

1998 to



***STAINLESS STEEL UNDERTAILGATE  
SPREADERS***

**Parts List  
&  
Service Manual**

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ALL Stainless Steel Undertailgate Spreaders come equipped with a name plate attached to it. The model and serial numbers are stamped on the name plate. Always use the model and serial numbers in all correspondence regarding parts and or operation .

## Safety

**As with any piece of machinery, common sense is the best precaution to minimize the possibility of personal injury or property damage. Although the following is a good outline of proper practices for this piece of equipment, good safe practices must be followed during anything not cover in the general list.**

- ❖ Before operation this piece of equipment the operator must be instructed and warned concerning the proper use of this equipment.
- ❖ This piece of equipment should only be installed by qualified personnel.
- ❖ Read the owners manual completely before operating equipment.
- ❖ Stop the spreader and remove power prior to leaving the vehicle.
- ❖ Check periodically that all guards and covers are in place *operating this unit without all guards and shields in place is dangerous and must never occur.*
- ❖ A running spreader throws material at a high rate of speed, keep all personnel clear of area whenever power is applied to reduce the risk of injury.
- ❖ Always turn power off to units prior to servicing and secure in such a way that only the person(s) servicing the unit can restore power.
- ❖ Before removing or opening any cover or guard, turn power off and secure.
- ❖ Use care when clearing a jammed auger. Lower the dump body to the fully down position. As with any work on auger, turn all power off including the trucks engine. Open the trough bottom, taking care since the bottom will be very heavy due to the added material in the trough. Always keep your hands out of auger area when removing a jam. Using a pry bar, loosen the material which is causing the jam. When the jam is clear, close the trough bottom and test unit to see that it is operating properly.
- ❖ Never enter the dump body when the spreader is operation, as this exposes the person in the body to the auger which can result in serious personal injury.
- ❖ To unload a small quantity of material from the unit, run the auger with the spinner stopped.
- ❖ To unload a larger quantity, lower the body and run the auger until the cover will close. Now dump the remaining material out of the body over the top of the spreader.

## **Spreader Installation**

### **Spreader Chassis Installation:**

The Chassis assembly must be positioned solidly to the rear of the dump body, centered directly below the tailgate opening. Measure the inside width of the chassis assembly, and the outside width of the rear corner posts of the dump body. If the width of the rear post is not equal to the chassis, or there is a gap between the spreader chassis and dump body, there will need to be spacers made (not supplied) to keep the loss of material to a minimum. With the tailgate secured in a horizontal position, mark a line even with the bottom of the tailgate on the rear of the dump body. Raise and secure the gate into the upright position. Transfer the line down 1" to locate the top of the trough. Using a crane and the lift hook holes in the unit, raise the trough up to the second line drawn. Make sure the spreader is flush against the rear of the body. Place suitable supports (a fully assembled unit weighs 550 lbs empty.) under the spreader to lower the risk of injury while installing the unit. Attach rear hinge mounts to rear of sander using supplied pins. Mark hole position on rear posts. Remove hinge plates and drill 17/32 diameter holes where marked. Attach the brackets to the body using 1/2-13 x 1-1/2 long, zinc plated or Stainless Steel, hex head cap screws and nylon locking nuts (not supplied). Attach the support strap to the square hole in the chassis using carriage bolts and lock nuts supplied with the unit. Attach the other end of the support strap to the rear post of the body using hardware provided.

### **Side Wings:**

Bolt the side wings to the inside of the dump body tailgate using proper hardware. Leave 1/8" clearance on the sides and 1/2" clear to the floor. You may need to trim wings to fit your tailgate height.

### **Spinner Assembly:**

Assemble Spinner per 700-50E. Lift assembly into position and attach with pin and hairpin cotters to spreader chassis.

### **Spinner Level Brace:**

Bolt the two bars together at using the holes provided. Now level the spinner assembly. Find a location which both bars will touch the spinner arm and the truck frame. Drill a hole in the long bar and the truck frame, and attach with a 1/2" bolt. To complete the installation, weld the short stainless tab to the spinner arm assembly.

## Hydraulics

### Installation of hydraulics:

Any hydraulic hoses, valves, filters and the like are installed at our distributor. Any questions regarding the operation of the hydraulics or replacement part numbers should be directed to the distributor where this units was installed.

