



TS3500 BIN FILL CONVEYOR



Operators Manual

Document: TD-09-06-1027

Revision: B



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 TS3500 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.

TS3500 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*

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
	Conveyor Set-up and Operation.....	19
	Operational Hints	20
	Machine Break-in	21
	Emergency Stopping	24
Section C	Transporting	25
Section D	Troubleshooting	27
	Unplugging	28
Section E	Maintenance	29
Section F	Belt Tensioning Specification	34
Section G	Storage.....	35
Section H	Mechanical Drawings.....	36
Section I	Limited Warranty.....	87

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

The 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 equipment. **YOU** must ensure that you and anyone else who is going to operate, maintain or work around the conveyor 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.

- 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 signs 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.



TS3500 BIN FILL CONVEYOR

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.

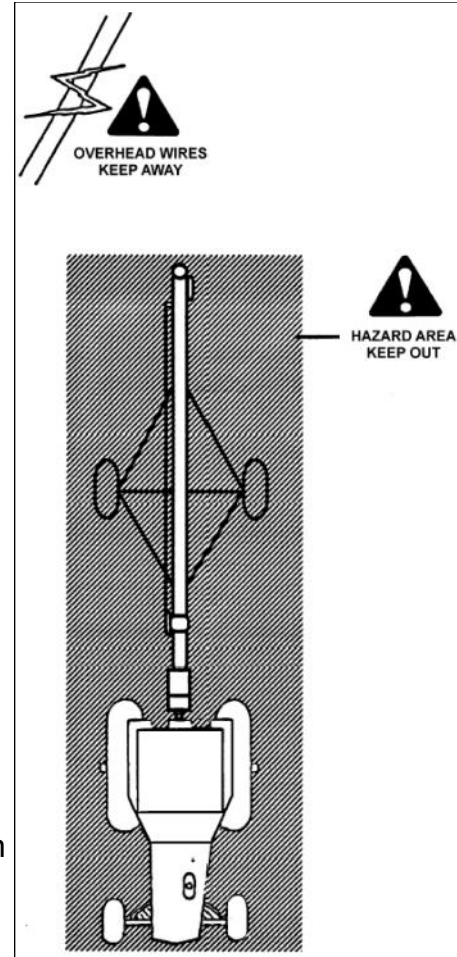


OPERATING SAFETY:

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. Electrocutation 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.
The conveyor should NEVER be transported with the axles in the extended position.
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 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 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.

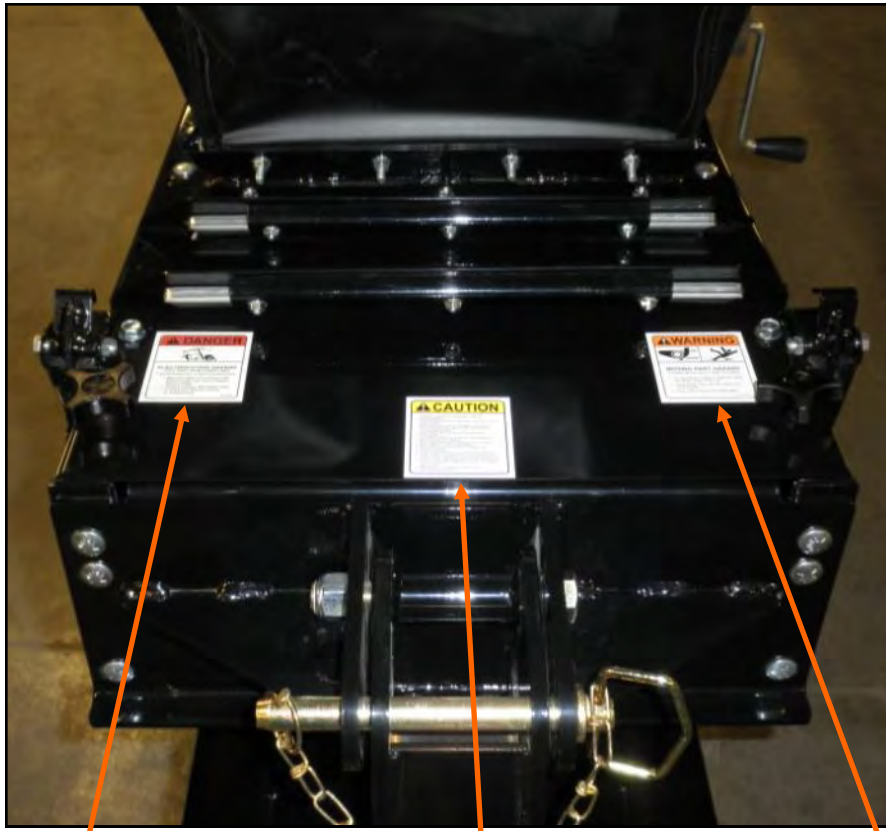
How to Install Safety Signs:

- 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.

TS3500 BIN FILL CONVEYOR



Part # 09-02-0007



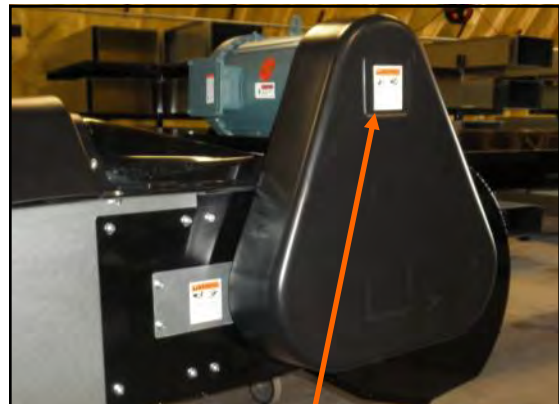
Part # 09-02-0006



Part # 09-02-0011

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. For new safety signs, contact your local USC at (785) 431-7900.



Part # 09-02-0008



Part # 09-02-0009

TS3500 BIN FILL CONVEYOR



Part # 09-02-0011



Part # 09-02-0010



Part # 09-02-0012

**SECTION
B****MECHANICAL OPERATION****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.

The Bin Fill Conveyor is designed to efficiently move seed between a truck, trailer or wagon to a seed bin. Conveyor lift is provided by an electric powered hydraulic lift.

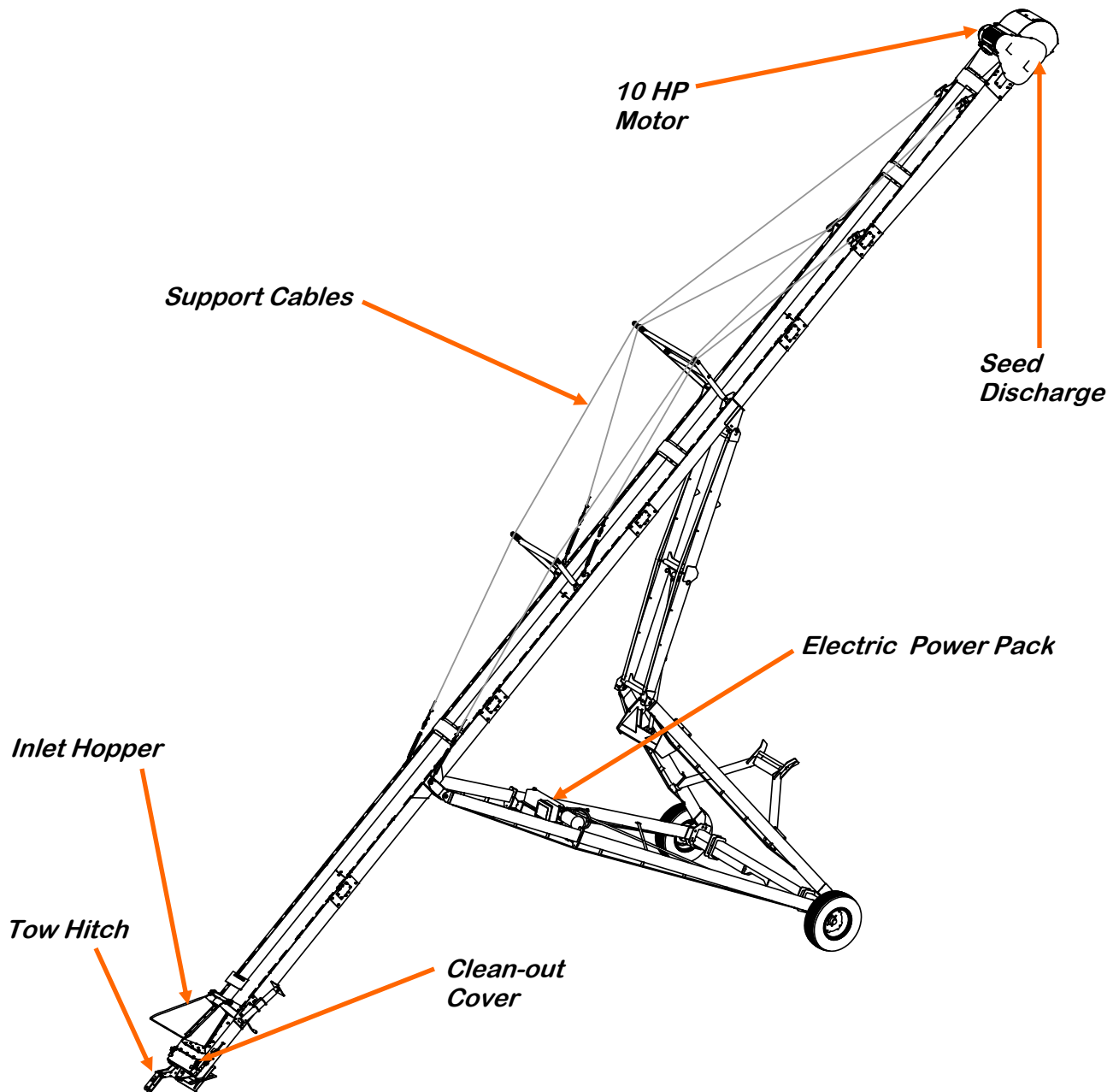
It is the responsibility of the owner or operator to read this manual and to train all other operators before they start working with the machine. In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, and prudence of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

TS3500 BIN FILL CONVEYOR



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:** 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 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 (see page 29).
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.



WARNING 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.

CONVEYOR SET-UP

The following steps outline the initial set-up of your Bin Fill 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 C, Transporting on page 26.
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 (see 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

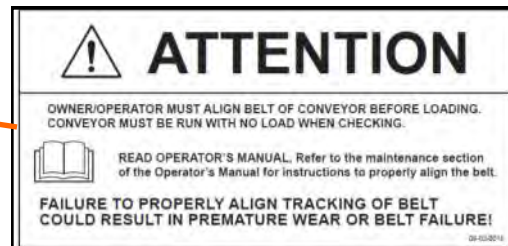
- **USC strongly recommends not using the conveyor at or below freezing temperatures. If you do, use the following start-up procedure:**
 1. Turn the conveyor ON and OFF several times to bump the conveyor belt. If any ice has formed on or around the belt, this should break the belt free. If the belt does not move, wait for the outside temperature to increase.
 2. Once the belt is moving freely, let it run for 4 or 5 minutes to allow it to warm up.
 3. At the end of the warm-up period, verify that the belt has the correct tension and is aligned properly. If it is not, follow the tension and alignment instructions outlined in the Maintenance Section to make the necessary adjustments. (see page 29)
 4. The hydraulic oil in the electric powered lift assembly may need to be heated prior to lifting the bin fill conveyor. Freezing temperatures will increase the fluids viscosity requiring additional force to drive the hydraulic piston. This will increase the amperage load of the motor and possibly cause it to trip the motor starter overload.
- Direct the flow of material into the inlet hopper when moving material. Do not “flood feed” the inlet hopper.
- Always listen for any unusual sounds or noises. If any are heard, continue to run for a short time to allow any material to clear from the conveyor. If you still hear the sound, 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 bin fill conveyor hopper when emptying low clearance facilities.

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. A small amount of rubber flashing from the conveyor belt may be present during initial belt break-in period. This is part of the normal break-in process.

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 31 and 32).**



Part # 09-02-0016

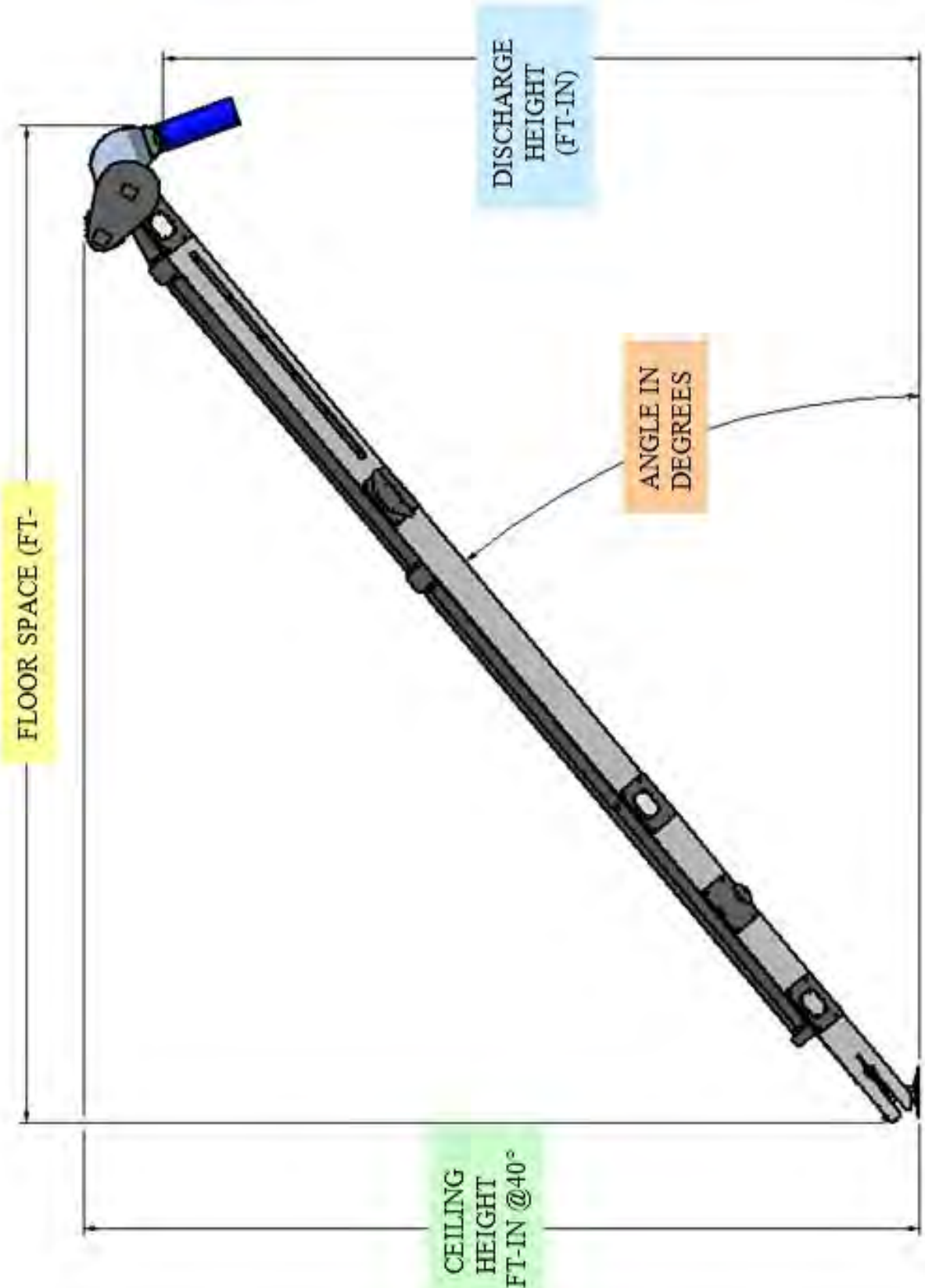
After operating or transport for 1/2 hour

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.

STRUCTURAL ENVELOPE



Conveyor Lengths	Angle in Degrees										
	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°	40°
TS3555	17-6	19-4	21-2	22-11	24-8	26-5	28-1	29-9	31-4	32-11	34-6
	53-10	53-1	52-5	51-8	50-10	49-5	48-11	47-11	46-10	45-8	44-6
	20-8	22-5	24-2	25-10	27-6	29-2	30-9	32-4	33-10	35-4	36-1
TS3565	20-11	23-1	25-3	27-4	29-4	31-5	33-5	35-4	37-3	39-1	40-11
	63-2	62-5	61-7	60-1	59-2	58-7	57-5	56-2	54-5	53-7	52-2
	24-1	26-2	28-3	30-3	32-3	34-2	36-1	37-11	39-9	41-6	43-2
TS3570	22-8	25	27-3	29-6	31-9	33-11	36	38-1	40-2	42-2	44-1
	67-11	67	66-1	65-1	64-1	62-11	61-8	60	58-3	56-9	56
	25-10	28-1	30-3	32-5	34-7	36-8	38-8	40-9	42-8	44-7	46-5

FULL Y LOW-ERED	11°
	9
TS3555	56-1
	12-5
TS3565	10-11
	65-11
TS3570	14-4
	11-10
	70-10
	15-3

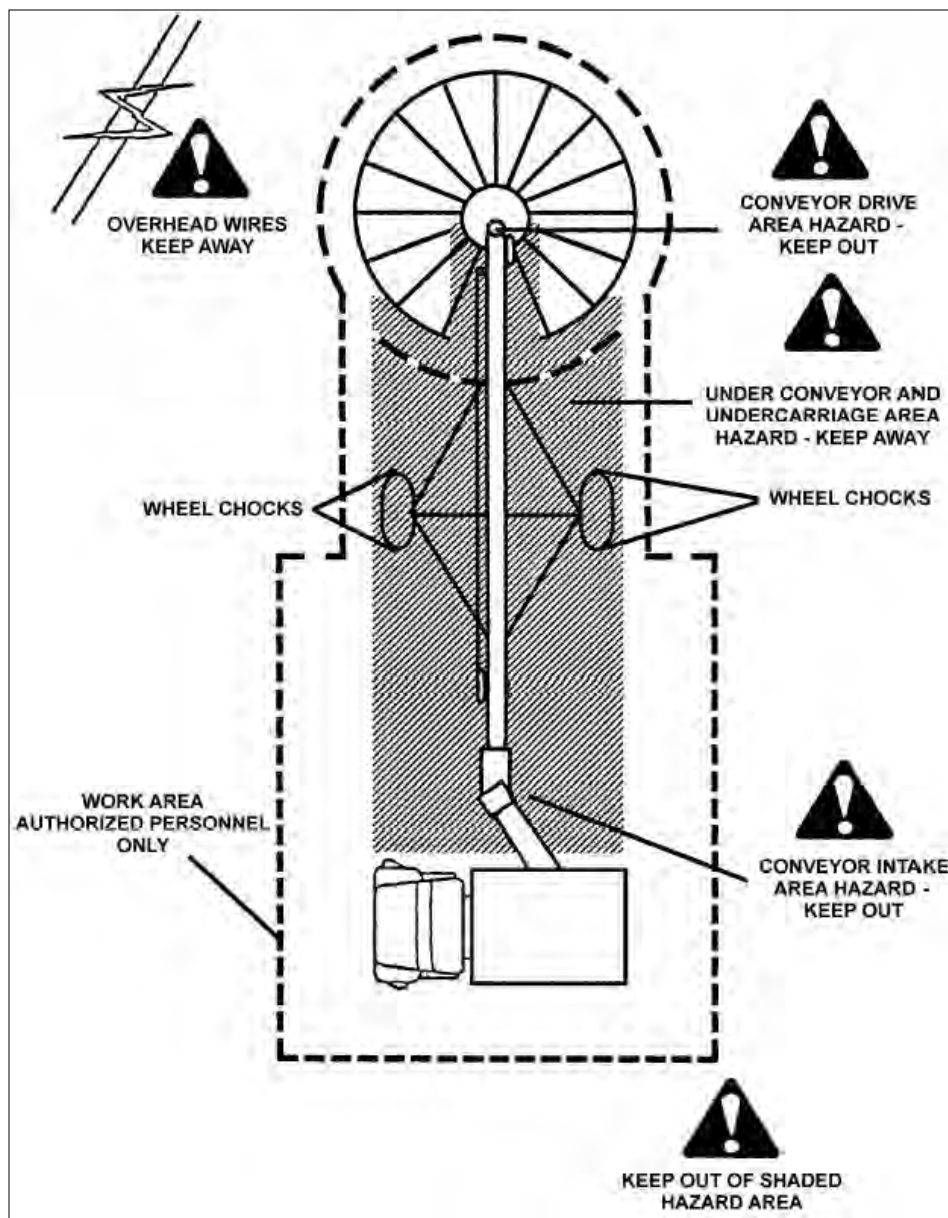
*** ALL DIMENSIONS ROUNDED DOWN TO NEAREST INCH
 ** N / A - INFORMATION NOT AVAILABLE**

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

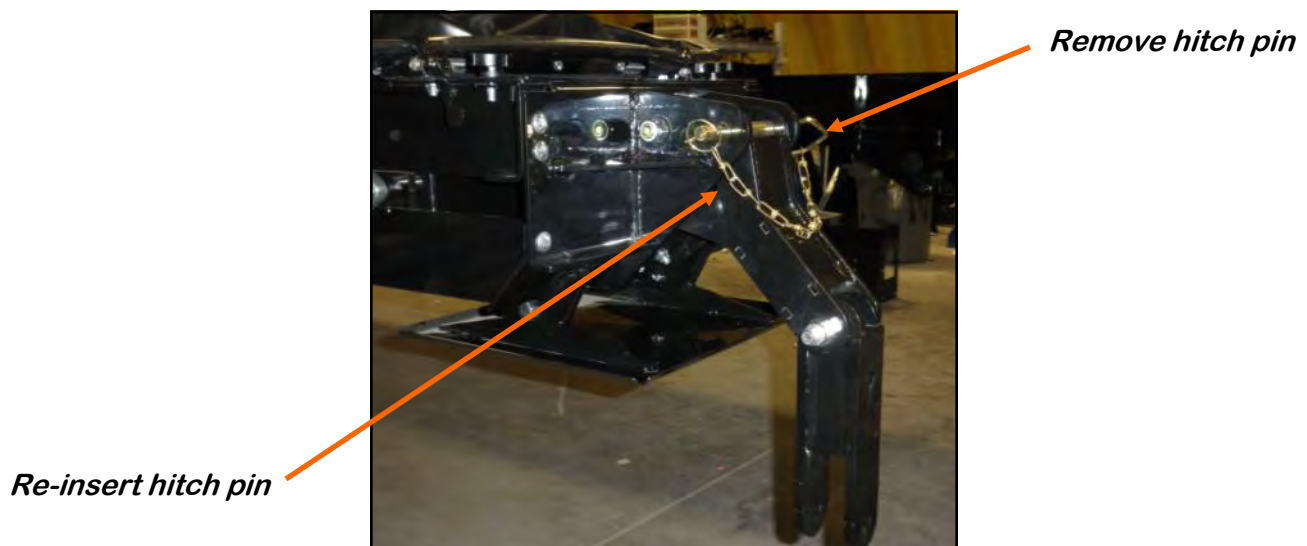
When the machine is shut down inadvertently or for an emergency, the belt may still be covered with material. It may be necessary to tighten the drive belt slightly to handle the heavier-than-normal starting loads.



