



#### DRILL FILL TUBE CONVEYOR FITS 40' CASE IH 500T & NEW HOLLAND P2085 DRILLS

Beginning With Serial #D62870100

Part No. 2004195

#### **Foreword**

Your new TUBE CONVEYOR is designed and manufactured to give you years of dependable service. To keep it running efficiently, read the instructions in this operator's manual.

This manual covers operation, service, assembly, and parts for your TUBE CONVEYOR. Read and study manual completely before attempting to operate this implement. Take this manual to the field for handy reference when operating, adjusting, or servicing your machine.

"Right-Hand" and "Left-Hand" side of the machine are determined by standing behind the implement and facing in the direction of forward travel.

#### **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 Unverferth products, all specifications and information contained herein are subject to change without notice.

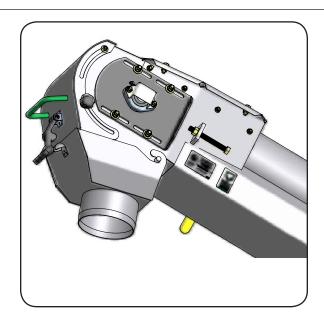
#### **Product Information**

Please fill out and retain this portion for your records. 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.

The serial number plate is located as shown in Fig. 1.

Product			
Serial Number			
Date of Purchase			
Dealer			-
City	State	7in	

Please supply this information when you have questions or when ordering repair or replacement parts. Your dealer needs this information to give you prompt, efficient service.



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# SECTION I Safety

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#### **General Hazard Information**

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

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

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

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



#### **REMEMBER:**

# THINK SAFETY A CAREFUL OPERATOR IS THE

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.

#### **IMPORTANT**

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

**1-2** (January 2017)

#### **Safety Decals**

# A 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 #9003125 Fluorescent Reflector

Part #9003126 Red Reflector



#### Fill Tube Conveyor — Safety

#### **Following Safety Instructions**

Read and understand this operator's manual, and the towing vehicle's operator's land, before operating.



- All machinery should be operated only by trained and authorized personnel.
- To prevent machine damage, use only attachments and service parts approved by the manufacturer.



- Always shut tractor engine off & remove key before servicing the implement.
- Avoid personal attire such as loose fitting clothing, shoestrings, drawstrings, pants cuffs, long hair, etc., that may become entangled in moving parts.
- Never attempt to operate implement unless you are in driver's seat.



1-4 (January 2017)

#### **Before Operating or Servicing**

- Do not stand between towing vehicle and implement during hitching
- Avoid working under the unit; however, if it becomes absolutely unavoidable, make sure the implement is safely blocked.
- Always make certain everyone and everything is clear of the machine before beginning operation.
- Turn engine off and remove key from ignition before servicing or adjusting equipment.
- · Verify that all safety shields are in place and secured.
- Ensure that all applicable safety decals are installed and legible.

#### **During Operation**

- Keep away from overhead power lines. Electrical shock can cause serious injury or death.
- · Regulate speed to field conditions, maintain complete control at all times
- Use extreme care when operating close to ditches, fences, or on hillsides.
- Never lubricate equipment when in operation.
- Seed being transported may contain seed treatment. Read and follow all requirements for personal protective equipment and first aid as outlined on seed tags.
- Be sure that all safety shields are in place, and that the clean-out door is closed and securely latched.

#### **Before Transporting**

- 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.

#### **During Transport**

- Comply with state and local laws governing highway safety when moving machinery.
- Maximum speed of implement should never exceed 20 mph. Do not exceed 10 mph during off-highway travel.
- Use transport lights as required by local laws to adequately warn operators of other vehicles.
- Use good judgment when transporting equipment on highways. Regulate speed to road conditions and maintain complete control.

**1-6** (January 2017)

#### **Pressurized Oil**

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

#### **Preparing for Emergencies**

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



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



#### **Wearing Protective Equipment**

Wear clothing and personal protective equipment appropriate for the job





Wear steel-toed shoes when operating.



Wear hearing protection when exposed to loud noises.



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

 This product may contain a chemical known to the state of California to cause cancer, or birth defects, or other reproductive harm.

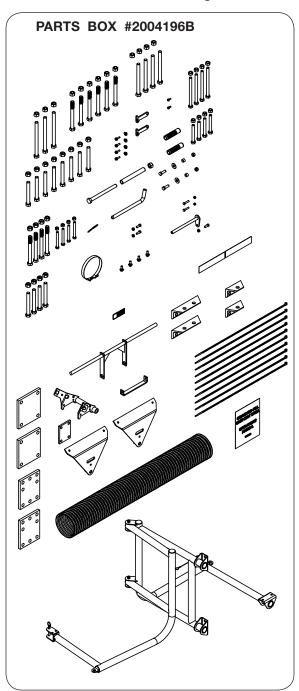
**1-8** (January 2017)

# SECTION II Set Up

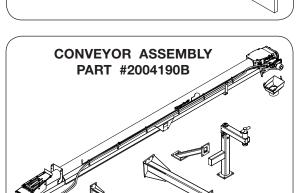
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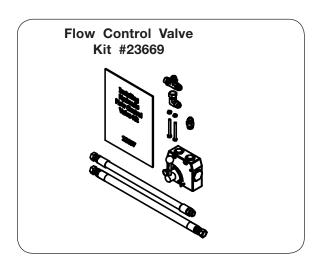
#### **Shipping Bundles**

You should receive the following bundles:



HOPPER BUNDLE PART #27717B





**2-2** (January 2017)

#### Basic Set Up

# **A WARNING**

- READ AND UNDERSTAND SAFETY RULES BEFORE OPERATING OR SERVICING THIS MA-CHINE. 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.
- 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 CUFFS, LONG HAIR, ETC., THAT MAY BECOME ENTANGLED IN MOVING PARTS.
- 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 500 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.

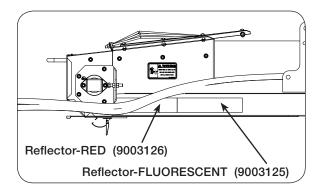
#### **IMPORTANT**

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

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

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

Install fluorescent orange decal (9003125) and red reflector (9003126) to the extreme left-hand side of conveyor near hopper. Be sure that reflectors are clearly visible when looking at rear of unit.

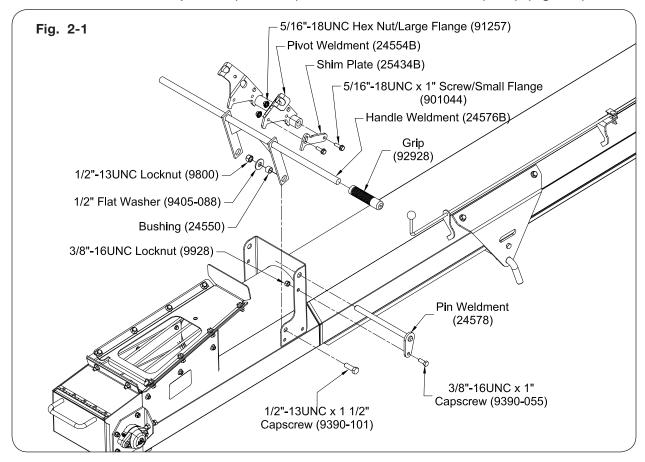


Place drill on a solid, level surface with sufficient clear space to unfold the wings of the drill. Unfold wings, lower unit to the ground, block from moving, set the tractor brakes, shutoff the engine, and remove the ignition key.



#### Hopper

1. Attach the pivot weldment (24554B) to the tube conveyor using pin weldment (24578), 3/8"-16UNC x 1" capscrew (9390-055), and 3/8"-16UNC locknut (9928) (Fig. 2-1).



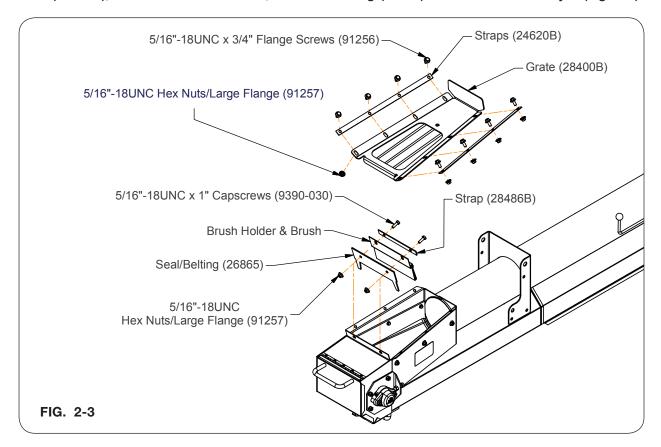
- 2. Attach the shim plate (25434B) to the pivot weldment (24554B) using 5/16"-18UNC x 1" screws/small flange (901044) and 5/16"-18UNC hex nuts/large flange (91257) (Fig. 2-1).
- 3. Push the grips (92928) onto the ends of the handle weldment (24576B). Attach the handle weldment (24576B) to the tube conveyor using 1/2"-13UNC x 1 1/2" capscrews (9390-101), bushings (24550), 1/2" flat washers (9405-088) and 1/2"-13UNC locknuts (9800) (Fig. 2-1).
- Insert the formed tube (26918B) into the vinyl hopper (902421) as shown in Fig. 2-2. Attach the tube ends to the pivot weldment (24554B) using 5/16"-18UNC x 1 1/2" capscrews (9390-032) and 5/16"-18UNC locknuts (9807).



