

SAFETY SECTION



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.

NOTICE

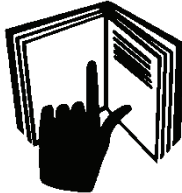
BLUE - NOTICE alerts you to practices unrelated to personal injury, such as messages related to property damage.

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.



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.

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



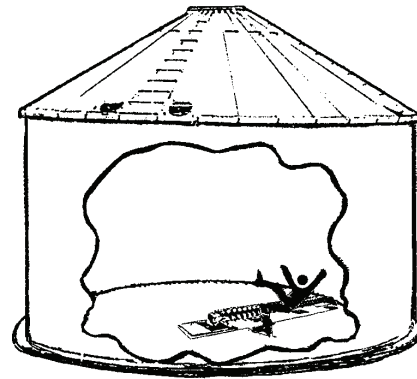
DANGER: Never enter bin unless all power is locked out and another person is present.



Rotating augers can kill or dismember!

NEVER enter bin when augers are running!

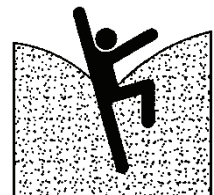
When bin is nearly empty, sweep auger will travel at an increasingly fast speed. Keep away from sweep and sump augers to avoid entanglement.



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.



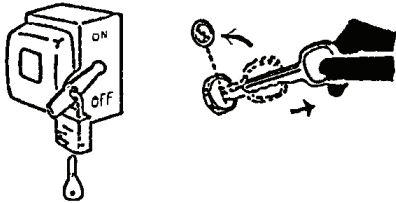
Failure to heed this warning will result in death or serious injury.

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.

WARNING: KEEP CLEAR OF ALL MOVING PARTS.

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

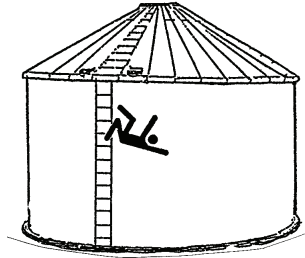
Keep away from all moving parts. Keep all shields in place. **SHUT OFF AND LOCK OUT** all power before servicing.



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.

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: _____



WARNING: KEEP RIDERS OFF UNIT

Riding on any agricultural equipment is very dangerous. People can be killed or seriously injured when accidentally falling off of unit, or by thrown objects.

TRANSPORT SAFETY WARNING: Transporting this equipment on public roads may result in death or serious injury. If road travel is required it is essential that all of the following procedures be followed:

- Read and understand operator's manual.
- Check and comply with state and local regulations.
- Be sure transport vehicle has slow moving vehicle emblem and that all required warning lights are in working order.
- Use warning lights during transportation.
- Use required warning flags, emblems or lights.
- Check that red reflectors are on back of unit (at outer edges) and are clearly visible.
- Check that amber reflectors are on front of unit (at outer edges) and are clearly visible.

- Travel at a safe speed. Reduce speed and/or use lower gear on rough ground or slopes.
- Transport unit in its narrowest configuration. Wings (ramps) must be completely folded.
- Stop slowly.
- Have extended rear angle mirrors on vehicles.
- Use safety chain provided.
- Check for other vehicles when turning (2/3 of farm accidents on roads occur when turning). Use mirrors and signal lights.



WARNING: Do not transport unit in areas of poor visibility, especially on hills, during poor weather and/or at night.

Failure to observe these precautions may cause death or serious injury.

Use good judgment when transporting. Maintain complete control of machine at all times. Comply with state and local laws. Read safety regulations before moving machinery. Always strive to prevent accidents. Watch out for other vehicles.

DRIVE OVER HOPPER SAFETY DECALS

Safety decals should be mounted on equipment as shown below. 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.

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

1. Red reflector tape - **L0277**
2. Amber reflector tape - **L0276**
3. Orange reflector tape - **L02765**



4. **WARNING - L0284** - Keep away from moving parts.



5. **DANGER - L0256** - Keep everyone clear of machinery when folding or unfolding ramps.