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:

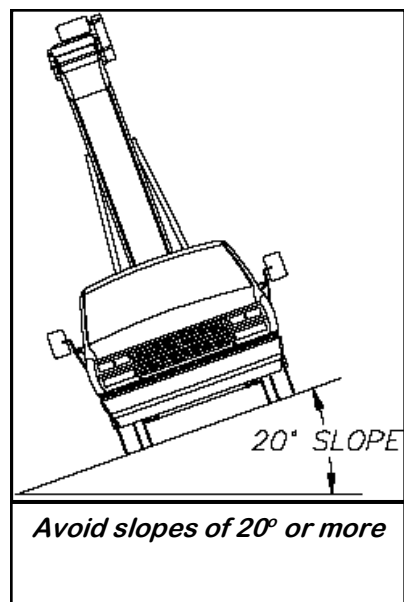
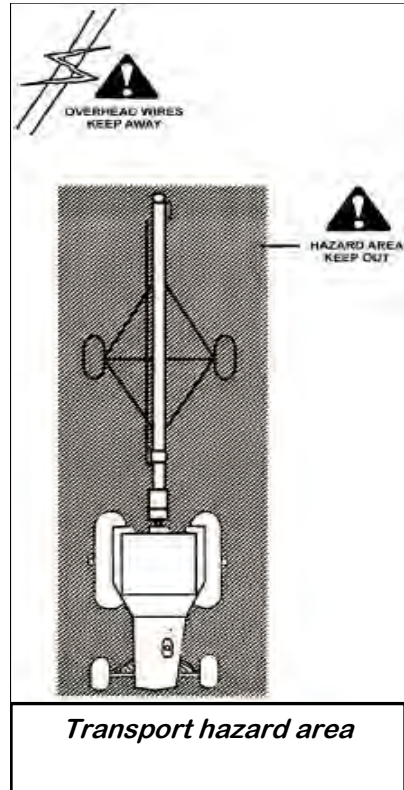
1. Using the jack, raise the drawbar to the desired height and remove the hitch pin from drawbar assembly.
2. Be sure that there is sufficient room and clearance to back up to the machine.
3. Back up tow vehicle and align with drawbar on conveyor.
4. Set the park brake before dismounting.
5. Align the 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 into one of the holes in the drawbar.
8. Move to new location.
9. Reverse the above procedure when unhooking.



TRANSPORTING

Bin Fill 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. 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.



TROUBLESHOOTING SECTION D

Below is a table describing the most frequent problems and solutions with the Bin Fill Conveyor. For further assistance, contact USC at (785) 431-7900.

Problem	Possible Cause	Solution
Conveyor will not run.	<ol style="list-style-type: none"> 1. Not turned on. 2. Conveying belt loose. 3. Drive belt loose. 	<ol style="list-style-type: none"> 1. Start power source or turn on power. 2. Tighten and align belt. 3. Tighten drive belt.
Belt edge fraying.	<ol style="list-style-type: none"> 1. Belt not aligned. 	<ol style="list-style-type: none"> 1. Align and tension belt.
Low conveying capacity.	<ol style="list-style-type: none"> 1. Angle too steep. 2. Slow operating speed. 3. Conveyor belt slipping. 4. Drive belt slipping. 	<ol style="list-style-type: none"> 1. Reposition with angle at 40°. 2. Increase operating speed. 3. Tighten belt. 4. Set drive belt tension.
Conveyor will not raise	<ol style="list-style-type: none"> 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 to tight. 6. Pressure relief valve set too low. 7. Motor running in wrong direction. 	<ol style="list-style-type: none"> 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.

*Remove shipping bolts
after receiving
conveyor*



Bottom clean-out cover



Bottom clean-out cover removed

MAINTENANCE

SECTION E

Proper maintenance of the Bin Fill 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.

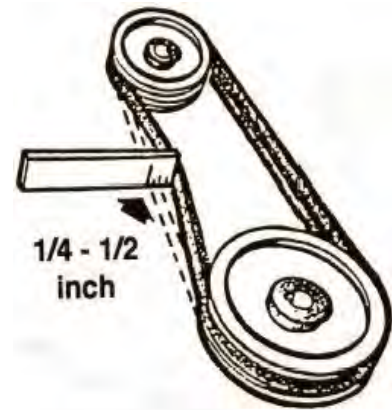
NOTICE

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.
4. Check the chain tension. Adjust if required, lubricate chain and re-install guard.



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 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.

WARNING

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:

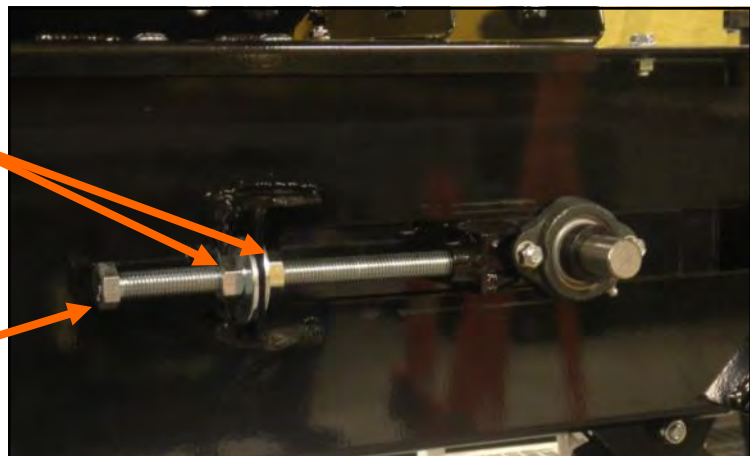
NOTICE

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 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.

Loosen these jam nuts before adjusting the bearing position bolt

Use this bolt to tighten and align the belt

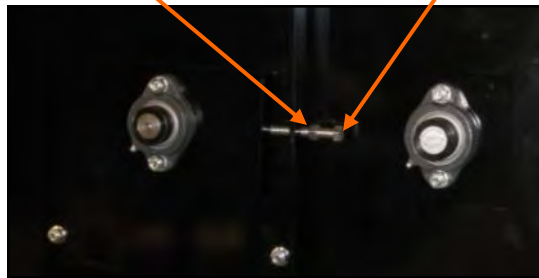


CONVEYING BELT ALIGNMENT-HEAD END

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.

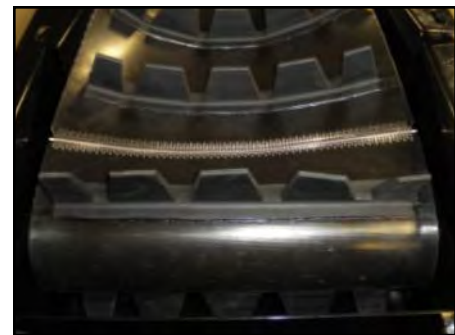
*Tighten jam nut
after adjustment*

*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



Head Cover removed

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.

Drive Belt Tension

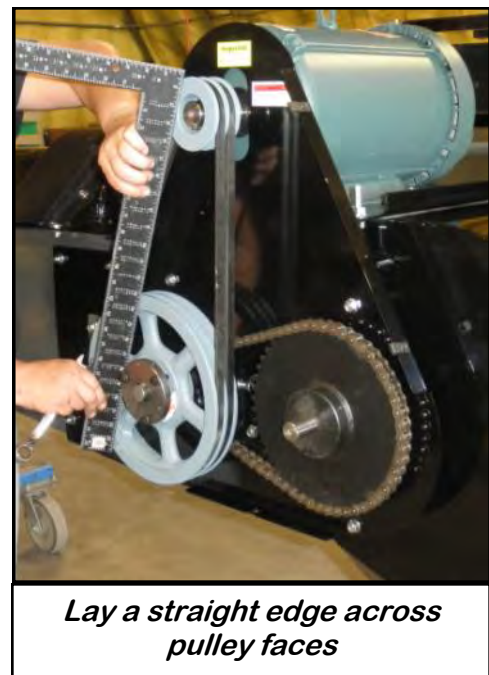
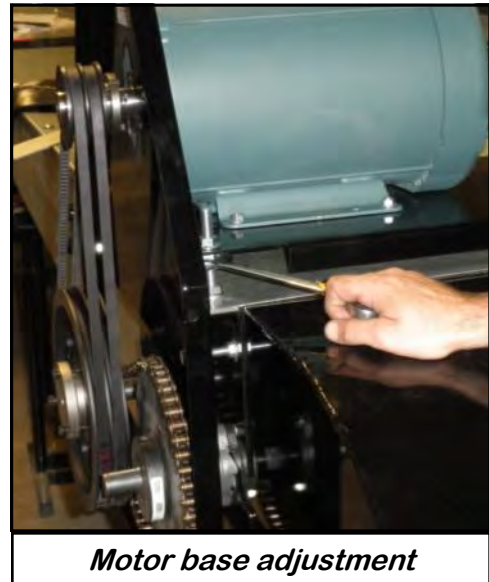
1. Push on the center of the belt span with a force of approximately 5 to 10 lbs.
2. Follow the belt tensioning specification on page 34 to determine proper belt deflection.
3. Move the motor up, using the adjustment bolts, to set drive belt tension (top right).
4. Close and secure guards.

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.

Drive Belt Replacement

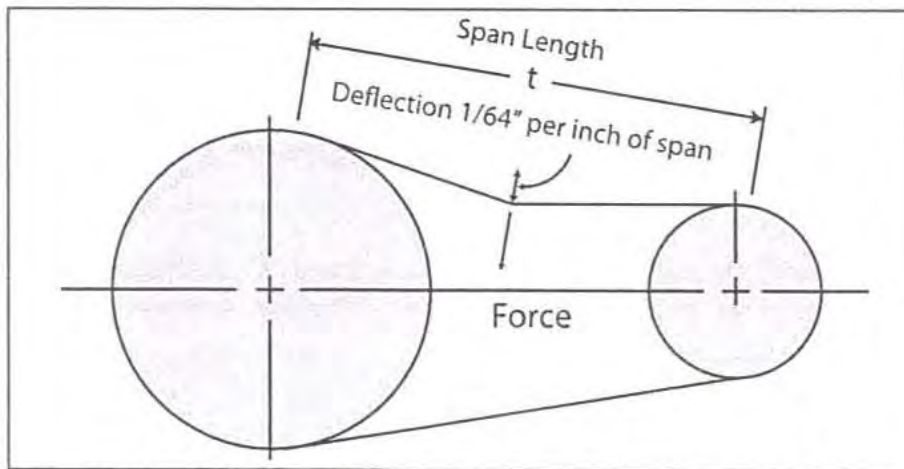
1. Lower motor to its loosest position.
2. Remove old belt and replace with a new one.
3. Raise motor to set the belt tension.
4. Check pulley alignment. Adjust if required.
5. Close and secure guards.



**SECTION
F**

BELT TENSIONING SPECIFICATION

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 PULLEY 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

When storing the Bin Fill 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.

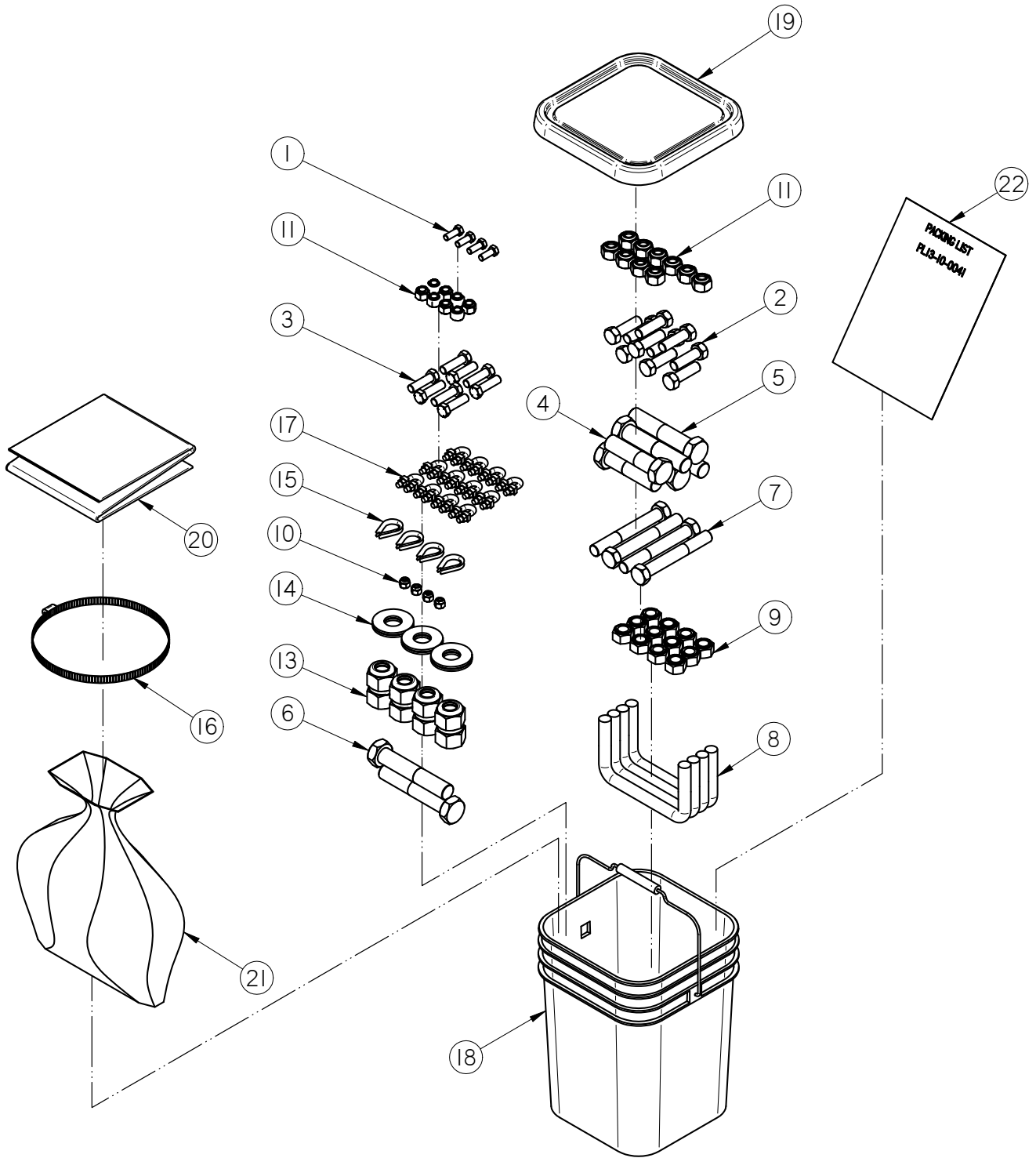


A dust mask and protective rubber gloves shall be used when cleaning the machine.

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

SECTION
H

MECHANICAL DRAWINGS

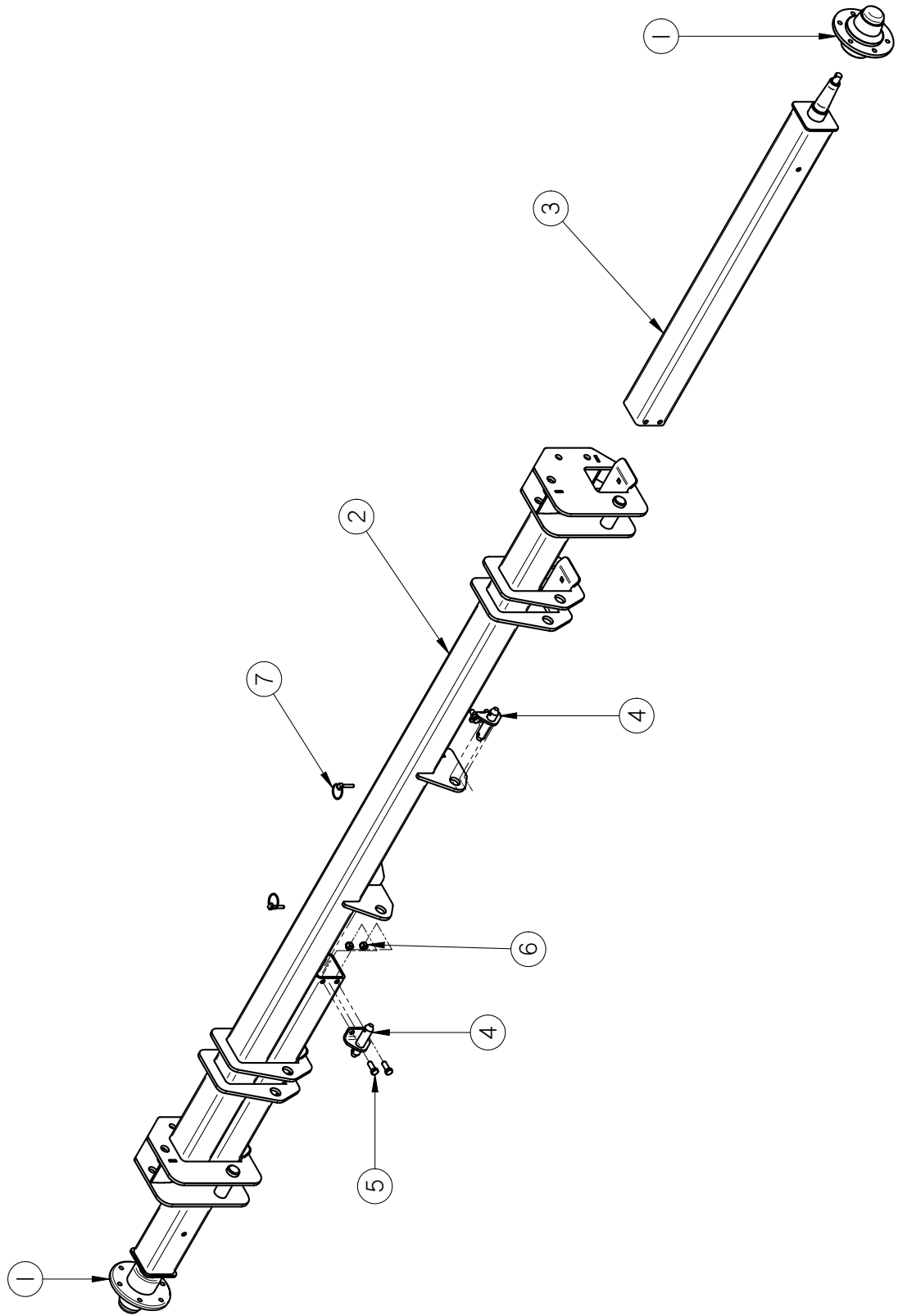


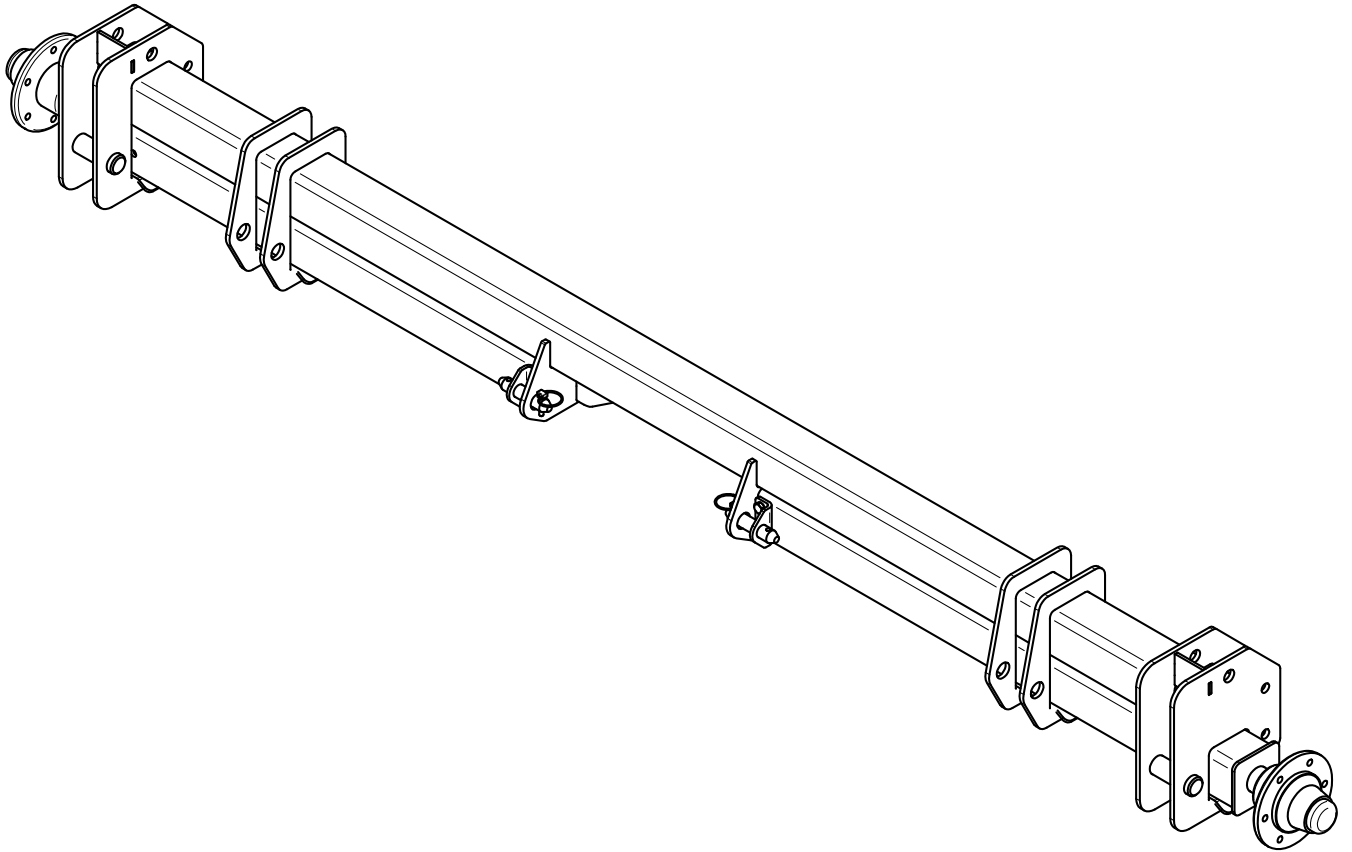
TS3500 BIN FILL CONVEYOR

PARTS BUCKET - HYDRAULIC LIFT (13-10-0041)

Item #	Part #	Description	Qty
1	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	10
2	06-01-0032	BOLT, .625 X 11 X 2" UNC ZP GRADE 5	8
3	06-01-0054	BOLT .500-13 X 1.75 ZP GR5	2
4	06-01-0166	BOLT,1.00-8 X 4.00 UNC ZP GRADE 8	4
5	06-01-0167	BOLT,1.00-8 X 5.00 UNC ZP GRADE 8	2
6	06-01-0168	BOLT, 1.00-8 X 5 1/2 UNC ZP GRADE 8	4
7	06-01-0178	BOLT .750-10 X 5.50 HH ZP GR5	4
8	06-01-0260	BOLT U .750-10 X 6.81 X 3.75 ZP SQ	12
9	06-02-0029	NUT,LOCK, .750-10 ZP NE NYLON INSERT	4
10	06-03-0003	NUT NYL LOCK .375-16 ZP GR5	8
11	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	10
12	06-03-0005	NUT NYL LOCK .625-11 ZP	8
13	06-03-0028	NUT NYL LOCK 1.00-8 ZP GR5	6
14	06-05-0010	WASHER, 1.00 FLAT ZP	4
15	06-07-0023	THIMBLE .250 WIRE ROPE HD	1
16	06-07-0027	CLMP HOSE 9.375 TO 12.25 X 9/16 SS	12
17	06-07-0026	CBL CLIP ROPE .313	1
18	08-07-0037	BCKT 4 GAL	1
19	08-07-0038	BCKT LID 4 GAL	1
20	103D92	CNVR DSCHG SPOUT EXT 10ID	1
21	13-10-0032	PARTS BAG HYD PWR PK BL CNVR	1
22	PL13-10-0041	PACKING LIST PL13-10-0041	X