**2-4** (January 2017)

#### **Hopper** (Continued)

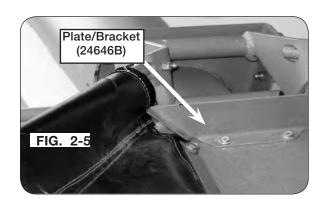
5. Remove the 5/16"-18UNC hex nuts/large flange (91257), 5/16"-18UNC x 3/4" flange screws (91256), straps (24620B), grate (28400B), 5/16"-18UNC x 1" capscrews (9390-030), strap (28486B), brush holder with brush, and seal/belting (26865) from the tube conveyor (Fig. 2-3).



6. Attach the vinyl hopper to the tube conveyor using the poly strips (24986), plate (24646B), 1/4"-20UNC x 3/4" flange screws (97420), and 1/4"-20UNC hex nuts/large flange (97189) Fig. 2-4 & Fig. 2-5.

NOTE: Spraying lubricant inside the vinyl hopper cover can help it slide easier.





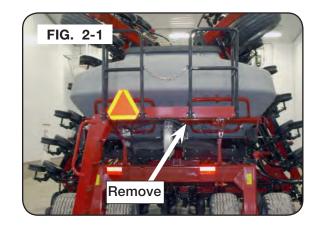
#### **Mounting Brackets and Support Stand**

## A CAUTION

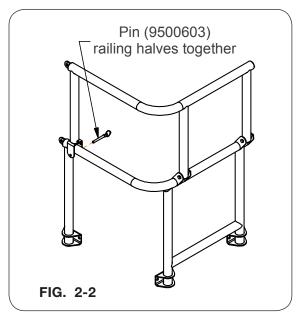
 DO NOT USE REAR PLATFORM BEFORE REPLACEMENT RAILING IS INSTALLED. FAILURE TO DO SO COULD LEAD TO FALLING CAUSING DAMAGE OR SERIOUS PERSONAL INJURY.

Case IH 500T & New Holland P2085 Drills requires replacement of the right hand side safety railing prior to installation of the drill fill.

 Remove and save the Case IH 500T or New Holland P2085 right-hand side railing and mounting hardware from the drill platform on the rear of the drill. (Fig. 2-1)



Fold over the new right-hand side railing and pin it together. (FIG. 2-2)



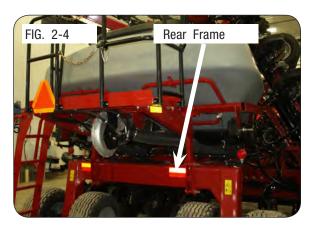
**2-6** (January 2017)

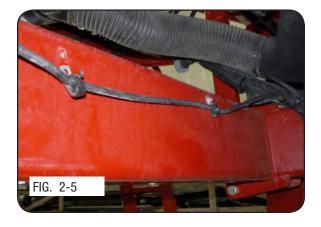
#### **Mounting Brackets and Support Stand** (continued)

3. Install provided replacement railing with previously removed hardware (FIG. 2-3). Attach the previously removed railing chain.



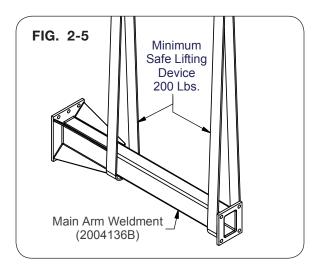
4. Remove and save the self tapping screws from the rear frame that hold the electrical line in place. (FIG. 2-4 and FIG. 2-5)



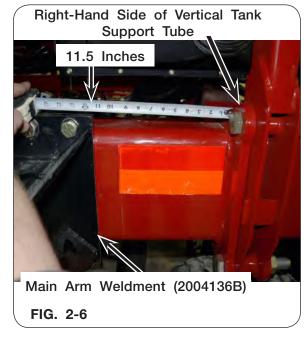


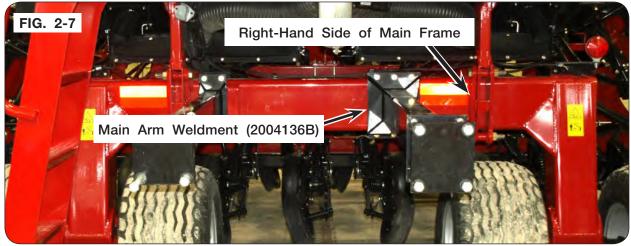
#### Mounting Brackets and Support Stand (continued)

5. With a minimum safe lifting device rated for 200 lbs., lift the right-hand main arm weldment (2004136B) (FIG. 2-5).



 Locate the drill's right-hand vertical tank support tube. Position the conveyor righthand main arm weldment (2004136B) 11.5" to the left as shown in (Fig. 2-6 & Fig. 2-7).

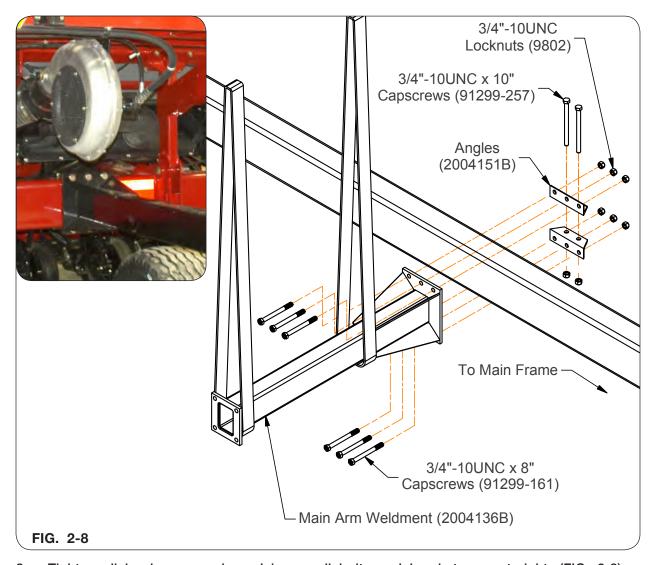




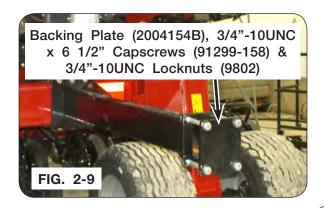
**2-8** (January 2017)

#### Mounting Brackets and Support Stand (continued)

7. Loosely assemble the the main arm weldment (2004136B) to the left-side of the main frame with two angles (2004151B), six 3/4"-10UNC x 8" capscrews (91299-161), and six 3/4"-10UNC locknuts (9802) (FIG. 2-8). Align the angles (2004151B) and secure with two 3/4"-10UNC x 10" capscrews (91299-257), and 3/4"-10UNC locknuts (9802) (FIG. 2-8).

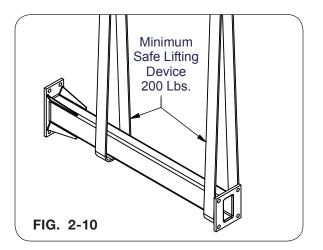


- 8. Tighten all hardware evenly and insure all bolts and brackets are straight. (FIG. 2-8)
- 9. Loosely install backing plate (2004154B) to the end of the main arm weldment (2004136B) with four 3/4"-10UNC x 6 1/2" capscrews (91299-158) and 3/4"-10UNC locknuts (9802) (FIG. 2-9).