6. **WARNING - L0273** - Escaping fluid can cause harm.



7. **WARNING - L0274** - No Riders! To prevent serious injury or death - Keep Off Unit.



REFLECTOR TAPE PLACEMENT



8. **CAUTION - L0285** - Not intended for use on public roads.



9. **WARNING - L0522** - Be sure all safety locks are in place before transporting.



10. **WARNING - L0281** - To avoid serious injury or death: Read manual, keep shields in place, keep clear of moving parts, etc.



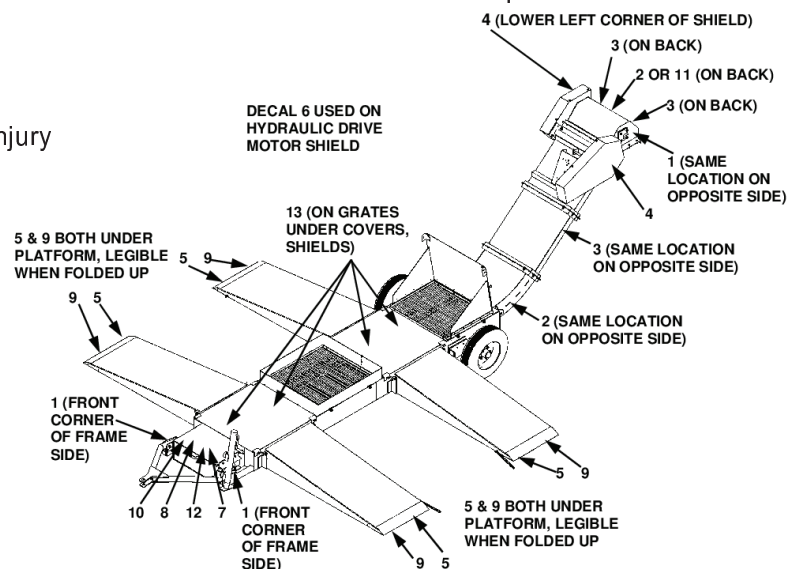
11. Slow-Moving Vehicle sign - **J2250**. Use whenever hopper is being towed.



12. **WARNING - L0512** Use safety chain when towing. See page 16 for Safety Chain, J1799



13. **DANGER - L0271** - Shield Missing - Do Not Operate!



Setup

Follow these steps to set up Drive-Over Hopper for operation

1. Take off outer belt shield by removing four 5/16" screws.
2. Mount electric motor on motor mount in appropriate holes. See Image 1. If using hydraulic drive option, also remove inner belt shield. Follow instructions included with hydraulic drive kit and on page 20 of this manual.
3. Install pulleys and bushings on motor and jackshaft. Install 15-3/4" pulley on jackshaft. Install smaller pulley (size varies with pulley kit) on motor shaft. Torque tapered bushings to their appropriate torque. See bushing instruction sheet or torque value sheet in this manual, making sure pulleys are aligned.
4. Tension belts to 1/4" deflection under 10 lbs. pressure per belt using turnbuckle tensioner. Lock turnbuckle in place by tightening 1/2" jam nut. See Image 1.



Image 1 – Motor mount

5. Install outer belt shield and attaching screws.
6. Remove outer chain shield and check tightness of drive chain. Chain should be taut, but not overly tight. Re-install chain shield.
7. Check for any foreign objects in hopper that may cause damage to unit.
8. Run hopper and check for smooth operation.
9. Drag chain is tensioned on idler (bottom) end of hopper. To adjust hopper, loosen jam nuts and adjust each side evenly. See Image 2.



Image 2 – Drag chain take-up



WARNING: Do not adjust drag chain when hopper is running. Always disconnect power source before servicing any part of hopper. Failure to do so could result in accidental activation resulting in death or serious injury.

NOTICE: Drag chain will make excessive noise if it is too tight. Some noise when running empty is normal.

