



S3000 BIN FILL CONVEYOR



Operators Manual

Build Revision A



INTRODUCTION

Thank you for choosing USC, LLC 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 Series 3000 Bin Fill Conveyor. It does not hold USC, LLC liable for any accidents or injuries that may occur.

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.

SERIES 3000 BIN FILL CONVEYOR

- 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 your local USC dealer 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 your USC dealer. Ownership passes to purchaser when the unit leaves the USC, LLC. 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 serial number is located on the side of the conveyor near the hitch.



SERIAL NUMBER: _____

TABLE OF CONTENTS

<u>Section</u>	<u>Contents</u>	<u>Page #</u>
Section A	Safety Instructions	5
Section B	Mechanical Operation	16
	System Overview & Controls.....	17
	Pre-Operation Checklist	18
	Machine Break-in.....	19
	Conveyor Set-up.....	20
	Operation	21
	Structural Envelope.....	22
	Emergency Stopping	26
Section C	Transporting	28
Section D	Troubleshooting	30
Section E	Maintenance	33
Section F	Storage.....	38
Section G	Mechanical Drawings.....	40
Section H	Limited Warranty	67

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.

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 seed treating system is usually 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 USC, LLC Seed Treating System. **YOU** must ensure that you and anyone else who is going to operate, maintain, or work around the Seed Treating System 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 Conveyor.

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.

- Series 3000 Conveyor 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 signs before operating, maintaining, adjusting or unplugging the Conveyor.
2. Only trained persons shall operate the Bin Fill Conveyor. 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 Conveyor.

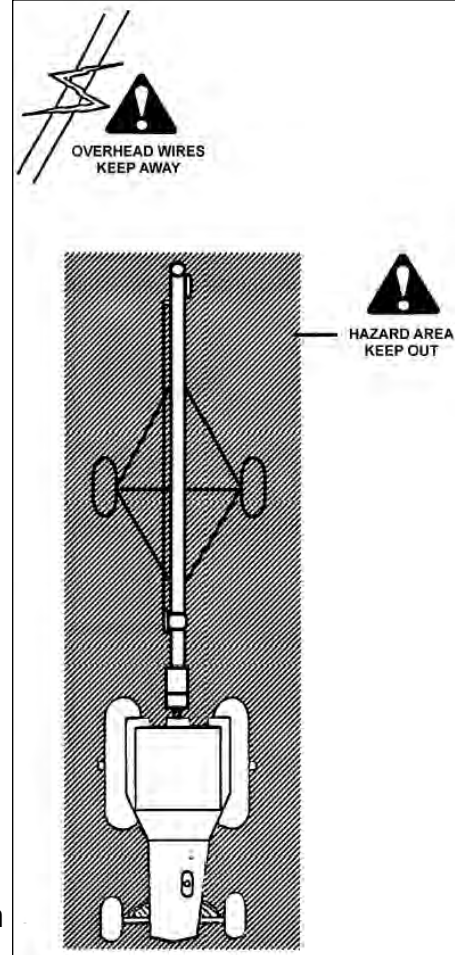


OPERATING SAFETY:

1. Read and understand the Operator's Manual and all safety signs 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. Keep lift point at drawbar height.
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 Conveyor.
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 SIGNS

1. Keep safety signs clean and legible at all times.
2. Replace safety signs that are missing or have become illegible.
3. Replaced parts that displayed a safety sign should also display the current sign.
4. Safety signs are available from your Authorized Dealer.

How to Install Safety Signs:

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

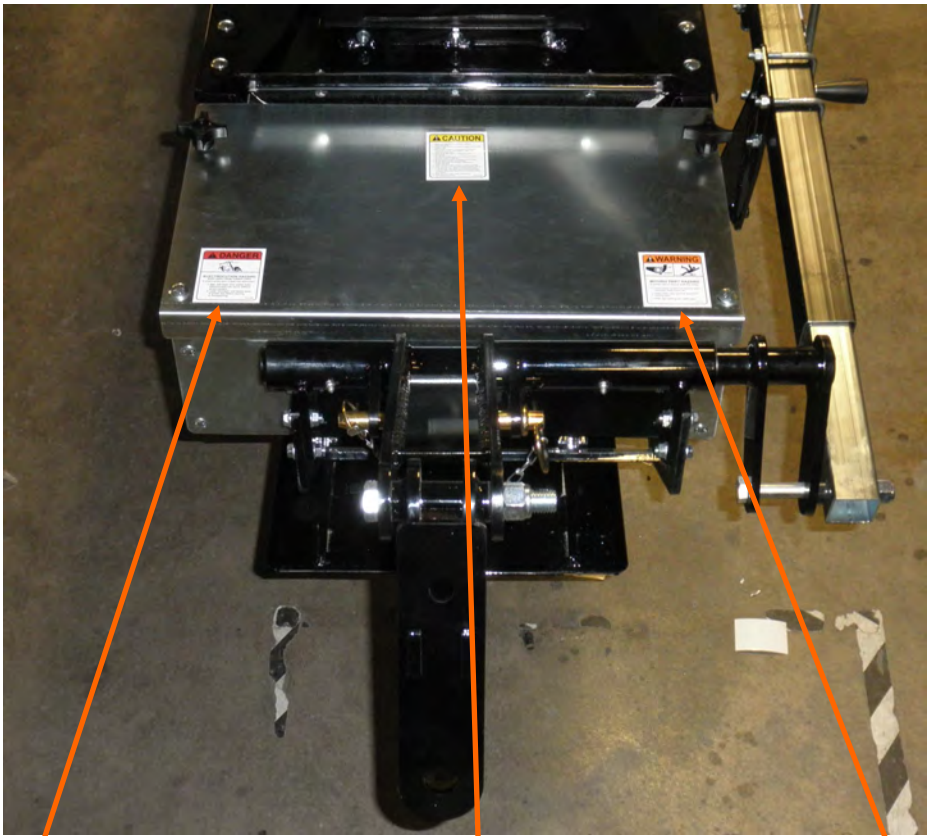


Part # 09-02-0001



Part # 09-02-0002

SERIES 3000 BIN FILL CONVEYOR



Part # 09-02-0007



Part # 09-02-0006



Part # 09-02-0011

SERIES 3000 BIN FILL CONVEYOR

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

REMEMBER—If Safety Signs have been damaged, removed, become illegible, or parts replaced without safety signs, new signs must be applied. New safety signs are available from your Authorized Dealer.



Part # 09-02-0008

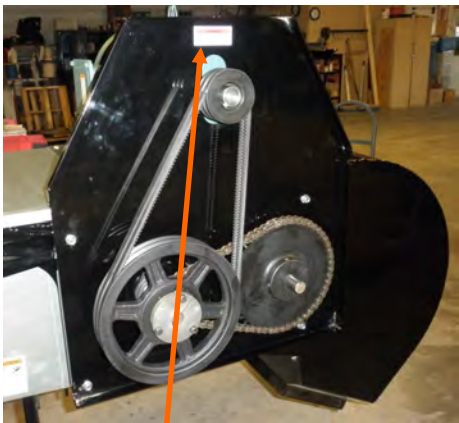


Part # 09-02-0009

SERIES 3000 BIN FILL CONVEYOR



Part # 09-02-0011



Part # 09-02-0010



Part # 09-02-0012

**SECTION
B**

MECHANICAL OPERATION



OPERATING SAFETY

- | | |
|--|--|
| <ol style="list-style-type: none"> 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. | <ol style="list-style-type: none"> 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. |
|--|--|

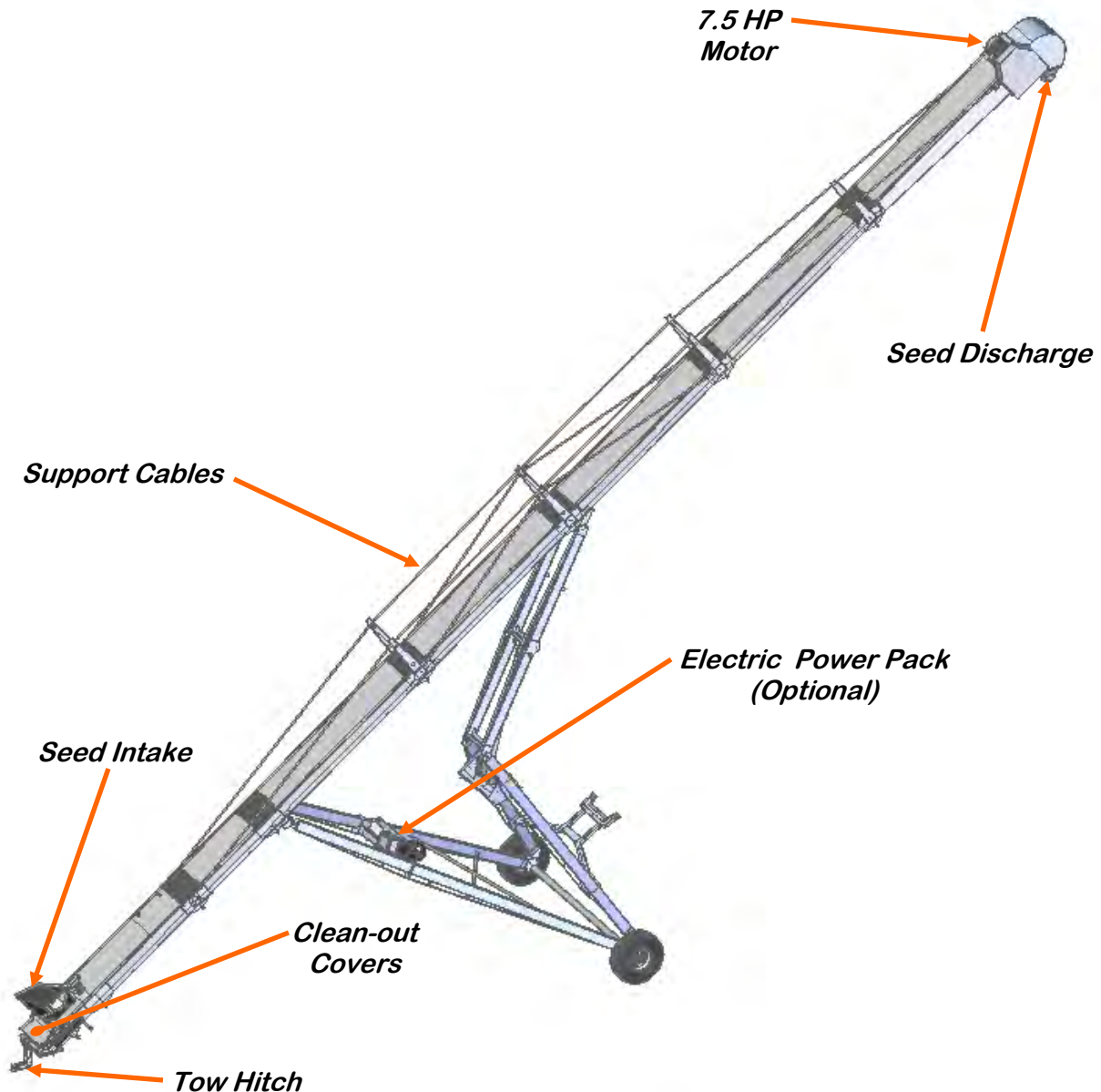
The USC, LLC Series 3000 Bin Fill Conveyor is designed to efficiently move seed between a truck, trailer or wagon to a seed bin. Conveyor lift is provided by hydraulics. The fluid is provided by either the hydraulic connection from a tractor or the optional Electric Powered Hydraulic Lift.

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.

SYSTEM OVERVIEW



CONTROLS

- **Electric Drive:** Have a licensed electrician provide power to the motor per the National Electrical Code ANSI/NFPA 70 and local codes. Install an ON, OFF switch for the convenience of the operator.
- **Electric Power Pack (Optional):** An electric powered hydraulic version may be purchased when the customer is not using a tractor with a hydraulic connection to raise and lower the conveyor. Use the provided controls to raise or lower the discharge end of the conveyor. Have a licensed electrician provide power to the control box per the National Electrical Code ANSI/NFPA 70 and local codes.

PRE-OPERATION CHECKLIST

Efficient and safe operation of the USC, LLC Series 3000 Bin Fill 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 E, Maintenance (pg 33).
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 the support cables for security. Inspect cable for fraying or damage and replace if damaged or frayed.
6. Check that hydraulic fittings are secure and not leaking hydraulic fluid.
7. Check that drive belt and conveying belt are not frayed or damaged and that they are properly adjusted and aligned.
8. Be sure Conveyor wheels are chocked.
9. Check that discharge and intake areas are free of obstructions.



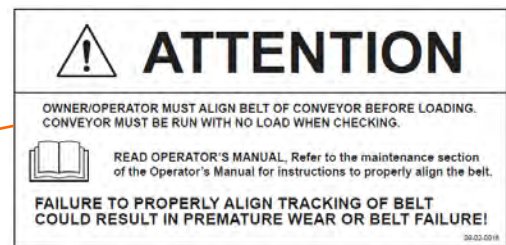
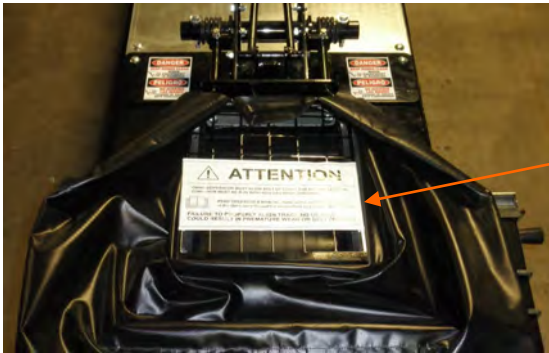
Anchoring and/or support of Conveyor during operation is necessary. When the lower half of Conveyor empties of material, the weight balance transfers to the upper end of the machine, which can cause upending.

MACHINE BREAK-IN

Although there are no operational restrictions on the Conveyor when used for the first time, it is required 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, before any seed is run through, it is essential that the operator check conveyor belt tension and alignment and make any necessary adjustments (see pages 35 and 36).**



Part # 09-02-0016

After operating or transport for 1/2 hour

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

After operating for 5 hours and 10 hours

1. Re-torque all wheel 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.

CONVEYOR SET-UP

The following steps outline the initial set-up of your USC Series 3000 Conveyor:

1. Clear the area of bystanders, especially small children before starting.
2. Be sure there is enough clearance from overhead obstructions and power lines or other equipment to move the machine into its working position.
3. Attach the Conveyor to an appropriate towing vehicle. See Section D, Transporting on page 28.
4. Move conveyor as near as possible to desired position.
5. Use the hydraulic lift to raise the conveyor outlet so it clears the top of the bin you intend to load seed into.
6. Move conveyor to it's final position.
7. Set the parking brake on the towing vehicle before dismounting.
8. Using the hand crank or optional hydraulic lift, lower the conveyor to the ground.
9. Place chocks in the front and rear of each wheel.
10. Unhook the unit from the towing vehicle.
11. It will be necessary to stake or weight the intake end to prevent upending when the machine is emptying.
12. Review the Workplace Safety Diagram for your model prior to starting work. Follow all setup instructions and do not allow any unauthorized people into the working area
13. Reverse the above procedure when removing the machine from its working position.