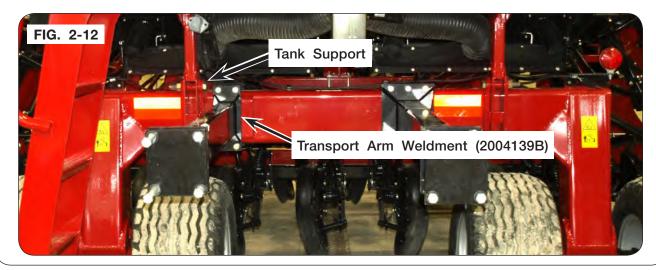
#### **Mounting Brackets and Support Stand** (continued)

10. With a minimum safe lifting device rated for 200 lbs., lift the transport arm weldment (2004139B) (FIG. 2-10).



11. The left-hand transport arm weldment (2004139B) has five bolts and should be located 1.75 inches to the right of the left hand tank support. (FIG. 2-11 & FIG. 2-12)

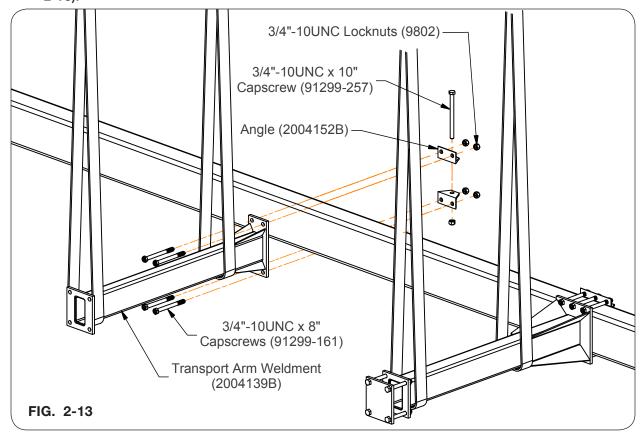




**2-10** (January 2017)

#### Mounting Brackets and Support Stand (continued)

12. Loosely assemble the transport arm weldment (2004139B) to the right-side of the tank support with two angles (2004152B), four 3/4"-10UNC x 8" capscrews (91299-161), and four 3/4"-10UNC locknuts (9802) (FIG. 2-12). Align the angles (2004152B) and secure with a 3/4"-10UNC x 10" capscrew (91299-257), and 3/4"-10UNC locknut (9802) (FIG. 2-13).



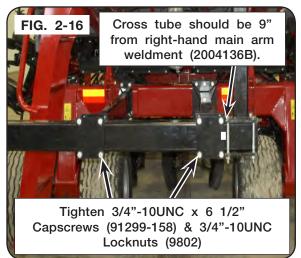
- 13. Tighten all hardware evenly and insure all bolts and brackets are straight. (FIG. 2-13)
- 14. Loosely install backing plate (2004154B) to the end of the main arm weldment (2004136B) with four 3/4"-10UNC x 6 1/2" capscrews (91299-158) and 3/4"-10UNC locknuts (9802) (FIG. 2-14).



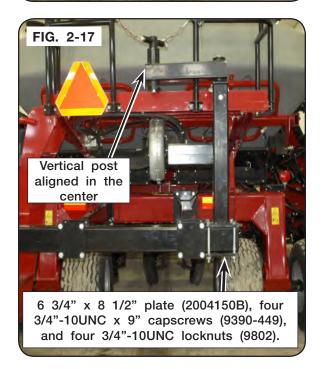
#### Mounting Brackets and Support Stand (continued)

15. With a minimum safe lifting device rated for 100 lbs., assemble the cross tube weldment (2004144B) to the main arm weldment (2004136B) and transport arm weldment (2004139B). Cross tube weldment (2004144B) should be located 9 inches from the right hand side of the main arm weldment (2004136B) (FIG. 2-15 & FIG. 2-16). Tighten backing plates (2004154B) with the 3/4"-10UNC x 6 1/2" capscrews (91299-158) and 3/4"-10UNC locknuts (9802). (FIG. 2-15 & FIG. 2-16)





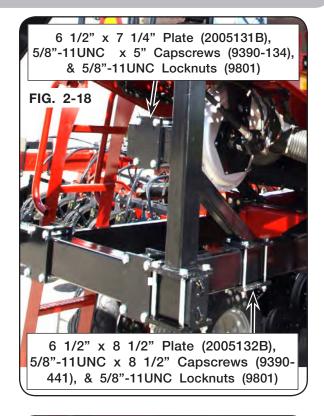
16. With a minimum safe lifting device rated for 150 lbs., position the vertial post assembly (2004191B) on top of cross tube (2004144B), against the right-hand main arm weldment (2004136B). Loosely mount to the cross tube weldment (2004144B) with 6 3/4" x 8 1/2" plate (2004150B), four 3/4"-10UNC x 9" capscrews (9390-449), and four 3/4"-10UNC locknuts (9802) (FIG. 2-17). When the vertical post assembly arm is swung completely to the left the post should be centered.

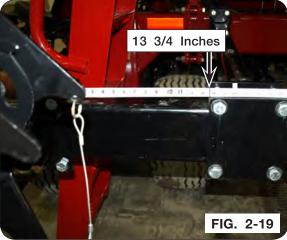


**2-12** (January 2017)

#### Mounting Brackets and Support Stand (continued)

- 17. With a minimum safe lifting device rated for 50 lbs., loosely mount the top of the vertical post brace weldment (2005127B) to the vertical post assembly (2004191B) with 6 1/2" x 7 1/4" plate (2005131B), four 5/8"-11UNC x 5" capscrews (9390-134), and four 5/8"-11UNC locknuts (9801). (FIG. 2-18)
- Loosely assemble the bottom of the vertical post brace weldment (2005127B) to the main arm weldment (2004136B) with 6 1/2" x 8 1/2" plate (2005132B), four 5/8"-11UNC x 8 1/2" capscrews (9390-441), and four 5/8"-11UNC locknuts (9801). (FIG. 2-18)
- 19. Tighten all hardware as recommended in the "Torque Chart" located in the MAINTENANCE section.
- 20. Locate the transport bracket mounting tube (2005106B) 13 3/4 inches left of the transport arm weldment (2004139B) (FIG. 2-19). Loosely attach the transport bracket mounting tube (2005106B) to the cross tube weldment (2004144B) with 6 3/4" x 8 1/2" plate (2004150B), 3/4"-10UNC x 6 1/2" capscrews (91299-158), and 3/4"-10UNC locknuts (9802) (FIG. 2-20).
- 21. Tighten all hardware as recommended in the "Torque Chart" located in the MAINTENANCE section.

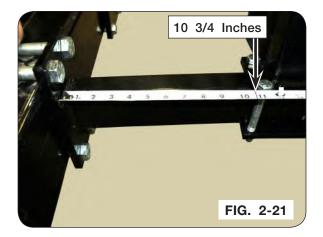




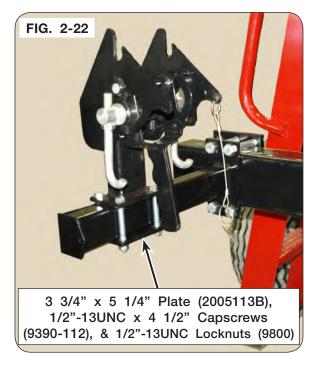


#### Mounting Brackets and Support Stand (continued)

22. Locate the transport bracket assembly (2004172B) 10 3/4 inches from the transport bracket mounting tube (2005106B) (FIG. 2-21).



23. Loosely attach the transport bracket assembly (2004172B) to the transport bracket mounting tube (2005106B) with 3 3/4" x 5 1/4" plate (2005113B), 1/2"-13UNC x 4 1/2" capscrews (9390-112), and 1/2"-13UNC locknuts (9800) (FIG. 2-22).

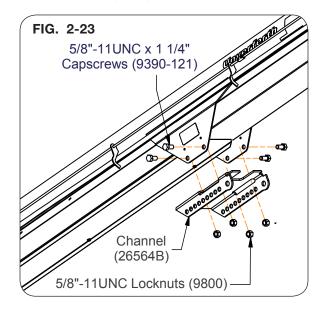


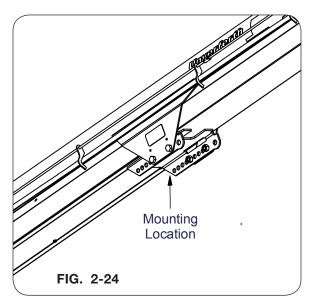
- 24. Tighten all hardware as recommended in the "Torque Chart" located in the MAINTENANCE section.
- 25. Zip tie electrical lines underneath the frame to match their original routing.

**2-14** (January 2017)

#### **Attaching The Conveyor**

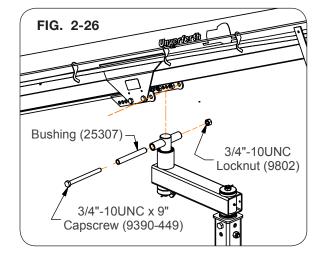
1. Attach channel (26564B) to the bottom of the conveyor assembly as shown in FIG. 2-23 & FIG. 2-24. Secure with four 5/8"-11UNC x 1 1/4" capscrews (9390-121) and 5/8"-11UNC locknuts (9801).





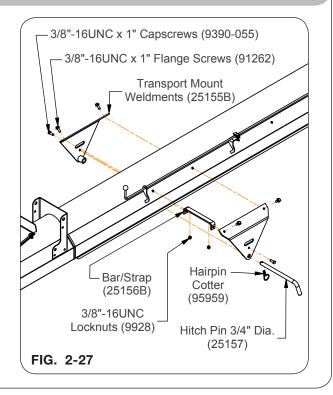
- 2. Using a safe lifting devices rated at 500 lbs. minimum, lift the conveyor assembly into the mounting position as shown in FIG. 2-25 & FIG. 2-26.
- Secure conveyor assembly (2004193B) to the vertical post assembly (2004191B) with bushing (25307), 3/4"-10UNC x 9" capscrew (9390-449), and 3/4"-10UNC locknut (9802). (FIG. 2-26)





#### Attaching The Conveyor (continued)

- Attach the transport mount weldments (25155B) to the lower section of the conveyor assembly (2004193B) with four 3/8"-16UNC x 1" flange screws (91262) (FIG. 2-27).
- 5. Secure the bar/strap (25156B) in between the trasnport mount weldments (25155B) with two 3/8"-16UNC x 1" capscrews 9390-055) and 3/8"-16UNC locknuts (9928) (FIG. 2-27).
- 6. Insert the hitch pin 3/4" dia. (25157) and hairpin cotter (95959) as shown in FIG. 2-27.



