

**Document: TD-09-06-1027 Revision: D** 













## 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 Tube Series 3500 Bin Fill Conveyor. It does not hold USC, LLC liable for any accidents or injuries that may occur.

The technical information provided in this document is based on extensive testing under controlled conditions at the USC research and development facility. This information is given without guarantee as the conditions of operation and storage of the equipment are beyond our control. Variables such as temperature, humidity, viscosity of chemical products and changes in seed size or variety may all effect the accuracy of application and seed coverage. Periodically check the equipment calibration while treating and make adjustments as required. This will insure the optimum seed coverage.

#### **OPERATOR RESPONSIBILITIES**

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

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



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

- Disconnect, lockout, and tagout electrical and all other energy sources before inspecting, cleaning, servicing, repairing, or any other activity that would expose you to the hazards of electrical shock.
- Do not operate, clean, or service this equipment until you have read and understood the contents of this manual. If you do not understand the information in this manual, bring it to the attention of your supervisor, or call USC at (785) 431-7900 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 USC, LLC. 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 right side of the conveyor near the inlet hopper.



SERIAL NUMBER:



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## SAFETY INSTRUCTIONS

SECTION

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.

If any of the required regularly scheduled maintenance is located above the reach of the operator, they should follow the companies normal safe practices of reaching that particular height, utilizing the companies specified equipment and following normal safety precautions.

When working with treatment chemicals, operators should always wear protective gloves, safety glasses, and follow the companies safety precautions in the case of any spillage or operator contamination.

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

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

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

#### **GENERAL SAFETY**

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







- 4. Provide a fire extinguisher for use in case of an accident. Store in a highly visible place.
- 5. Do not allow children, spectators or bystanders within hazard area of machine.
- 6. Wear appropriate protective gear. This includes but is not limited to:
  - A hard hat
  - Protective shoes with slip resistant soles
  - Protective goggles
  - Heavy gloves
  - Hearing protection
  - Respirator or filter mask
- 7. Place all controls in neutral or off, stop motor, and wait for all moving parts to stop. Then disable power source before servicing, adjusting, repairing, or unplugging.
- 8. Review safety related items annually with all personnel who will be operating or maintaining the conveyor.







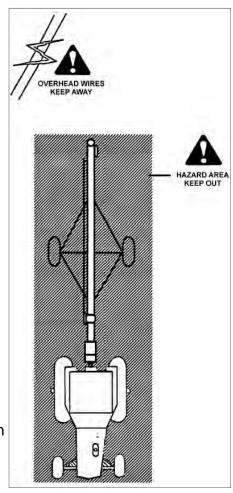
#### **OPERATING SAFETY:**

- 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**

- Read and understand ALL the information in the operator's manuals regarding procedures and SAFETY when moving or transporting the conveyor.
   The conveyor should <u>NEVER</u> 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. Electrocution 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. Electrocution 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.



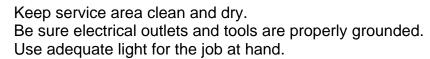
Before placement of the conveyor, be sure that ground is reasonably level. The conveyor may topple or work improperly if the ground is too uneven, damaging the equipment and/or causing personal injury.



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:



- 4. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
- 5. Clear the area of bystanders, especially children, when carrying out any maintenance and repairs or making any adjustments.
- 6. Before resuming work, install and secure all guards when maintenance work is completed.
- 7. Keep safety signs clean. Replace any sign that is damaged or not clearly visible.





#### **SAFETY LABELS**

- 1. Keep safety labels clean and legible at all times.
- 2. Replace safety labels that are missing or have become illegible.
- 3. Replaced parts that displayed a safety label should also display the current label.
- 4. Replacement safety labels are available. Contact USC at (785) 431-7900.

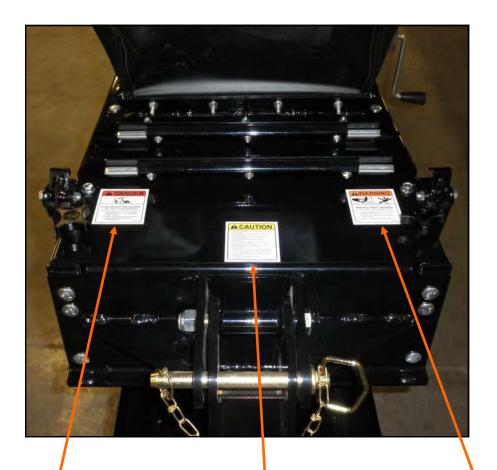
#### **How to Install Safety Labels:**

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



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









#### **ELECTROCUTION HAZARD** KEEP AWAY FROM POWER LINES

To prevent serious injury or death from electrocution:

- 1. Stay well away from power lines. Electrocution can occur without direct contact.
- 2. Lower Conveyor well below level of power line before moving or transporting.

09-02-0007

- 1. Read and understand the Operator's Manual
- before operating.

  2. Keep all safety shields and devices in place and in good.
- Keep all safety shields and devices in place and in working order.
   Make certain everyone is clear before operating or moving the machine. Keep children, visitors and untrained people away.
   Keep hands, feet, hair and clothing away from

- 4. Keep hands, feel, har and clothing away from moving parts.
  5. Shut off and disable power source before adjusting, servicing, repair, or cleaning.
  6. Disconnect power before resetting motor overload.
  7. Be sure electric motors are grounded.
  8. Support discharge end or anchor intake end to prevent upending.
  9. Emply Conveyor before moving to prevent upending.
  10. Lower conveyor to its fully down position before moving or transporting. Use a tractor to move and transport.
  11. Lower Conveyor well below level of power lines before moving or transporting. Electrocution can occur without direct contact.
  12. Keep away from intake. Keep others away.
  13. Train operators annually.

  05-02-0006

# **▲WARNING**





#### MOVING PART HAZARD

To prevent serious injury or death from falling:

- 1. Do not stand or climb on machine when operating. Keep others off.
- 2. Keep hands, feet, and hair away from moving parts.
- 3. Wear tight clothing and safety gear.

09-02-0011

Part # 09-02-0007 Part # 09-02-0006 Part # 09-02-0011



#### Think SAFETY! Work SAFELY!

REMEMBER—If safety labels have been damaged, removed, become illegible, or parts replaced without safety labels, new labels must be applied. New safety labels are available from USC at (785) 431-7900.





Part # 09-02-0008





Part # 09-02-0009









#### MOVING PART HAZARD

To prevent serious injury or death from falling:

- Do not stand or climb on machine when operating. Keep others off.
- Keep hands, feet, and hair away from moving parts.
- 3. Wear tight clothing and safety gear.

09-02-06

Part # 09-02-0011









Part # 09-02-0010



Part # 09-02-0012

#### SECTION B

## MECHANICAL OPERATION



#### **OPERATING SAFETY**

- Read and understand the Operator's Manual and all safety signs before using.
- Electric motor drives: Disconnect and disable electrical supply completely and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
- Clear the area of bystanders, especially children, before starting.
- Be familiar with machine hazard area. If anyone enters hazard areas, shut down machine immediately. Clear the area before restarting.
- 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.

- Stay away from overhead obstructions and power lines during operation and transporting. Electrocution can occur without direct contact.
- Do not operate machine when any guards are removed.
- Lower Conveyor to its lowest position before moving or transporting or when not in use.
- Inspect lift cable before using Conveyor. Replace if frayed or damaged.
- Make certain lift cable is properly seated in cable pulleys.
- 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.

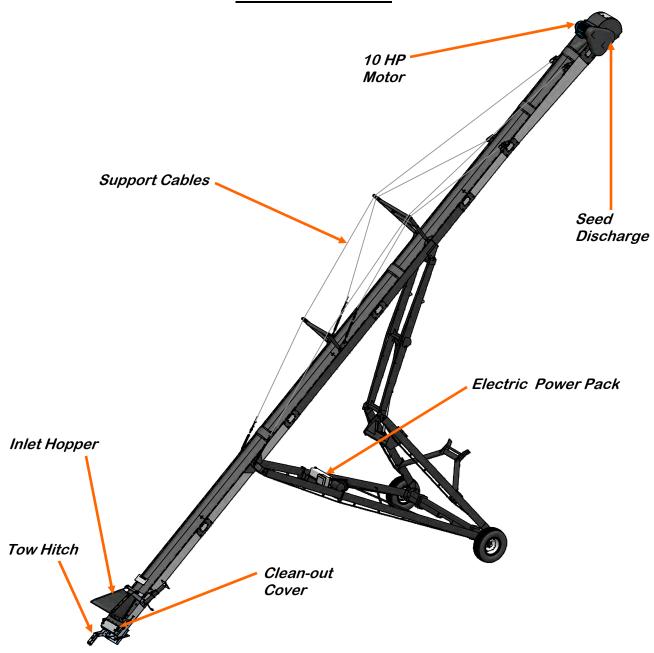


Follow all safety instructions exactly. Safety is everyone's business. By following recommended procedures, a safe working environment is provided for the operator, bystanders and the area around the worksite. Untrained operators are not qualified to operate the machine.

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**

- <u>Electric Drive:</u> 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.
- <u>Electric Power Pack:</u> 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.



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.

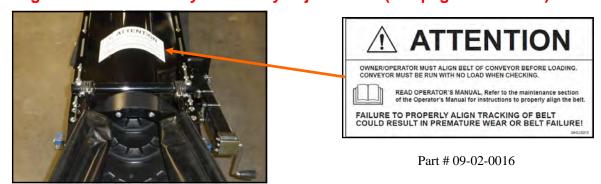


#### **MACHINE BREAK-IN**

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).



#### After operating or transport for 1/2 hour

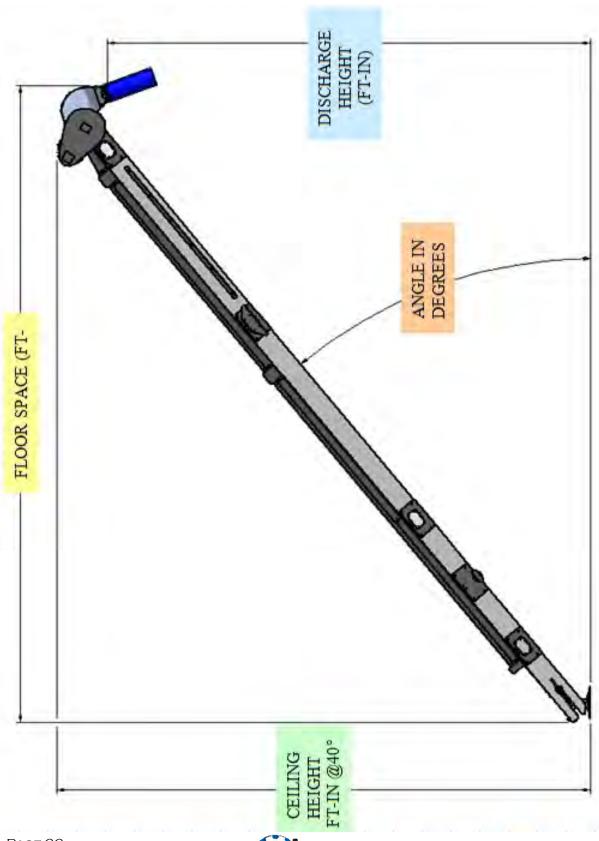
- 1. Re-torque all the wheel bolts.
- 2. Re-torque fasteners and hardware.
- 3. Check that all safety decals are installed and legible. Apply new decals if required.
- 4. Check the drive belt tension and alignment. Tension or align as required.
- 5. Check the conveying belt tension and alignment. Tension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



Page 22



Conveyor					Angle	Angle in Degrees	Irees				
Lengths	$20^{\circ}$	$22^{\circ}$	$24^{\circ}$	°92	$28^{\circ}$	$_{\circ}0\varepsilon$	$35^{\circ}$	$34^{\circ}$	$36^{\circ}$	38°	$40^{\circ}$
	17-6	19-4	21-2	22-11	24-8	26-5	28-1	29-9	31-4	32-11	34-6
TS3555	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
	20-11	23-1	25-3	27-4	29-4	31-5	33-5	35-4	37-3	39-1	40-11
TS3565	63-2	62-5	61-7	60-1	59-2	28-7	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
	22-8	25	27-3	29-6	31-9	33-11	36	38-1	40-2	42-2	44-1
TS3570	67-11	67	66-1	65-1	64-1	62-11	61-8	09	58-3	6-95	56
	25-10	28-1	30-3	32-5	34-7	36-8	38-8	40-9	42-8	7-44	46-5

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

	$11^{\circ}$	6	56-1	12-5	10-11	65-11	14-4	11-10	70-10	15-3
FULL Y	LOWERED		TS3555			TS3565			TS3570	

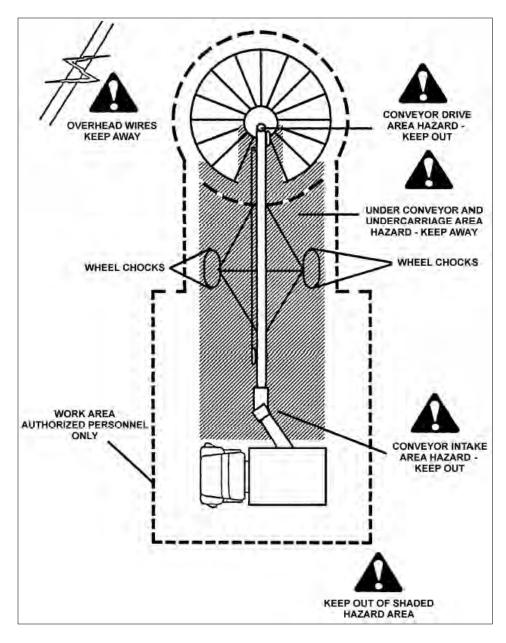


#### **Emergency Stopping**

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.





