



# Field Loader Conveyor

**Model: FLC-16**

Owner's Manual

**PNEG-2259**

Version: 1.0

Date: 01-29-2019





# Introduction

Thank you for choosing GSI for your equipment needs. We appreciate your business and will work diligently to ensure that you are satisfied with your choice.

## **OVERVIEW**

The purpose of this manual is to provide you with the basic information needed to operate and maintain the Field Loader Conveyor . It does not hold GSI liable for any accidents or injuries that may occur.

The technical information provided in this document is based on extensive testing under controlled conditions at the research and development facility.

This information is given without guarantee as the conditions of operation and storage of the equipment are beyond our control. Variables such as temperature, humidity, and changes in grain size or variety may all effect the transfer rate and maximum angle.

## **OPERATOR RESPONSIBILITIES**

As the purchaser/owner/operator of this equipment and control system, you have an obligation to install, operate, and maintain the equipment in a manner that minimizes the exposure of people in your care to any potential hazards inherent in using this equipment. It is critical that the owner of this equipment:

- Has a clear and documented understanding of the process this machine is being used in and of any resulting hazards or special requirements arising from this specific application.
- Allow only properly trained and instructed personnel to install, operate or service this equipment.
- Maintain a comprehensive safety program involving all who work with this machine and other associated process equipment.
- Establish clear areas of staff responsibility (e.g. operation, setup, sanitation, maintenance, and repairs).
- Provide all personnel with necessary safety equipment.
- Periodically inspect the equipment to insure that the doors, covers, guards, and safety devices are in place and functioning, that all safety instructions and warning labels are intact and legible, and that the equipment is in good working order.
- In addition to the operating instructions, observe and enforce the applicable legal and other binding regulations, national and local codes.

As the person with the most to gain or lose from working safely, it is important that you work responsibly and stay alert. By following a few simple rules, you can prevent an accident that could injure or kill you or a co-worker.

- Disconnect, lockout, and tagout electrical and all other energy sources before inspecting, cleaning, servicing, repairing, or any other activity that would expose you to the hazards of electrical shock.
- Do not operate, clean, or service this equipment until you have read and understood the contents of this manual. If you do not understand the information in this manual, bring it to the attention of your supervisor, or call GSI at (217) 226-4421 for assistance.
- Any operator who is known or suspected to be under the influence of alcohol or drugs should not be allowed to operate the equipment.
- Understand and follow the safety practices required by your employer and this manual.
- **PAY ATTENTION** to what you and other personnel are doing and how these activities may affect your safety.
- **Failure to follow these instructions may result in serious personal injury or death.**

### RECEIVING YOUR EQUIPMENT

As soon as the equipment is received, it should be carefully inspected to make certain that it has sustained no damage during shipment and that all items listed on the packing list are accounted for. If there is any damage or shortages, the purchaser must immediately notify GSI. Ownership passes to purchaser when the unit leaves the GSI premises. The purchaser is responsible for unloading and mounting all components of the equipment.

Document the serial number of the machine for future reference. The serialization label is located on the inlet end the conveyor near the transition.



**SERIAL NUMBER:** \_\_\_\_\_



---

# Table of Contents

| <b><u>Section</u></b> | <b><u>Contents</u></b>                                | <b><u>Page #</u></b> |
|-----------------------|---|----------------------|
| <b>Section A</b>      | <b>Safety Instructions</b> .....                      | <b>6</b>             |
| <b>Section B</b>      | <b>Installation</b> .....                             | <b>17</b>            |
| <b>Section C</b>      | <b>Mechanical Operation</b> .....                     | <b>28</b>            |
|                       | Conveyor Overview .....                               | 29                   |
|                       | Controls, Pre-Operation Checklist, Operation .....    | 30                   |
|                       | Operating Hints, Emergency Stopping, Restarting ..... | 31                   |
|                       | Machine Break-in .....                                | 32                   |
| <b>Section D</b>      | <b>Troubleshooting</b> .....                          | <b>33</b>            |
|                       | Unplugging .....                                      | 34                   |
| <b>Section E</b>      | <b>Maintenance</b> .....                              | <b>35</b>            |
|                       | Belt Tensioning & Alignment - Inlet End .....         | 37                   |
|                       | Belt Alignment - Transition .....                     | 38                   |
|                       | Belt Alignment - Head End .....                       | 39                   |
|                       | Belt Replacement .....                                | 40                   |
|                       | Drive Belt Tensioning & Alignment .....               | 41                   |
| <b>Section F</b>      | <b>Belt Tensioning Specification</b> .....            | <b>42</b>            |
| <b>Section G</b>      | <b>Storage</b> .....                                  | <b>43</b>            |
| <b>Section H</b>      | <b>Mechanical Drawings</b> .....                      | <b>44</b>            |
| <b>Section I</b>      | <b>Limited Warranty</b> .....                         | <b>59</b>            |

# Safety Instructions

## Section A

Every year accidents in the work place maim, kill and injure people. Although it may be impossible to prevent all accidents, with the right combination of training, operating practices, safety devices and operator vigilance, the number of accidents can be significantly reduced. The purpose of this section is to educate equipment users about hazards, unsafe practices and recommended hazard avoidance techniques.

### SAFETY WORDS AND SYMBOLS

It is very important that operators and maintenance personnel understand the words and symbols that are used to communicate safety information. Safety words, their meaning and format, have been standardized for U.S. manufacturers and published by the American National Standards Institute (ANSI). The European Community (E.C.) has adopted a different format based on the International Standards Organization (I.S.O.) and applicable machinery directives. Both formats are presented below. Graphic symbols are not standardized but most manufacturers will use some variation of the ones seen in this manual.



Indicates an imminently hazardous situation which, if not avoided, **will** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **could** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **may** result in minor or moderate injury and/or property damage.



Provides additional information that the operator needs to be aware of to avoid a potentially hazardous situation.



**Mandatory Lockout Power Symbol.** Disconnect, lockout and tagout electrical and other energy sources before inspecting, cleaning or performing maintenance on this panel.



**International Safety Alert Symbol.** The exclamation point (!) surrounded by a yellow triangle indicates that an injury hazard exists. However, it does not indicate the seriousness of potential injury. The exclamation point (!) is also used with the DANGER, WARNING and CAUTION symbols so the potential injury is indicated.



**Electrocution Hazard Symbol.** This symbol indicates that an electrocution hazard exists. Serious injury or death could result from contacting high voltage.



**International Electrocution Hazard.** This symbol indicates that an electrocution hazard exists. Serious injury or death could result from contacting high voltage.



**Mandatory Read Manual Action Symbol.** (I.S.O. format) This symbol instructs personnel to read the Operators Manual before servicing or operating the equipment.



**Mandatory Read Manual Action Symbol.** This symbol instructs personnel to read the Operators Manual before servicing or operating the equipment.

Notice is used to notify people of important installation, operation or maintenance information which is not hazard related.

**NOTICE**

## **LOCKOUT / TAGOUT PROCEDURES**

Lockout/Tagout is the placement of a lock/tag on an energy isolating device in accordance with an established procedure. When taking equipment out of service to perform maintenance or repair work, always follow the lockout/tagout procedures as outlined in ANSI Z344.1 and/or OSHA Standard 1910.147. This standard “requires employers to establish a program and utilize procedures for affixing appropriate lockout devices or tagout devices to energy isolating devices and to otherwise disable machines or equipment to prevent unexpected energizing, start-up, or release of stored energy in order to prevent injury to employees.”

## **CONTROLLED STOP**

This is the stopping of machine motion by reducing the electrical command signal to 0 (zero) once the stop signal has been recognized.

## **HAZARD REVIEW**

### **Electrocution Hazard**



Electrocution accidents are most likely to occur during maintenance of the electrical system or when working on or near exposed high voltage wiring. This hazard does not exist when the electrical power has been disconnected, properly locked, and tagged out.

### **Automatic Start Hazard**



This equipment may be controlled by an automated system and may start without warning. Failure to properly disconnect, lockout, and tagout all energy sources of remotely controlled equipment creates a very hazardous situation and could cause injury or even death. PLEASE STAY CLEAR AND BE ALERT.



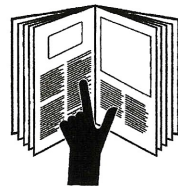
**YOU** are responsible for the **SAFE** operation and maintenance of your GSI equipment . **YOU** must ensure that you and anyone else who is going to operate, maintain or work around the equipment be familiar with the operating and maintenance procedures and related **SAFETY** information contained in this manual. This manual will take you step-by-step through your working day and alert you to good safety practices that should be adhered to while operating the equipment

Remember, **YOU** are the key to safety. Good safety practices not only protect you, but also the people around you. Make these practices a working part of your safety program. Be certain that **EVERYONE** operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

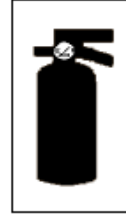
- Equipment owners must give operating instructions to operators or employees before allowing them to operate the machine, and at least annually thereafter per OSHA (Occupational Safety and Health Administration) regulation 1928.57.
- The most important safety device on this equipment is a **SAFE** operator. It is the operator's responsibility to read and understand **ALL** Safety and Operating instructions in the manual and to follow them. All accidents can be avoided.
- A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.
- Think **SAFETY!** Work **SAFELY!**

### GENERAL SAFETY

1. Read and understand the operator's manual and all safety labels before operating, maintaining, adjusting or unplugging the equipment .
2. Only trained persons shall operate the equipment . An untrained operator is not qualified to operate the machine.
3. Have a first-aid kit available for use should the need arise, and know how to use it.



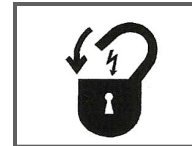
4. Provide a fire extinguisher for use in case of an accident. Store in a highly visible place.
5. Do not allow children, spectators or bystanders within hazard area of machine.
6. Wear appropriate protective gear. This includes but is not limited to:



- A hard hat
- Protective shoes with slip resistant soles
- Protective goggles
- Heavy gloves
- Hearing protection
- Respirator or filter mask



7. Place all controls in neutral or off, stop motor, and wait for all moving parts to stop. Then disable power source before servicing, adjusting, repairing, or unplugging.
8. Review safety related items annually with all personnel who will be operating or maintaining the equipment.

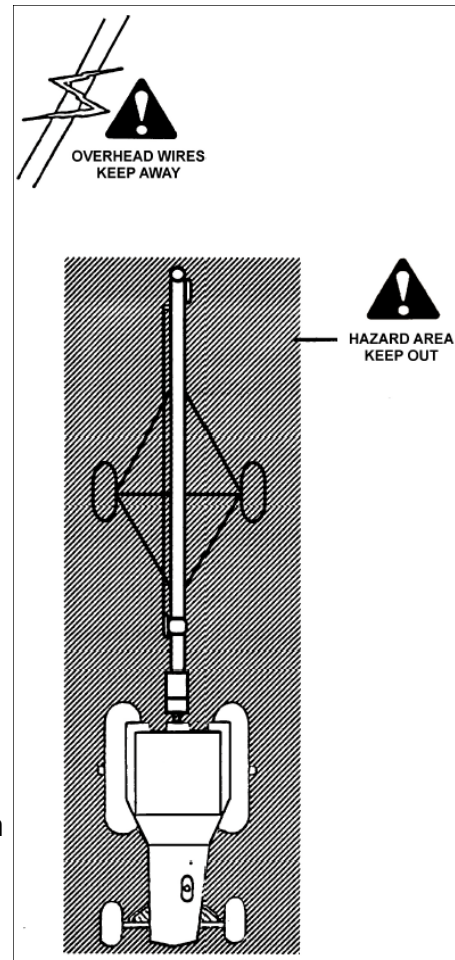


### **OPERATING SAFETY:**

1. Read and understand the operator's manual and all safety labels before using.
2. Disconnect and disable electrical supply completely and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
3. Clear the area of bystanders, especially children, before starting.
4. Be familiar with the machine hazard area. If anyone enters hazard area, shut down machine immediately. Clear the area before restarting.
5. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
6. Stay away from overhead obstructions and power lines during operation and transporting. Electrocution can occur without direct contact.
7. Do not operate machine when any guards are removed.
8. Inspect welds and repair if needed.

### **TRANSPORT SAFETY**

1. Read and understand ALL the information in the operator's manuals regarding procedures and SAFETY when moving or transporting the conveyor.
2. Check with local authorities regarding conveyor transport on public roads. Obey all applicable laws and regulations.
3. Always travel at a safe speed. Use caution when making corners or meeting traffic.
4. Make sure the SMV (Slow Moving Vehicle) emblem and all the lights and reflectors that are required by the local highway and transport authorities are in place, are clean and can be seen clearly by all overtaking and oncoming traffic.
5. Do not allow riders on the conveyor or the towing vehicle when transporting.
6. Attach conveyor to towing vehicle with a pin and retainer.
7. Lower conveyor to its lowest position for transporting.
8. Keep to the right and yield the right-of-way to allow faster traffic to pass. Drive on the road shoulder, if permitted by law.
9. Do not exceed 25 m.p.h. (40 km/h). Reduce speed on rough roads and surfaces.
10. Stay away from overhead obstructions and power lines when transporting. Electrocutation can occur without direct contact.
11. Always use hazard warning flashers on tractor when transporting unless prohibited by law.



### **PLACEMENT SAFETY**

1. Move only with the appropriate equipment
2. Stay away from overhead power lines when moving the conveyor. Electrocutation can occur without direct contact.
3. Be familiar with machine hazard area. If anyone enters hazard areas, shut down machine immediately. Clear the area before restarting.
4. Operate the conveyor on level ground free of debris. Anchor the conveyor to prevent tipping or upending.

### **TIRE SAFETY**

1. Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death.
2. Do not attempt to mount a tire unless you have the proper equipment and experience to do the job.
3. Have a qualified tire dealer or repair service perform required tire maintenance.
4. When replacing worn tires, make sure they meet the original tire specifications. Never undersize.



Before placement of the conveyor, be sure that ground is reasonably level. The conveyor may topple or work improperly if the ground is too uneven, damaging the equipment and/or causing personal injury.



When releasing the conveyor from the towing vehicle, test the intake end for downward weight. Do not raise the intake end above drawbar height. When the intake end is elevated too high with machine in raise position, the balance of weight quickly transfers to the discharge end,

### **MAINTENANCE SAFETY**

1. Review the operator's manual and all safety items before working with, maintaining or operating the equipment.
2. Place all controls in neutral or off, stop motors, disable power source, and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
3. Follow good shop practices:  
Keep service area clean and dry.  
Be sure electrical outlets and tools are properly grounded.  
Use adequate light for the job at hand.
4. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
5. Clear the area of bystanders, especially children, when carrying out any maintenance and repairs or making any adjustments.
6. Before resuming work, install and secure all guards when maintenance work is completed.
7. Keep safety signs clean. Replace any sign that is damaged or not clearly visible.





## **SAFETY LABELS**

1. Keep safety labels clean and legible at all times.
2. Replace safety labels that are missing or have become illegible.
3. Replaced parts that displayed a safety label should also display the current label.
4. Replacement safety labels are available. Contact GSI at (217) 226-4421.

### **How to Install Safety Labels:**

- Be sure that the installation area is clean and dry.
- Be sure temperature is above 50°F (10°C).
- Decide on the exact position before you remove the backing paper.
- Remove the smallest portion of the split backing paper.
- Align the sign over the specified area and carefully press the small portion with the exposed sticky backing in place.
- Slowly peel back the remaining paper and carefully smooth the remaining portion of the sign in place.
- Small air pockets can be pierced with a pin and smoothed out using the piece of sign backing paper.



Located on the GSI equipment you will find safety labels. Always be sure to read and follow all directions on the labels.





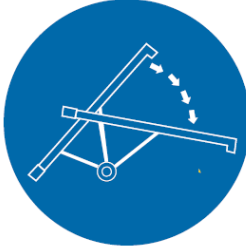
Guards provided with GSI equipment are to remain in place during operation.

Think **SAFETY!** Work **SAFELY!**


REMEMBER—If safety labels have been damaged, removed, become illegible, or parts replaced without safety labels, new labels must be applied. New safety labels are available from GSI at (217) 226-4421.

**DC-2417 & DC-2467 — Decals located at the hitch.**



| <b>SAFE OPERATING INSTRUCTIONS</b>  |                        |
|---|------------------------|
| <p>Make certain everyone is clear of area before operating or moving conveyor.</p> <p>Disconnect power before resetting motor overload.</p> <p>Be sure electric motors are grounded.</p> <p>Support discharge end or anchor intake end to prevent upending.</p> <p>Empty conveyor before moving to prevent upending.</p> <p>Lower conveyor to its fully down position before moving or transporting. Use a tractor to move and transport.</p> |                        |
| <small>GSI Group Inc. 217-226-4421</small>  | <small>DC-2471</small> |

|  <b>DANGER</b>  |  |
|--|--|
|   |  |
| <p>Contact with overhead power lines can result in electrocution.</p> <p>DO NOT allow conveyor to make contact with or come close to power lines. Electrocution can occur without direct contact.</p> <p>Lower conveyor well below level of power lines before moving or transporting.</p> |  |
| <small>GSI Group Inc. 217-226-4421</small>   | <small>DC-2467</small>   |

**DC-2466 - Located at all conveyor access doors and all conveyor inlet / outlet points.**

|   |         |
|---|---------|
|  <b>WARNING</b>  |         |
|   |         |
| <p>Moving parts can crush, cut and trap. Injury or death can result.</p> <p>DO NOT stand on machine or contact moving parts during operation.</p> <p>DO NOT operate without guards in place.</p> <p>Keep hands, feet, hair and loose clothing away from moving parts.</p> <p>Lock-out power before servicing.</p> |         |
| GSI Group Inc. 217-226-4421   | DC-2466 |

**DC-2470- Located on conveyor housing, near front , top.**

|  |   |
|--|---|
| <b>NOTICE</b>  |   |
| <br> | <p>Operator must align belt of conveyor before loading. Conveyor must be run with no load when checking alignment.</p> <p>Read operator's manual. Refer to the maintenance section of the operator's manual for instructions to properly align the belt.</p> <p><b>FAILURE TO PROPERLY ALIGN BELT COULD RESULT IN PREMATURE WEAR OR BELT FAILURE.</b></p> |
| GSI Group Inc. 217-226-4421  | DC-2470   |

**DC-2468 - Located on belt guard (over motor belt / sheaves).**



**DC-2469- Located on body of field loader, by motor belt / sheaves.**



Section  
B

# Installation



Be sure to use safe working habits when installing your equipment. Installation of the Field Loader conveyor requires physical strength and strain, make sure you are in healthy physical condition. GSI is not liable for any injuries that occur while installing.