#### **Hydraulics**



- HYDRAULIC SYSTEM MUST BE PURGED OF AIR BEFORE OPERATING TO PREVENT SERI-OUS INJURY OR DEATH.
- HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLU-IDS. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM.
- RELIEVE HYDRAULIC PRESSURE BEFORE SERVICING HYDRAULIC SYSTEM. SEE TRACTOR AND DRILL OPERATOR'S MANUALS FOR PROPER PROCEDURE.

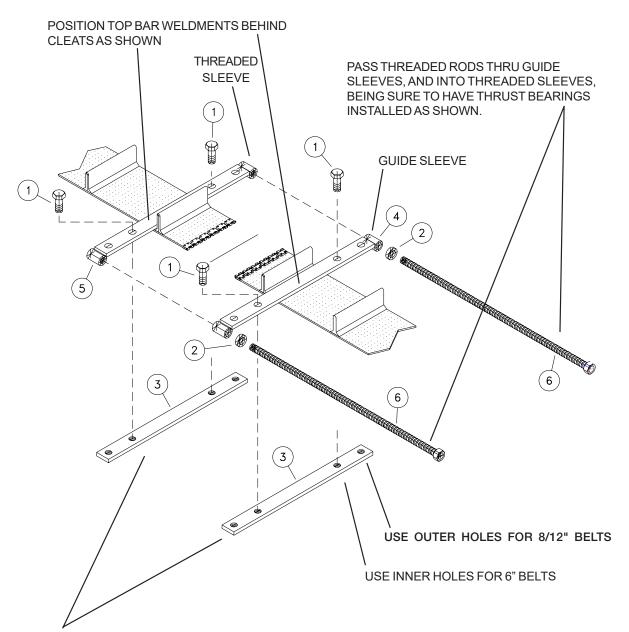
Be sure that the hoses do not rub any sharp surfaces or are kinked in any way.

Hoses are provided to the remote outlets on the drill. If outlets are not present, contact your Case or New Holland dealer for optional package, or provide additional hose lengths to reach the tractor.

Unverferth recommends that tieing into drill hydraulics should only be done with Case or New Holland remote outlet accessory kit.

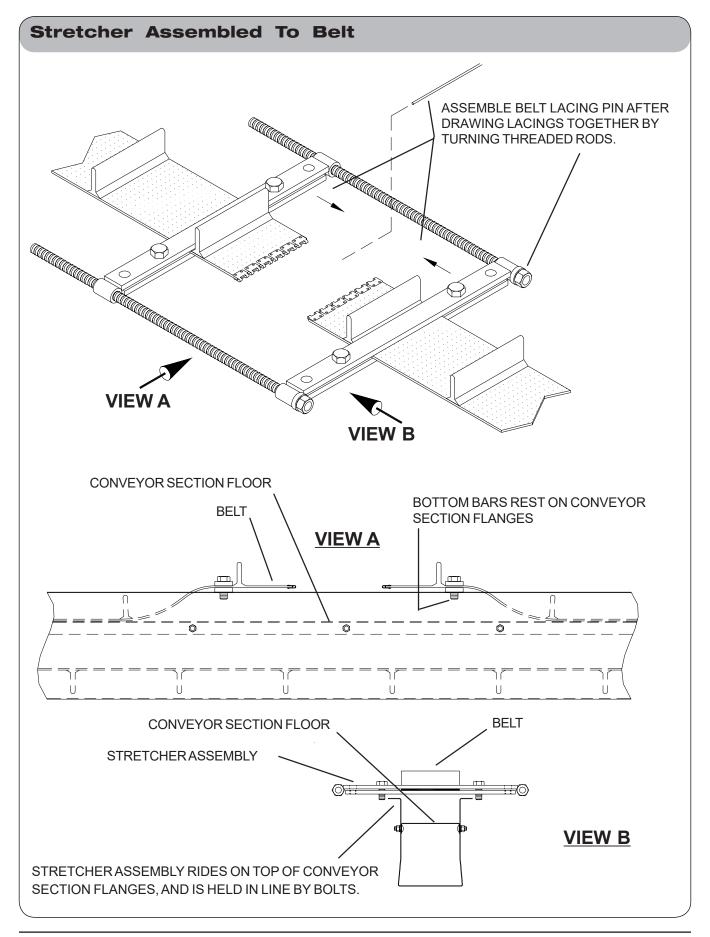
**2-16** (January 2017)

# **Tube Conveyor Belt Stretcher (Optional) Required For Replacement of Cleated Belts**



INSTALL BOTTOM BARS ACROSS UNDERSIDE OF BELT, AND SECURE WITH FOUR 5/8NC X 1-1/2" BOLTS THROUGH TOP BARS AS SHOWN.

REF	PART NO.	QTY	DESCRIPTION
1	TA0-907235-0	4	BOLT, HEX 5/8NC X 1/2" GRADE 5
2	TA0-903118-0	2	BEARING, BALL THRUST, 5/8" I.D.
3	TA1-114401-0	2	BOTTOM BAR, 6" & 12" BELT STRETCHER
4	TA2-114404-0	2	PLAIN TOP BAR WELDMENT, 6" & 12" BELT STRETCHER
5	TA2-114406-0	2	THREADED TOP BAR WELDMENT, 6" & 12" BELT STRETCHER
6	TA1-114408-0	2	THREADED ROD WELDMENT, 6" & 12" BELT STRETCHER



**2-18** (January 2017)

# SECTION III Operation

Preparing DrillPreparing Drill	3-2
Operating Procedures	
Transporting	
Hydraulic System	
Clean-Out Doors	

#### **Preparing Drill**

# A WARNING

 KNOW AND UNDERSTAND SAFETY RULES BEFORE OPERATING OR SERVICING THIS MA-CHINE. REVIEW "SAFETY" SECTION IN THIS MANUAL IF NECESSARY.

Read this operation section thoroughly. Acquaint yourself with the adjustments required to obtain efficient and trouble-free operations.

#### **IMPORTANT**

• Before attempting to attach the drill to the tractor, familiarize yourself with operations and adjustments of the unit. To insure safe operating conditions, obey all safety notes outlined in the drill's operator's manual.

#### **Operating Procedures**



- KEEP ALL UNAUTHORIZED PEOPLE CLEAR OF WORK AREA.
- Pull tractor and air drill into position, shift tractor into park (or neutral) and lock brakes on tractor. Air drill must be lowered to the ground to fill.
- 2. Open the lid on the air drill tanks to allow the conveyor to be positioned.
- 3. Raise the latch assembly (24782B) from the transport bracket as shown in Fig. 3-1.



**3-2** (January 2017)

#### **Operating Procedures**

4. Railing will need to be opened by utilizing folding mechanism located on RH side railing. Hook top support chain and remove pins holding top portion of railing in place. Carefully lowering railing to allow conveyor access to center fill. (Fig. 3-2 and 3-3)





- 4. Swing the conveyor into operating position as shown in Fig. 3-4.
- 5. Reattach the safety railing to the operating position.
- 6. Engage the tractor hydraulic system to allow the hydraulic oil to flow to the conveyor. Make sure the conveyor belt is moving in a forward direction. If the belt is moving in a backward direction, either reverse the hoses going into the tractor or move the tractor control hydraulic lever in the opposite direction to reverse the flow.

#### Operating Procedures (Continued)

# **A WARNING**

- SEED MAY BE TREATED WITH HAZARDOUS MATERIAL. AVOID CONTACTING SEED WITH SKIN, EYES, AND AVOID BREATHING DUST. FOLLOW MANUFACTURER'S RECOMMENDA-TIONS.
- 6. Start the conveyor moving and begin the flow of seed into the conveyor. Adjust the seed flow for a smooth, even flow of seed through the conveyor.
- 7. Fill the tank evenly by moving the adjustable spout from side-to-side while the conveyor is running. When the desired level is reached in the tank(s), close the transfer wagon door and empty out the conveyor.