# **TRANSPORTING**

SECTION C

#### 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.



Remove hitch pin

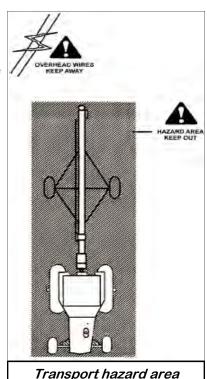
Re-insert hitch pin



#### 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. Electrocution 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.



20° SLOPE

Avoid slopes of 20° or more



# **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> <li>Not turned on.</li> <li>Conveying belt loose.</li> <li>Drive belt loose.</li> </ol>	<ol> <li>Start power source or turn on power.</li> <li>Tighten and align belt.</li> <li>Tighten drive belt.</li> </ol>
Belt edge fraying.	1. Belt not aligned.	Align and tension belt.
Low conveying capacity.	<ol> <li>Angle too steep.</li> <li>Slow operating speed.</li> <li>Conveyor belt slipping.</li> <li>Drive belt slipping.</li> </ol>	<ol> <li>Reposition with angle at 40°.</li> <li>Increase operating speed.</li> <li>Tighten belt.</li> <li>Set drive belt tension.</li> </ol>
Conveyor will not raise	<ol> <li>No power to hydraulic pack.</li> <li>Low oil.</li> <li>Using incorrect oil.</li> <li>Hydraulic cylinder vent not installed or plugged.</li> <li>Pivot point hardware is to tight.</li> <li>Pressure relief valve set too low.</li> <li>Motor running in wrong direction.</li> </ol>	<ol> <li>Check power source, make sure switch inside of control box is in the on position.</li> <li>Make sure oil level is high enough to touch the bottom of the indentations located on the top of the reservoir.</li> <li>You must use DTE 24 hydraulic oil.</li> <li>Clean or install new vent.</li> <li>Back hardware tightness off so hardware will easily rotate. (Make sure lock-nuts are still fully engaged)</li> <li>Adjust relief valve as needed to raise (Adjust set screw inward)</li> <li>Check wiring. Revise as needed.</li> </ol>



#### **UNPLUGGING**

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

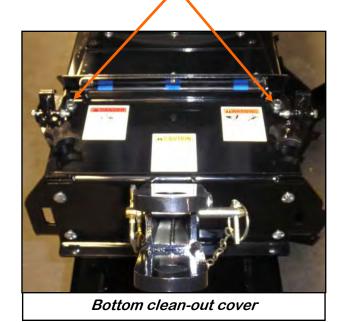
- 1. Place all controls in neutral or off, stop motor, disable and lock out power source before unplugging.
- 2. Remove the nut, bolt and sliding clean out door from the bottom of the inlet tube section of the conveyor. Remove any built up material. Reinstall door and hardware.



Sliding Clean Out Door

- 3. Open the tail cover (below).
- 4. Remove plugged material.
- 5. Install and secure conveyor and tail covers.

Remove shipping bolts after receiving conveyor







Page 28

## **MAINTENANCE**

SECTION E

Proper maintenance of the Tube Series Bin Fill Conveyors 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.



Failure to maintain the proper belt tension will cause the belt to slip. This will damage the belt and head drive pully. If the belt is not tracking correctly, it can ride along one edge causing the belt to fray and damage the belt splice. Either problem will cause the belt to burn or wear out prematurely.

#### **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.



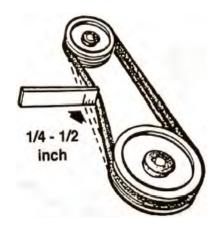
If fittings will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace fitting if necessary.



#### **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.
- 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.



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:

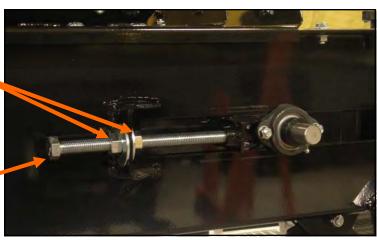


Place all controls in neutral or off, stop motor and disable power source before working on belt.

- 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 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

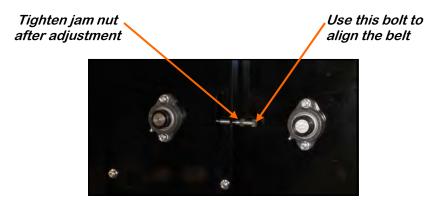
Use this bolt to tighten and align the belt





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

- 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.



#### **BELT REPLACEMENT**

- 1. Rotate the belt until the seam is visible.
- 2. Move the tail roller to its loosest position.
- 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







#### **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:



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**

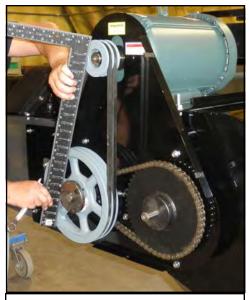
- 1. Lay a straightedge across the pulley faces to check the alignment (bottom right).
- 2. Use the pulley hub or the motor mounting plate slots to move the pulley to the required position for alignment.
- 3. Tighten hub bolts to secure pulley on shaft.
- 4. Check belt tension
- 5. Close and secure guards.

#### **Drive Belt Replacement**

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



Motor base adjustment

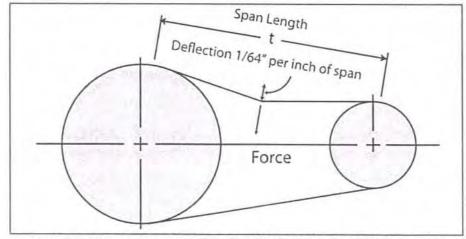


Lay a straight edge across pulley faces



# SECTION 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.

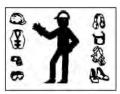
BELT	SMALLER PULLEY	ON FORCE	
CROSS SECTION	DIAMETER RANGE (inches)	RUN - IN (lbs)	NORMAL (lbs)
AX	3.0 - 3.6	4 - 1/8	2 - 3/4
	3.8 - 4.8	5	3 - 1/4
	5.0 - 7.0	6	4
ВХ	3.4 - 4.2	5 - 1/4	3 - 1/2
	4.4 - 5.2	7 - 1/8	4 - 3/4
	5.4 - 9.4	9	6



# **STORAGE**

SECTION G

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.

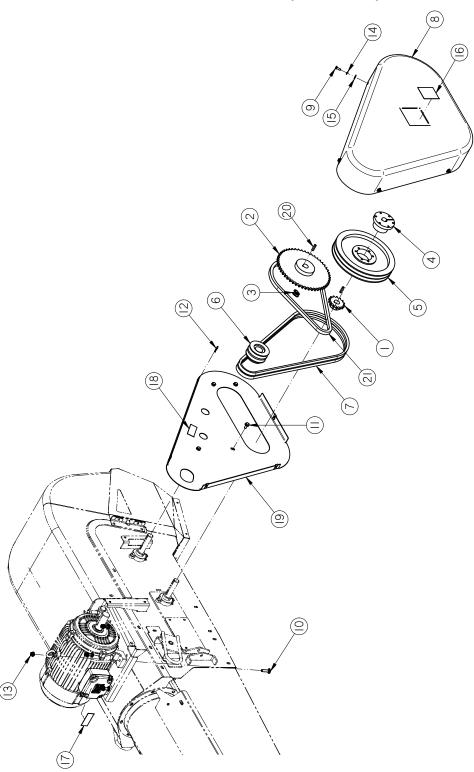
- 1. Clear the area of bystanders, especially small children.
- 2. Thoroughly wash the entire machine to remove all dirt, mud, debris or residue.
- 3. Inspect all moving or rotating parts to see if anything has become entangled in them. Remove the entangled material.
- 4. Lubricate all grease fittings. 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

## 10 HP DRIVE ASSEMBLY (13-08-0657)



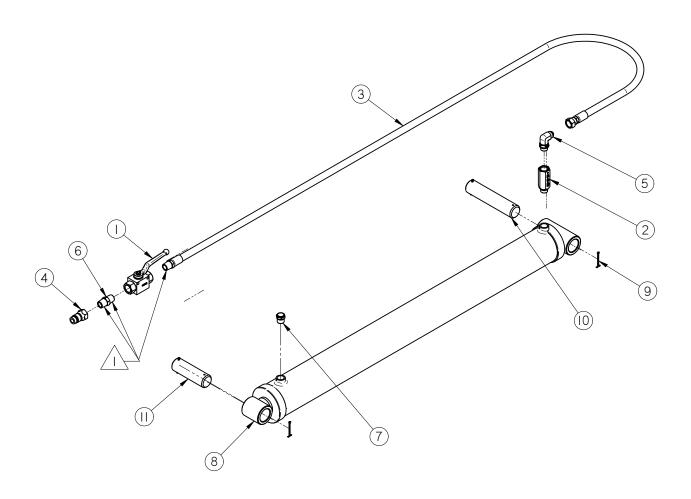


# 10 HP DRIVE ASSEMBLY (13-08-0657)

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	BUSH 1.000IN BORE TYPE SK	1
5	01-08-0087	SHV 2B110SK	1
6	01-08-0119	SHV 2BK36 X 1.375 FHSH BORE	1
7	01-08-0124	BELT BX63	2
8	05-06-0133	CVR BELT DRV BL	1
9	06-01-0006	BOLT, .250-20 X .75 UNC ZP GRADE 5	5
10	06-01-0128	BOLT CRG .375-16 X 1.50 ZP GR5	4
11	06-01-0138	BOLT, FLG .3125-18 UNC ZP GRADE 5; 3/4" LG	4
12	06-02-0047	NUT .250-20 U-CLIP NUT	5
13	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	4
14	06-04-0001	WSHR LOCK SPLT .250 ZP	5
15	06-05-0001	WASHER, FLAT .250	5
16	09-02-0009	ATWK LBL WARNING ROTATING PARTS	1
17	09-02-0010	ATWK LBL DANGER ELECTROCUTION	1
18	09-02-0012	ATWK LBL DANGER MISSING SHIELD	1
19	104D00	BACKPLATE BELT COVER BL	1
20	106-3-2036	KEY .250 X 1.25 CS	2
21	13-05-0200	CHAIN #50 24BW BIN LD DRV	1



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



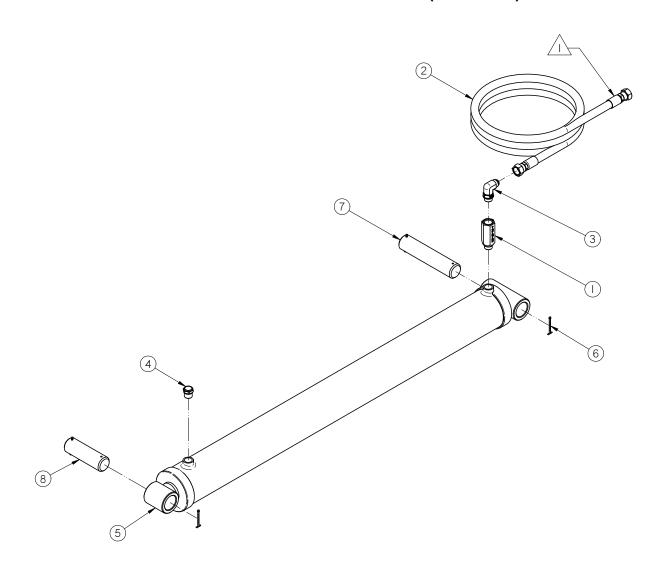
1 The following items will require Teflon tape during assembly.

