



# Sweepway®

**Bin Unloading Power Sweep**

## **Owner's Installation & Operation Manual**

**Sukup Manufacturing Co.**

**1555 255th Street, Box 677**

**Sheffield, Iowa, USA 50475-0677**

**Phone: 641-892-4222**

**Fax: 641-892-4629**

**Website: [www.sukup.com](http://www.sukup.com)**

**E-mail: [info@sukup.com](mailto:info@sukup.com)**

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## Safety



Read manual before installing or using product. Failure to follow instructions and safety precautions in manual can result in death or serious injury. Keep manual in a safe location for future reference.



On safety decals, this symbol and the signal words Danger, Warning, Caution and Notice draw your attention to important instructions regarding safety.

They indicate potential hazards and levels of intensity.



**RED - DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



**ORANGE - WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



**YELLOW - CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



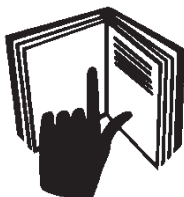
**BLUE - NOTICE** alerts you to practices unrelated to personal injury, such as messages related to property damage.

**IMPORTANT:** To prevent serious injury or death to you or your family, it is essential that safety decals are clearly visible, in good condition, and applied to the appropriate equipment.

### FOLLOW MANUAL & SAFETY DECAL MESSAGES

Carefully read this manual and all safety decals on your equipment. Safety decals must be kept in good condition. Replace missing or damaged safety decals by contacting Sukup

Manufacturing Co. via mail at PO Box 677, Sheffield, Iowa USA, 50475; by phone at 641-892-4222; or by e-mail at [info@sukup.com](mailto:info@sukup.com).



It is the responsibility of the owner/operator to know what specific requirements, precautions, and work hazards exist. It is also the responsibility of the owner/operator to inform anyone operating or working in the area of this equipment of hazards and safety precautions that need to be taken to avoid personal injury or death. Always keep children away from bins and vehicles with flowing grain.

Make no unauthorized modifications to machine. Modifications may endanger function and/or safety of unit. Keep unit in good working condition. Keep shields in place. Replace worn or missing shields free of charge by contacting Sukup Manufacturing Co.

### GRAIN BIN SAFETY

Owners/operators are responsible for developing site-specific confined space entry procedures. OSHA's confined space entry procedures (29CFR 1910.146) can be found at [www.osha.gov](http://www.osha.gov).

#### If you must enter bin for repair or maintenance:

- Use a safety harness, safety line and respirator
- Station another person outside of bin
- Avoid the center of the bin
- Wear appropriate personal protective equipment
- Keep clear of all augers and moving parts



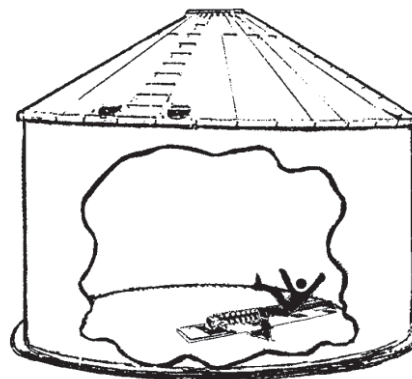
**DANGER:** Never enter bin unless all power is locked out and another person is present.



**Rotating augers can kill or dismember!**

#### NEVER enter bin when augers are running!

When bin is nearly empty, sweep auger will travel at an increasingly fast speed. Keep away from sweep and sump augers to avoid entanglement.



Failure to follow precautions above will result in death or serious injury.



**DANGER:** Flowing grain may trap and suffocate. If you enter a bin of flowing grain you can be completely submerged in grain in about 8 seconds.

Failure to heed this warning will result in death or serious injury.



## Safety

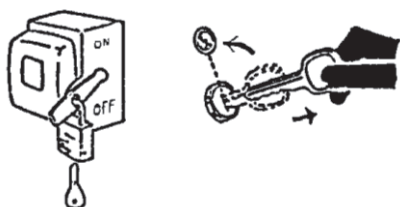
To avoid electric shock or electrocution, all equipment must be properly wired and grounded according to electrical codes. Have unit wired by qualified electrician.



