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
63	98229	Decal, WARNING (Falling or Lowering Equip..)	2	
64	9006919	Button Plug 2 1/2"	1	
65	901478	Decal, DANGER (Electrocution)	2	
66	2005358CG	Conveyor Tube Service Weldment w/Decals	1	For 6" Tube Conveyor
	2005360CG	Conveyor Tube Service Weldment w/Decals		For 8" Tube Conveyor - 28250@
67	2008983CG	Throttle Bracket	1	
68	9502339	Actuator Assembly	1	
69	9394-002	Hex Nut 1/4"-20UNC	1	
70	2007913CG	Bracket	2	
71	28714CG	Throttle Link	2	For 8" Tube Conveyor
72	22018	Bushing 3/8" Dia. x 9/32"	2	For 8" Tube Conveyor
73	9390-008	Capscrew 1/4"-20UNC x 1 3/4" G5	2	
74	9390-004	Capscrew 1/4"-20UNC x 7/8" G5	2	
75	901413	Control Cable	1	
76	9830-016	Hex Nut #10-32UNF	4	Grade 2
77	902368	Quick Disconnect Ball Joint	1	
78	9504358	Noram Gearbox Assembly	1	For 6" Conveyor
	9504544	Noram Gearbox Assembly		For 8" Conveyor
79	901414	Rod End Bearing For Control Cable 10-32 Threads Both Ends	1	
80	2006828B	Bracket, Plate 7ga x 1" x 6 9/32"	1	
81	25673B	Bracket, Plate 12ga x 1" x 6 3/8"	1	
82	94917-038	Capscrew M6-1.0P x 16mm Full Thread	1	

Auger Drive Assembly & Hopper Components

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



Auger Drive Assembly & Hopper Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES	
1	2005357CG	Auger Weldment 6" x 18' w/Decals	1		
2	TA0-903088-0	Bearing w/Flange & Grease Zerk	1		
3	29374CG	Cleanout Door	1		
4	9396-015	Wing Nut 1/4"-20UNC	1		
5	903225	Plastic Flighting Assembly	1		
	6	901122	Plastic Flighting Section w/Gussets	2	
	7	900199	Plastic Flighting Section	49	
	8	91484	Capscrew 5/16"-18UNC x 2 1/4"	2	Stainless Steel
	9	92929-007	Elastic Stop Nut 5/16"-18UNC	2	Stainless Steel
10	9390-003	Capscrew 1/4"-20UNC x 3/4"	4	Grade 5	
11	9936	Locknut 1/4"-20UNC	4		
12	9388-027	Carriage Bolt 5/16"-18UNC x 1 1/2"	4	Grade 5	
13	9404-019	Lock Washer 5/16"	2		
14	9394-004	Hex Nut 5/16"-18UNC	2		
15	9928	Locknut 3/8"-16UNC	6		
16	91257	Flange Nut 5/16"-18UNC	8		
17	26485	Rest Pad 4" x 8 3/4"	1		
18	26484	Lever Weldment	1		
19	9800	Locknut 1/2"-13UNC	4		
20	9391-033	Cotter Pin 5/32" Dia. x 1"	1		
21	901044	Flange Screw 5/16"-18UNC x 1"	4	Grade 5	
22	9390-057	Capscrew 3/8"-16UNC x 1 1/2"	1	Grade 5	
23	9394-006	Hex Nut 3/8"-16UNC	1		
24	99860	Extension Spring 2 1/4" Long	1		
25	98229	Decal, WARNING (Falling or Lowering Equip..)	2		
26	901169	Rubber Bumper	2		
27	9006919	Button Plug 2 1/2"	1		
28	2002263CG	Grate Weldment	1		
29	2001995CG	Engine Mount Weldment	1		
30	2002361	Rubber Hopper	1		
31	25882	Poly Washer 7 3/4" Dia.	1		
32	26100CG	Latch Weldment	1		
33	26103	Lever Weldment	1		
34	26101	Leveler Bar w/Roll Pin	1		
35	9392-097	Roll Pin 3/16" Dia. x 1"	1		
36	26440CG	Chute Weldment	1		
37	26505	Switch Retainer	1		
38	2012612	Switch Assembly 198"	1		
39	28377CG	Adjustment Plate	1		

(Continued on next page)

Auger Drive Assembly & Hopper Components (continued)

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
40	28410CG	Pivot Weldment	1	
41	28412	Pin 3/4" Dia. x 8 1/4"	1	
42	29157CG	Shield Weldment	1	
43	29160CG	Shield Weldment	1	
44	29294	Shaft w/ 1/4 Keyway Both Ends	1	
45	29378CG	Shield Assembly	1	
46	800713	Keystock 1/4" x 1/4" x 1 1/2"	1	
47	9001396	Pan Head Self Drilling Screw #10-16 x 1/2"	5	
48	9001501	Keystock 1/4" x 1/4" x 1"	1	
49	901659	Pulley/Sheave w/ Set Screws	1	
	9399-071	Set Screws 5/16"-18UNC x 3/8"	-	
50	901673	Honda Engine 4.8 Net HP Gas, 9.9 Cu. In.	1	
	903057	Key 7mm x 7mm	-	
51	901675	Grommet / Rubber 1" Dia.	1	
52	902006	Elevator Bolt 1/4"-20UNC x 3/4"	8	
53	902059	Pulley 2.95" Dia. w/ Set Screws	1	
	9399-071	Set Screws 5/16"-18UNC x 3/8"	-	
54	903165	U-Joint w/Setscrows	1	
	9399-070	Set Screws 5/16"-18UNC x 3/4"	-	
55	91256	Large Flange Screw 5/16"-18UNC x 3/4"	4	
56	91257	Flange Nut 5/16"-18UNC	4	
57	91263	Large Flange Nut 3/8"-16UNC	12	
58	9388-024	Carriage Bolt 5/16"-18UNC x 3/4"	4	Grade 5
59	9500341	Carriage Bolt 5/16"-18UNC x 1 3/4"	2	Grade 5
60	9388-051	Carriage Bolt 3/8"-16UNC x 1"	12	Grade 5
61	9390-001	Capscrew 1/4"-20UNC x 1/2"	2	Grade 5
62	9390-055	Capscrew 3/8"-16UNC x 1"	4	Grade 5
63	9390-057	Capscrew 3/8"-16UNC x 1 1/2"	1	Grade 5
64	9390-101	Capscrew 1/2"-13UNC x 1 1/2"	4	Grade 5
65	9391-035	Cotter Pin 5/32" Dia. x 1 1/2"	1	
66	9392-140	Roll Pin 1/4" Dia. x 2"	2	
67	9393-020	Slotted Nut 1"-14UNS	1	Grade 2
68	9394-004	Hex Nut 5/16"-18UNC	2	
69	9394-006	Hex Nut 3/8"-16UNC	1	
70	9395-010	Hex Jam Nut 1/2"-13UNC	1	
71	9404-019	Lock Washer 5/16"	2	
72	9405-076	Flat Washer 3/8" USS	4	
73	9405-088	Flat Washer 1/2" USS	5	

(Continued on next page)

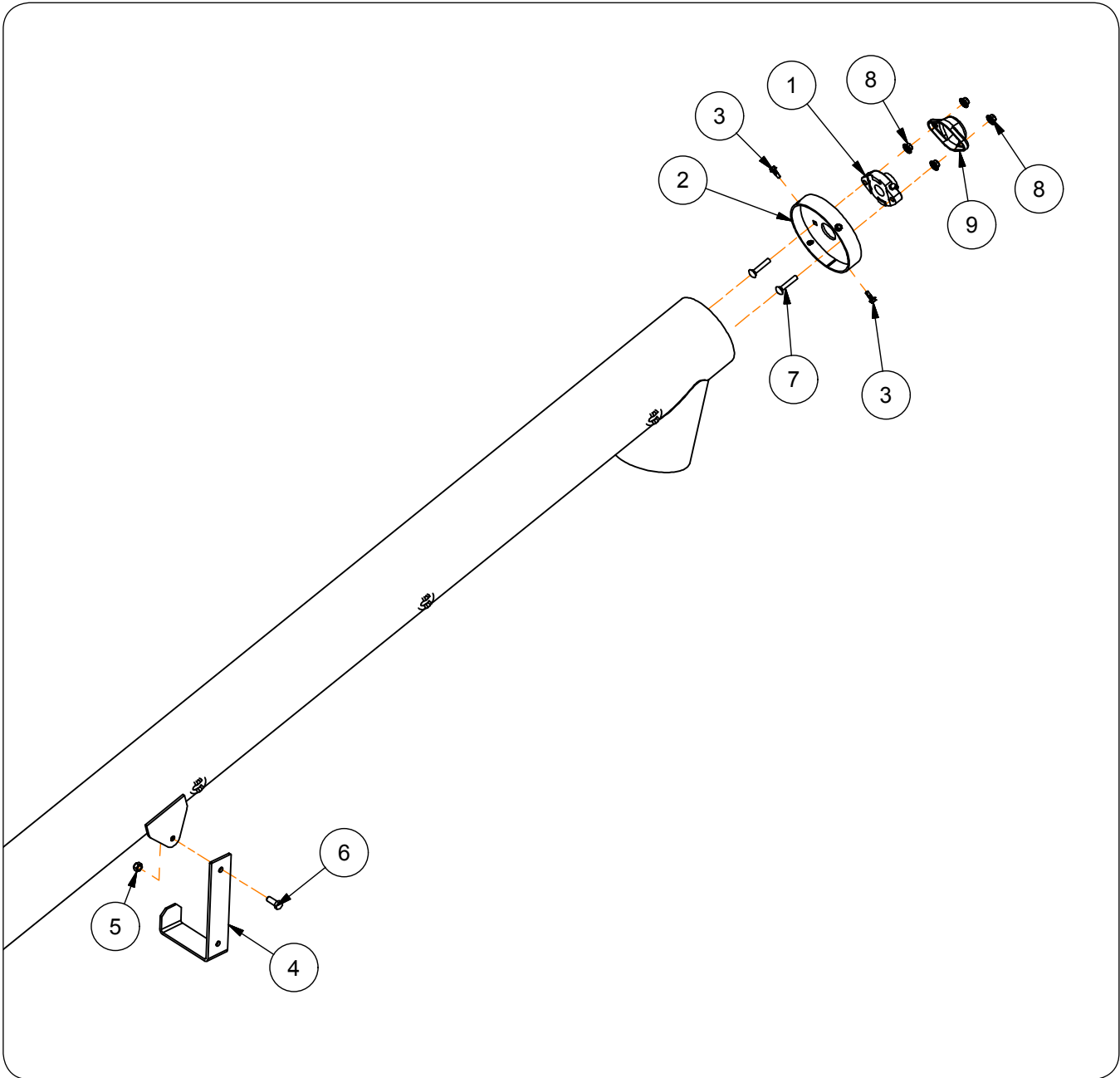
Auger Drive Assembly & Hopper Components (continued)

