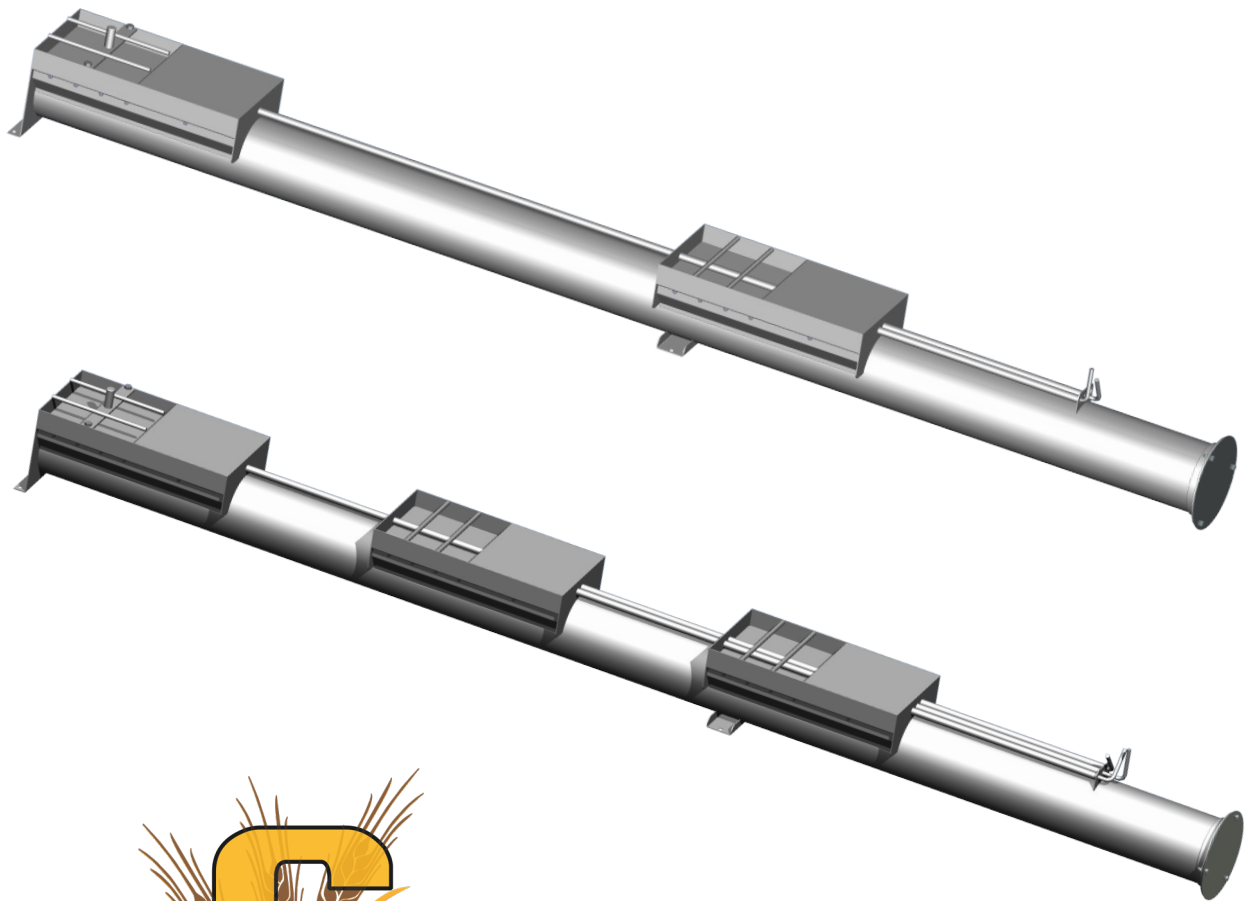




Haven Industries

Bin Unload Tubes Installation & Operator's Manual



ASSEMBLY INSTRUCTIONS



Bin Unload Tubes

CONGRATULATIONS! You have just purchased the finest grain handling equipment components available today! With proper use and service this equipment is designed to give you many years of trouble free service. All Grain Saver® Unloading Equipment is built to the highest standards and incorporates the most up-to-date safety features. For your safety and convenience, please take the time to read the following assembly, installation, and operating instructions. Familiarize yourself with the use of this equipment and the standard safety features before attempting to operate it.