Attach supply and return hoses to the spinner motor and secure to spinner arm with the provided hose clamp P/N 700-23. Attach supply and return hoses to the auger motor.

### Input Requirements:

The hydraulic motors may require a combined minimum of 23 GPM input of oil. Note that if you can not achieve full width at high auger speeds due to your spinner slowing down, then verify you are getting a full 23 GPM from your system.

### Oil Selection:

Select a clean, premium quality industrial, anti-wear oil with a viscosity between 100-200 SSU at operation temperature. Premium oils with viscosity indexes of 95 or above will provide the following temperature ranges:

Industry Identification Viscosity Grade	Operating Temperature	Viscosity
150 SSU	122° F	100 SSU
	84° F	200 SSU
225 SSU	140° F	100 SSU
	107° F	200 SSU
300 SSU	150° F	100 SSU
	116° F	200 SSU
450 SSU	165° F	100 SSU
	130° F	200 SSU
600 SSU	182° F	100 SSU
	145° F	200 SSU

Hydraulic oil filter should be changed after first 50 hours of use. Under normal conditions, the filter should be changed every 200 hours or per the hydraulic unit manufacturer's recommendations.

## Preventive and off season maintenance

### *Preventive Maintenance:*

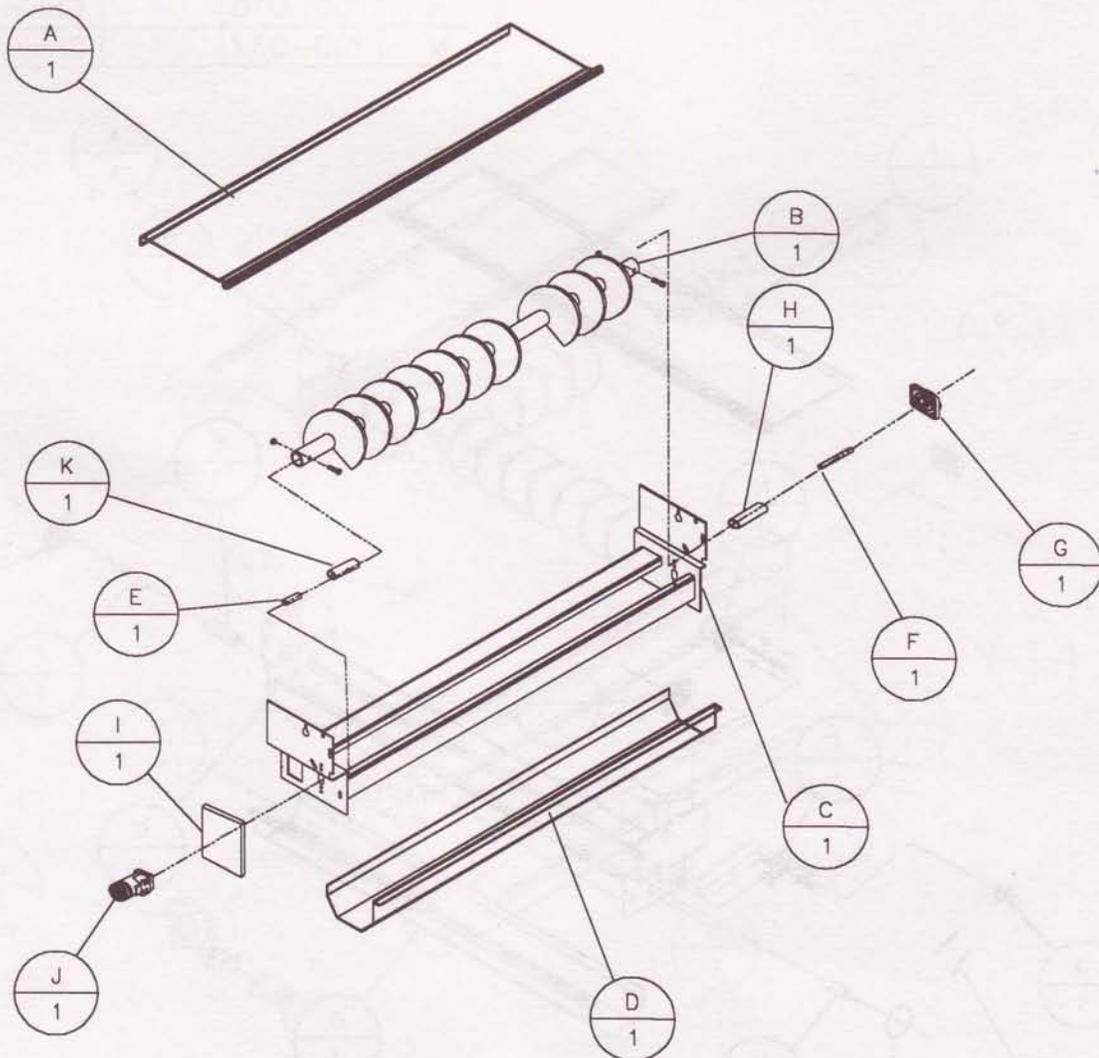
1. Bearings should be greased on a regular basis. A high quality grease with an operating range of -30° F to 250° F should be used. Prior to greasing, wipe the grease fitting area clean of dirt or other contaminants. Just enough grease should be pumped in to just show a little grease out of seal.
2. Gearbox units should be checked for level at regular intervals, or whenever leakage is suspected. Fill the gearbox no higher than the bottom of the fill plug.
3. After first 20 hours of operation, check torque on all fasteners, as some loosening is possible during initial use.