**3-4** (January 2017)

### **Drill Fill Tube Conveyor** — Operation

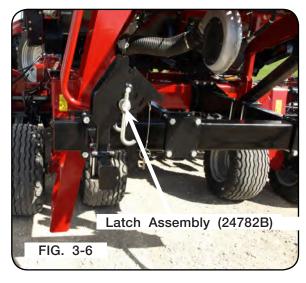
#### **Transporting**

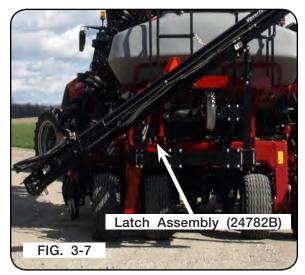
1. Once finished filling, place the conveyor back in the transport bracket (Fig. 3-5 and 3-6). Secure into position with the latch assembly (24782B).

### **IMPORTANT**

• Do not move the conveyor while filling the air drill.







#### **Drill Fill Tube Conveyor** — Operation

#### **Hydraulics**

# **A WARNING**

- HYDRAULIC SYSTEM MUST BE PURGED OF AIR BEFORE OPERATING TO PREVENT SERIOUS INJURY OR DEATH.
- HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM.
- RELIEVE HYDRAULIC PRESSURE BEFORE SERVICING HYDRAULIC SYSTEM. SEE TRACTOR OPERATOR'S MANUAL FOR PROPER PROCEDURE.

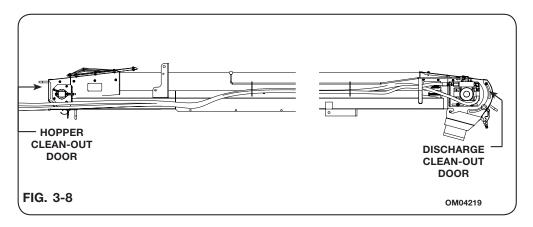
#### **Clean-Out Doors**



• DISCONNECT POWER OR HYDRAULIC SOURCES BEFORE OPENING ANY CLEAN-OUT DOOR!

Check routing of all hydraulic hoses. Hoses should not be kinked, twisted, or rubbing against sharp edges. Hoses should be secured with tie straps. Check hose fittings for hydraulic leaks. Tighten and/or repair or replace as required.

The hopper end of the conveyor can be cleaned by releasing the latch and opening the clean-out door. The conveyor discharge head can be cleaned by releasing the latch and opening the clean-out door (Fig. 3-8).



**3-6** (January 2017)

# Drill Fill Tube Conveyor — Operation

# SECTION IV Maintenance

Lubrication	4-2
Conveyor Bearings	4-2
Miscellaneous Lube Points	
Storage/Maintenance	
Hydraulic System	
Conveyor Belt	
Belt Tension	
Belt Tracking	4-5
Troubleshooting	
Torque Chart	
Hydraulic Fittings	

#### Lubrication

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

#### **Conveyor Bearings**

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



 DO NOT USE A HIGH-PRESSURE GREASE GUN TO LUBRICATE THIS BEARING, AS DAM-AGE TO BEARING SEAL COULD OCCUR.

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

#### Miscellaneous Lube Points

Oil or grease periodically (or as needed) the following:

- -- Hinge for clean-out door
- -- Swivel base on conveyor
- -- Latch pin housing
- -- Pivot bracket and arm
- -- On/Off control rod

#### Storage/Maintenance

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

#### DO THE FOLLOWING AFTER USE:

- Clean out conveyor/hopper. Use pressurized water to wash out conveyor and hopper after use.
- 2. Wipe off the following:
- -- Hydraulic valve, motor, hoses, and fittings
- -- Swivel base, cradle
- -- Reflectors and warning/caution decals
- 3. Check the following:
- -- Mounting bolts for tightness
- -- Cable ties for tightness
- -- Valve, motor, hoses, and fittings for leaks, etc.
- -- Hydraulic hoses for wear-abuse

#### DO THE FOLLOWING BEFORE PLACING THE CONVEYOR IN STORAGE:

- -- Repaint any chipped or scraped areas.
- -- Inspect for damaged or worn parts. Replace before next season.
- -- Store unit inside, away from livestock.

**4-2** (January 2017)

#### **Hydraulic System**

Refer to parts section for hydraulic component detail listing.

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

#### Replacing Hoses/Fittings/Cylinders:

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

# A WARNING

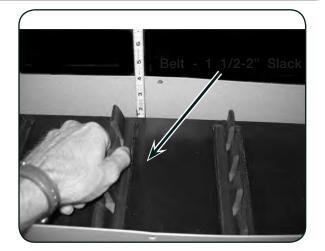
- RELIEVE HYDRAULIC SYSTEM OF ALL PRESSURE BEFORE ADJUSTING OR SERVICING.
   SEE TRACTOR OPERATOR'S MANUAL FOR PROPER PROCEDURES.
- HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM.

#### **Conveyor Belt**

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



 MOVING PARTS CAN CRUSH AND CUT. KEEP AWAY FROM MOVING PARTS.

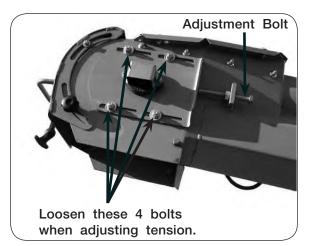


#### **Belt Tension**

Belt tension is inspected by removing lower intake panel/guard from conveyor, and gently pull 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 drive pulley. Replace the bottom cover panel and continue to check belt tracking before retightening the four bolts on each side of the conveyor.



#### **IMPORTANT**

Belt tracking must be done every time tension is adjusted.

**4-4** (January 2017)

#### Conveyor Belt (Continued)

#### **Belt Tracking**

Conveyor belt must always run at the center of the pulley on 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 belt tracking every 50 hours of use, and every time belt tension is adjusted.

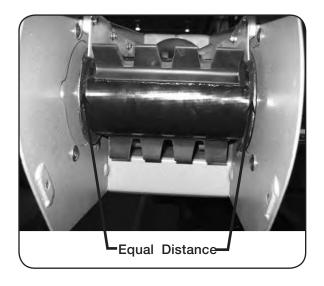
# **A WARNING**

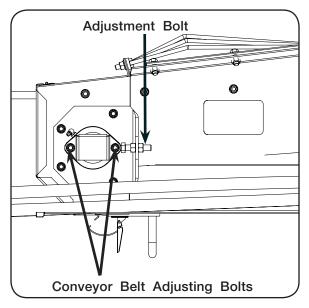
- ENTANGLEMENT IN MOVING PARTS CAN CAUSE SERIOUS INJURY OR DEATH. AVOID PERSONAL ATTIRE SUCH AS LOOSE FITTING CLOTHING, SHOE-STRINGS, DRAWSTRINGS, PANTS CUFFS, LONG HAIR, ETC. THAT MAY BECOME ENTANGLED IN MOVING PARTS.
- MOVING PARTS CAN CRUSH AND CUT. KEEP HANDS, FEET, CLOTHING, LONG HAIR, ETC. AWAY FROM MOVING PARTS.

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

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

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





Inspect tracking of belt at intake end by opening bottom inspection door on conveyor. Belt should be in the center of the pulley.

Adjust by loosening (Do Not Remove) the four bolts (two on each side) on the adjusting plate.

Operate conveyor at slow speed, and tighten or loosen adjustment bolt until belt is running in the center of the pulley.

### **IMPORTANT**

- Use extreme care when inspecting and adjusting belt tracking. Keep hands, feet, and clothing away from belt.
- Tighten the two bolts on the adjustment plate, and lock the adjustment bolt into place.

### Troubleshooting

	SYMPTOMS	REMEDIES					
A.	CONVEYOR WILL NOT TURN OVER OR	DEV	ELOP PROPER SPEED OR TORQUE:				
1.	Pump does not deliver sufficient pressure or volume	1.	Check output and delivery, change if necessary				
2.	Conveyor jammed	2.	Shut-off and lock-out power, open clean-out door and remove excess material (make sure swivel spout is clear)				
В.	B. CONVEYOR RUNS TOO SLOW:						
1.	Engine running too slow	1.	Increase engine speed				
2.	Pump not producing minimum required flow and pressure	2.	Check pump capacity and correct				
3.	Pump is worn	3.	Repair or replace pump				
4.	Internal leak in controls or motor	4.	Replace seals; repair or replace valves or motor				
5.	Air in system	5.	Bleed system and tighten connections				
6.	Improper hydraulic oil viscosity	6.	If auger starts slowly and speed increases after oil heats up, oil is too heavy weight. If auger slows down after oil heats up, oil is too light weight				
C.	CONVEYORS MOVING IN WRONG DIR	ECTIO	DN:				
1.	Control valve on tractor not set properly	1.	Reset				
D.	OIL HEATS EXCESSIVELY:						
1.	Oil viscosity incorrect	1.	Drain and refill with proper weight oil				
2.	Dirty oil	2.	Drain, flush, and refill with a clean oil and filter				
3.	Oil level too low	3.	Fill to proper level				
4.	Oil slipping through worn pump	4.	Repair or replace pump				
5.	Restricted line or piping	5.	Reroute lines to eliminate restrictions				
6.	Reservoir too small to provide adequate cooling	6.	Replace with larger reservoir or install oil cooler				
E.	PUMP / MOTOR SEALS BLOW-SHAFT	/ HO	USING BREAKS - HOSE BURST:				
1.	When a standard control valve is returned to neutral, to stop, or start a motor, sudden pressure is created which may break seals, tear off motor shafts, burst housing or hoses. (Especially at speed under load.) This sudden shock cannot be relieved through the primary relief valve in the system	1.	Avoid sudden and rapid starting and stopping (or convert to a free wheeling control valve (on the tractor) or a cushion valve may be installed)				
F.	BELT EDGES SHOWING EXCESSIVE W	/EAR:					
1.	Belt tracking incorrect	1.	Adjust tracking as detailed in service section of this manual				
2.	Poly seals on intake and/or discharge end worn.	2.	Replace poly seals				