- NEVER enter the storage structure while this equipment is in operation.**
- BE SURE all guards are in place before connecting power or starting this equipment.**
- NEVER allow children or any personnel who are unfamiliar with the features or hazards of this equipment to operate it without proper supervision.**

Your Grain Saver® Bin Sweep comes assembled from the factory, however, some minor finish assembly is required. You will need some basic tools to finish the assembly of this equipment; a wrench set up to 1", a crescent wrench, and a set of allen wrenches. Torque settings of 35 ft. lbs. is recommended for all hardware.

To Install Unload Tubes in concrete foundations:

- Be certain that the Sweep Pivot Pin is installed in the center well. This pin is to be the center of the concrete foundation.
- Set the concrete forms, "stake" the tube in place by using the leveling brackets provided on the center well to prevent "slip" and "float".
- The discharge end of the tube must be installed at least 1" lower than the intake end to prevent water build up in the tube and control rod sleeves.
- Pour the concrete foundations to the bin manufacturer's specifications and let "cure".

To install Unload Tubes in Drying, Aeration or Full Floor Systems:

- Locate the area where the tube is to exit the bin wall. Using the rodent cover as a template, cut the hole just large enough to allow for the tube and flange to pass through with minimal clearance. Be sure to allow for the handles as well.
- Align the Bin Sweep Pivot Pin with the center of the bin.
- Level the tube using the leveling brackets provided. Make sure that there is a 1" decline in the tube towards the discharge end or drill a 1/8" diameter hole in the intake hopper bottom to allow for drainage.
- Install the Drying/ Aeration floor to the manufacturer's specifications. Seal the area in the floor that was cut to fit around the hoppers with Grain Saver® Hopper Flanges. Use self-drilling screws to attach these to the hopper and the perforated floor. Caulk any cracks or openings with a good quality silicone or butyl based sealant.
- Install the Grain Saver® Bin Wall Plate over the tube and opening in the bin wall. The top half overlaps the bottom half by 1/2" to allow for proper watershed. Caulk any cracks or openings and fill corrugations with a good quality silicone or butyl based sealant.
- Touch up installation with Grain Saver® spray enamel (sold separately).
- Pull control rods open and grease rods liberally with petroleum based axle grease, push rods closed and allow a build up of grease at sleeve opening, creating a water seal.

Note: If any warning or safety decals become lost or damaged in any manner, please contact us for free replacements.

YOUR SAFETY IS OUR PRIMARY CONCERN!!

Ph. 507.584.6300

HORSEPOWER REQUIREMENTS

	8"			10"		
BIN DIA.	HORIZ.	INCL.	VERT.	HORIZ.	INCL.	VERT.
18'	3.0	5.0	7.5	5.0	7.5	10.0
21'	5.0	7.5	10.0	7.5	7.5	10.0
24'	5.0	7.5	10.0	7.5	10.0	15.0
27'	5.0	7.5	10.0	7.5	10.0	15.0
30'	5.0	7.5	10.0	7.5	10.0	15.0
33'	5.0	7.5	10.0	7.5	10.0	15.0
36'	5.0	7.5	10.0	10.0	15.0	20.0
42'	7.5	10.0	15.0	10.0	15.0	20.0
48'	7.5	10.0	15.0	15.0	15.0	20.0

INSTALLATION/OPERATING INSTRUCTIONS:

Filling the Bin:

- Lock out power to bin and all equipment before servicing this equipment.
- Remove Sweep Pivot Pin from center well brackets and store in a secure place. This allows for an unobstructed center well for unloading in the event of frost chunks or spoiled grain in the grain column.
- Check all rollers for free movement and oil liberally.
- Clean wells of debris and close gates securely.
- Pull control rods open and grease rods liberally with a petroleum based grease. Push rods closed and allow a build up of grease at sleeve opening, creating a water tight seal. You can drill and install grease zerks on the sleeve ends so grease can be applied into sleeves to seal the Sleeve/ Rod assembly.
- Fill the bin from center opening to manufacturer's specifications.
- If Powerhead and Unload Screw are removed for storage, install the rodent cap on the end of the tube.