Item #
1
2
3
4
5
6
7

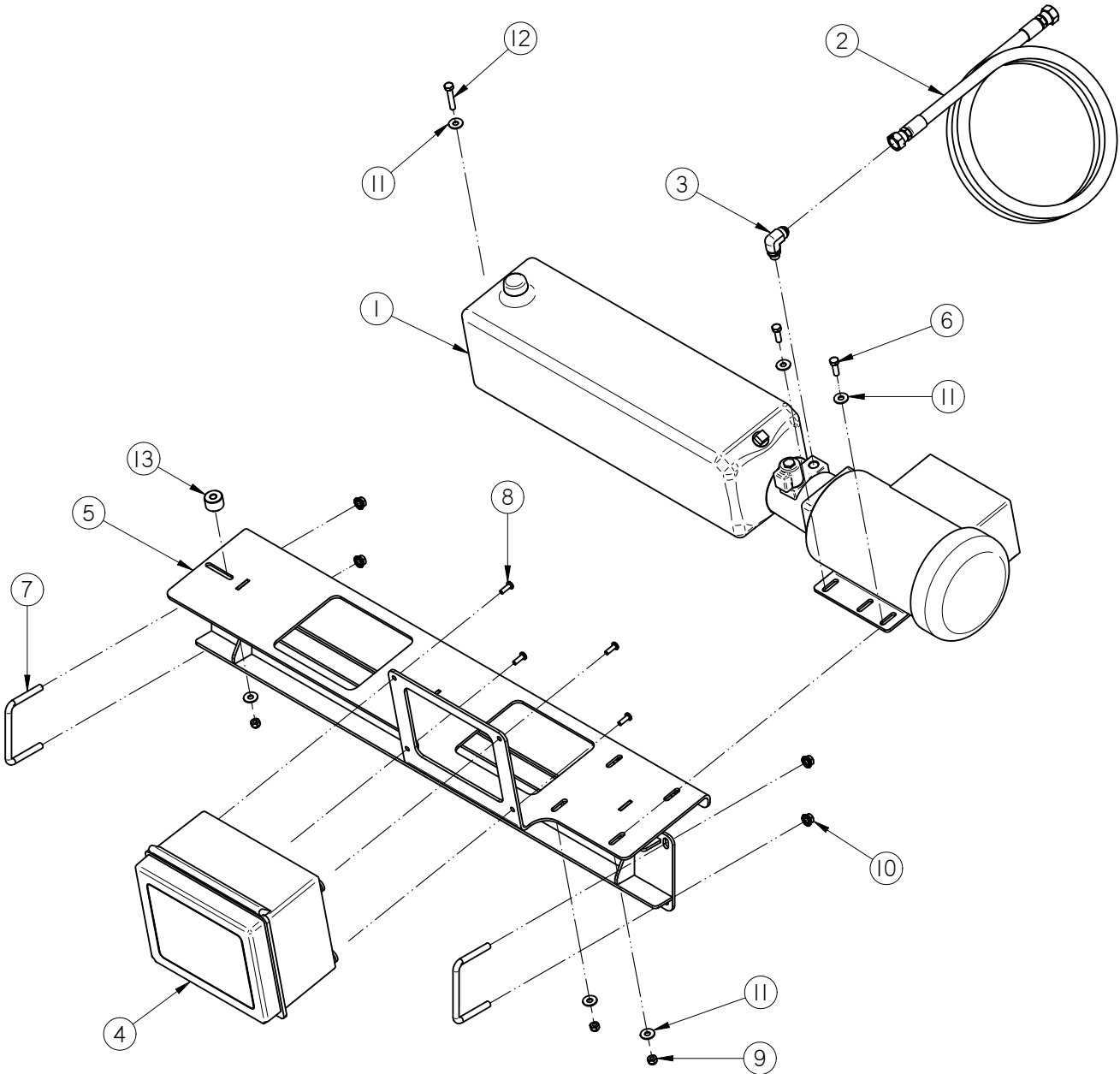




6	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	4
7	06-09-0101	PIN LYNCH .312OD X 1.250 LG STD	2

TS3500 BIN FILL CONVEYOR

ELECTRIC POWER PACK ASSEMBLY (13-08-0376)



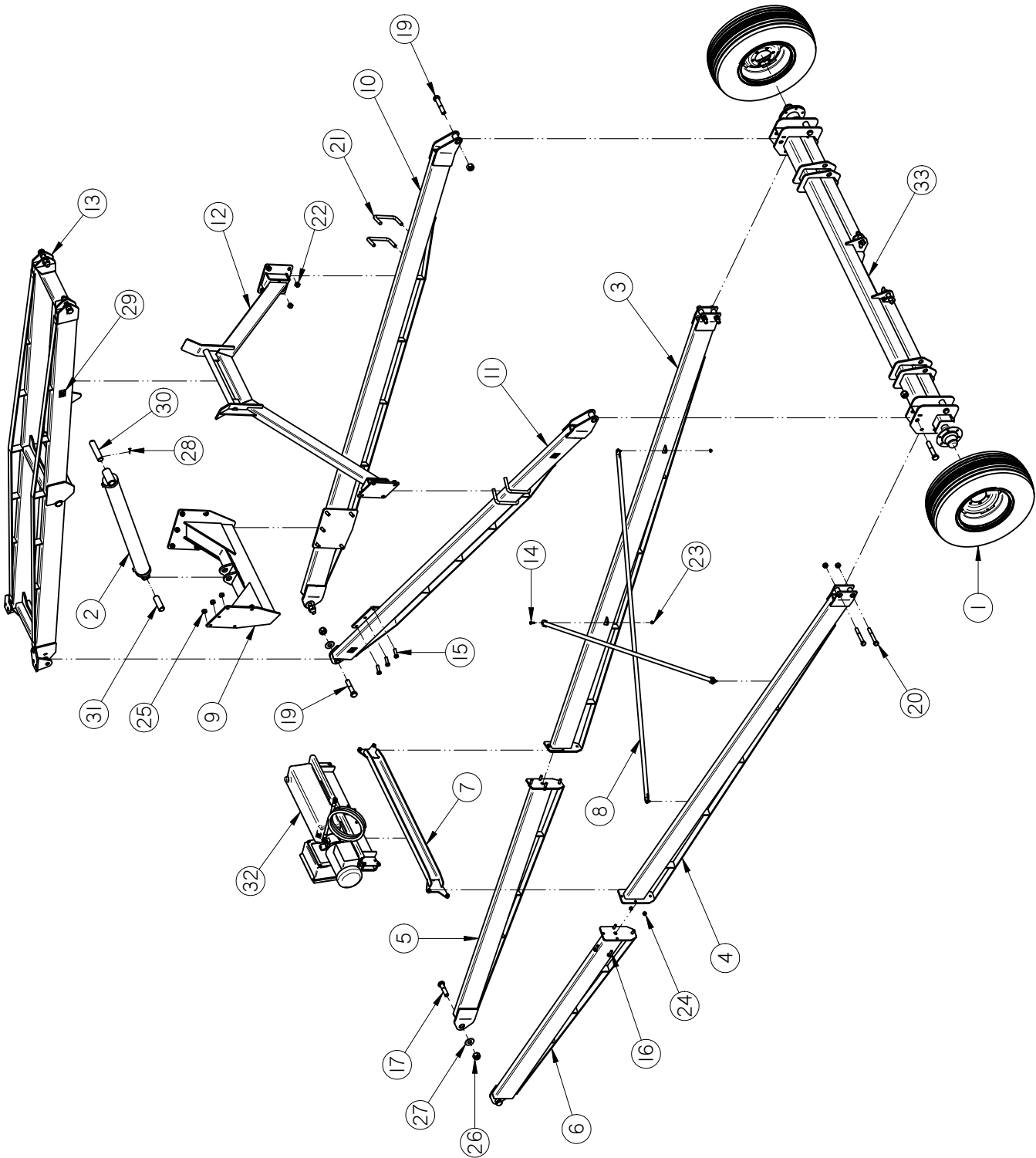
TS3500 BIN FILL CONVEYOR

ELECTRIC POWER PACK ASSEMBLY (13-08-0376)

Item #	Part #	Description	Qty
1	01-01-0164 B	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	03-07-0049	CORD 2COND 18AWG SJEOW	1FT
N/S	03-07-0129	CORD 5COND 14AWG SOOW	5FT
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
N/S	03-08-0299	CONN CG 0.5NPT .170-.450 3232LTF	1
N/S	03-08-0308	NUT NYLOC .750 NPT 8466	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	4
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
12	06-06-0013	BOLT, .3125-18 UNC ZP G5; 1.75" LG	1
13	1.03E+36	SPACER RES PWR PK	1

N/S These items not shown.

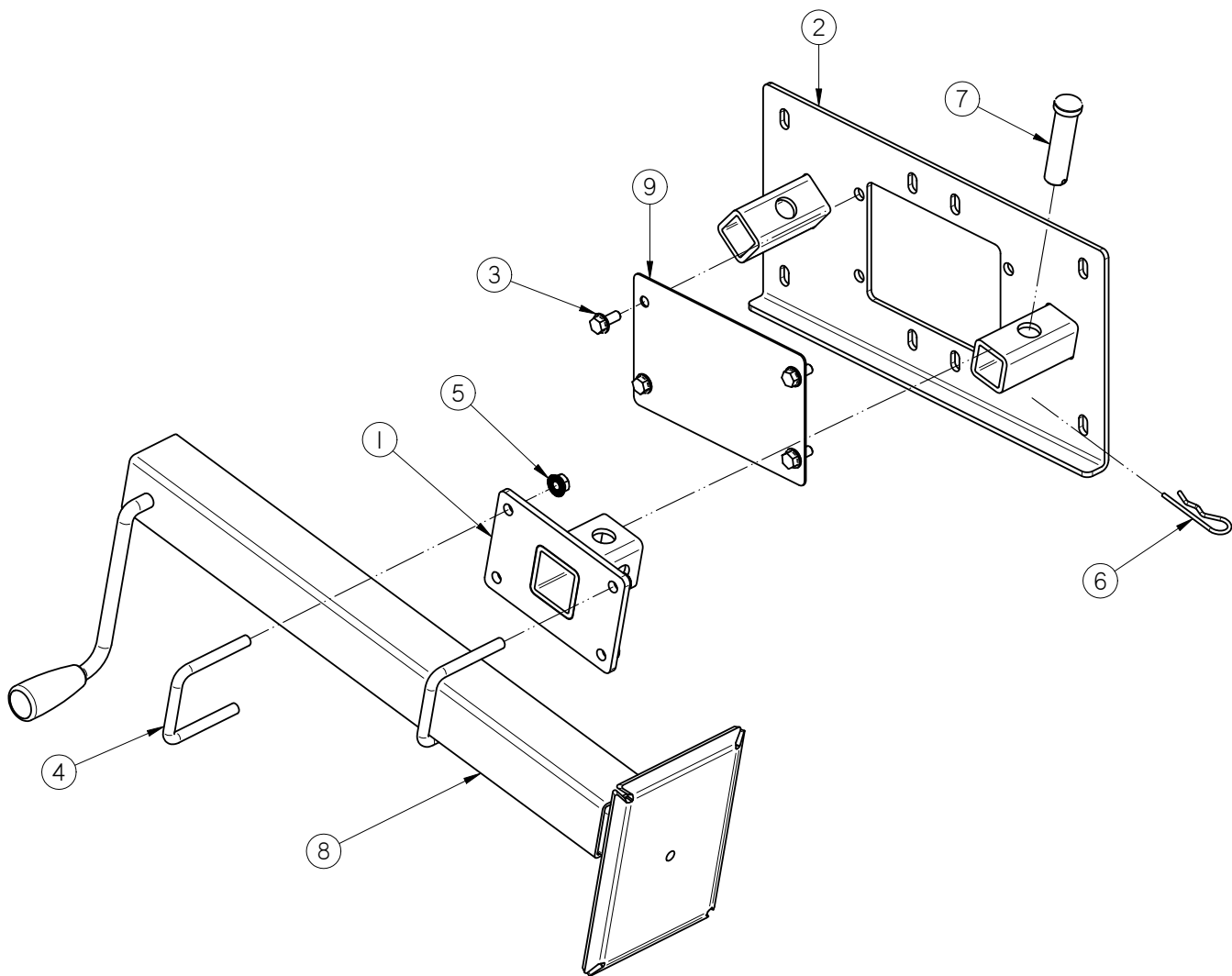
Item Num
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33



TS3500 BIN FILL CONVEYOR

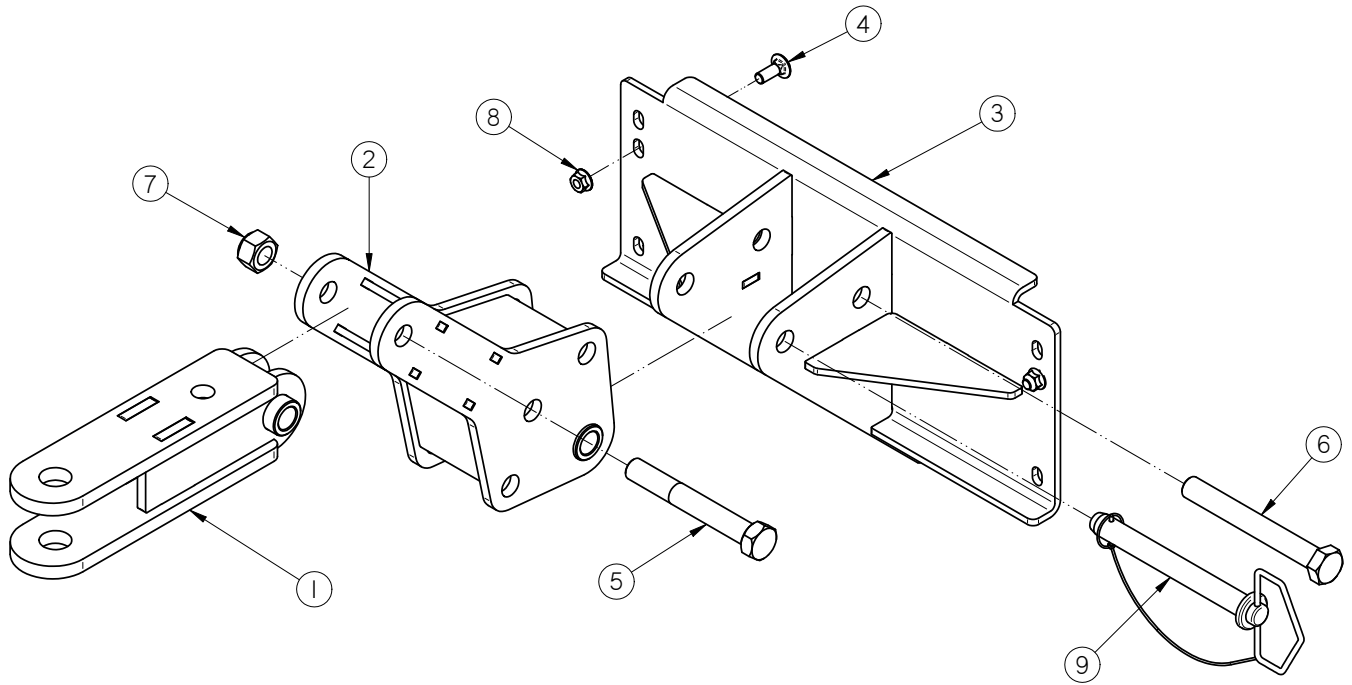
UNDERCARRIAGE ASSEMBLY (13-08-0527)

Item #	Part #	Description	Qty
1	01-06-0096	WHL ASSY 11L/15 - 15X8 6HL AG TYPE	2
2	03-17-0089	CYL HYD WELD 36IN STRK 4IN ID	1
3	05-08-0226	WDMT TR ARM RH	1
4	05-08-0227	WDMT TR ARM LH	1
5	05-08-0228	WDMT TR ARM FRNT RH	1
6	05-08-0229	WDMT TR ARM FRNT LH	1
7	05-08-0230	WDMT CROSS BRACE	1
8	05-08-0253	WDMT CROSS BRACE BL CNVR	2
9	05-08-0305	WDMT CYL MOUNT	1
10	05-08-0306	WDMT HINGE RH	1
11	05-08-0307	WDMT HINGE LH	1
12	05-08-0308	WDMT HINGE SUPP	1
13	05-08-0442	WDMT HINGE UPPER DBL EAR BL	1
14	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	4
15	06-01-0032	BOLT, .625 X 11 X 2" UNC ZP GRADE 5	10
16	06-01-0054	BOLT .500-13 X 1.75 ZP GR5	8
17	06-01-0166	BOLT,1.00-8 X 4.00 UNC ZP GRADE 8	2
18	06-01-0167	BOLT,1.00-8 X 5.00 UNC ZP GRADE 8	4
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	4
22	06-02-0029	NUT,LOCK, .750-10 ZP NE NYLON INSERT	12
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	06-03-0005	NUT NYL LOCK .625-11 ZP	10
26	06-03-0028	NUT NYL LOCK 1.00-8 ZP GR5	8
27	06-05-0010	WASHER, 1.00 FLAT ZP	6
28	06-09-0088	.125 X 2.00 ZP COTTER PIN	4
29	09-02-0015	ATWRK LBL DANGER PINCH POINT	6
30	102922	PIN, CYL UPPER BL	1
31	102923	PIN, CYL LOWER BL	1
32	13-08-0376	KIT ELEC PWR PK BL CNVR	1
33	13-08-0423	ASSY AXLE EXTENDED BL	1



6	06-09-0039	PIN CLIP 2.625 #11 1/8IN ZP	1
7	06-09-0095	PIN CLVS .750 X 3.00 ZP	1
8	08-08-0145	TRLR JACK SW 8000LB 15IN	1
9	103B9A	PLT SPLICE COVER	1

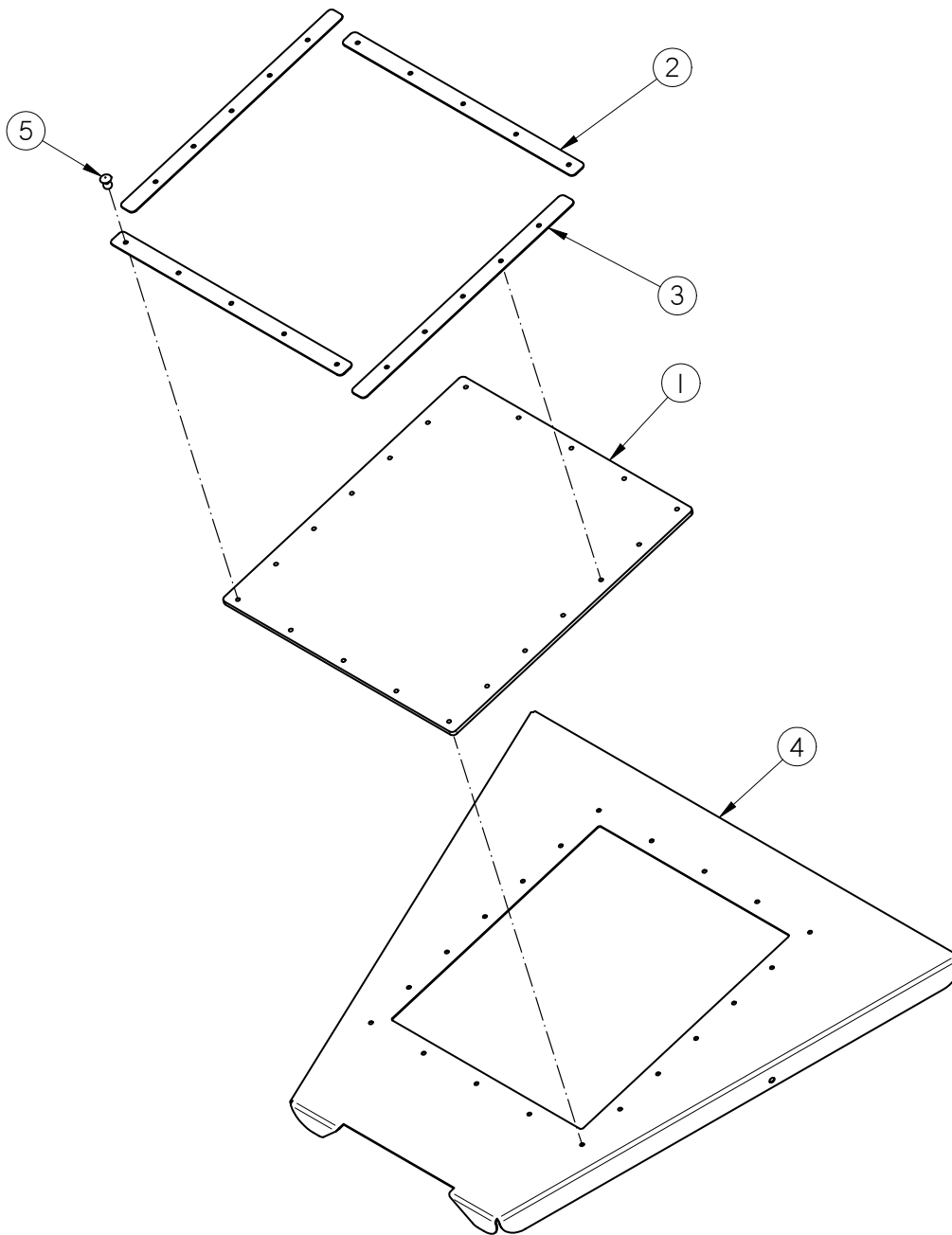
TS3500 BIN FILL CONVEYOR



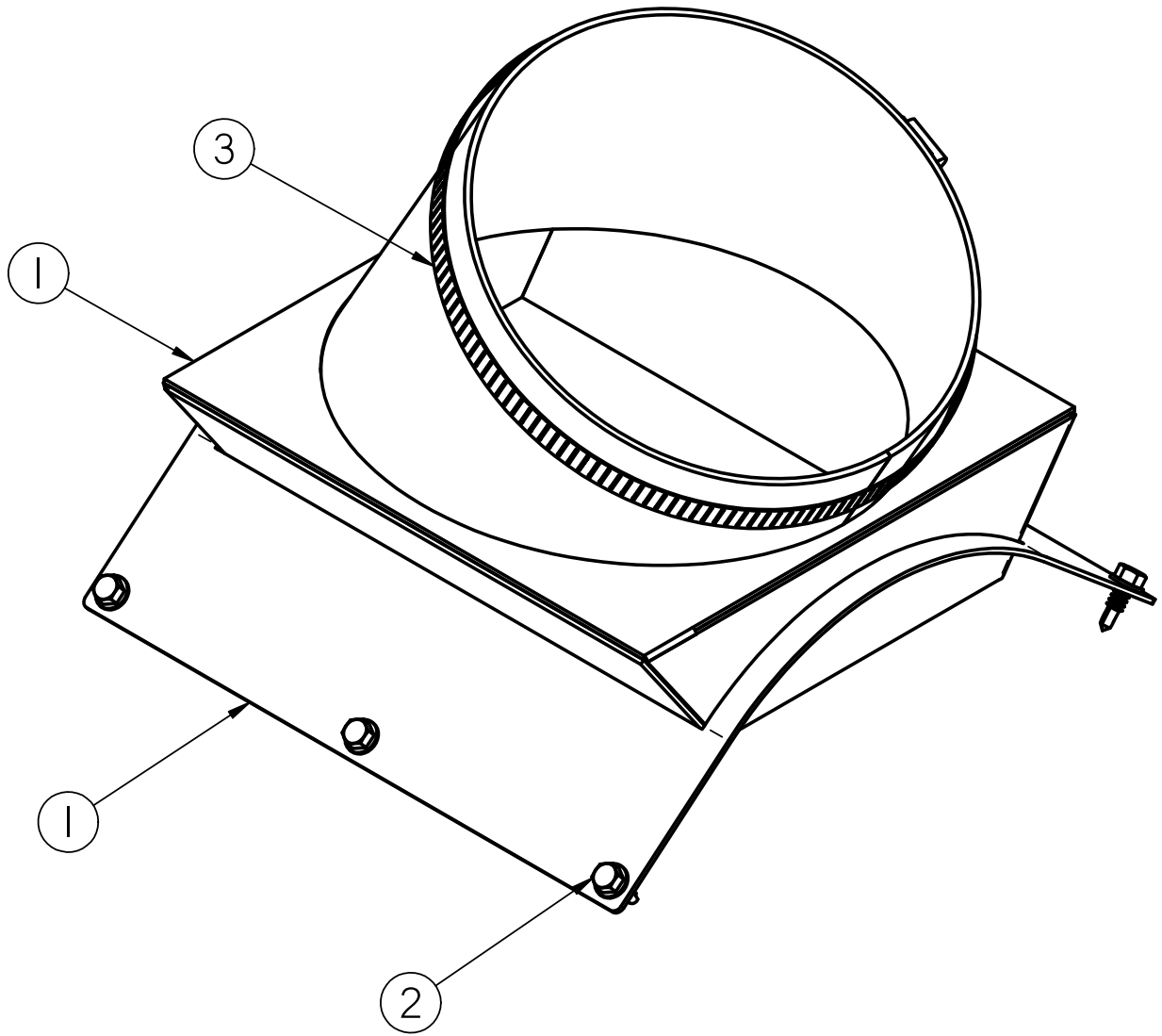
6	06-01-0253	BOLT .750-10 X 6.00 YP GR8	1
7	06-02-0029	NUT,LOCK, .750-10 ZP NE NYLON INSERT	2
8	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	4
9	06-09-0062	PIN HITCH .750 X 6.25 LG W-LYNCH	1