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 (13-10-0032)**



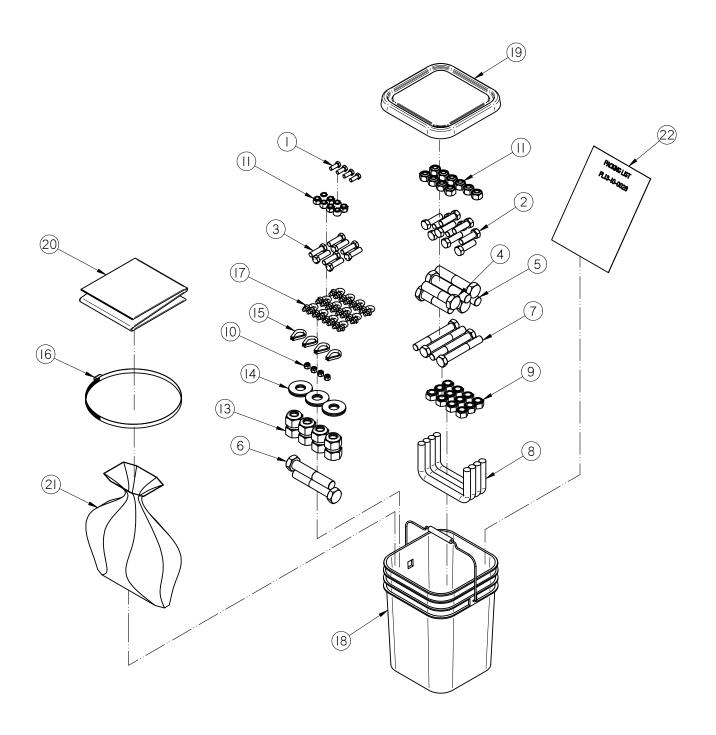


This end of hose will attach to power pack.

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



# PARTS BUCKET - HYDRAULIC LIFT (13-10-0028)



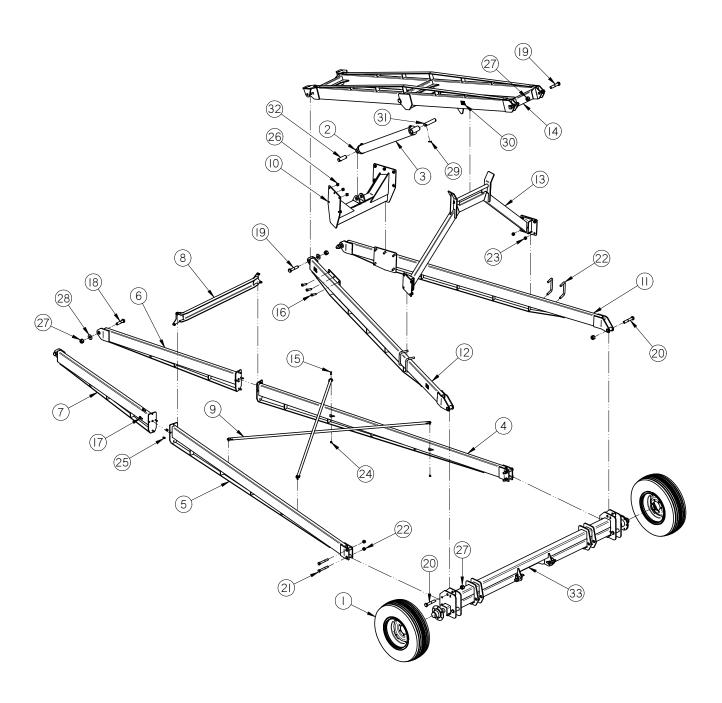


# PARTS BUCKET - HYDRAULIC LIFT (13-10-0028)

Item#	Part #	Description	Qty
1	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	4
2	06-01-0032	BOLT, .625 X 11 X 2" UNC ZP GRADE 5	10
3	06-01-0054	BOLT .500-13 X 1.75 ZP GR5	8
4	06-01-0166	BOLT,1.00-8 X 4.00 UNC ZP GRADE 8	2
5	06-01-0167	BOLT,1.00-8 X 5.00 UNC ZP GRADE 8	4
6	06-01-0168	BOLT, 1.00-8 X 5 1/2 UNC ZP GRADE 8	2
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	4
9	06-02-0029	NUT,LOCK, .750-10 ZP NE NYLON INSERT	12
10	06-03-0003	NUT NYL LOCK .375-16 ZP GR5	4
11	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	8
12	06-03-0005	NUT NYL LOCK .625-11 ZP	10
13	06-03-0028	NUT NYL LOCK 1.00-8 ZP GR5	8
14	06-05-0010	WASHER, 1.00 FLAT ZP	6
15	06-07-0023	THIMBLE .250 WIRE ROPE HD	4
16	06-07-0026	CBL CLIP ROPE .313	12
17	06-07-0027	CLMP HOSE 9.375 TO 12.25 X 9/16 SS	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	13-10-0029	PARTS BAG HYD LIFT BL CNVR	1
22	PL13-10-0028	PACKING LIST PL13-10-0028	1



## **UNDERCARRIAGE ASSEMBLY (13-08-0371)**



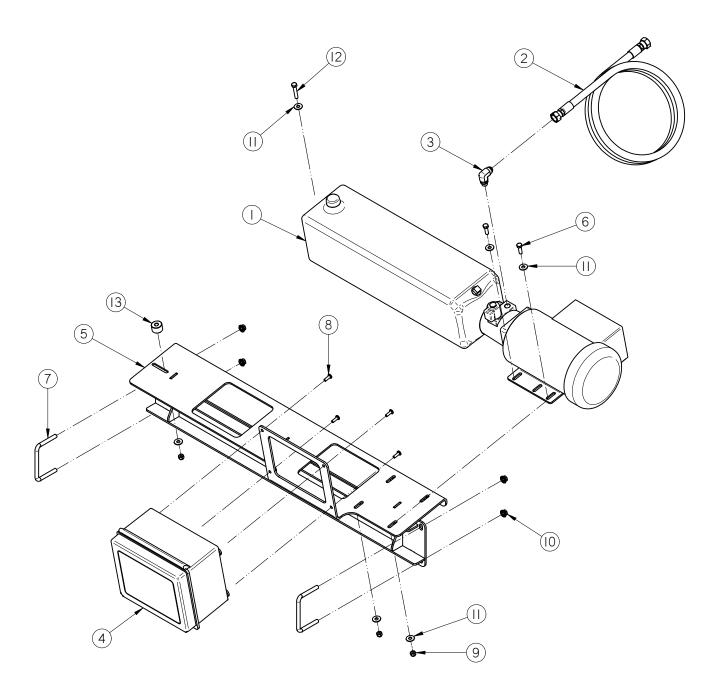


# **UNDERCARRIAGE ASSEMBLY (13-08-0371)**

Item #	Part #	Description	Qty
1	01-06-0096	WHL ASSY 11L/15 - 15X8 6HL AG TYPE	2
2	03-17-0089	SHAFT HYD WELD 36IN STRK 4IN ID	1
3	03-17-0089	CYLINDER HYD WELD 36IN STRK 4IN ID	1
4	05-08-0226	WDMT TR ARM RH	1
5	05-08-0227	WDMT TR ARM LH	1
6	05-08-0228	WDMT TR ARM FRNT RH	1
7	05-08-0229	WDMT TR ARM FRNT LH	1
8	05-08-0230	WDMT CROSS BRACE	1
9	05-08-0253	WDMT CROSS BRACE BL CNVR	2
10	05-08-0305	WDMT CYL MOUNT	1
11	05-08-0306	WDMT HINGE RH	1
12	05-08-0307	WDMT HINGE LH	1
13	05-08-0308	WDMT HINGE SUPP	1
14	05-08-0442	WDMT HINGE UPPER DBL EAR BL	1
15	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	4
16	06-01-0032	BOLT, .625 X 11 X 2" UNC ZP GRADE 5	10
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	2
19	06-01-0167	BOLT,1.00-8 X 5.00 UNC ZP GRADE 8	4
20	06-01-0168	BOLT, 1.00-8 X 5 1/2 UNC ZP GRADE 8	2
21	06-01-0178	BOLT .750-10 X 5.50 HH ZP GR5	4
22	06-01-0260	BOLT U .750-10 X 6.81 X 3.75 ZP SQ	4
23	06-02-0029	NUT,LOCK, .750-10 ZP NE NYLON INSERT	12
24	06-03-0003	NUT NYL LOCK .375-16 ZP GR5	4
25	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	8
26	06-03-0005	NUT NYL LOCK .625-11 ZP	10
27	06-03-0028	NUT NYL LOCK 1.00-8 ZP GR5	8
28	06-05-0010	WASHER, 1.00 FLAT ZP	6
29	06-09-0088	.125 X 2.00 ZP COTTER PIN	4
30	09-02-0015	ATWRK LBL DANGER PINCH POINT	6
31	102922	PIN, CYL UPPER BL	1
32	102923	PIN, CYL LOWER BL	1
33	13-08-0423	ASSY AXLE EXTENDED BL	1



## **ELECTRIC POWER PACK ASSEMBLY (13-08-0376)**





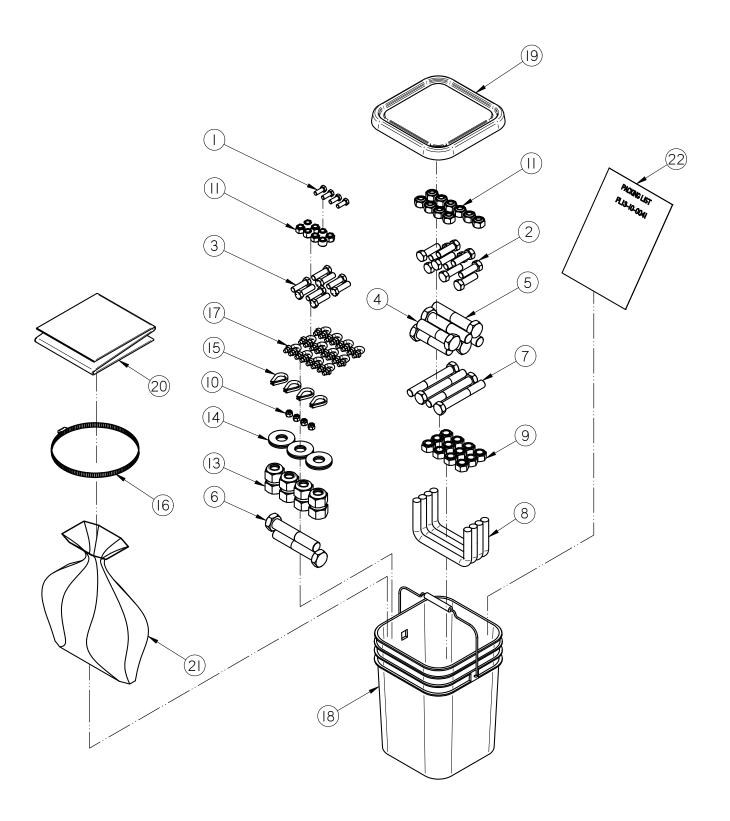
## **ELECTRIC POWER PACK ASSEMBLY (13-08-0376)**

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 .170450 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.