**4-6** (January 2017)

#### **Troubleshooting** (Continued)

Occasionally when a conveyor has been connected into an auxiliary hydraulic system, it may not operate. When hydraulic pressure and flow gauges are not available, it may be difficult to determine if the fault is in the source hydraulic system, or the conveyor. A convenient method of determining this is to connect the conveyor hydraulic hoses to another tractor system and check the operation. If, for example, the conveyor operates from the other tractor system but not from the original tractor connection, or the original tractor system is not adequate. If the conveyor fails to operate; however, there is probably a fault with the control valve, motor or the conveyor itself. In this case, refer to the troubleshooting guide.

#### Complete Torque Chart - Capscrews - Grade 5

#### IMPORTANT

- Grade 5 capscrews can be identified by three radial dashes on head.
- Tighten U-bolts to have the same number of threads exposed on each end.

SIZE	FOOT POUNDS	NEWTON METERS	SIZE	FOOT POUNDS	NEWTON METERS
1/4-20	8-10	11-13	3/4-10	200-220	270-300
1/4-28	9-11	12-15	3/4-16	210-230	285-310
5/16-18	15-17	20-23	7/8-9	330-350	425-475
5/16-24	17-19	23-26	7/8-14	360-380	460-515
3/8-16	25-28	34-38	1-8	500-525	675-710
3/8-24	28-31	38-42	1-14	540-560	730-760
7/16-14	40-45	54-61	1 1/8-7	600-635	815-860
7/16-20	45-50	61-68	1 1/8-12	665-700	920-950
1/2-13	62-68	84-92	1 1/4-7	850-895	1150-1215
1/2-20	68-75	92-102	1 1/4-12	940-990	1275-1340
9/16-12	90-98	22-133	1 3/8-6	1125-1175	1525-1590
9/16-18	100-110	134-148	1 3/8-12	1280-1335	1735-1810
5/8-11	120-135	162-183	1 1/2-6	1500-1560	2035-2115
5/8-18	124-137	168-186	1 1/2-12	1685-1755	2285-2380

### Complete Torque Chart - Capscrews - Grade 8

### **IMPORTANT**

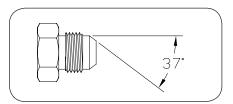
- Grade 8 capscrews can be identified by six radial dashes on head.
- For wheel torque requirements, refer to Wheels and Tires.
- Tighten U-bolts to have the same number of threads exposed on each end.

SIZE	FOOT POUNDS	NEWTON METERS	SIZE	FOOT POUNDS	NEWTON METERS
1/4-20	11-13	15-17	3/4-10	280-295	380-400
1/4-28	12-15	16-20	3/4-16	330-365	445-495
5/16-18	20-22	27-30	7/8-9	410-430	555-580
5/16-24	21-23	28-31	7/8-14	420-440	570-595
3/8-16	35-39	47-53	1-8	630-650	850-880
3/8-24	36-41	49-55	1-14	680-700	920-950
7/16-14	54-58	73-78	1 1/8-7	900-930	1220-1260
7/16-20	55-60	75-80	1 1/8-12	930-950	1260-1290
1/2-13	82-88	110-120	1 1/4-7	1250-1300	1695-1760
1/2-20	94-99	125-135	1 1/4-12	1280-1320	1735-1790
9/16-12	127-134	170-180	1 3/8-6	1665-1715	2250-2325
9/16-18	147-155	199-210	1 3/8-12	1750-1780	2370-2410
5/8-11	160-170	215-230	1 1/2-6	2225-2275	3015-3080
5/8-18	165-175	225-235	1 1/2-12	2285-2330	3100-3160

#### Hydraulic Fittings - Torque and Installation

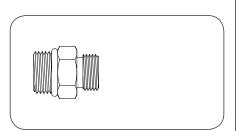
#### SAE Flare Connection (J.I.C.)

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



### SAE Straight Thread O-Ring Seal

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

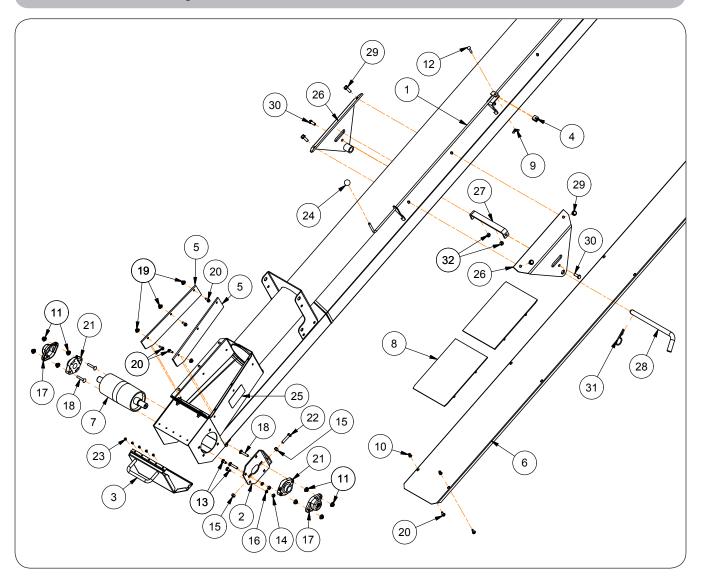


**4-8** (January 2017)

# SECTION V Parts

Idler End Components	5-2
Hopper Components	5-4
Transport & Pivot Support Stands	
Discharge Spout Components	5-10
Hydraulic Components	
Conveyor Option	