**HIGH VOLTAGE** ~ Always disconnect the power source before working on or near the control panel or lead wires.



**HIGH VOLTAGE** ~ Use insulated tools when making adjustments while the controls are under power.

## UNDERCARRIAGE ASSEMBLY

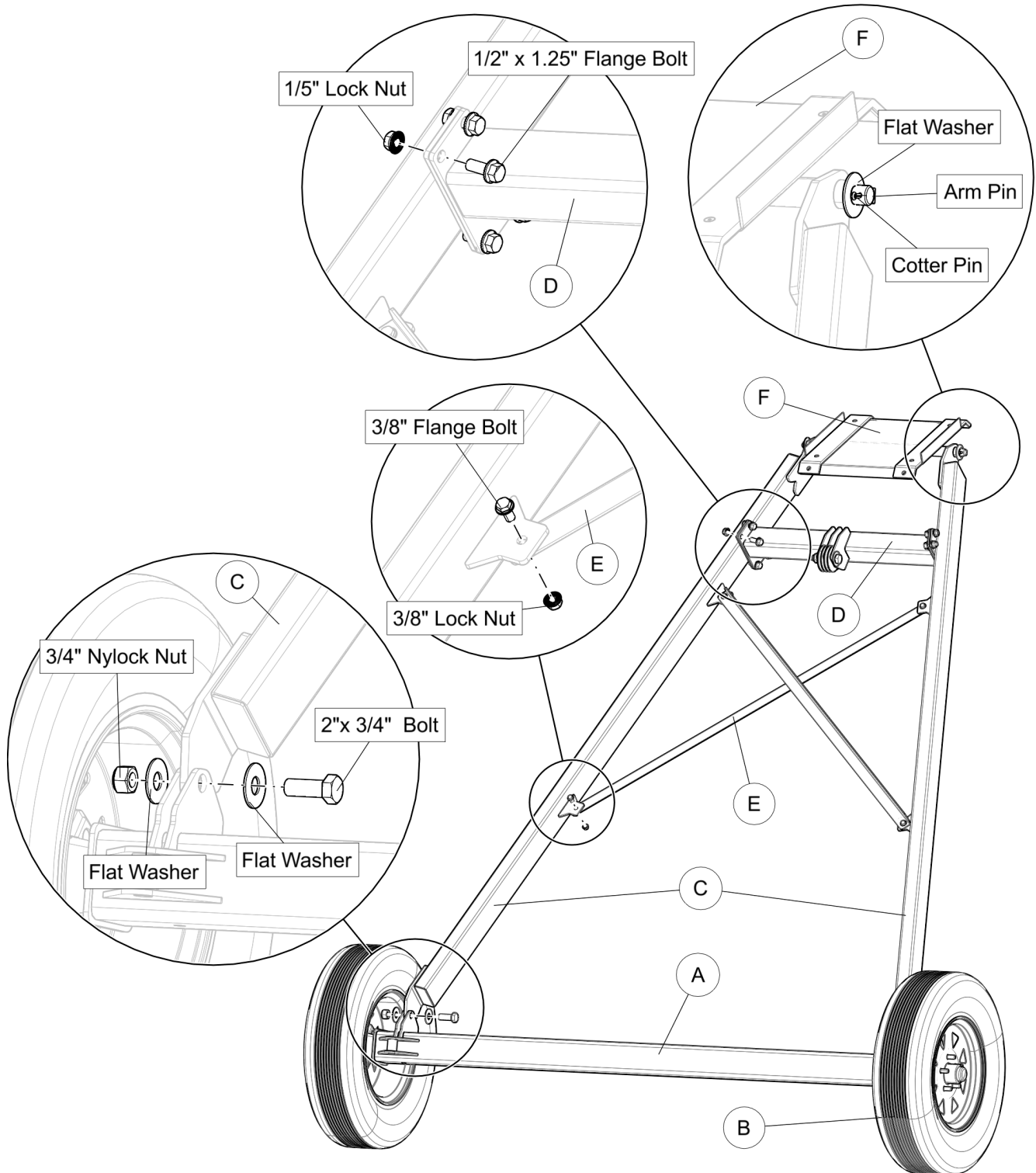
The following instructions should be used to assemble your GSI conveyor undercarriage.

**NOTE:** Leave all hardware loose until all components are assembled.

### Upper Undercarriage Assembly

1. Lay the Axle flat on the ground **(A)**.
2. Mount both tires **(B)** to the axle **(A)**.
3. Assemble the upper arm weldments **(C)** to the axle **(A)** using 2" x 3/4" bolts, flat washers and nylock nuts.
4. Assemble the upper pulley cross member **(D)** to both upper arm weldments **(C)** using 1/2" x 1.25" flange bolts and lock nuts. Make sure the pulleys are facing towards the axle and the weldment is on top.
5. Assemble the upper cross braces **(E)** using 3/8" flange bolts and lock nuts.
6. Using the upper arm pin, assemble the Transport Slide **(F)**. Secure the arm pin with two flat washers and cotter pins on each end.

### UPPER UNDERCARRIAGE ASSEMBLY



## **UNDERCARRIAGE ASSEMBLY**

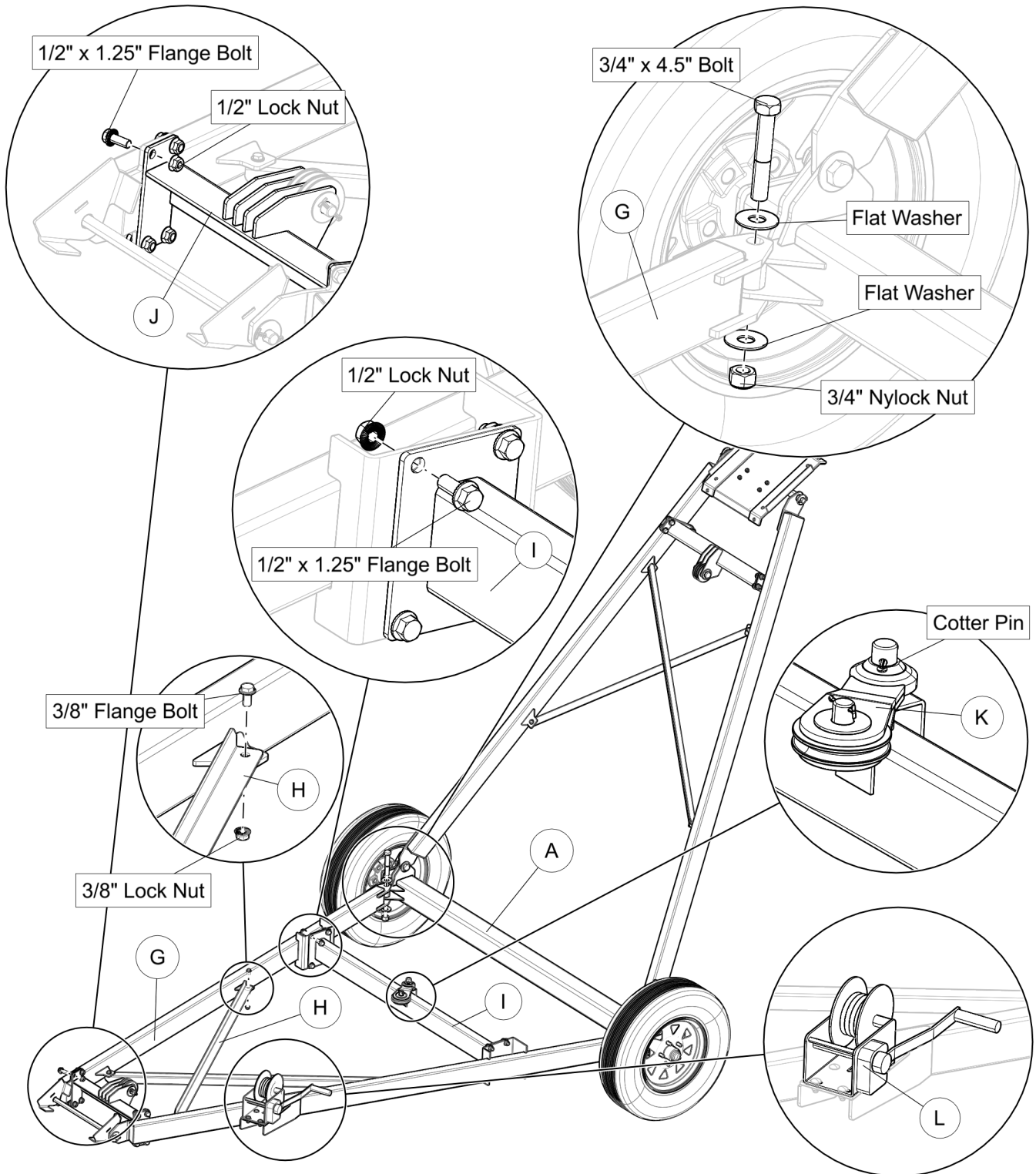
The following instructions should be used to assemble your GSI conveyor undercarriage.

**NOTE:** Leave all hardware loose until all components are assembled.

### **Lower Undercarriage Assembly**

7. Assemble the lower arm weldments **(G)** to the axle **(A)** using 3/4" x 4.5" bolts, flat washers, and nylock nuts.
8. Assemble the lower cross braces **(H)** using 3/8" flange bolts and lock nuts.
9. Assemble the lower pulley cross member **(J)** to the lower arm weldments **(G)** using 1/2" x 1.25" flange bolts and lock nuts.
10. Assemble the pulley weldment support **(I)** to the lower arm weldments **(G)** using 1/2" x 1.25" flange bolts and lock nuts.
11. Install the pulley assembly **(K)** onto the mounting pivot on the pulley weldment support **(I)** using a cotter pin.
12. Install the winch **(L)** using 3/8" x 1" flange bolts and lock nuts.
13. Fully tighten all of the hardware on the undercarriage.

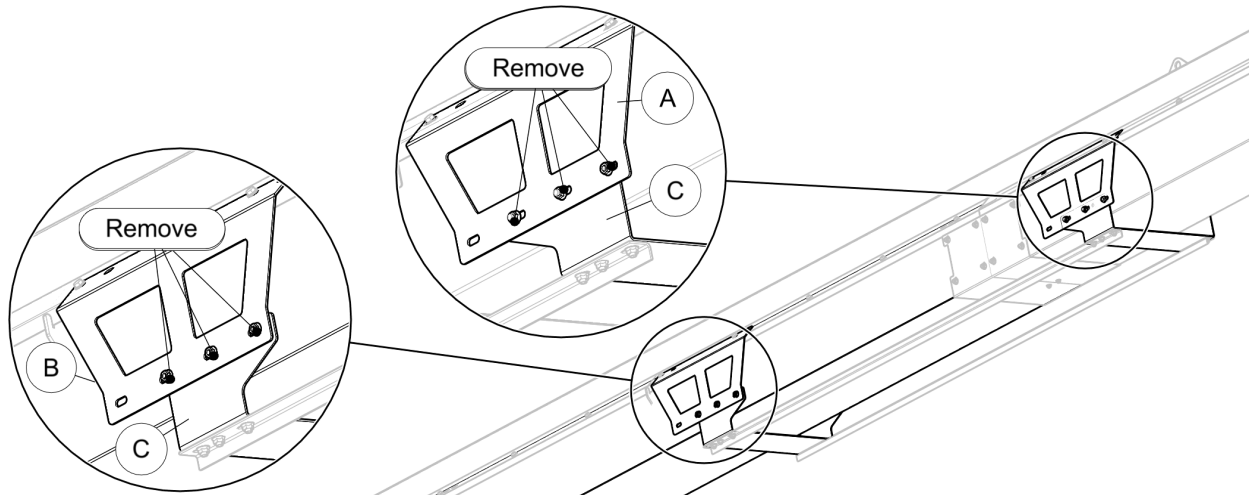
## LOWER UNDERCARRIAGE ASSEMBLY



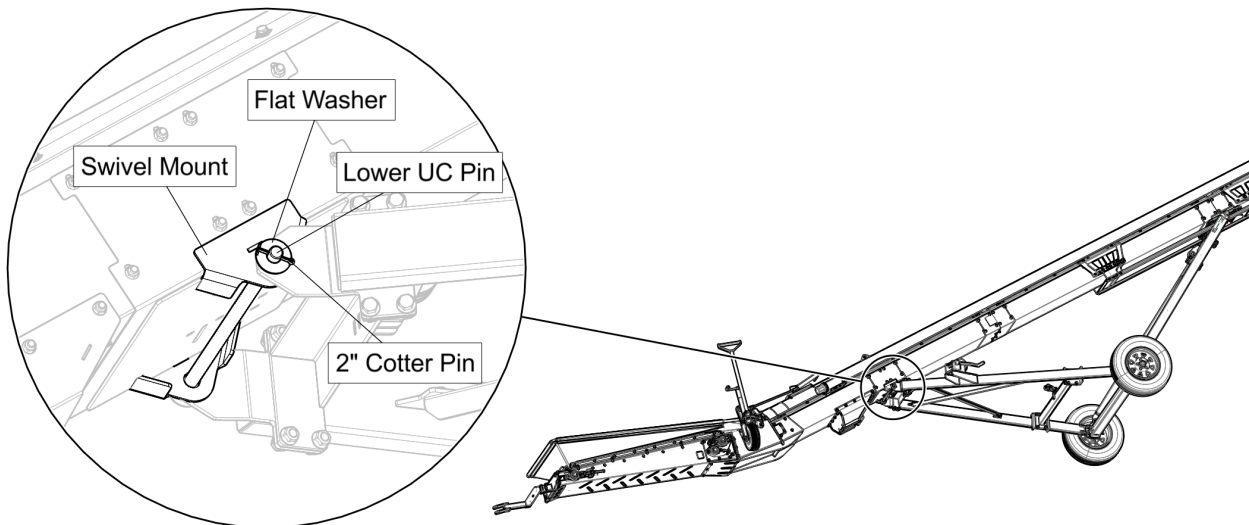


## UNDERCARRIAGE AND BASE CONVEYOR ASSEMBLY

1. Uninstall the slide stop from the base conveyor by removing the 12 bolts and nuts connecting the upper side plate stops **(A & B)** and the transport stops **(C)**.

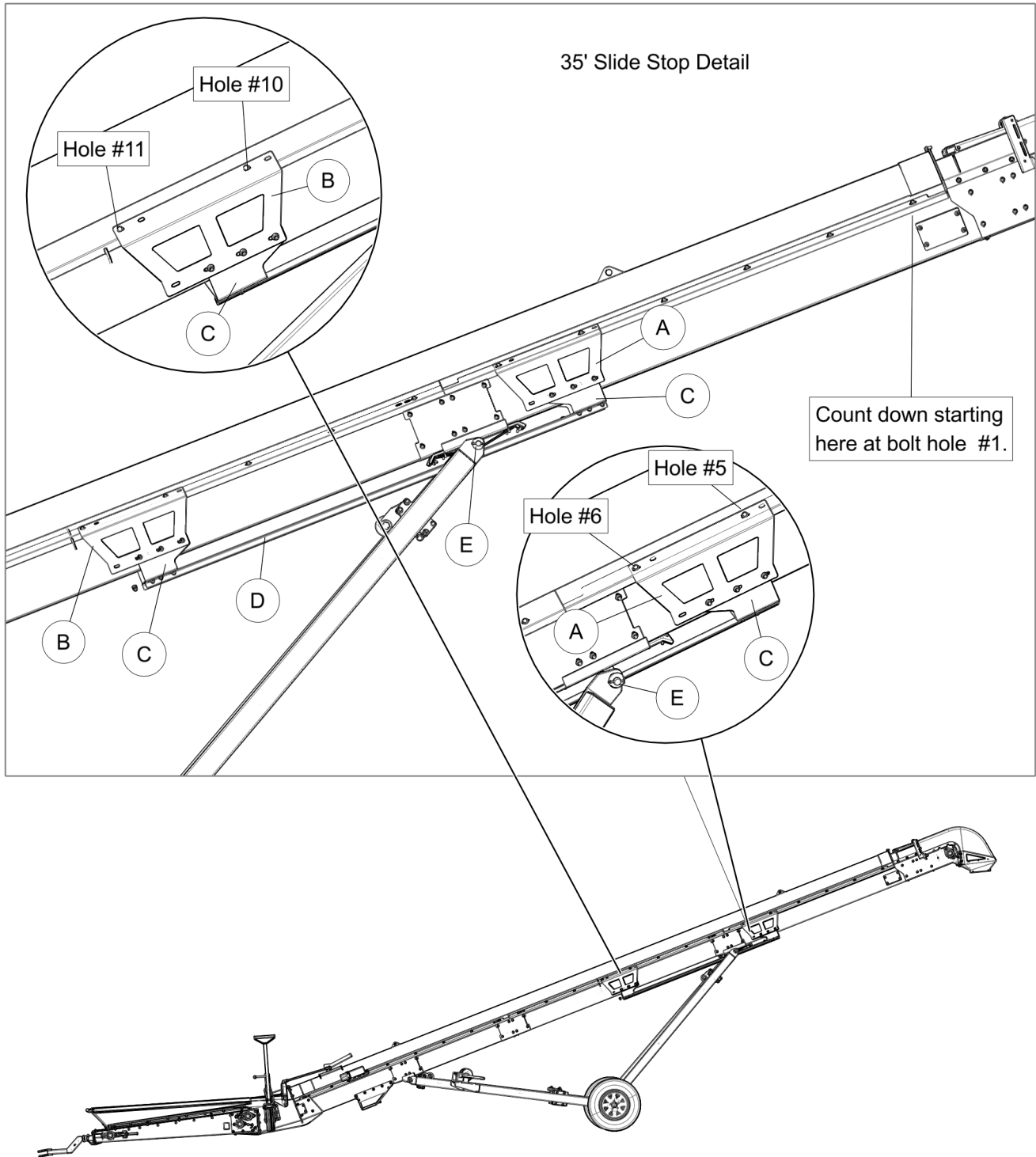


2. Using a forklift, pick up the base conveyor assembly in the center. Move the conveyor over the assembled undercarriage centering it.
3. Raise the lower arms until the swivel mounts line up with the holes in the arms. Insert the lower UC pin through the holes and secure each end with a flat washer and a 2" cotter pin.