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



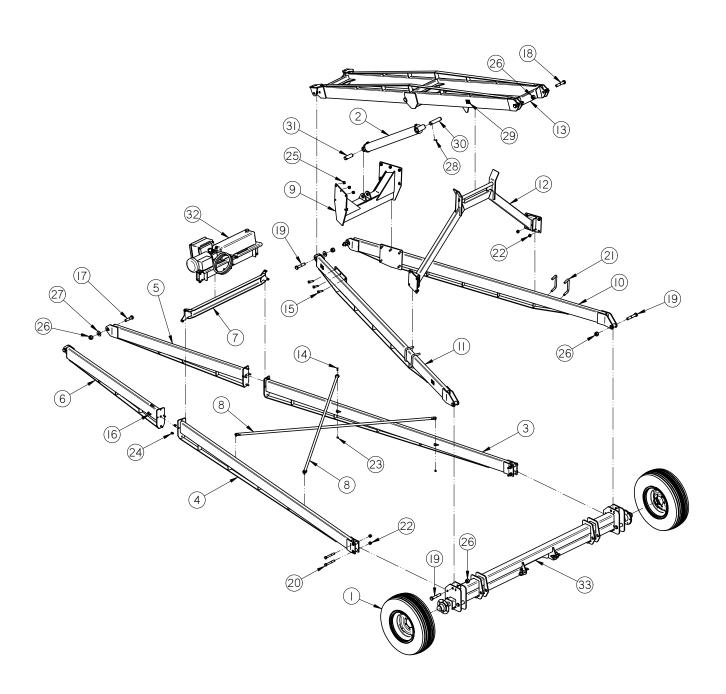


# PARTS BUCKET - HYDRAULIC LIFT (13-10-0041)

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	Х



## **UNDERCARRIAGE ASSEMBLY (13-08-0527)**



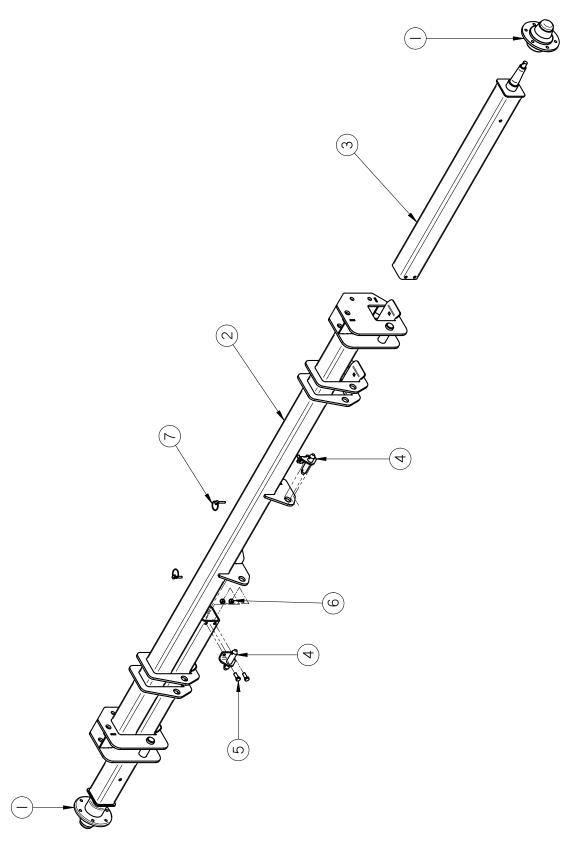


# **UNDERCARRIAGE ASSEMBLY (13-08-0527)**

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



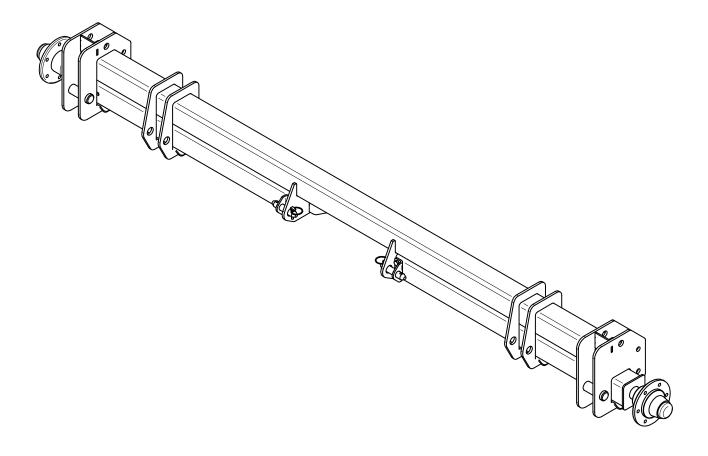
# **TELESCOPING AXLE ASSEMBLY (13-08-0423)**



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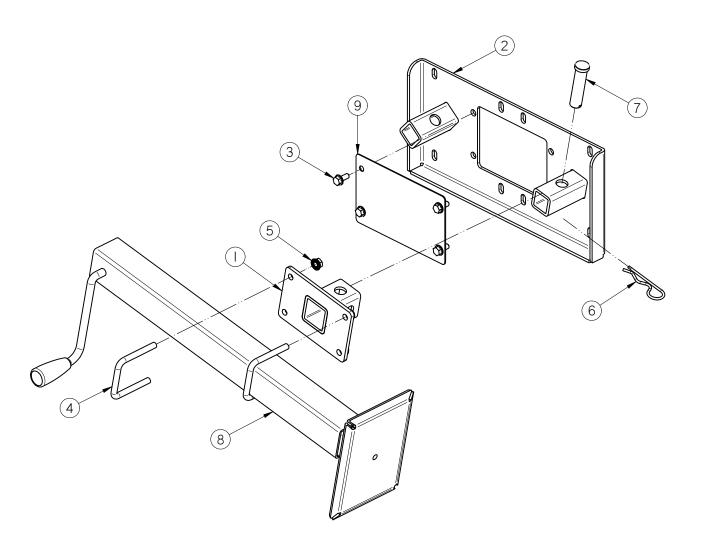
# **TELESCOPING AXLE ASSEMBLY (13-08-0423)**



Item#	Part #	Description	Qty
1	01-06-0140	ASSY HUB SPNDL 3500# 6 ON 6BC	2
2	05-08-0299	WDMT AXLE EXT BL	1
3	05-08-0300	WDMT AXLE STUB BL	2
4	05-08-0304	WDMT AXLE LOCK	2
5	06-01-0080	BOLT .500-13 X 1.25 ZP GR5	4
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



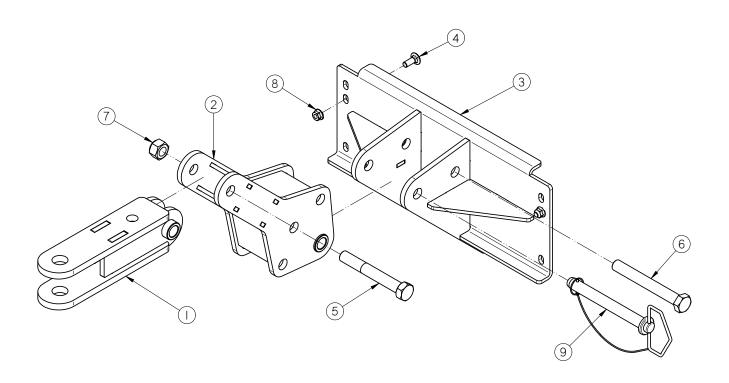
# **JACK ASSEMBLY (13-08-0511)**



Item #	Part #	Description	Qty
1	05-08-0295	WDMT JKSTD U-BLT	1
2	05-08-0431	WDMT JACK MNT	1
3	06-01-0138	BOLT, FLG .3125-18 UNC ZP GRADE 5; 3/4" LG	4
4	06-01-0263	BOLT U .375-16 X 2.87 X 3.00 ZP SQ	2
5	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	4
6	06-09-0002	PIN CLIP HITCH 3.063 SIZE 9 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



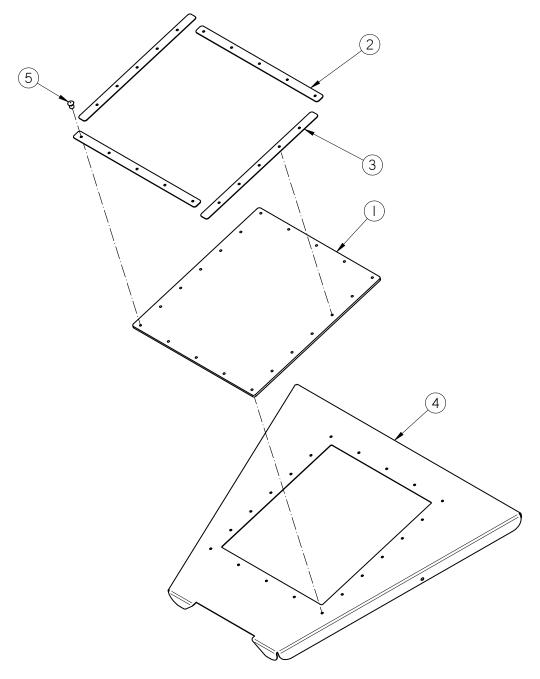
# HITCH ASSEMBLY (13-08-0513)



Item #	Part #	Description	Qty
1	05-08-0220	WDMT DRAWBAR BL CNVR	1
2	05-08-0309	WDMT HITCH PIVOT	1
3	05-08-0430	WDMT HITCH BL	1
4	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	4
5	06-01-0178	BOLT .750-10 X 5.50 HH ZP GR5	1
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



## **INLET COVER ASSEMBLY (05-07-0782)**

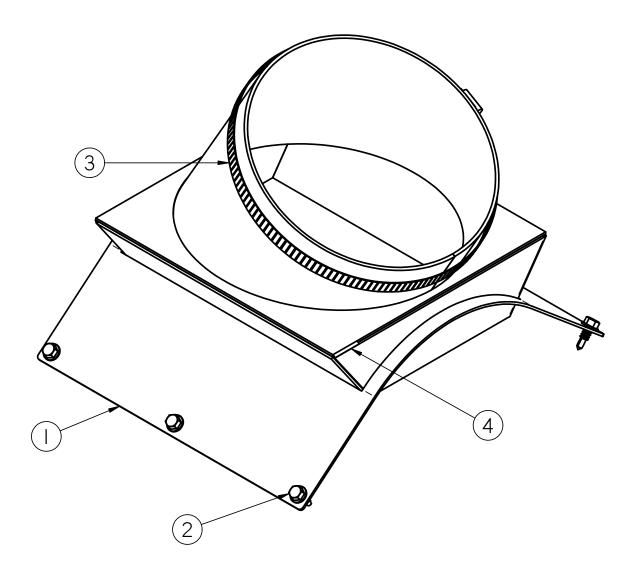


Item #	Part #	Description	Qty
1	05-10-3433	PLT S2000 INLET HOPP SEAL	1
2	05-10-3434	PLT S2000 INLET HOPP CLMP 2	2
3	05-10-3435	PLT S2000 INLET HOPP CLMP 1	2
4	05-10-4342	PLT S2000 INLET HOPP COVER	1
5	06-12-0022	RIVET POP .188 X .312 GRIP SS .65HD	20





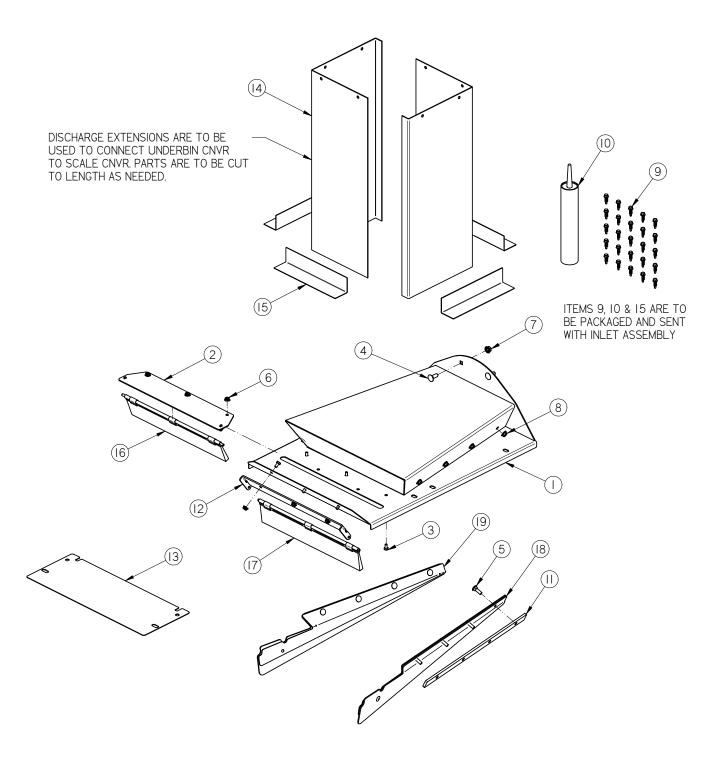
## **INLET COVER 8 INCH OD 30 DEGREE ASSEMBLY (05-07-0783)**



Item #	Part #	Description	Qty
1	05-03-1568	WDMT CNVR STUB INLET 8IN 30D TS3500	1
2	06-06-0052	SCRW SDST .250-14 X .750 HH ZP	6
3	06-07-0024	CLMP HOSE 7.125 TO 10 X 9/16 SS	1
4	06-10-0011	SLNT SILC CLEAR 10.1 OZ TUBE	0.1



### **INLET BLANK ASSEMBLY (13-08-0483)**



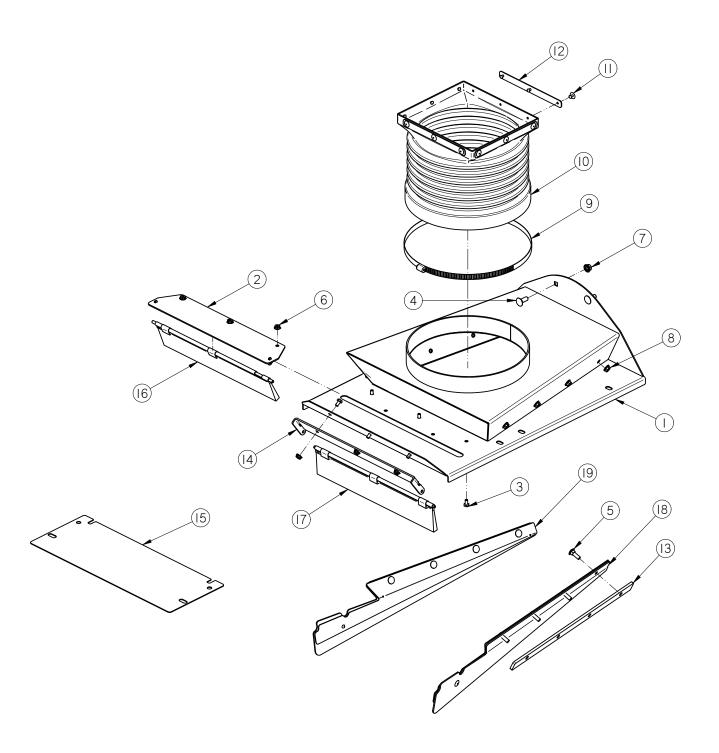


## **INLET BLANK ASSEMBLY (13-08-0483)**

Item#	Part #	Description	Qty
1	05-08-0467	WDMT INLET 10IN BLANK	1
2	05-08-0537	WDMT PIVOT BRSH PLT TS35	1
3	06-01-0004	BOLT, .250-20 X .500 UNC ZP GRADE 5	6
4	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	4
5	06-01-0223	BOLT CRG .313-18 X 1.00 ZP GR5	8
6	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	6
7	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	4
8	06-03-0019	NUT LOCK FLG .3125-18 ZP GR5	8
9	06-06-0037	SCRW SDST .250-14 X 1.000 HH ZP	25
10	06-10-0055	SLNT SILICONE BLK 10.1 OZ TUBE	1
11	103D17	PLT SKIRT SPACER	2
12	104739	EAR BRUSH MNT	1
13	1047FC	PLT INLET CVR TS35	1
14	104B48	UB DSCHG EXT	2
15	1054EB	ANGLE ATTACH	4
16	13-05-0480	ASSY BRUSH W\CLIPS 15.438	1
17	13-05-0481	ASSY BRUSH W\CLIPS 16.062	1
18	13-05-0578	ASSY RH SKIRT CLPSBL TS35	1
19	13-05-0579	ASSY LH SKIRT CLPSBL TS35	1