NOTES:

1. ALL RIVETS ARE TO BE FULLY SEATED WHEN INSTALLED.

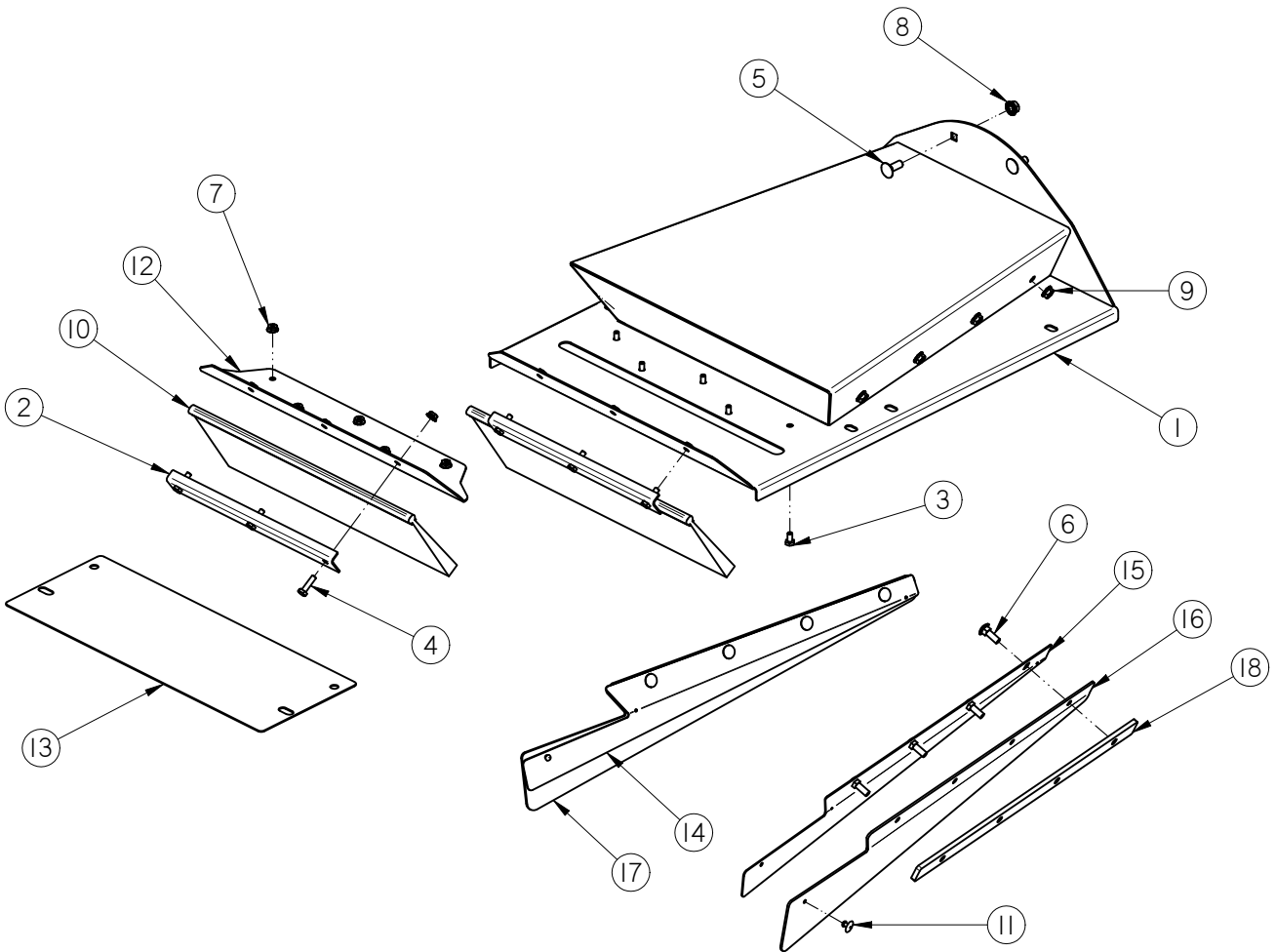


3	05-10-3433	PLT S2000 INLET HOPP CLIMP 1	2
4	05-10-4342	PLT S2000 INLET HOPP COVER	1
5	06-12-0022	RIVET POP .188 X .312 GRIP SS .65HD	20



TS3500 BIN FILL CONVEYOR

INLET BLANK ASSEMBLY (13-08-0483)

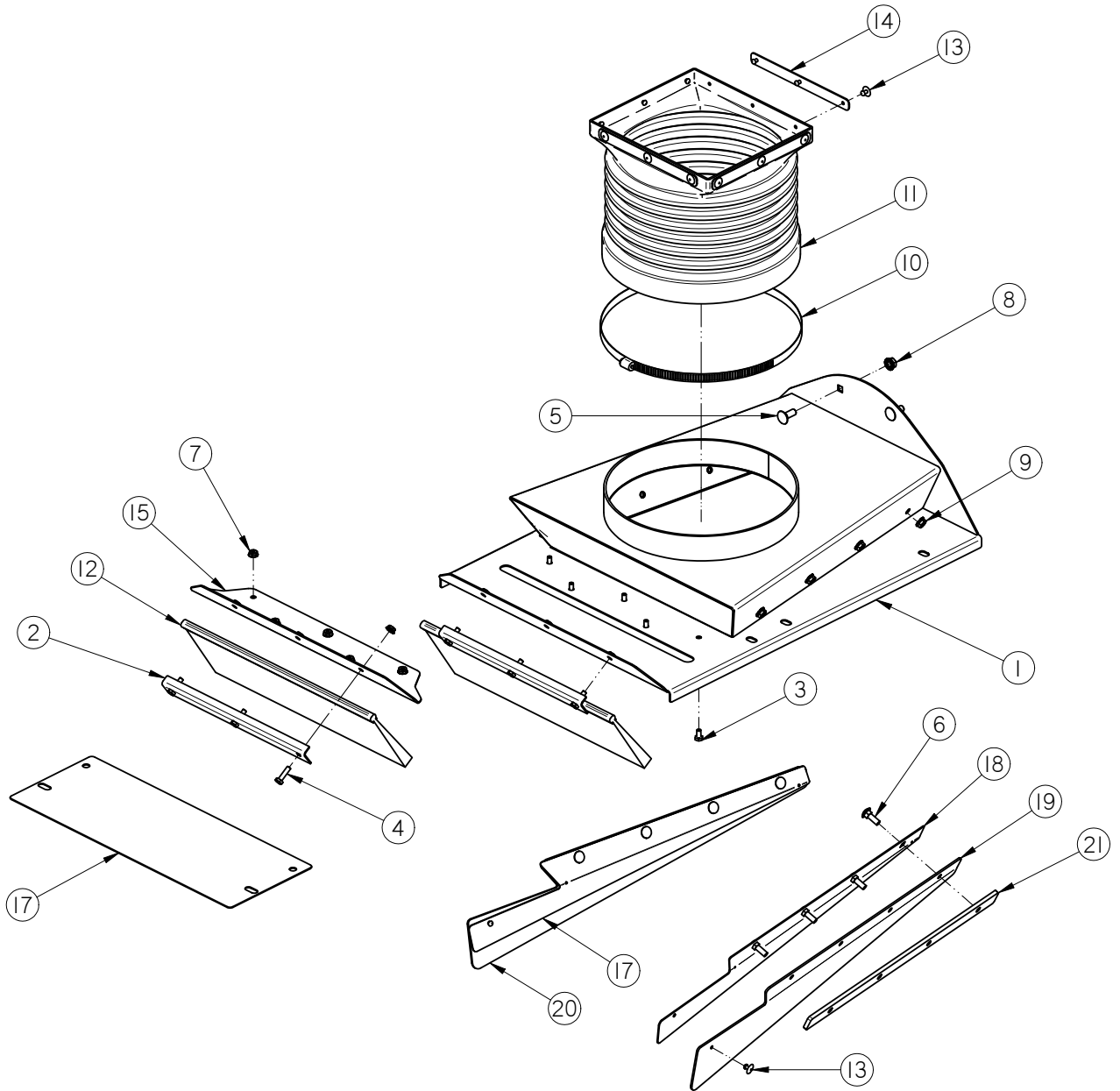


TS3500 BIN FILL CONVEYOR

INLET BLANK ASSEMBLY (13-08-0483)

Item #	Part #	Description	Qty
1	05-08-0467	WDMT INLET 10IN BLANK	1
2	05-10-2138	INLET BRSH HLDR S2000	2
3	06-01-0004	BOLT, .250-20 X .500 UNC ZP GRADE 5	5
4	06-01-0007	BOLT, .250-20 X 1 UNC ZP GRADE 5	6
5	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	4
6	06-01-0223	BOLT CRG .313-18 X 1.00 ZP GR5	8
7	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	11
8	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	4
9	06-03-0019	NUT LOCK FLG .3125-18 ZP GR5	8
10	06-10-0051	BRUSH SEAL 16.5"L	2
11	06-12-0022	RIVET POP .188 X .312 GRIP SS .65HD	2
12	103236	PLATE BRUSH MOUNT	1
13	103AE8	PLT TS16 INLET CVR TOP	1
14	103C7D	PLT SEED GUIDE LH	1
15	103C7F	PLT SEED GUIDE RH	1
16	103D13	SKIRT RBBR INLET RH	1
17	103D15	SKIRT RBBR INLET LH	1
18	103D17	PLT SKIRT SPACER	2

ROUND INLET HOPPER ASSEMBLY (13-08-0480)

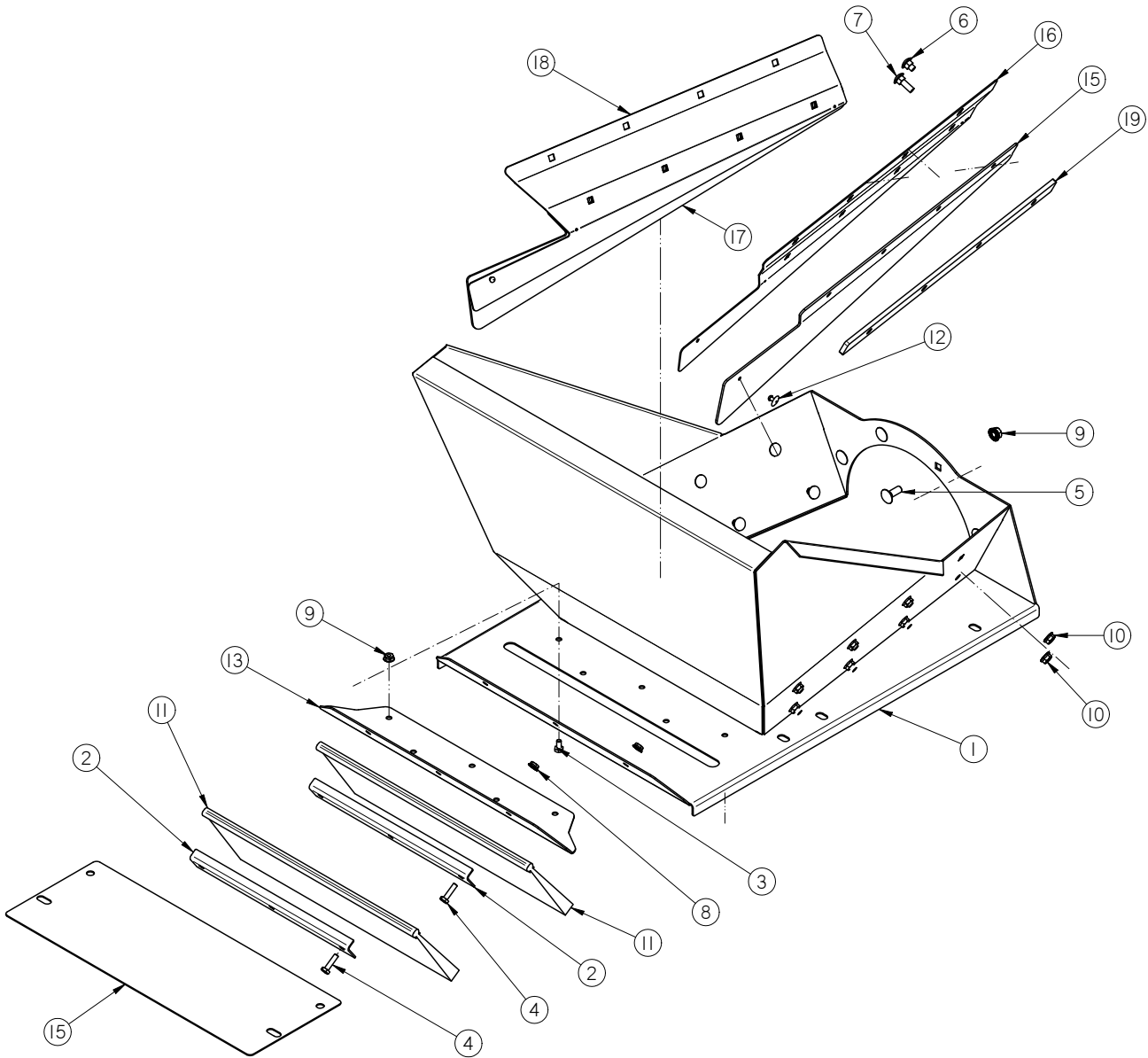


TS3500 BIN FILL CONVEYOR

ROUND INLET HOPPER ASSEMBLY (13-08-0480)

Item #	Part #	Description	Qty
1	05-08-0425	WDMT INLET RND 10IN	1
2	05-10-2138	INLET BRSH HLDR S2000	2
3	06-01-0004	BOLT, .250-20 X .500 UNC ZP GRADE 5	5
4	06-01-0007	BOLT, .250-20 X 1 UNC ZP GRADE 5	6
5	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	4
6	06-01-0223	BOLT CRG .313-18 X 1.00 ZP GR5	8
7	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATED	11
8	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	4
9	06-03-0019	NUT LOCK FLG .3125-18 ZP GR5	8
10	06-07-0032	CLMP HOSE QR 16.25 X 9/16 SS	1
11	06-10-0047	TRANSITION SPOUT FLEXIBLE	1
12	06-10-0051	BRUSH SEAL 16.5"L	2
13	06-12-0022	RIVET POP .188 X .312 GRIP SS .65HD	14
14	102FB6	PLT CLMP TRANS SEAL	4
15	103236	PLATE BRUSH MOUNT	1
16	103AE8	PLT TS16 INLET CVR TOP	1
17	103C7D	PLT SEED GUIDE LH	1
18	103C7F	PLT SEED GUIDE RH	1
19	103D13	SKIRT RBBR INLET RH	1
20	103D15	SKIRT RBBR INLET LH	1
21	103D17	PLT SKIRT SPACER	2

RIGID INLET HOPPER ASSEMBLY (13-08-0539)



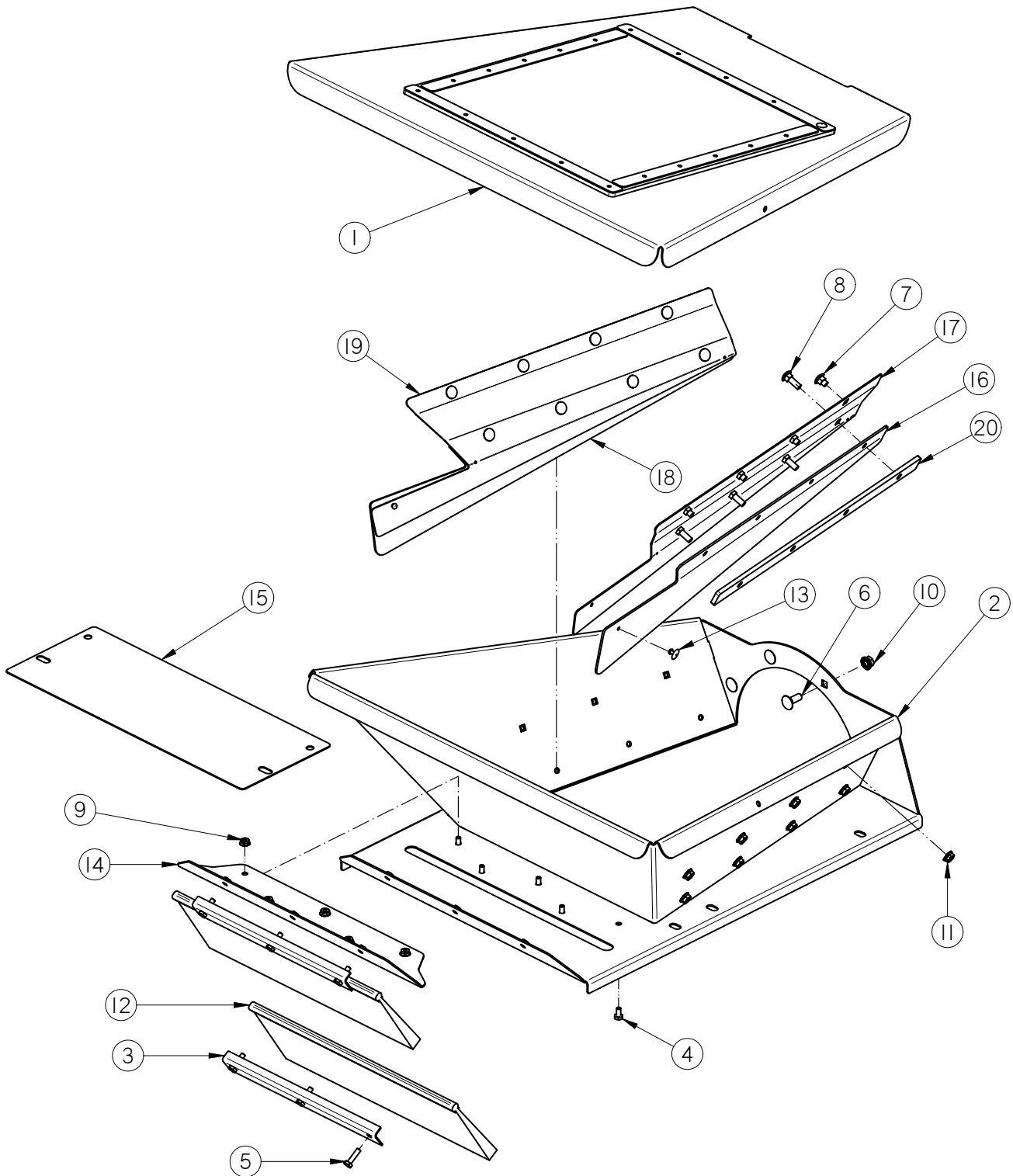
Item #
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19

TS3500 BIN FILL CONVEYOR

RIGID INLET HOPPER ASSEMBLY (13-08-0539)

Item #	Part #	Description	Qty
1	05-08-0466	WDMT INLET 10IN RND CNVR LG	1
2	05-10-2138	INLET BRSH HLDR S2000	2
3	06-01-0004	BOLT, .250-20 X .500 UNC ZP GRADE 5	5
4	06-01-0007	BOLT, .250-20 X 1 UNC ZP GRADE 5	6
5	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	4
6	06-01-0129	BOLT CRG .313-18 X .50 ZP GR5	8
7	06-01-0223	BOLT CRG .313-18 X 1.00 ZP GR5	8
8	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	11
9	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	4
10	06-03-0019	NUT LOCK FLG .3125-18 ZP GR5	16
11	06-10-0051	BRUSH SEAL 16.5"L	2
12	06-12-0022	RIVET POP .188 X .312 GRIP SS .65HD	2
13	103236	PLATE BRUSH MOUNT	1
14	103AE8	PLT TS16 INLET CVR TOP	1
15	103D13	SKIRT RBBR INLET RH	1
16	103D14	PLT SEED GUIDE RH	1
17	103D15	SKIRT RBBR INLET LH	1
18	103D16	PLT SEED GUIDE LH	1
19	103D17	PLT SKIRT SPACER	2

TS3500 BIN FILL CONVEYOR

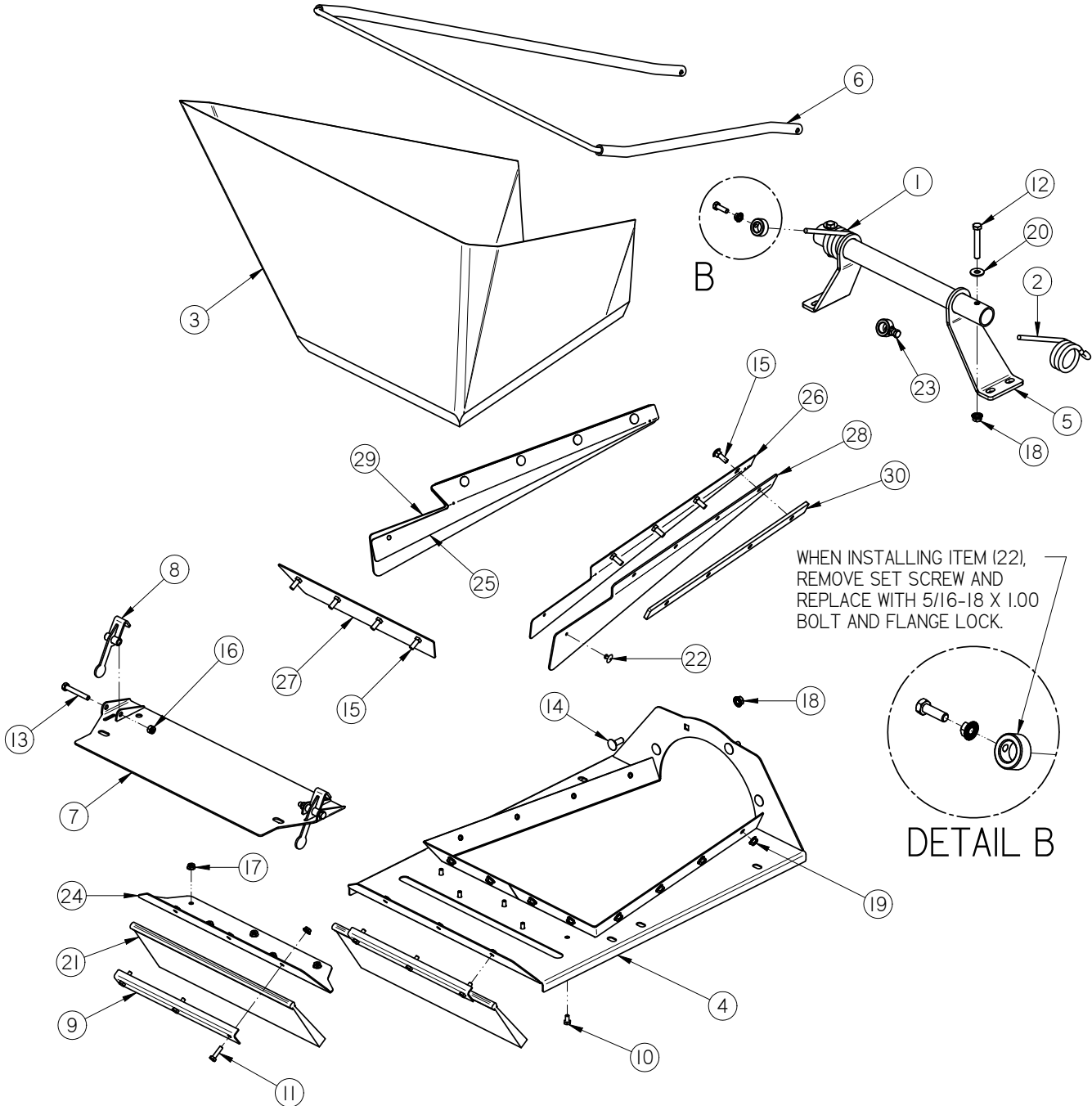


TS3500 BIN FILL CONVEYOR

RIGID INLET HOPPER ASSEMBLY (13-08-0499)