OPERATION

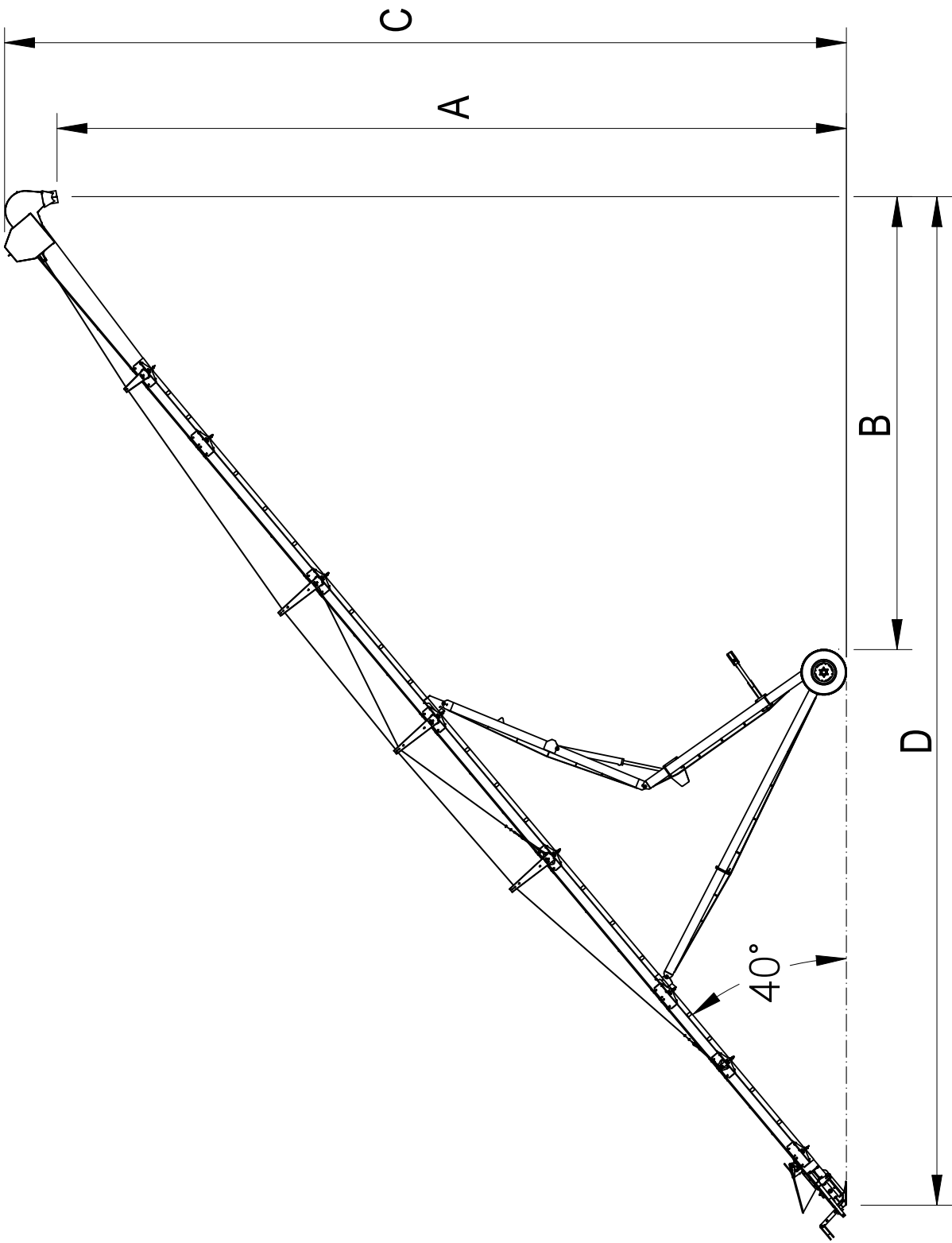
When using the Conveyor, follow this procedure:

1. Clear the area of bystanders, especially small children, before starting.
2. Review the Pre-Operation Checklist (page 18) before starting.
3. 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.
4. Set the conveyor in position. To achieve rated capacity, the conveyor should be run **no steeper than 40°**. Molded flights on the belt minimize material rollback during operation.
5. Drive or back the truck or wagon into position for unloading.
6. Turn the electric motor ON and begin the flow of material and unload.
7. To stop the conveyor; stop the flow of material and run until the belt is empty. Turn off motor and lock out power source.

Operational hints

- Direct the flow of material into the input hopper when moving material. Do not “flood feed” the inlet hopper.
- 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.
- Do not support the discharge end directly on the bin, truck box, trailer or wagon. Stake the intake (hopper) or weight it down to prevent upending.
- Use a Truck Unload Conveyor or similar conveyor to move grain from under the bin discharge into the Series 3000 conveyor hopper when emptying low clearance facilities.

STRUCTURAL ENVELOPE - RAISED POSITION



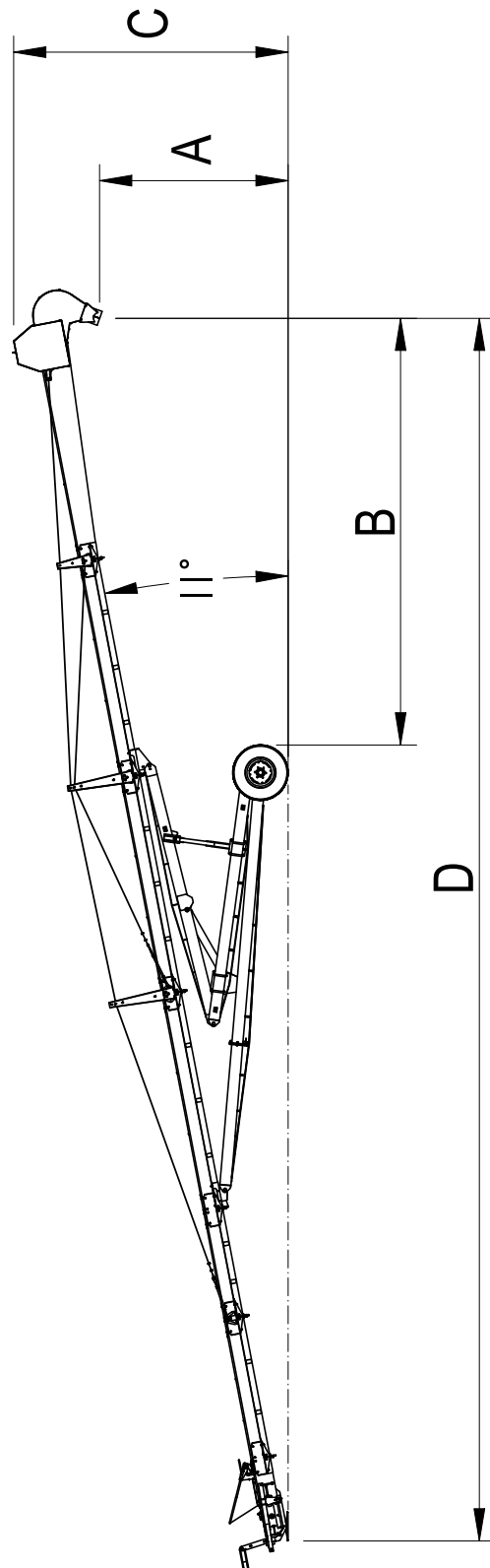
STRUCTURAL ENVELOPE - RAISED POSITION

MODEL #	DESCRIPTION	A	B	C	D
17-14-0007	CNVR BIN LD 5520 7.5HP 1PH	34' 2"	13' 7 1/2"	37' 1"	44' 5 1/2"
17-14-0008	CNVR BIN LD 5520 7.5HP 3PH	34' 2"	13' 7 1/2"	37' 1"	44' 5 1/2"
17-14-0013	CNVR BIN LD 5520EP 7.5HP 1PH	34' 2"	13' 7 1/2"	37' 1"	44' 5 1/2"
17-14-0014	CNVR BIN LD 5520EP 7.5HP 3PH	34' 2"	13' 7 1/2"	37' 1"	44' 5 1/2"
17-14-0009	CNVR BIN LD 6520 7.5HP 1PH	40' 7 1/8"	21' 3 5/8"	43' 6"	52' 1 1/2"
17-14-0010	CNVR BIN LD 6520 7.5HP 3PH	40' 7 1/8"	21' 3 5/8"	43' 6"	52' 1 1/2"
17-14-0015	CNVR BIN LD 6520EP 7.5HP 1PH	40' 7 1/8"	21' 3 5/8"	43' 6"	52' 1 1/2"
17-14-0016	CNVR BIN LD 6520EP 7.5HP 3PH	40' 7 1/8"	21' 3 5/8"	43' 6"	52' 1 1/2"
17-14-0019	CNVR BIN LD 7020 7.5HP 1PH	43' 9 5/8"	25' 1 1/2"	46' 8 1/2"	55' 11 1/2"
17-14-0020	CNVR BIN LD 7020 7.5HP 3PH	43' 9 5/8"	25' 1 1/2"	46' 8 1/2"	55' 11 1/2"
17-14-0021	CNVR BIN LD 7020EP 7.5HP 1PH	43' 9 5/8"	25' 1 1/2"	46' 8 1/2"	55' 11 1/2"
17-14-0022	CNVR BIN LD 7020EP 7.5HP 3PH	43' 9 5/8"	25' 1 1/2"	46' 8 1/2"	55' 11 1/2"

NOTES

1. WHEELS SHOULD NOT BE CHOCKED WHEN RAISING AND LOWERING UNIT IF UNIT IS HOOKED TO TRACTOR AT DRAWBAR.
2. WHEELS SHOULD ALWAYS BE CHOCKED AFTER RAISING OR IF UNHOOKED FROM TRACTOR..
3. AFTER RAISING UNIT OVER BIN, SHUT OIL FLOW OFF FROM TRACTOR WITH HYDRAULIC BALL VALVE.
4. MAKE SURE TRANSPORT PIN IS INSTALLED WHEN TRANSPORTING UNIT ON ROADWAY.
5. HYDRAULIC OIL FLOW SHOULD BE SHUT OFF USING HYDRAULIC BALL VALVE WHEN TRANSPORTING UNIT ON ROADWAY.

STRUCTURAL ENVELOPE - LOWERED AND TRANSPORT POSITION



STRUCTURAL ENVELOPE - LOWERED AND TRANSPORT POSITION

MODEL #	DESCRIPTION	A	B	C	C @ 18" DRAWBAR HEIGHT	D
17-14-0007	CNVR BIN LD 5520 7.5HP 1PH	8' 6 1/2"	19' 4 1/4"	12' 5 1/2"	11' 6 5/8"	55' 5 1/2"
17-14-0008	CNVR BIN LD 5520 7.5HP 3PH	8' 6 1/2"	19' 4 1/4"	12' 5 1/2"	11' 6 5/8"	55' 5 1/2"
17-14-0013	CNVR BIN LD 5520EP 7.5HP 1PH	8' 6 1/2"	19' 4 1/4"	12' 5 1/2"	11' 6 5/8"	55' 5 1/2"
17-14-0014	CNVR BIN LD 5520EP 7.5HP 3PH	8' 6 1/2"	19' 4 1/4"	12' 5 1/2"	11' 6 5/8"	55' 5 1/2"
17-14-0009	CNVR BIN LD 6520 7.5HP 1PH	10' 5 1/4"	29' 2 1/8"	14' 4 1/8"	13'	65' 3 1/2"
17-14-0010	CNVR BIN LD 6520 7.5HP 3PH	10' 5 1/4"	29' 2 1/8"	14' 4 1/8"	13'	65' 3 1/2"
17-14-0015	CNVR BIN LD 6520EP 7.5HP 1PH	10' 5 1/4"	29' 2 1/8"	14' 4 1/8"	13'	65' 3 1/2"
17-14-0016	CNVR BIN LD 6520EP 7.5HP 3PH	10' 5 1/4"	29' 2 1/8"	14' 4 1/8"	13'	65' 3 1/2"
17-14-0019	CNVR BIN LD 7020 7.5HP 1PH	11' 4 1/2"	34' 1"	15' 3 3/8"	13' 8 5/8"	70' 2 3/8"
17-14-0020	CNVR BIN LD 7020 7.5HP 3PH	11' 4 1/2"	34' 1"	15' 3 3/8"	13' 8 5/8"	70' 2 3/8"
17-14-0021	CNVR BIN LD 7020EP 7.5HP 1PH	11' 4 1/2"	34' 1"	15' 3 3/8"	13' 8 5/8"	70' 2 3/8"
17-14-0022	CNVR BIN LD 7020EP 7.5HP 3PH	11' 4 1/2"	34' 1"	15' 3 3/8"	13' 8 5/8"	70' 2 3/8"

NOTES

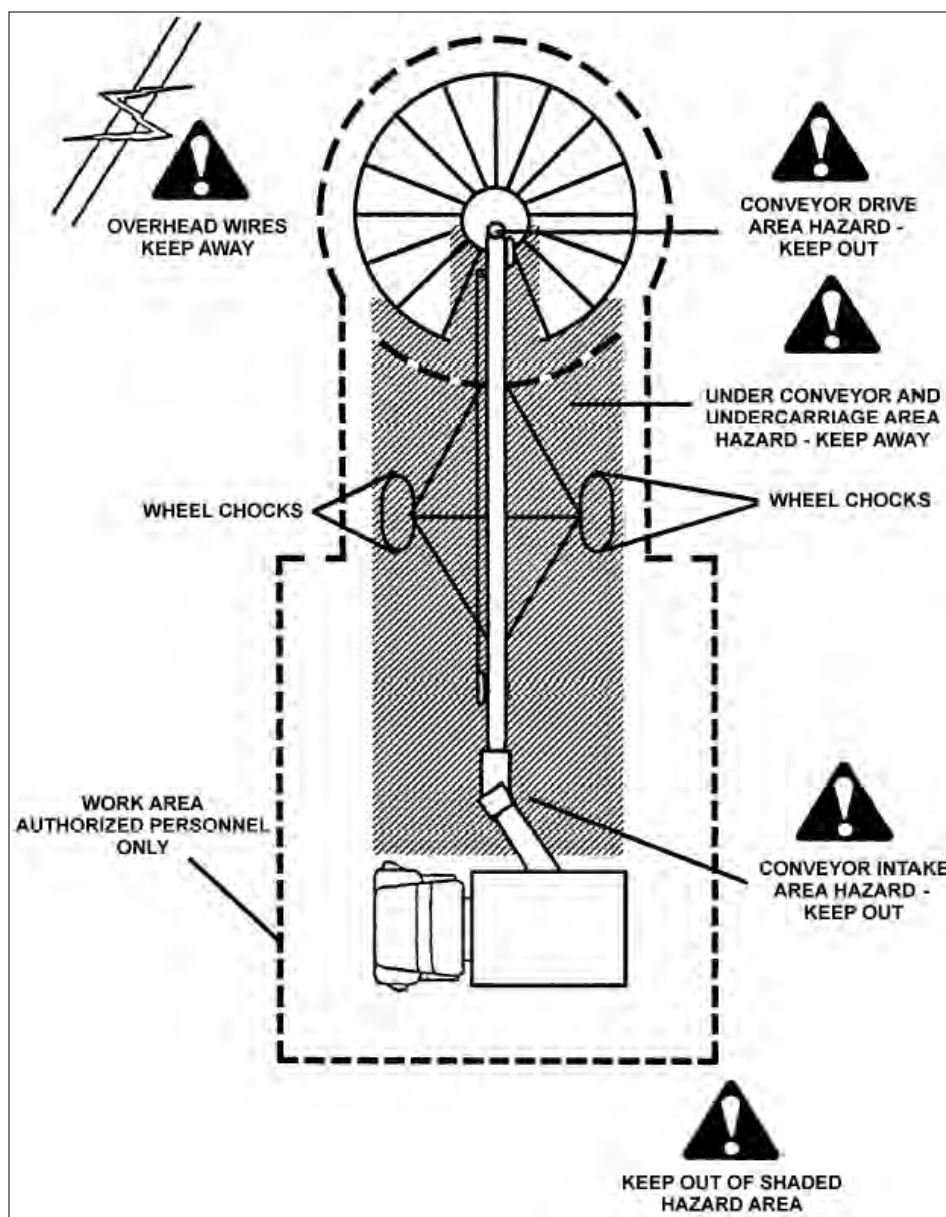
1. WHEELS SHOULD NOT BE CHOCKED WHEN RAISING AND LOWERING UNIT IF UNIT IS HOOKED TO TRACTOR AT DRAWBAR.
2. WHEELS SHOULD ALWAYS BE CHOCKED AFTER RAISING OR IF UNHOOKED FROM TRACTOR..
3. AFTER RAISING UNIT OVER BIN, SHUT OIL FLOW OFF FROM TRACTOR WITH HYDRAULIC BALL VALVE.
4. MAKE SURE TRANSPORT PIN IS INSTALLED WHEN TRANSPORTING UNIT ON ROADWAY.
5. HYDRAULIC OIL FLOW SHOULD BE SHUT OFF USING HYDRAULIC BALL VALVE WHEN TRANSPORTING UNIT ON ROADWAY.