### **Idler End Components**

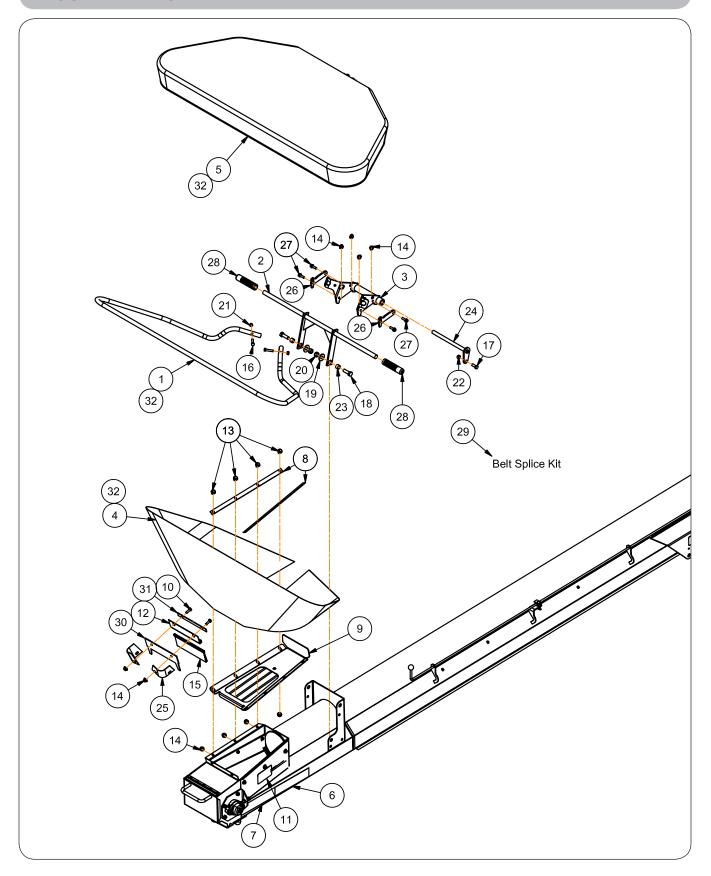


**5-2** (January 2017)

### Idler End Components (continued)

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	23698	Control Rod	1	
2	23912B	Adjustment Plate =Black=	1	
3	23923B	Clean Out Door Weldment =Black=	1	
4	24266	Friction Block	2	
5	24756	Poly Strip	2	
6	27165B	Bottom Shield =Black=	1	
7	900608	Idler Pulley	1	
8	900779	Conveyor Belt	1	
9	901056	Wing Nut 1/4-20UNC w/Nylon-Insert Lock	1	
10	902340	Rivet Nut 1/4-20 UNC	8	Grade 5
11	91257	Hex Nut/Large Flange 5/16-18UNC	8	Grade 5
12	9388-005	Carriage Bolt 1/4-20UNC x 1 1/2	1	Grade 5
13	9388-024	Carriage Bolt 5/16-18UNC x 3/4	4	Grade 5
14	9394-004	Hex Nut 5/16-18UNC	4	Grade 5
15	9394-006	Hex Nut 3/8-16UNC	2	Grade 5
16	9404-019	Lock Washer 5/16	4	
17	9500310	Cover	2	
18	9500341	Carriage Bolt 5/16-18UNC x 1 3/4	4	Grade 5
19	97189	Hex Nut/Large Flange 1/4-20UNC	6	
20	97420	Flange Screw 1/4-20 x 3/4	14	Grade 5
21	TA0-903088-0	Bearing w/Zerk	2	
22	TA0-907104-0	Capscrew 3/8-16UNC x 1 3/4 (Full Threaded)	1	Grade 5
23	TA0-908335-0	Rivet 3/16 x 3/8	5	
24	TA0-914793-0	Knob	1	
25	TA1-906109-0	Decal, WARNING (Moving Parts)	1	
26	25155B	Transport Mount Weldment =Black=	2	
27	25156B	Bar/Strap =Black=	1	
28	25157	Hitch Pin 3/4" Dia.	1	
29	91262	Flange Screw 3/8"-16UNC x 1"	4	
30	9390-055	Capscrew 3/8"-16UNC x 1"	2	
31	95959	Hairpin Cotter .1562"Dia. x 3	1	
32	9928	Locknut 3/8"-16UNC	2	

### **Hopper Components**

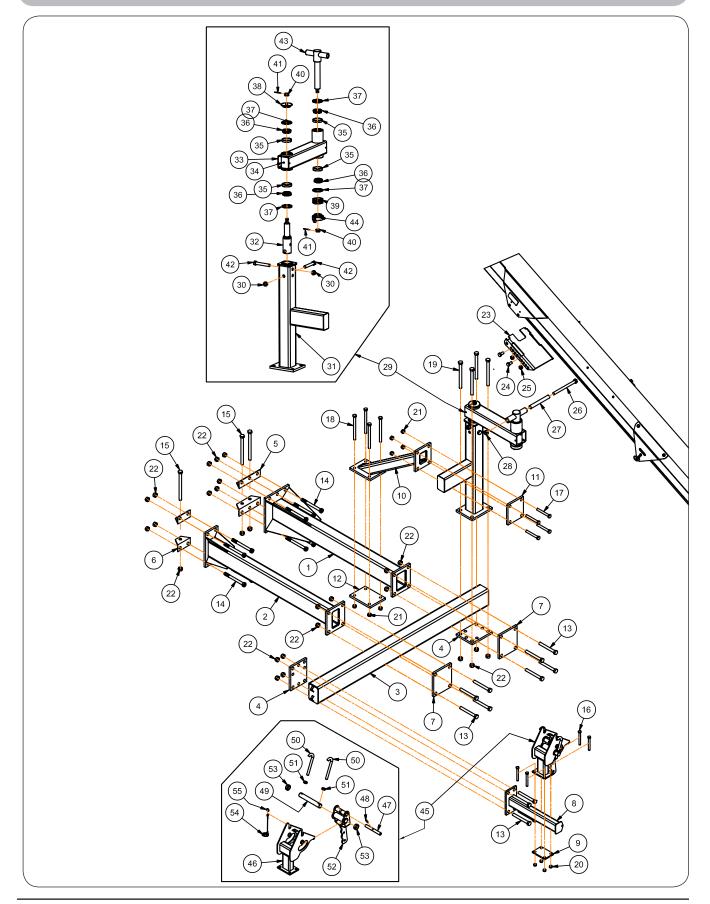


**5-4** (January 2017)

### Hopper Components (continued)

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	26918B	Upper Hopper Frame	1	
2	24576B	Handle Weldment	1	
3	24554B	Pivot Weldment	1	
4	902421	Hopper, Vinyl	1	
5	27715	Hopper Cover, Vinyl w/Bungee Cord	1	
6	9003125	Reflector =Fluorescent=	1	
7	9003126	Reflector =Red=	1	
8	24620B	Strap 3/4 x 17 1/2	2	
9	28400B	Guard	1	
10	9390-030	Capscrew 5/16-18UNC x 1	2	Grade 5
11	TA1-906109-0	Decal, WARNING (Moving Parts)	1	
12	24964	Brush Holder	1	
13	91256	Screw/Large Flange 5/16-18UNC x 3/4	8	Grade 5
14	91257	Hex Nut/Large Flange 5/16-18UNC	4	Grade 5
15	901111	Nylon Brush	1	
16	9390-032	Capscrew 5/16-18UNC x 1 1/2	2	Grade 5
17	9390-055	Capscrew 3/8-16UNC x 1	1	Grade 5
18	9390-101	Capscrew 1/2-13UNC x 1 1/2	1	Grade 5
19	9405-088	Flat Washer 1/2	2	
20	9800	Locknut 1/2-13UNC	2	Grade 5
21	9807	Locknut 5/16-18UNC	2	Grade 5
22	9928	Locknut 3/8-16UNC		Grade 5
23	24550	Bushing		
24	24578	Pin Weldment		
25	24986	Poly Strip		
26	25434B	Shim Plate	2	
27	901044	Screw/Small Flange 5/16-18UNC x 1	4	Grade 5
28	92928	Grip/Handle Bar	2	
29	9501506	Belt Splice Kit	-	
30	26865	Belt Seal	1	
31	28486B	Strap 3/4 x 7 1/2	1	
32	27717B	6" Hopper Kit (Not Shown)	-	Includes Items: 1, 4, 5

### **Transport & Pivot Support Stands**



**5-6** (January 2017)

### Transport & Pivot Support Stands (continued)

ITEM	DESCRIPTION	PART NO.	QTY	NOTES
1	Main Arm Weldment =Black=	2004136B	1	
2	Transport Arm Weldment =Black=	2004139B	1	
3	Cross Tube Weldment =Black=	2004144B	1	
4	Plate 6 3/4" x 8 1/2" =Black=	2004150B	2	
5	Angle with 5 Holes =Black=	2004151B	2	
6	Angle with 3 Holes =Black=	2004152B	2	
7	Plate 7 1/2" x 8 1/2" =Black=	2004154B	2	
8	Transport Bracket Mounting Tube =Black=	2005106B	1	
9	Plate 3 3/4" x 5 1/4" =Black=	2005113B	1	
10	Vertical Post Brace Assembly =Black=	2005127B	1	
11	Plate 6 1/2" x 7 1/4" =Black=	2005131B	1	
12	Plate 6 1/2" x 8 1/2" =Black=	2005132B	1	
13	Capscrew 3/4"-10UNC x 6 1/2"	91299-158	12	Grade 8
14	Capscrew 3/4"-10UNC x 8"	91299-161	10	Grade 8
15	Capscrew 3/4"-10UNC x 10"	91299-257	3	Grade 8
16	Capscrew 1/2"-13UNC x 4 1/2"	9390-112	4	Grade 5
17	Capscrew 5/8"-11UNC x 5"	9390-134	4	Grade 5
18	Capscrew 5/8"-11UNC x 8 1/2"	9390-441	4	Grade 5
19	Hcs 3/4"-10UNC x 9"	9390-449	4	Grade 5
20	Top Locknut 1/2"-13UNC	9800	4	
21	Top Locknut 5/8"-11UNC	9801	8	
22	Top Locknut 3/4"-10UNC	9802	29	
23	Channel =Black=	26564B	1	
24	Capscrew 5/8"-11UNC x 1 1/4"	9390-121	4	Grade 5
25	Top Locknut 5/8"-11UNC	9801	4	
26	Capscrew 3/4"-10UNC x 9"	9390-449	1	Grade 5
27	Bushing	25307	1	
28	Top Locknut 3/4"-10UNC	9802	1	

(Continued on next page)

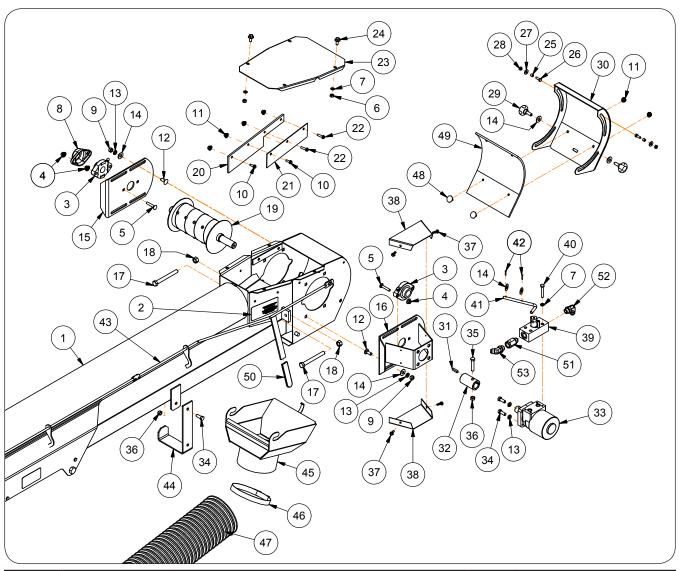
# Transport & Pivot Support Stands (continued)