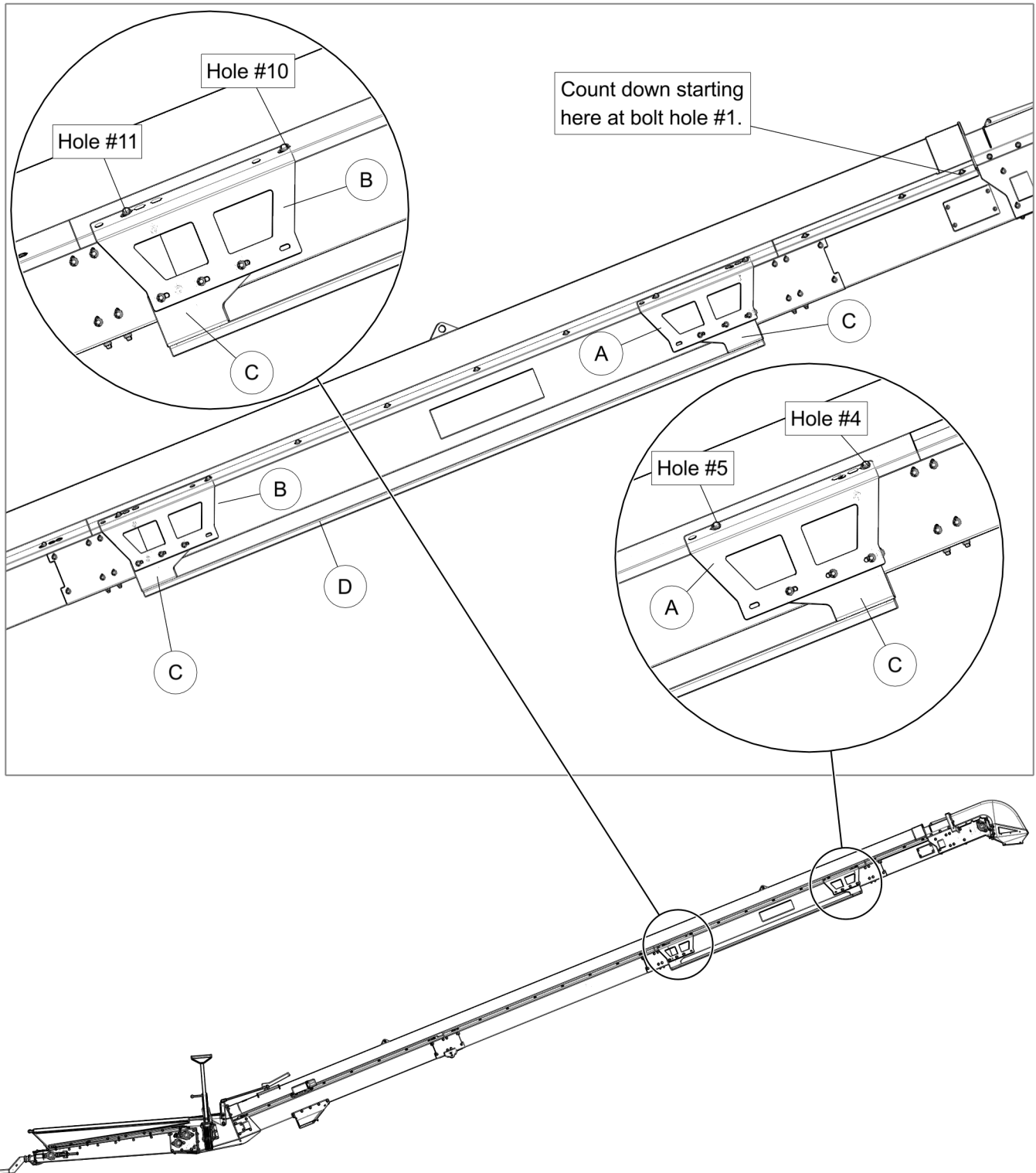


4. Use a forklift to raise the upper arms of the undercarriage until the undercarriage slide is pressed firmly against the conveyor pan between the transport stops **(C)**.
5. Reinstall the slide trap angle supports **(D)** under the UC pin **(E)** to capture the slide assembly. Reinstall the 12 bolts and nuts connecting the upper side plate stops **(A & B)** and the transport stops **(C)**.
6. While the conveyor is safely supported, route the cables and install the winch. (See Routing the Cable on page 25.)

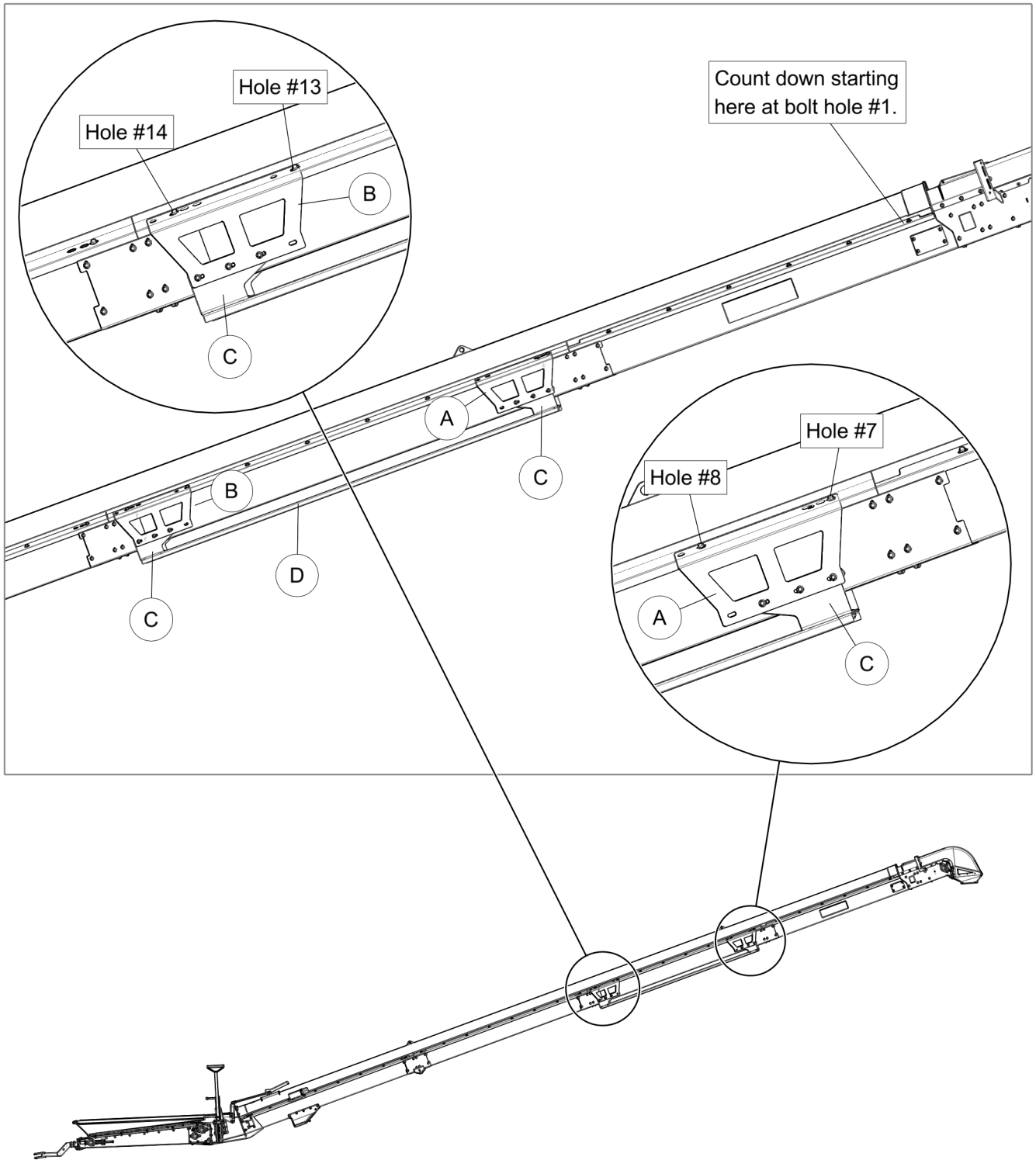
### 35 FOOT - SLIDE MOUNT DETAILS



**40 FOOT - SLIDE MOUNT DETAILS**

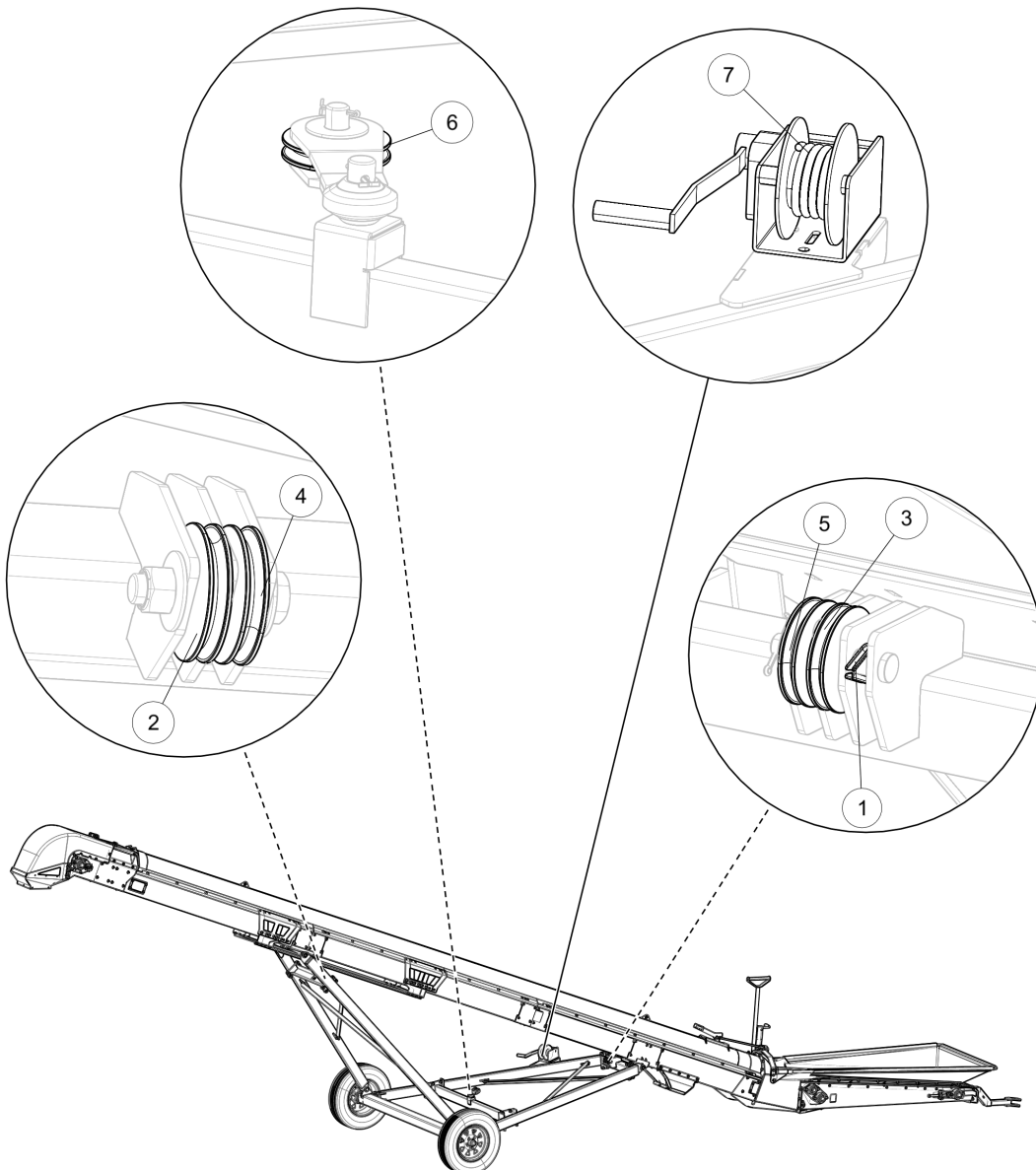


**45 FOOT - SLIDE MOUNT DETAILS**



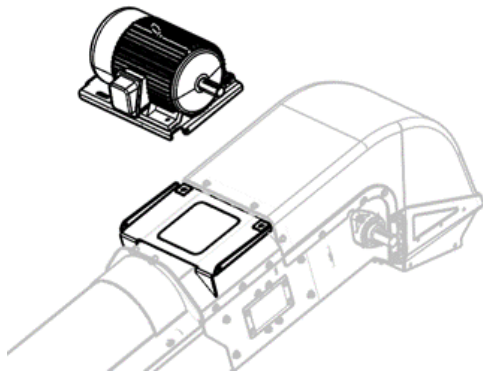
## Routing the Cable

1. Wrap the cable around the thimble **(1)** On the lower cross brace and secure using two cable clamps.
2. Route the cable through the pulley on the upper cross brace **(2)**. Make sure to route the cable starting on the side away from the winch and working towards the winch.
3. Route the cable down through the pulley **(3)** next to the thimble on the lower cross brace, then back up to the pulley on the upper cross brace **(4)** and then back down around the last pulley on the lower cross brace **(5)**.
4. Then route the cable around the pivot pulley **(6)** on the pulley support weldment and then to the winch **(7)**.
5. Wrap the remaining cable around the winch and secure.

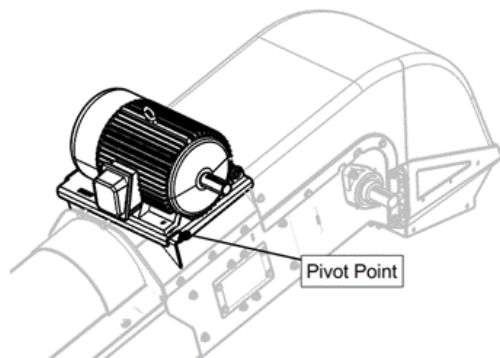


### **Installing an Electric Motor**

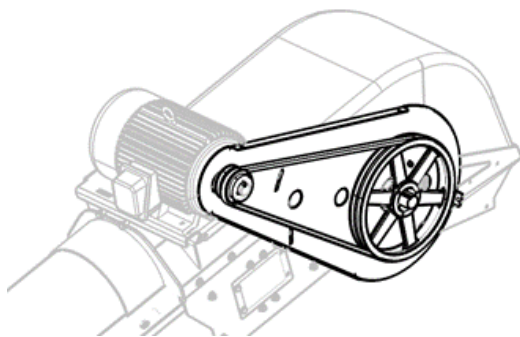
1. Loosely install the motor to the motor mounting plate.
2. Then set the motor and mounting plate onto the head assembly and install the bolts at the pivot point of the motor mount plate.
3. Position the end of the motor shaft close to the same plane as the pulley shaft end.
4. Align the sheaves according to the manual and tighten them. (See page 41.)
5. Tighten the motor mount nuts. These are located by the feet of the motor, carriage bolt heads are under the plate.
6. Install the belts by rolling them onto the sheaves.
7. Tighten the motor mount tension bolts and nuts to the recommended tension (See page 42.)



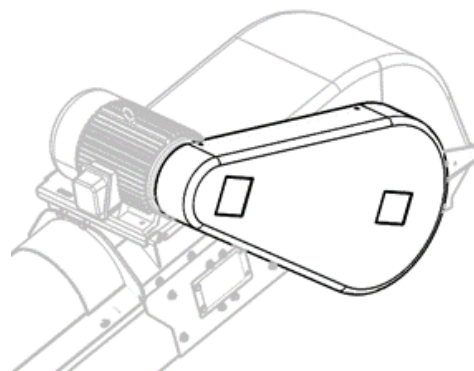
Motor to mounting plate.



Motor pivot point.



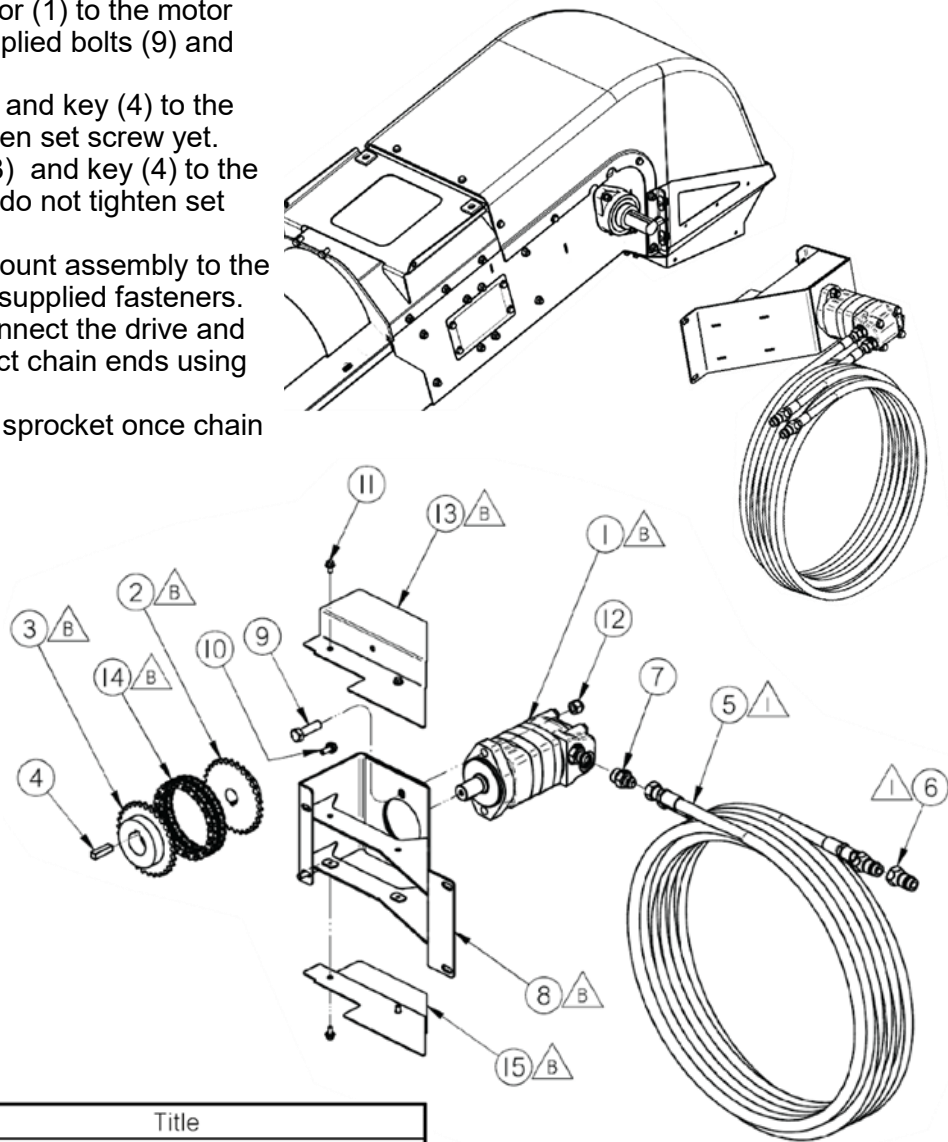
Sheaves and belts.



Belt cover.