Item #	Part #	Description	Qty
1	05-07-0782	ASSY CNVR INLET CVR	1
2	05-08-0444	WDMT INLET 10IN RND CNVR	1
3	05-10-2138	INLET BRSH HLDR S2000	2
4	06-01-0004	BOLT, .250-20 X .500 UNC ZP GRADE 5	5
5	06-01-0007	BOLT, .250-20 X 1 UNC ZP GRADE 5	6
6	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	4
7	06-01-0129	BOLT CRG .313-18 X .50 ZP GR5	8
8	06-01-0223	BOLT CRG .313-18 X 1.00 ZP GR5	8
9	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	11
10	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	4
11	06-03-0019	NUT LOCK FLG .3125-18 ZP GR5	16
12	06-10-0051	BRUSH SEAL 16.5"L	2
13	06-12-0022	RIVET POP .188 X .312 GRIP SS .65HD	2
14	103236	PLATE BRUSH MOUNT	1
15	103AE8	PLT TS16 INLET CVR TOP	1
16	103D13	SKIRT RBBR INLET RH	1
17	103D14	PLT SEED GUIDE RH	1
18	103D15	SKIRT RBBR INLET LH	1
19	103D16	PLT SEED GUIDE LH	1
20	103D17	PLT SKIRT SPACER	2

COLAPSABLE INLET HOPPER ASSEMBLY (13-08-0482)

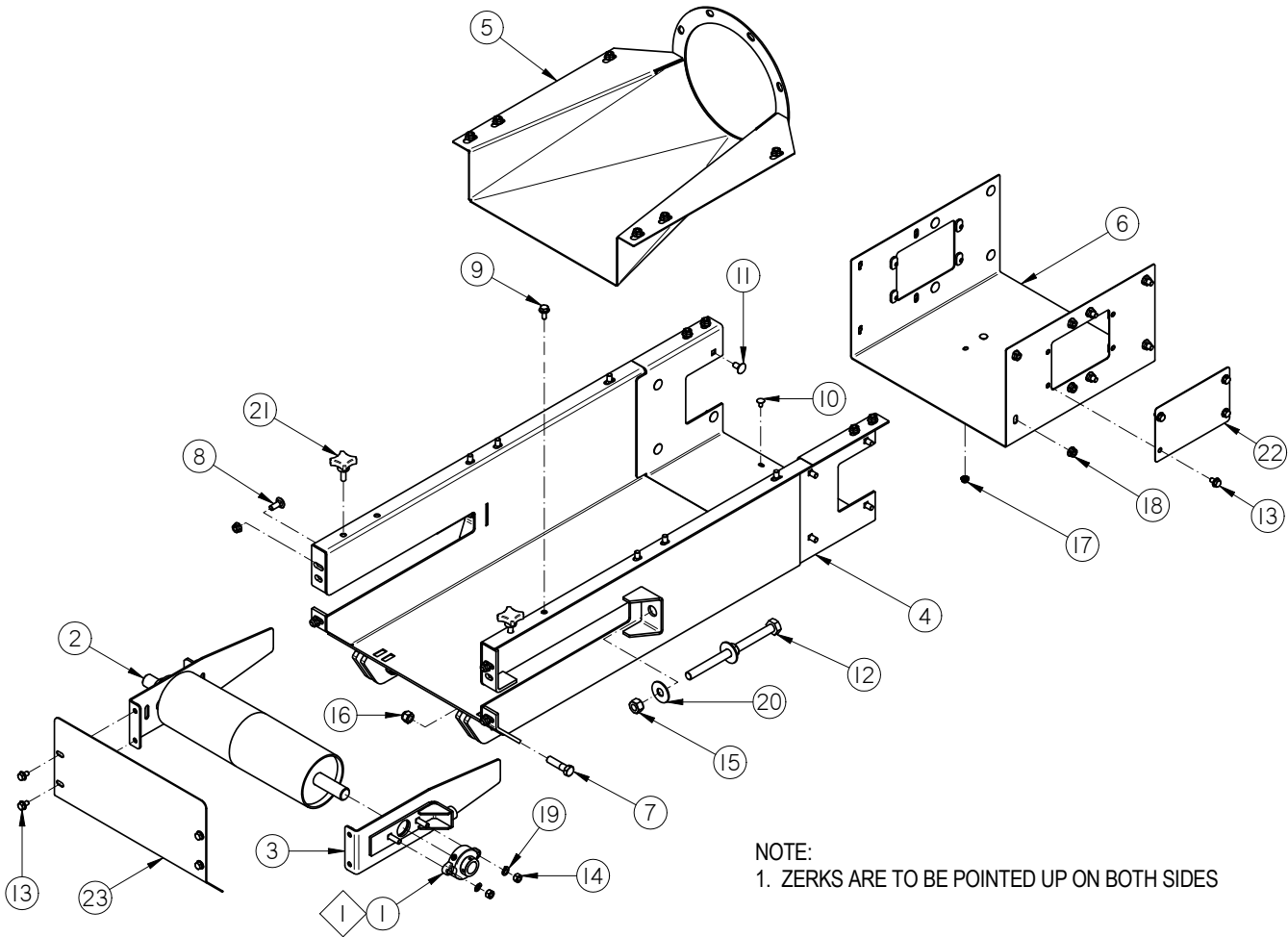


Item Num
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

COLAPSABLE INLET HOPPER ASSEMBLY (13-08-0482)

Item #	Part #	Description	Qty
1	01-04-0061	CLPSBL HOPP SPRING LH	1
2	01-04-0062	CLPSBL HOPP SPRING RH	1
3	01-13-0018	TARP CLPSBL RND CNVR	1
4	05-08-0437	WDMT INLET PLT CLPSBL	1
5	05-08-0438	WDMT SPRING ATTACH CLPSBL	1
6	05-08-0439	WDMT FRAME CLPSBL	1
7	05-08-0440	WDMT CVR CLPSBL	1
8	05-08-0441	WDMT LATCH CLPSBL	2
9	05-10-2138	INLET BRSH HLDR S2000	2
10	06-01-0004	BOLT, .250-20 X .500 UNC ZP GRADE 5	5
11	06-01-0007	BOLT, .250-20 X 1 UNC ZP GRADE 5	6
12	06-01-0071	BOLT, .375-16 X 2 1/2 ZP G5 FULL THREAD	2
13	06-01-0109	BOLT, .3125-18 UNC ZP G5; 2.25" LG	2
14	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	4
15	06-01-0223	BOLT CRG .313-18 X 1.00 ZP GR5	12
16	06-03-0002	NUT NYL LOCK .313-18 ZP GR5	2
17	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	11
18	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	6
19	06-03-0019	NUT LOCK FLG .3125-18 ZP GR5	12
20	06-05-0004	WSHR FLAT .375 ZP	2
21	06-10-0051	BRUSH SEAL 16.5"L	2
22	06-12-0022	RIVET POP .188 X .312 GRIP SS .65HD	2
23	06-12-0048	COLLAR SET 1 1/4OD X 3/4ID	2
24	103236	PLATE BRUSH MOUNT	1
25	103C7D	PLT SEED GUIDE LH	1
26	103C7F	PLT SEED GUIDE RH	1
27	103C9E	PLT SEAL CLMP REAR	1
28	103D13	SKIRT RBBR INLET RH	1
29	103D15	SKIRT RBBR INLET LH	1
30	103D17	PLT SKIRT SPACER	2

INLET END SECTION ASSEMBLY (13-08-0504)



NOTE:
1. ZERKS ARE TO BE POINTED UP ON BOTH SIDES

Item Number

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

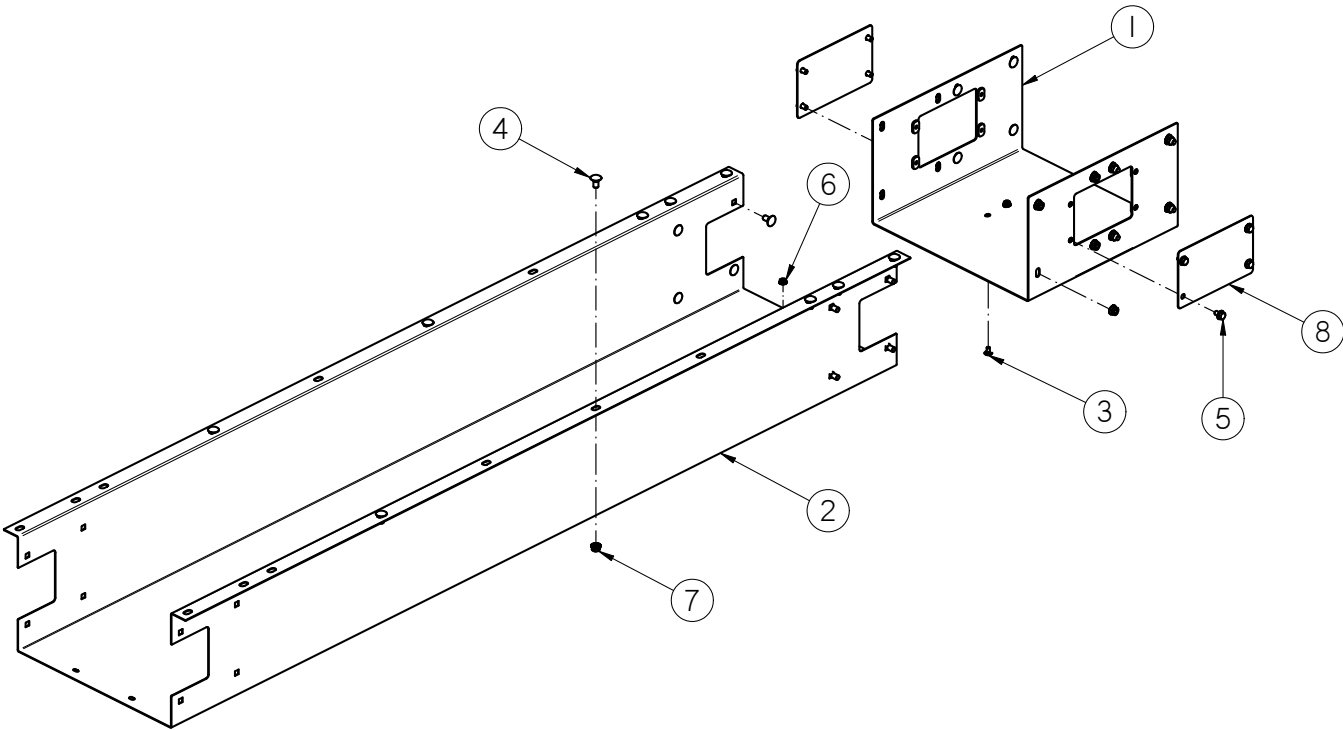
TS3500 BIN FILL CONVEYOR

INLET END SECTION ASSEMBLY (13-08-0504)

Item #	Part #	Description	Qty
1	01-03-0042	BRG FLG MNT 1.000ID 2BOLT ECNTRC	1
2	01-08-0095	PULLEY TAIL HYD-CRWN S2000	2
3	05-08-0404	WDMT TAKE-UP PLT RND CNVR	1
4	05-08-0408	WDMT INLET HSG 16IN RND	1
5	05-08-0409	WDMT TRANS 10IN RND CNVR	1
6	05-08-0412	WDMT SPLICE 16IN	2
7	06-01-0027	BOLT .500-13 X 2.00 ZP GR5	4
8	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	2
9	06-01-0124	BOLT, FLG .375-16 UNC ZP GRADE 5; 3/4" LG	4
10	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	26
11	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	2
12	06-01-0249	BOLT .625-11 X 9.00 ZP GR5 FTH	12
13	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	4
14	06-02-0003	NUT FULL .375-16 ZP GR5	4
15	06-02-0005	NUT, .625-11 UNC ZP GRADE 5	2
16	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	4
17	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATED	32
18	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	4
19	06-04-0003	WSHR LOCK SPLT .375 ZP	4
20	06-05-0006	WASHER, .625 FLAT ZP	2
21	06-09-0066	KNOB .375 -16 X 1. 4 LUG PLASTIC	2
22	103B9A	PLT SPLICE COVER	1
23	103BA9	PLT COVER TAKE-UP 16IN	X

TS3500 BIN FILL CONVEYOR

REV	DESCRIPTION	REVISION HISTORY	DATE
A	INITIAL DRAWING		07-28-2014



THIS MATERIAL IS THE CONFIDENTIAL AND PROPRIETARY PROPERTY OF USC, LLC. AND SHALL NOT BE USED WITHOUT PERMISSION.

DRAWN	NAME	DATE	
CHECKED	davidw	07/28/14	
ENG APPR			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES:			
DECIMALS	ANGLES		
XXX±.06	±1°		
XXXX±.031			
DO NOT SCALE DRAWING			

USC, L.L.C.
 Sabatha, Kansas 66534 USA

TITLE: ASSY CNVR INLET EXT BL

SIZE: DWG NO
C 13-08-0518

File Name 13-08-0518 - BF Inlet Extension.dft
 Printed 10/30/14 at 12:53 SHEET

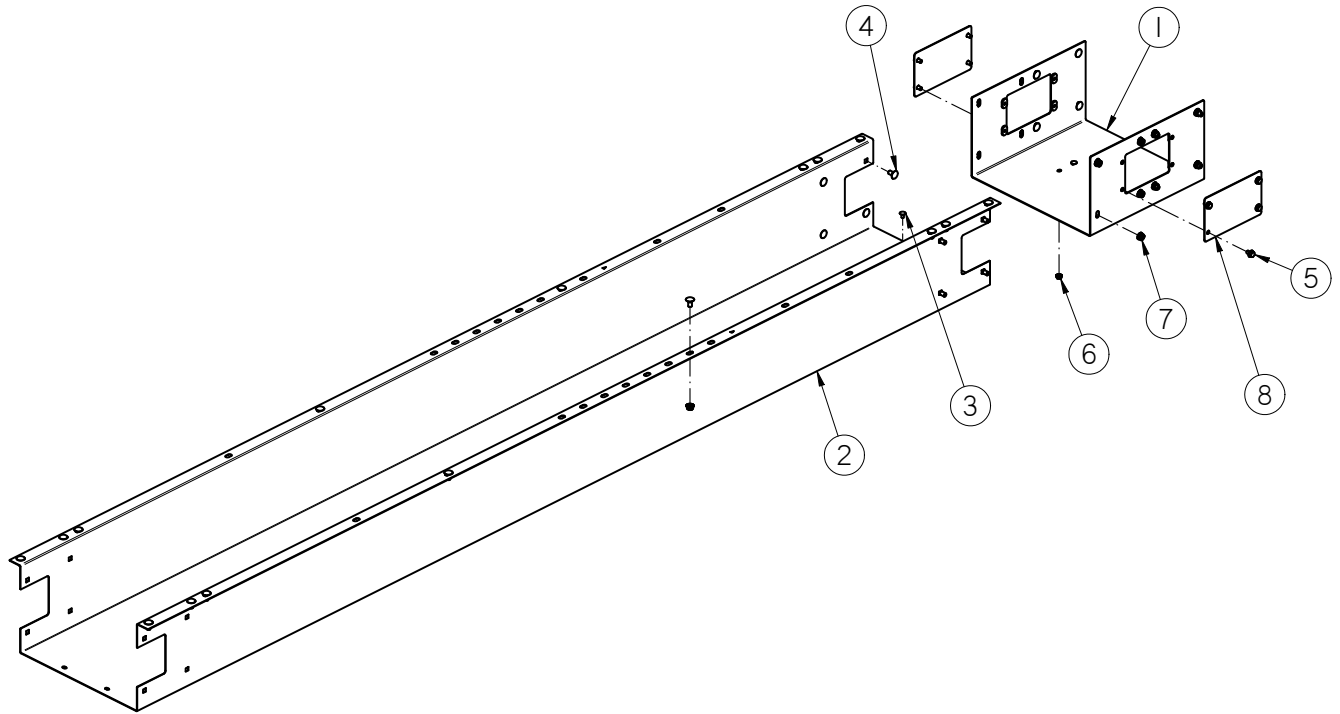
QTY	PART NUMBER	DESCRIPTION	QTY
2	05-10-4333	FR INLET SECT 10IN EXT	1
3	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	4
4	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	26
5	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	8
6	06-03-0013	NUT, LOCK, FLG .250-20 ZP SERRATED	4
7	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	26
8	103B9A	PLT SPLICE COVER	2



TS3500 BIN FILL CONVEYOR

10 FT MID SECTION ASSEMBLY (13-08-0501)

REV	DESCRIPTION	REVISION HISTORY
A	INITIAL DRAWING	07-



THIS MATERIAL IS THE CONFIDENTIAL AND PROPRIETARY OF USC, LLC. AND SHALL NOT BE USED WITHOUT THE WRITTEN PERMISSION OF USC, LLC.

NAME: davidw DATE: 07/28/14
 DRAWN: davidw
 CHECKED:
 ENG APPR:

US
 Sabetha, Ka

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TITLE: ASSY CNVR 10FT X 16

DECIMALS: .XX=+0.06
 .XXX=+0.031

ANGLES: ±1°

SIZE: DWG NO: C 13-08-050

File Name 13-08-0501 = 10FT
 Printed 10/09/14 at 16:01

DO NOT SCALE DRAWING

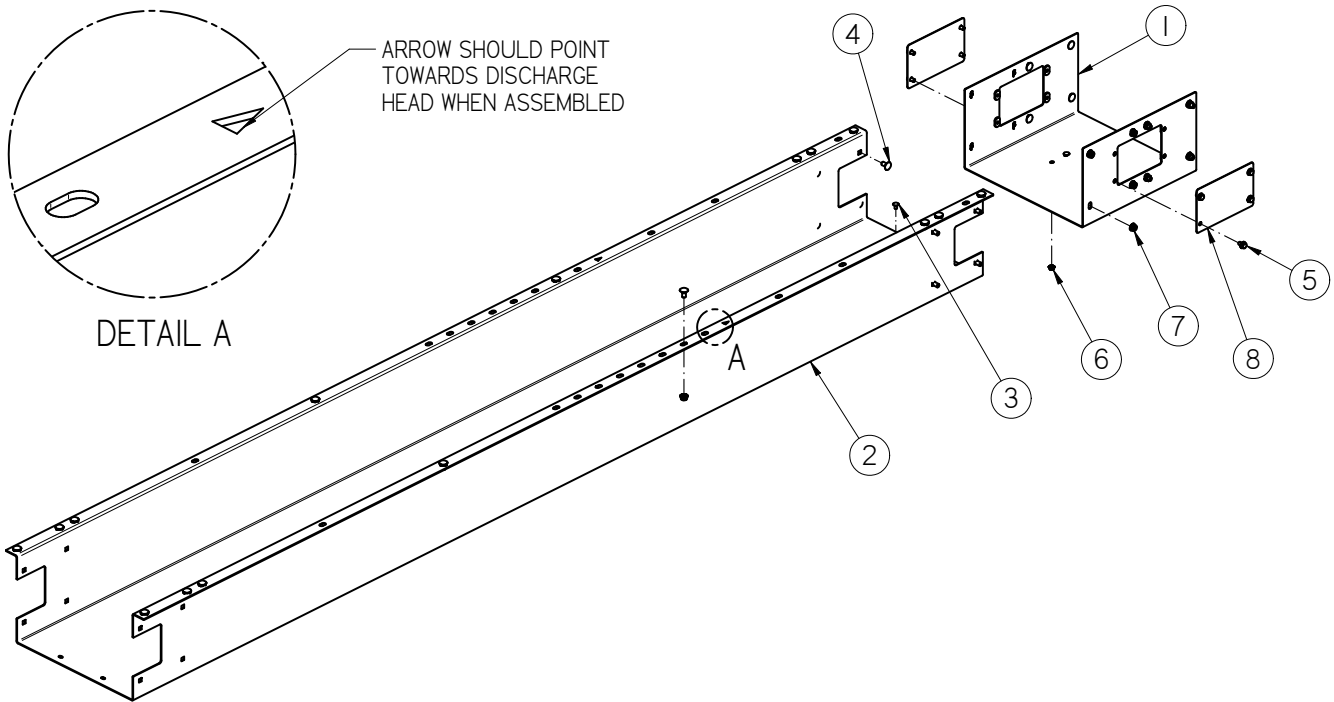
2	05-10-4334	FRAME 10F1 X 16IN MID SECTION	1
3	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	4
4	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	32
5	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	8
6	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	4
7	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	32
8	103B9A	PLT SPLICE COVER	2



TS3500 BIN FILL CONVEYOR

10 FT MID SECTION ASSEMBLY (13-08-0529)

REV	DESCRIPTION	DATE
A	INITIAL DRAWING	10-08-2014



THIS MATERIAL IS THE CONFIDENTIAL AND PROPRIETARY PROPERTY OF USC, LLC. AND SHALL NOT BE USED WITHOUT PERMISSION.