### *Off season storage:*

1. Plug any open hydraulic ports or lines.
2. Change the oil in gearbox if so equipped.
3. Grease all bearings per normal.
4. Wash the trough area out completely.
5. Remove the spinner assembly and clean thoroughly.

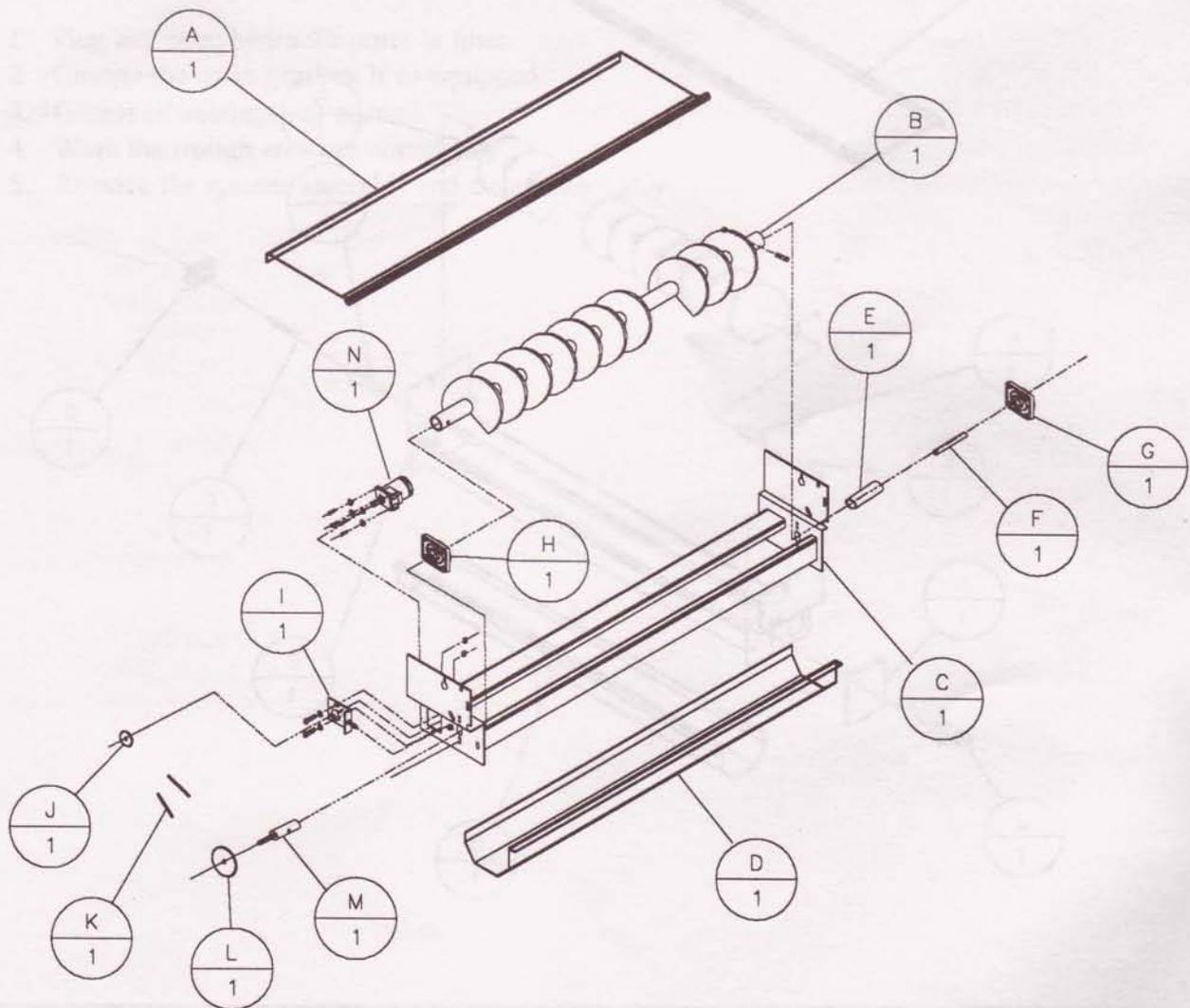
# Direct Drive Assembly

A	700-007	1	Top Cover
B	700-026	1	Auger
C	700-059	1	Chasis Weldment
D	700-004	1	Trough Bottom
E	700-040	1	Mod Shaft Coupling
F	700-002	1	Idler Shaft
G	300-069	1	2-Bolt Bearing
H	700-001	1	Auger Spacer
I	700-018	1	Drive Adapter
J	700-035	1	D.D. Motor
K	700-041	1	Spacer, Drive