### Installing a Hydraulic Motor

1. Assemble the hydraulic motor (1) to the motor mount bracket (8) using supplied bolts (9) and nuts (12).
2. Install the drive sprocket (2) and key (4) to the hydraulic motor; do not tighten set screw yet.
3. Install the driven sprocket (3) and key (4) to the head shaft of the conveyor; do not tighten set screw yet.
4. Affix the motor and motor mount assembly to the head of the conveyor using supplied fasteners.
5. Use double chain (14) to connect the drive and driven sprockets and connect chain ends using connecting link.
6. Tighten set screws on each sprocket once chain is in place.
7. Assemble safety covers (13, 15) to motor mount bracket to safely shield shaft coupling.
8. Install hydraulic hoses (5) to hydraulic motor (1) using supplied fittings (7).
9. Secure hydraulic hoses to conveyor tube from head to a suitable location near conveyor tail section.



| Item # | Document # | Qty | Title                                      |
|--------|------------|-----|--|
| 1      | 01-01-0270 | 1   | MTR HYD SERIES 2000 8.0 CU IN              |
| 2      | 01-02-0065 | 1   | Sprocket #40 30T 1.0000 Bore Type B        |
| 3      | 01-02-0144 | 1   | SPROCKET #40 30T 1.50ID .375KWY            |
| 4      | 01-10-0015 | 1   | 3/8" KEY, CS - 1 1/2" LONG                 |
| 5      | 02-03-0055 | 2   | HHA .375ID 050.0FT -08FJX -08MP            |
| 6      | 02-05-0067 | 2   | FTTG HYD QCK .500 NPT ISO 5675             |
| 7      | 02-05-0078 | 2   | FTTG HYD STGHT 8MJ-10MOR                   |
| 8      | 05-08-0723 | 1   | WDMT HYD MTR MNT                           |
| 9      | 06-01-0054 | 2   | BOLT .500-13 X 1.75 ZP GR5                 |
| 10     | 06-01-0138 | 2   | BOLT, FLG .3125-18 UNC ZP GRADE 5; 3/4" LG |
| 11     | 06-01-0299 | 4   | BOLT FLG .250-20 X .500 ZP GR5             |
| 12     | 06-03-0004 | 2   | NUT NYL LOCK .500-13 ZP GR5                |
| 13     | I05C29     | 1   | COVER TOP HYD DRV                          |
| 14     | I05C2B     | 1   | ASSY RC 40-2 29-LINKS (14.5")              |
| 15     | I05C2F     | 1   | COVER BOTTOM HYD DRV                       |

# Mechanical Operation

## Section C



### OPERATING SAFETY

1. Read and understand the Operator's Manual and all safety signs before using.
2. Electric motor drives: Disconnect and disable electrical supply completely and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
3. Clear the area of bystanders, especially children, before starting.
4. Be familiar with machine hazard area. If anyone enters hazard areas, shut down machine immediately. Clear the area before restarting.
5. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
6. Do not allow riders on the Conveyor or transport vehicle when transporting.
7. Stay away from overhead obstructions and power lines during operation and transporting. Electro-cution can occur without direct contact.
8. Do not operate machine when any guards are removed.
9. Lower Conveyor to its lowest position before moving or transporting or when not in use.
10. Inspect lift cable before using Conveyor. Replace if frayed or damaged.
11. Make certain lift cable is properly seated in cable pulleys.
12. Be sure that conveyor is empty before raising or lowering.

Power is provided by an electric motor. Be familiar with the machine before starting.

It is the responsibility of the owner or operator to read this manual and to train all other operators before they start working with the machine. In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, and prudence of personnel involved in the operation, transport, maintenance and storage of equipment or in the use and maintenance of facilities.

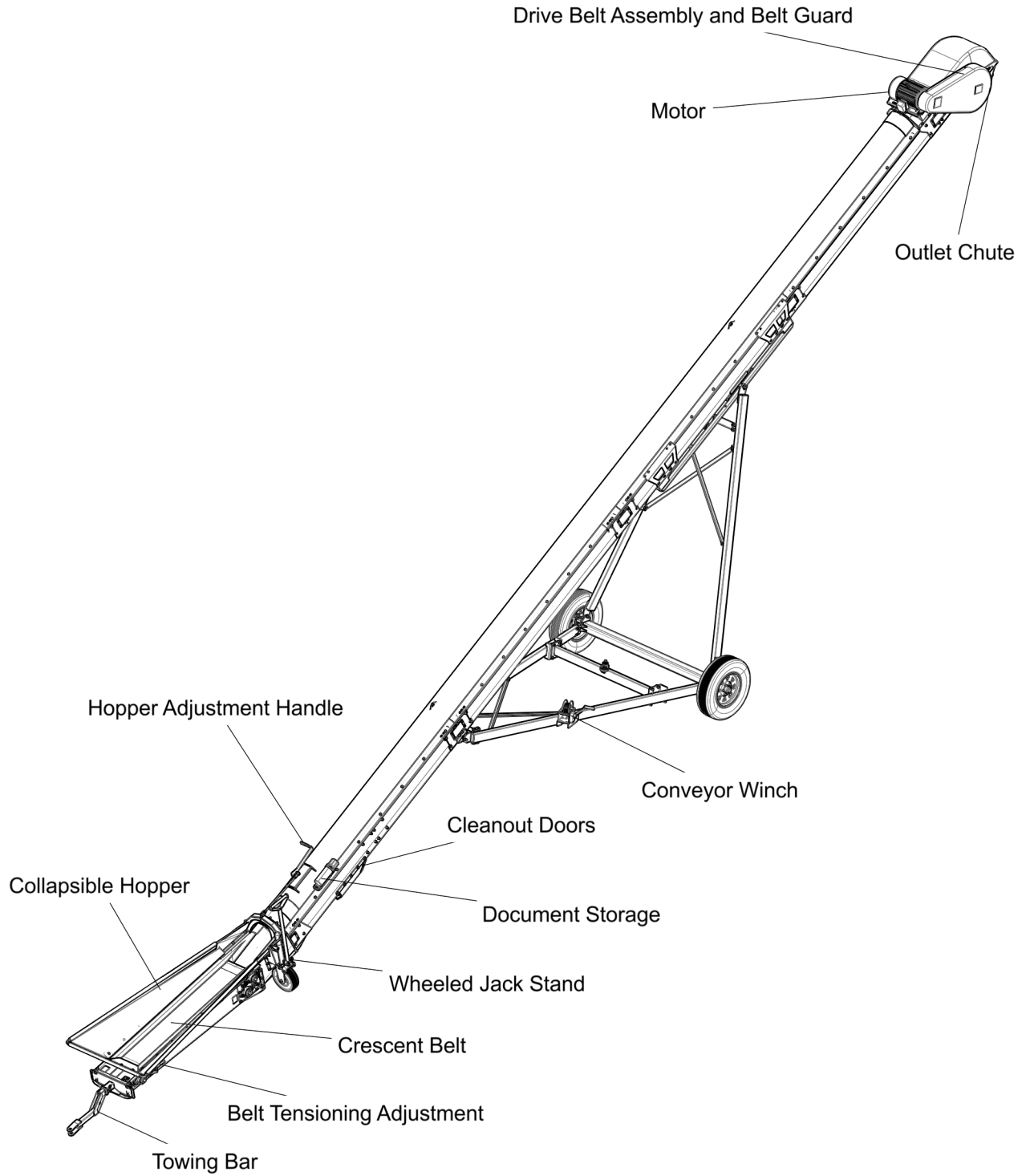
### NOTICE

Follow all safety instructions exactly. Safety is everyone's business. By following recommended procedures, a safe working environment is provided for the operator, bystanders and the area around the worksite. Untrained operators are not qualified to operate the machine.

Many features incorporated into this machine are the result of suggestions made by customers like you. Read this manual carefully to learn how to operate the machine safely and how to set it to provide maximum efficiency. By following the operating instructions in conjunction with a good maintenance program, your conveyor will provide many years of trouble free service.



## CONVEYOR OVERVIEW



## **CONTROLS**

**Electric Drive:** Have a licensed electrician provide power to the machine per the National Electrical Code ANSI/NFPA 70 and local codes. For customer safety and ease of use, a motor on / off switch may be mounted on the conveyor.

## **PRE-OPERATION CHECKLIST**

Efficient and safe operation of the Field Loader Conveyor requires that each operator reads and understands the operating procedures and all related safety precautions outlined in this section. A pre-operation checklist is provided for the operator. It is important for both the personal safety and maintaining the good mechanical condition of the Conveyor that this checklist is followed.

Before operating the Conveyor and each time thereafter, the following areas should be checked off:

1. Service the machine per the schedule outlined in Section D, Maintenance (See page 35).
2. Use only an electric motor of adequate power to operate the machine.
3. Check that all guards are installed, secured and functioning as intended. Do not operate with missing or damaged shields.
4. Check worksite. Clean up working area to prevent slipping or tripping.
5. Check that drive belt and conveying belt are not frayed or damaged and that they are properly adjusted and aligned.
6. Check that discharge chute is free of obstructions.

## **OPERATION**

1. Clear the area of bystanders before starting the equipment.
2. Review the workplace Hazards schematic and use extra care when inside the hazard area, Keep all bystanders out of this area. Should anyone enter this area, stop the machine immediately.
3. Turn the Field Loader Conveyor motor on and crank the truck seed gate open to begin conveying seed away from your truck.
4. To stop the conveyor shut the truck gate and run until the belt is clear of material. Then turn off the conveyor motor.

### **OPERATING HINTS**

- Always listen for any unusual sounds or noises. If any are heard, stop the machine and determine the source. Correct the problem before resuming work.
- Never allow anyone into the workplace hazard area. If anyone enters, stop immediately. Make them LEAVE before resuming work.
- Do not run the machine for long periods of time with no material on the belt. It increases the wear. Try to run the conveyor only when moving material.
- Always check and make sure the belt is properly aligned. Neglecting your belt may lead to wear and possible breakage.
- Always disconnect power from the conveyor when its not being operated in case of power surges.
- If the conveyor is equipped with a hydraulic drive motor. Make sure the tractor hydraulic pressure is a minimum of 2400 PSI.

### **EMERGENCY STOPPING**

Although it is recommended that the machine be emptied before stopping, in an emergency situation, stop or shutdown the power source immediately. Correct the emergency before resuming work.

### **RESTARTING**

When the machine is shut down inadvertently or for an emergency, the belt may still be covered with material. It may be necessary to tighten the drive belt slightly to handle the heavier-than-normal starting loads.

## **MACHINE BREAK-IN**

Although there are no operational restrictions on the conveyor when used for the first time, it is recommended that the following mechanical items be checked:

### **Before Starting**

1. Read the Conveyor Operator's Manual.
2. During the conveyors first few minutes of operation, check conveyor belt alignment to ensure belt is tracking correctly when running empty and also during loaded conditions.

**NOTE: The conveyor belt is not tracked from the factory. This must be done in the field before running material. See page 37-39 for conveyor belt tensioning and alignment.**

### **After Operating for 1/2 Hour**

1. Re-torque fasteners and hardware.
2. Check that all safety decals are installed and legible. Apply new decals if required.
3. Check the drive belt tension and alignment. Tension or align as required.
4. Check the conveying belt tension and alignment. Tension or align as required.
5. Check that all guards are installed and working as intended.

### **After Operating for 5 Hours and 10 Hours**

1. Re-torque all bolts, fasteners and hardware.
2. Check that all guards are installed, secured and functioning as intended. Do not operate with missing or damaged shields.
3. Check safety decals. Install new ones if required.
4. Check the drive belt, and conveying belt tension and alignment. Tension or align as required.
5. Then go to the normal servicing and maintenance schedule as defined in the Maintenance Section.

## Section D Troubleshooting

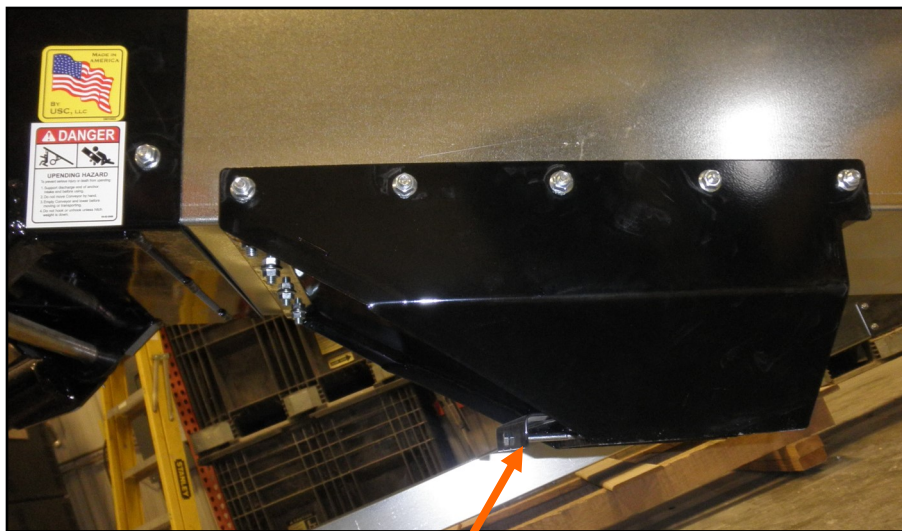
Below is a table describing the most frequent problems and solutions with the Field Loader Conveyor. For further assistance, contact GSI at (217) 226-4421.

| Problem                                     | Possible Cause   | Solution   |
|---|--|--|
| Conveyor will not run.<br>(Electric Motor)  | <ol style="list-style-type: none"> <li>1. Not turned on.</li> <li>2. Conveying belt loose.</li> <li>3. Drive belt loose.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Start power source or turn power on.</li> <li>2. Tighten and align belt.</li> <li>3. Tighten drive belt.</li> </ol>                          |
| Conveyor will not run.<br>(Hydraulic Motor) | <ol style="list-style-type: none"> <li>1. Tractor hydraulic pressure is to low.</li> <li>2. Ball valve is in shut off position.</li> <li>3. Hose disconnected.</li> </ol>    | <ol style="list-style-type: none"> <li>1. Tractor hydraulic pressure needs to be 2400 PSI minimum.</li> <li>2. Open valve.</li> <li>3. Connect hose to tractor.</li> </ol>             |
| Belt edge fraying.                          | <ol style="list-style-type: none"> <li>1. Belt not aligned.</li> </ol>   | <ol style="list-style-type: none"> <li>1. Align and tension belt.</li> </ol>   |
| Low conveying capacity.                     | <ol style="list-style-type: none"> <li>1. Angle too steep.</li> <li>2. Slow operating speed.</li> <li>3. Conveyor belt slipping.</li> <li>4. Drive belt slipping.</li> </ol> | <ol style="list-style-type: none"> <li>1. Reposition with angle at 40°.</li> <li>2. Increase operating speed.</li> <li>3. Tighten belt.</li> <li>4. Set drive belt tension.</li> </ol> |

## **UNPLUGGING**

In unusual moisture or material conditions, the machine may plug. When plugging occurs, follow this procedure:

1. Place all controls in neutral or off, stop motor, disable and lock out power source before unplugging.
2. Remove the nut, bolt and sliding clean out door from the cleanout on the bottom of the 10 foot inlet section of the conveyor. Remove any built up material. Reinstall door and hardware.



*Sliding Clean  
Out Door*

3. Return power to the conveyor.

Section  
E

# Maintenance

Proper maintenance of the Field Loader Conveyor is critical for peak performance, reliability and accuracy of this system. The following is a guideline for the type of maintenance and servicing that should be performed on this unit. Your environment and uses may require additional maintenance and service beyond this list to assure a reliable and safe unit. The operator of this unit has ultimate responsibility to identify areas of concern and rectify them before they become a hazard or safety issue. There is no substitute for a trained, alert operator.



Do not put this unit into operation with any questionably maintained parts. Poor performance or a hazard may occur.

## FLUIDS AND LUBRICANTS

### Grease

Use an SAE multipurpose high temperature grease with extreme pressure (EP) performance. Also acceptable is an SAE multipurpose lithium-based grease.

### Storing Lubricants

Your machine can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants. Store them in an area protected from dust, moisture and other contaminants.

### GREASING

Use a Maintenance Checklist to keep record of all scheduled maintenance.

1. Use a hand-held grease gun for all greasing.
2. Wipe grease fitting with a clean cloth before greasing to avoid injecting dirt and grit.
3. Replace and repair broken fittings immediately.

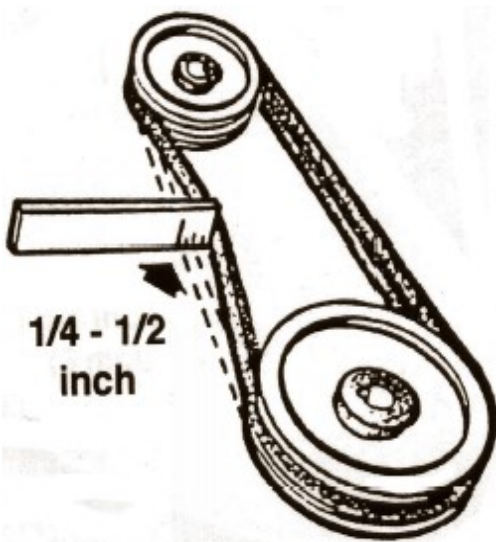


If fittings will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace fitting if necessary.

## **CONVEYOR SERVICING INTERVALS**

### **Every 40 hours or Weekly**

1. Check the conveyor belt tension and alignment.
2. Grease conveyor bearings.
  - A. Two bolt flanged bearings, head pulley bearings right and left (2 locations).
  - B. Four bolt flanged bearings, jackshaft bearings right and left at the transition (2 locations).
  - C. Two bolt flanged bearings, tail pulley bearings right and left (2 locations).
3. Remove guard and check the drive belt tension and alignment. The belts will deflect approximately 1/4 to 1/2 inch when properly tensioned.



### **Every 200 hours or Annually**

1. Wash machine.
2. Check sheave bushing for wear. To inspect sheave:
  - A. Loosen and remove the bolt.
  - B. Inspect the bushing on the sheave for wear.
  - C. Reverse steps A and B for re-assembly.



## **CONVEYING BELT TENSION AND ALIGNMENT - INLET END**

A contoured crescent belt is used to convey material along the frame. The tension and alignment of the belt should be checked weekly, or more often if required, to be sure that it does not slip or run to one side. A properly tensioned belt will not slip when it is operating. Operating the belt with less slippage will increase the belt life and causes less stress on bearings, pulleys and shafts.

### **⚠ WARNING**

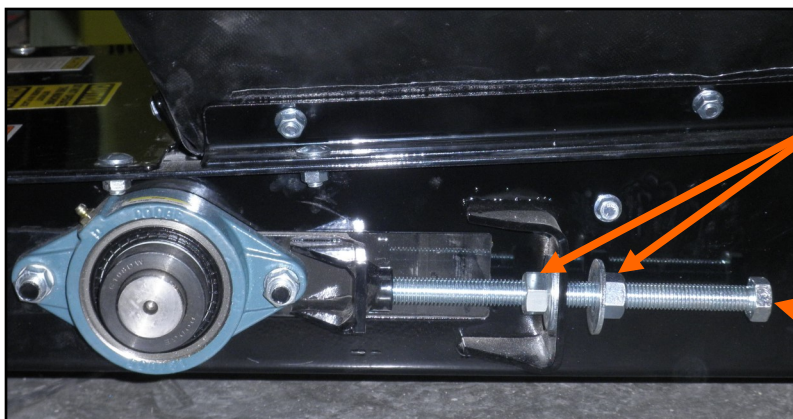
Although it is acceptable to align the belt from either the Head or the Tail end. Tightening the belt may only be done from the Tail end of the conveyor

To maintain the belt, follow this procedure:

### **NOTICE**

Place all controls in neutral or off, stop motor and disable power source before working on belt.