NAME: davidw DATE: 10/08/14
 DRAWN: davidw
 CHECKED: ENG APPR
 TITLE: ASSY CNVR 10FT X 16IN MID SECT
 SIZE: DWG NO: C 13-08-0529
 File Name: 13-08-0529 - BF 10 FT Mid Section.dwg
 Printed 10/30/14 at 13:09
 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 DECIMALS: .XX+.06 ANGLES: 31°
 .XXX+.031
 DO NOT SCALE DRAWING

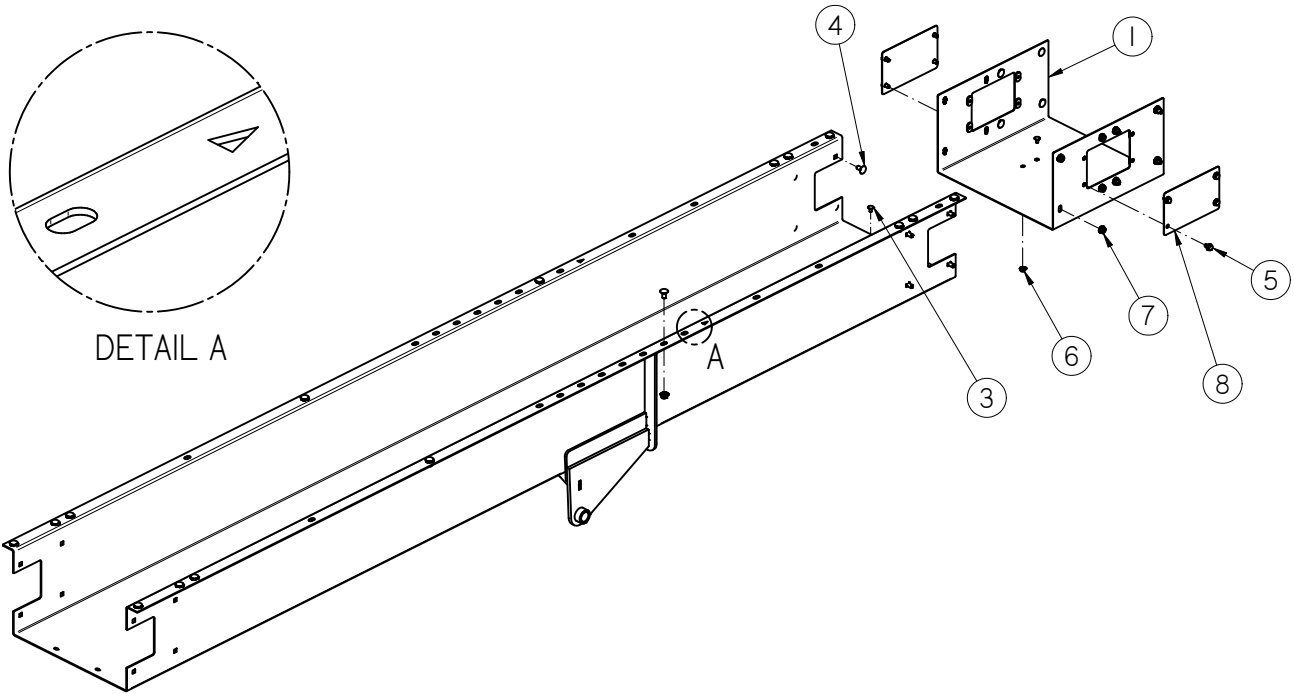
USC, LLC.
Sabetha, Kansas 66534 USA

QTY	PART NO	DESCRIPTION	UNIT
1	05-10-4345	FRAME 10FT X 16IN MID SECT BL	1
4	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	4
32	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	32
8	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	8
4	06-03-0013	NUT, LOCK, FLG .250-20 ZP SERRATTED	4
32	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	32
2	103B9A	PLT SPLICE COVER	2

TS3500 BIN FILL CONVEYOR

10 FT MID-SECTION ASSEMBLY (13-08-0530)

REV	DESCRIPTION	REVISION HISTORY
A	INITIAL DRAWING	D 10-0



THIS MATERIAL IS THE CONFIDENTIAL AND PROPRIETARY OF USC, LLC. AND SHALL NOT BE USED WITHOUT PERMISSION.

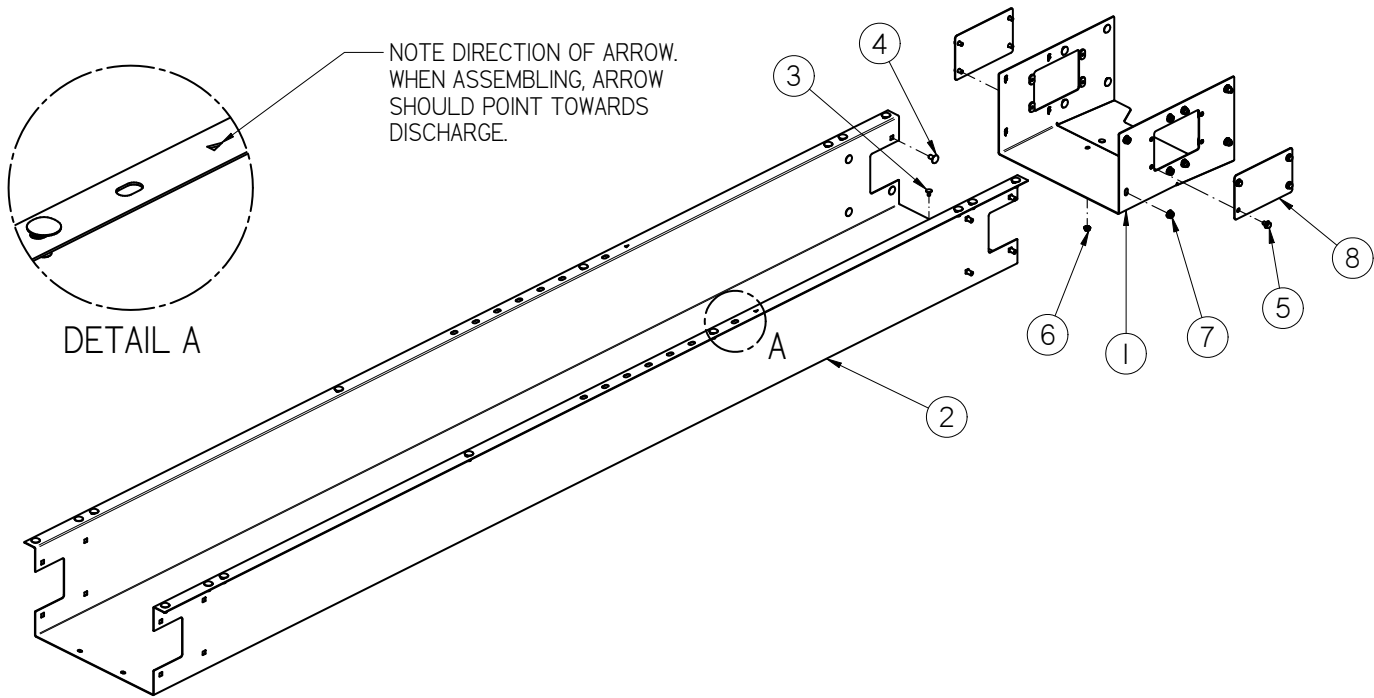
NAME	DATE	<p>USC Sabetha, Kansas</p> <p>TITLE ASSY CNVR 10FT X 16IN</p> <p>SIZE DWG NO C 13-08-0530</p> <p>File Name: 13-08-0530 = BF 10FT Printed 10/30/14 at 13:25</p>
DRAWN davidw	10/08/14	
CHECKED		
ENG APPR		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		
DECIMALS .00x+.006	ANGLES .1°	
XXX+.031		
DO NOT SCALE DRAWING		

2	05-08-0446	WDMT CNVR MNT TS35	1
3	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	4
4	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	32
5	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	8
6	06-03-0013	NUT, LOCK, FLG .250-20 ZP SERRATTED	4
7	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	32
8	103B9A	PLT SPLICE COVER	2



TS3500 BIN FILL CONVEYOR

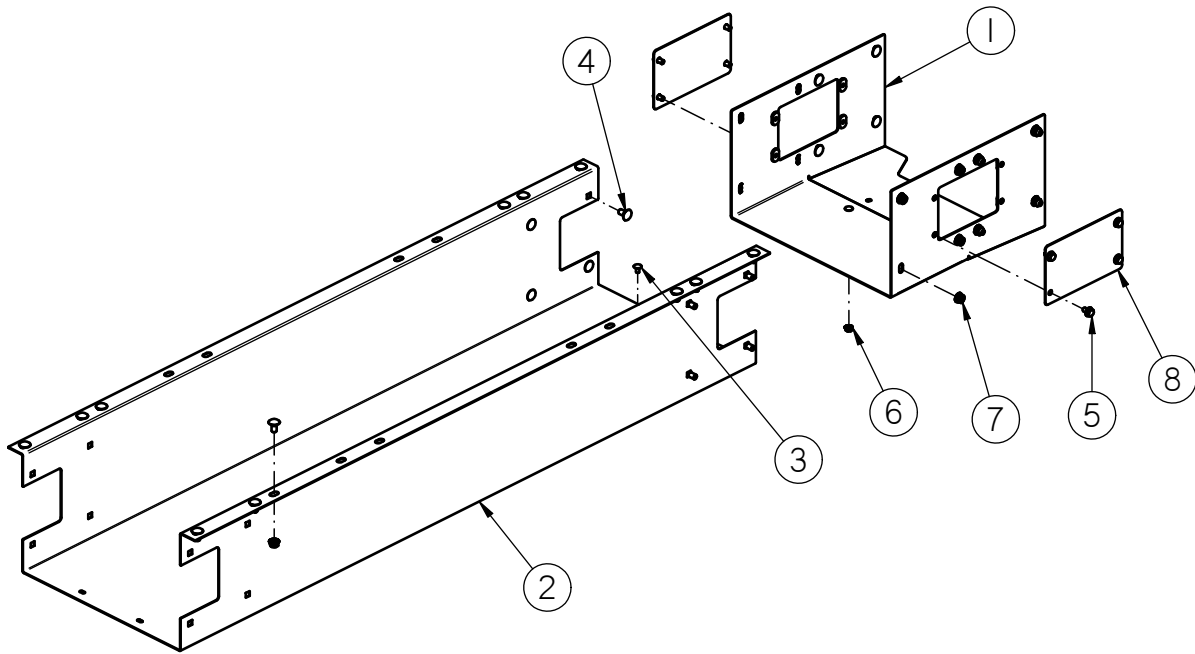
REV	DESCRIPTION	DATE
A	INITIAL DRAWING	08-27-2014



THIS MATERIAL IS THE CONFIDENTIAL AND PROPRIETARY PROPERTY OF USC, LLC. AND SHALL NOT BE USED WITHOUT PERMISSION.

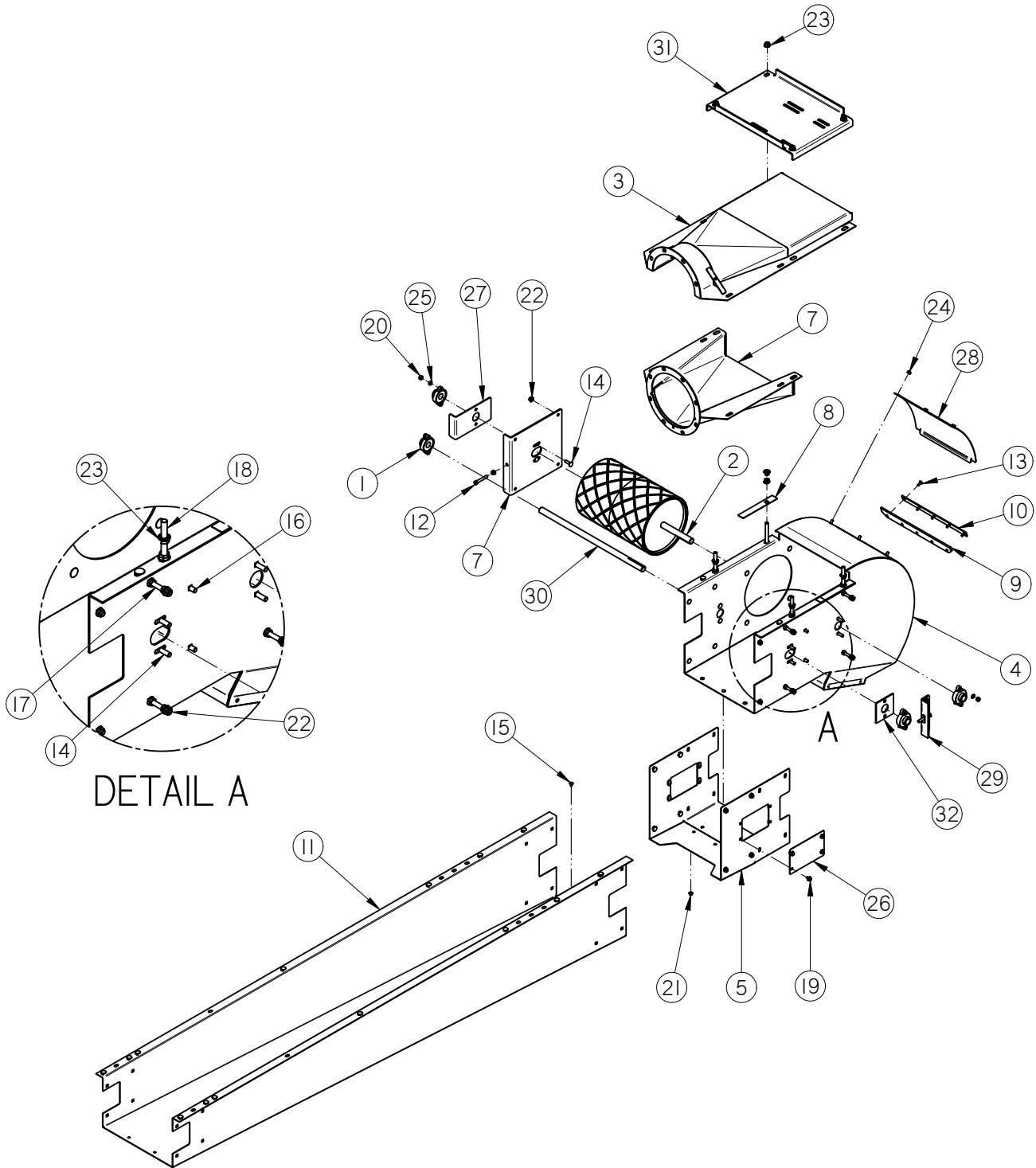
DRAWN	NAME	DATE	USC, L.L.C. Sabetha, Kansas 66534 USA
CHECKED	davidw	08/27/14	
ENG APPR			TITLE
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.			ASSY CNVR MID SECT BL
DECIMALS .XX+.06 XXX+.031	ANGLES 1°	SIZE C	DWG NO 13-08-0509
DO NOT SCALE DRAWING			File Name: 13-08-0509 - BL Mid Section.dft Printed 10/31/14 at 13:48

1	05-08-0430	WDIMT SPLICE MID SECT BL	1
2	05-10-4334	FRAME 10FT X 16IN MID SECTION	1
3	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	4
4	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	32
5	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	8
6	06-03-0013	NUT, LOCK, FLG .250-20 ZP SERRATED	4
7	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	32
8	103B9A	PLT SPLICE COVER	2



5	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	8
6	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATED	4
7	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	28
8	103B9A	PLT SPLICE COVER	2

HEAD SECTION ASSEMBLY (13-08-0510)

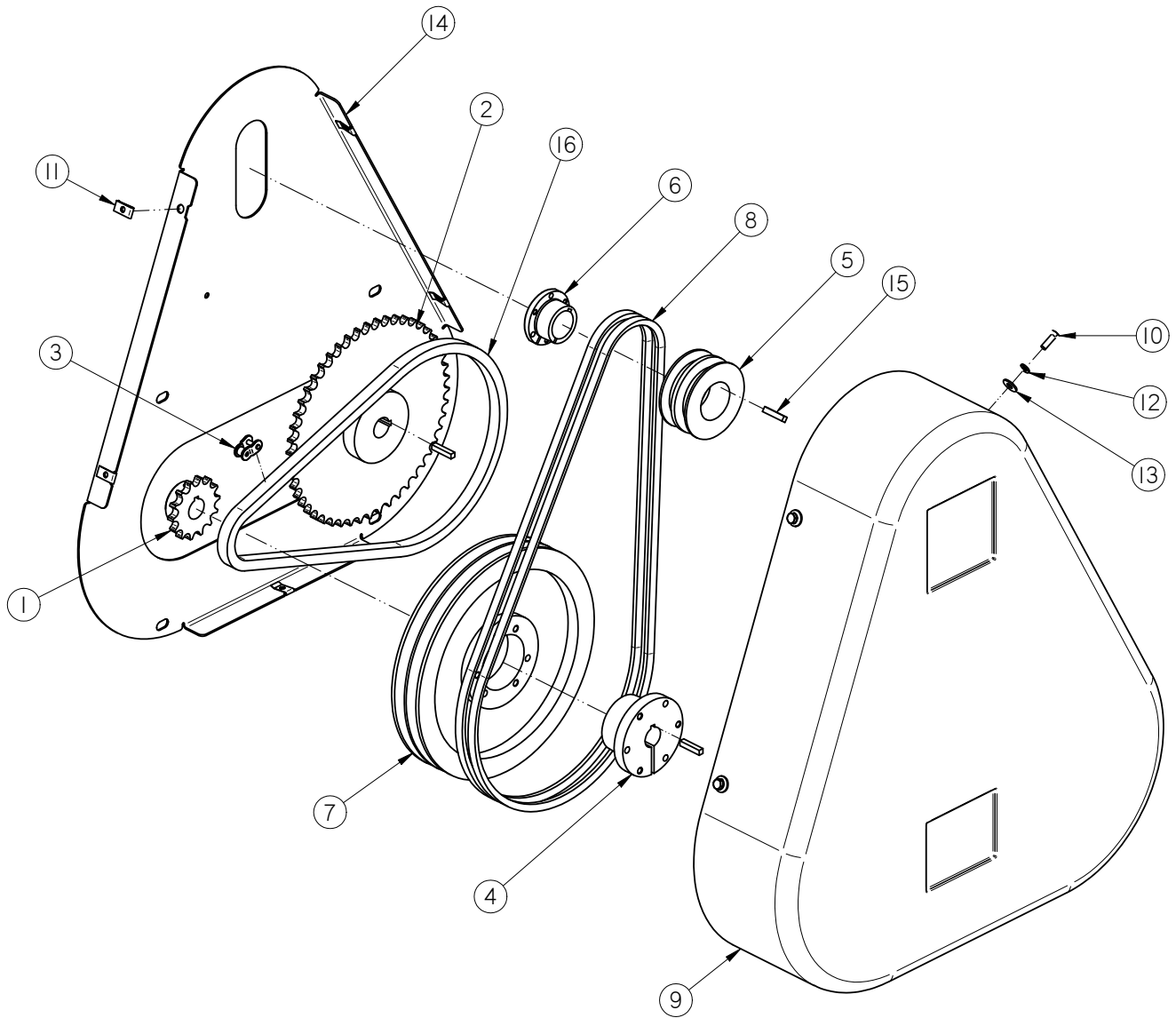


TS3500 BIN FILL CONVEYOR

HEAD SECTION ASSEMBLY (13-08-0510)

Item #	Part #	Description	Qty
1	01-03-0042	BRG FLG MNT 1.000ID 2BOLT ECNTRC	4
2	01-08-0110	PULLEY HEAD BL VULC TS3500	1
3	05-08-0410	WDMT HD CVR 10IN	1
4	05-08-0427	WDMT DSCGH HD 16IN BL	1
5	05-08-0434	WDMT SPLICE 16IN HD BL	1
6	05-08-0435	WDMT ADJ PLT BL	1
7	05-08-0465	WDMT TRANS 10IN RND CNVR	1
8	05-10-3267	SPCR UB HEAD CVR 16GA	2
9	05-10-3985	PLT S2000 CNVR BLT SCRAPER RBBR	1
10	05-10-3986	PLT S2000 CNVR BLT SCRAPER HLDR	1
11	05-10-4344	FRAME HEAD 16IN SECTION BL	1
12	06-01-0071	BOLT .375-16 X 2.50 ZP GR5	2
13	06-01-0122	BOLT, CARRIAGE, .250-20x.75 G5 ZP	5
14	06-01-0127	BOLT CRG .375-16 X 1.25 ZP GR5	8
15	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	6
16	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	36
17	06-01-0154	BOLT CRG .375-16 X 2.50 FTH ZP GR5	4
18	06-01-0157	BOLT, .500-13 X 4" UNC ZP GRADE 5 fth	4
19	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	8
20	06-02-0003	NUT FULL .375-16 ZP GR5	8
21	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	11
22	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	50
23	06-03-0015	NUT LOCK FLG .500-13 ZP GR5	12
24	06-03-0019	NUT LOCK FLG .3125-18 ZP GR5	3
25	06-04-0003	WSHR LOCK SPLT .375 ZP	8
26	103B9A	PLT SPLICE COVER	2
27	103CA2	PLT BRG ADJ STRIKE	1
28	103CA7	PLT INSP CVR 16IN BL	1
29	280-2-0016	TRACKING ANGLE WELDMENT	1
30	280-3-0048	24 X 1 INCH JACK-HEAD SHAFT	1
31	280-3-0052	MTR MNT	1
32	280-3-0112	BEARING SPACER PLATE	1

10 HP DRIVE ASSEMBLY (13-08-0512)

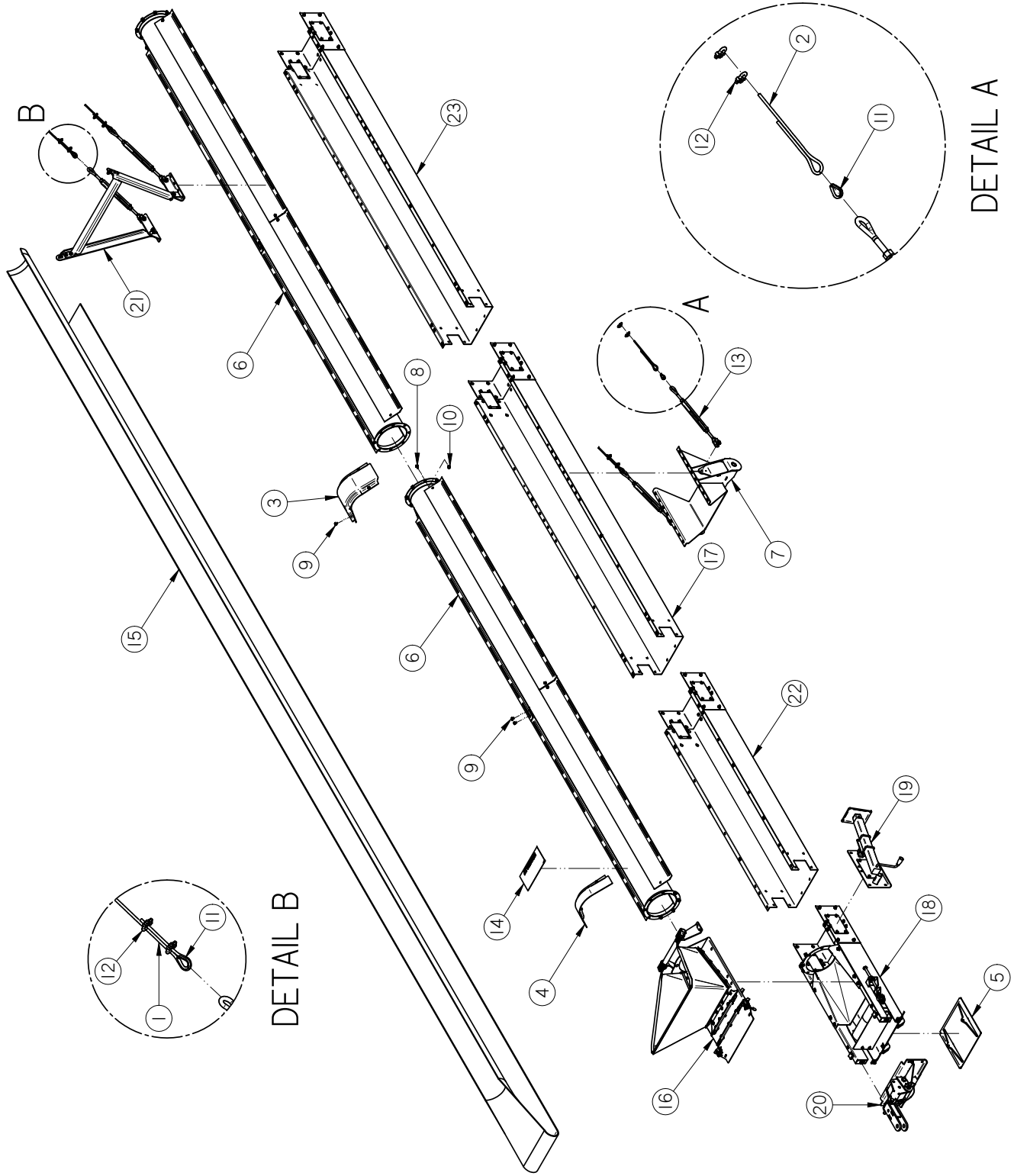


TS3500 BIN FILL CONVEYOR

10 HP DRIVE ASSEMBLY (13-08-0512)

Item #	Part #	Description	Qty
1	01-02-0093	SPKT 14T 50P 1.00 ID	1
2	01-02-0114	SPKT 50T 50P 1.00ID KWY	1
3	01-04-0007	#50 OFFSET LINK	1
4	01-08-0037	BUSHING SK 1.00	1
5	01-08-0076	SHV 2BLT PD 3.4 2B3.4SH SH BUSH	1
6	01-08-0081	BUSH 1.375IN BORE TYPE SH	1
7	01-08-0087	SHV 2B110SK	1
8	01-08-0112	BELT BX56	2
9	05-06-0108	SHEILD BELT GAURD BL	1
10	06-01-0006	BOLT .250-20 X .750 ZP GR5	5
11	06-02-0047	NUT .250-20 U-CLIP NUT	5
12	06-04-0001	WSHR LOCK SPLT .250 ZP	5
13	06-05-0001	WASHER, FLAT .250	5
14	103CA9	PLT BACK RND BL	1
15	106-3-2036	KEY .250 X 1.25 CS	3
16	13-05-0200	CHAIN #50 24BW BIN LD DRV	1

Item Number	Document Number	Quantity
1	01-01-0065	2
2	01-01-0066	2
3	05-06-0106	1
4	05-06-0107	1
5	05-08-0218	1
6	05-08-0407	2
7	05-08-0432	1
8	06-01-0124	20
9	06-01-0261	16
10	06-03-0014	20
11	06-07-0023	4
12	06-07-0026	8
13	06-12-0041	2
14	09-02-0016	1
15	11-02-0163	1
16	13-08-0482	1
17	13-08-0501	1
18	13-08-0504	1
19	13-08-0511	1
20	13-08-0513	1
21	13-08-0514	1
22	13-08-0518	1
23	13-08-0529	1



DETAIL A

THIS MATERIAL IS THE CONFIDENTIAL PROPERTY OF USCC, LLC AND SHALL NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.