Have an electrician install a main power disconnect switch capable of being locked only in OFF position. Mark disconnect clearly as to equipment it operates.

Always lock out main power disconnect switch whenever equipment is not in use.

### Service Disconnect



**WARNING:** When servicing equipment, never enter bin unless all power is locked out and another person is present. Always LOCK OUT all power and always check with voltage meter before servicing.

Failure to do so could result in death or serious injury.

Owners/operators are responsible for developing site-specific Lockout/Tagout procedures based on equipment at their work site. See OSHA's typical minimal lockout procedures (29CFR 1910.147 App A) at [www.osha.gov](http://www.osha.gov).



### WARNING: KEEP CLEAR OF ALL MOVING PARTS.

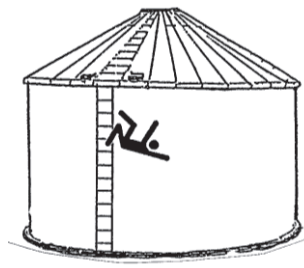
Keep people (ESPECIALLY YOUTH) away from equipment, particularly during operation.

Keep away from all moving parts. Keep all shields in place. **SHUT OFF AND LOCK OUT** all power before servicing.

Failure to follow precautions above could result in death or serious injury.



**WARNING:** Metal is slippery when wet. To avoid falls, never carry items if climbing on bin. Maintain secure hand and foothold if climbing on bin. Failure to do so could result in death or serious injury.



**CAUTION:** Metal edges are sharp. To avoid injury, wear protective clothing and handle equipment and parts with care.

Failure to do so may result in minor or moderate injury.

## PERSONAL PROTECTIVE EQUIPMENT



Owners/Operators are responsible for developing site-specific personal protective equipment standards. OSHA's personal protective equipment standards (29CFR 1910.132) can be found at [www.osha.gov](http://www.osha.gov).

## EMERGENCIES – KNOW WHAT TO DO

Have emergency numbers and written directions to work site readily available in case of emergency. An area for emergency phone numbers to be recorded is provided below and at end of this manual.

### Ambulance • Fire • Police: 9-1-1

Bin rescue team: \_\_\_\_\_

Emergency medical squad: \_\_\_\_\_

Address of work site: \_\_\_\_\_

Directions to work site: \_\_\_\_\_

## Safety Decals for Sweepway

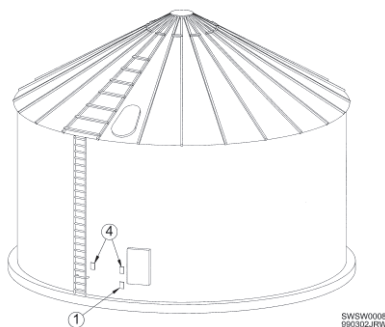
Safety decals should be mounted on your equipment as shown in this safety section. Yearly and prior to equipment use, check that all decals and shields are in place and legible.

To order a replacement decal or shield at no charge, contact your dealer or Sukup Manufacturing Co., Box 677, Sheffield, IA USA 50475. If replacement is necessary, make sure location for decal is free from grease, oil and dirt. Remove backing from decal and place in proper position.

Decals 1-5 are factory-mounted. Additional copies of decals 1 and 4 are shipped with this manual in separate packet #A3399 and have mounting instructions inside packet.

**IMPORTANT:** If suggested locations are not clearly visible, place safety decals in a more suitable area. Never cover up any existing safety decals.

1. **DECAL L0281 – WARNING:** To avoid serious injury or death. **Mount this decal** on bin sheet near door handle.



2. **DECAL L0271 - DANGER:** Shield missing. Do not operate!



3. **DECAL L0284 – WARNING:** Keep away from all moving parts.