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
74	9405-116	Flat Washer 1" SAE	1	
75	9500986	V-Belt	1	
76	97189	Large Flange Hex Nut 1/4"-20UNC	8	
77	9800	Locknut 1/2"-13UNC	4	
78	9928	Locknut 3/8"-16UNC	6	
79	9936	Locknut 1/4"-20UNC	4	
80	99860	Extension Spring 2 1/4" Long	1	
81	TA0-903088-0	Bearing w/Flange	1	
82	TA0-907104-0	Capscrew 3/8"-16UNC x 1 3/4"	1	Full Threaded - Grade 5
83	TA0-907228-0	Capscrew 1/2"-13UNC x 7 1/2"	1	Full Threaded - Grade 5
84	TA1-906109-0	Decal, WARNING (Moving part can crush..)	2	
85	2002755B	Steel Fighting Weldment	1	
86	104988	Draw Latch	2	
87	29410	Charging Harness	1	
88	9390-008	Capscrew 1/4"-20UNC x 1 3/4"	2	
89	26718CG	Throttle Actuator Bracket (Shown)	1	
90	26719CG	Angle for Actuator Assembly (Shown)	1	
91	28418B	Bracket	2	
92	28419CG	Battery Cover	1	
93	2012611	Wire Harness	1	
94	28968	Bushing/Tube 3/8" Dia. x 15/16" (Shown)	2	
95	900513	Grommet / Rubber 2" Dia.	2	
96	902873	Battery Cable (Red)	1	
97	902874	Battery Cable (Black)	1	
98	9390-045	Capscrew 5/16"-18UNC x 5 1/2"	3	
99	9405-064	Flat Washer 1/4" USS	2	
100	9500811	Actuator Assembly 2" Stroke 12 VDC	1	
101	9807	Locknut 5/16"-18UNC	3	
102	TA0-908394-0	Pop Rivet	4	
103	901478	Decal, DANGER (Electrocution)	2	
104	N/A	Battery / 12V Marine Top Post (Purchase Battery Locally)	1	

Auger Discharge End Components

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



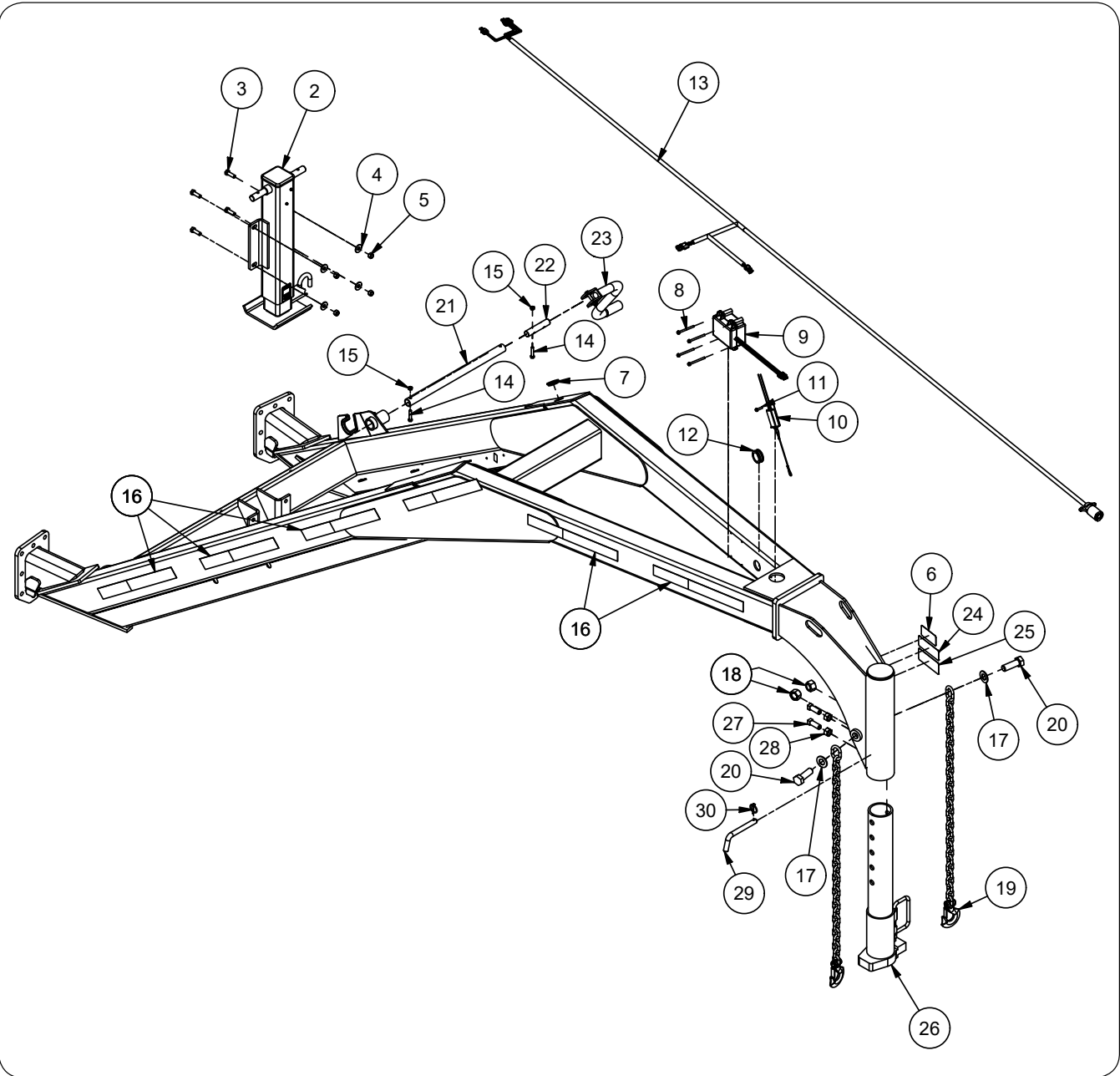
Auger Discharge End Components

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

ITEM	PART NO.	DESCRIPTION	NOTES
1	TA0-903088-0	Bearing w/Flange 1" I.D.	
2	29405CG	End Cap	
3	9473	Self-Drilling Screw 1/4-14 x 3/4"	
4	24414CG	Spout Bracket	
5	9928	Locknut 3/8"-16UNC	
6	9390-055	Capscrew 3/8"-16UNC x 1"	Grade 5
7	9500341	Carriage Bolt 5/16"-18UNC x 1 3/4"	Grade 5
8	91257	Large Flange Nut 5/16"-18UNC	
9	9500310	Bearing Cover	

Gooseneck Hitch Components (Option)

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



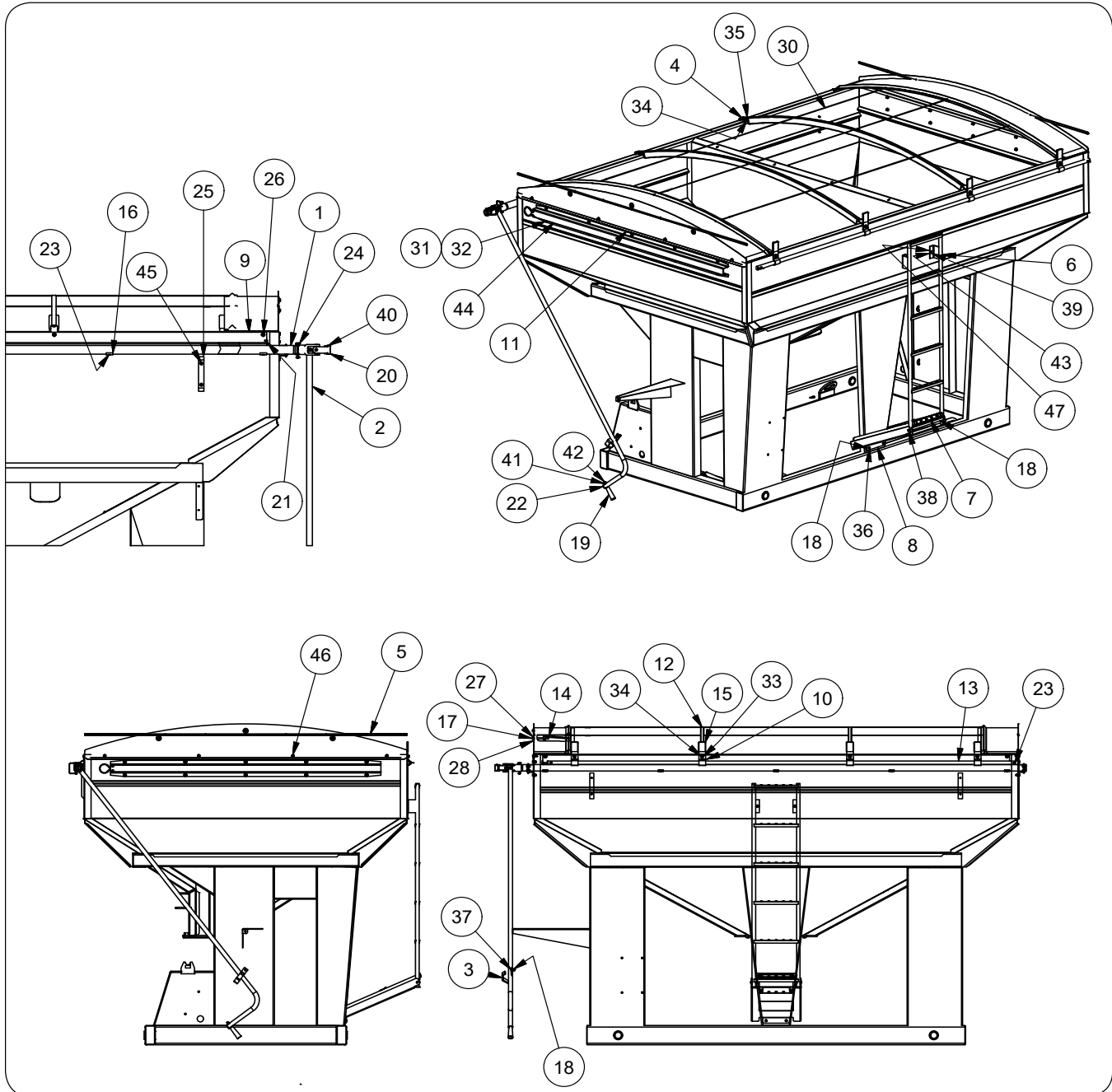
Gooseneck Hitch Components (Option)