ITEM	ITEM DESCRIPTION PART NO. QTY		NOTES	
29	Vertical Post Assy	2004191B	1	Includes Items 30 through 44
30	Top Locknut 3/4"-10UNC	9802	2	
31	Vertical Post Weldt	2004165B	1	
32	Pivot Post	2001844	1	
33	Pivot Arm =Black=	25535B	1	
34	Grease Zerk	91160	2	
35	Bearing Cup	9349	2	
36	Bearing Cone	9247	4	
37	2 1/4" Seal	9355	4	
38	Cap =Black=	25804B	1	
39	Wave Washer	901564	3	
40	Slotted Nut 3/4"-10UNC	9393-015	2	
41	Cotter Pin 1/8" Dia. x 2"	9391-027	2	
42	Capscrew 3/4"-10UNC x 5"	9390-155	2	Grade 5
43	Pivot Weldment =Black=	2004177B	1	
44	Cap Weldment =Black=	25541B	1	
45	Transport Bracket Assembly =Black=	2004172B	1	Includes Items 46 through 55
46	Transport Bracket Weldment =Black=	2004171B	1	
47	Shaft	2003128	1	
48	Roll Pin 5/16" Dia. x 1 1/4"	9392-153	1	
49	Shaft	2003119	1	
50	Draw Hook	2003118	2	
51	Hex Jam Nut 5/8"-18UNF	9395-013	2	
52	52 Latch Handle =Black= 2003123B 1			
53	Bushing	2003138	2	
54	Lynch Pin W/Lanyard	901170	1	
55	Split Ring	9501116	1	

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### Notes

### **Discharge Spout Components**



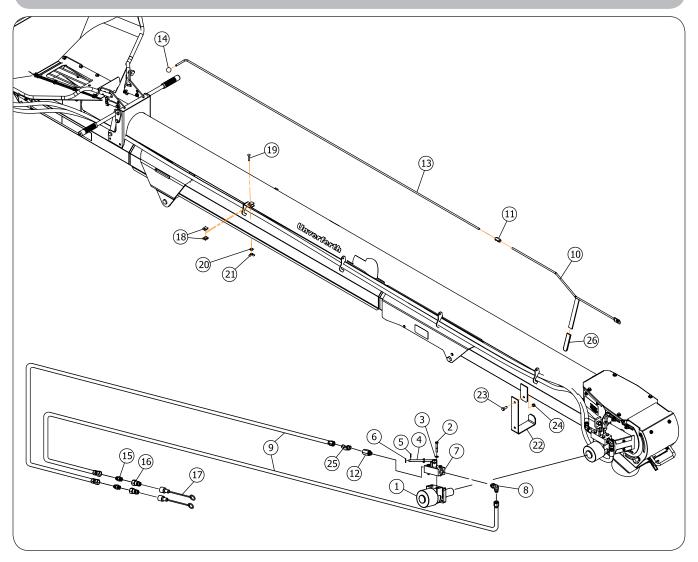
ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	2005363B	Conveyor Weldment with clean out door	1	Includes decals
2	95445	Decal, WARNING (High Pressure Oil)	2	
3	TA0-903088-0	Bearing w/Zerk	2	
4	91257	Hex Nut/Large Flange 5/16-18UNC	6	Grade 5
5	9500341	Carriage Bolt 5/16-18UNC x 1 3/4	4	Grade 5
6	9394-004	Hex Nut 5/16-18UNC	4	Grade 5
7	9404-019	Lock Washer 5/16	4	
8	9500310	Bearing Cover	1	
9	9394-006	Hex Nut 3/8-16UNC	8	Grade 5
10	97420	Flange Screw 1/4-20UNC x 3/4	4	Grade 5
11	97189	Hex Nut/Large Flange 1/4-20UNC	12	Grade 5
12	9388-051	Carriage Bolt, 3/8-16UNC x 1	8	Grade 5
13	9404-021	Lock Washer 3/8	12	
14	9405-076	Flat Washer 3/8	12	

**5-10** (January 2017)

### Discharge Spout Components (continued)

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
15	23994B	Adjustment Plate	1	
16	24091B	Bracket Weldment	1	
17	93400	Capscrew 1/2-13UNC x 4 1/2 (Full Threaded)	2	Grade 5
18	9394-010	Hex Nut 1/2-13UNC	2	Grade 5
19	901077	Drive Pulley	1	
20	24755	Poly Strip	2	
21	24260	Seal	2	
22	901101	Flange Screw 1/4-20UNC x 1	4	Grade 5
23	23918B	Top Shield	1	
24	91256	Screw/Large Flange 5/16-18UNC x 3/4	4	Grade 5
25	22018	Tube/Bushing	2	
26	9390-003	Capscrew 1/4-20UNC x 3/4	2	Grade 5
27	9405-064	Flat Washer 1/4	2	
28	9936	Locknut 1/4-20UNC	2	Grade 5
29	901046	Knob/Plastic	2	
30	26214B	Deflector Weldment	1	
31	9001501	Keystock 1/4 x 1/4 x 1	1	
32	23690	Coupler	1	
	91604B	Hydraulic Motor w/0-Rings	1	
33	91306	O-Ring (Repair Purposes Only)	-	
	91687	Seal Kit (Repair Purposes Only)	-	
34	9390-055	Capscrew 3/8-16UNC x 1	5	
35	9390-059	Capscrew 3/8-16UNC x 2	1	
36	9928	Locknut 3/8-16UNC	2	
37	9473	Screw/Self-Drilling 1/4-20UNC x 3/4	4	
38	24399B	Shield	2	
00	95488	Valve - Hydraulic Control	1	
39	96918	Seal Kit	-	
40	9390-034	Capscrew 5/16-18UNC x 2	4	
41	23693	Handle 3/8" Dia.	1	
42	9392-056	Roll Pin 1/8" Dia. x 3/4	2	
43	25205	Control Rod Weldment	1	
44	24414B	Bracket	1	
45	26220B	Spout Weldment	1	
46	98060	Clamp/T-Bolt	1	
47	TAAU14170	Flex Spout	1	
48	902006	Elevator Bolt 1/4-20UNC x 3/4	4	
49	901723	Neoprene Sheet 9 x 11 1/2	1	
50	900209	Vinyl Handle	1	
51	94909	In-Line Check Valve	1	
52	9863	90° Elbow 3/4-16 JIC Male x 3/4-16 O-Ring Male	1	
53	93586	45° Elbow 3/4-16 JIC Male x 3/4-16 O-Ring Male	1	

# **Hydraulic Components**



ITEM	PART NO.	DESCRIPTION	QTY	NOTES
4	91604B	Hydraulic Motor 6 CU. IN.		
1	91687	Seal Kit for Hydraulic Motor	] '	
2	9390-034	Capscrew 5/16-18UNC x 2	2	Grade 5
3	9404-019	Lock Washer 5/16	2	
4	23693	Handle	1	
5	9392-056	Roll Pin 1/8" Dia. x 3/4" Long	2	
6	9405-076	Flat Washer 3/8	2	
7	95488	Hydraulic Control Valve w/ 3/4-16 Ports		
_ ′	96918	Seal Kit for Hydraulic Control Valve	] '	
8	9863	90° Elbow 3/4-16 JIC Male x 3/4-16 O-Ring Male	1	
9	23851	Hose 1/2 x 252 (3000 PSI)	2	
10	25205	Control Rod Weldment	1	
11	23701	Coupler 1 1/4" Long	1	
12	94909	In-Line Check Valve w/ 3/4-16 O-Ring Ports	1	

**5-12** (January 2017)

### **Hydraulic Components** (continued)

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
13	23698	Control Rod 5/16" Dia.	1	
14	TA0-914793-0	Knob	1	
15	9864	Adapter 3/4-16 JIC Male x 3/4-16 O-Ring Male	2	
16	91383	Male Tip Coupling 3/4-16 O-Ring Female Thrd	2	
17	91511	Dust Cap	2	
18	24266	Friction Block	2	
19	9388-004	Carriage Bolt 1/4-20UNC x 1 1/4	1	Grade 5
20	9405-064	Flat Washer 1/4	1	
21	901056	Wing Nut 1/4-20UNC w/Nylon-Insert Lock	1	
22	24414B	Spout Bracket/Holder	1	
23	9390-055	Capscrew 3/8-16UNC x 1	1	Grade 5
24	9928	Locknut 3/8-16UNC	1	Grade 5
25	93586	45° Elbow, 3/4-16JIC M x 3/4-16 O-R ADJ M	1	
26	900209	Vinyl Handle	1	

### **Conveyor Option**