## **ROUND INLET HOPPER ASSEMBLY (13-08-0480)**



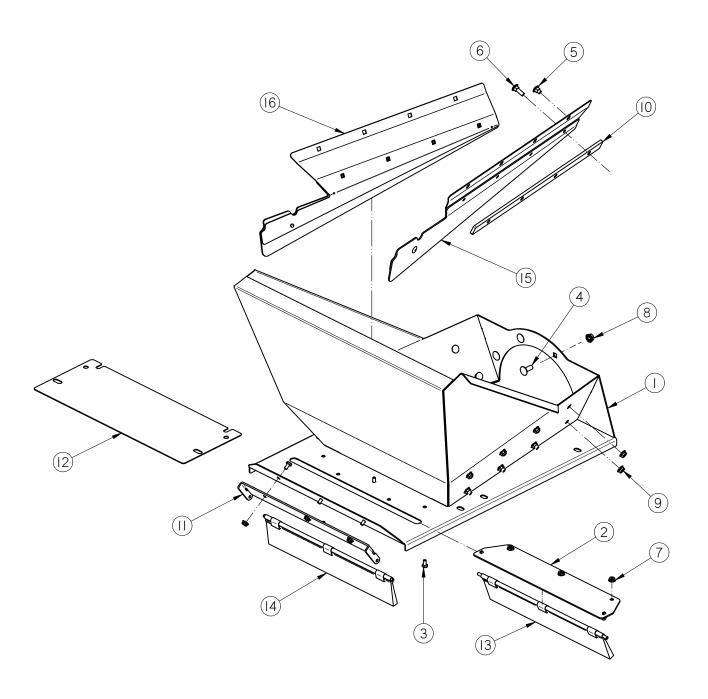


## **ROUND INLET HOPPER ASSEMBLY (13-08-0480)**

Item#	Part #	Description	Qty
1	05-08-0425	WDMT INLET RND 10IN	1
2	05-08-0537	WDMT PIVOT BRSH PLT TS35	1
3	06-01-0004	BOLT, .250-20 X .500 UNC ZP GRADE 5	6
4	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	4
5	06-01-0223	BOLT CRG .313-18 X 1.00 ZP GR5	8
6	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	6
7	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	4
8	06-03-0019	NUT LOCK FLG .3125-18 ZP GR5	8
9	06-07-0032	CLMP HOSE QR 16.25 X 9/16 SS	1
10	06-10-0047	TRANSITION SPOUT FLEXIBLE	1
11	06-12-0022	RIVET POP .188 X .312 GRIP SS .65HD	12
12	102FB6	PLT CLMP TRANS SEAL	4
13	103D17	PLT SKIRT SPACER	2
14	104739	EAR BRUSH MNT	1
15	1047FC	PLT INLET CVR TS35	1
16	13-05-0480	ASSY BRUSH W\CLIPS 15.438	1
17	13-05-0481	ASSY BRUSH W\CLIPS 16.062	1
18	13-05-0578	ASSY RH SKIRT CLPSBL TS35	1
19	13-05-0579	ASSY LH SKIRT CLPSBL TS35	1



## **RIGID INLET HOPPER ASSEMBLY (13-08-0539)**



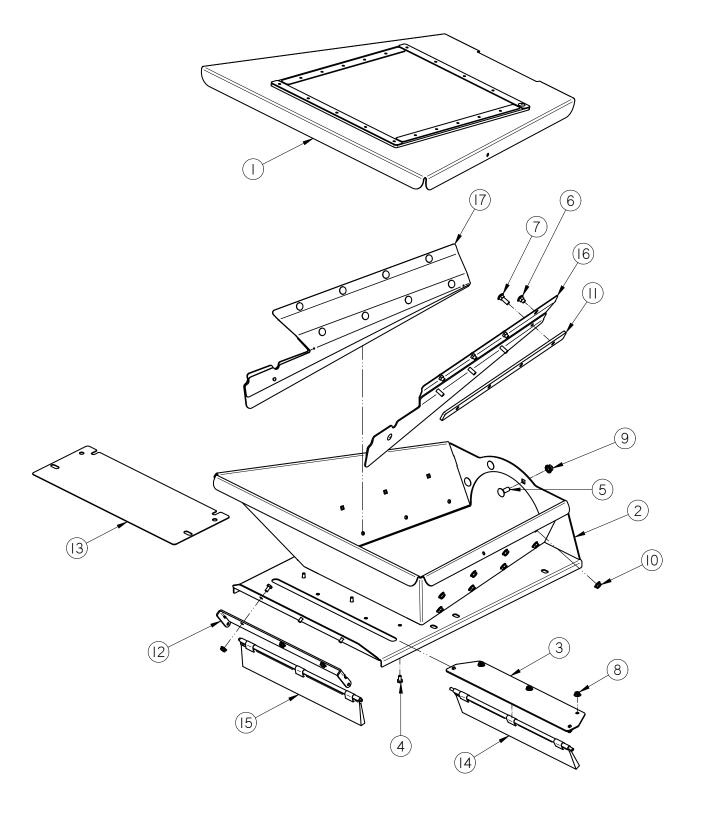


## **RIGID INLET HOPPER ASSEMBLY (13-08-0539)**

Item#	Part #	Description	Qty
1	05-08-0466	WDMT INLET 10IN RND CNVR LG	1
2	05-08-0537	WDMT PIVOT BRSH PLT TS35	1
3	06-01-0004	BOLT, .250-20 X .500 UNC ZP GRADE 5	6
4	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	4
5	06-01-0129	BOLT CRG .313-18 X .50 ZP GR5	8
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	6
8	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	4
9	06-03-0019	NUT LOCK FLG .3125-18 ZP GR5	16
10	103D17	PLT SKIRT SPACER	2
11	104739	EAR BRUSH MNT	1
12	1047FC	PLT INLET CVR TS35	1
13	13-05-0480	ASSY BRUSH W\CLIPS 15.438	1
14	13-05-0481	ASSY BRUSH W\CLIPS 16.062	1
15	13-05-0580	ASSY SKIRT RIGID TS35	1
16	13-05-0581	ASSY SKIRT RIGID TS35	1



## **RIGID INLET HOPPER ASSEMBLY (13-08-0499)**



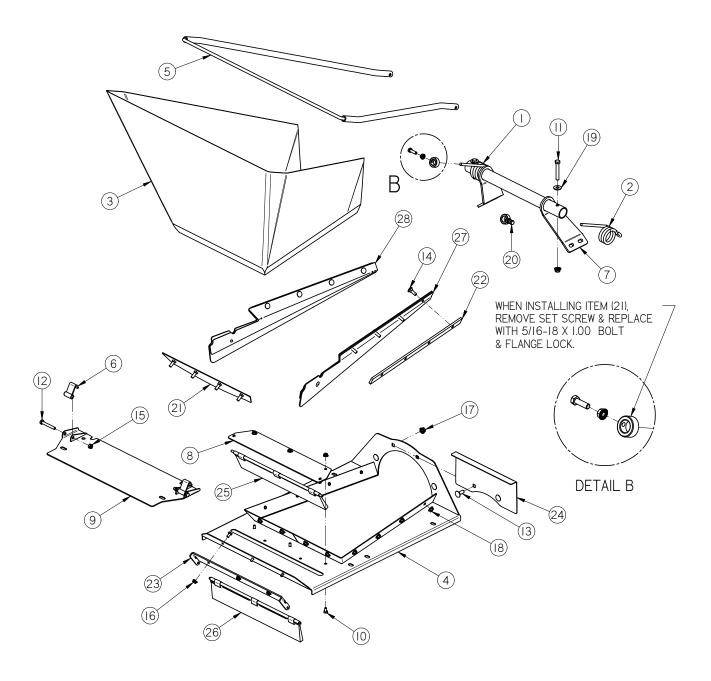


## **RIGID INLET HOPPER ASSEMBLY (13-08-0499)**

Item #	Part #	Description	Qty
1	05-07-0782	ASSY CNVR INLET CVR	1
2	05-08-0444	WDMT INLET 10IN RND CNVR	1
3	05-08-0537	WDMT PIVOT BRSH PLT TS35	1
4	06-01-0004	BOLT, .250-20 X .500 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	6
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	103D17	PLT SKIRT SPACER	2
12	104739	EAR BRUSH MNT	1
13	1047FC	PLT INLET CVR TS35	1
14	13-05-0480	ASSY BRUSH W\CLIPS 15.438	1
15	13-05-0481	ASSY BRUSH W\CLIPS 16.062	1
16	13-05-0580	ASSY SKIRT RIGID TS35	1
17	13-05-0581	ASSY SKIRT RIGID TS35	1



### **COLAPSABLE INLET HOPPER ASSEMBLY (13-08-0618)**



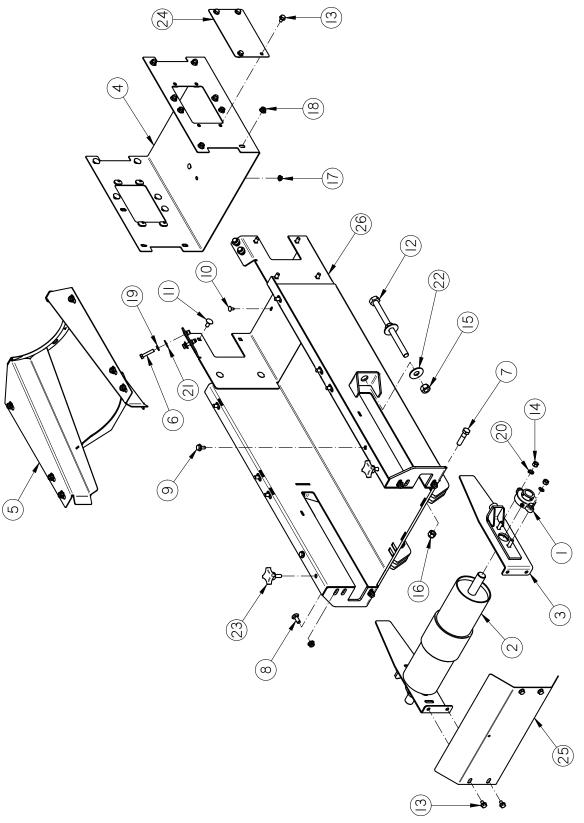


### **COLAPSABLE INLET HOPPER ASSEMBLY (13-08-0618)**

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	05-08-0439	WDMT FRAME CLPSBL	1
6	05-08-0441	WDMT LATCH CLPSBL	2
7	05-08-0510	WDMT SPG ATTACH CLPSBL TS35	1
8	05-08-0537	WDMT PIVOT BRSH PLT TS35	1
9	05-08-0538	WDMT CVR CLPSBL	1
10	06-01-0004	BOLT, .250-20 X .500 UNC ZP GRADE 5	6
11	06-01-0071	BOLT .375-16 X 2.50 ZP GR5	2
12	06-01-0109	BOLT, .3125-18 UNC ZP G5; 2.25" LG	2
13	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	4
14	06-01-0223	BOLT CRG .313-18 X 1.00 ZP GR5	12
15	06-03-0002	NUT NYL LOCK .313-18 ZP GR5	2
16	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	6
17	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	6
18	06-03-0019	NUT LOCK FLG .3125-18 ZP GR5	12
19	06-05-0004	WSHR FLAT .375 ZP	2
20	06-12-0048	COLLAR SET 1 1/4OD X 3/4ID	2
21	103C9E	PLT SEAL CLMP REAR	1
22	103D17	PLT SKIRT SPACER	2
23	104739	EAR BRUSH MNT	1
24	1052F4	PLT CLPSBL DEFLECT	1
25	13-05-0480	ASSY BRUSH W\CLIPS 15.438	1
26	13-05-0481	ASSY BRUSH W\CLIPS 16.062	1
27	13-05-0578	ASSY RH SKIRT CLPSBL TS35	1
28	13-05-0579	ASSY LH SKIRT CLPSBL TS35	1