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	2010230CG	Gooseneck Hitch Assembly	-	Includes Items 2-25
2	107905B	Jack Weldment	1	
3	9390-101	Capscrew 1/2"-13UNC x 1 1/2"	4	Grade 5
4	9405-088	Flat Washer 1/2"	4	
5	9800	Locknut 1/2"-13UNC	4	
6	97961	Decal, WARNING (Read and Understand...)	1	
7	97422	Plug/Rubber	1	
8	902238	Flange Bolt 1/4"-20UNC x 3"	4	
9	----	Break Away Switch & Battery with Charger & Box	1	See "Electric Breakaway Components" in PARTS Section
10				
11	9512	Screw/Self-Drilling 1/4-14 x 1"	1	
12	98487	Grommet/Rubber	1	
13	27829	Wiring Harness Front	1	
14	9390-058	Capscrew 3/8"-16UNC x 1 3/4"	2	Grade 5
15	9928	Locknut 3/8"-16UNC	3	
16	25003	Conspicuity Marking / Reflectors	12	
17	9405-116	Flat Washer 1"	4	
18	9663	Locknut 1"-8UNC	2	
19	98792	Chain w/Hook & C-Link Assembly	2	
20	91299-187	Capscrew 1"-8UNC x 3"	2	Grade 8
21	2001095B	Extension Tube	1	
22	2001097B	Bar 1" Dia. x 5"	1	
23	9500583	Jack Handle	1	
24	9500953	Decal, CAUTION (Always Use Transport Chain.....)	1	
25	9500952	Decal, CAUTION (Unhitching of Trailer can cause...)	1	
26	2003304B	Gooseneck Hitch - Drilled	-	
27	97875	Set Screw, 3/4"-10UNC x 2" Square Head	2	
28	9394-016	Hex Nut, 3/4"-10UNC	2	
29	9501179	Bent Pin (3/4" x 5" usable length)	1	
30	9093	Klik Pin 3/16" Dia. x 1 1/4" min	1	

Tarp & Ladder Components - Model 2620

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



ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	2000184	Roll Tube Weldment	1	
	9500278	Plug 2"	1	Not Shown
2	221748	Tarp Handle Weldment	1	
3	221770B	Handle Retainer Weldment	1	
4	251122B	Sideboard Bracket	2	
5	25847	Trim-Lok	2	
6	26490CG	Ladder Weldment	1	
7	26495CG	Ladder - Lower Extension	1	

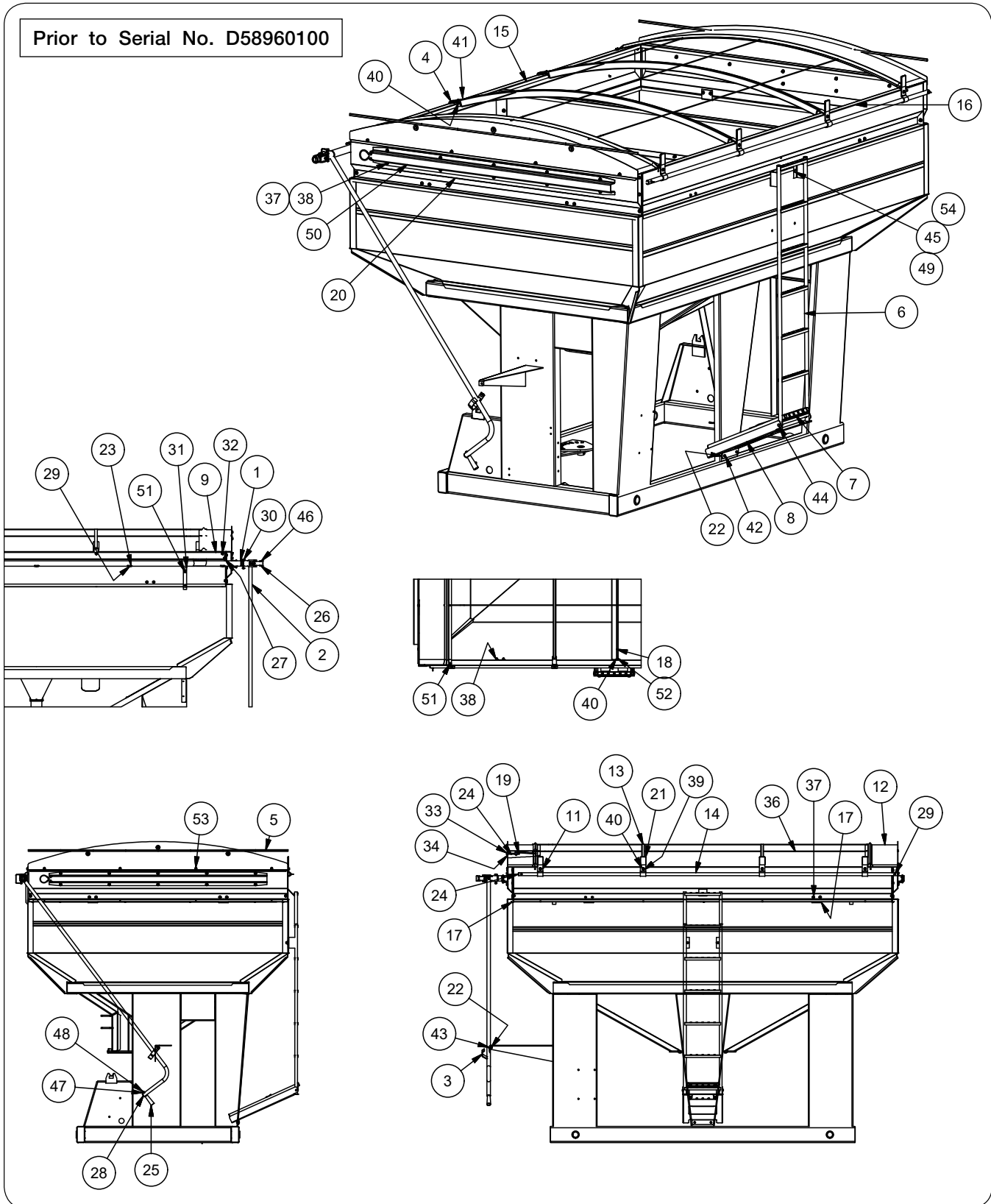
Tarp & Ladder Components - Model 2620

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

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
8	26496CG	Plate - Ladder Holder	1	
9	2012289	Latch Plate 139", W/Slots, Aluminum	1	
10	266689B	Tarp Short Stop Plate	4	
11	27194DG	Tarp End Cap	2	
12	27195B	Tarp Bow Weldment	2	
13	27203	Fixed Tube - 140"	1	
14	281712B	Bracket & U-Nut Assembly	3	
15	9003078	Plastic Cap	4	
16	9004949	U-Clamp	5	
17	TA0-907131-0	Capscrew 3/8"-16UNC x 4 1/2"	3	Full Threaded - Grade 5
18	9928	Locknut 3/8"-16UNC	5	
19	9004969	Handle	1	
20	9004977	U-Joint	1	
21	9005088	Plastic Plug 1 1/8"	2	
22	9005089	Plug 1 1/4"	1	
23	9005197	Pan Head Self-Drilling Screw #10-16 x 3/4"	7	
24	9005305	Lynch Pin 3/8" Dia. x 3"	1	
25	901185	Poly Tarp Deflector	2	
26	9005312	Truss Head Machine Screw 3/8"-16UNC x 1"	6	
27	9005688	Lock Washer External Tooth 3/8"	3	
28	9005696	Washer 3/8"	3	
29	901992	Tarp (Not Shown)	1	
30	902876	Cable Assembly 124" Long	3	
31	91256	Large Flange Screw 5/16"-18UNC x 3/4"	20	
32	91257	Large Flange Hex Nut 5/16"-18UNC	20	
33	91262	Large Flange Screw 3/8"-16UNC x 1"	4	
34	91263	Large Flange Hex Nut 3/8"-16UNC	10	
35	9936	Locknut 1/4"-20UNC	1	
36	9390-003	Capscrew 1/4"-20UNC x 3/4"	1	Grade 5
37	9390-055	Capscrew 3/8"-16UNC x 1"	3	Grade 5
38	9390-058	Capscrew 3/8"-16UNC x 1 3/4"	2	Grade 5
39	9390-099	Capscrew 1/2"-13UNC x 1"	2	Grade 5
40	9392-180	Roll Pin 3/8" Dia. x 2"	1	
41	9398-012	Elastic Stop Nut 3/8"-16UNC	1	
42	903172-450	Pan Head Phillips Screw 3/8"-16UNC x 4 1/2"	1	
43	9405-088	Flat Washer 1/2" USS	2	
44	9500020	Tarp Roll Return 80 1/2" w/Nylon Slide Boards	2	
	9501550	Cable Assembly 320"	-	
45	9512	Self-Drilling Screw 1/4-14 x 1"		
46	96972	Self-Drilling Screw 3/8-16UNC x 1"	16	
47	9800	Locknut 1/2"-13UNC	2	

Tarp & Ladder Components - Model 3620

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



Tarp & Ladder Components - Model 3620

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	2000184	Roll Tube Weldment	1	
	9500278	Plug 2" (Not Shown)	1	
2	221748	Tarp Handle Weldment	1	
3	221770B	Handle Retainer Weldment	1	
4	251122B	Sideboard Bracket	2	
5	25847	Trim-Lok	2	
6	27152CG	Ladder Weldment	1	
7	26495CG	Ladder - Lower Extension	1	
8	26496CG	Plate - Ladder Holder	1	
9	2012289	Latch Plate 139"	1	
11	266689B	Tarp Short Stop Plate	4	
12	27194DG	Tarp End Cap	2	
13	27195B	Tarp Bow Weldment	2	
14	27203	Fixed Tube - 140"	1	
15	27240DG	Board Weldment Left-Hand	1	
16	27242DG	Board Weldment Right-Hand	1	
17	27243DG	Hook Plate	8	
18	27246DG	Center Divider	1	
19	281712B	Bracket & U-Nut Assembly	3	
20	29048DG	Board Front & Rear	2	
21	9003078	Plastic Cap	4	
22	9928	Locknut 3/8"-16UNC	5	
23	9004949	U-Clamp	5	
24	TA0-907131-0	Capscrew 3/8"-16UNC x 4 1/2"	3	Full Threaded - Grade 5
25	9004969	Handle	1	
26	9004977	U-Joint	1	
27	9005088	Plastic Plug 1 1/8"	2	
28	9005089	Plug 1 1/4"	1	
29	9005197	Pan Head Self-Drilling Screw #10-16 x 3/4"	7	
30	9005305	Lynch Pin 3/8" Dia. x 3"	1	
31	901185	Poly Tarp Deflector	2	
32	9005312	Truss Head Machine Screw 3/8"-16UNC x 1"	6	
33	9005688	Lock Washer External Tooth 3/8"	3	
34	9005696	Washer 3/8"	3	
35	901992	Tarp (Not Shown)	1	
	9005581	Tarp Repair Kit	-	
36	902876	Cable Assembly 124" Long	3	
37	91256	Large Flange Screw 5/16"-18UNC x 3/4"	20	

(Continued on next page)

Tarp & Ladder Components - Model 3620 (continued)