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.



SERIES 3000 BIN FILL CONVEYOR

NOTES

SECTION
C

TRANSPORTING

ATTACHING AND UNHOOKING

It is recommended that the Conveyor be attached to an appropriate towing vehicle whenever it is moved. Follow this procedure when attaching to or unhooking from a towing vehicle:

1. Using the jack, raise the drawbar to the desired height and remove the hitch pin from drawbar assembly (bottom left).
2. Be sure that there is sufficient room and clearance to back up to the machine.
3. Back up tow vehicle and align with drawbar on conveyor.
4. Set the park brake before dismounting.
5. Align the drawbar to tow vehicle and Install a hitch pin with a retainer (not supplied). Hitch pin should not be less than 3/4 inch in diameter. Anything smaller could damage lifting mechanism. 1 inch diameter is optimal.
- 6. Remove wheel chocks before raising the tail end of the conveyor. Failure to do so can damage lifting mechanism.**
7. Using the jack, raise the tail end of the conveyor high enough to be able to re-insert the hitch pin above the drawbar mechanism (bottom right).
8. Move to new location.
9. Reverse the above procedure when unhooking.

Remove hitch pin

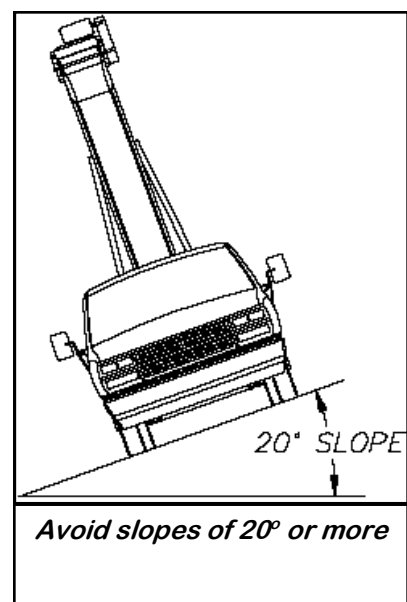
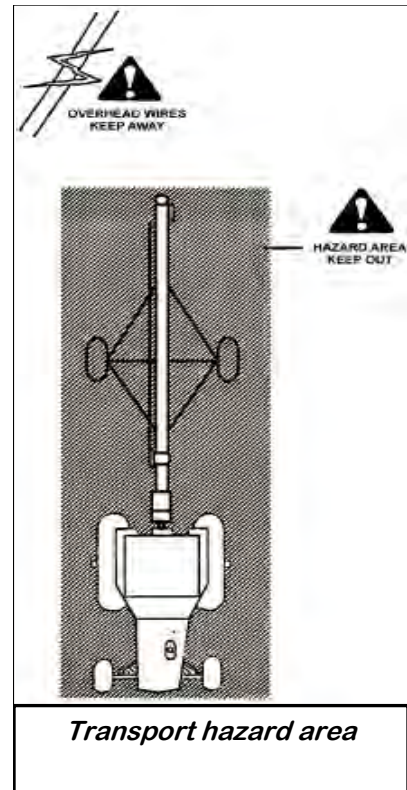


Re-insert hitch pin

TRANSPORTING

USC, LLC Series 3000 Conveyors are designed to be easily and conveniently moved from place to place. When transporting, follow this procedure:

1. Review the Transport Safety Schematic before starting.
2. Be sure all bystanders are clear of the machine.
3. On electric power pack units, unplug the power cord, wrap around frame, and secure to prevent dragging.
4. Attach to a towing vehicle using a hitch pin with a retainer.
5. Remove chocks from the wheels.
6. Lower the conveyor into its fully down position so that it is sitting on the rest plate on the axle assembly.
7. Electrocutation can occur without direct contact.
8. Never go across slopes of more than 20°. It is better to go straight up or straight down a slope.
9. 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.
10. 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.
11. It is not recommended that the machine be transported faster than 25 mph (40 km/h).
12. Do not allow riders on the machine or towing vehicle.
13. During periods of limited visibility, use pilot vehicles or add extra lights to the machine.
14. Always use hazard flashers on the vehicle when transporting unless prohibited by law.



**SECTION
D**

TROUBLESHOOTING

Below is a table describing the most frequent problems and solutions with the USC Series 3000 Conveyor. For further assistance, contact your local USC dealer.

Problem	Possible Cause	Solution
Conveyor will not run.	1. Not turned on. 2. Conveying belt loose. 3. Drive belt loose.	1. Start power source or turn on power. 2. Tighten and align belt. 3. Tighten drive belt.
Belt edge fraying.	1. Belt not aligned.	1. Align and tension belt.
Low conveying capacity.	1. Angle too steep. 2. Slow operating speed. 3. Conveyor belt slipping. 4. Drive belt slipping.	1. Reposition with angle at 40°. 2. Increase operating speed. 3. Tighten belt. 4. Set drive belt tension.
Conveyor will not raise (Tractor)	1. Tractor hydraulic pressure is to low. 2. Ball valve is in shut off position. 3. Hose disconnected. 4. Hydraulic cylinder vent not installed or plugged. 5. Pivot point hardware is to tight.	1. Tractor hydraulic pressure needs to be 2400 PSI minimum. 2. Open valve. 3. Connect hose to tractor. 4. Clean or install new vent. 5. Back hardware tightness off so hardware will easily rotate. (Make sure lock-nuts are still fully engaged)

SERIES 3000 BIN FILL CONVEYOR

Below is a table describing the most frequent problems and solutions with the USC Series 3000 Conveyor. For further assistance, contact your local USC dealer.

Problem	Possible Cause	Solution
Conveyor will not raise (Power Pack)	1. No power to hydraulic pack. 2. Low oil. 3. Using incorrect oil. 4. Hydraulic cylinder vent not installed or plugged. 5. Pivot point hardware is too tight. 6. Pressure relief valve set too low. 7. Motor running in wrong direction.	1. Check power source, make sure switch inside of control box is in the on position. 2. Make sure oil level is high enough to touch the bottom of the indentations located on the top of the reservoir. 3. You must use DTE 24 hydraulic oil. 4. Clean or install new vent. 5. Back hardware tightness off so hardware will easily rotate. (Make sure lock-nuts are still fully engaged) 6. Adjust relief valve as needed to raise (Adjust set screw inward) 7. Check wiring. Revise as needed.

Unplugging

In unusual moisture or material conditions, the machine can plug. When unplugging, follow this procedure:

1. Place all controls in neutral or off, stop motor, disable and lock out power source before unplugging.
2. Unbolt and remove the necessary conveyor covers.
3. Remove plugged material.
4. Re-install and secure conveyor covers.



Bottom clean-out covers



Bottom clean-out covers removed

MAINTENANCE

SECTION E

Proper maintenance of the USC Series 3000 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.

Hydraulic Oil

Use DTE 24 hydraulic oil for Electric Powered Hydraulic Pack.

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.

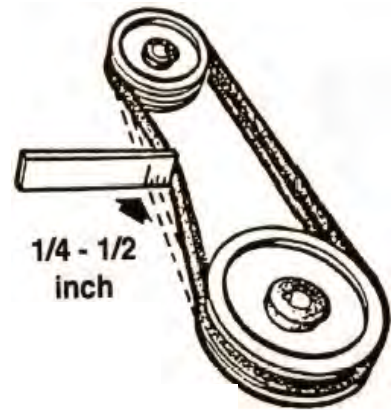


If fittings will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace fitting if necessary.

SERVICING INTERVALS

Every 40 hours or Weekly

1. Check the conveyor belt tension and alignment.
2. Grease conveyor bearings.
 - Two bolt flanged bearings, tail roller bearings right and left (2 locations).
 - Two bolt flanged bearings, drive roller bearings right and left (2 locations).
 - Two bolt flanged bearings, jackshaft 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. (right)



Every 200 hours or Annually

1. Repack wheel bearings.
2. Wash machine.
3. Check pulley bushing for wear. To inspect pulley:
 - Lower the conveyor to its lowest position.
 - When the conveyor has reached the lowest position, it will stop on the hinge support.
 - Loosen and remove the bolt.
 - Inspect the bushing on the pulley for wear.
 - Reverse steps 1-4 for re-assembly.

CONVEYING BELT TENSION AND ALIGNMENT-TAIL END

A contoured belt with molded flights 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.



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

To maintain the belt, follow this procedure:



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.
3. The belt is tightened by turning both take-up adjustments an **equal** number of turns.
4. Use the drive roller 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 roller. 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 rollers.

*Use this bolt to tighten the belt
or to adjust the tracking*



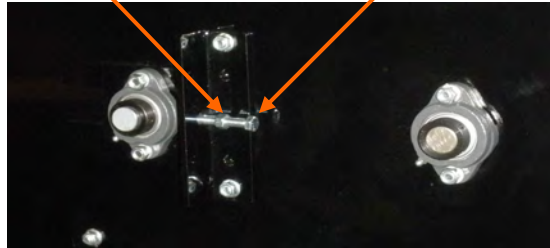
*Tighten jam nut
after adjustment*

CONVEYING BELT ALIGNMENT-HEAD END

1. A misaligned belt will track toward the loose side. Set the tracking by loosening the jam nut on the tight side and using the bearing position bolt to move the end of the head roller toward the tail. Tighten the jam nut when the belt is centered on the head roller.
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 roller 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.

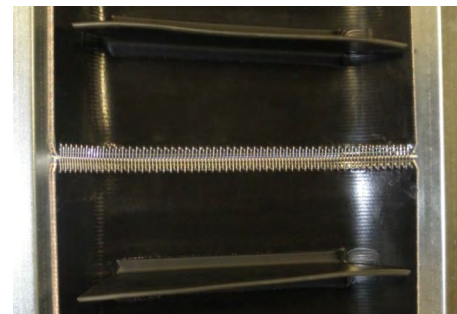
*Tighten jam nut
after adjustment*

*Use this bolt to
align the belt*



BELT REPLACEMENT

1. Rotate the belt until the seam is visible.
2. Move the tail roller 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



Check Alignment



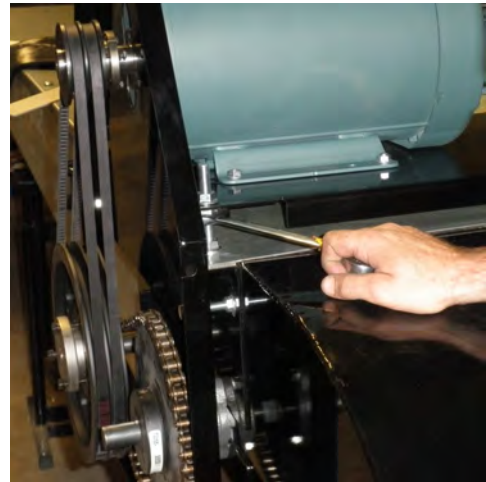
DRIVE BELT TENSION & ALIGNMENT

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 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.

Belt Tension Drive

1. Push on the center of the belt span with a force of approximately 5 to 10 lbs.
2. The belts will deflect approximately 1/4 to 1/2 inch when properly tensioned.
3. Move the motor up, using the adjustment bolts, to set drive belt tension (top right).
4. Close and secure guards.



Motor base adjustment

Drive Belt Alignment

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



Lay a straightedge across pulley faces

Drive Belt Replacement

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

SECTION F

STORAGE

When storing the USC Series 3000 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.



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

1. Clear the area of bystanders, especially small children.
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. Touch up all paint nicks and scratches to prevent rusting.
6. Move to storage area.
7. Select an area that is dry, level and free of debris.
8. Unhook from towing vehicle.
9. Place blocks under the intake or the jack if required.
10. If the machine cannot be placed inside, cover the electric motor with a water proof tarpaulin and tie securely in place.
11. Store machine in an area away from human activity.
12. Do not allow children to play on or around the stored machine.

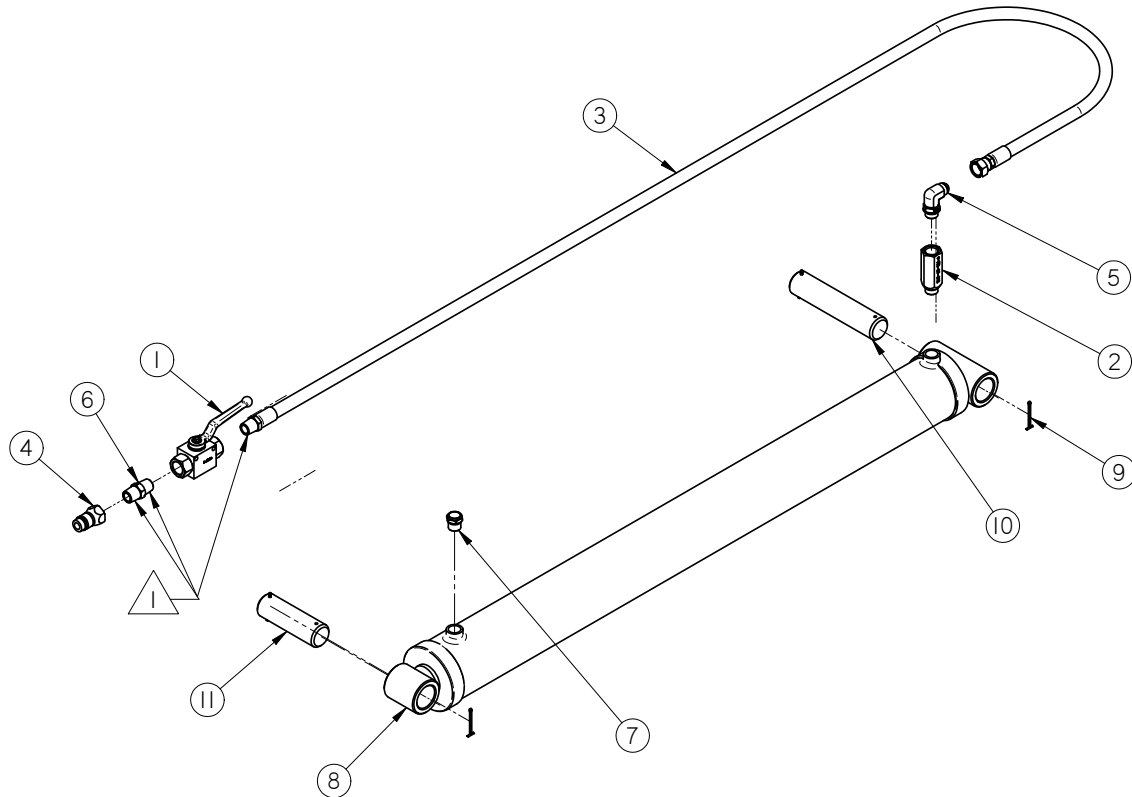
SERIES 3000 BIN FILL CONVEYOR

NOTES

SECTION
G

MECHANICAL DRAWINGS

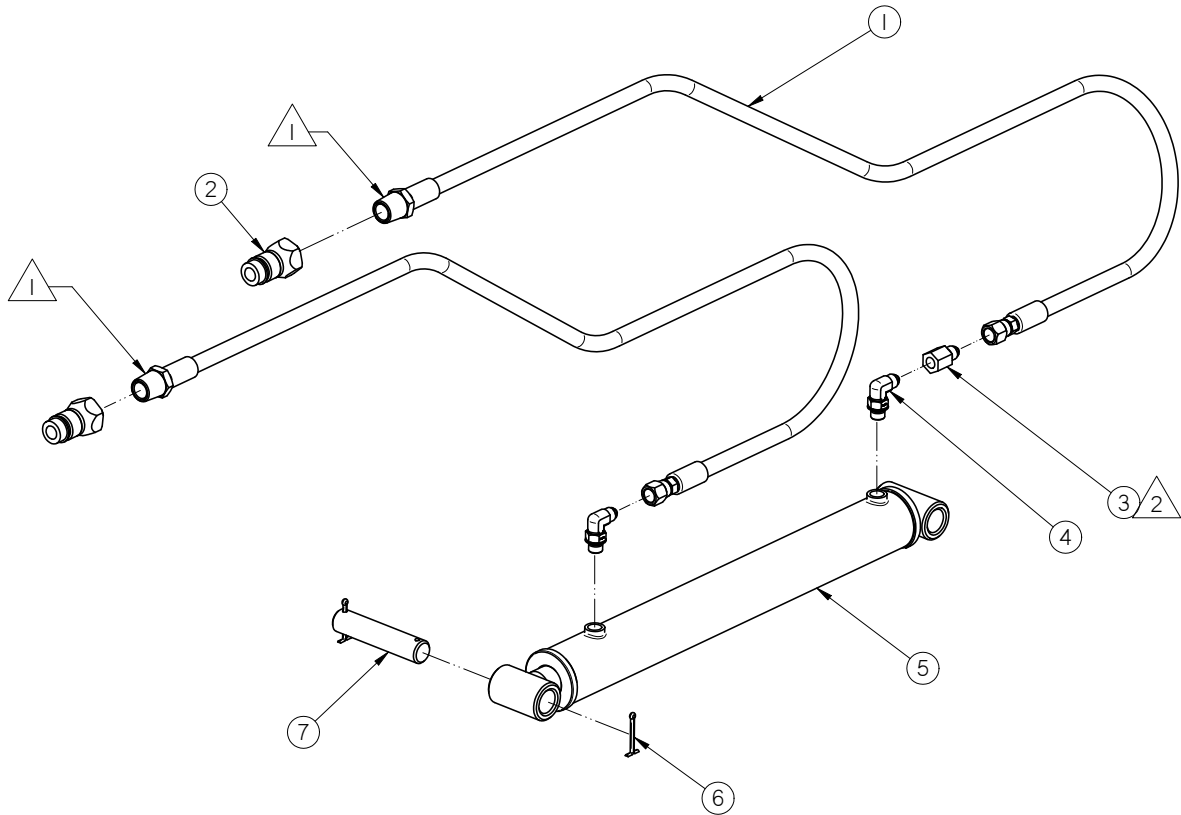
HYDRAULIC ASSEMBLY - CONVEYER LIFT (13-10-0029)



