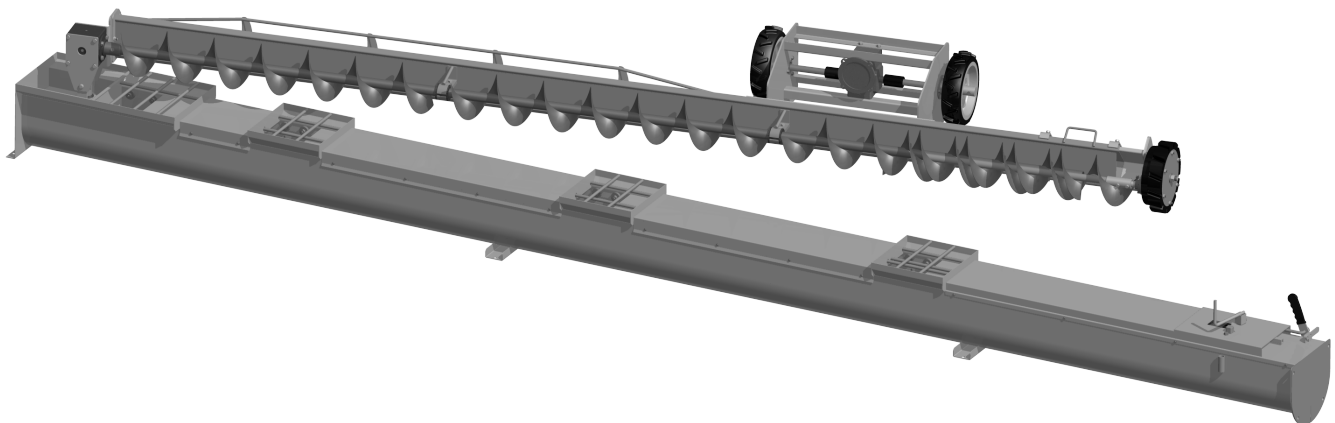




Haven Industries

Power Sweep Installation & Operating Instructions



ASSEMBLY & INSTALLATION INSTRUCTIONS:

Power Sweep Systems



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™ Power Sweep System is completely assembled and is ready for installation in your new concrete foundation, or in your new existing conventional drying, natural air drying or other style aeration / drying system.

To install Power Sweep System in a concrete foundation:

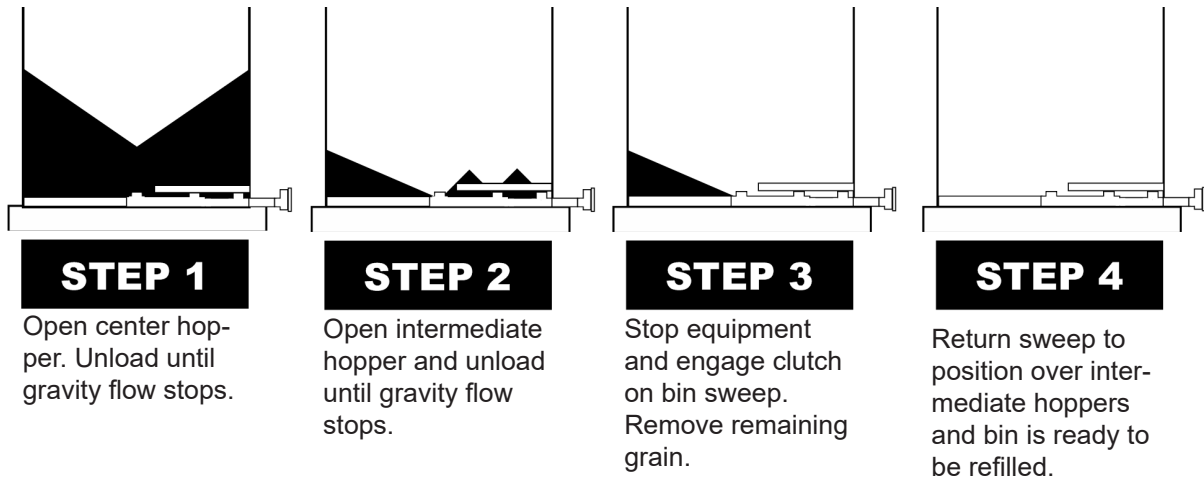
- The Splined Gearbox Sweep output shaft is to be the center of the concrete foundation.
- Set the concrete forms, “stake” the tube in place using the leveling brackets provided on the Center Hopper to prevent “slip” and “float”.
- Check control rod sleeves to be certain that they were not bent in shipping or handling. This could cause difficulty in opening the wells. Straighten if necessary with a pry bar.
- 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.
- Pour the concrete foundations to the bin manufacturer’s specifications and let “cure”.
- Install the sweep assembly with the one bolt “keeper” over the splined shaft.
- Adjust the sweep backboard to the length by loosening the 4 bolts and rotating the wheel so the sweep telescopes in or out to the desired location. Tighten the bolts. Sweep should also be adjusted on both the center and wheel end to ensure proper movement and operation. Make sure the sweep is not touching the bin floor at any point around the bin.
- Install Powerhead drive by inserting powerhead drive screw into unload screw and fasten them with the 2 provided bolts and tighten them. Then tighten the flange clamps on powerhead drive to flange on unload tube or u-trough. Adjust the unload screw on the spline of the center gearbox by loosening the insert bearing on the powerhead and sliding the unload screw and connected powerhead screw in or out so it is connected securely on the spline of the center gearbox. When properly set, There should be approximately 7/8” to 1” of spline showing from the gearbox plate to the unload screw spine.
- Install sweep safety stop on the inside of the bin wall right behind where the sweep will be parked when filling the bin, the sweep should be parked right over the sumps.