4. **DECAL L0258A – DANGER:** Do not enter this bin! Keep clear of all augers. **Mount this decal** on bin sheet near door handle and near ladder leading to roof.



5. **DECAL L03061 – DANGER:** Keep away when auger is running!

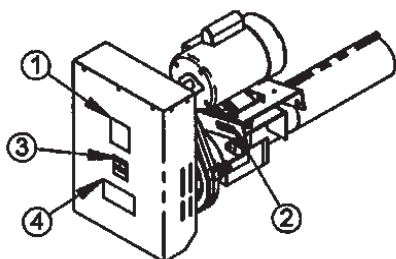


6. **DECAL L0328 – Sweepway Operation.** Mount this decal on bin sidewall near sump openers.



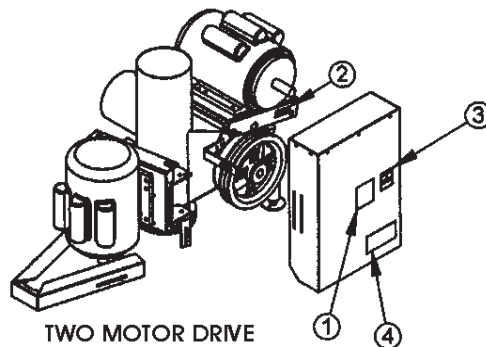
## Safety Decals Placement for Sweepway

### HORIZONTAL

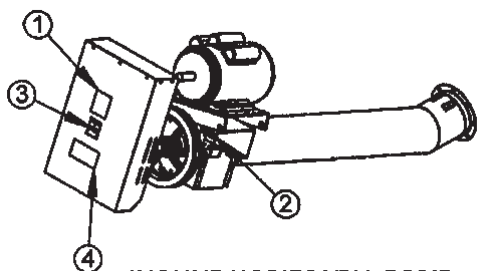


STANDARD ONE MOTOR DRIVE

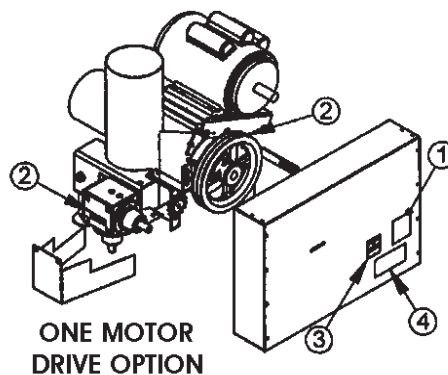
### VERTICAL BOOT



TWO MOTOR DRIVE  
(STANDARD)

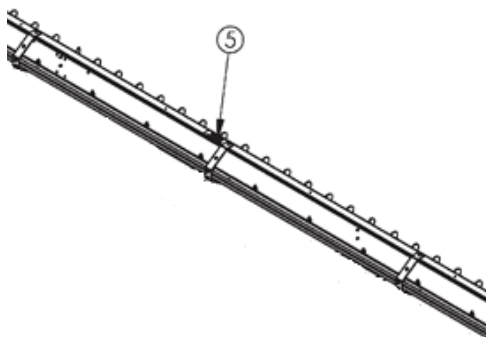


INCLINE HORIZONTAL DRIVE



ONE MOTOR  
DRIVE OPTION

### SWEEP BACKBOARD



## OPERATING INSTRUCTIONS

**IMPORTANT:** This sweep is designed for single-stage sweeping only. Verify that bin is designed for single-stage sweeping.

Standard Sukup grain bins are designed with anchors that allow sweeping of entire diameter of bin in one stage. However, older Sukup bins 72' dia. and larger that do not have two anchors per stiffener should be swept in multiple stages beginning with inner section of floor, and then outer section after sweep extension is added. Additional anchor brackets can be purchased from Sukup Manufacturing Co. and retrofitted to enable single-stage sweeping.