1 The following items will require Teflon tape during assembly.

Item #	Part #	Description	Qty
1	02-02-0061	VLV BALL .500 NPT 2 WAY HIGH PRESS	1
2	02-02-0062	VLV FLOW RESRICTOR .062 SAE 8	1
3	02-03-0055	HOSE HYD 50FT .500 NPT - 8FJX	1
4	02-05-0067	FTTG HYD QCK .500 NPT ISO 5675	1
5	02-06-0058	FTTG HYD 90 DEG 8MJ-8MOR	1
6	02-07-0075	FTTG NIP .500 NPT HEX HI-PRESS	1
7	02-12-0013	VENT BREATHER BRASS SAE 8	1
8	03-17-0089	CYL HYD WELD 30IN STRK 4IN ID	1
9	06-09-0088	.125 X 2.00 ZP COTTER PIN	4
10	102922	PIN, CYL UPPER BL	1
11	102923	PIN, CYL LOWER BL	1

HYDRAULIC ASSEMBLY KIT - HITCH (13-10-0030)

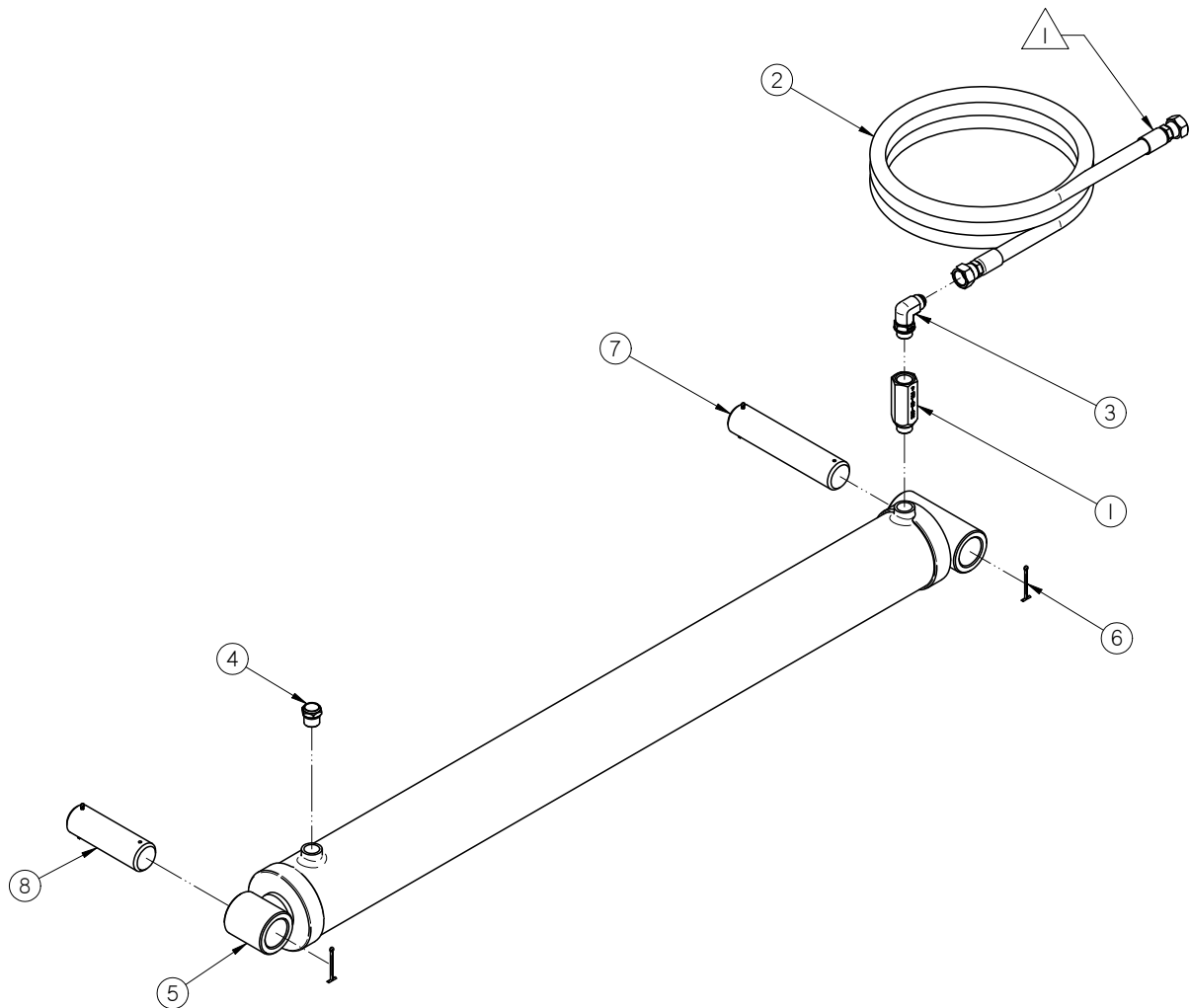


1 The following items will require Teflon tape during assembly.

2 Orifice is to be installed at base end of cylinder as illustrated.

Item #	Part #	Description	Qty
1	02-03-0056	HOSE HYD 8FT .500 NPT - 4FJX	2
2	02-05-0067	FTTG HYD QCK .500 NPT ISO 5675	2
3	02-05-0087	FTTG HYD STGHT ORF .062 4MJ-4FJ	1
4	02-06-0069	FTTG HYD 90 DEG 4MJ-4MOR	2
5	03-17-0088	CYL HYD WELD 10IN STRK 1.5IN ID	1
6	06-09-0087	.125 X 1.50 ZP COTTER PIN	2
7	102924	PIN, CYL HITCH BL	1

HYDRAULIC ASSEMBLY KIT - HITCH (13-10-0032)

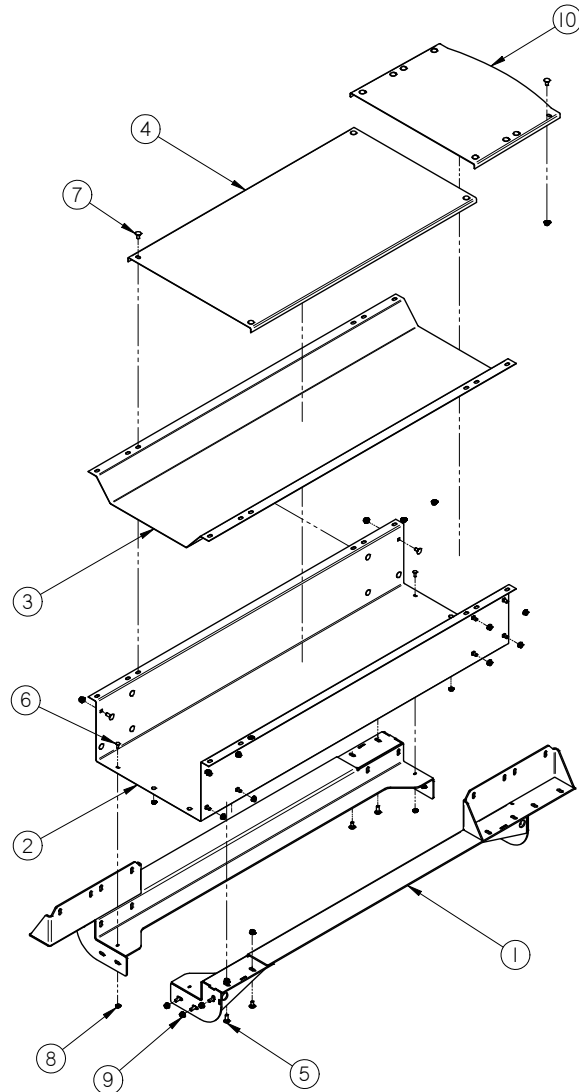


1 This end of hose will attach to power pack.

Item #	Part #	Description	Qty
1	02-02-0062	VLV FLOW RESRICTOR .062 SAE 8	1
2	02-03-0057	HOSE HYD 25FT 8FJX - 8FJX	1
3	02-06-0058	FTTG HYD 90 DEG 8MJ-8MOR	1
4	02-12-0013	VENT BREATHER BRASS SAE 8	1
5	03-17-0089	CYL HYD WELD 30IN STRK 4IN ID	1
6	06-09-0088	.125 X 2.00 ZP COTTER PIN	4
7	102922	PIN, CYL UPPER BL	1
8	102923	PIN, CYL LOWER BL	1

SERIES 3000 BIN FILL CONVEYOR

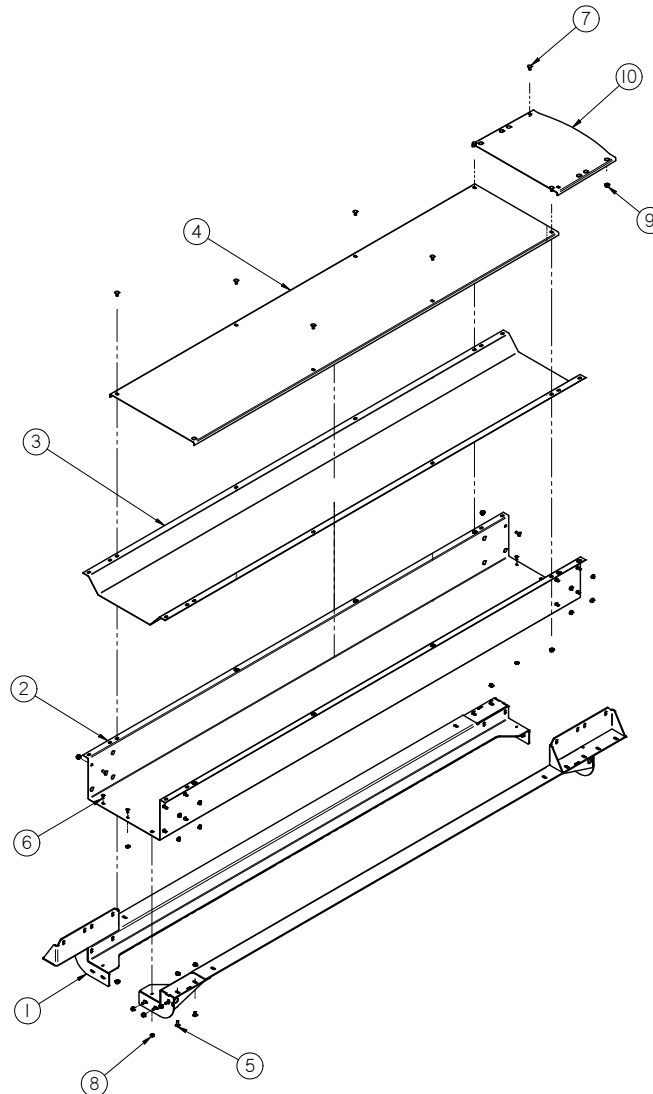
5FT MID - SECTION ASSEMBLY (05-07-0593)



Item #	Part #	Description	Qty
1	05-08-0240	WDMT STB CHN 5FT	2
2	5/10/3857	FR 5FT MID SECT 3000 SEIRES	1
3	5/10/3858	TROUGH PAN 5FT MID SECT S3000	1
4	5/10/3859	TOP CVR 5FT MID SECT 3000 SEIRES	1
5	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	10
6	06-01-0122	BOLT, CARRIAGE, .250-20x.75 G5 ZP	6
7	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	28
8	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	6
9	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	38
10	1028EE	LID SPLICE OVERLAP S3000	1

SERIES 3000 BIN FILL CONVEYOR

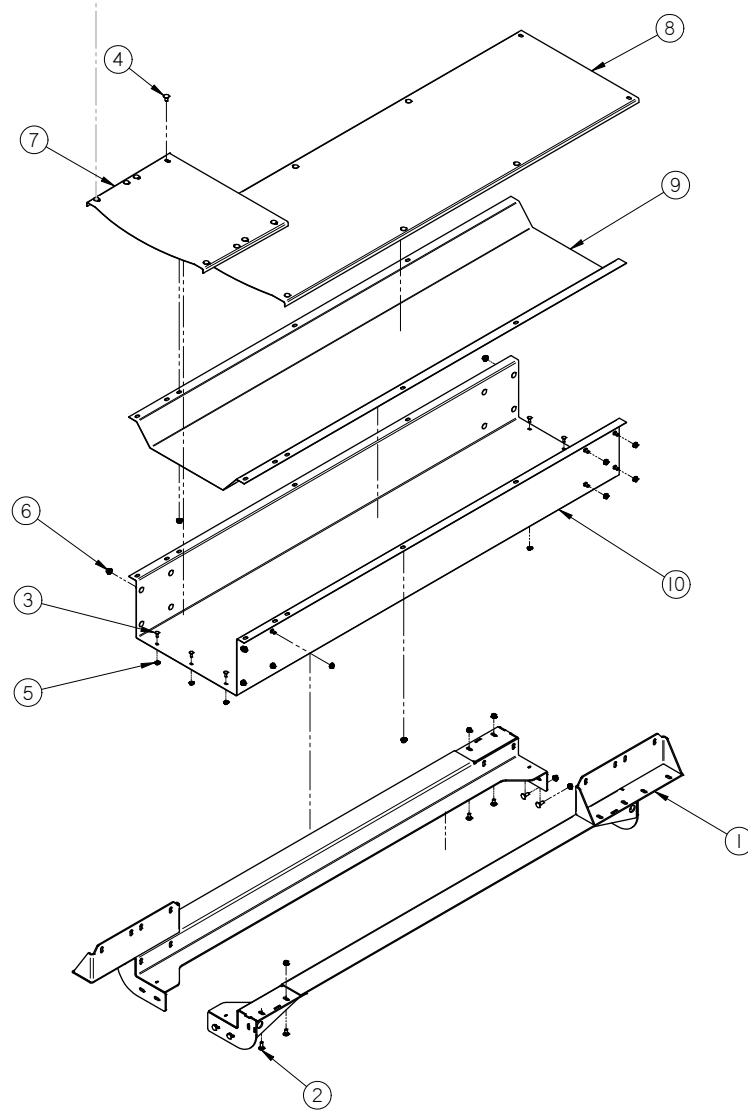
10FT MID - SECTION ASSEMBLY (05-07-0594)