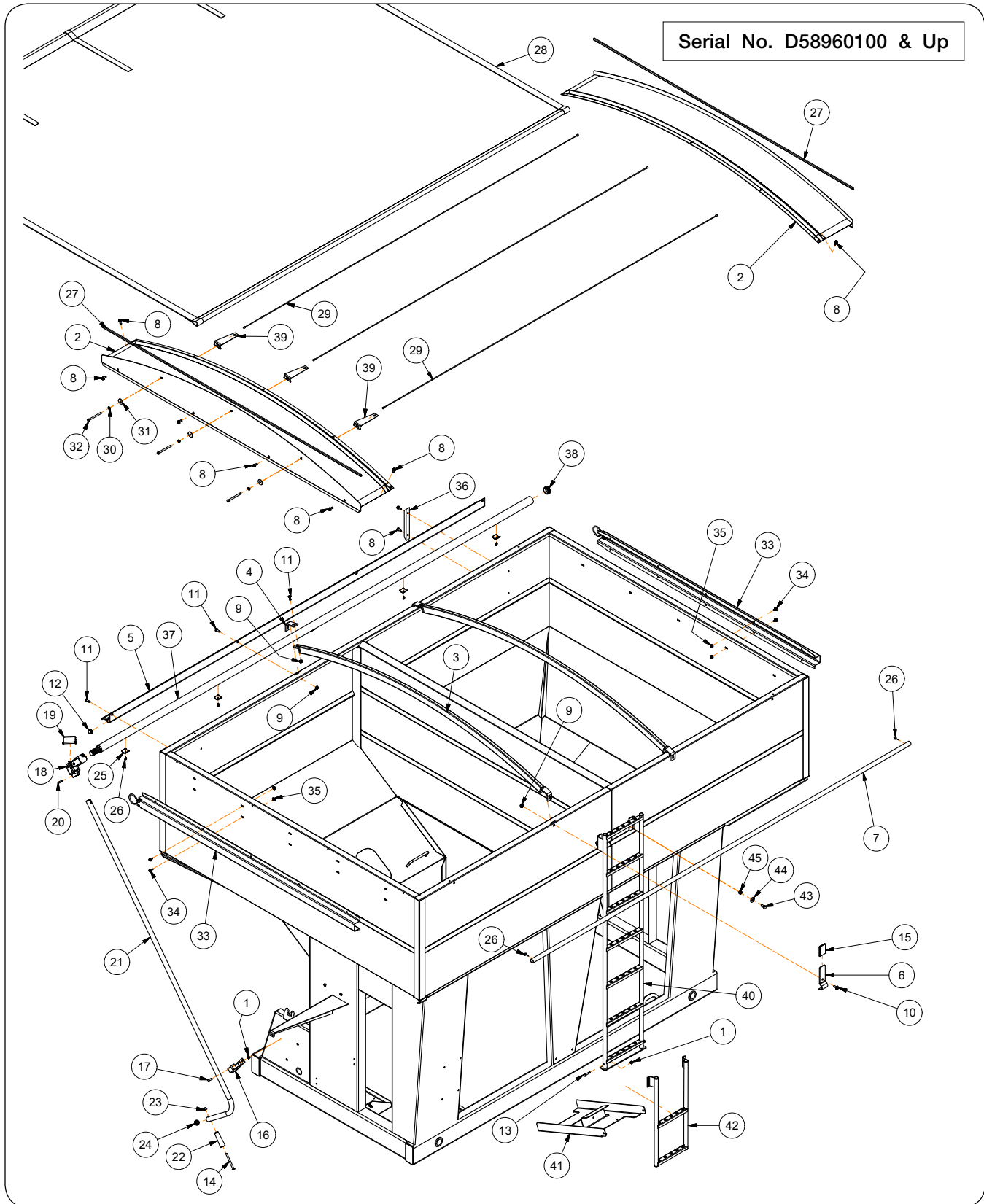
Please visit www.unverferth.com/parts/ for the most current parts listing.

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
38	91257	Large Flange Hex Nut 5/16"-18UNC	20	
39	91262	Large Flange Screw 3/8"-16UNC x 1"	4	
40	91263	Large Flange Hex Nut 3/8"-16UNC	10	
41	9388-051	Carriage Bolt 3/8"-16UNC x 1"	2	Grade 5
42	9390-053	Capscrew 3/8"-16UNC x 3/4"	2	Grade 5
43	9390-055	Capscrew 3/8"-16UNC x 1"	3	Grade 5
44	9390-058	Capscrew 3/8"-16UNC x 1 3/4"	2	Grade 5
45	9390-099	Capscrew 1/2"-13UNC x 1"	2	Grade 5
46	9392-180	Roll Pin 3/8" Dia. x 2"	1	
47	9398-012	Elastic Stop Nut 3/8"-16UNC	1	
48	903172-450	Pan Head Phillips Screw 3/8"-16UNC x 4 1/2"	1	
49	9405-088	Flat Washer 1/2" USS	2	
50	9500020	Tarp Roll Return 80 1/2" w/Nylon Slide Boards	2	
	9501550	Cable Assembly 320"	-	
51	9512	Self-Drilling Screw 1/4-14 x 1"	8	
52	95585	Large Flange Screw 3/8"-16UNC x 3/4"	22	
53	96972	Self-Drilling Screw 3/8"-16UNC x 1"	16	
54	9800	Locknut 1/2"-13UNC	2	

Notes

Tarp & Ladder Components - Model 3620

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



Tarp & Ladder Components - Model 3620

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	9928	Locknut 3/8"-16UNC	5	
2	27194DG	Tarp End Cap	2	
3	27195B	Tarp Bow Weldment	2	
4	251122B	Sideboard Bracket	2	
5	2012289	Latch Plate 139"	1	
6	266689B	Tarp Short Stop Plate	4	
7	27203	Fixed Tube - 140"	1	
8	96972	Self-Drilling Screw 3/8"-16UNC x 1"	16	
9	91263	Large Flange Hex Nut 3/8"-16UNC	10	
10	91262	Large Flange Screw 3/8"-16UNC x 1"	4	
11	9005312	Truss Head Machine Screw 3/8"-16UNC x 1"	6	
12	9005088	Plastic Plug 1 1/8"	2	
13	9390-058	Capscrew 3/8"-16UNC x 1 3/4"	2	Grade 5
14	903172-450	Pan Head Screw 3/8"-16UNC x 4 1/2"	1	
15	9003078	Plastic Cap	4	
16	221770B	Handle Retainer Weldment	1	
17	9390-055	Capscrew 3/8"-16UNC x 1"	1	Grade 5
18	9004977	U-Joint	1	
19	9005305	Lynch Pin 3/8" Dia. x 3"	1	
20	9392-180	Roll Pin 3/8" Dia. x 2"	1	
21	221748	Tarp Handle Weldment	1	
22	9004969	Handle	1	
23	9398-012	Elastic Stop Nut 3/8"-16UNC	1	
24	9005089	Plug 1 1/4"	1	
25	9004949	U-Clamp	5	
26	9005197	Pan Head Self-Drilling Screw #10-16 x 3/4"	7	
27	25847	Trim-Lok	2	
28	901992	Tarp 118" x 138"	1	
	9005581	Tarp Repair Kit	-	
29	902876	Cable Assembly 124" Long	3	
30	9005688	Lock Washer - External Tooth 3/8"	3	
31	9005696	Washer 3/8"	3	
32	TA0-907131-0	Capscrew 3/8"-16UNC x 4 1/2" (Full Threaded)	3	Grade 5
33	9500020	Tarp Roll Return 80 1/2" w/Nylon Slide Boards	2	
	9501550	Cable Assembly 320"	-	
34	91256	Large Flange Screw 5/16"-18UNC x 3/4"	20	
35	91257	Large Flange Hex Nut 5/16"-18UNC	20	

(Continued on next page)

Tarp & Ladder Components - Model 3620 (continued)

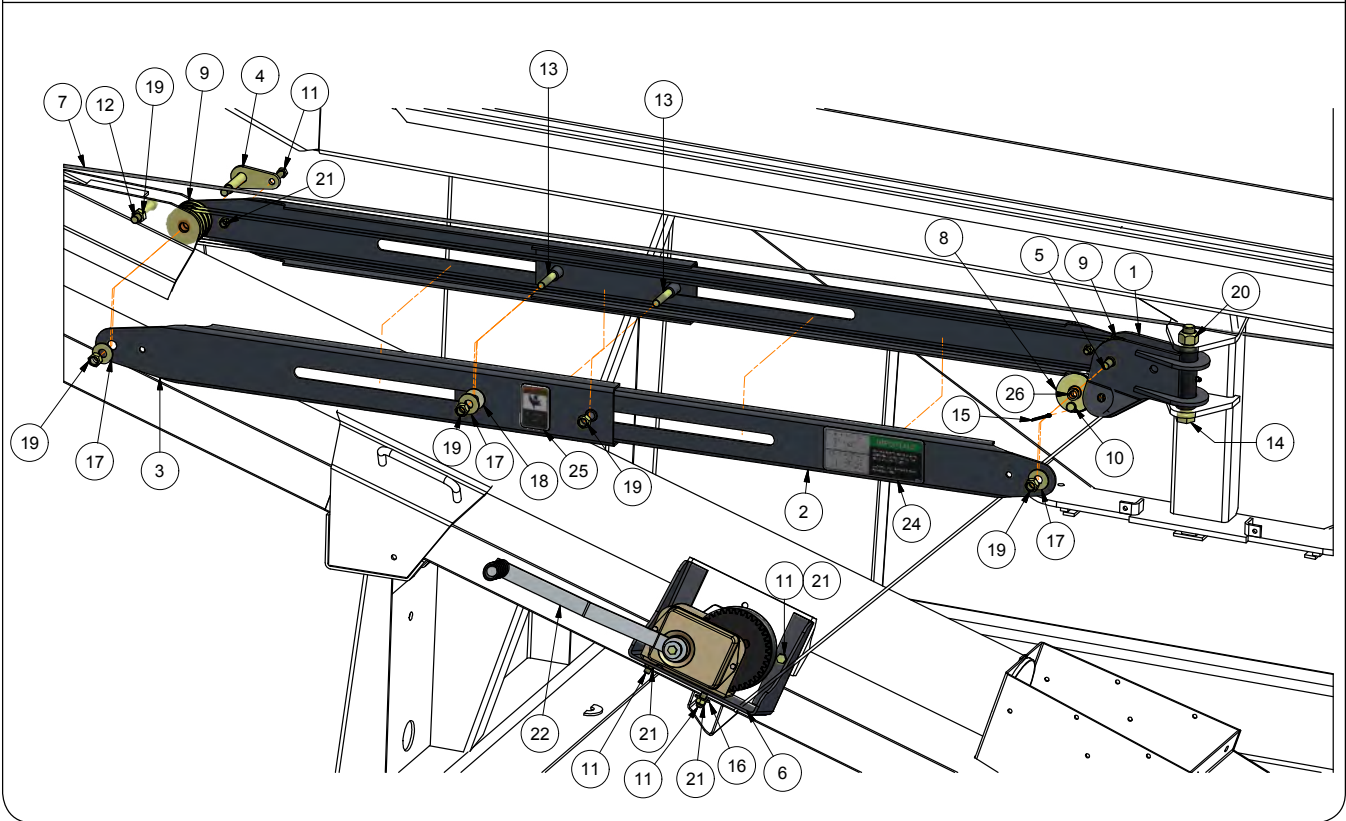
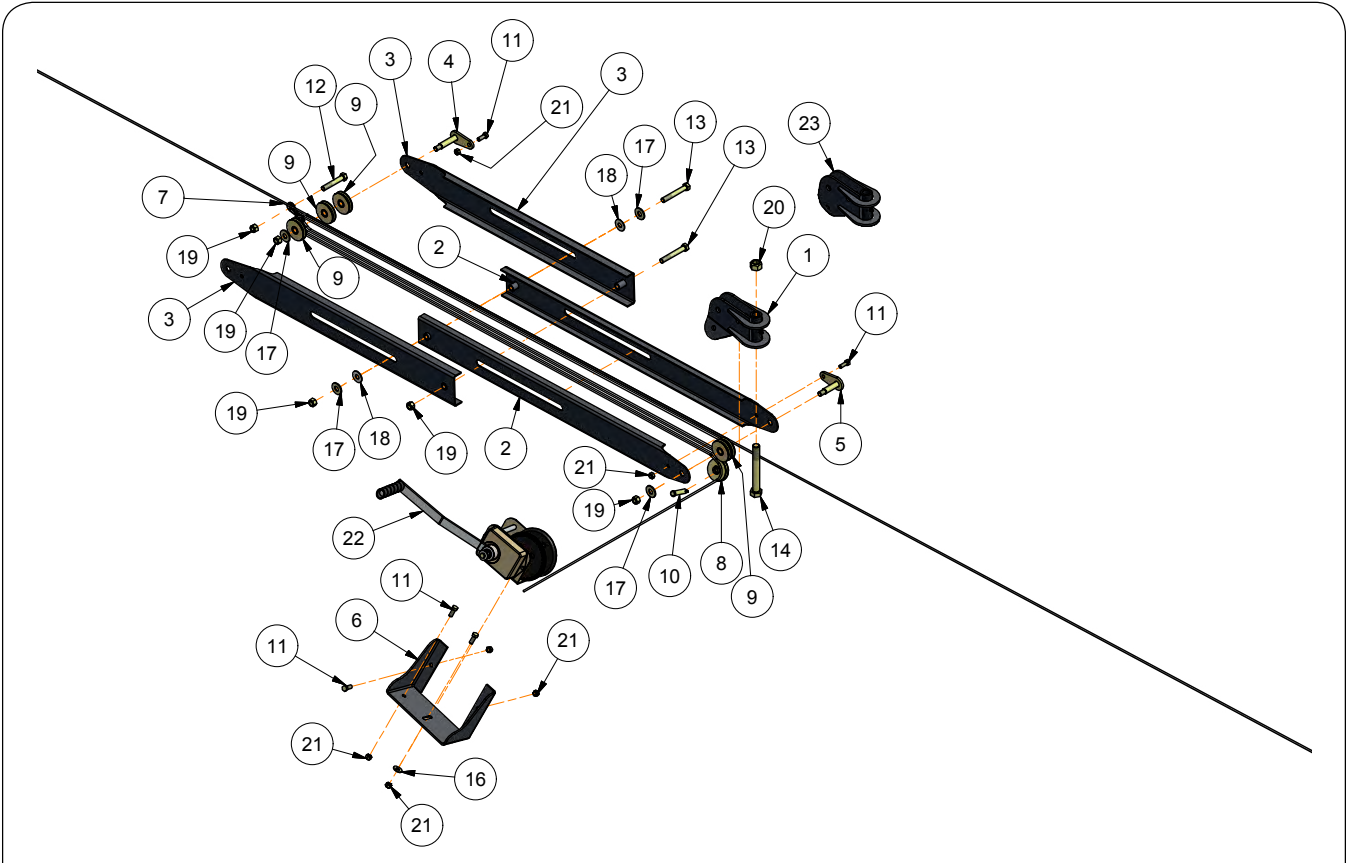
Please visit www.unverferth.com/parts/ for the most current parts listing.