1. Use the take-up bolt located at the tail to set the tension of the belting.
2. If the belt needs to be tightened to prevent slippage, use the take-up adjustments on the tail end only.
3. The belt is tightened by turning both take-up adjustments an **equal** number of turns.
4. Use the drive pulley to check the alignment. The belt should be centered.
5. Turn the belt 1/2 revolution when the belt is new and check the drive and tail pulley. If out of alignment, the belt will move to the loose side. Loosen the jam nut and use the bearing position bolts to set the position. Tighten jam nut.
6. Run and check again. Check frequently during the first few minutes of operation and then several times during the first 10 hours. The belt normally seats itself during the first 10 hours of operation and can be checked weekly after that.
7. The belt is properly aligned when the belt runs in the center of the head and tail pulleys.

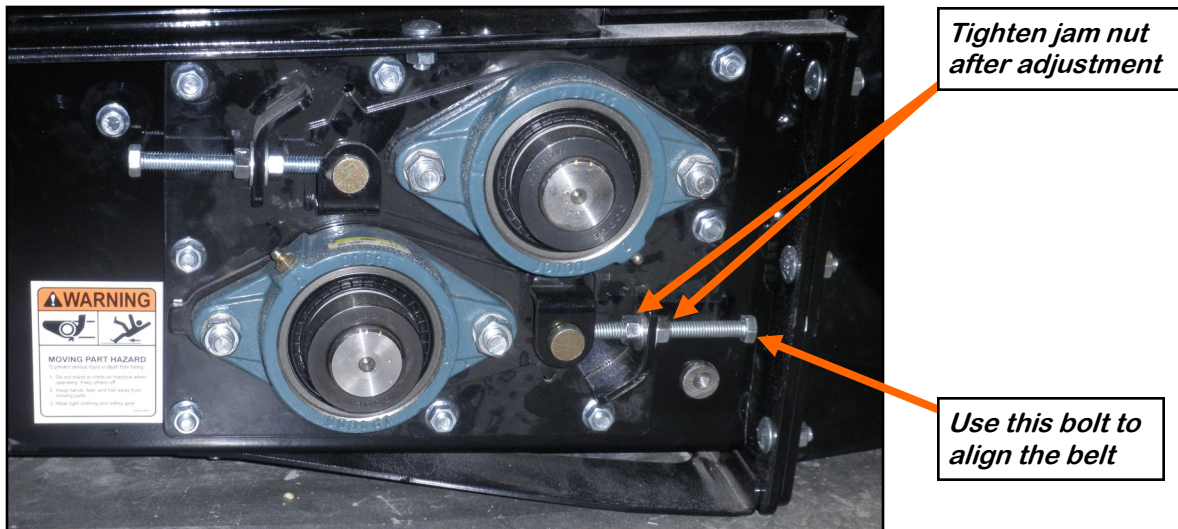


*Loosen the jam nuts before adjusting the bearing position bolt*

*Use this bolt to tighten and align the belt*

## **CONVEYING BELT ALIGNMENT - TRANSITION**

1. A misaligned belt will track toward the loose side. Set the tracking by loosening the jam nuts on the tight side and using the bearing position bolt to move the end of the head pulley toward the tail. The same method is used on the transition rollers pictured below. Tighten the jam nuts when the belt is centered on the head pulley. When installing a new belt, start out with the pointer in the center of the hole.
2. Run the belt and check the tracking again. Loosen the tight side slightly again if required. Repeat the adjusting and checking procedure until the belt centers on the input end pulley and remains centered when running.
3. Always repeat this aligning procedure when installing a new belt. Check frequently during the first 10 hours of operation. After 10 hours, the belt is normally seated and checking the alignment can be done less frequently.



## **CONVEYING BELT ALIGNMENT - HEAD END**

1. A misaligned belt will track toward the loose side. Set the tracking by loosening the bearing mounts on the tight side and using the bearing position bolt to move the end of the head pulley toward the tail. Tighten the bearing mount when the belt is centered on the head pulley.
2. Run the belt and check the tracking again. Loosen the tight side slightly again if required. Repeat the adjusting and checking procedure until the belt centers on the inlet end pulley and remains centered when running.
3. Always repeat this aligning procedure when installing a new belt. Check frequently during the first 10 hours of operation. After 10 hours, the belt is normally seated and checking the alignment can be done less frequently.

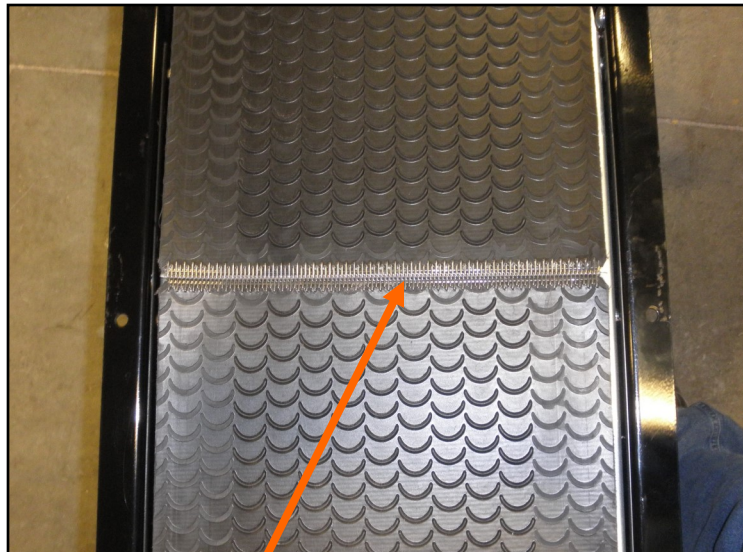


*Tighten jam nuts  
after adjustment*

*Use this bolt to  
align the belt*

## **BELT REPLACEMENT**

1. Remove the cover from the tail section. Rotate the belt until the seam is visible.
2. Move the tail pulley to its loosest position.
3. Pull all the slack to the seam area.
4. Remove the wire connector and open the belt.
5. Attach one end of the replacement belt to the belt end being removed.
6. Pull the old belt out and the new belt will be threaded into place.
7. Disconnect the old belt.
8. Connect the ends of the new belt together and secure.
9. Set the belt tension.
10. Check and set the belt alignment.



***Belt Seam***



## DRIVE BELT TENSION & ALIGNMENT

Power to the conveying belt is transmitted through a V-belt. The V-belt drive system must be maintained at the proper belt tension and pulley alignment to obtain the desired performance and life. When maintaining the belt drive system for the electric drive model, follow this procedure:

### **NOTICE**

Turn motor off and unplug power cord or turn off power and lock out the master panel before starting maintenance on drive belt system.

#### Drive Belt Tension

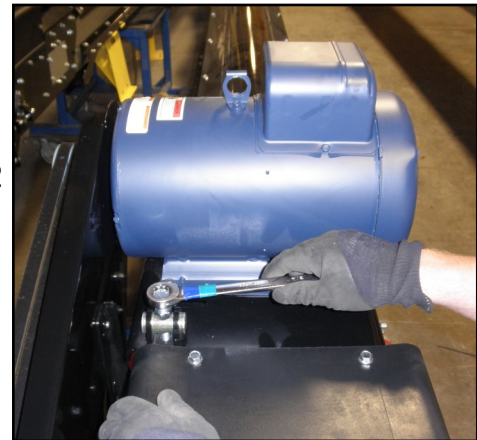
1. Push on the center of the belt span with a force of approximately 5 to 10 lbs.
2. Follow the belt tensioning specification on page 42 to determine proper belt deflection.
3. Move the motor up, using the adjustment bolt, to set drive belt tension (right).
4. Close and secure guards.

#### Drive Belt Alignment

1. Lay a straightedge across the sheave faces to check the alignment (right).
2. Use the sheave hub or the motor mounting plate slots to move the sheave to the required position for alignment.
3. Tighten hub bolts to secure sheave on shaft.
4. Check belt tension
5. Close and secure guards.

#### Drive Belt Replacement

1. Lower motor to its lowest position.
2. Remove old belt and replace with a new one.
3. Raise motor to set the belt tension.
4. Check sheave alignment. Adjust if required.
5. Close and secure guards.



*Motor base adjustment*

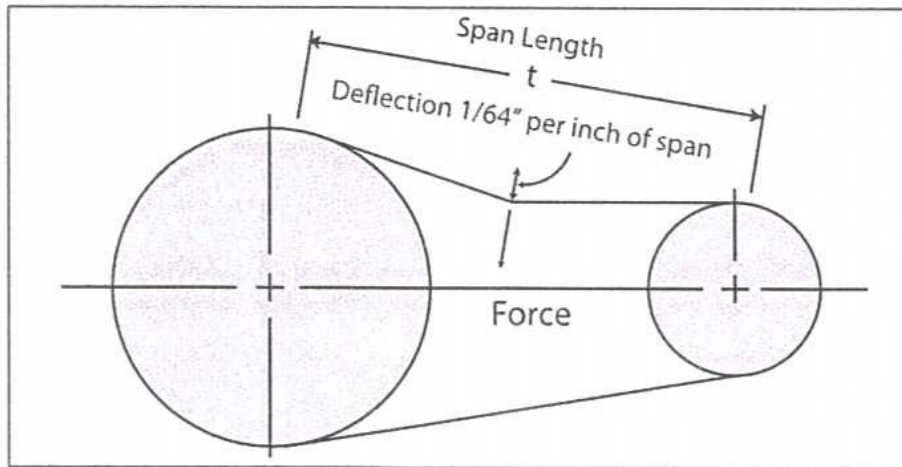


*Lay a straightedge across*

# Belt Tensioning Specification

## Section F

V-Belt tensioning adjustment can be made using a tension meter or other type spring scale using the following procedure. After seating the belts in the groove and adjusting center distance so as to take up the slack in the belts, further increase the tension until only a slight bow on the slack side is apparent while the drive is operating under load. Stop the drive and using the meter, measure the force necessary to depress one of the center belts 1/64 inch for every inch of belt span (see sketch below). For example, a deflection for a 50 inch belt span is 50/64 or 25/32 inch. The amount of force required to deflect the belt should compare with the deflection forces noted in the table below. Also notice for V- Belts that deflection forces vary from the initial RUN - IN values which are greater (reflecting higher run-in tensioning) to the NORMAL values for after the run-in period.



MEASURE THE SPAN LENGTH "T" AS SHOWN IN THE SKETCH ABOVE.

| BELT CROSS SECTION | SMALLER SHEAVE DIAMETER RANGE (inches) | DEFLECTION FORCE |              |
|--------------------|--|------------------|--------------|
|                    |  | RUN - IN (lbs)   | NORMAL (lbs) |
| AX                 | 3.0 - 3.6                              | 4 - 1/8          | 2 - 3/4      |
|                    | 3.8 - 4.8                              | 5                | 3 - 1/4      |
|                    | 5.0 - 7.0                              | 6                | 4            |
| BX                 | 3.4 - 4.2                              | 5 - 1/4          | 3 - 1/2      |
|                    | 4.4 - 5.2                              | 7 - 1/8          | 4 - 3/4      |
|                    | 5.4 - 9.4                              | 9                | 6            |

## Section G Storage

When storing the Field Loader Conveyor for long periods of time, the following procedure must be followed to reduce the chance of rust, corrosion and fatigue of the conveyor. You can also use these steps when storing the machine for the winter.



1. Clear the area of bystanders, especially small children.

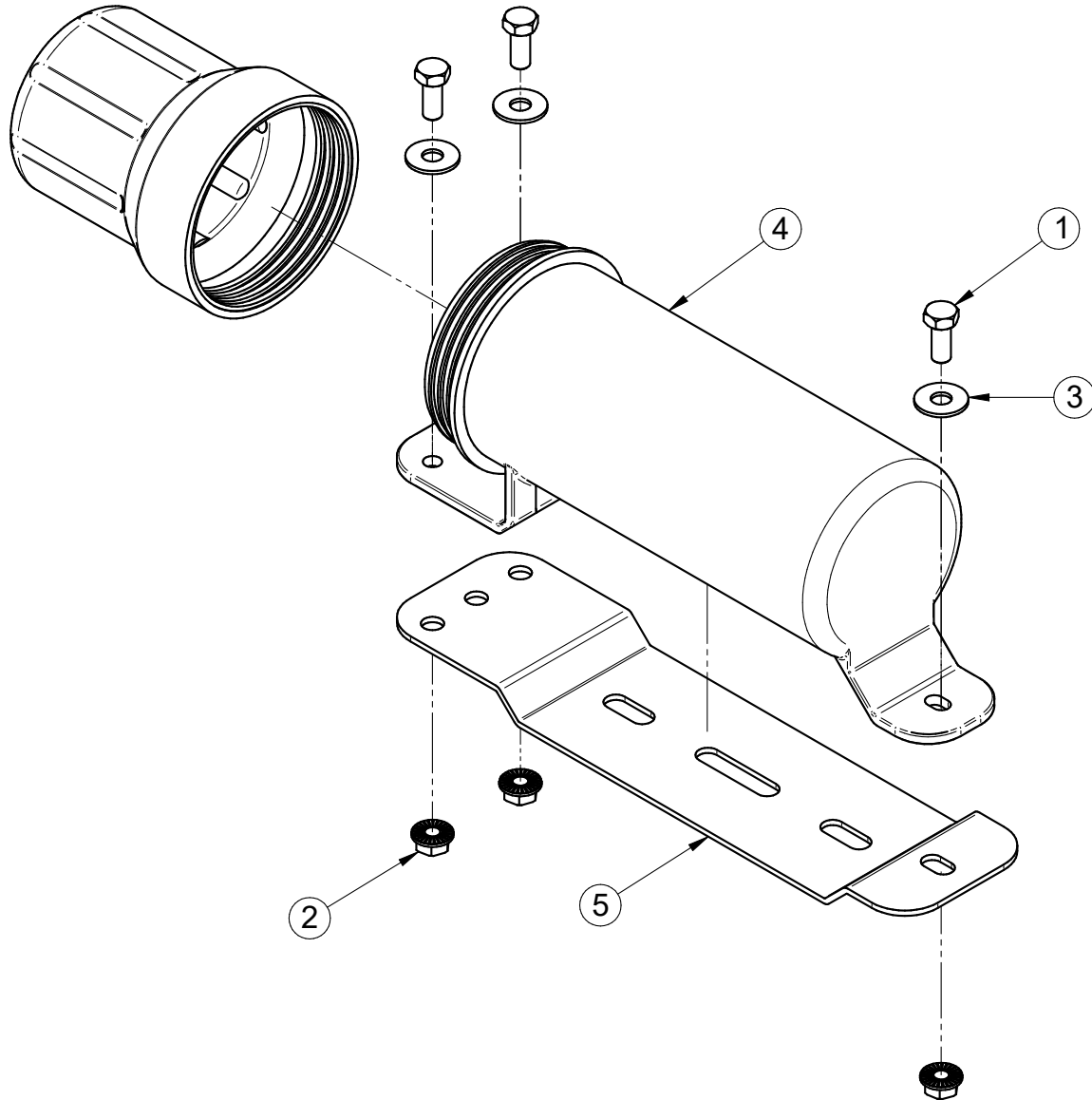
A dust mask and protective rubber gloves shall be used when cleaning the machine.

2. Thoroughly wash the entire machine to remove all dirt, mud, debris or residue.
3. Inspect all moving or rotating parts to see if anything has become entangled in them. Remove the entangled material.
4. Lubricate all grease fittings. Make sure that all grease cavities have been filled with grease to remove any water residue from the washing. This also protects the bearing seals.
5. Remove drive assembly cover. Clean entire area and ensure drive belt is clean and free of debris.
6. Touch up all paint nicks and scratches to prevent rusting.
7. Select an area that is dry, level and free of debris.
8. If possible, store the machine inside a protective building to keep it from being exposed to the weather. If storing outside, cover the entire machine with a large waterproof tarpaulin. If you do not have one large enough, at a minimum cover all electric motors.
9. Store machine in an area away from human activity.
10. Do not allow children to play on or around the stored machine.