Item #	Part #	Description	Qty
1	05-08-0238	WDMT STB CHN 10FT	2
2	5/10/3841	FR 20BW 10FT MID SECT	1
3	5/10/3842	TROUGH PAN 20BW 10FT MID SECT	1
4	5/10/3843	PLT TOP CVR 20BW MID SECT	1
5	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	12
6	06-01-0122	BOLT, CARRIAGE, .250-20x.75 G5 ZP	6
7	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	30
8	06-03-0013	NUT, LOCK, FLG .250-20 ZP SERRATTED	6
9	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	42
10	1028EE	LID SPLICE OVERLAP S3000	1

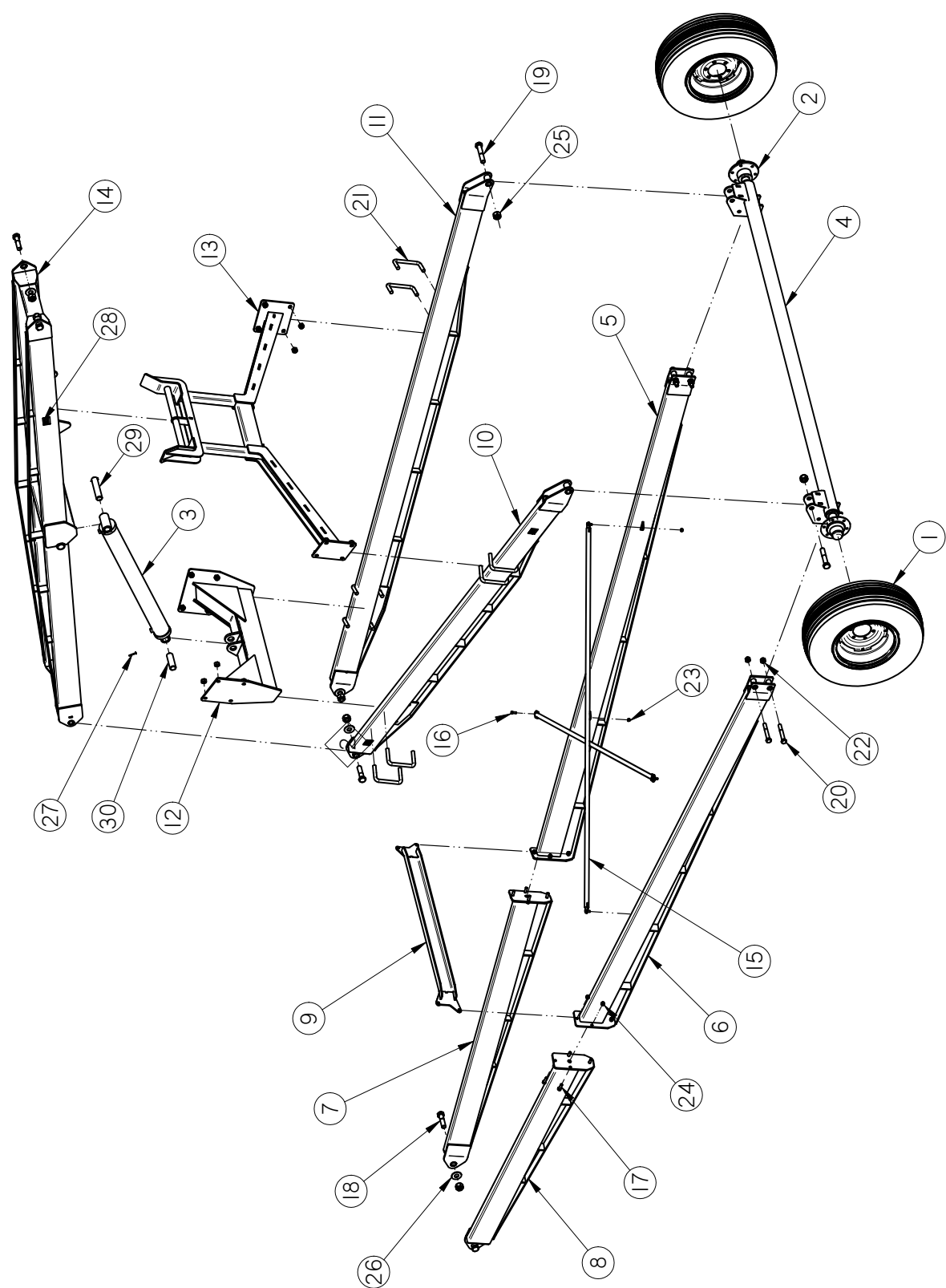
SERIES 3000 BIN FILL CONVEYOR

6FT EXT ASSY (05-07-0595)



Item #	Part #	Description	Qty
1	05-08-0239	WDMT STB CHN 6FT	2
2	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	9
3	06-01-0122	BOLT, CARRIAGE, .250-20x.75 G5 ZP	6
4	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	31
5	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATED	6
6	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	40
7	1028EE	LID SPLICE OVERLAP S3000	1
8	1029DA	PLT TOP CVR INLET 20BW	1
9	1029DB	TROUGH PAN 20BW TAIL SECT	1
10	1029DC	FR 20BW TAIL SECT	1

UNDERCARRIAGE ASSEMBLY (13-08-0371)

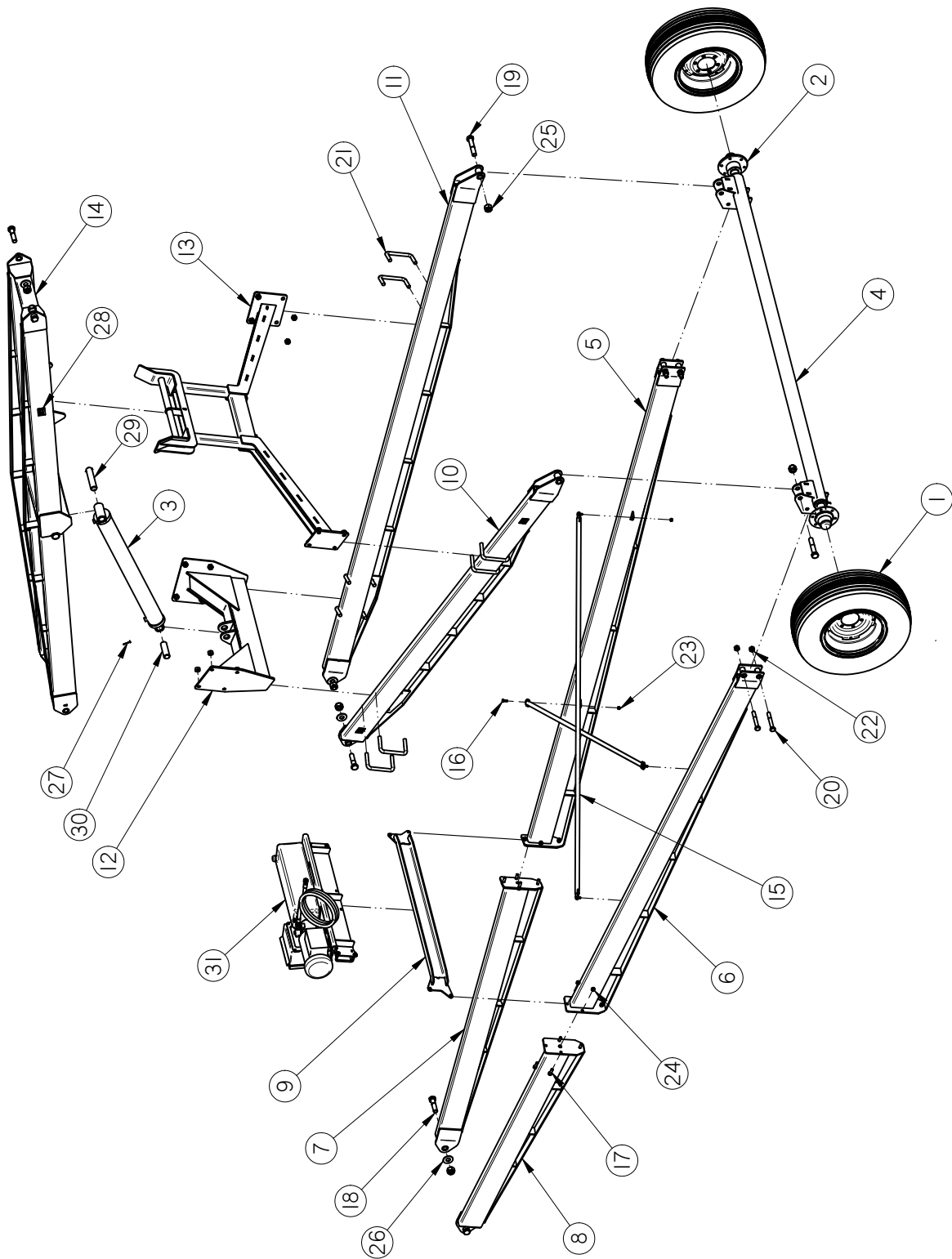


SERIES 3000 BIN FILL CONVEYOR

UNDERCARRIAGE ASSEMBLY (13-08-0371)

Item #	Part #	Description	Qty
1	01-06-0096	WHL ASSY 11L/15 - 15X8 6HL AG TYPE	2
2	01-06-0140	ASSY HUB SPNDL 3500# 6 ON 6BC	2
3	03-17-0089	CYL HYD WELD 30IN STRK 4IN ID	1
4	05-08-0225	WDMT AXLE BL CNVR	1
5	05-08-0226	WDMT TR ARM RH	1
6	05-08-0227	WDMT TR ARM LH	1
7	05-08-0228	WDMT TR ARM FRNT RH	1
8	05-08-0229	WDMT TR ARM FRNT LH	1
9	05-08-0230	WDMT CROSS BRACE	1
10	05-08-0231	WDMT HINGE LH	1
11	05-08-0232	WDMT HINGE RH	1
12	05-08-0233	WDMT, CYL MOUNT	1
13	05-08-0234	WDMT HINGE SUPP	1
14	05-08-0235	WDMT HINGE UPPER BL CNVR	1
15	05-08-0253	WDMT CROSS BRACE BL CNVR	2
16	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	4
17	06-01-0054	BOLT .500-13 X 1.75 ZP GR5	8
18	06-01-0166	BOLT,1.00-8 X 4.00 UNC ZP GRADE 8	6
19	06-01-0168	BOLT, 1.00-8 X 5 1/2 UNC ZP GRADE 8	2
20	06-01-0178	BOLT .750-10 X 5.50 HH ZP GR5	4
21	06-01-0260	BOLT U .750-10 X 6.81 X 3.75 ZP SQ	8
22	06-02-0029	NUT,LOCK, .750-10 ZP NE NYLON INSERT	20
23	06-03-0003	NUT NYL LOCK .375-16 ZP GR5	4
24	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	8
25	06-03-0028	NUT NYL LOCK 1.00-8 ZP GR5	8
26	06-05-0010	WASHER, 1.00 FLAT ZP	6
27	06-09-0088	.125 X 2.00 ZP COTTER PIN	4
28	09-02-0015	ATWRK LBL DANGER PINCH POINT	6
29	102922	PIN, CYL UPPER BL	1
30	102923	PIN, CYL LOWER BL	1

UNDERCARRIAGE ASSEMBLY (13-08-0383)

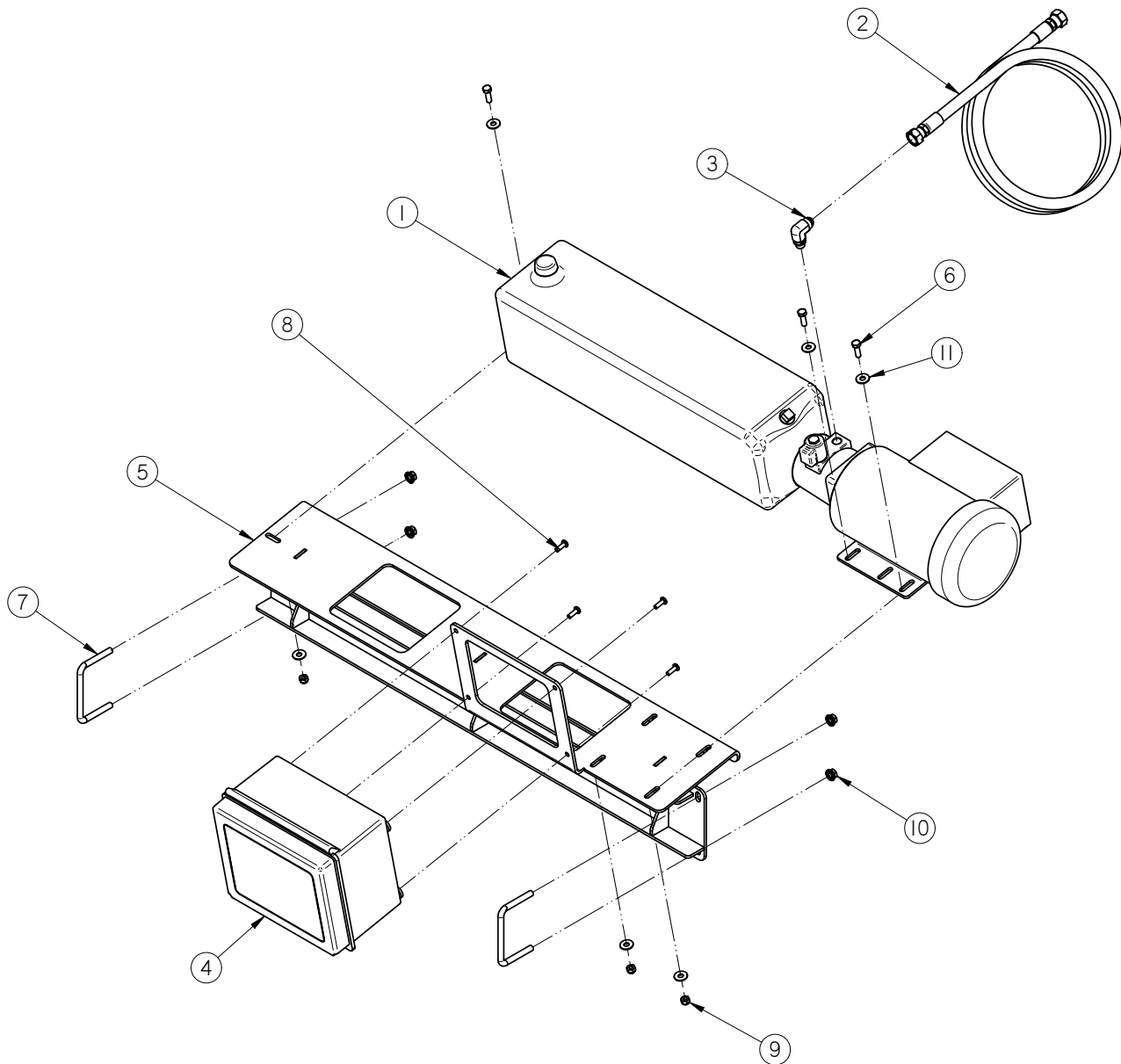


SERIES 3000 BIN FILL CONVEYOR

UNDERCARRIAGE ASSEMBLY (13-08-0383)