### **INLET END SECTION ASSEMBLY (13-08-0580)**



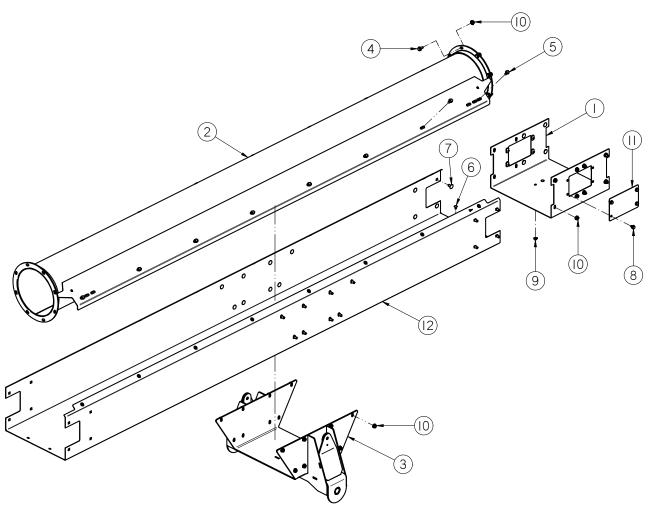


## **INLET END SECTION ASSEMBLY (13-08-0580)**

Item#	Part #	Description	Qty
1	01-03-0042	BRG FLG MNT 1.000ID 2BOLT ECNTRC	2
2	01-08-0095	PULLEY TAIL W-LAGGING	1
3	05-08-0404	WDMT TAKE-UP PLT RND CNVR	2
4	05-08-0412	WDMT SPLICE 16IN	1
5	05-08-0570	WDMT TAIL TRANS TS35	1
6	06-01-0013	BOLT, .312-18 UNC ZP GRADE 5; 1.50" LG	4
7	06-01-0027	BOLT .500-13 X 2.00 ZP GR5	2
8	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	4
9	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	2
10	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	4
11	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	22
12	06-01-0249	BOLT .625-11 X 9.00 ZP GR5 FTH	2
13	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	12
14	06-02-0003	NUT FULL .375-16 ZP GR5	4
15	06-02-0005	NUT, .625-11 UNC ZP GRADE 5	4
16	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	2
17	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	4
18	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	28
19	06-04-0002	WSHR LOCK SPLT .313 ZP	4
20	06-04-0003	WSHR LOCK SPLT .375 ZP	4
21	06-05-0003	WSHR FLAT .313 ZP	4
22	06-05-0006	WASHER, .625 FLAT ZP	4
23	06-09-0066	KNOB .375 -16 X 1. 4 LUG PLASTIC	2
24	103B9A	PLT SPLICE COVER	2
25	10426C	PLT COVER TAKE-UP 16IN	1
26	13-05-0524	ASSY INLET WDMT W/RIVETNUTS	1



# 10FT MID - SECTION ASSEMBLY (13-08-0587)

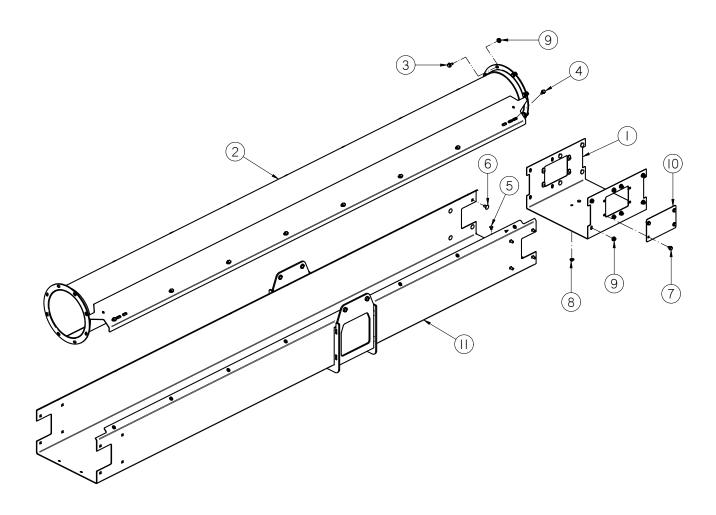


Item#	Part #	Description	Qty
1	05-08-0412	WDMT SPLICE 16IN	1
2	05-08-0509	WDMT TUBE 10.00IN X 120IN	1
3	05-08-0513	WDMT UNCRG ATTACH LOWER	1
4	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	8
5	06-01-0138	BOLT, FLG .3125-18 UNC ZP GRADE 5; 3/4" LG	16
6	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	4
7	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	32
8	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	8
9	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	4
10	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	40
11	103B9A	PLT SPLICE COVER	2
12	13-05-0440	ASSY 10FT SECT MNT W/RIVETNUTS	1





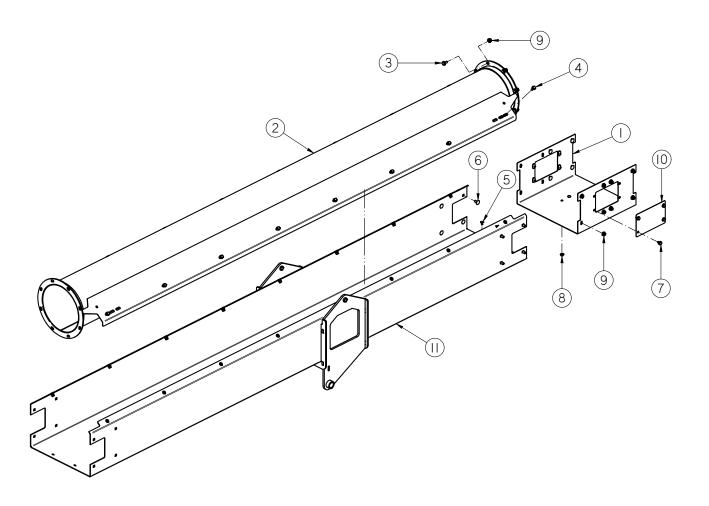
# 10 FT CABLE SUPPORT SECTION ASSEMBLY (13-08-0588)



Item#	Part #	Description	Qty
1	05-08-0412	WDMT SPLICE 16IN	1
2	05-08-0509	WDMT TUBE 10.00IN X 120IN	1
3	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	8
4	06-01-0138	BOLT, FLG .3125-18 UNC ZP GRADE 5; 3/4" LG	16
5	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	4
6	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	16
7	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	8
8	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	4
9	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	24
10	103B9A	PLT SPLICE COVER	2
11	13-05-0441	ASSY 10FT WDMT W/RIVETNUTS	1



# 10 FT MOUNT SECTION ASSEMBLY (13-08-0589)

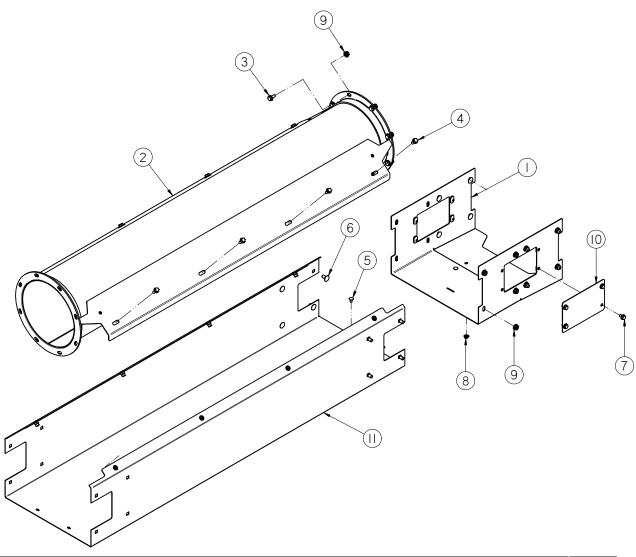


Item #	Part #	Description	Qty
1	05-08-0412	WDMT SPLICE 16IN	1
2	05-08-0509	WDMT TUBE 10.00IN X 120IN	1
3	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	8
4	06-01-0138	BOLT, FLG .3125-18 UNC ZP GRADE 5; 3/4" LG	16
5	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	4
6	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	16
7	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	8
8	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	4
9	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	24
10	103B9A	PLT SPLICE COVER	2
11	13-05-0442	ASSY WDMT MNT 10FT W/RIVETNUTS	1

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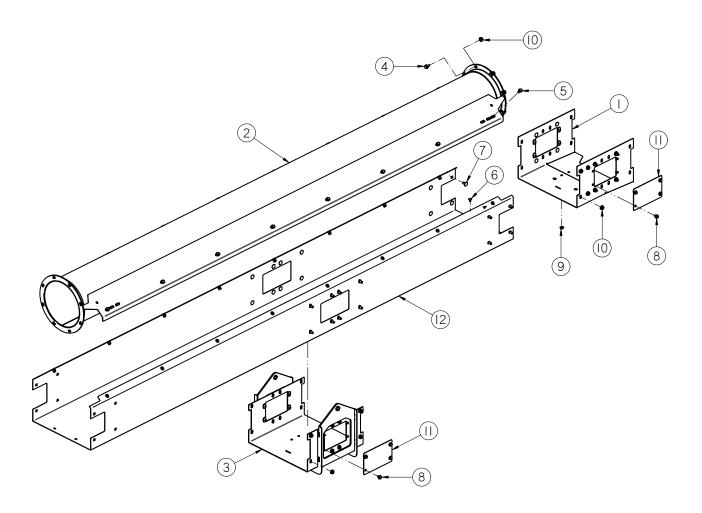
# 5 FT MID - SECTION ASSEMBLY (13-08-0591)



Item #	Part #	Description	Qty
1	05-08-0436	WDMT SPLICE MID SECT BL	1
2	05-08-0506	WDMT TUBE 10.00IN X 60IN	1
3	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	8
4	06-01-0138	BOLT, FLG .3125-18 UNC ZP GRADE 5; 3/4" LG	8
5	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	4
6	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	16
7	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	8
8	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	4
9	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	24
10	103B9A	PLT SPLICE COVER	2
11	13-05-0433	ASSY 5FT MID SECT W/RIVETNUTS	1



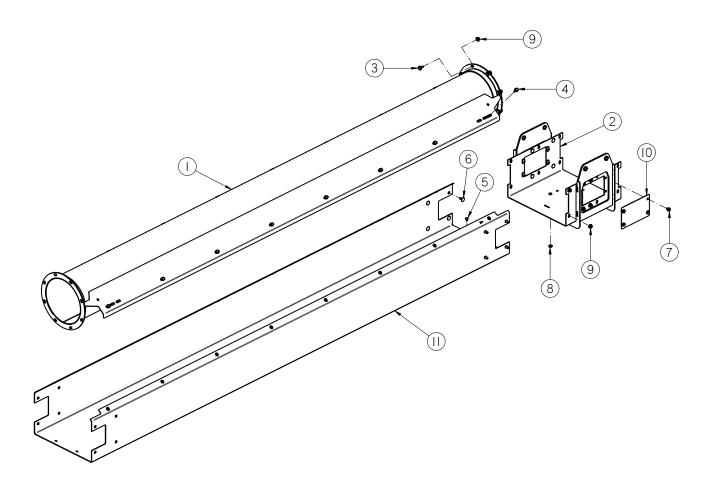
### 10 FT HEAD MID - SECTION ASSEMBLY (13-08-0592)



Item #	Part #	Description	Qty
1	05-08-0436	WDMT SPLICE MID SECT BL	1
2	05-08-0509	WDMT TUBE 10.00IN X 120IN	1
3	05-08-0515	WDMT SPLICE CABLE SUPPORT	1
4	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	8
5	06-01-0138	BOLT, FLG .3125-18 UNC ZP GRADE 5; 3/4" LG	16
6	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	4
7	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	32
8	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	16
9	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	4
10	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	40
11	103B9A	PLT SPLICE COVER	4
12	13-05-0447	ASSY 10FT SECT W/RIVETNUTS	1



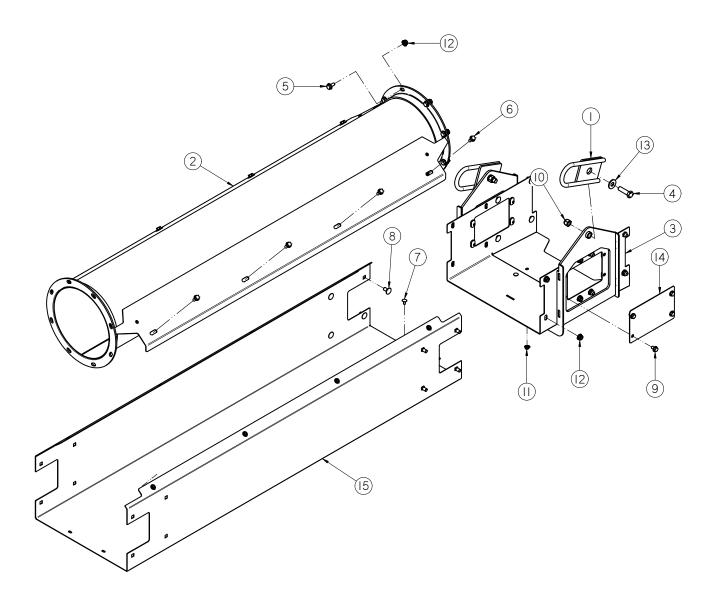
## 10 FT SECTION ASSEMBLY (13-08-0595)