# Mechanical Drawings

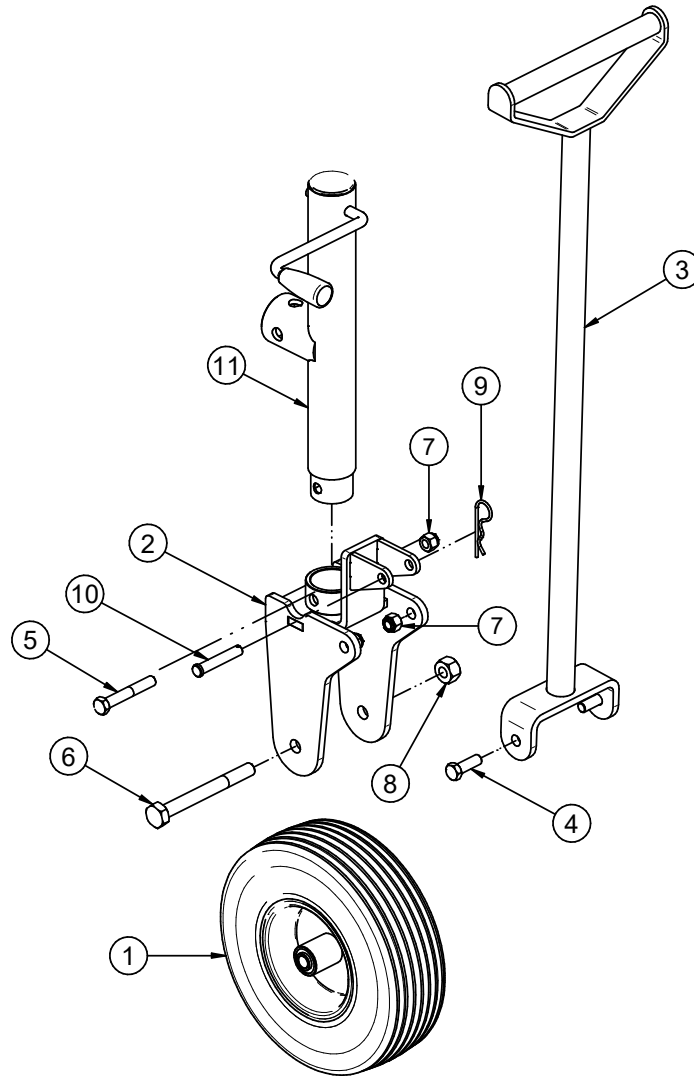
Section  
H

## MANUAL TUBE ASSEMBLY (13-05-0332)



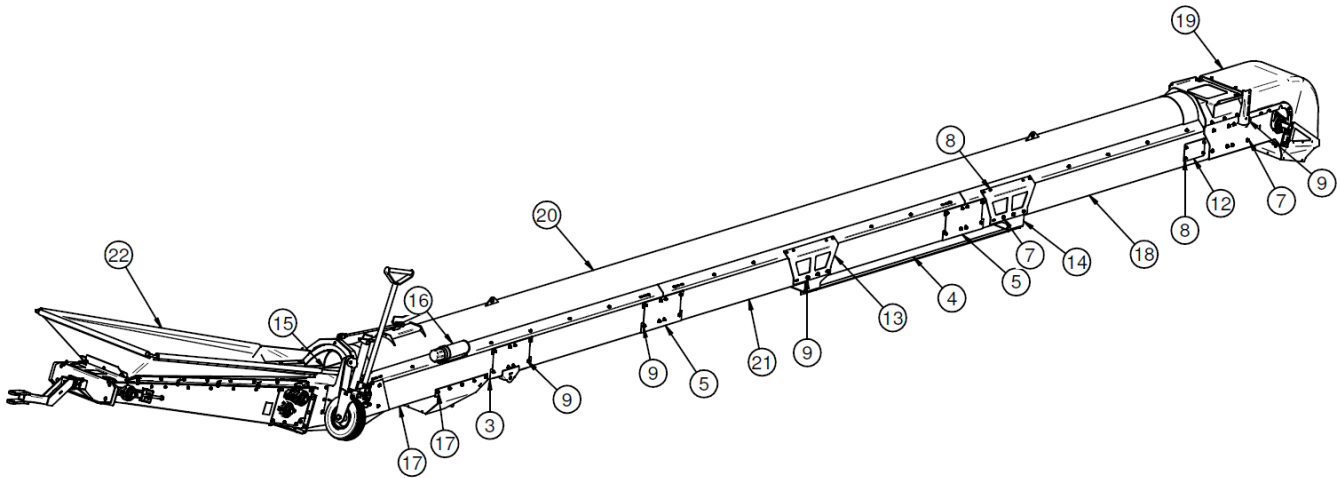
| Item # | Part #     | Description                      | Qty |
|--------|------------|----------------------------------|-----|
| 1      | 06-01-0010 | BOLT .313-18 X 0.75 ZP GR5       | 3   |
| 2      | 06-03-0019 | NUT, FLG .3125-18 UNC ZP GRADE 5 | 3   |
| 3      | 06-05-0011 | WASHER, .3125 FLAT 18-8 SS       | 3   |
| 4      | 08-07-0050 | HOLDER MANUAL 3.25 DIA           | 1   |
| 5      | 103980     | PLT MANUAL MT                    | 1   |



**JACK STAND WITH WHEEL ASSEMBLY (13-05-0661)**

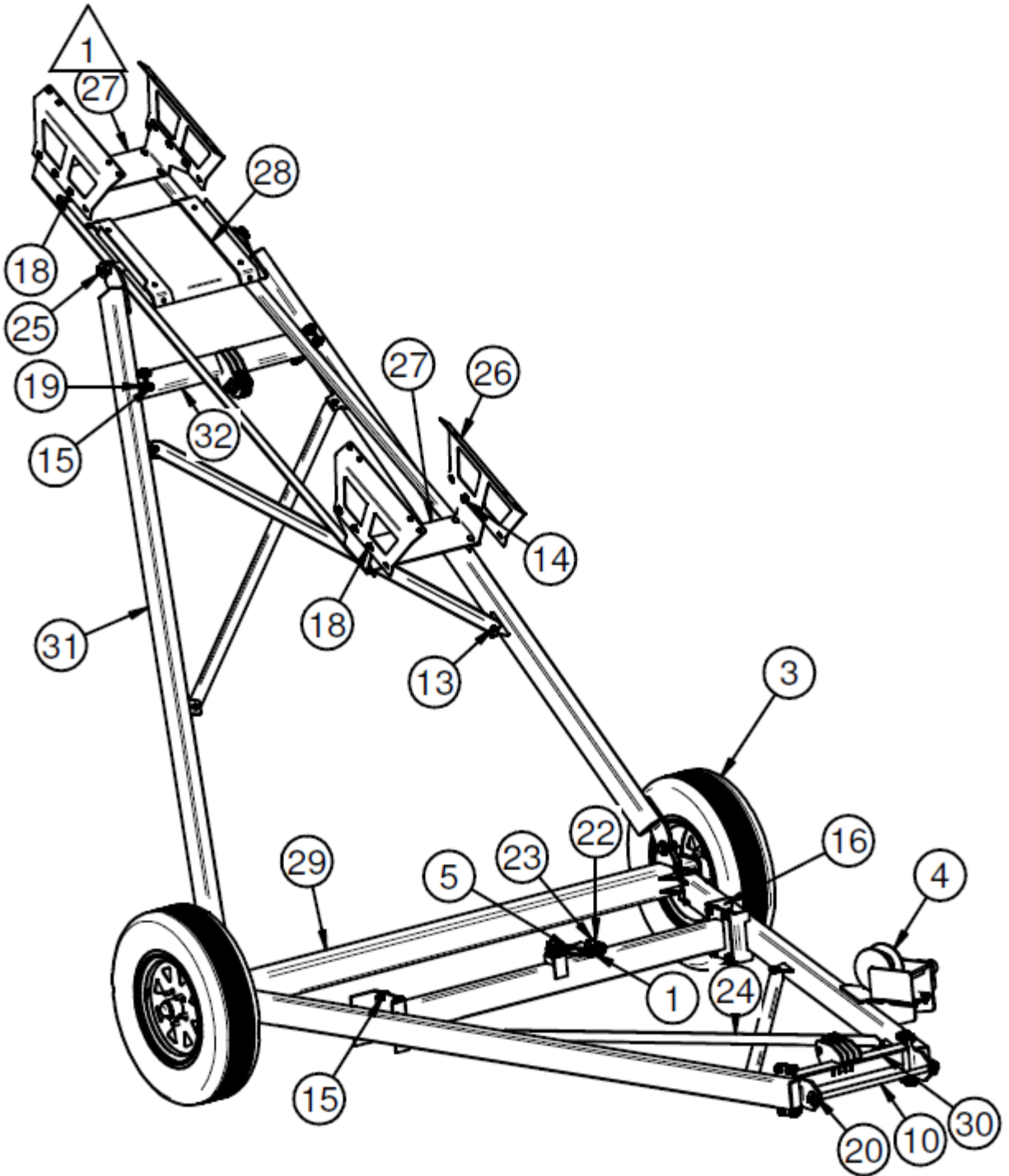
| Item # | Part #     | Description                        | Qty |
|--------|------------|------------------------------------|-----|
| 1      | 01-06-0177 | WHL 12DIA X 4.0W .625 BORE         | 1   |
| 2      | 05-08-0719 | WDMT WHL FRK                       | 1   |
| 3      | 05-08-0720 | WDMT WHL FRK HNDL                  | 1   |
| 4      | 06-01-0025 | BOLT .500-13 X 1.50 ZP GR5         | 2   |
| 5      | 06-01-0029 | BOLT .500-13 X 3.25 ZP GR5         | 1   |
| 6      | 06-01-0100 | BOLT, .625 X 11 G5 ZP 6.50"        | 1   |
| 7      | 06-03-0004 | NUT NYL LOCK .500-13 ZP GR5        | 3   |
| 8      | 06-03-0005 | NUT NYL LOCK .625-11 ZP            | 1   |
| 9      | 06-09-0039 | PIN CLIP HITCH 2.625 #11 1/8 IN ZP | 1   |
| 10     | 06-09-0058 | PIN CLVS .500 X 2.75 PLN           | 1   |
| 11     | 08-08-0207 | TRLR JACK SW 2000LB 10IN           | 1   |

**35' Base Conveyor**

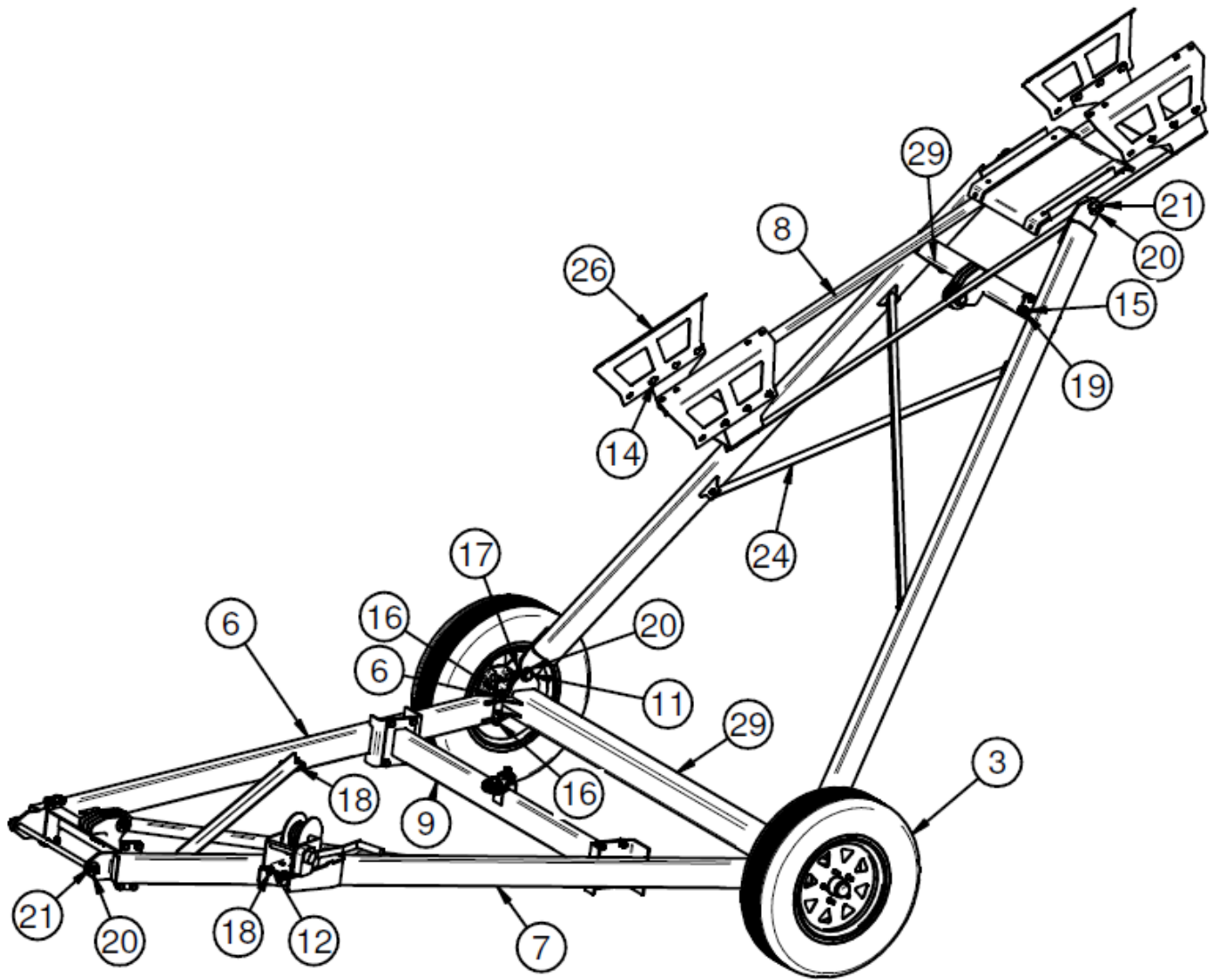


| Item | Part #        | Rev | Title                               | Qty |
|------|---------------|-----|-------------------------------------|-----|
| 3    | 05-08-0813-04 | A   | WDMT FL SPLICE UNCRG MT LOW         | 1   |
| 4    | 05-08-0837-04 | A   | TRANSPORT SLIDE TRAP 87             | 2   |
| 5    | 05-10-4769-04 | A   | PLT SPLICE 16IN UNI-TUBE OCHRE      | 2   |
| 6*   | 06-01-0150    | A   | BOLT, CARRIAGE, .250-20x.50 G5 ZP   | 14  |
| 7    | 06-01-0153    | A   | BOLT CRG .375-16X.750 ZP SHORT NECK | 84  |
| 8    | 06-01-0261    | A   | BOLT FLG .3125-18 X .500 ZP GR5     | 50  |
| 9    | 06-03-0014    | A   | NUT LOCK FLG .375-16 ZP GR5         | 64  |
| 10*  | 06-03-0041    | A   | NUT LOCK FLG .250-20 SS 18-8        | 14  |
| 11*  | 09-01-0227    | A   | ATWL LBL GSI FL 1645                | 2   |
| 12   | 103B9A        | A   | PLT SPLICE COVER                    | 2   |
| 13   | 1044BA-04     | A   | PLT STOP LOWER                      | 4   |
| 14   | 1044BC-04     | A   | TRANSPORT STOP                      | 2   |
| 15   | 11-02-0186    | A   | BELT CNVR CRES 16W FL35             | 1   |
| 16   | 13-05-0332    | A   | ASSY MANUAL TUBE MT                 | 1   |
| 17   | 13-05-0764-04 | A   | PAN ASSY 12IN ST LOWER              | 1   |
| 18   | 13-05-0768    | A   | FRAME, PAN ASSY FL 10               | 1   |
| 19   | 13-05-0769-04 | A   | HEAD SECTION ASSY FL ST             | 1   |
| 20   | 13-05-0771-04 | A   | TUBE WDMT 12IN 35 ST                | 1   |
| 21   | 13-05-0806    | A   | ASSY MID SECT PAN FL                | 4   |
| 22   | 13-08-0888-04 | A   | INLET ASSY FL ST                    | 1   |

**35' Undercarriage**



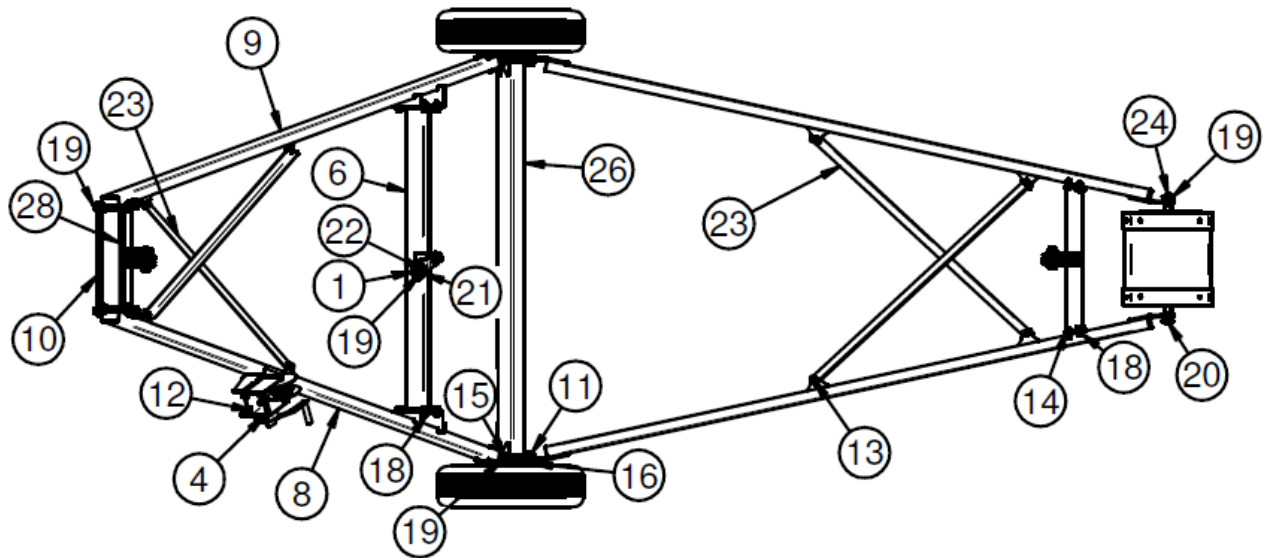
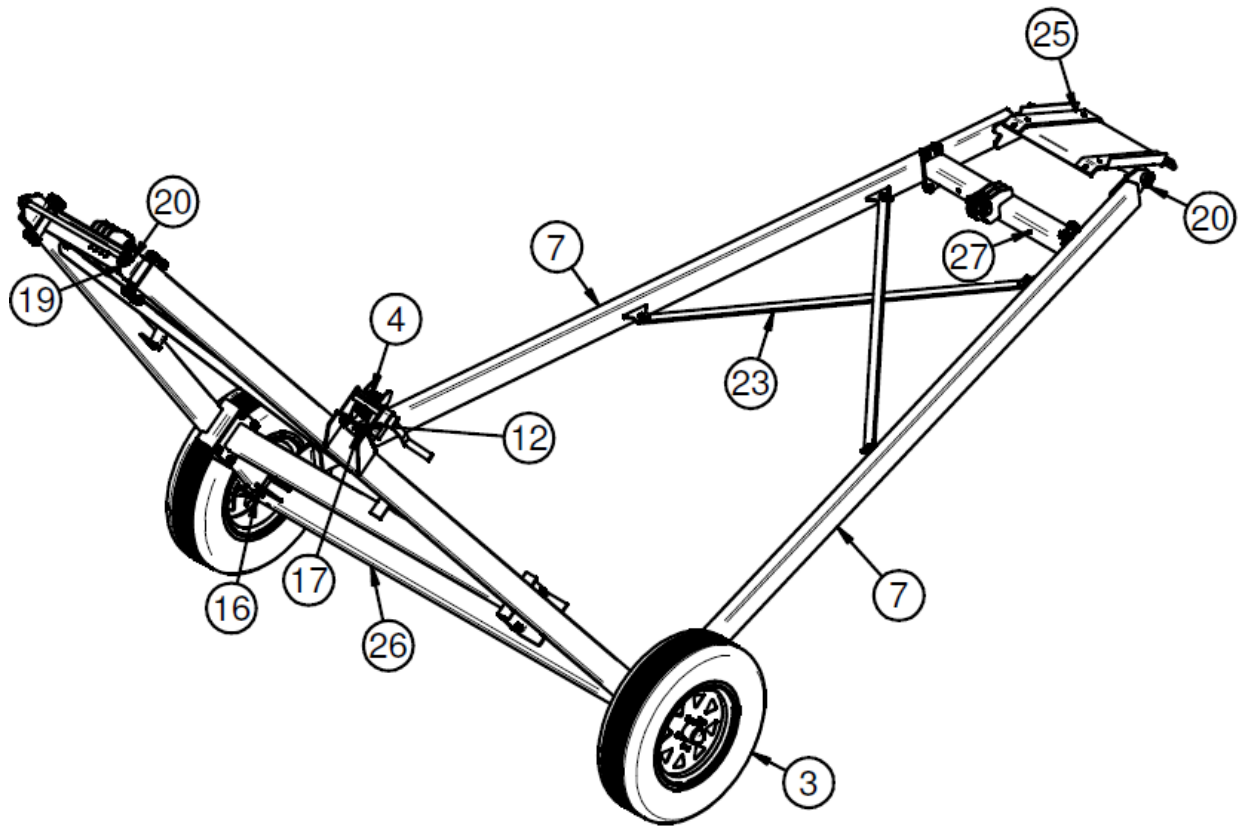
**35' Undercarriage**