Item #	Part #	Description	Qty
1	01-06-0096	WHL ASSY 11L/15 - 15X8 6HL AG TYPE	2
2	01-06-0140	ASSY HUB SPNDL 3500# 6 ON 6BC	2
3	03-17-0089	CYL HYD WELD 30IN STRK 4IN ID	1
4	05-08-0225	WDMT AXLE BL CNVR	1
5	05-08-0226	WDMT TR ARM RH	1
6	05-08-0227	WDMT TR ARM LH	1
7	05-08-0228	WDMT TR ARM FRNT RH	1
8	05-08-0229	WDMT TR ARM FRNT LH	1
9	05-08-0230	WDMT CROSS BRACE	1
10	05-08-0231	WDMT HINGE LH	1
11	05-08-0232	WDMT HINGE RH	1
12	05-08-0233	WDMT, CYL MOUNT	1
13	05-08-0234	WDMT HINGE SUPP	1
14	05-08-0235	WDMT HINGE UPPER BL CNVR	1
15	05-08-0253	WDMT CROSS BRACE BL CNVR	2
16	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	4
17	06-01-0054	BOLT .500-13 X 1.75 ZP GR5	8
18	06-01-0166	BOLT,1.00-8 X 4.00 UNC ZP GRADE 8	6
19	06-01-0168	BOLT, 1.00-8 X 5 1/2 UNC ZP GRADE 8	2
20	06-01-0178	BOLT .750-10 X 5.50 HH ZP GR5	4
21	06-01-0260	BOLT U .750-10 X 6.81 X 3.75 ZP SQ	8
22	06-02-0029	NUT,LOCK, .750-10 ZP NE NYLON INSERT	20
23	06-03-0003	NUT NYL LOCK .375-16 ZP GR5	4
24	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	8
25	06-03-0028	NUT NYL LOCK 1.00-8 ZP GR5	8
26	06-05-0010	WASHER, 1.00 FLAT ZP	6
27	06-09-0088	.125 X 2.00 ZP COTTER PIN	4
28	09-02-0015	ATWRK LBL DANGER PINCH POINT	6
29	102922	PIN, CYL UPPER BL	1
30	102923	PIN, CYL LOWER BL	1
31	13-08-0376	KIT ELEC PWR PK BL CNVR	1

HYDRAULIC ASSEMBLY KIT - HITCH (13-10-0032)



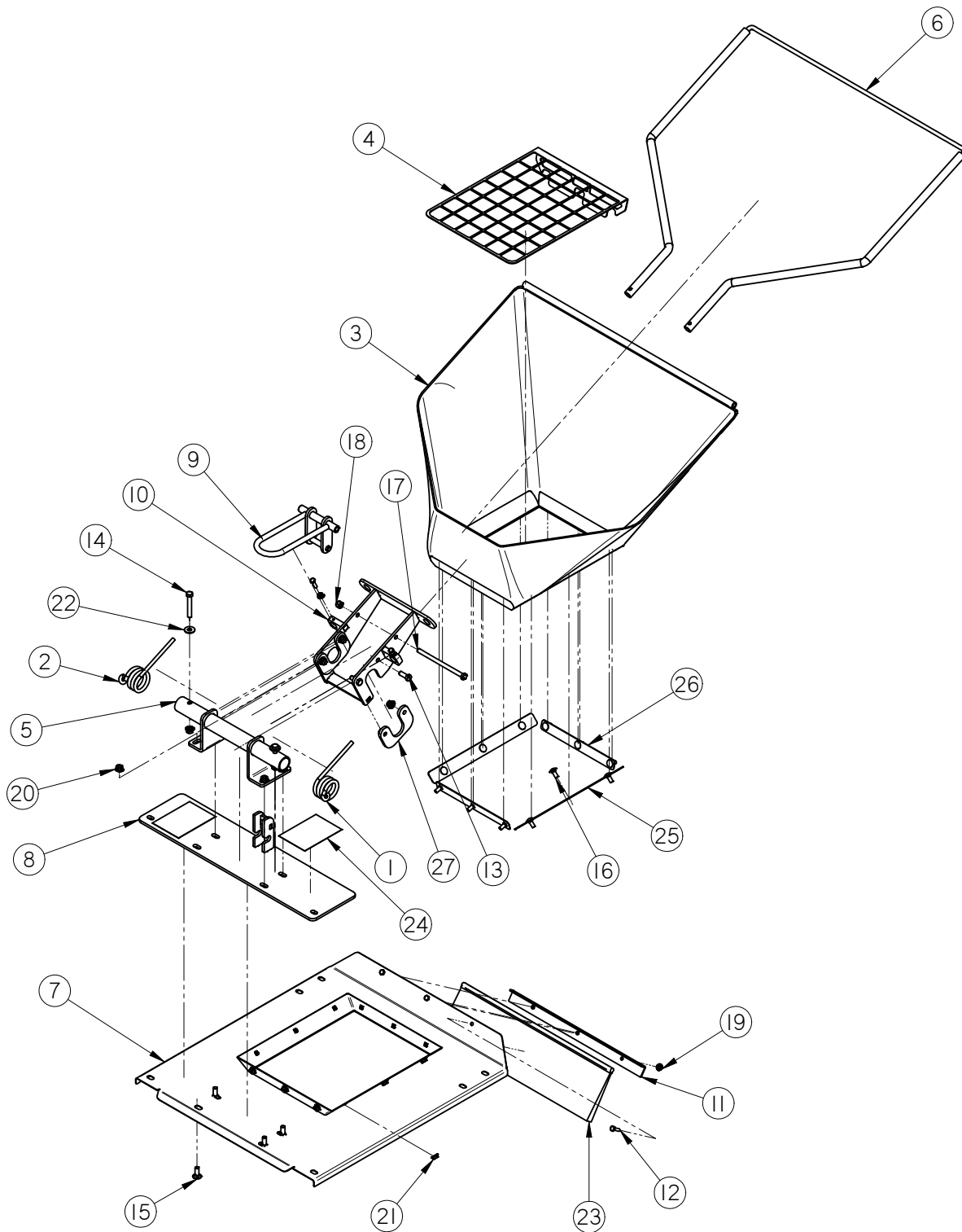
SERIES 3000 BIN FILL CONVEYOR

HYDRAULIC ASSEMBLY KIT - HITCH (13-10-0032)

Item #	Part #	Description	Qty
1	01-01-0164	HYD PWR PK 2HP 1.0GPM 3000PSI	1
2	02-03-0057	HOSE HYD 25FT 8FJX - 8FJX	1
3	02-06-0065	FTTG HYD 90 DEG 8MJ-6MOR	1
N/S	03-07-0082	CORD 5COND 10AWG	5FT
N/S	03-08-0068	CNDT .500 FTTG FLX STGHT METAL	1
N/S	03-08-0069	CNDT .500 FTTG FLX 90DEG METAL	1
N/S	03-08-0074	CNDT .500 METAL FLEX	2FT
N/S	03-08-0197	NUT CG 0.75 NPT	1
N/S	03-08-0198	CONN CG PLAS 0.75 NPT 0.354-0.630	1
4	03-12-0234	PNL CNTL BL CNVR HYD PWR PK	1
5	05-08-0264	WDMT PWR PAK MNT BL CNVR	1
6	06-01-0012	BOLT .313-18 X 1.00 ZP GR5	5
7	06-01-0202	BOLT U .375-16 X 4.00 X 2.625 ZP	2
8	06-01-0215	SCRW MACH #14 X .750 SS PLASTITE	4
9	06-03-0002	NUT NYL LOCK .313-18 ZP GR5	5
10	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	4
11	06-05-0003	WSHR FLAT .313 ZP	10

N/S These items not shown.

INLET HOPPER ASSEMBLY (13-08-0362)

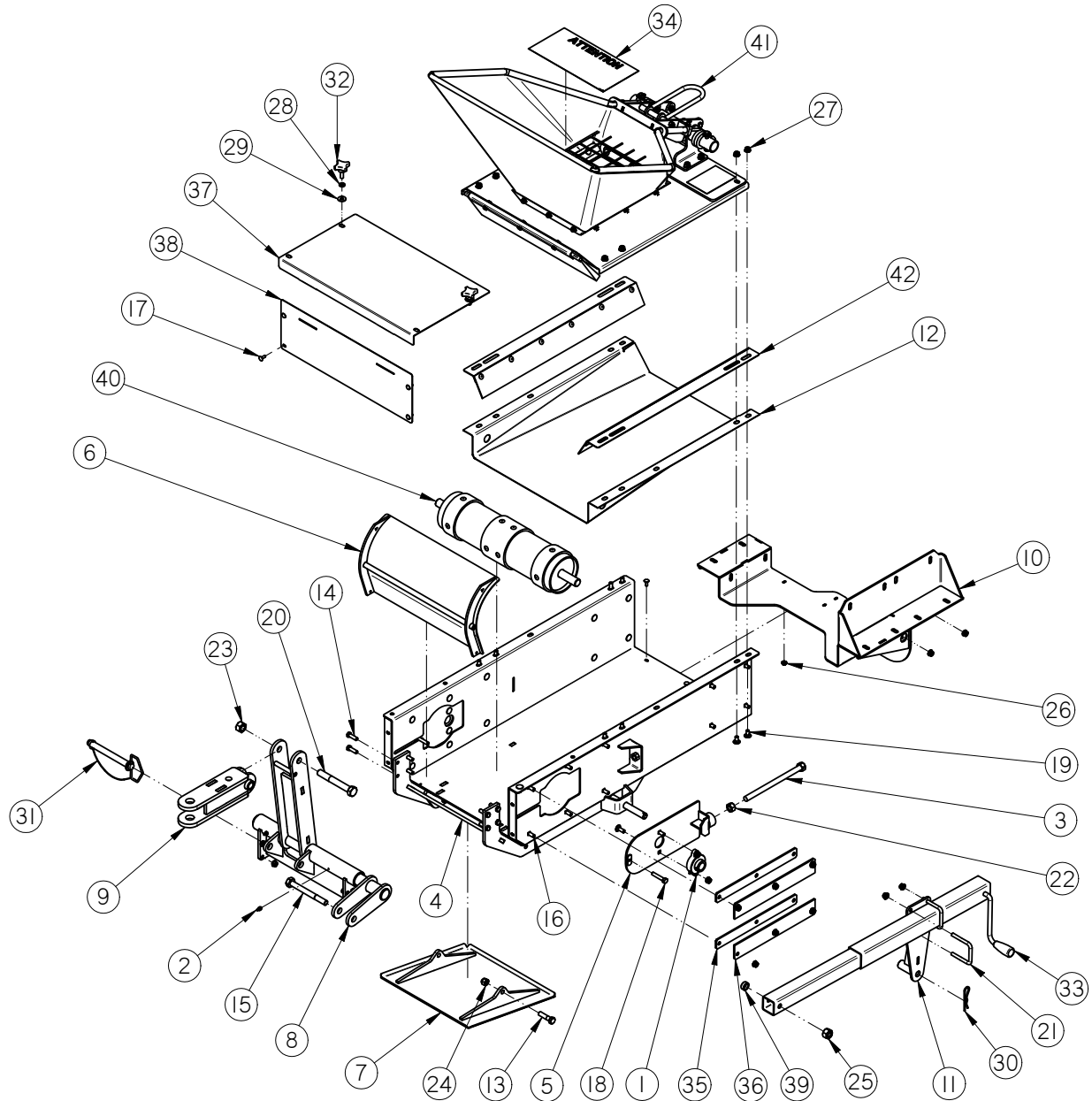


SERIES 3000 BIN FILL CONVEYOR
INLET HOPPER ASSEMBLY (13-08-0362)

Item #	Part #	Description	Qty
1	01-04-0061	CLPSBL HOPP SPRING LH	1
2	01-04-0062	CLPSBL HOPP SPRING RH	1
3	01-13-0015	S3000 CLPSBL TARP	1
4	05-06-0096	S3000 CLPSBL HOPP GRATE	1
5	05-07-0579	WDMT S2000 CLPSBL PIVOT	1
6	05-07-0580	WDMT S2000 CLPCBL TOP FRM	1
7	05-08-0215	WDMT INLET HOPPER BL CNVR	1
8	05-08-0257	WDMT MNT CLPSBL	1
9	05-08-0258	WDMT LATCH HNDL CLPSBL	1
10	05-08-0260	WDMT SPRG ATT CLPSBL	1
11	05-10-3835	INLET BRSH HLDR S3000	1
12	06-01-0007	BOLT, .250-20 X 1 UNC ZP GRADE 5	5
13	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	4
14	06-01-0071	BOLT, .375-16 X 2 1/2 ZP G5 FULL THREAD	2
15	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	4
16	06-01-0171	BOLT CRG .3125-18X.750 ZP SHORT NECK	12
17	06-01-0264	BOLT,.375-16 G5 ZP 6.00	1
18	06-03-0003	NUT NYL LOCK .375-16 ZP GR5	1
19	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	5
20	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	10
21	06-03-0019	NUT LOCK FLG .3125-18 ZP GR5	12
22	06-05-0004	WSHR FLAT .375 ZP	2
23	06-10-0043	BRUSH, SEAL 20"L CNVR BL	1
24	09-02-0001	ATWK LBL DANGER FINGERS	2
25	1027DC	S2000 CLPSBL TARP RET SIDE	2
26	1029C5	S3000 CLPSBL TARP RET FNT	2
27	102A30	PLT LATCH LOCK	2

SERIES 3000 BIN FILL CONVEYOR

TAIL SECTION (13-08-0360)



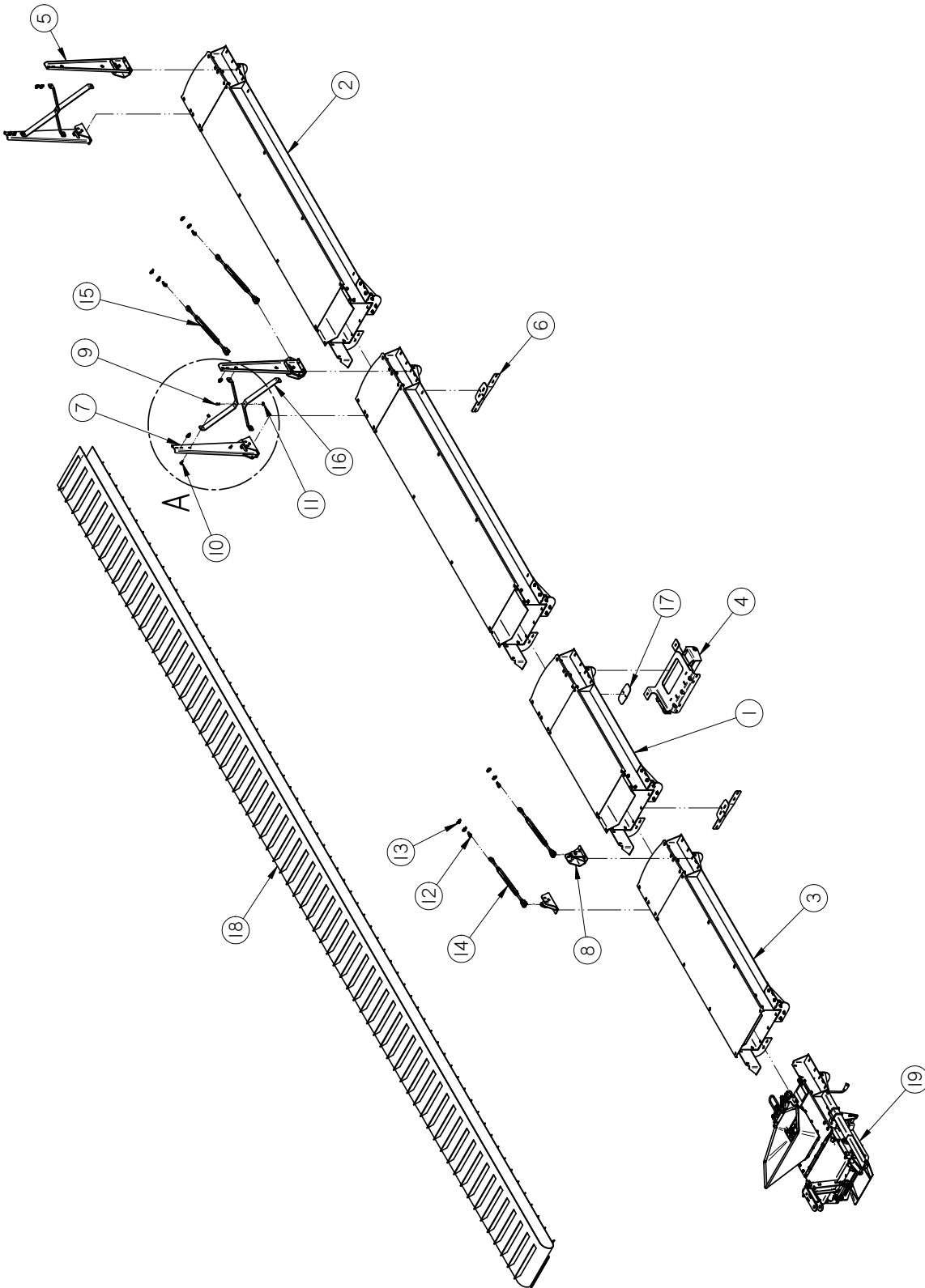
Item #	Part #	Description	Qty
1	01-03-0042	BRG FLG MNT 1.000ID 2BOLT ECNTRC	2
2	01-11-0005	FTTG GR5 90 DEG .250-28 NPT	2
3	05-03-0493	WDMT TENSION ADJUSTER BOLT 10 IN	2
4	05-08-0213	WDMT, INLET SECT CNVR BL	1
5	05-08-0214	WDMT, TAKE-UP BRG PLT BL	2
6	05-08-0217	WDMT, BAFFLE BELT SEAL BL	1
7	05-08-0218	WDMT, PAD CNVR BL	1