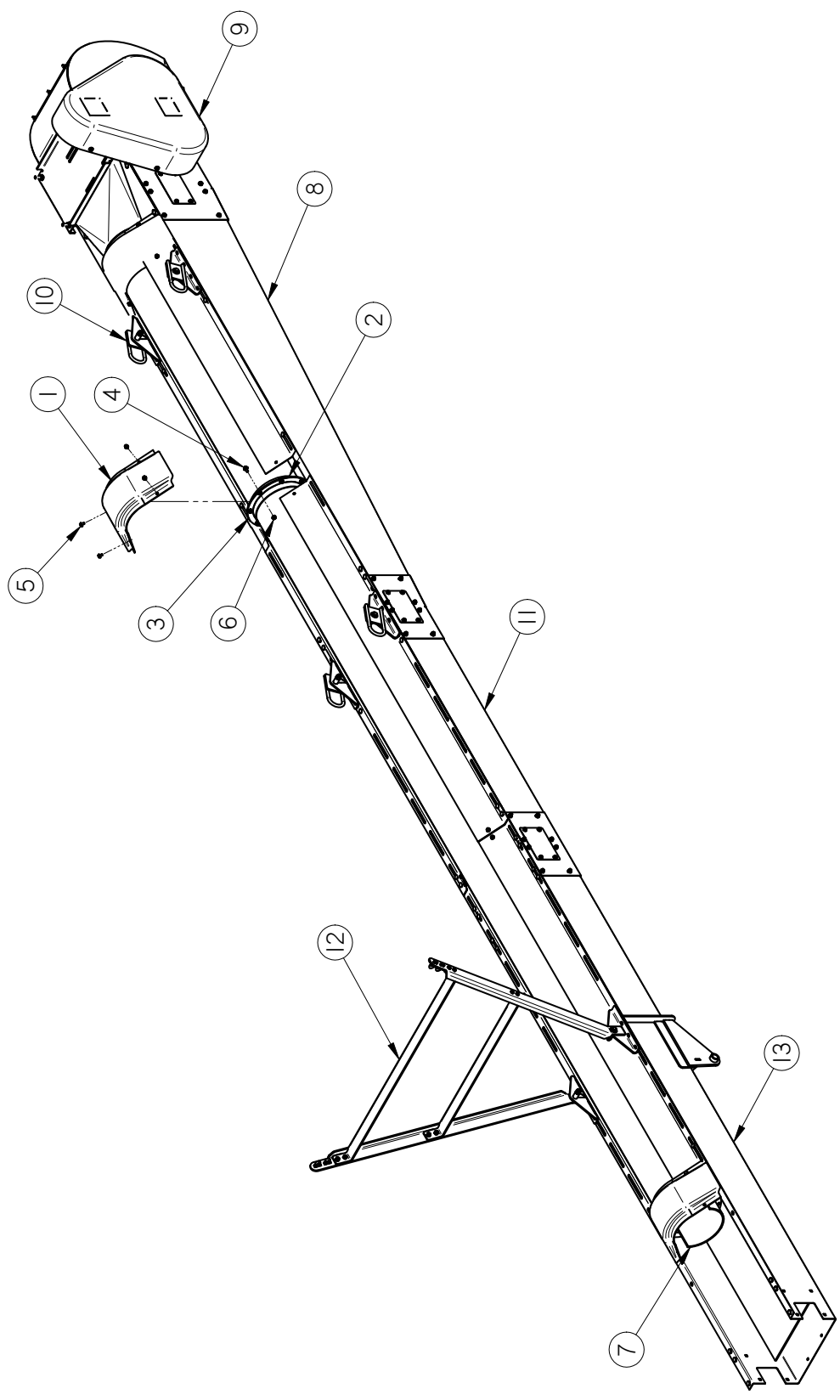
DRAWN: obdvw DATE: 08/28/14
 CHECKED: ASS
 ENG: APRR
 TOLERANCES: DECIMALS .XX±.06 ANGLES .1°±.1°
 DECIMALS .XX±.06 ANGLES .1°±.1°
 XXX±.031
 PRINTING: DO NOT SCALE DRAWING

TS3500 BIN FILL CONVEYOR

CONVEYOR INLET HALF - TS3555 (13-08-0520)

Item #	Part #	Description	Qty
1	01-01-0065	WIRE ROPE .313 DIA X 25FT	2
2	01-01-0066	WIRE ROPE .313 DIA X 45FT	2
3	05-06-0106	CVR SPLICE RND CNVR	1
4	05-06-0107	CVR SPLICE INLET RND CNVR	1
5	05-08-0218	WDMT, PAD CNVR BL	1
6	05-08-0407	WDMT TUBE 10IN X 180IN	2
7	05-08-0432	WDMT UNCRG ATTACH LOWER	1
8	06-01-0124	BOLT, FLG .375-16 UNC ZP GRADE 5; 3/4" LG	20
9	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	16
10	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	20
11	06-07-0023	THIMBLE .250 WIRE ROPE HD	4
12	06-07-0026	CBL CLIP ROPE .313	8
13	06-12-0041	TURNBUCKLE 5/8-11 12 IN ADJ	2
14	09-02-0016	LBL ATWRK ATT BELT ALIGN	1
15	11-02-0153	BELT CNVR CLTS TS3535	1
16	13-08-0482	ASSY CLPSBL INLET HOPPER TS35	1
17	13-08-0501	ASSY CNVR 10FT X 16IN MID SECT	1
18	13-08-0504	ASSY INLET SECT 16IN RND	1
19	13-08-0511	ASSY JACK MNT CNVR	1
20	13-08-0513	ASSY HITCH BL RND CNVR	1
21	13-08-0514	ASSY CABLE ATTACH	1
22	13-08-0518	ASSY CNVR INLET EXT BL	1
23	13-08-0529	ASSY CNVR 10FT X 16IN MID SECT BL	1

Item Num
1
2
3
4
5
6
7
8
9
10
11
12
13



- 1. PART IS TO BE FREE OF WELD SPATTER AFTER WELDING.
- 2. PART IS TO BE PAINTED BLACK.

TS3500 BIN FILL CONVEYOR

CONVEYOR HEAD HALF - TS3555 (13-08-0521)

Item #	Part #	Description	Qty
1	05-06-0106	CVR SPLICE RND CNVR	3
2	05-08-0405	WDMT TUBE 10IN X 60IN	1
3	05-08-0407	WDMT TUBE 10IN X 180IN	1
4	06-01-0124	BOLT, FLG .375-16 UNC ZP GRADE 5; 3/4" LG	16
5	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	14
6	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	16
7	11-02-0150	BELT CNVR CLTS TS3520	1
8	13-08-0510	ASSY HD SECT 16IN RND BL	1
9	13-08-0512	KIT DRV 7.5 & 10HP CNVR 11.35 DRV PL	1
10	13-08-0515	ASSY CABLE ATTACH HD	2
11	13-08-0519	ASSY CNVR 5FT X 16IN HD BL	1
12	13-08-0528	ASSY CABLE ATTACH TALL	1
13	13-08-0530	ASSY CNVR 10FT X 16IN MNT SECT BL	1

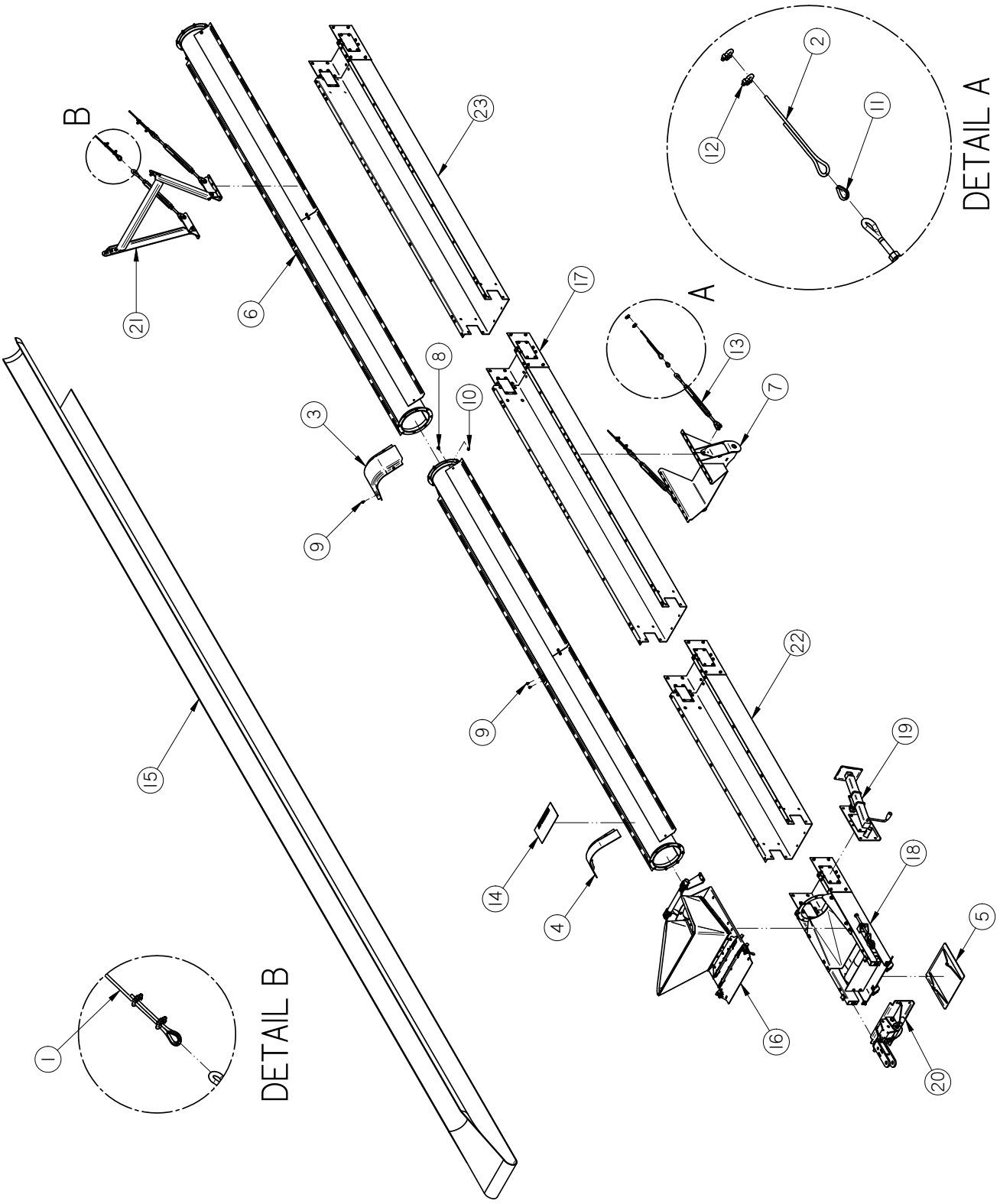
Item Number	Document Number
1	01-01-0065
2	01-01-0067
3	05-06-0106
4	05-06-0107
5	05-08-0218
6	05-08-0407
7	05-08-0432
8	06-01-0124
9	06-01-0261
10	06-03-0014
11	06-07-0023
12	06-07-0026
13	06-12-0041
14	09-02-0016
15	11-02-0163
16	13-08-0482
17	13-08-0501
18	13-08-0504
19	13-08-0511
20	13-08-0513
21	13-08-0514
22	13-08-0516
23	13-08-0529

THIS MATERIAL IS THE CONFIDENTIAL PROPERTY OF USG, LLC AND SHALL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE WRITTEN PERMISSION OF USG, LLC.

NAME: _____ DATE: 09/29/14
 DRAWN: djd/gvw
 CHECKED: _____
 ENG APPR: _____

TOLERANCES UNLESS OTHERWISE SPECIFIED ARE IN INCHES
 DECIMALS XX+0.06
 FRACTIONS XXX+1/32
 ANGLES 41

DO NOT SCALE DRAWING



DETAIL B

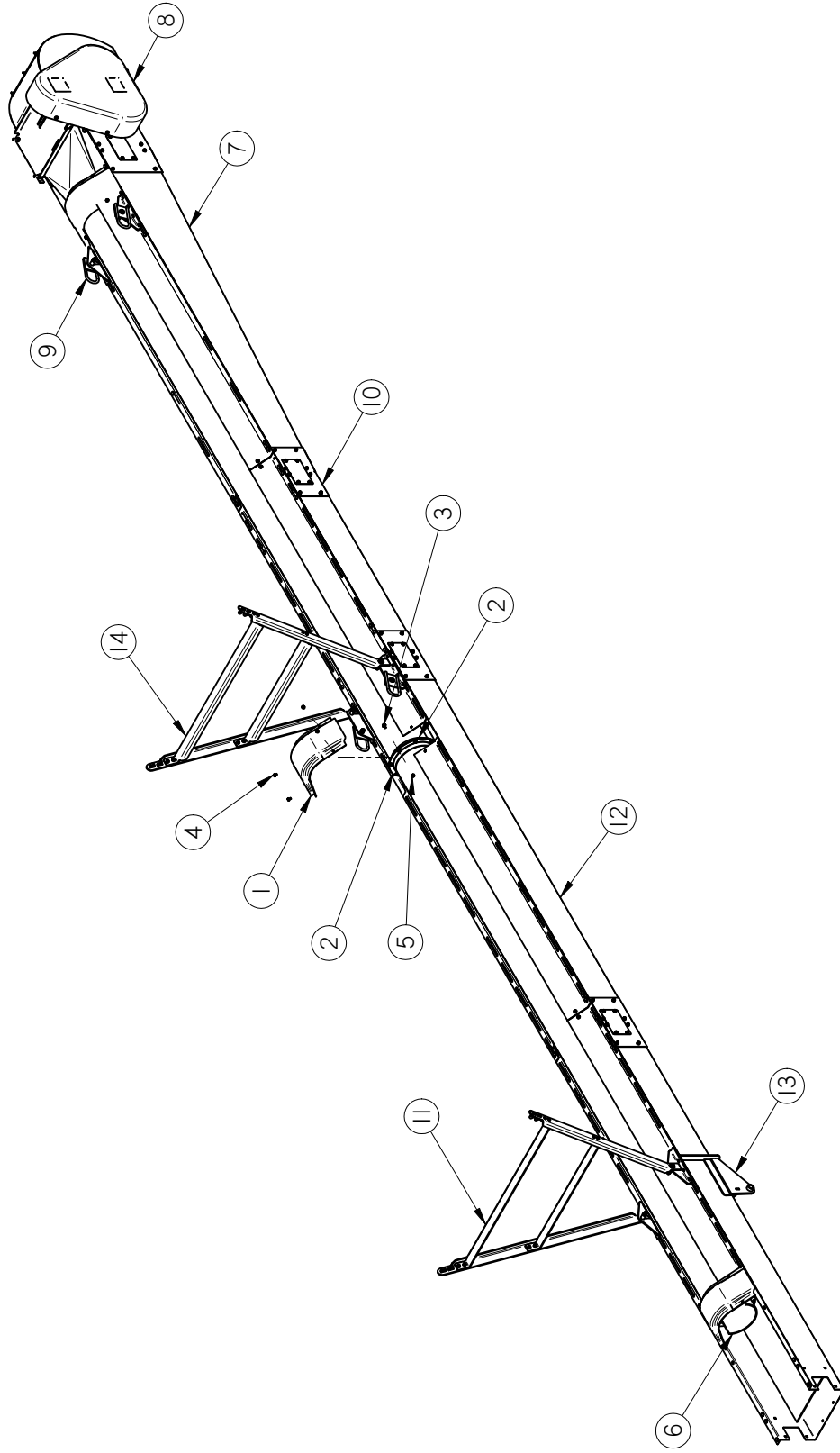
DETAIL A

TS3500 BIN FILL CONVEYOR

CONVEYOR INLET HALF - TS3565 (13-08-0522)

Item #	Part #	Description	Qty
1	01-01-0065	WIRE ROPE .313 DIA X 25FT	2
2	01-01-0067	WIRE ROPE .313 DIA X 55FT	2
3	05-06-0106	CVR SPLICE RND CNVR	1
4	05-06-0107	CVR SPLICE INLET RND CNVR	1
5	05-08-0218	WDMT, PAD CNVR BL	1
6	05-08-0407	WDMT TUBE 10IN X 180IN	2
7	05-08-0432	WDMT UNCRG ATTACH LOWER	1
8	06-01-0124	BOLT, FLG .375-16 UNC ZP GRADE 5; 3/4" LG	20
9	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	16
10	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	20
11	06-07-0023	THIMBLE .250 WIRE ROPE HD	4
12	06-07-0026	CBL CLIP ROPE .313	8
13	06-12-0041	TURNBUCKLE 5/8-11 12 IN ADJ	2
14	09-02-0016	LBL ATWRK ATT BELT ALIGN	1
15	11-02-0153	BELT CNVR CLTS TS3535	1
16	13-08-0482	ASSY CLPSBL INLET HOPPER TS35	1
17	13-08-0501	ASSY CNVR 10FT X 16IN MID SECT	1
18	13-08-0504	ASSY INLET SECT 16IN RND	1
19	13-08-0511	ASSY JACK MNT CNVR	1
20	13-08-0513	ASSY HITCH BL RND CNVR	1
21	13-08-0514	ASSY CABLE ATTACH	1
22	13-08-0518	ASSY CNVR INLET EXT BL	1
23	13-08-0529	ASSY CNVR 10FT X 16IN MID SECT BL	1

NOTES:
1. PART IS TO BE FREE OF WELD SPATTER AFTER WELDING.
2. PART IS TO BE PAINTED BLACK.

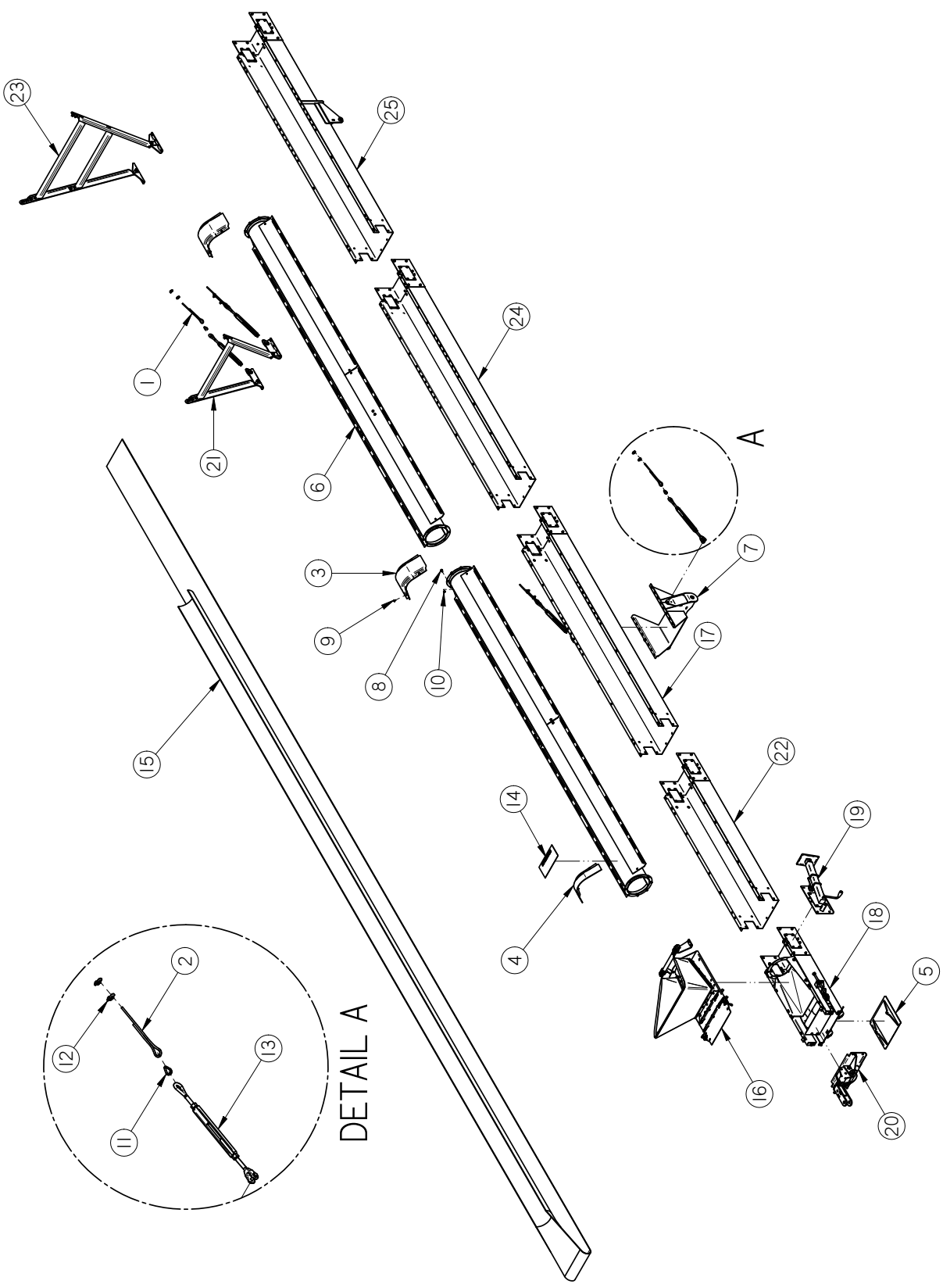


Item #	P
1	05-01
2	05-01
3	06-01
4	06-01
5	06-01
6	11-02
7	13-08
8	13-08
9	13-08
10	13-08
11	13-08
12	13-08
13	13-08
14	13-08

TS3500 BIN FILL CONVEYOR

CONVEYOR HEAD HALF - TS3565 (13-08-0523)

Item #	Part #	Description	Qty
1	05-06-0106	CVR SPLICE RND CNVR	3
2	05-08-0407	WDMT TUBE 10IN X 180IN	2
3	06-01-0124	BOLT, FLG .375-16 UNC ZP GRADE 5; 3/4" LG	16
4	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	18
5	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	16
6	11-02-0152	BELT CNVR CLTS TS3530	1
7	13-08-0510	ASSY HD SECT 16IN RND BL	1
8	13-08-0512	KIT DRV 7.5 & 10HP CNVR 11.35 DRV PL	1
9	13-08-0515	ASSY CABLE ATTACH HD	1
10	13-08-0519	ASSY CNVR 5FT X 16IN HD BL	1
11	13-08-0528	ASSY CABLE ATTACH TALL	1
12	13-08-0529	ASSY CNVR 10FT X 16IN MID SECT BL	1
13	13-08-0530	ASSY CNVR 10FT X 16IN MNT SECT BL	1
14	13-08-0531	ASSY CABLE ATTACH DUAL	1