**35' Undercarriage**

| Item | Part #     | Rev | Title                                | Qty |
|------|------------|-----|--------------------------------------|-----|
| 1    | 01-02-0074 | A   | PLLY WIRE ROPE 3 IN DIA              | 1   |
| 2*   | 01-04-0072 | A   | WIRE ROPE .25 DIA X 72FT             | 1   |
| 3    | 01-06-0150 | A   | ASSY WHL/TIRE 5BLT-15.0 X 6.0 6PLY   | 2   |
| 4    | 01-08-0105 | A   | WINCH 2500LB                         | 1   |
| 5    | 05-08-0555 | A   | WDMT SHV MNT PIVOTING                | 1   |
| 6    | 05-08-0834 | A   | WDMT LOWER ARM LH FL35 UNCG          | 1   |
| 7    | 05-08-0835 | A   | WDMT LOWER ARM RH FL35 UNCG          | 1   |
| 8    | 05-08-0837 | A   | TRANSPORT SLIDE TRAP 87              | 2   |
| 9    | 05-08-0840 | A   | WDMT PULLEY SUPPORT FL 40            | 1   |
| 10   | 05-11-0558 | A   | LOWER UC PIN                         | 1   |
| 11   | 06-01-0065 | A   | BOLT, .750-10 X 2.0 UNC ZP GRADE 5   | 2   |
| 12   | 06-01-0115 | A   | BOLT CRG .375-16 X 1.00 ZP GR5       | 4   |
| 13   | 06-01-0124 | A   | BOLT FLG .375-16 X .750 ZP GR5       | 8   |
| 14   | 06-01-0153 | A   | BOLT CRG .375-16X.750 ZP SHORT NECK  | 20  |
| 15   | 06-01-0232 | A   | BOLT FLG .500-13 X 1.250 ZP GR5      | 24  |
| 16   | 06-01-0277 | A   | BOLT .750-10 X 4.50 ZP GR5           | 2   |
| 17   | 06-02-0029 | A   | NUT,LOCK, .750-10 ZP NE NYLON INSERT | 4   |
| 18   | 06-03-0014 | A   | NUT LOCK FLG .375-16 ZP GR5          | 32  |
| 19   | 06-03-0015 | A   | NUT LOCK FLG .500-13 ZP GR5          | 24  |
| 20   | 06-05-0007 | A   | WASHER, .750 FLAT ZP                 | 13  |
| 21   | 06-09-0023 | A   | .188 X 2.00 ZP COTTER PIN            | 5   |
| 22   | 06-09-0087 | A   | .125 X 1.50 ZP COTTER PIN            | 1   |
| 23   | 06-09-0094 | A   | PIN CLVS .750 X 2.00 ZP              | 1   |
| 24   | 102FBC     | A   | PLT X BRACE UNCG                     | 4   |
| 25   | 102FE6     | A   | UPPER ARM PIN SS16 UNCG              | 1   |
| 26   | 1044BA     | A   | PLT STOP LOWER                       | 4   |
| 27   | 1044BC     | A   | TRANSPORT STOP                       | 2   |
| 28   | 13-05-0232 | A   | ASSY TRANSPORT SLIDE 16BW PORT       | 1   |
| 29   | 13-08-0458 | A   | ASSY AXLE SS 40 45FT                 | 1   |
| 30   | 13-08-0893 | A   | ASSY LOWER X MEMBER FL35             | 1   |
| 31   | 13-08-0895 | A   | WDMT UPPER ARM FL35 UNCG             | 2   |
| 32   | 13-08-0896 | A   | ASM UPPER X MEMBER FL35              | 1   |

**40' - 45' Undercarriage**

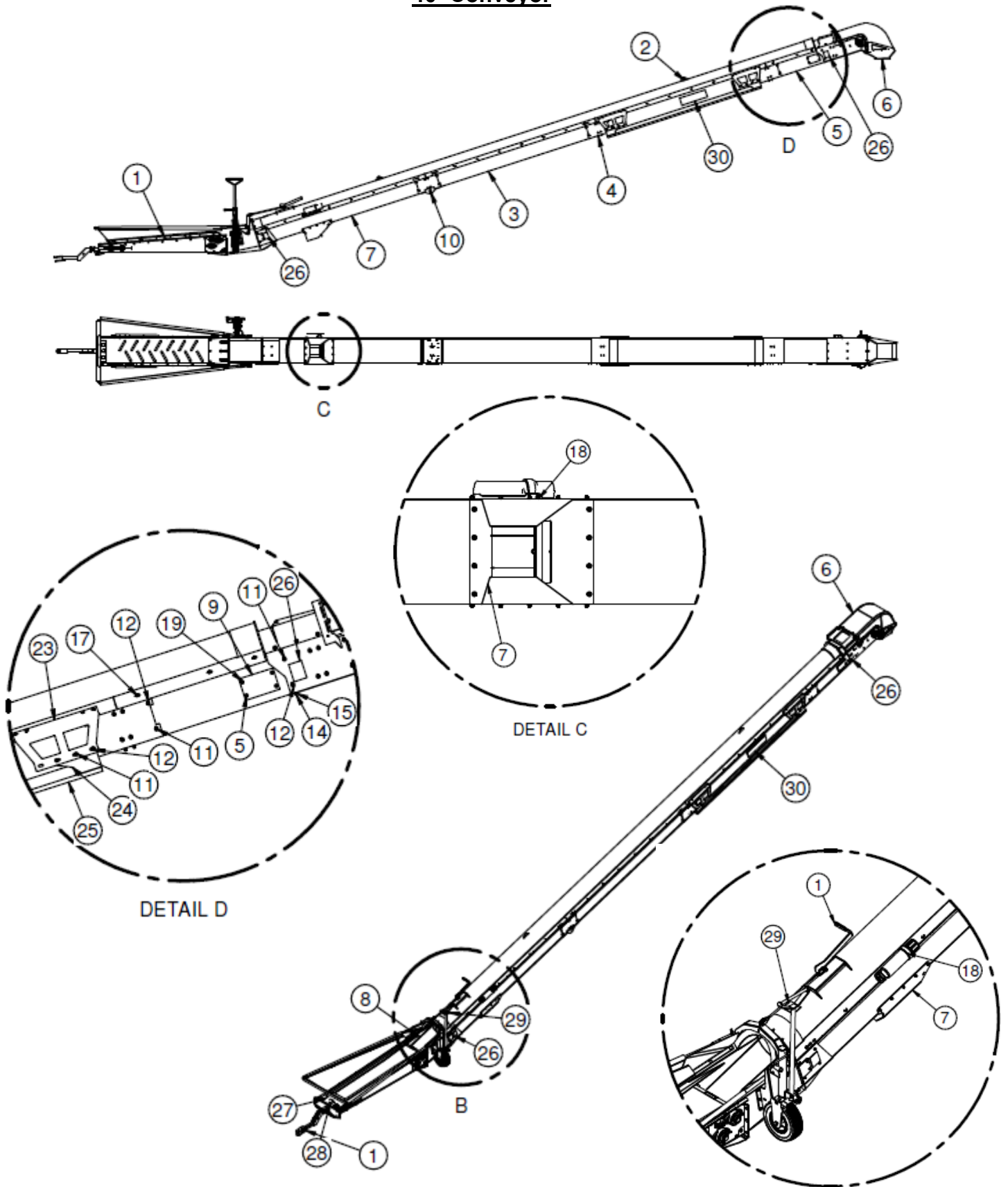




**40' - 45' Undercarriage**

| Item | Part #     | Rev | Title                                | Qty |
|------|------------|-----|--------------------------------------|-----|
| 1    | 01-02-0074 | A   | PLLY WIRE ROPE 3 IN DIA              | 1   |
| 2*   | 01-04-0076 | A   | WIRE ROPE .25 DIA X 80FT             | 1   |
| 3    | 01-06-0150 | A   | ASSY WHL/TIRE 5BLT-15.0 X 6.0 6PLY   | 2   |
| 4    | 01-08-0105 | A   | WINCH 2500LB                         | 1   |
| 5*   | 05-08-0555 | A   | WDMT SHV MNT PIVOTING                | 1   |
| 6    | 05-08-0825 | A   | WDMT PULLEY SUPPORT FL 40            | 1   |
| 7    | 05-08-0826 | A   | WDMT UPPER ARM FL40                  | 2   |
| 8    | 05-08-0827 | A   | WDMT LOWER ARM RH FL40               | 1   |
| 9    | 05-08-0828 | A   | WDMT LOWER ARM LH FL40               | 1   |
| 10   | 05-11-0558 | A   | LOWER UC PIN                         | 1   |
| 11   | 06-01-0065 | A   | BOLT, .750-10 X 2.0 UNC ZP GRADE 5   | 2   |
| 12   | 06-01-0115 | A   | BOLT CRG .375-16 X 1.00 ZP GR5       | 4   |
| 13   | 06-01-0124 | A   | BOLT FLG .375-16 X .750 ZP GR5       | 8   |
| 14   | 06-01-0232 | A   | BOLT FLG .500-13 X 1.250 ZP GR5      | 24  |
| 15   | 06-01-0277 | A   | BOLT .750-10 X 4.50 ZP GR5           | 2   |
| 16   | 06-02-0029 | A   | NUT,LOCK, .750-10 ZP NE NYLON INSERT | 4   |
| 17   | 06-03-0014 | A   | NUT LOCK FLG .375-16 ZP GR5          | 12  |
| 18   | 06-03-0015 | A   | NUT LOCK FLG .500-13 ZP GR5          | 24  |
| 19   | 06-05-0007 | A   | WASHER, .750 FLAT ZP                 | 13  |
| 20   | 06-09-0023 | A   | .188 X 2.00 ZP COTTER PIN            | 5   |
| 21   | 06-09-0087 | A   | .125 X 1.50 ZP COTTER PIN            | 1   |
| 22   | 06-09-0094 | A   | PIN CLVS .750 X 2.00 ZP              | 1   |
| 23   | 102FBC     | A   | PLT X BRACE UNCG                     | 4   |
| 24   | 102FE6     | A   | UPPER ARM PIN SS16 UNCG              | 1   |
| 25   | 13-05-0232 | A   | ASSY TRANSPORT SLIDE 16BW PORT       | 1   |
| 26   | 13-08-0458 | A   | ASSY AXLE SS 40 45FT                 | 1   |
| 27   | 13-08-0891 | A   | ASSY UPPER X MEMBER FL40             | 1   |
| 28   | 13-08-0892 | A   | ASSY LOWER X MEMBER FL40             | 1   |

**40' Conveyor**

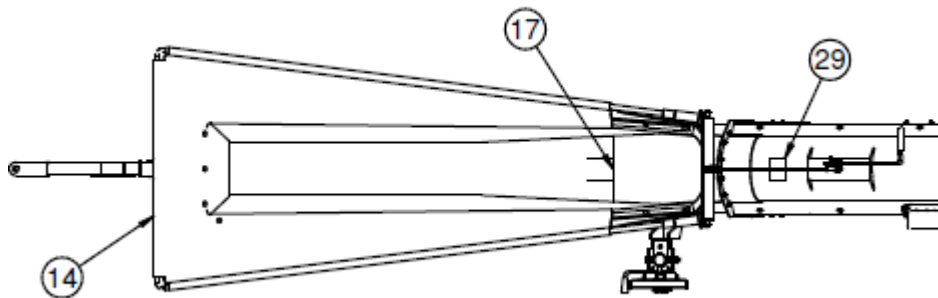
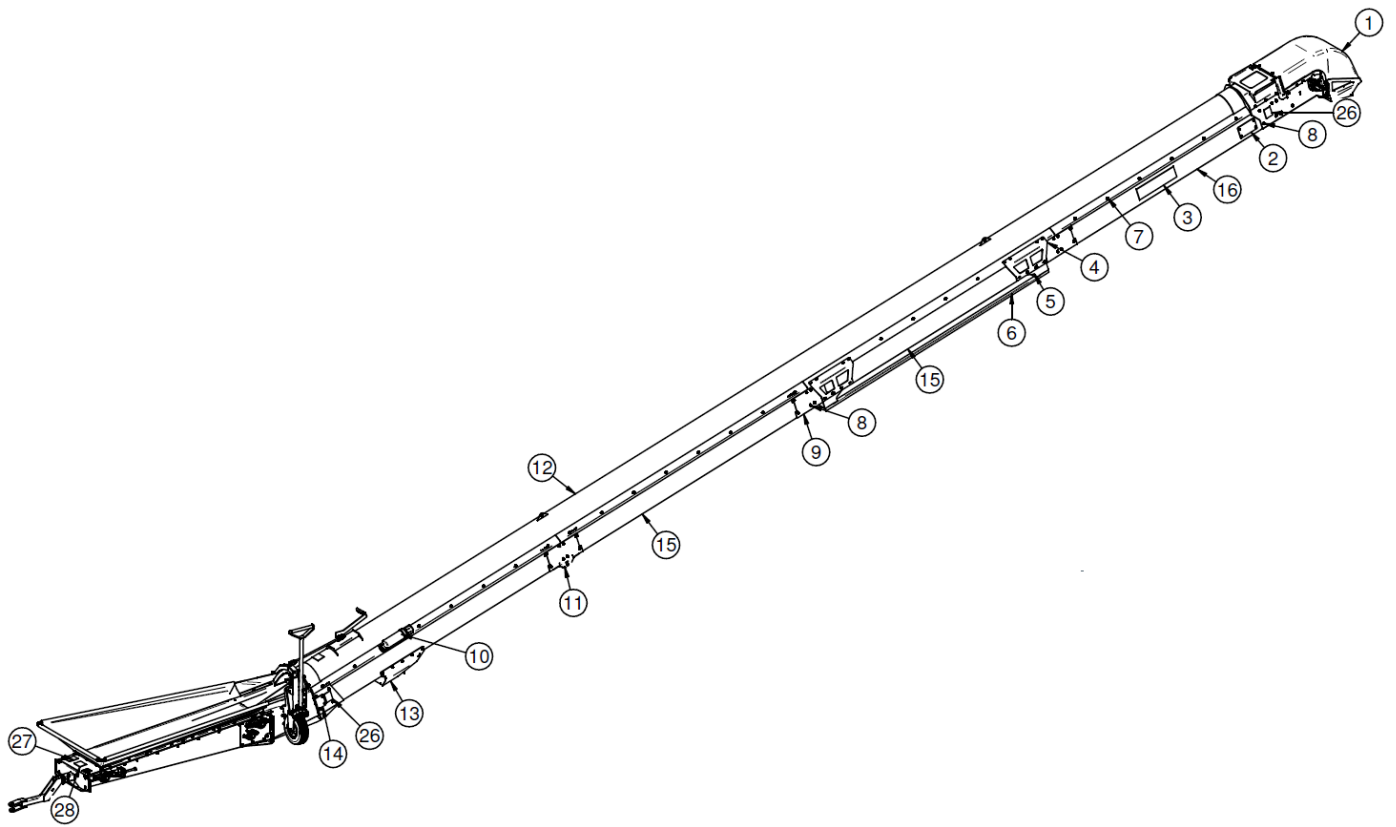




**40' Conveyor**

| Item # | Part #        | Rev # | Title                       | Quantity |
|--------|---------------|-------|-----------------------------|----------|
| 1      | 13-08-0888-04 | A     | INLET ASSY FL ST            | 1        |
| 2      | 13-05-0770-04 | A     | WDMNT TUBE FL 40            | 1        |
| 3      | 13-05-0806    | A     | ASSY MID SECT PAN FL        | 2        |
| 4      | 05-10-4769-04 | A     | PLT SPLICE 16IN UNI-TUBE    | 3        |
| 5      | 05-08-0815    | A     | HEAD PAN WDMT 5FT           | 1        |
| 6      | 13-05-0769-04 | A     | HEAD SECTION ASSY FL ST     | 1        |
| 7      | 13-05-0763    | A     | LOW FL SECT ASSY            | 1        |
| 8      | 11-02-0187    | A     | BELT CNVR CRES 16W FL40     | 1        |
| 9      | 103B9A        | A     | PLT SPLICE COVER            | 2        |
| 10     | 05-08-0813-04 | A     | WDMT FL SPLICE UNCRG        | 1        |
| 11     | 06-01-0153    | A     | BOLT CRG .375-16X.750 ZP    | 96       |
| 12     | 06-03-0014    | A     | NUT LOCK FLG .375-16 ZP     | 96       |
| 14     | 06-01-0150    | A     | BOLT, CARRIAGE,             | 6        |
| 15     | 06-03-0013    | A     | NUT,LOCK, FLG .250-20 ZP    | 6        |
| 17     | 06-01-0261    | A     | BOLT FLG .3125-18 X .500 ZP | 27       |
| 18     | 13-05-0332    | A     | ASSY MANUAL TUBE MT         | 1        |
| 19     | 06-03-0019    | A     | NUT, FLG .3125-18 UNC ZP    | 8        |
| 20     | 11-02-0064    | A     | SPLICE BELT U2 UNIBAR       | 1        |
| 21     | 11-02-0161    |       | CABLE BELT SPLICE NY        | 1        |
| 23     | 1044BA-04     | A     | PLT STOP LOWER              | 4        |
| 24     | 1044BC-04     | A     | TRANSPORT STOP              | 2        |
| 25     | 11-03-0006    | A     | SHT 10GA CS                 | 2        |
| 26     | 09-02-0027    | A     | LBL ATWK GSI MOVING         | 4        |
| 27     | 09-02-0028    | A     | LBL ATWK ATWRK GSI          | 1        |
| 28     | 09-01-0199    | A     | LBL ATWK GSI CONV OPP       | 1        |
| 29     | 09-02-0031    | A     | LBL ATWK GSI BELT           | 1        |
| 30     | 09-01-0226    | A     | LBL ATWK GSI 1640           | 2        |