SERIES 3000 BIN FILL CONVEYOR

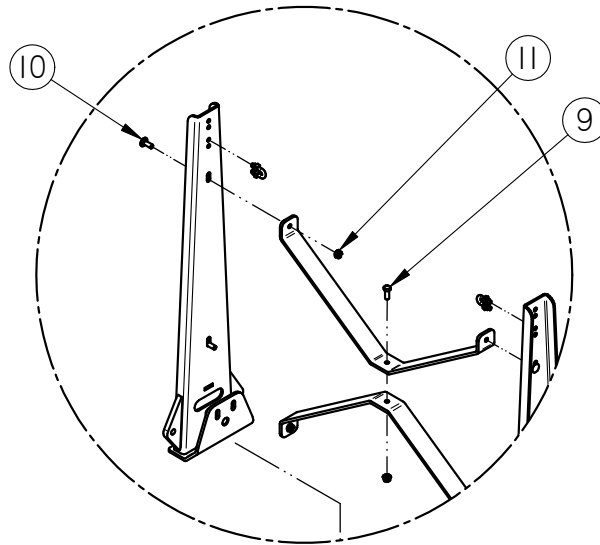
TAIL SECTION (13-08-0360)

Item #	Part #	Description	Qty
8	05-08-0219	WDMT HITCH PIVOT BL CNVR	1
9	05-08-0220	WDMT DRAWBAR BL CNVR	1
10	05-08-0241	WDMT STB CHN INLET	1
11	05-08-0255	WDMT JACK MT BL	1
12	5/10/4135	TROUGH, TRANS TAIL SECT BL	1
13	06-01-0027	BOLT .500-13 X 2.00 ZP GR5	2
14	06-01-0053	BOLT .375-16 X 1.25 ZP GR5	8
15	06-01-0100	BOLT, .625 X 11 G5 ZP 6.50"	1
16	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	20
17	06-01-0122	BOLT, CARRIAGE, .250-20x.75 G5 ZP	7
18	06-01-0137	BOLT .375-16 X 2.00 ZP GR5 FULL THRD	2
19	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	18
20	06-01-0178	BOLT .750-10 X 5.50 HH ZP GR5	1
21	06-01-0263	BOLT U .375-16 X 2.87 X 3.00 ZP SQ	2
22	06-02-0005	NUT, .625-11 UNC ZP GRADE 5	2
23	06-02-0029	NUT,LOCK, .750-10 ZP NE NYLON INSERT	1
24	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	2
25	06-03-0005	NUT NYL LOCK .625-11 ZP	1
26	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	7
27	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	50
28	06-04-0003	WSHR LOCK SPLT .375 ZP	2
29	06-05-0004	WSHR FLAT .375 ZP	2
30	06-09-0052	PIN CLIP HITCH 3.3125 OAL.148 OD ZP	1
31	06-09-0062	PIN HITCH .750 X 6.25 LG W-LYNCH	1
32	06-09-0066	KNOB .375 -16 X 1. 4 LUG PLASTIC	2
33	08-08-0145	TRLR JACK SW 8000LB 15IN	1
34	09-02-0016	LBL ATWRK ATT BELT ALIGN	1
35	10203B	SPACER	4
36	10203C	SPACER	4
37	1027EA	COVER, CLEANOUT TOP	1
38	1027EB	COVER, CLEANOUT REAR	1
39	102A03	SPACER JACK MT	1
40	13-08-0361	ASSY, PULLEY TAIL SECT BL	1
41	13-08-0362	ASSY, INLET HOPPER CNVR BL	1
42	13-08-0373	ASSY SKIRTING BL CNVR	2

SERIES 3000 BIN FILL CONVEYOR
CONVEYOR TAIL HALF (13-08-0369)
5520BL—6520BL—7020BL



SERIES 3000 BIN FILL CONVEYOR
CONVEYOR TAIL HALF (13-08-0369)
5520BL—6520BL—7020BL

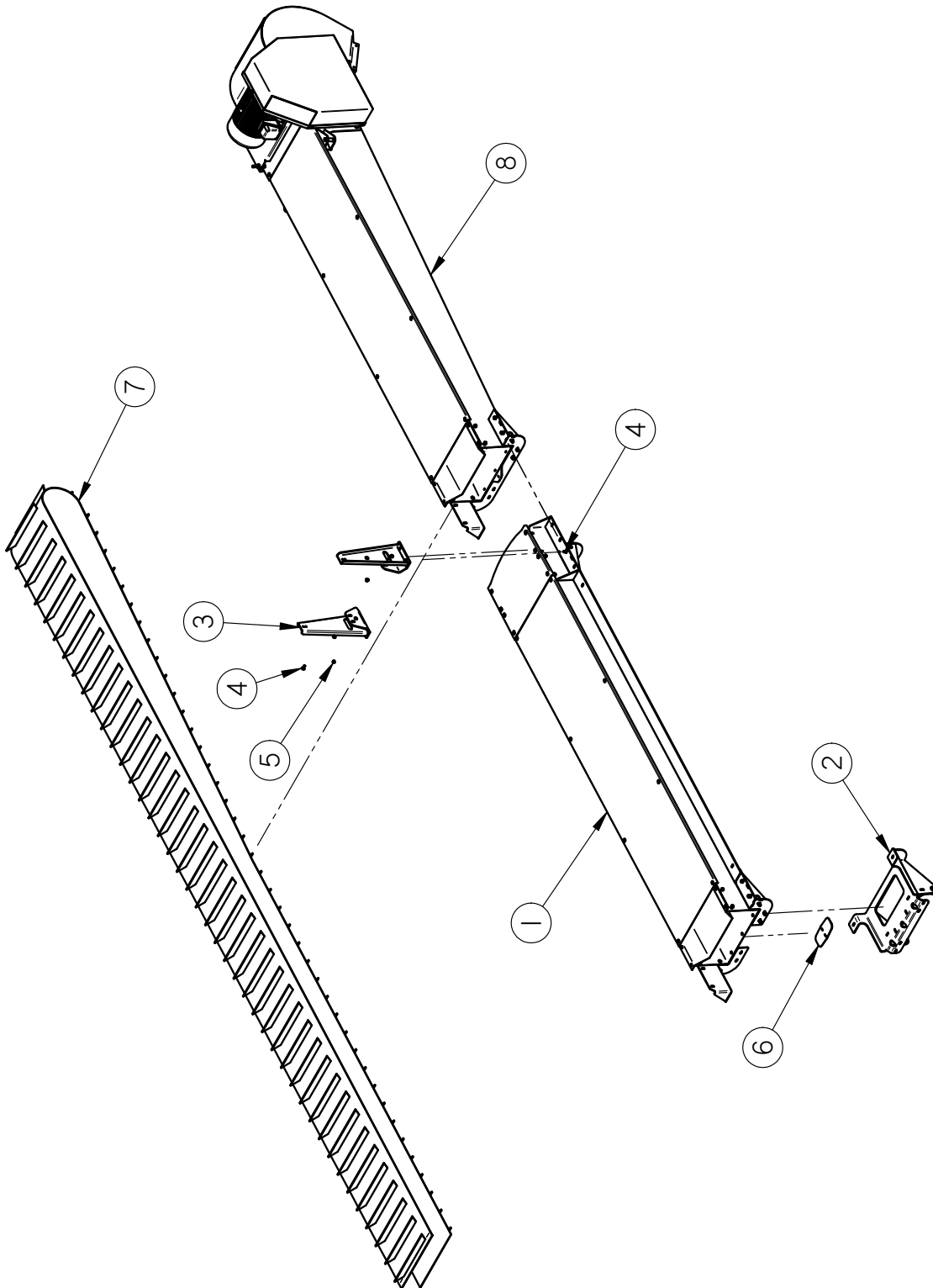


DETAIL A

Item #	Part #	Description	Qty
1	05-07-0593	ASSY CNVR 5FT MID SECT BL	1
2	05-07-0594	ASSY CNVR 10FT MID SECT BL	2
3	05-07-0595	ASSY CNVR 10FT EXT BL	1
4	05-08-0237	WDMT, FRAME BASE LOWER BL	1
5	05-08-0243	WDMT CABLE SUPP CTR	2
6	05-08-0244	WDMT STB SPLICE	2
7	05-08-0246	WDMT CABLE MT SWVL TALL	2
8	05-08-0247	WDMT CABLE MT SWVL	2
9	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	2
10	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	15
11	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	17
12	06-07-0023	THIMBLE .250 WIRE ROPE HD	4
13	06-07-0026	CBL CLIP ROPE .313	14
14	06-12-0041	TURNBUCKLE 5/8-11 12IN ADJ	2
15	06-12-0041	TURNBUCKLE 5/8-11 12IN ADJ	2
16	1029AE	STRAP, CROSS TIE	4
17	1029OD	PLATE, TIE	1
18	11-02-0083	BELT CNVR CLTS 3520	1
19	13-08-0360	ASSY TAIL SECT BL CNVR	1

SERIES 3000 BIN FILL CONVEYOR

CONVEYOR HEAD HALF - 5520BL
7.5HP 230V 1PH (03-08-0380) and 7.5 HP 230V 3PH (03-08-0381)



SERIES 3000 BIN FILL CONVEYOR

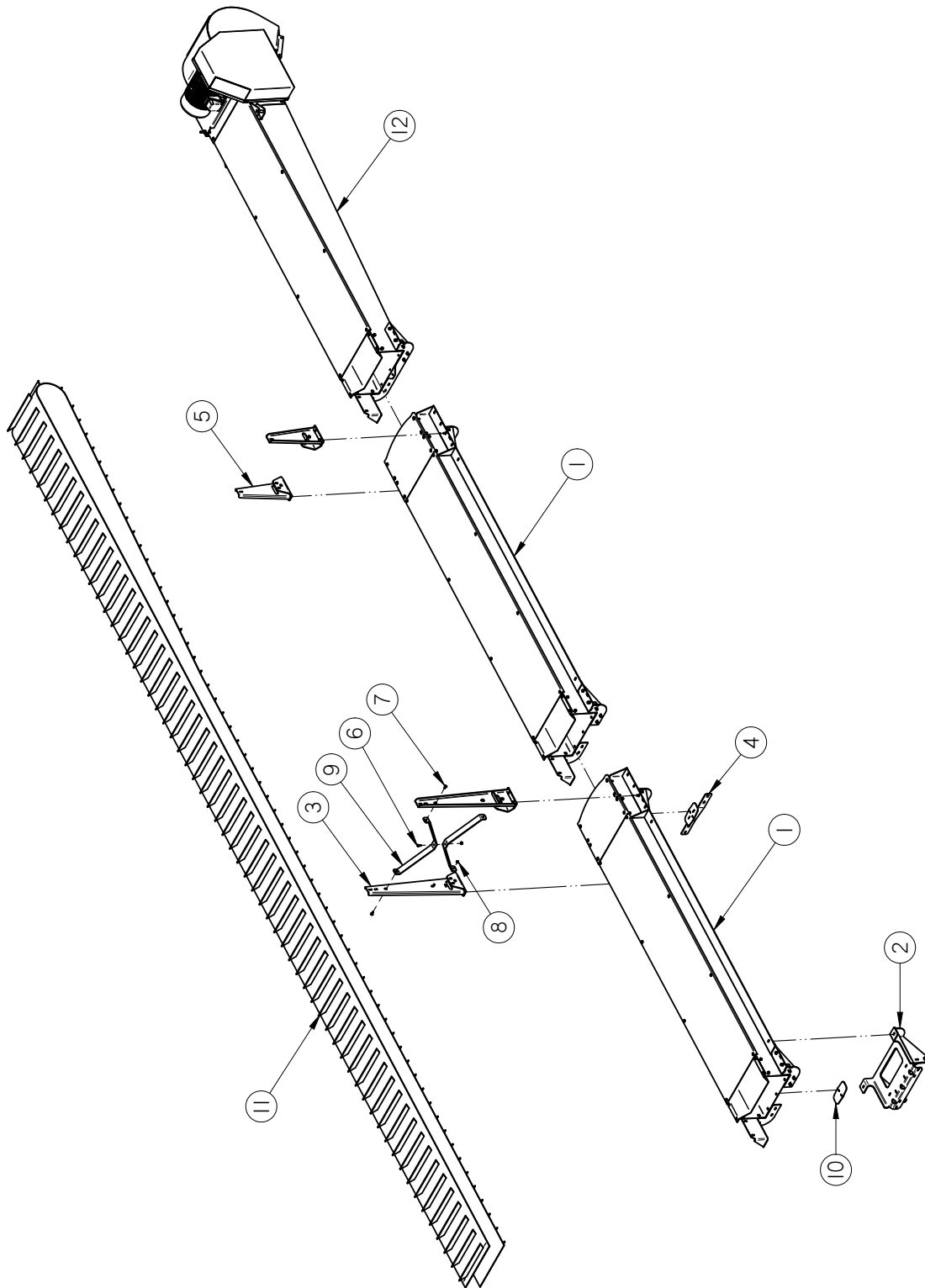
**CONVEYOR HEAD HALF - 5520BL
7.5HP 230V 1PH (03-08-0380) and 7.5 HP 230V 3PH (03-08-0381)**

Item #	Part #	Description	Qty
1	05-07-0594	ASSY CNVR 10FT MID SECT BL	1
2	05-08-0236	WDMT FR BASE UPPER BL CNVR	1
3	05-08-0245	WDMT CABLE SUPP SHORT	2
4	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	9
5	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	9
6	1029OD	PLATE, TIE	1
7	11-02-0085	BELT CNVR CLTS 2520	1
8	SEE TABLE 1		1

TABLE 1		
Assembly Number	Part Number	Description
13-08-0380	13-08-0358	ASSY CNVR HD SECT 7.5HP 1PH BL
13-08-0381	13-08-0377	ASSY CNVR HD SECT 7.5HP 3PH BL

SERIES 3000 BIN FILL CONVEYOR

CONVEYOR HEAD HALF - 6520BL
7.5HP 230V 1PH (03-08-0370) and 7.5 HP 230V 3PH (03-08-0379)