Operation Preparation

1. Position Drive-Over Hopper so it is on level ground. **NOTICE:** Ensure main body and ramps are adequately supported. Driving excessive weight over hopper on uneven ground may bend hopper or ramps.



Image 3 – Hopper on level ground

2. Raise each side of hopper with jack and remove transport wheels. Use jack stubs near wheels. See Image 4.

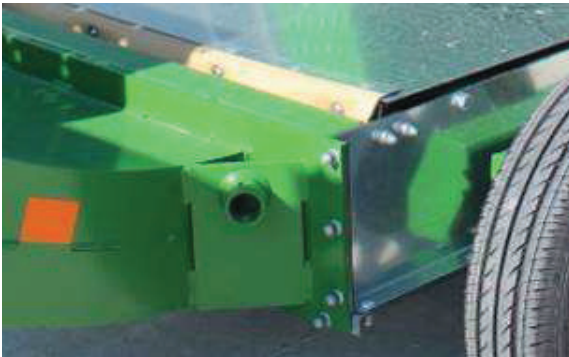


Image 4 – Jack stub



Image 5 – Attached ramp

3. If using for first time, attach ramps to spring arms and hinges shown in Images 3 and 5. Spring arms will go through holes in bottom of ramp sections. If using after hauling from another site, remove ramp lock-up chains and unfold.
4. Unfold side dump splashguard if using side dump gravity boxes. See Image 6.

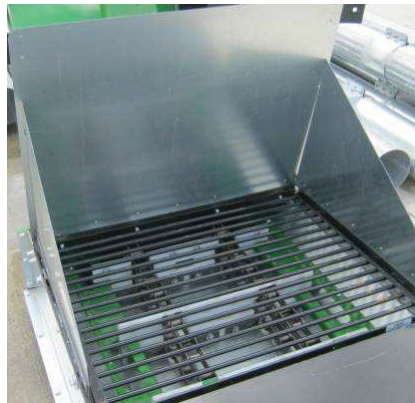


Image 6 – Side dump

5. On units with an extension, install jack on extension support mount and raise jack to support powerhead. If jack cannot be used due to limited space, some other means must be used to support powerhead.
6. Connect unit to power supply.

Operation

- After positioning truck or wagon, turn on drive-over hopper motor and slowly open grain discharge of transport vehicle.
- Monitor grain flow into hopper to ensure it is not overloaded. Tops of paddles should be visible as grain is moved up throat of hopper.
- If grain appears to “bubble,” or back up into inlet, decrease flow of grain into hopper until flow levels off.

IMPORTANT: DO NOT flood-feed drive-over hopper. It must be control-fed.

Transport

To set hopper in transport position, follow Operation Preparation steps in reverse order.

Tongue can be used in high or low position, depending on drawbar height. In high position, front pin in tongue (closest to drawbar) should go through hole in tongue weldment. In low position, pin should go over top of tongue weldment.

Drive-Over Hopper is **not** intended for use on public roads. Do not tow equipment that does not have brakes at speeds over 20 mph or, when fully loaded, that weighs more than 3,300 pounds and weighs more than 1.5 times weight of towing unit. Safety chain is provided.

Maintenance

- After first four hours of operation, check tightness of all fasteners. See Torque Values sheet on page 10.
- Check belt, drag chain and drive chain tension and re-adjust if necessary. Belts should be inspected daily for tension, cracks and signs of failure.
- Grease bearings on driveshaft, jackshaft, and idler shaft every 40-50 hours of operation.
- Oil drive chain every 40-50 hours.
- Drag chain does not need to be lubricated.

End-of-Season Storage

- Clean Drive-Over Hopper inside and out. Trash and dirt will draw moisture and cause rust.
- Thoroughly lubricate machine according to Maintenance Section above.
- Paint all parts from which paint has been worn, particularly inside of hopper.

Be sure Drive-Over Hopper does not fill up with water that will rust bottom of hopper and drag chain. Store hopper in a dry place or leave transport tires on and lower tongue to ground to let water drain.