36	901185	Poly Strip/Tarp Deflector	2	
37	2000184	Roll Tube Weldment	1	
38	9500278	Plug 2"	1	
39	281712B	Tarp Bracket & U-Nut Assembly	3	
40	27152CG	Ladder Weldment	1	
41	26496CG	Plate - Ladder Holder	1	
42	26495CG	Ladder - Lower Extension	1	
43	9390-099	Capscrew 1/2"-13UNC x 1"	2	Grade 5
44	9405-088	Flat Washer 1/2" USS	2	
45	9800	Locknut 1/2"-13UNC	2	

Notes

Manual Winch Components

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



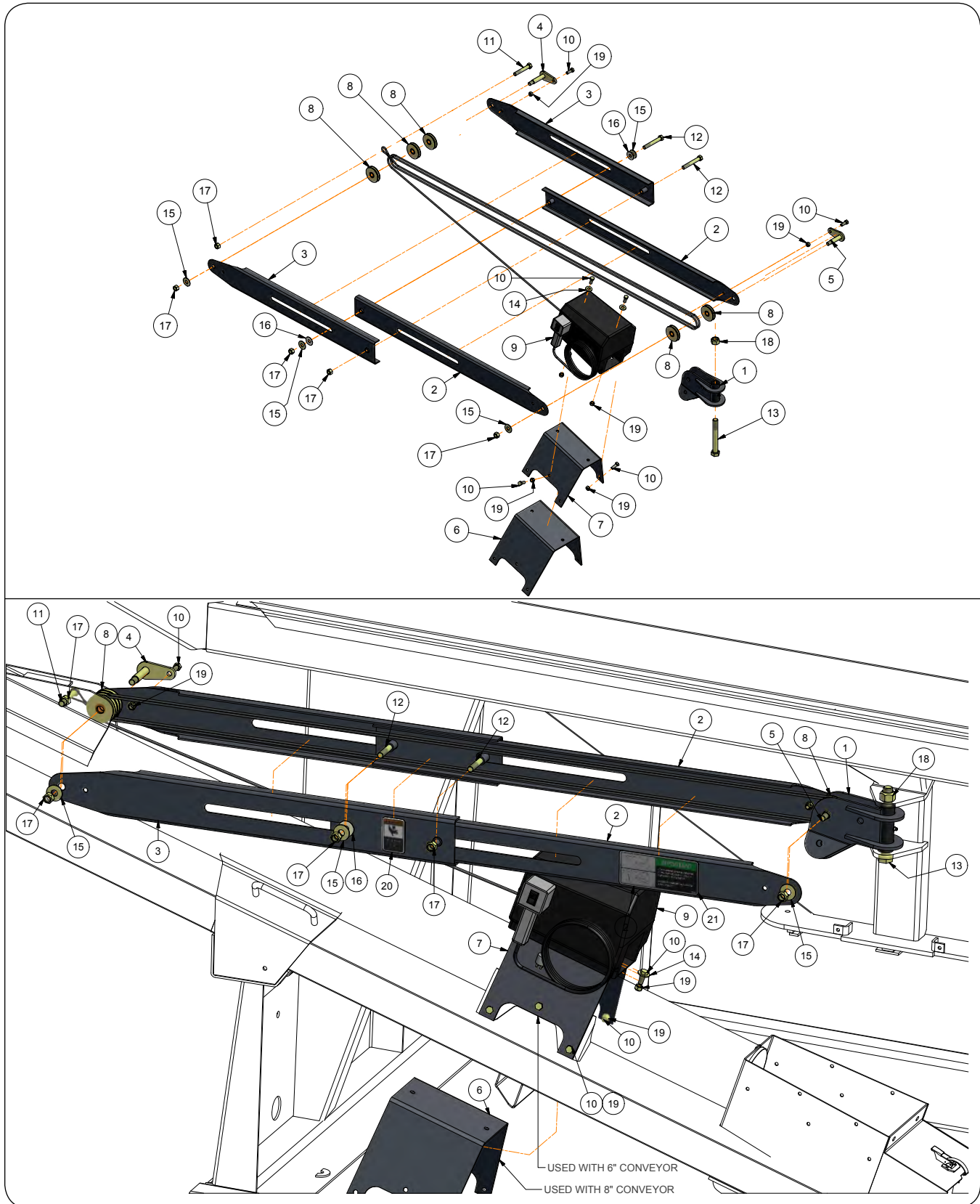
Manual Winch Components

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

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	28308CG	Pivot Weldment	1	
2	28310CG	Channel Weldment	2	
3	28312CG	Channel Weldment	2	
4	28323	Pin Weldment	1	
5	28324	Pin Weldment	1	
6	28329CG	Winch Holder Bracket	1	
7	28424	Winch Cable 405" Long	1	
8	29675	Pulley	1	
9	29676	Pulley	5	
10	902280	Clevis Pin 1/2" Dia. x 2 5/32"	1	
11	9390-055	Capscrew 3/8"-16UNC x 1"	6	Grade 5
12	9390-107	Capscrew 1/2"-13UNC x 3"	1	Grade 5
13	9390-109	Capscrew 1/2"-13UNC x 3 1/2"	2	Grade 5
14	9390-157	Capscrew 3/4-10UNC x 6"	1	Grade 5
15	9391-023	Cotter Pin 1/8" Dia. x 1"	1	
16	9405-076	Flat Washer 3/8" USS	1	
17	9405-088	Flat Washer 1/2" USS	4	
18	95236	Nylon Flat Washer	2	
19	9800	Locknut 1/2"-13UNC	5	
20	9802	Locknut 3/4-10UNC	1	
21	9928	Locknut 3/8"-16UNC	6	
22	TA0-904904-0	Brake Winch	1	
23	2000501CG	Optional Pivot Weldment (for transporting conveyor to the rear)	-	
24	9501338	Decal, IMPORTANT (Cable Tension)	2	
25	97048	Decal, WARNING (Pinch Point)	2	
26	281369	Bushing 3/4" OD	2	

Electric Winch Components (Optional)