SERIES 3000 BIN FILL CONVEYOR

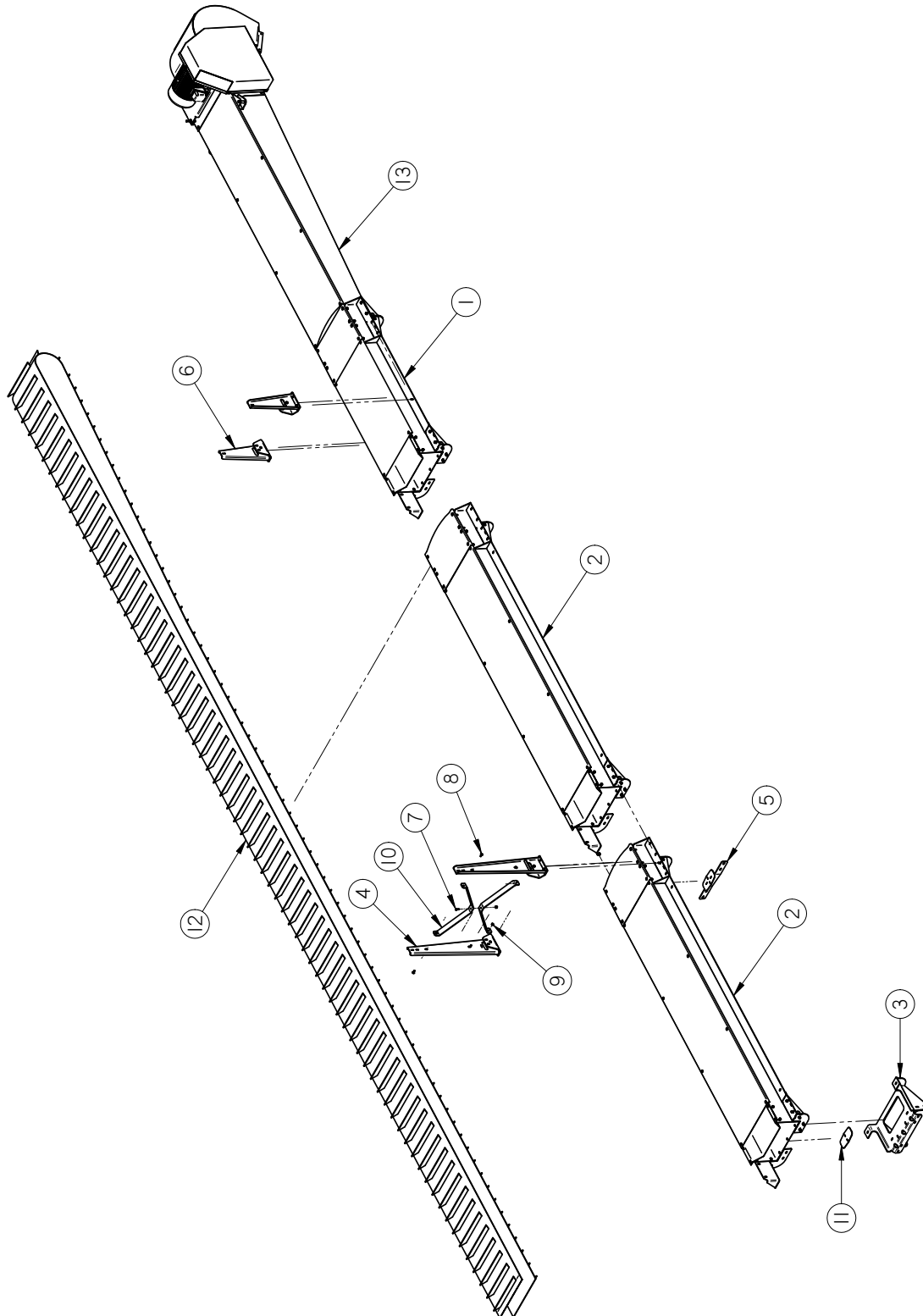
**CONVEYOR HEAD HALF - 6520BL
7.5HP 230V 1PH (03-08-0370) and 7.5 HP 230V 3PH (03-08-0379)**

Item #	Part #	Description	Qty
1	05-07-0594	ASSY CNVR 10FT MID SECT BL	X
2	05-08-0236	WDMT FR BASE UPPER BL CNVR	X
3	05-08-0243	WDMT CABLE SUPP CTR	X
4	05-08-0244	WDMT STB SPLICE	X
5	05-08-0245	WDMT CABLE SUPP SHORT	X
6	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	X
7	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	X
8	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	X
9	1029AE	STRAP, CROSS TIE	X
10	1029OD	PLATE, TIE	X
11	11-02-0088	BELT CNVR CLTS 3020	X
12	SEE TABLE 1		X

TABLE 1		
Assembly Number	Part Number	Description
13-08-0370	13-08-0358	ASSY CNVR HD SECT 7.5HP 1PH BL
13-08-0379	13-08-0377	ASSY CNVR HD SECT 7.5HP 3PH BL

SERIES 3000 BIN FILL CONVEYOR

CONVEYOR HEAD HALF - 7020BL
7.5HP 230V 1PH (03-08-0375) and 7.5 HP 230V 3PH (03-08-0378)



SERIES 3000 BIN FILL CONVEYOR

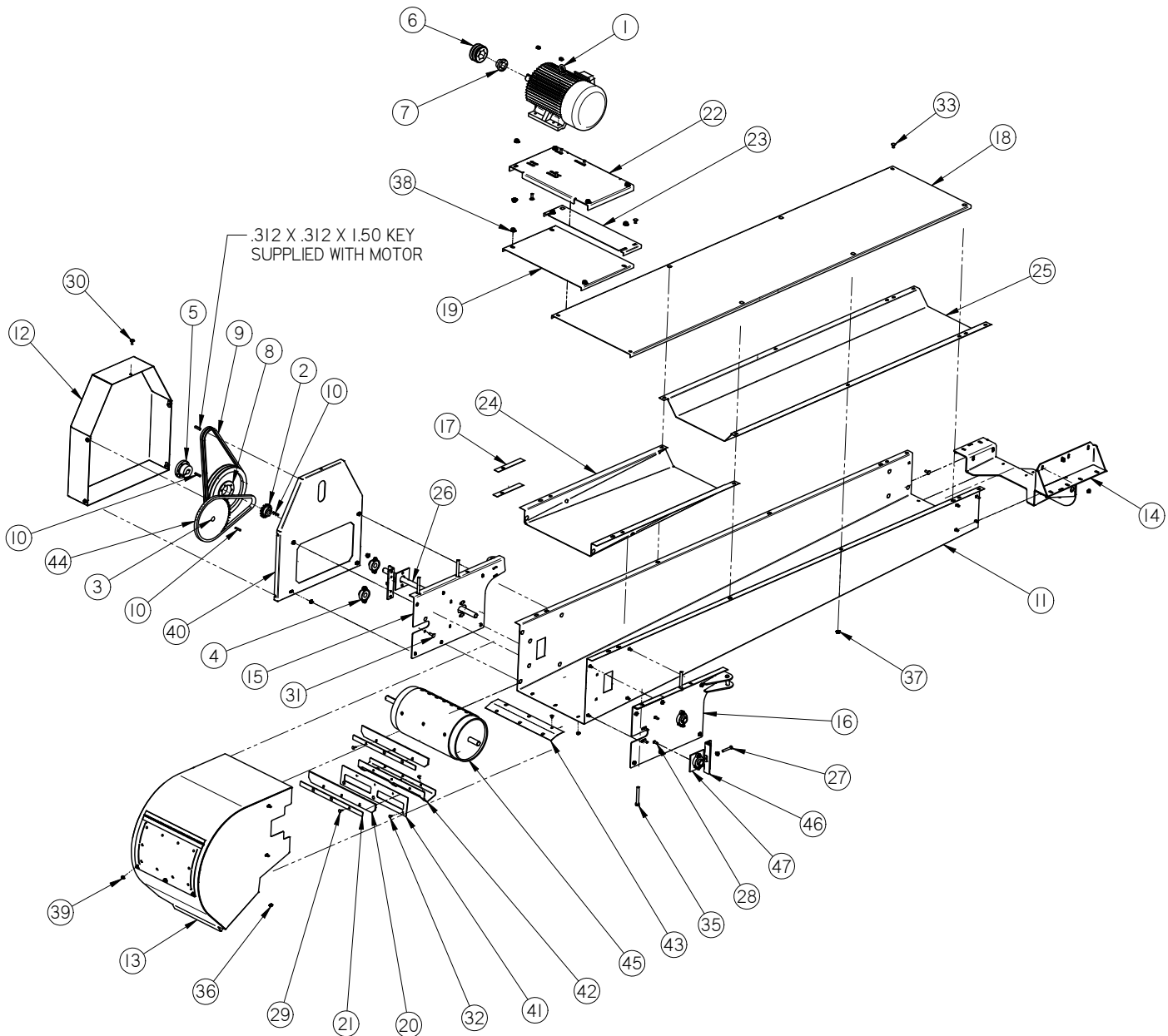
**CONVEYOR HEAD HALF - 7020BL
7.5HP 230V 1PH (03-08-0375) and 7.5 HP 230V 3PH (03-08-0378)**

Item #	Part #	Description	Qty
1	05-07-0593	ASSY CNVR 5FT MID SECT BL	1
2	05-07-0594	ASSY CNVR 10FT MID SECT BL	2
3	05-08-0236	WDMT FR BASE UPPER BL CNVR	1
4	05-08-0243	WDMT CABLE SUPP CTR	2
5	05-08-0244	WDMT STB SPLICE	2
6	05-08-0245	WDMT CABLE SUPP SHORT	2
7	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	1
8	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	11
9	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	12
10	1029AE	STRAP, CROSS TIE	2
11	1029OD	PLATE, TIE	1
12	11-02-0083	BELT CNVR CLTS 3520	1
13	SEE TABLE 1		1

TABLE 1		
Assembly Number	Part Number	Description
13-08-0375	13-08-0358	ASSY CNVR HD SECT 7.5HP 1PH BL
13-08-0378	13-08-0377	ASSY CNVR HD SECT 7.5HP 3PH BL

SERIES 3000 BIN FILL CONVEYOR

HEAD SECTION 7.5HP 230V 1PH (03-08-0358) and 7.5 HP 230V 3PH (03-08-0377)



SERIES 3000 BIN FILL CONVEYOR

HEAD SECTION 7.5HP 230V 1PH (03-08-0358) and 7.5 HP 230V 3PH (03-08-0377)

Item #	Part #	Description	Qty
1	SEE TABLE 1 ON PAGE 66		1
2	01-02-0093	SPROCKET, 50BS14H, 1" BORE	1
3	01-02-0114	SPKT 50T 50P 1.00ID KWY	1
4	01-03-0042	BRG FLG MNT 1.000ID 2BOLT ECNTRC	4
5	01-08-0037	BUSHING SK 1.00	1
6	01-08-0076	SHV 2BLT PD 3.4 2B3.4SH SH BUSH	1
7	01-08-0081	BUSH 1.375IN BORE TYPE SH	1
8	01-08-0087	SHV 2B110SK	1
9	01-08-0091	BELT AX54	2
10	01-10-0005	1/4" KEY, CS - 1 1/2" LONG	3
11	05-03-1230	FRAME, HD SECT BL	1
12	05-06-0078	WDMT GRD FRNT BIN LD	1
13	05-08-0210	WDMT, DSCHG SPOUT BL	1
14	05-08-0242	WDMT STB CHN HD	1
15	05-08-0249	WDMT, HED PLT RH BL	1
16	05-08-0250	WDMT, HD PLT LH BL	1
17	5/10/3267	SPCR UB HEAD CVR 16GA	4
18	5/10/3843	PLT TOP CVR 20BW MID SECT	1
19	5/10/3846	PLT TOP CVR DSCHG 20BW	1
20	05-10-3851B	PLT S3000 CNVR BLT SCRAPER RBBR	2
21	5/10/3852	PLT S3000 CNVR BLT SCRAPER HLDR	2
22	5/10/3854	PLT MTR MNT 20BW	1
23	5/10/3856	PLT CNVR SPLICE HEAD CVR S3000	1
24	5/10/4127	TROUGH TRANS HD SECT BL	1
25	5/10/4128	TROUGH, HD SECT BL	1
26	05-11-0310	SHAFT 28 X 1IN JACK HEAD	1
27	06-01-0071	BOLT, .375-16 X 2 1/2 ZP G5 FULL THREAD	2
28	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	10
29	06-01-0122	BOLT, CARRIAGE, .250-20x.75 G5 ZP	6
30	06-01-0124	BOLT, FLG .375-16 UNC ZP GRADE 5; 3/4" LG	5
31	06-01-0127	BOLT, CARRIAGE, .375-16 X 1 1/4 ZP G5	12
32	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	12
33	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	23
34	06-01-0154	BOLT CRG .375-16 X 2.50 FTH ZP GR5	4
35	06-01-0157	BOLT, .500-13 X 4" UNC ZP GRADE 5 fth	4

SERIES 3000 BIN FILL CONVEYOR

HEAD SECTION 7.5HP 230V 1PH (03-08-0358) and 7.5 HP 230V 3PH (03-08-0377)

Item #	Part #	Description	Qty
36	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	18
37	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	59
38	06-03-0015	NUT LOCK FLG .500-13 ZP GR5	12
39	06-03-0019	NUT LOCK FLG .3125-18 ZP GR5	3
40	101AA8	PLT GRD BACK BIN LD	1
41	10279E	PLATE, BAFFLE FLAT HD SECT BL	1
42	10279F	PLATE, BAFFLE FORMED HD SECT BL	1
43	1027A0	PLATE, GAP HD SECT BL	1
44	13-05-0200	CHAIN #50 24BW BIN LD DRV	1
45	13-08-0359	ASSY, HD PULLEY 10"DIA X 20"L	1
46	280-2-0016	TRACKING ANGLE WELDMENT	2
47	280-3-0112	BEARING SPACER PLATE	2

TABLE 1		
Assembly Number	Part Number	Description
13-08-0358	01-01-0135	MTR 7.5HP 1740RPM 215T TEFC 1PH
13-08-0377	01-01-0153	MTR 7.5HP 1740RPM 215T TEFC 3PH

USC LIMITED WARRANTY

SECTION H

USC, LLC, (Manufacturer) warrants its seed treating equipment as follows:

1. **Limited Warranty:** Manufacturer warrants that the Products sold hereunder will be free from defects in material and workmanship for a period of 18 months from date of shipment. If the Products do not conform to this Limited Warranty during the warranty period, Buyer shall notify Manufacturer in writing of the claimed defects and demonstrate to Manufacturer satisfaction that said defects are covered by this Limited Warranty. If the defects are properly reported to Manufacturer within the warranty period, and the defects are of such type and nature as to be covered by this warranty, Manufacturer shall, at its expense, furnish replacement Products or, at Manufacturer's option, replacement parts for the defective products. Shipping and installation of the replacement Products or replacement parts shall be at the Buyer's expense.

2. **Other Limits:** THE FOREGOING IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Manufacturer does not warrant against damages or defects arising from improper installation (where installation is by persons other than Manufacturer), against defects in products or components not manufactured by Manufacturer, or against damages resulting from such non-Manufacturer made products or components. Manufacturer passes on to the Buyer the warranty it received (if any) from the maker of such non-Manufacturer made products or components. This warranty also does not apply to Products upon which repairs and/or modifications have been effected or attempted by persons other than pursuant to written authorization by Manufacturer. Manufacturer does not warrant against casualties or damages resulting from misuse and/or abuse of product(s), acts of nature, effects of weather, including effects of weather due to outside storage, accidents, or damages incurred during transportation by common carrier.

3. **Exclusive Obligation:** THIS WARRANTY IS EXCLUSIVE. The sole and exclusive obligation of Manufacturer shall be to repair or replace the defective Products in the manner and for the period provided above. Manufacturer shall not have any other obligation with respect to the Products or any part thereof, whether based on contract, tort, strict liability or otherwise. Under no circumstances, whether based on this Limited Warranty or otherwise, shall Manufacturer be liable for incidental, special, or consequential damages.

4. **Other Statements:** Manufacturer's employees or representatives' oral or other written statements do not constitute warranties, shall not be relied upon by Buyer, and are not a part of the contract for sale or this limited warranty.

5. **Return Policy:** Approval is required prior to returning goods to USC, LLC. A restocking fee will apply.

6. **Entire Obligation:** This Limited Warranty states the entire obligation of Manufacturer with respect to the Products. If any part of this Limited Warranty is determined to be void or illegal, the remainder shall remain in full force and effect.



USC, LLC

2320 124th road

Sabetha, Ks 66534

PHONE: (785) 431-7900

FAX: (785) 431-7950

EMAIL: sales-team@uscllc.com

WEB: www.uscllc.com