Item #	Part #	Description	Qty
1	05-08-0509	WDMT TUBE 10.00IN X 120IN	1
2	05-08-0516	WDMT SPLICE CABLE SUPPORT DBL	1
3	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	8
4	06-01-0138	BOLT, FLG .3125-18 UNC ZP GRADE 5; 3/4" LG	16
5	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	4
6	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	16
7	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	8
8	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	4
9	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	24
10	103B9A	PLT SPLICE COVER	2
11	13-05-0448	ASSY 10FT CARB W/RIVETNUTS	1



### 5 FT MID - SECTION ASSEMBLY (13-08-0596)



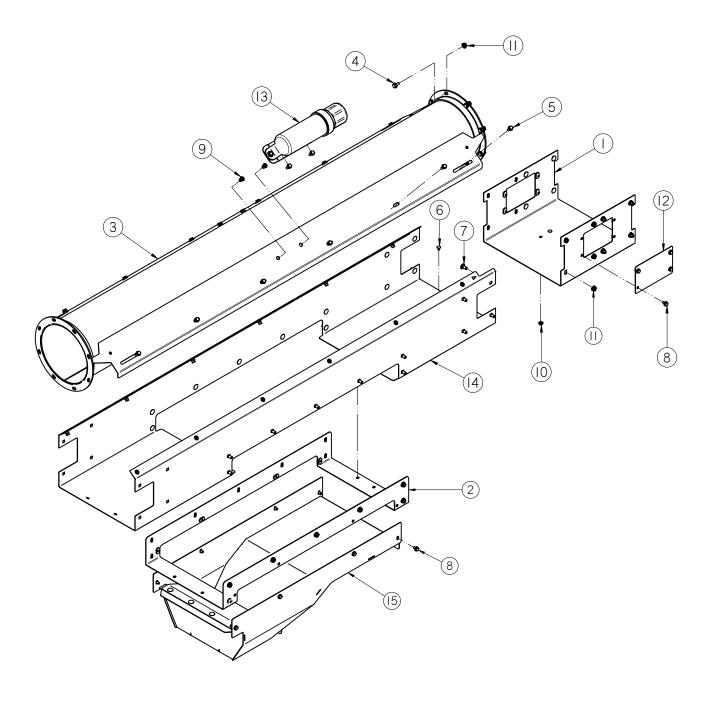


### 5 FT MID - SECTION ASSEMBLY (13-08-0596)

Item #	Part #	Description	Qty
1	05-08-0428	WDMT SWVL CABLE ATTACH	2
2	05-08-0506	WDMT TUBE 10.00IN X 60IN	1
3	05-08-0517	WDMT SPLICE MID SECT BL	1
4	06-01-0054	BOLT .500-13 X 1.75 ZP GR5	2
5	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	8
6	06-01-0138	BOLT, FLG .3125-18 UNC ZP GRADE 5; 3/4" LG	8
7	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	4
8	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	16
9	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	8
10	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	2
11	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	4
12	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	24
13	06-05-0005	WSHR FLAT .500 ZP	2
14	103B9A	PLT SPLICE COVER	2
15	13-05-0433	ASSY 5FT MID SECT W/RIVETNUTS	1



## **INLET EXTENSION ASSEMBLY (13-08-0586)**



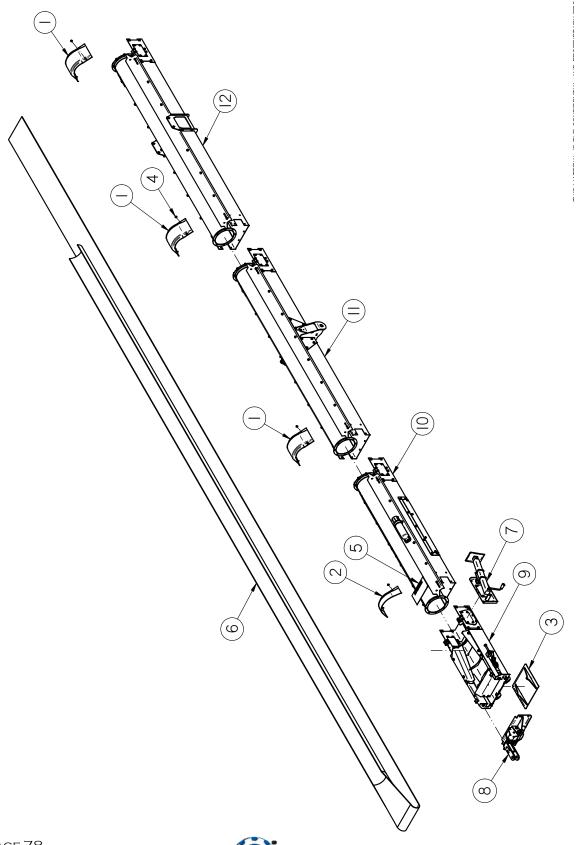


## **INLET EXTENSION ASSEMBLY (13-08-0586)**

Item #	Part #	Description	Qty
1	05-08-0412	WDMT SPLICE 16IN	1
2	05-08-0480	WDMT ACCESS DOOR 16IN	1
3	05-08-0507	WDMT TUBE 10.00IN X 84.86IN	1
4	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	8
5	06-01-0138	BOLT, FLG .3125-18 UNC ZP GRADE 5; 3/4" LG	16
6	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	8
7	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	30
8	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	16
9	06-02-0092	RIVETNUT .312-18 ZP	4
10	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	8
11	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	38
12	103B9A	PLT SPLICE COVER	2
13	13-05-0332	ASSY MANUAL TUBE MT	1
14	13-05-0554	ASSY INLET EXT W/RIVETNUTS	1
15	13-08-0694	ASSY DOOR TS35 CLN OUT/ACCESS	1



### **CONVEYOR INLET HALF - 3555 - 3565 - 3570 (13-08-0606)**

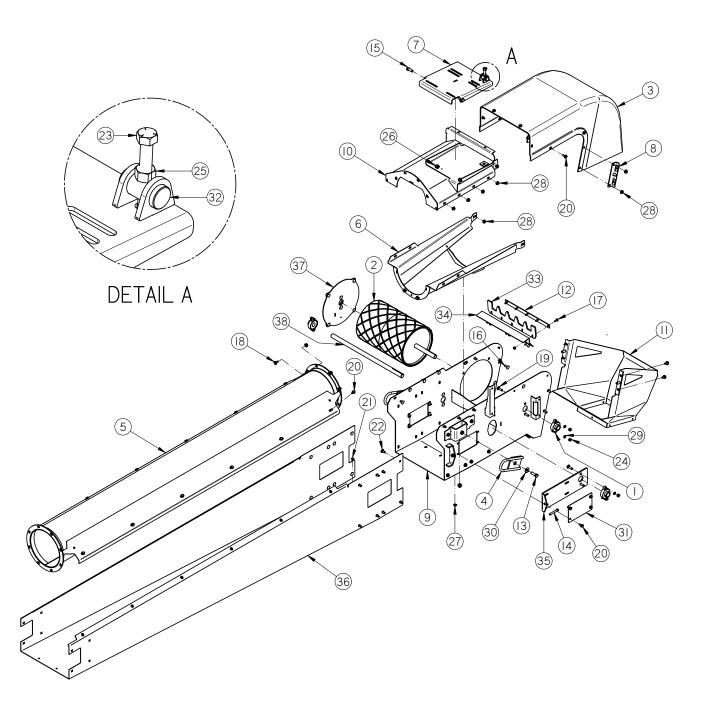


### **CONVEYOR INLET HALF - 3555 - 3565 - 3570 (13-08-0606)**

Item #	Part #	Description	Qty
1	05-06-0122	CVR SPLICE RND CNVR 10IN	3
2	05-06-0123	CVR SPLICE RND CNVR 10IN	1
3	05-08-0218	WDMT, PAD CNVR BL	1
4	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	12
5	09-02-0016	LBL ATWRK ATT BELT ALIGN	1
6	11-02-0153	BELT CNVR CLTS TS3535	1
7	13-08-0511	ASSY JACK MNT CNVR	1
8	13-08-0513	ASSY HITCH BL RND CNVR	1
9	13-08-0580	ASSY INLET SECT TS35	1
10	13-08-0586	ASSY INLET EXT TS35 BL	1
11	13-08-0587	ASSY CNVR 10FT X 16IN MID SECT	1
12	13-08-0588	ASSY CNVR 10FT CBL SUPPORT SECT BL	1



### **HEAD SECTION ASSEMBLY (13-08-0656)**



Item #	Part #	Description	Qty
1	01-03-0042	BRG FLG MNT 1.000ID 2BOLT ECNTRC	3
2	01-08-0110	PULLEY HEAD BL VULC TS3500	1
3	05-06-0128	COVER HD TS35 DD	1



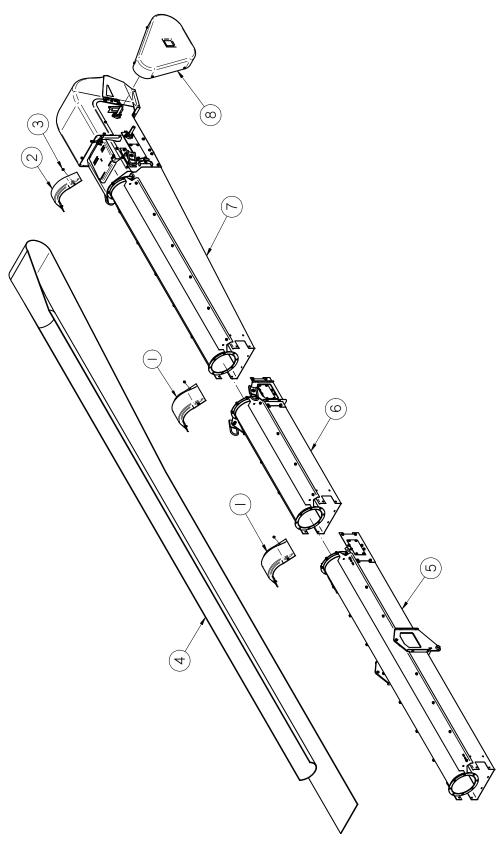


## **HEAD SECTION ASSEMBLY (13-08-0656)**

Item#	Part #	Description	Qty
4	05-08-0428	WDMT SWVL CABLE ATTACH	2
5	05-08-0508	WDMT TUBE 10.00IN X 95IN	1
6	05-08-0547	WDMT HD TRANS TS35	1
7	05-08-0549	WDMT MTR MNT PLT LG	1
8	05-08-0568	WDMT DSCHG HD MNT PLT	2
9	05-08-0577	WDMT DSCHG HD TS35 BL	1
10	05-08-0579	WDMT HD CVR TS35 BL	1
11	05-08-0580	WDMT DSCHG SPOUT TS35 BL	1
12	5/10/3986	PLT S2000 CNVR BLT SCRAPER HLDR	1
13	06-01-0025	BOLT .500-13 X 1.50 ZP GR5	2
14	06-01-0071	BOLT .375-16 X 2.50 ZP GR5	1
15	06-01-0080	BOLT .500-13 X 1.25 ZP GR5	2
16	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	4
17	06-01-0122	BOLT, CARRIAGE, .250-20x.75 G5 ZP	5
18	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	10
19	06-01-0127	BOLT CRG .375-16 X 1.25 ZP GR5	6
20	06-01-0138	BOLT, FLG .3125-18 UNC ZP GRADE 5; 3/4" LG	28
21	06-01-0150	BOLT, CARRIAGE, .250-20x.50 G5 ZP	3
22	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	32
23	06-01-0157	BOLT, .500-13 X 4" UNC ZP GRADE 5 fth	1
24	06-02-0003	NUT FULL .375-16 ZP GR5	6
25	06-02-0004	NUT FULL .500-13 ZP GR5	1
26	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	4
27	06-03-0013	NUT,LOCK, FLG .250-20 ZP SERRATTED	8
28	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	43
29	06-04-0003	WSHR LOCK SPLT .375 ZP	6
30	06-05-0005	WSHR FLAT .500 ZP	2
31	103B9A	PLT SPLICE COVER	2
32	10414A	PIN MTR PIVOT	1
33	10426E	RBBR SCRAPER 16IN FILL	1
34	10484F	PLT BAFFLE MNT	1
35	104D05	PLT TIGHTNER	1
36	13-05-0522	FRAME HD W/RIVETNUTS	1
37	13-08-0655	ASSY TRACKING PLT HD	1
38	280-3-0048	24 X 1 INCH JACK-HEAD SHAFT	1