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



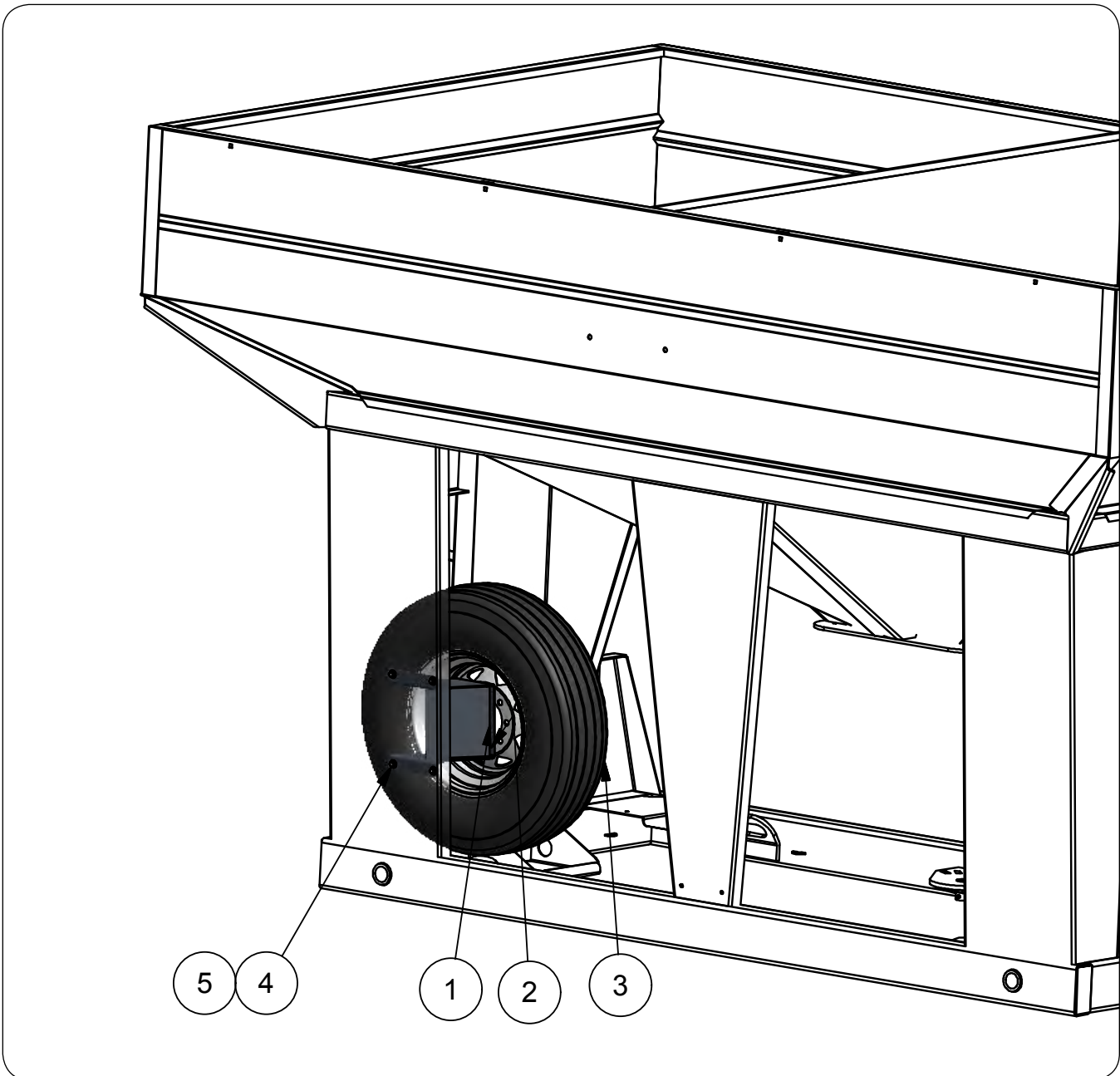
Electric Winch Components (Optional)

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

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
	28474	Electric Winch Kit	-	Includes Items 6, 7, 9, 10, 14, 19
1	28308CG	Pivot Weldment	1	
2	28310CG	Channel Weldment	2	
3	28312CG	Channel Weldment	2	
4	28323	Pin Weldment	1	
5	28324	Pin Weldment	1	
6	28334CG	Winch Bracket	1	For 8" Tube Conveyor
7	28335CG	Winch Bracket	1	For 6" Tube Conveyor
8	29676	Pulley	5	
9	902171	Electric Winch w/Brake	1	Includes Switch Assembly
	9500396	Switch Assembly For Electric Winch/ Rocker Switch w/Cord	-	
10	9390-055	Capscrew 3/8"-16UNC x 1"	8	Grade 5
11	9390-107	Capscrew 1/2"-13UNC x 3"	1	Grade 5
12	9390-109	Capscrew 1/2"-13UNC x 3 1/2"	2	Grade 5
13	9390-157	Capscrew 3/4"-10UNC x 6"	1	Grade 5
14	9405-076	Flat Washer 3/8" USS	2	
15	9405-088	Flat Washer 1/2" USS	4	
16	95236	Nylon Flat Washer	2	
17	9800	Locknut 1/2"-13UNC	5	
18	9802	Locknut 3/4"-10UNC	1	
19	9928	Locknut 3/8"-16UNC	8	
20	97048	Decal, WARNING (Pinch Point)	2	
21	9501338	Decal, IMPORTANT (Cable Tension)	2	

Spare Tire (Optional)

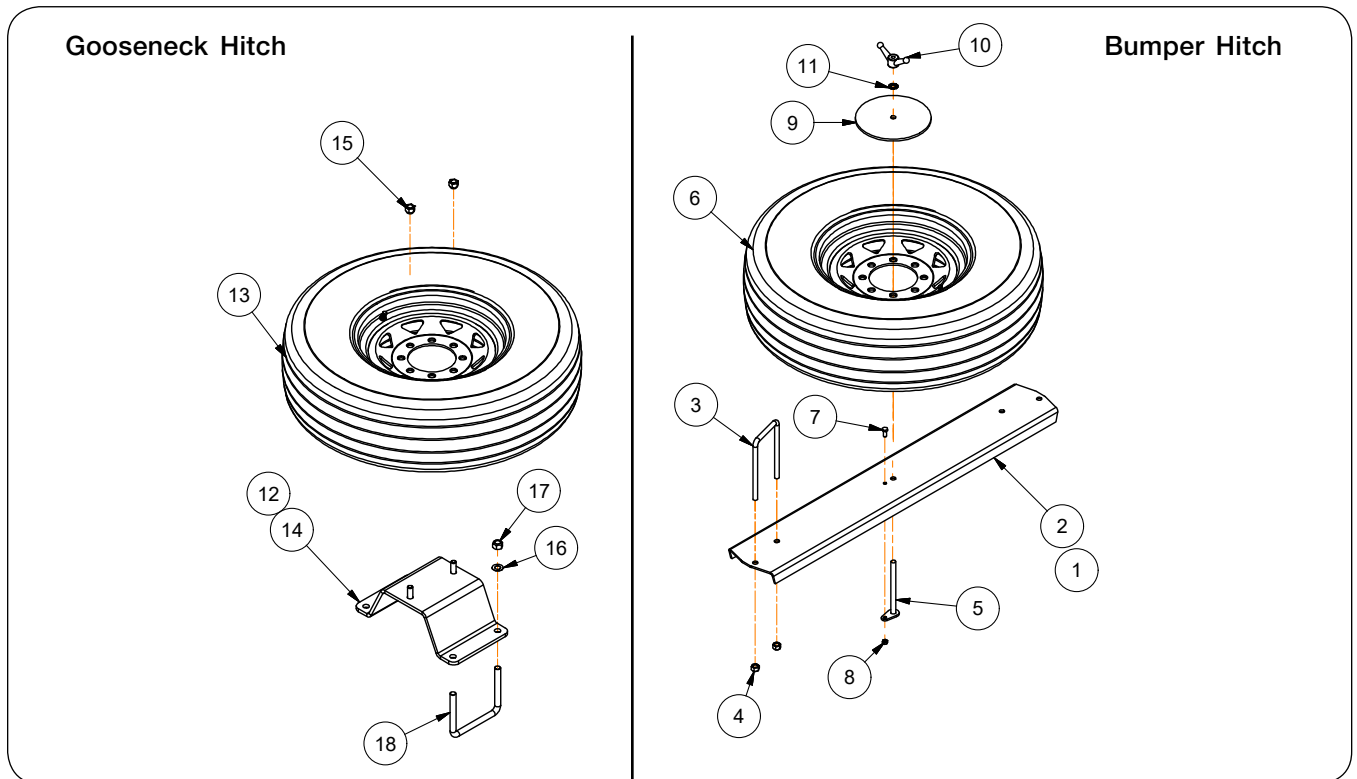
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
	28963	Spare Tire Kit w/Tire	-	
1	28960CG	Spare Tire Bracket Weldment	1	
2	901669	Tapered Nut 9/16"-18UNF	2	
3	902702	Wheel/Tire 6 x 16 - ST235/85R16	1	
4	91262	Large Flange Screw 3/8"-16UNC x 1"	4	
5	91263	Large Flange Nut 3/8"-16UNC	4	

Spare Tire (Optional)

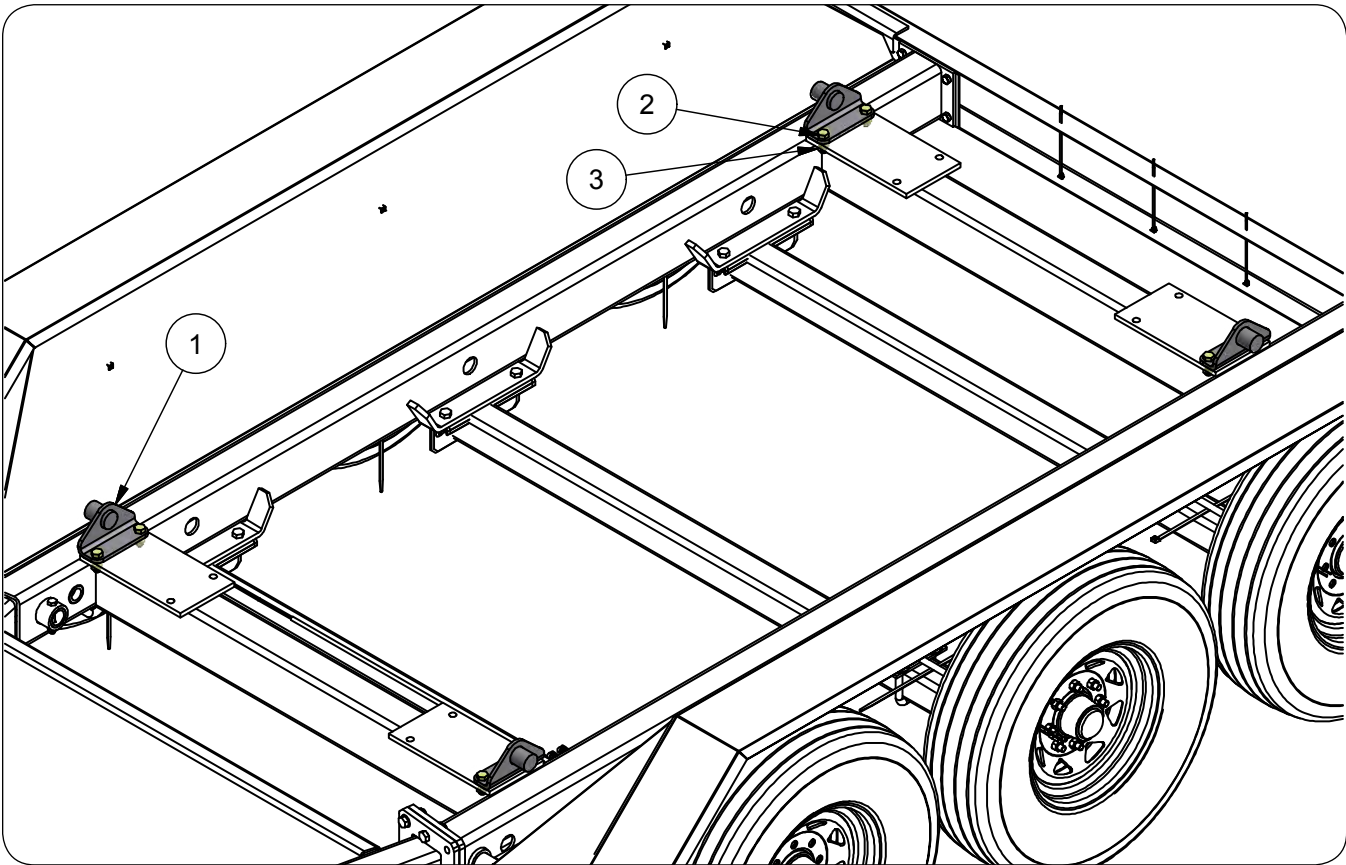
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	2000939B	Carlisle Spare Tire Asy For Bumper Pull Hitch	1	Includes Items 2 through 11
	2012501B	Kenda Spare Tire Asy For Bumper Pull Hitch		
2	29736B	Spare Tire Plate	1	
3	91323	U-bolt 1/2"-13UNC x 7 1/8"	2	
4	9800	Locknut 1/2"-13UNC	4	
5	29751	Pin Weldment 1/2" Dia. x 6 5/8"	1	
6	902702	Carlisle Wheel/Tire 6x16 ST235/85R16	1	Load Range E
	9504685	Kenda Wheel/Tire 6x16 ST235/85R16		
7	9390-028	Capscrew 5/16"-18UNC x 3/4"	1	Grade 5
8	9807	Locknut 5/16"-18UNC	1	
9	2001047B	Washer	1	
10	9500475	Handle Nut 1/2"-13UNC	1	
11	TA500470	External Star Washer	1	
12	2000940B	Carlisle Spare Tire Asy For Gooseneck Hitch	1	Includes Items 13 through 18
	2012501B	Kenda Spare Tire Asy For Gooseneck Hitch		
13	902702	Carlisle Wheel/Tire 6x16 ST235/85R16	1	Load Range E
	9504685	Kenda Wheel/Tire 6x16 ST235/85R16		
14	2009560B	Bracket Weldment	1	
15	901669	Tapered Nut 9/16"-18UNF	2	
16	903108	Flat Washer 5/8" USS	4	
17	9801	Locknut 5/8"-11UNC	4	
18	93419	U-Bolt 5/8"-11UNC x 5 1/4"	2	