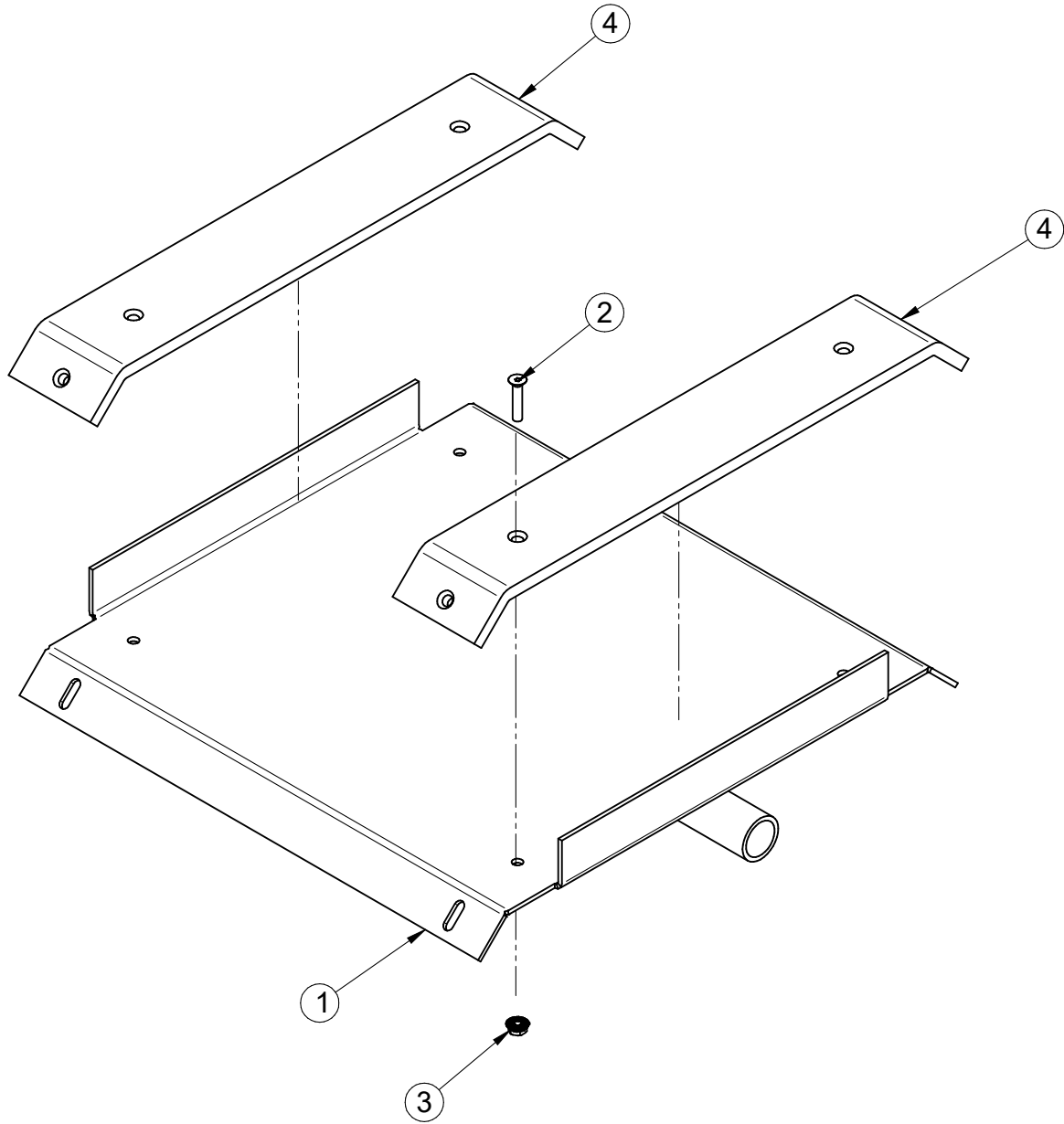
**45' Conveyor**



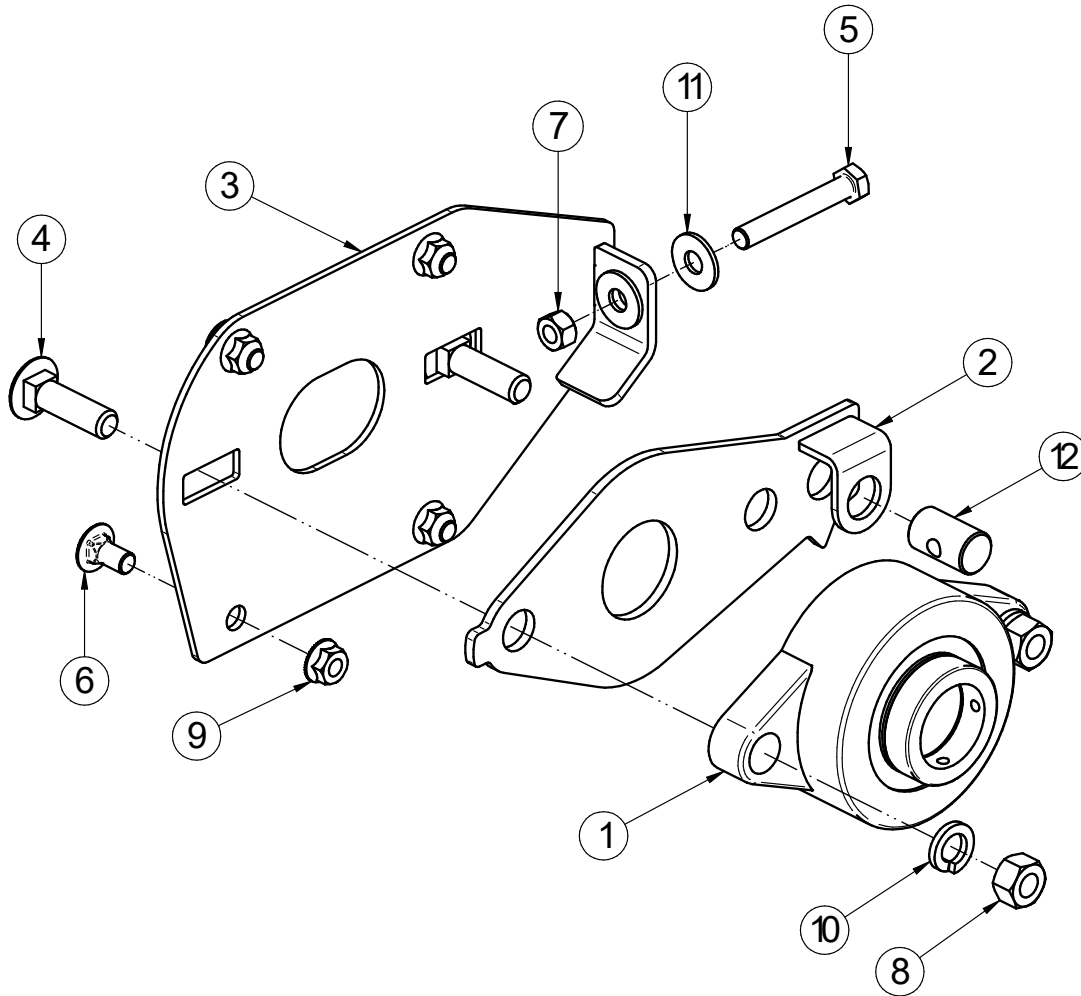
**45' Conveyor**

| Item # | Part #        | Rev # | Title                       | Quantity |
|--------|---------------|-------|-----------------------------|----------|
| 1      | 13-05-0769-04 | A     | HEAD SECTION ASSY FL ST     | 1        |
| 2      | 103B9A        | A     | PLT SPLICE COVER            | 2        |
| 3      | 09-01-0227    | A     | LBL ATWK GSI 1645           | 2        |
| 4      | 1044BA-04     | A     | PLT STOP LOWER              | 4        |
| 5      | 1044BC-04     | A     | TRANSPORT STOP              | 2        |
| 6      | 11-03-0006    | A     | SHT 10GA CS                 | 2        |
| 7      | 06-01-0261    | A     | BOLT FLG .3125-18 X .500 ZP | 70       |
| 8      | 06-01-0153    | A     | BOLT CRG .375-16X.750 ZP    | 84       |
| 9      | 05-10-4769-04 | A     | PLT SPLICE 16IN UNI-TUBE    | 2        |
| 10     | 13-05-0332    | A     | ASSY MANUAL TUBE MT         | 1        |
| 11     | 05-08-0813-04 | A     | WDMT FL SPLICE UNCRG        | 1        |
| 12     | 13-05-0772-04 | A     | WDMT FL45 TUBE              | 1        |
| 13     | 13-05-0763    | A     | LOW FL SECT ASSY            | 1        |
| 14     | 13-08-0888-04 | A     | INLET ASSY FL ST            | 1        |
| 15     | 13-05-0806    | A     | ASSY MID SECT PAN FL        | 2        |
| 16     | 13-05-0768    | A     | FRAME, PAN ASSY FL 10       | 1        |
| 17     | 11-02-0188    | A     | BELT CRES 15.75 X 100.63FT  | 1        |
| 18     | 06-01-0150    | A     | BOLT, CARRIAGE,             | 16       |
| 19     | 06-03-0013    | A     | NUT,LOCK, FLG .250-20 ZP    | 16       |
| 20     | 06-03-0014    | A     | NUT LOCK FLG .375-16 ZP     | 84       |
| 23     | 09-01-0227    | A     | ATWL LBL GSI FL 1645        | 1        |
| 24     | 11-02-0064    | A     | SPLICE BELT U2 UNIBAR       | 1        |
| 25     | 11-02-0161    |       | CABLE BELT SPLICE NY        | 1        |
| 26     | 09-02-0027    | A     | LBL ATWK GSI MOVING         | 4        |
| 27     | 09-02-0028    | A     | LBL ATWK ATWRK GSI          | 1        |
| 28     | 09-01-0199    | A     | LBL ATWK GSI CONV OPP       | 1        |
| 29     | 09-02-0031    | A     | LBL ATWK GSI BELT           | 1        |

**TRANSPORT SLIDE ASSEMBLY (13-05-0232)**

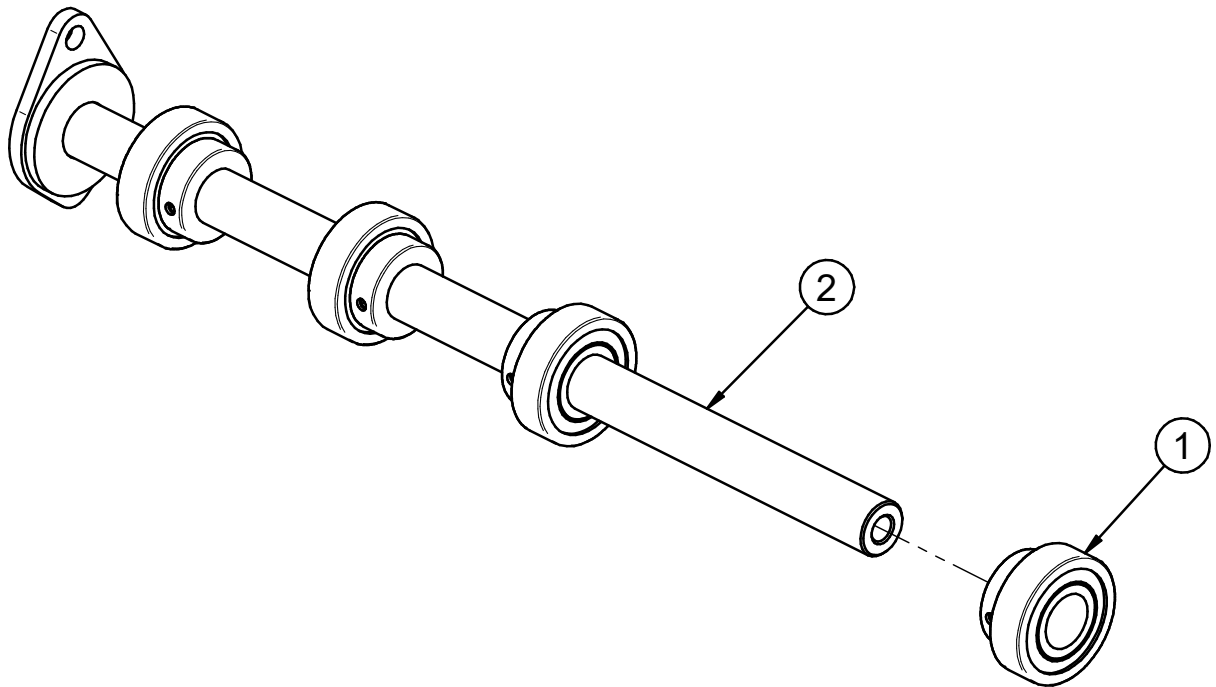


| Item # | Part #     | Description                       | Qty |
|--------|------------|-----------------------------------|-----|
| 1      | 05-07-0521 | WDMT TRANSPORT SLIDE 16BW PORT    | 1   |
| 2      | 06-01-0155 | SCRW MACH .250-20 X 1.25 SH FLHD  | 8   |
| 3      | 06-03-0013 | NUT,LOCK, FLG .250-20 ZP SERRATED | 8   |
| 4      | 280-3-0038 | PLASTIC SLIDE                     | 2   |

**HEAD TRACKING PLATE ASSEMBLY (13-08-0746)**

| Item # | Part #     | Description                         | Qty |
|--------|------------|-------------------------------------|-----|
| 1      | 01-03-0077 | BRG FLG MNT 1.50ID 2BOLT ECNTRC     | 1   |
| 2      | 05-08-0706 | WDMT TRACKING PIVOT LG BRG          | 1   |
| 3      | 05-08-0708 | WDMT TRACKING PLT HD LG BRG         | 1   |
| 4      | 06-01-0026 | BOLT CRG .500-13 X 1.75 ZP GR5      | 2   |
| 5      | 06-01-0071 | BOLT .375-16 X 2.50 ZP GR5          | 1   |
| 6      | 06-01-0153 | BOLT CRG .375-16X.750 ZP SHORT NECK | 4   |
| 7      | 06-02-0003 | NUT FULL .375-16 ZP GR5             | 1   |
| 8      | 06-02-0004 | NUT FULL .500-13 ZP GR5             | 2   |
| 9      | 06-03-0014 | NUT LOCK FLG .375-16 ZP GR5         | 4   |
| 10     | 06-04-0004 | WSHR LOCK SPLT .500 ZP              | 2   |
| 11     | 06-05-0004 | WSHR FLAT .375 ZP                   | 2   |
| 12     | 104079     | PIN TRACKING PIVOT                  | 1   |

**BELT BEARING SHAFT ASSEMBLY (13-05-0659)**



| Item # | Part #     | Description               | Qty |
|--------|------------|---------------------------|-----|
| 1      | 01-03-0073 | BRG BALL .875ID X .2047OD | 4   |
| 2      | 05-08-0717 | WDMT PIN ROLLER           | 1   |

## Limited Warranty — N.A. Grain Products

The GSI Group, LLC. ("GSI") warrants products which it manufactures, to be free of defects in materials and workmanship under normal usage and conditions for a period of 12 months from the date of shipment (or, if shipped by vessel, 14 months from the date of arrival at the port of discharge). If, in GSI's sole judgment, a product is found to have a defect in materials and/or workmanship, GSI will, at its own option and expense, repair or replace the product or refund the purchase price. This Limited Warranty is subject to extension and other terms as set forth below.

**Warranty Enhancements:** The warranty period for the following products is enhanced as shown below and is in lieu of (and not in addition to) the above stated warranty period. (Warranty Period is from date of shipment.)

|                          | Product   | Warranty Period |
|--------------------------|---|-----------------|
| <b>Storage</b>           | Grain Bin Structural Design<br>• Roof, doors, platforms and walk arounds<br>• Flooring (when installed using GSI specified floor support system for that floor)<br>• Hopper tanks | 5 Years         |
|                          | Dryer Structural Design – (Tower, Portable and TopDry)<br>• Includes (frame, portable dryer screens, ladders, access doors and platforms)   | 5 Years         |
| <b>Conditioning</b>      | All other Dryer parts including:<br>• Electrical (controls, sensors, switches & internal wiring)  | 2 Years         |
|                          | Bullseye Controllers  | 2 Years         |
| <b>Material Handling</b> | Bucket Elevators Structural Design  | 5 Years         |
|                          | Towers Structural Design  | 5 Years         |
|                          | Catwalks Structural Design  | 5 Years         |
|                          | Accessories (stairs, ladders and platforms) Structural Design   | 5 Years         |

### Conditions and Limitations:

THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE LIMITED WARRANTY DESCRIPTION SET FORTH HEREIN; SPECIFICALLY, GSI DISCLAIMS ANY AND ALL OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE IN CONNECTION WITH: (I) ANY PRODUCT MANUFACTURED OR SOLD BY GSI, OR (II) ANY ADVICE, INSTRUCTION, RECOMMENDATION OR SUGGESTION PROVIDED BY AN AGENT, REPRESENTATIVE OR EMPLOYEE OF GSI REGARDING OR RELATED TO THE CONFIGURATION, INSTALLATION, LAYOUT, SUITABILITY FOR A PARTICULAR PURPOSE, OR DESIGN OF SUCH PRODUCTS.

The sole and exclusive remedy for any claimant is set forth in this Limited Warranty and shall not exceed the amount paid for the product purchased. This Warranty only covers the value of the warranted parts and equipment, and does not cover labor charges for removing or installing defective parts, shipping charges with respect to such parts, any applicable sales or other taxes, or any other charges or expenses not specified in this Warranty. GSI shall not be liable for any other direct, indirect, incidental or consequential damages, including, without limitation, loss of anticipated profits or benefits. Expenses incurred by or on behalf of a claimant without prior written authorization from the GSI warranty department shall not be reimbursed. This warranty is not transferable and applies only to the original end-user. GSI shall have no obligation or responsibility for any representations or warranties made by or on behalf of any dealer, agent or distributor. Prior to installation, the end-user bears all responsibility to comply with federal, state and local codes which apply to the location and installation of the products.

This Limited Warranty extends solely to products sold by GSI and does not cover any parts, components or materials used in conjunction with the product, that are not sold by GSI. GSI assumes no responsibility for claims resulting from construction defects, unauthorized modifications, corrosion or other cosmetic issues caused by storage, application or environmental conditions. Modifications to products not specifically delineated in the manual accompanying the product at initial sale will void all warranties. This Limited Warranty shall not extend to products or parts which have been damaged by negligent use, misuse, alteration, accident or which have been improperly/inadequately maintained.

#### Notice Procedure:

In order to make a valid warranty claim a written notice of the claim must be submitted, using the RMA form, within 60 days of discovery of a warrantable nonconformance. The RMA form is found on the OneGSI portal.

#### Service Parts:

GSI warrants, subject to all other conditions described in this Warranty, Service Parts which it manufactures for a period of 12 months from the date of purchase unless specified in Enhancements above.

(Limited Warranty - N.A. Grain Products, revised 19 October 2018)

**This equipment shall be installed in accordance with the current installation codes and applicable regulations, which should be carefully followed in all cases. Authorities having jurisdiction should be consulted before installations are made.**



1004 E. Illinois St.  
Assumption, IL 62510-0020  
Phone: 1-217-226-4421  
Fax: 1-217-226-4420  
[www.gsiag.com](http://www.gsiag.com)



GSI is a worldwide brand of AGCO Corporation.

Copyright © 2018 by GSI Group  
Printed in the USA