## **CONVEYOR HEAD HALF - TS3555 (13-08-0607)**



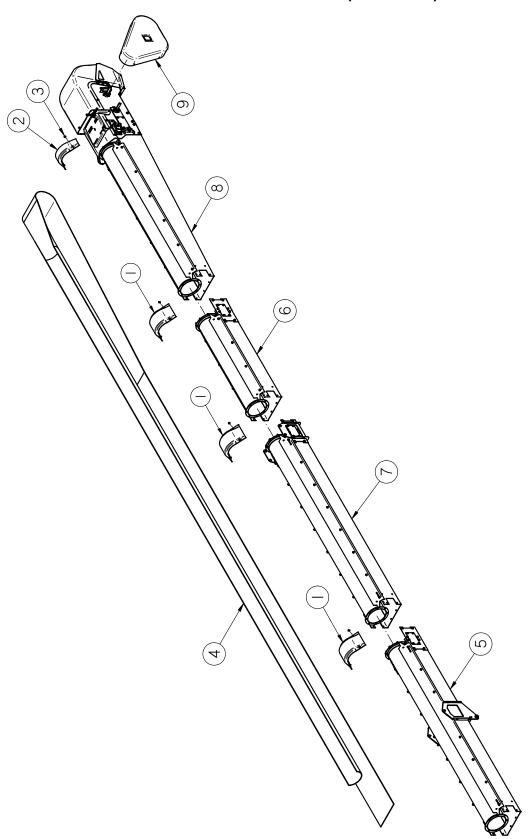


# CONVEYOR HEAD HALF - TS3555 (13-08-0607)

Item #	Part #	Description	Qty
1	05-06-0122	CVR SPLICE RND CNVR 10IN	2
2	05-06-0123	CVR SPLICE RND CNVR 10IN	1
3	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	10
4	11-02-0150	BELT CNVR CLTS TS3520	1
5	13-08-0589	ASSY CNVR 10FT X 16IN MNT SECT BL	1
6	13-08-0596	ASSY 5FT MID BL TS35	1
7	13-08-0656	ASSY HEAD SECT TS35 BL	1
8	13-08-0657	KIT DRV 10HP TS35 BL	1



## **CONVEYOR HEAD HALF - TS3565 (13-08-0608)**



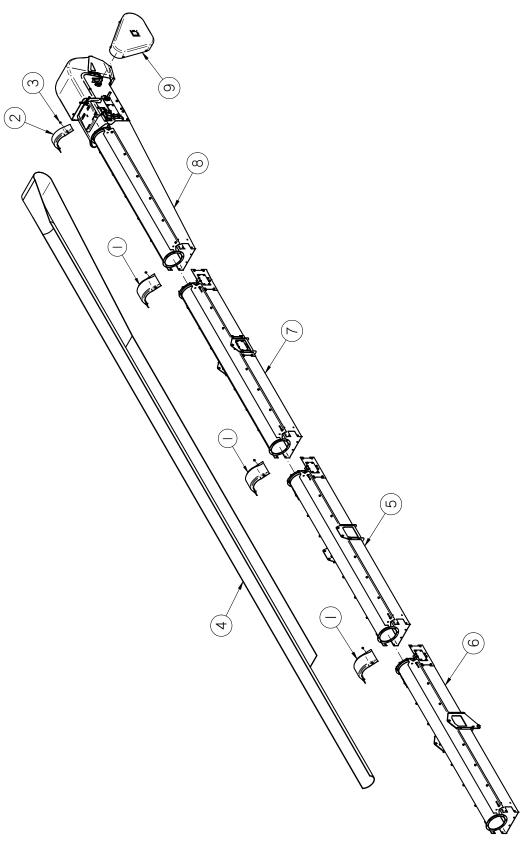


## **CONVEYOR HEAD HALF - TS3565 (13-08-0608)**

Item#	Part #	Description	Qty
1	05-06-0122	CVR SPLICE RND CNVR 10IN	3
2	05-06-0123	CVR SPLICE RND CNVR 10IN	1
3	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	14
4	11-02-0152	BELT CNVR CLTS TS3530	1
5	13-08-0589	ASSY CNVR 10FT X 16IN MNT SECT BL	1
6	13-08-0591	ASSY 5FT MID BL TS35	1
7	13-08-0595	ASSY CNVR 10FT X 16IN SECT BL	1
8	13-08-0656	ASSY HEAD SECT TS35 BL	1
9	13-08-0657	KIT DRV 10HP TS35 BL	1



## CONVEYOR HEAD HALF - TS3570 (13-08-0609)



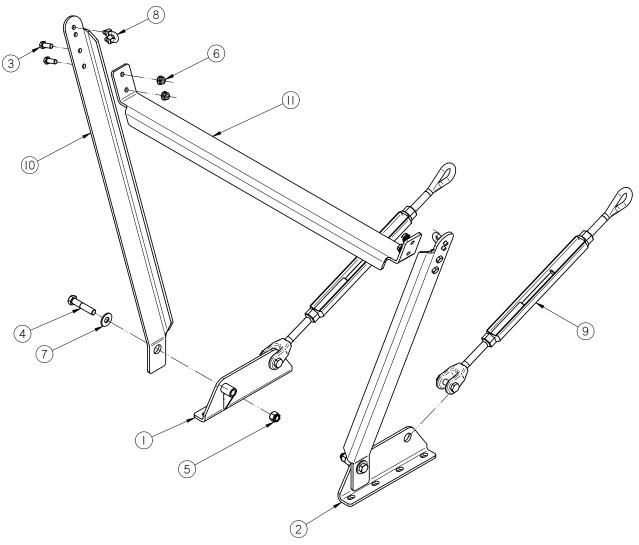


## **CONVEYOR HEAD HALF - TS3570 (13-08-0609)**

Item #	Part #	Description	Qty
1	05-06-0122	CVR SPLICE RND CNVR 10IN	3
2	05-06-0123	CVR SPLICE RND CNVR 10IN	1
3	06-01-0261	BOLT FLG .3125-18 X .500 ZP GR5	14
4	11-02-0153	BELT CNVR CLTS TS3535	1
5	13-08-0588	ASSY CNVR 10FT CBL SUPPORT SECT BL	1
6	13-08-0589	ASSY CNVR 10FT X 16IN MNT SECT BL	1
7	13-08-0592	ASSY CNVR 10FT X 16IN MID SECT	1
8	13-08-0656	ASSY HEAD SECT TS35 BL	1
9	13-08-0657	KIT DRV 10HP TS35 BL	1



## SHORT CABLE SUPPORT ASSEMBLY (13-08-0514)

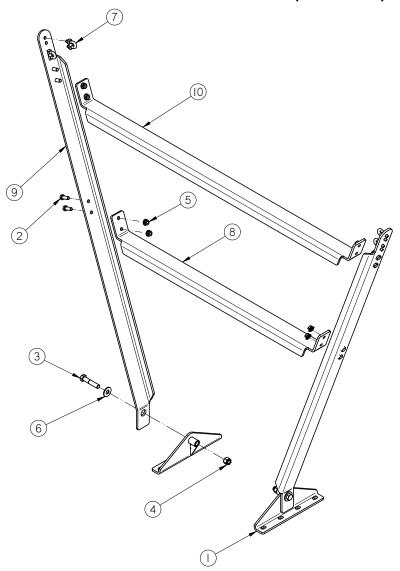


Item #	Part #	Description	Qty
1	05-08-0448	WDMT CABLE MNT DUAL RH	1
2	05-08-0449	WDMT CABLE MNT DUAL LH	1
3	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	4
4	06-01-0028	BOLT .500-13 X 2.50 ZP GR5	2
5	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	2
6	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	4
7	06-05-0005	WSHR FLAT .500 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

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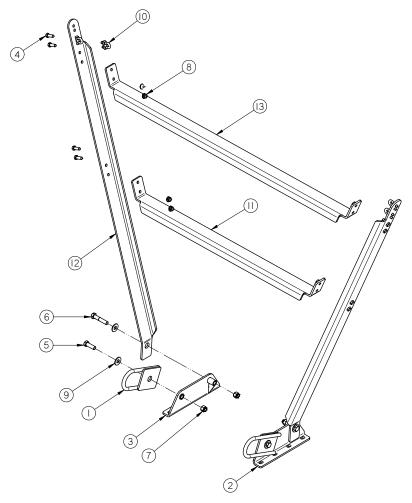
# TALL CABLE SUPPORT ASSEMBLY (13-08-0528)



Item #	Part #	Description	Qty
1	05-08-0447	WDMT CABLE MNT	2
2	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	8
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



## **DUAL CABLE SUPPORT ASSEMBLY (13-08-0531)**

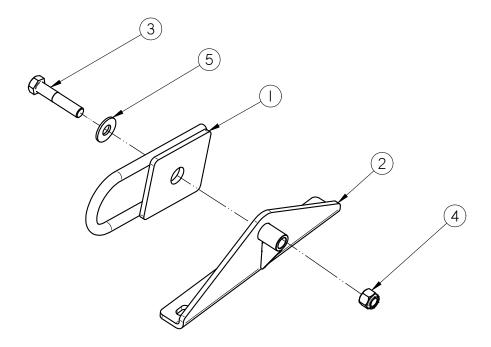


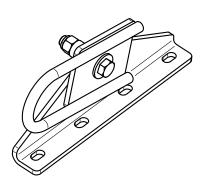
Item #	Part #	Description	Qty
1	05-08-0428	WDMT SWVL CABLE ATTACH	2
2	05-08-0448	WDMT CABLE MNT DUAL RH	1
3	05-08-0449	WDMT CABLE MNT DUAL LH	1
4	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	8
5	06-01-0025	BOLT .500-13 X 1.50 ZP GR5	2
6	06-01-0028	BOLT .500-13 X 2.50 ZP GR5	2
7	06-03-0004	NUT NYL LOCK .500-13 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

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# **CABLE ATTACHMENT ASSEMBLY (13-08-0515)**

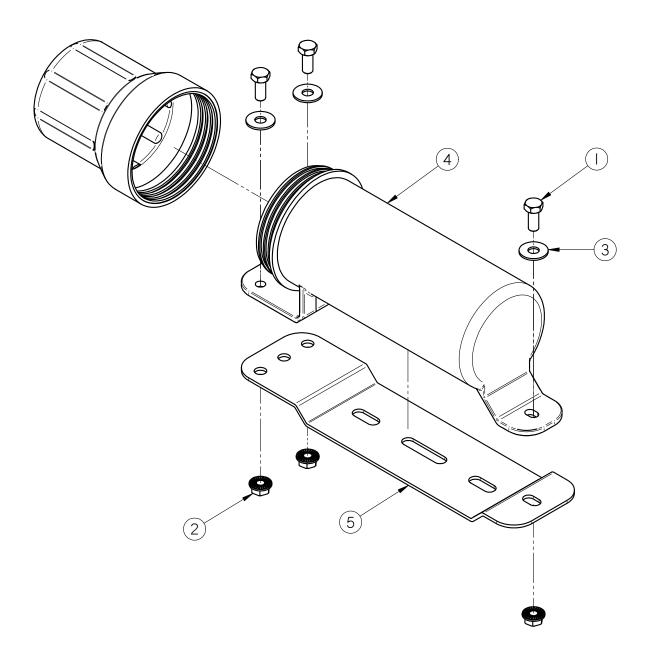




Item #	Part #	Description	Qty
1	05-08-0428	WDMT SWVL CABLE ATTACH	2
2	05-08-0447	WDMT CABLE MNT	2
3	06-01-0028	BOLT .500-13 X 2.50 ZP GR5	2
4	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	2
5	06-05-0005	WSHR FLAT .500 ZP	2



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



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

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# **USC LIMITED WARRANTY**

SECTION

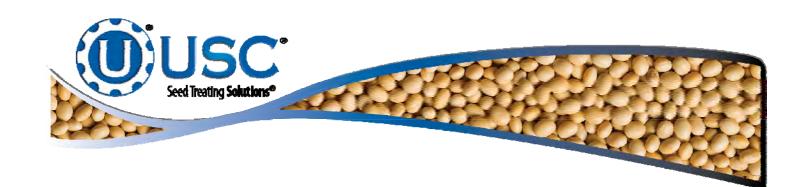
USC, LLC, (Manufacturer) warrants its seed treating equipment as follows:

- 1. <u>Limited Warranty</u>: 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. <u>Other Limits</u>: 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. This includes any welding on equipment which could damage electrical components. Manufacturer does not warrant against casualties or damages resulting from misuse and / or abuse of Products, improper storage or handling, acts of nature, effects of weather, including effects of weather due to outside storage, accidents, or damages incurred during transportation by common carrier.

- 3. <u>Exclusive Obligation:</u> 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 lost profits, lost revenue, lost sales (whether direct or indirect damages), incidental, special, punitive, indirect or consequential damages.
- 4. <u>Other Statements:</u> 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 Manufacturer. A restocking fee will apply.
- 6. <u>Entire Obligation:</u> 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.





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