Non-Scale Components

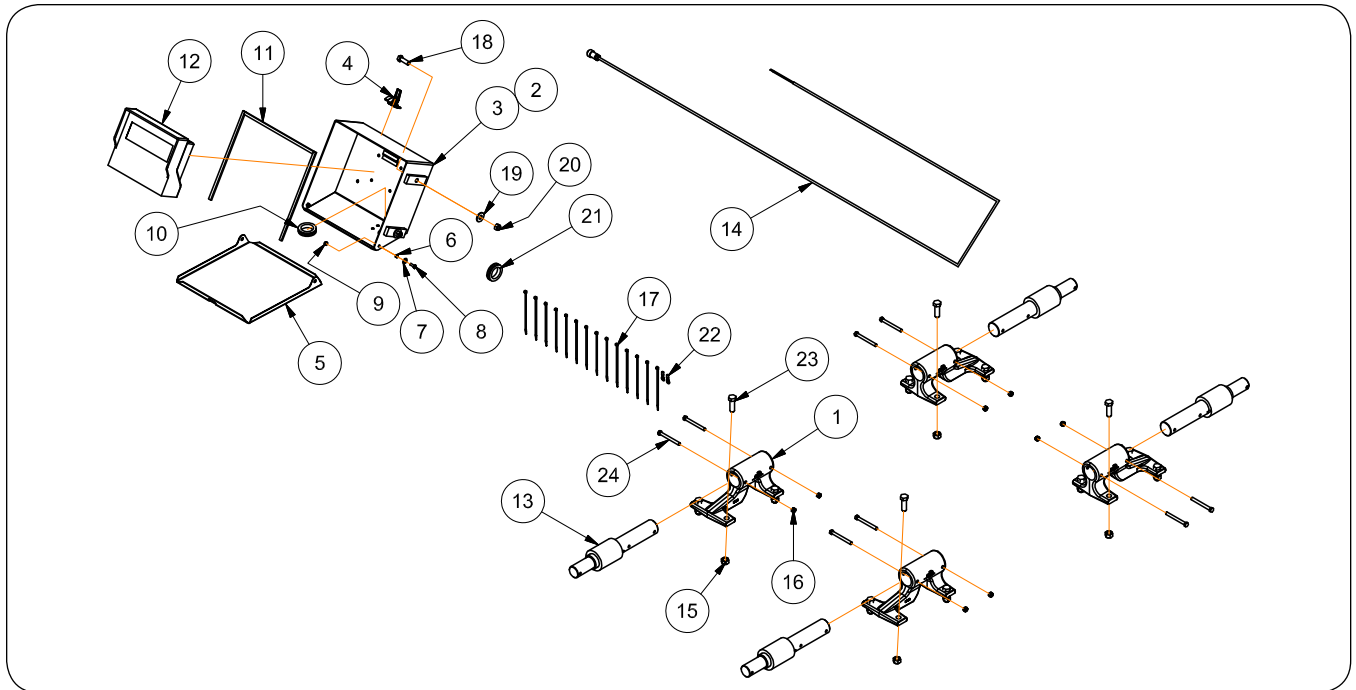
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
	27644CG	Non-Scale Bundle	-	
1	24931CG	Bracket Weldment	4	
2	9390-123	Capscrew 5/8"-11UNC x 1 3/4"	8	
3	9801	Locknut 5/8"-11UNC	8	

Scale Components - Model 640XL (Optional)

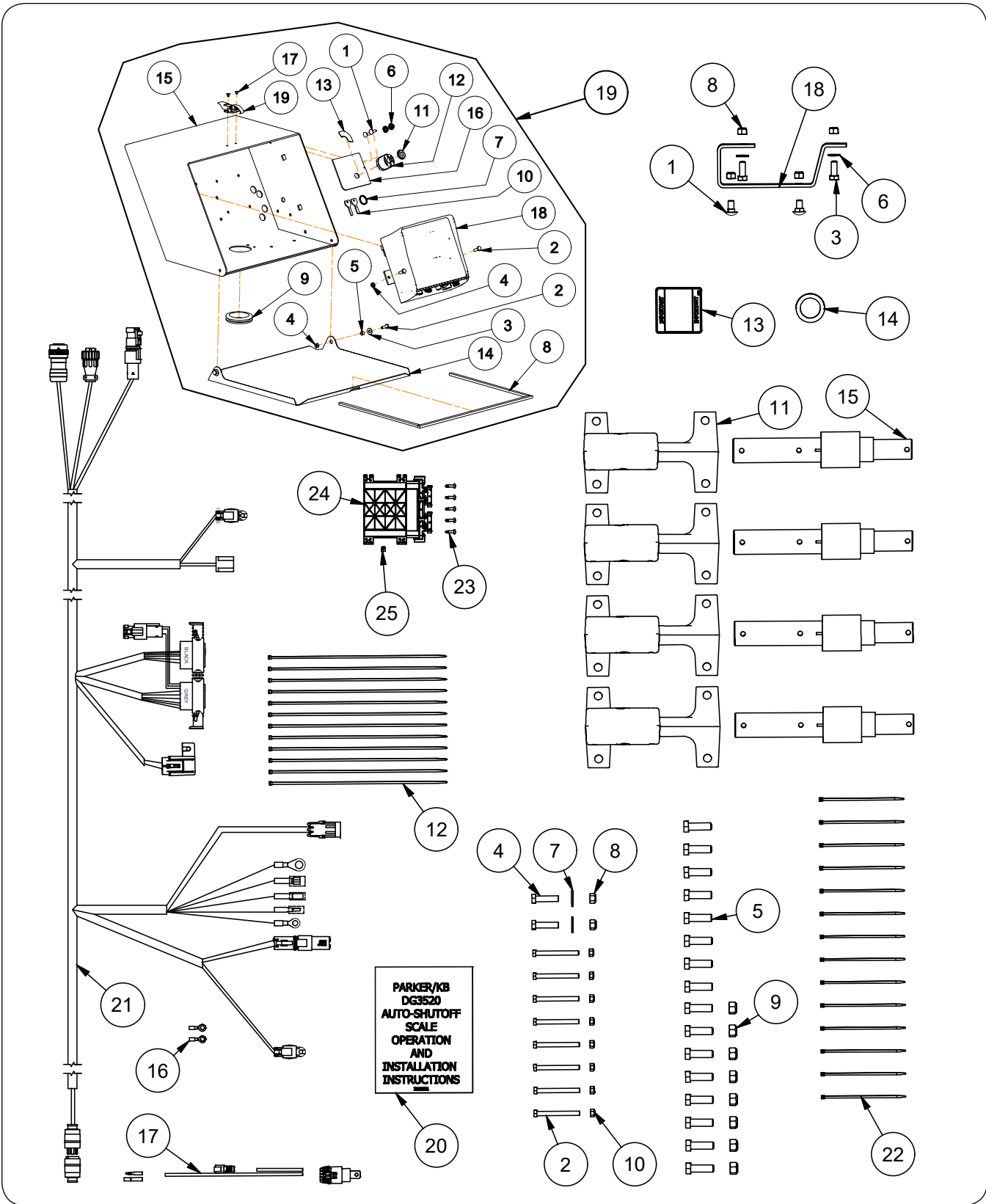
Please visit www.unverferth.com/parts/ for the most current parts listing.



ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	26858	Scale Components	-	
1	29477CG	Scale Bracket	4	
2	28945CG	Scale Enclosure w/Monitor	1	
3	28944CG	Scale Enclosure Weldment	1	
4	9220	Draw Latch	1	
5	28943CG	Cover	1	
6	22018	Bushing	2	
7	9405-064	Flat Washer 1/4" USS	2	
8	9390-003	Capscrew 1/4"-20UNC x 3/4	2	Grade 5
9	9936	Locknut 1/4"-20UNC	2	
10	900513	Rubber Grommet 2" Dia.	1	
11	900152	Foam Strip	3	
12	902062	Scale Indicator	1	
13	902063	Load Cell	4	
14	902087	Power Cord	1	
15	9801	Locknut 5/8"-11UNC	8	
16	9928	Locknut 3/8"-16UNC	8	
17	9000106	Cable Tie	14	
18	9390-103	Capscrew 1/2"-13UNC x 2	2	Grade 5
19	9405-088	Flat Washer 1/2" USS	2	
20	9800	Locknut 1/2"-13UNC	2	
21	900513	Rubber Grommet 2" Dia.	1	
22	901907	Ring Terminal 5/16"	2	
23	9390-124	Capscrew 5/8"-11UNC x 2"	16	
24	9390-066	Capscrew 3/8"-16UNC x 3 3/4"	8	

DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)

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



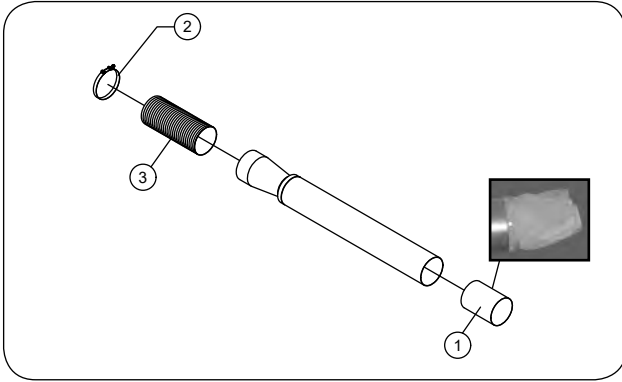
Seed Chariot® 2620/3620 — Parts

DG3520 Auto-Shutoff Scale Pkg #2012585CG (Optional)