For single-stage sweeping of Sukup bins 54' to 105' in diameter, bin must have 1" Grade 5 anchor bolts (17" deep for "Inverted T" foundation, or deep into stemwall ring rebar zone for "T-Cap"), with a minimum of 7-1/2" from anchor to outside edge of stemwall. Check bin anchor specifications prior to using sweep.

Bins by other manufacturers that are 60' dia. or less may be swept in one stage provided anchors have been inspected and found suitable for single-stage sweeping. (Contact bin manufacturer for further information). For larger bins by others, sweep in multiple stages: Use only inner section of sweep on first pass, making one revolution around bin, then connect outer section and sweep remainder of bin.



**DANGER: KEEP AWAY when auger is running. Entanglement with rotating auger will cause death or serious injury.**

**NOTICE:** If bin is equipped with a Cluster Buster, ensure neither rod nor cable is in torsion bar. If bin is equipped with a sidedraw, do not use at same time sumps are being used to unload grain.

1. Start horizontal (and vertical if applicable) unload auger(s). Open center sump. Unload grain from center sump until gravity flow stops.
2. Open intermediate sumps, allowing additional gravity flow into unloading auger. If bin has an independent intermediate sump, open it by pulling rod shown in Fig. 31.

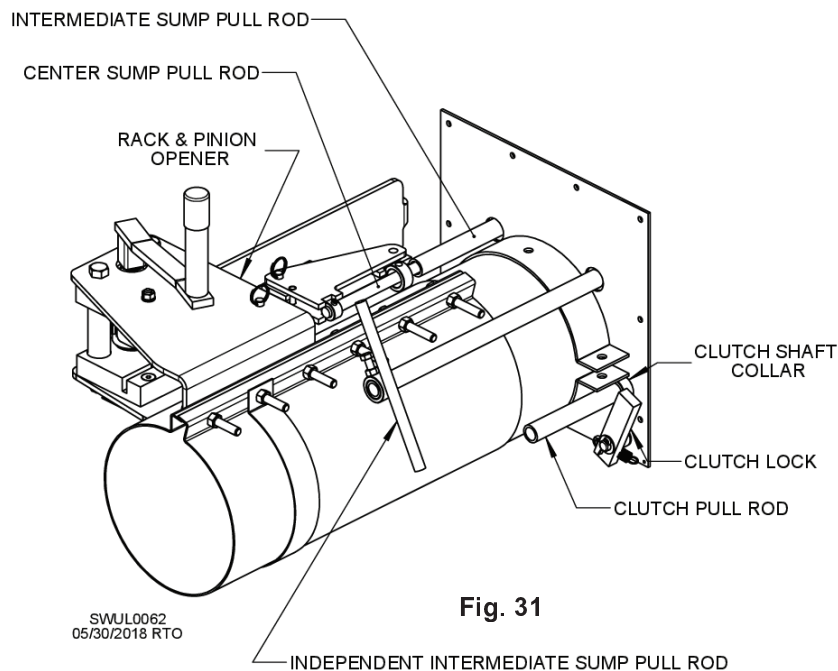


Fig. 31

3. When grain flow stops, shut off power to system. Engage sweep auger by pulling clutch rod.  
**NOTICE:** Power must be shut off before engaging sweep auger to prevent damage to clutch assembly.

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## Operation

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4. Turn on power. Center sump slide gate must remain **FULLY** open and sweep stop must be deployed while sweep auger is operating. Remove remaining grain, making sure to reposition stop before each revolution. **NOTICE:** Leave bottom panel of inner bin door closed when running sweep to avoid possible damage to sweep wheel and/or door.



**DANGER: When bin is nearly empty, sweep auger will travel at an increasingly fast speed. Keep away from auger to avoid entanglement, which will result in death or serious injury.**

5. Close sumps and place sweep just behind intermediate sumps.

**NOTE:** If a slower flow of grain is desired, (e.g., grinding) a larger driven pulley (12" comes standard) should be used on unload auger. (14" pulley available from Sukup Manufacturing Co.)