To Install Power Sweep System 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 and handle cover as well.
- Align the splined gearbox output shaft with the center of the bin.
- Check control rod sleeves to be certain that they were not bent in shipping or handling. This could cause difficulty in opening the wells. Straighten if necessary with a pry bar.
- 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 center 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 this 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 and attach with bolts or screws. 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.
- Install the sweep assembly with the one bolt “keeper” over the splined shaft.
- Adjust the sweep backboard to the desired length by loosening the 4 bolts and rotating the wheel so the sweep telescopes in or out to the desired length. Tighten the bolts. Sweep should also be adjusted on both the center and wheel end to ensure proper movement and operation. Make sure the sweep is not touching the bin floor at any point around the bin.
- Install Powerhead drive by inserting powerhead drive screw into unload screw and fasten them with the 2 provided bolts and tighten them. Then tighten the flange clamps on powerhead drive to flange on unload tube or u-trough. Adjust the unload screw on the spline of the center gearbox by loosening the insert bearing on the powerhead and sliding the unload screw and connected powerhead screw in or out so it is connected securely on the spline of the center gearbox. When properly set, There should be approximately 7/8” to 1” of spline showing from the gearbox plate to the unload screw spine.
- Install sweep safety stop on the inside of the bin wall right behind where the sweep will be parked when filling the bin, the sweep should be parked right over the sumps.

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

These operating instructions show how easy the 4-Step Grain Saver™ Power Sweep is to operate!



INSTALLATION / OPERATING INSTRUCTIONS:

Filling the bin:

- Lock out power to bin and all equipment before servicing.
- Position Sweep to allow it to rest over the Unload Hoppers.
- Check all rollers and slides for free movement and oil liberally.
- Clean wells of debris and close gates securely.
- Fill the bin from center opening to manufacturer's specifications.
- If Powerhead and Unload Screw are removed for storage, install rodent cap on end of tube.
- If Powerhead is not removed, install supplied aeration cover over discharge spout with wing nuts.

Unloading the bin:

- Insert Unload Screw / Powerhead into tube and secure with bolts or flange clamps. Remove cover on discharge spout.
- Start Powerhead and listen for obstructions or signs of any problems.
- Rack & Pinion gate controls are set so the center well must be opened first. Read the instruction decal under the controls and open the gates in the sequence specified. Failure to follow this sequence could result in severe damage to the bin structure.
- When starting to unload, open gates slowly with auger running at full speed.
- When grain stops flowing to the center well, turn off the power and shift the sweep into gear, then restart the motor. Never attempt to shift the gearbox while power is on. **DO NOT** enter the bin while the sweep is running!
- Leave Intermediate Gate(s) open while sweep is running.
- Never start and stop Unload Equipment under full load.
- Lock out power to bin and all equipment before servicing.

HORSEPOWER REQUIREMENTS POWER SWEEP SYSTEMS

BIN DIA.	8"			10"			GRAIN DEPTH
	HORIZ.	INCL.	VERT.	HORIZ.	INCL.	VERT.	
18'	5.0	7.5	15.0	7.5	10.0	15.0	18
21'	5.0	7.5	10.0	7.5	10.0	15.0	24
24'	5.0	7.5	10.0	7.5	10.0	20.0	31
27'	7.5	7.5	10.0	7.5	10.0	20.0	40
30'	7.5	10.0	15.0	7.5	15.0	20.0	49
33'	7.5	10.0	15.0	10.0	15.0	20.0	61
36'	7.5	10.0	15.0	10.0	15.0	20.0	71
42'	10.0	10.0	15.0	10.0	15.0	20.0	96
48'	10.0	15.0	20.0	15.0	15.0	25.0	126
54'				15.0	20.0	25.0	160
60'				20.0	20.0	30.0	197

!! 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.

LIMITED WARRANTY

HAVEN INDUSTRIES, hereinafter is referred to as "Agent". The manufacturers of The Grain Saver® Auger Equipment warranties 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 it's 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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