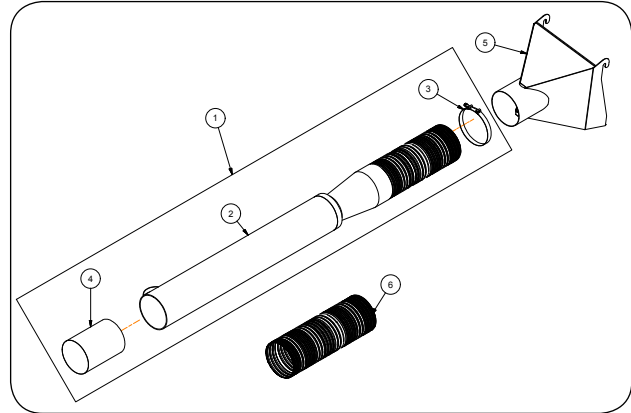
ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	9388-102	Carriage Bolt 1/2"x1" UNC GR5	2	
2	9390-066	Capscrew 3/8"x3 3/4" UNC GR5	8	
3	9390-100	Capscrew 1/2"x1 1/4" UNC GR5	2	
4	9390-103	Capscrew 1/2"x2" UNC GR5	2	
5	9390-124	Capscrew 5/8"x2" UNC GR5	16	
6	9405-086	Flat Washer 1/2" SAE	2	
7	9405-088	Flat Washer 1/2" USS	2	
8	9800	Top Lock 1/2"	6	
9	9801	Locknut/Top 5/8"-11UNC	8	
10	9928	Top Lock 3/8"	8	
11	29476	Scale Bracket Casting	4	
12	94037	Cable Tie 15 1/2"	12	
13	251027	Decal-Important	1	
14	900513	Grommet 1/4"x2"OD Groove, 1 3/4"ID	1	
15	901173	Load Bar	4	
16	901907	Ring Terminal 5/16"	2	
17	2002965	Ignition Adapter Harness	1	
18	2003162CG	Bracket-Side Mount	1	
19	2012600CG	DG3520 Auto-Shutoff Scale Enclosure Assembly	1	Includes Items 19.1-19.19
19.1	9388-002	Carriage Bolt 1/4"x3/4" UNC GR5	2	
19.2	9390-003	Capscrew 1/4x3/4" UNC GR5	4	
19.3	9405-064	Flat Washer 1/4" USS	2	
19.4	9936	Locknut 1/4"-20	4	
19.5	22018	Bushing	2	
19.6	97189	Hex Nut/Lrg Flg 1/4"-20 UNC	2	
19.7	97489	Split Ring 1"	1	
19.8	900152	Foam Strip	3	
19.9	901334	Grommet 1/4"Wx2" 1/2"D Groove, 2 1/4" ID	1	
19.10	901718	Key	2	
19.11	901719	Nut - Keyswitch	1	
19.12	901720	Ignition Switch	1	
19.13	901811	Keyswitch Decal	1	
19.14	2002539CG	Cover	1	
19.15	2002540CG	Remote Enclosure Weld't	1	
19.16	2002872CG	Plate-Keyswch	1	
19.17	9003503	Rivet 3/16"x1/4"	2	
19.18	9504945	DG3520 Scale	1	
19.19	TA0-902596-0	Latch	1	
20	2012601	DG3520 Auto-Shutoff Scale Manual	1	
21	2012605	Wiring Harness	1	
22	9000106	Cable Tie 7 1/2"x0.18"	14	
23	9005197	Self Drilling Screw #10-16x3/4"	5	
24	9504952	Primary Power Driver	1	
25	9505152	Antenna Connector Cap	1	
26	25502	Crate	1	Not Shown

Telescopic Spout Components (Optional)

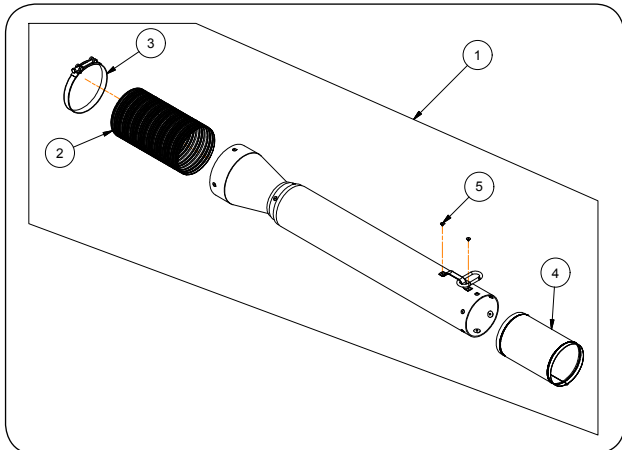
Please visit www.unverferth.com/parts/ for the most current parts listing.



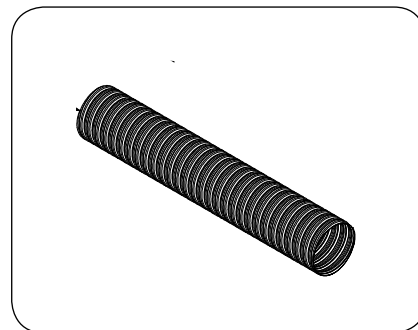
6" 3-Stage Telescopic Spout for 6" Conveyor (Optional)			
ITEM	PART NO.	DESCRIPTION	QTY
	22578	3-Stage 6" Telescopic Spout Assembly (6' to 10' w/Sock)	-
1	22577	Sock 5 3/8" Dia. x 8" Long	1
2	98060	Clamp 6" Dia.	1
3	96855	Telescopic Spout	1



6" 3-Stage Telescopic Spout for 8" Conveyor (Optional)			
ITEM	PART NO.	DESCRIPTION	QTY
	28515	Telescopic Spout 6'-10' Bundle	
1	22578	6" Conveyor Telescopic Spout 6'-10' ONLY	1
2	96855	Telescopic Spout	1
3	98060	Clamp/T-Bolt	1
4	22577	Sock Spout Extension	1
5	26290CG	Spout Weldment	1
6	21759	Flexible Spout 6" OD x 18"	1



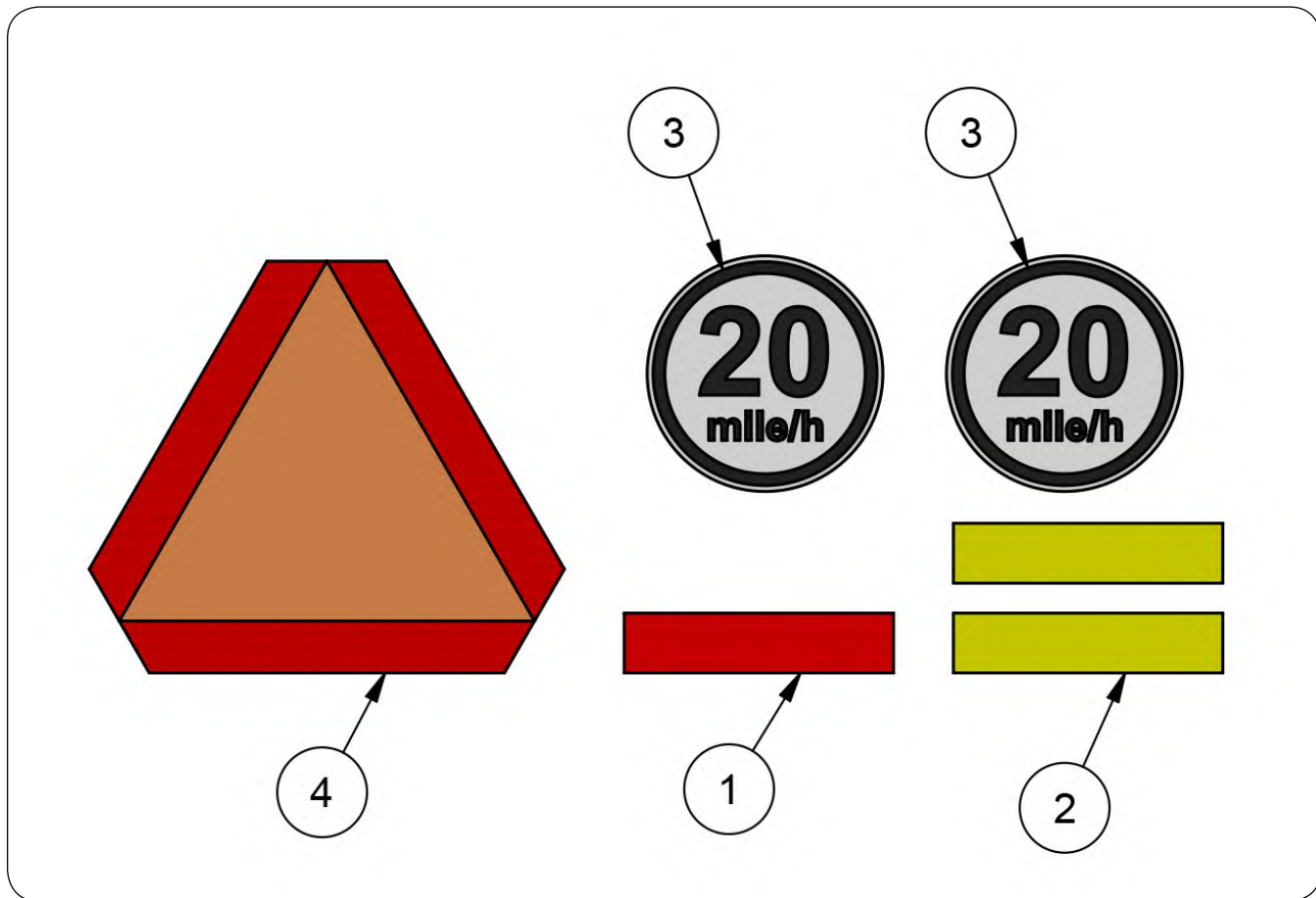
8" 3-Stage Telescopic Spout for 8" Conveyor (Optional)			
ITEM	PART NO.	DESCRIPTION	QTY
1	29782CG	3-Stage 8" Telescopic Spout Asy (6 1/2' to 11' w/Sock) (Includes Items 2 through 5)	1
2	25752	Flexible Spout	1
3	9500171	Hose Clamp	1
4	9500173	Vinyl Sock	1
5	9500175	Drive Rivet 3/16D x 1/4	17



4' Flexible Spouts (Optional)		
ITEM	PART	DESCRIPTION
	TAAU14170	Flex Spout 6" I.D. x 4' Long
	901544	Flex Spout 8" I.D. x 4' Long

AG Package # 2010513 (Option) - SMV, SIS Decals, & Reflectors

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



ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	9003126	Reflector, RED	1	
2	9003127	Reflector, AMBER	2	
3	9008714	Decal, Rear SIS 20MPH	2	
4	97530	Decal, SMV Emblem	1	



Unverferth[®]

www.unverferth.com