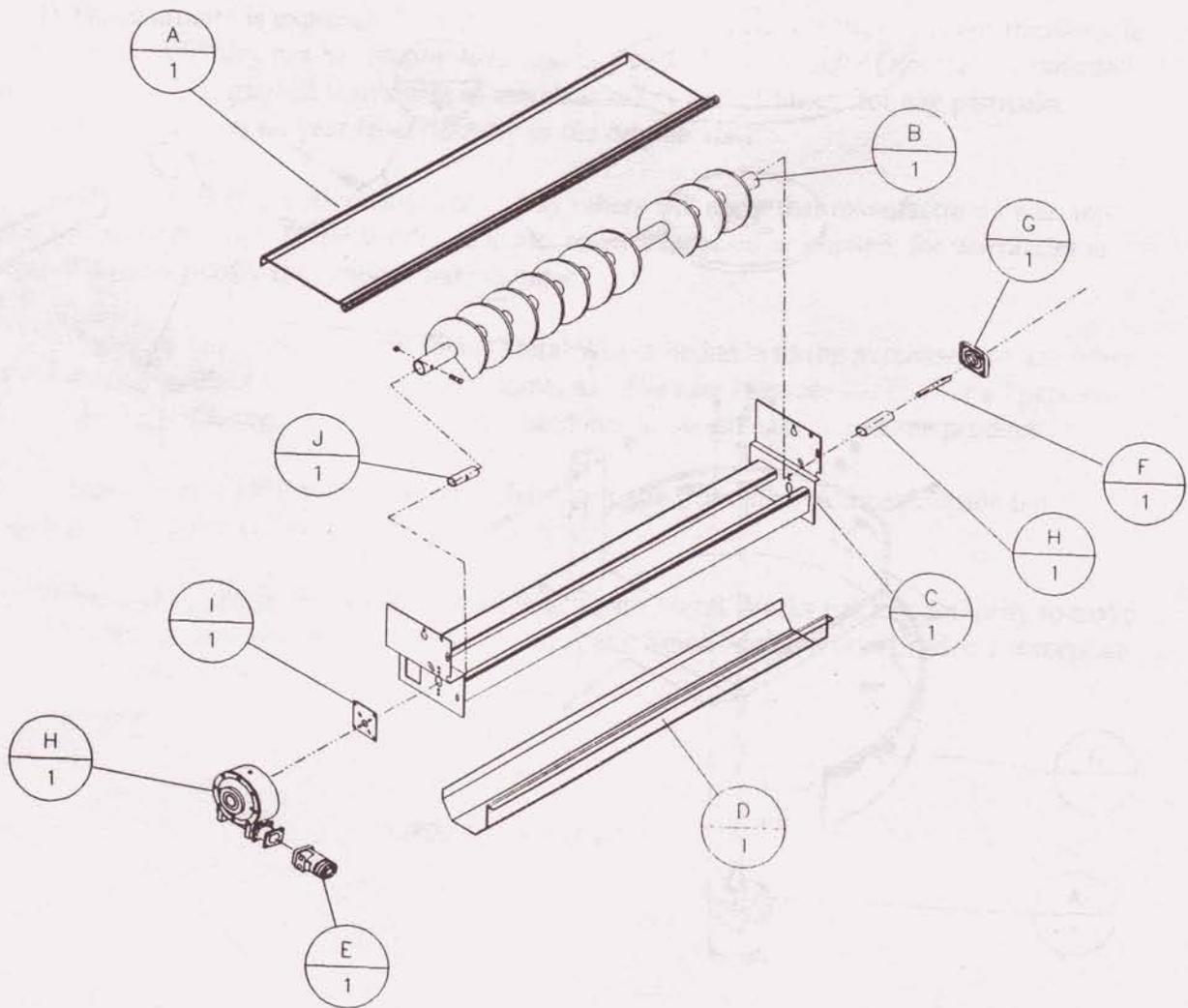
# Chain Drive Assembly

Seq.	P/N	Qty	Description
A	700-007	1	Top Cover
B	700-026	1	Auger
C	700-059	1	Chasis Weldment
D	700-004	1	Tough Bottom
E	700-001	1	Auger Spacer
F	700-002	1	Idler Shaft
G	300-069	1	2-Bolt Bearing
H	700-044	1	4-Bolt Bearing
I	700-019	1	Chain Adapter Plate
J	700-045	1	11 Tooth Sprocket
K	700-047	1	Drive Chain
L	700-046	1	40 Tooth Sprocket
M	700-010	1	Chain Drive Shft
N	700-037	1	Chain Drive Motor