Unloading the Bin:

- Insert the Unload Screw/ Powerhead into the tube and secure flanges with bolts or flange clamps.
- Start Unload Screw and listen for obstructions or signs of any problems.
- Control rods are positioned so that the center well must be opened first. Read the instruction decal under the control rods and open the gates in the sequence specified. Failure to follow this sequence could result in severe damage to the bin structure.
- Open gates slowly while the Unload Screw is running at full speed when starting to unload.
- Close the Slide Gates and allow the Unload Screw to run for a few seconds to clean out the Bin Unload Tube before turning off the power.
- Never start and stop Bin Unload Equipment under full load.
- Lock out power to bin and all Unloading Equipment before servicing.
- Locate and install Bin Sweep Pivot Pin in the Center Bin Well.
- Install the Bin Sweep and exit bin. Do not stay in bin while Bin Sweep is running.

!! WARNING !!

Exposed screw conveyors can cause severe injury or death! Lock out all power before entering storage facility.

!! WARNING !!

Exposed belts and chains can cause severe injury or death! Lock out all power before removing guards.

Fax. 507.584.0215

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LIMITED WARRANTY

HAVEN INDUSTRIES, hereinafter is referred to as "Agent". The manufacturers of The Grain Saver® Auger Equipment warrant each Grain Saver® product to be free from defects in material and workmanship for a period of twelve (12) months. The "defects" must be reported to the manufacturer, the "Agent", or to the "Agent's" representatives within the 12 month warranty period commencing on the date of the original sale.

This limited warranty is made expressly in lieu of all other warranties, whether expressed or implied but not limited to, warranties of merchantability and fitness for a particular purpose, and of all other obligations or liabilities on the part of the "Agent". The customer's rights and remedies are governed exclusively by the terms and conditions of this limited manufacturer's warranty, and the customer expressly waives for himself, and any subsequent purchaser, any claim based upon contract, tort, strict liability, or otherwise.

"Manufacturer's" obligation and sole remedy under this warranty is exclusively limited, at "manufacturer's" option, to either repair or replace any part or product found to be "defective" providing that such part or product be returned to the "Agent's" place of business in Dexter, Minnesota, Transportation Charges Prepaid, or to the selling dealer or distributor's place of business from whom the purchase was made. All corrective work on products must be approved in writing by "Agent" prior to such repairs. No allowances will be made for corrective work that has been completed without this expressed approval.

Improper lubrication, improper installation, deterioration by chemical action, and premature wear caused by the presence of abrasive material does not constitute "defects".

This warranty shall not render "Agent" liable for any consequential damages including, and without limitation to; personal injury, expenses of removing the product, loss or damage resulting to the equipment or structure(s) in which the "Manufacturer's" products have been installed, loss of such equipment or structure, loss of commodity, or loss of profits.

This warranty shall be declared null and void immediately if the purchaser or the representative of the purchaser, or anyone else shall modify or install, or cause to be modified or installed replacement parts not sold, distributed, or approved by the "Manufacturer".

This warranty shall not be extended to gearboxes, batteries, drive belts, tires, inner tubes, electrical controls, or any purchased component that carries its own manufacturer's warranty. The warranty on these products shall be limited only to the term of the published warranties on these products.

Manufacturer is not responsible for installation of the product, and is not liable for any loss or damage attributed to any improper installation.

"Agent" neither assumes nor authorizes anyone to assume for "Agent", any liabilities in connection with the sale of its products.

All claims under this limited warranty must be presented in writing within 30 days of the date of assumed failure to: HAVEN INDUSTRIES 67374 310th St. Dexter, Minnesota 55926. Failure to do so will result in customer's claim being waived and not enforced.

This warranty is subject to existing conditions of supply, which may directly affect the ability of the "Manufacturer" to obtain materials or manufactured replacement parts.

Customer agrees to incorporate the terms of this warranty into any subsequent sale or transfer of these products to a third party such that the "Agent's" liability shall be expressed, limited to the terms and conditions of this limited warranty, as well as the choice of law and choice of jurisdiction provisions of this agreement. If any party brings any action against the "Agent", for other than those set forth in this limited warranty against any such claims and/or judgments thereon. In no event shall the "Agent's" liability extend beyond the terms and conditions of the warranty provided to the "Agent's" original customer.

Customer agrees that Customer's rights and responsibilities, in regard to this transaction, shall be governed by the laws of the state of Minnesota and shall be the exclusive jurisdiction for bringing any dispute in regards to this transaction.

Customer acknowledges that he is knowledgeable concerning the goods purchased from the "Agent". Customer has reviewed the limited warranty and that the remedies provided are adequate and acceptable to the customer. "Agent" is not responsible or liable for any claim of personal injury or death.



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