Item Number	Document Number
1	01-01-0065
2	01-01-0068
3	05-06-0106
4	05-06-0107
5	05-08-0218
6	05-08-0407
7	05-08-0432
8	06-01-0124
9	06-01-0261
10	06-03-0014
11	06-07-0023
12	06-07-0026
13	06-12-0041
14	09-02-0016
15	11-02-0153
16	13-08-0482
17	13-08-0501
18	13-08-0504
19	13-08-0511
20	13-08-0513
21	13-08-0514
22	13-08-0518
23	13-08-0528
24	13-08-0529
25	13-08-0530

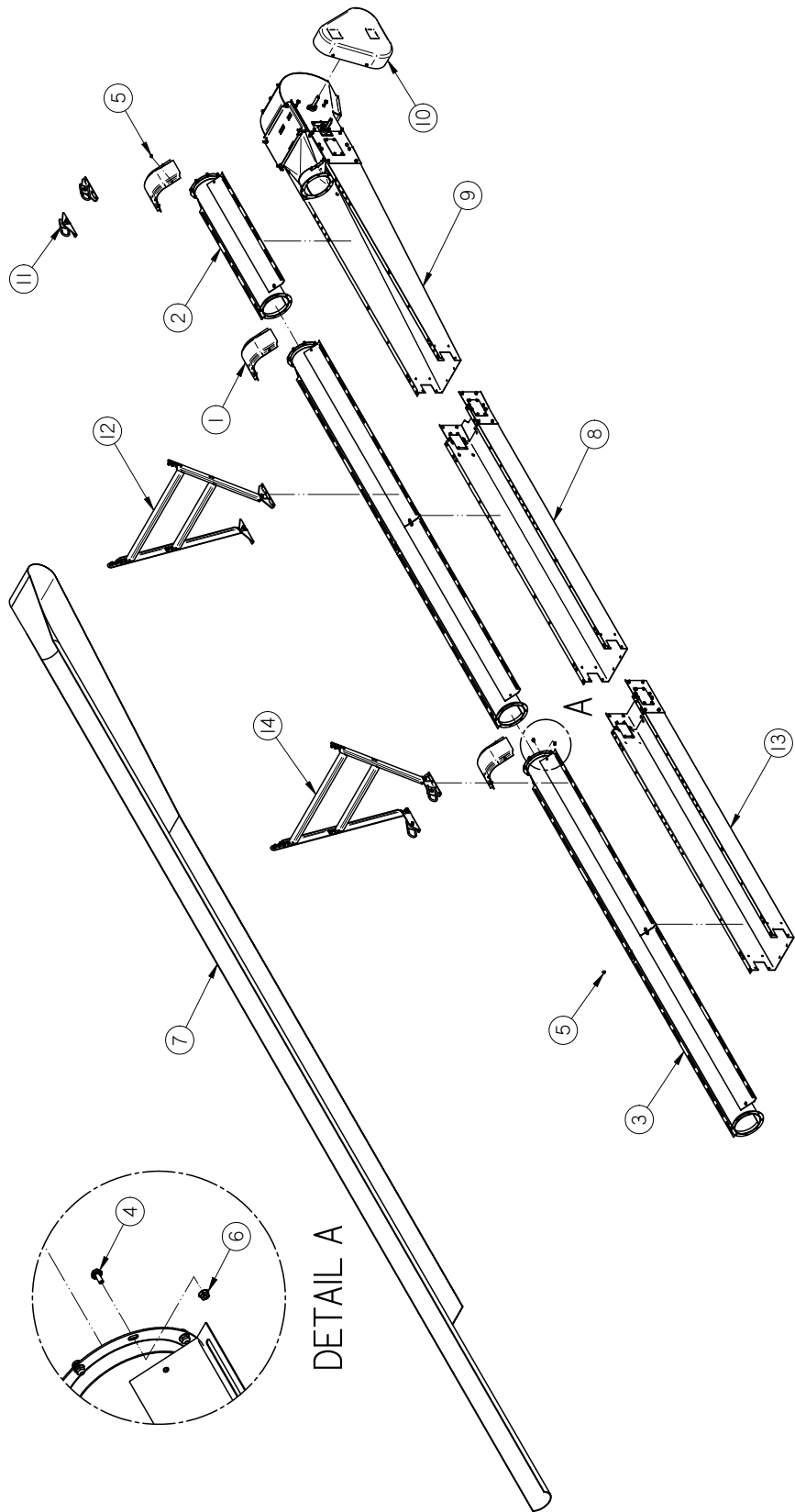
THIS MATERIAL IS THE CONFIDENTIAL PROPERTY OF USC, LLC AND SHALL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE WRITTEN PERMISSION OF USC, LLC.

DRAWN: dev
 DATE: 08/29/14
 CHECKED: dev
 ENG APPR: dev
 TOLERANCES: UNLESS OTHERWISE SPECIFIED IN NOTES
 DECIMALS: XX+106
 ANGLES: °11
 FIT: XXX+1031
 (DWG) SCALE: 1:1

TS3500 BIN FILL CONVEYOR

CONVEYOR INLET HALF - TS3570 (13-08-0524)

Item #	Part #	Description	Qty
1	01-01-0065	WIRE ROPE .313 DIA X 25FT	2
2	01-01-0068	WIRE ROPE .313 DIA X 60FT	2
3	05-06-0106	CVR SPLICE RND CNVR	2
4	05-06-0107	CVR SPLICE INLET RND CNVR	1
5	05-08-0218	WDMT, PAD CNVR BL	1
6	05-08-0407	WDMT TUBE 10IN X 180IN	2
7	05-08-0432	WDMT UNCRG ATTACH LOWER	1
8	06-01-0124	BOLT, FLG .375-16 UNC ZP GRADE 5; 3/4" LG	20
9	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	16
10	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	20
11	06-07-0023	THIMBLE .250 WIRE ROPE HD	4
12	06-07-0026	CBL CLIP ROPE .313	8
13	06-12-0041	TURNBUCKLE 5/8-11 12 IN ADJ	2
14	09-02-0016	LBL ATWRK ATT BELT ALIGN	1
15	11-02-0153	BELT CNVR CLTS TS3535	1
16	13-08-0482	ASSY CLPSBL INLET HOPPER TS35	1
17	13-08-0501	ASSY CNVR 10FT X 16IN MID SECT	1
18	13-08-0504	ASSY INLET SECT 16IN RND	1
19	13-08-0511	ASSY JACK MNT CNVR	1
20	13-08-0513	ASSY HITCH BL RND CNVR	1
21	13-08-0514	ASSY CABLE ATTACH	1
22	13-08-0518	ASSY CNVR INLET EXT BL	1
23	13-08-0528	ASSY CABLE ATTACH TALL	1
24	13-08-0529	ASSY CNVR 10FT X 16IN MID SECT BL	1
25	13-08-0530	ASSY CNVR 10FT X 16IN MNT SECT BL	1



DETAIL A

THIS MATERIAL IS THE CONFIDENTIAL AND PROPRIETARY PROPERTY OF USC, L.L.C. AND SHOULD NOT BE USED WITHOUT PERMISSION.

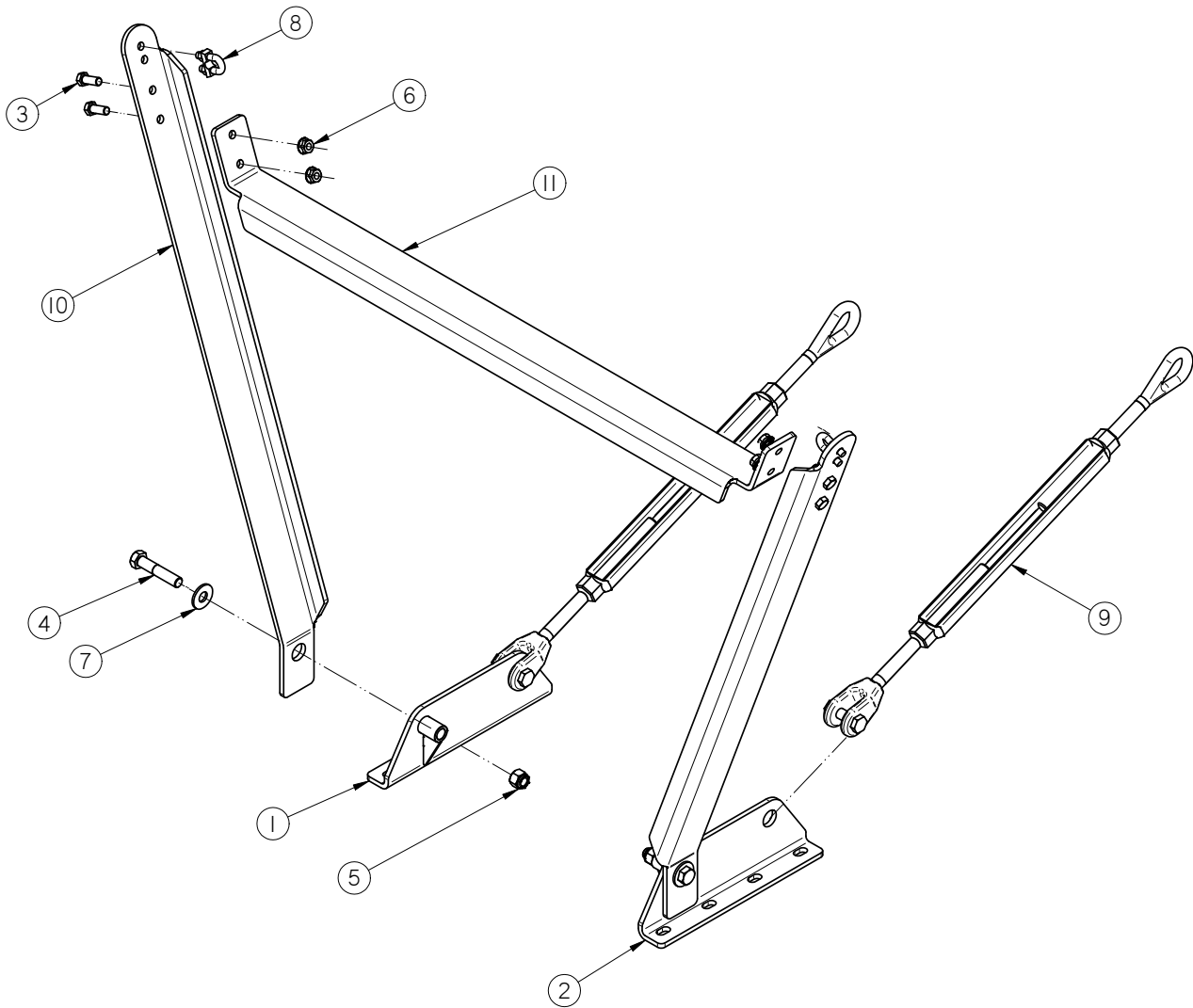
DRAWN NAME 082814
 DIVISION DATE
 CHECKED
 ENGINEER
 TITLE ASSY CNVR HD HALF TS3570
 SIZE D 13-08-0525
 TOLERANCES ANGLES
 DECIMALS .01
 XXXX-1.031 File Name: 9-08-055 - Head/HD 3570.dft
 Printed 11/05/14 at 7:36
 0.001X SCALE DRAWING

USC, L.L.C.
 Subiaco, Kansas 66534 USA

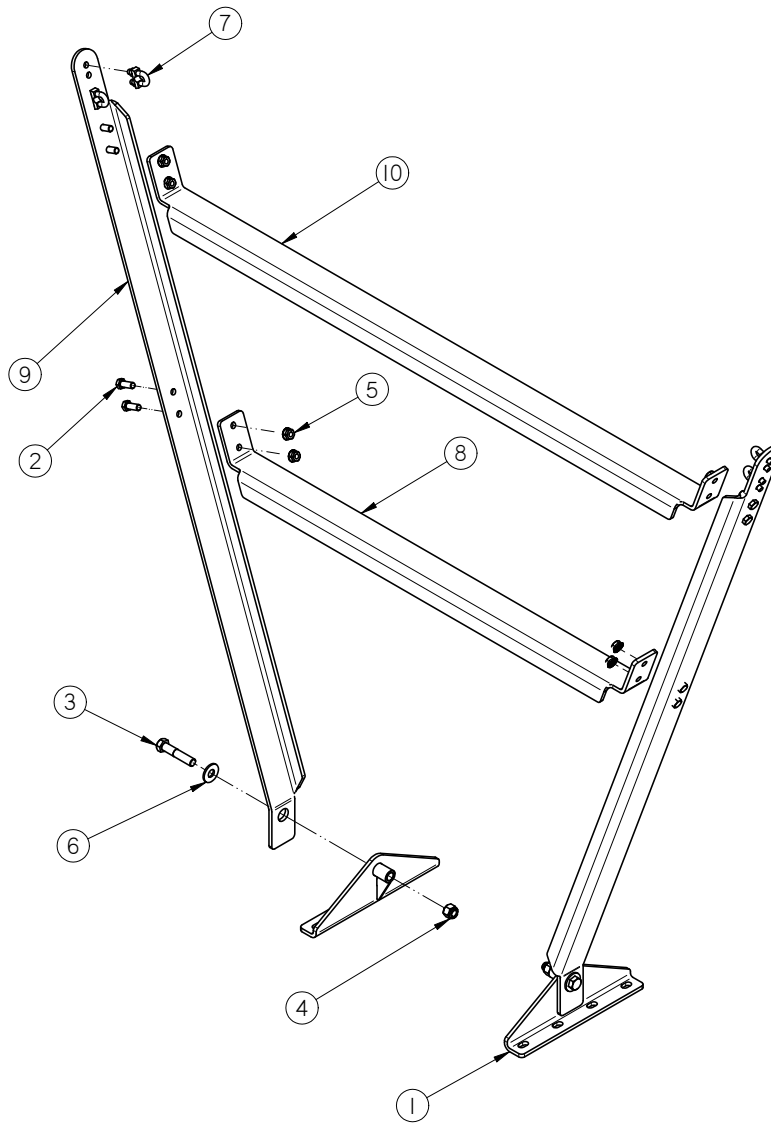
TS3500 BIN FILL CONVEYOR

CONVEYOR HEAD HALF - TS3570 (13-08-0525)

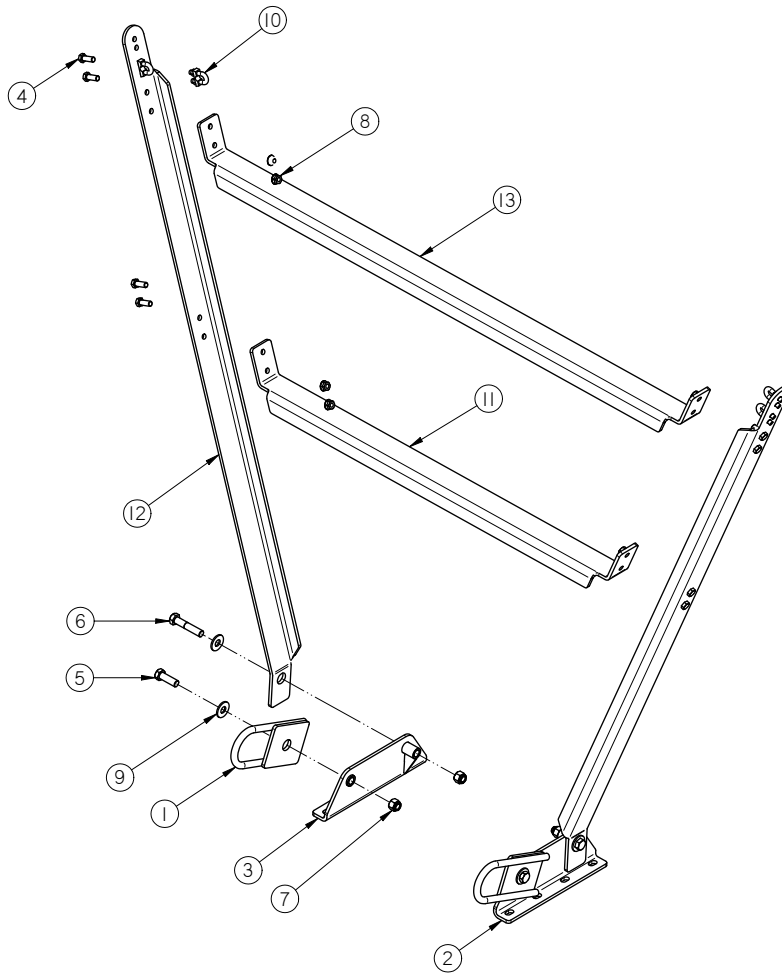
Item #	Part #	Description	Qty
1	05-06-0106	CVR SPLICE RND CNVR	3
2	05-08-0405	WDMT TUBE 10IN X 60IN	1
3	05-08-0407	WDMT TUBE 10IN X 180IN	2
4	06-01-0124	BOLT, FLG .375-16 UNC ZP GRADE 5; 3/4" LG	24
5	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	22
6	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	24
7	11-02-0153	BELT CNVR CLTS TS3535	1
8	13-08-0509	ASSY CNVR MID SECT BL	1
9	13-08-0510	ASSY HD SECT 16IN RND BL	1
10	13-08-0512	KIT DRV 7.5 & 10HP CNVR 11.35 DRV PL	1
11	13-08-0515	ASSY CABLE ATTACH HD	1
12	13-08-0528	ASSY CABLE ATTACH TALL	1
13	13-08-0529	ASSY CNVR 10FT X 16IN MID SECT BL	1
14	13-08-0531	ASSY CABLE ATTACH DUAL	1



5	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	2
6	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	4
7	06-05-0005	WSHR FLAT .500 ZP	2
8	06-07-0026	CBL CLIP ROPE .313	2
9	06-12-0041	TURNBUCKLE 5/8-11 12 IN ADJ	2
10	103C94	STRAP CABLE UPRIGHT	2
11	103C95	STRAP CABLE CROSS	1

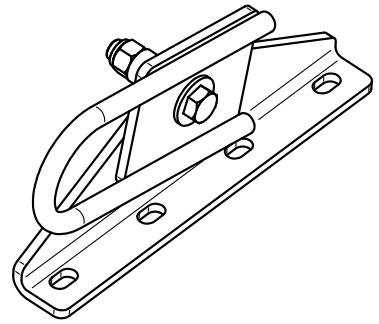
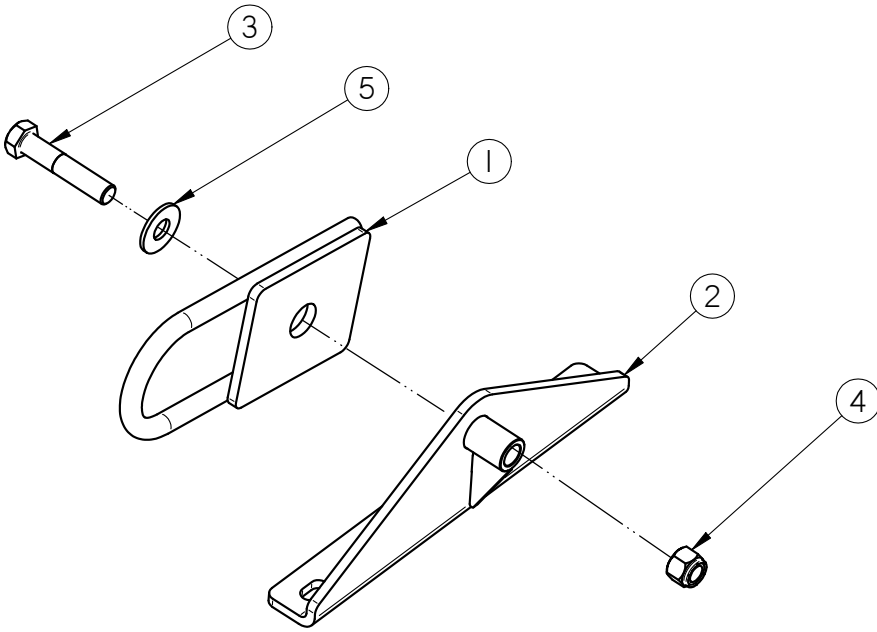


3	06-01-0028	BOLT .500-13 X 2.50 ZP GR5	2
4	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	2
5	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	8
6	06-05-0005	WSHR FLAT .500 ZP	2
7	06-07-0026	CBL CLIP ROPE .313	4
8	103C95	STRAP CABLE CROSS	1
9	103D39	STRAP CABLE UPRIGHT TALL	2
10	103D3A	STRAP CABLE CROSS LONG	1



Item Number	Docume
1	05-08-0
2	05-08-0
3	05-08-0
4	06-01-0
5	06-01-0
6	06-01-0
7	06-03-0
8	06-03-0
9	06-05-0
10	06-07-0
11	103C95
12	103D39
13	103D3A

Item			
1	05-08-0448	WDMT SWVE CABLE ATTACH	1
2	05-08-0448	WDMT CABLE MNT DUAL RH	1
3	05-08-0449	WDMT CABLE MNT DUAL LH	1
4	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	8
5	06-01-0025	BOLT .500-13 X 1.50 ZP GR5	2
6	06-01-0028	BOLT .500-13 X 2.50 ZP GR5	2
7	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	4
8	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	8
9	06-05-0005	WSHR FLAT .500 ZP	4
10	06-07-0026	CBL CLIP ROPE .313	4
11	103C95	STRAP CABLE CROSS	1
12	103D39	STRAP CABLE UPRIGHT TALL	2
13	103D3A	STRAP CABLE CROSS LONG	1



TS3500 BIN FILL CONVEYOR

NOTES:

USC LIMITED WARRANTY

SECTION I

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.

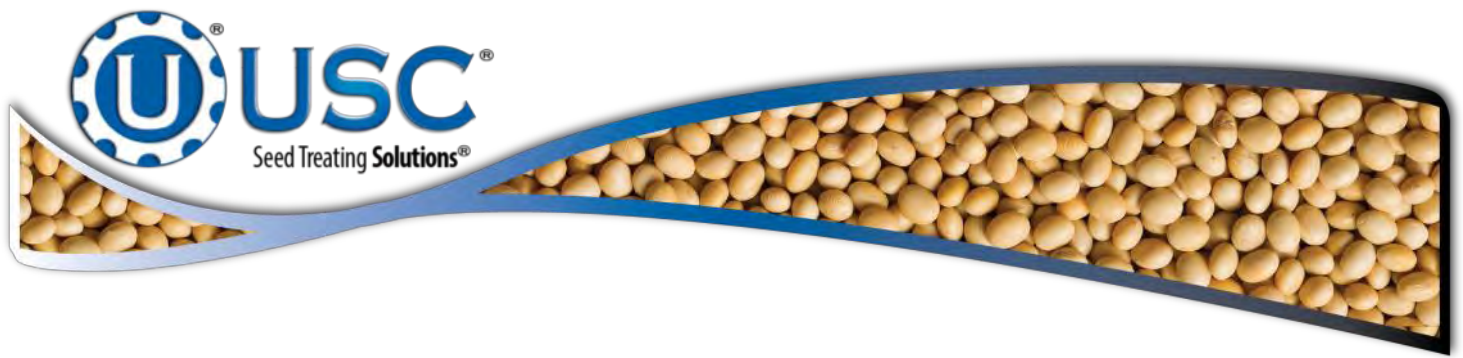
3. **Exclusive Obligation:** THIS WARRANTY IS EXCLUSIVE. The sole and exclusive obligation of Manufacturer shall be to repair or replace the defective Products in the manner and for the period provided above. Manufacturer shall not have any other obligation with respect to the Products or any part thereof, 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