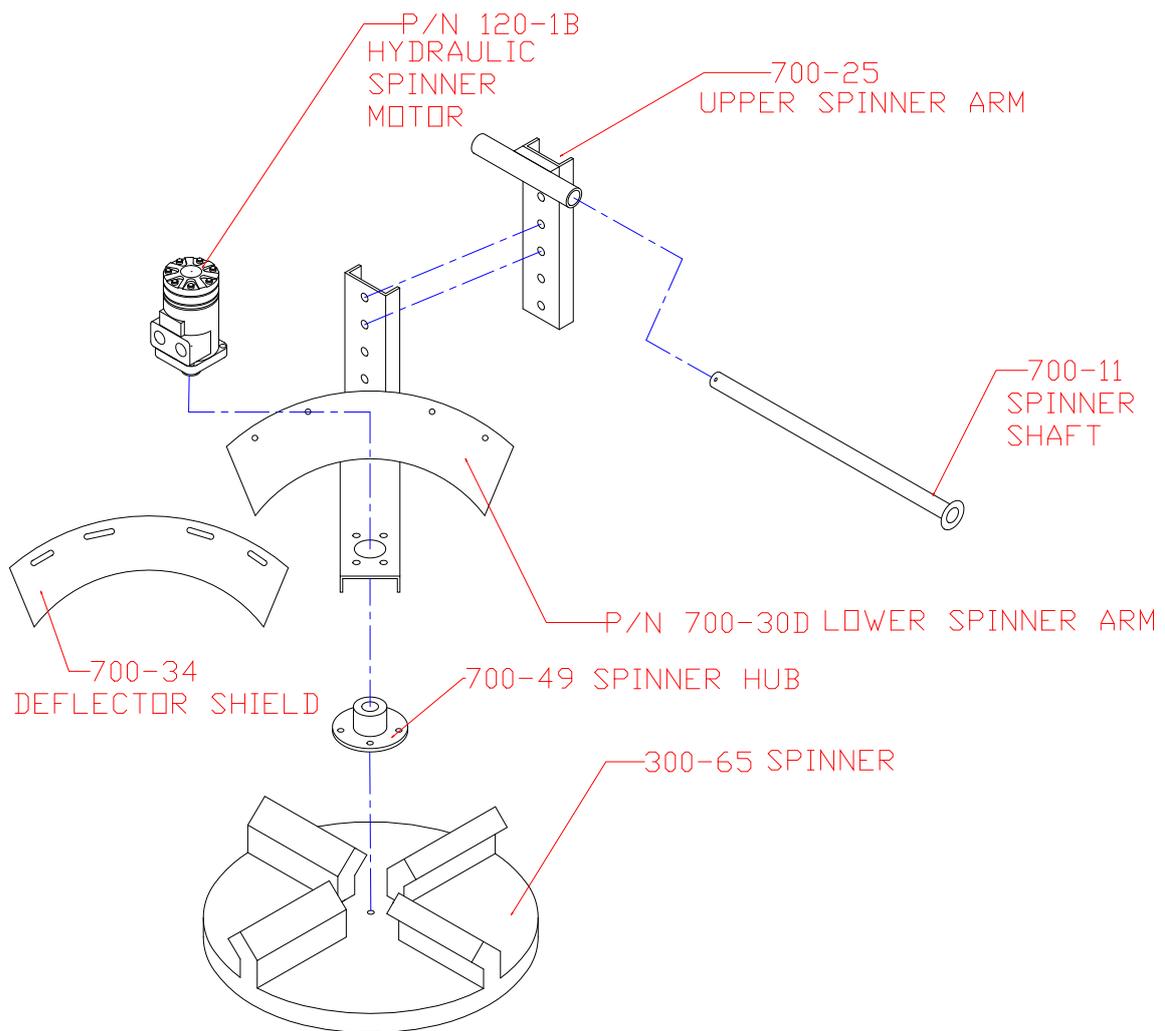
# Gearbox Drive Assembly

A	700-007	1	Top Cover
B	700-026	1	Auger
C	700-059	1	Chassis Weldment
D	700-004	1	Trough Bottom
E	700-038	1	Hyd. Motor 1002
F	700-002	1	Idler Shaft
G	300-069	1	Idler Bearing
H	700-048	1	Gearbox 5:1
I	700-018	1	Drive Adapter
J	700-041	1	Spacer, Drive



# Spinner Subassembly

Seq.	P/N	Qty	Description
	120-1B	1	Spinner Motor
	300-65	1	Poly Spinner
	700-30	1	Spinner Arm
	700-34	1	Deflector Shield
	700-49	1	Spinner Hub
	700-25	1	Upper Spinner
	700-11	1	Spinner Shaft



## COMPLETE WARRANTY PROVISIONS

### A. PARTS REPLACEMENT AND REPAIR:

Smith Metal Works warrants its manufactured products to be free from defects in material or workmanship for a period of 1 (one) year from time of purchase. This warranty is limited to the repair or replacement of products failing under normal use and operation of equipment. Prior authorization must be obtained for all warranty claims. **You must call and receive a Warranty Authorization Number.** All replacement parts will be billed to your account. The defective part(s) and a copy of the original paid invoice or bill of sale must be returned to the factory before credit will be given to your account for such. All labor charges will be credited at a pre-determined amount.

### B. EXCLUSIONS:

1) This warranty is expressly limited to parts replacement and repair, and is not transferable. Any expressed warranty not herein provided, and any remedy for breach of contract is excluded and disclaimed. The implied warranties of merchantability and of fitness for any particular purpose are limited to one year from delivery to the original user.

2) Any component or part manufactured by others will carry that manufacturer's warranty, and in no case will Smith Metal Works be liable, either expressed or implied, for warranties in excess of those made by the original manufacturer.

3) Under no circumstances will Smith Metal Works be liable to the purchaser, or any other person, for any incidental or consequential damages. The user assumes liability for all personal injury or property damage resulting from the handling, possession, or use of the product.

4) Repairs or modifications done by others, or parts from other sources outside the company's factory are not covered by this warranty.

5) No agent, employee, or representative of Smith Metal Works has any authority to make any affirmation, representation, or warranty concerning Smith Metal Works products, except as specifically stated above.