

INSTALLATION AND OPERATING INSTRUCTION MANUAL

SBD-9 TAILGATE SPREADER

DIRECT DRIVE 9" AUGER SPREADER
WITH DUAL DROPOUTS FOR
ICE & SNOW CONTROL, AND BERM FILLING

INCLUDED IN THIS MANUAL:

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SAFETY PRECAUTIONS

The best safety device is a careful operator!



This symbol means ATTENTION!
Become Alert!
Your safety is involved!
Please read and understand completely before
operating!



Improper use of this equipment can result in serious injury. To reduce this possibility, give complete and undivided attention to the job at hand, and follow these safety precautions.

Preparation

Know your controls. Read this instruction manual. Learn how to stop the equipment quickly in an emergency.

Do not allow children to operate machine; nor adults to operate it without proper instructions.

Keep all individuals not involved in the use of the equipment a safe distance away.

Operation

Observe and shut off all equipment controls before starting engine so equipment will not unintentionally operate when engine is started.

Always check area around machine before engaging or operating controls.

Always wear relatively tight and belted clothing when operating equipment. Loose jackets, shirts, sleeves or other loose clothing should not be worn because of the danger of catching them in moving parts or controls.

Stop and inspect equipment if unusual movement, sounds or noises are observed. Repair damage before restarting and operating the equipment.

Disengage power to all operating equipment: (1) before leaving operator's position, (2) before making any repairs, adjustments, or cleaning, or (3) when not in use.

Take all possible precautions when leaving the equipment unattended; such as disengaging the hydraulic system from the vehicle engine, shifting vehicle out of gear, setting parking brake, shutting off engine and removing key.

NOTICE:


It is the responsibility of the owner of this spreader to replace any or all safety decals which become unreadable or otherwise defaced, and to apply the new decals to the spreader in a secure manner in the same location as the old decals.

Read and observe all **"DANGER"** and **"CAUTION"** safety decals appearing on equipment.

The following safety decals appear in various locations on your equipment. The sizes of the decals shown in this manual have been reduced in order to save space. Refer to page 4 for location and size of safety decals on your equipment.

NOTICE!

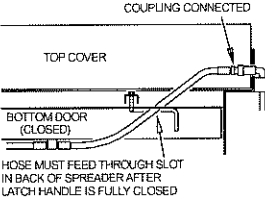
Your spreader is equipped with a safety interlock device. This device must be disconnected before the spreader trough bottom door and the spreader trough top cover can be opened exposing the auger. This device positively disconnects all hydraulic power from the auger drive motor to prevent accidental bodily injury due to contact with a turning auger.



DANGER

SERIOUS PERSONAL INJURY OR DEATH CAN RESULT
IF THE SAFETY INTERLOCK DEVICE - AS INSTALLED ON THIS SPREADER:

- IS ALTERED IN ANY WAY FROM ITS ORIGINAL INTENT AS SHOWN
- IS NOT MAINTAINED SO AS TO OPERATE ACCORDING TO ITS ORIGINAL INTENT AS SHOWN



COUPLING CONNECTED

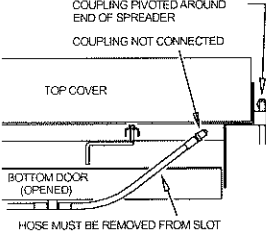
TOP COVER

BOTTOM DOOR (CLOSED)

HOSE MUST FEED THROUGH SLOT IN BACK OF SPREADER AFTER LATCH HANDLE IS FULLY CLOSED

SPREADER WILL OPERATE

TOP COVER CANNOT BE OPENED REARWARD
AND BOTTOM DOOR CANNOT BE OPENED
EXPOSING AUGER.



COUPLING PIVOTED AROUND
END OF SPREADER

COUPLING NOT CONNECTED

TOP COVER

BOTTOM DOOR (OPENED)

HOSE MUST BE REMOVED FROM SLOT
SO LATCH HANDLE CAN BE OPENED

SPREADER WILL NOT OPERATE

TOP COVER AND BOTTOM DOOR CAN BE OPENED

IF DEFACED - ORDER PART NO. 04049 283 00

This decal appears on the back of the spreader cover plate at the right end of the spreader. It alerts all to the danger associated with the improper use of the Safety Interlock Device.





CAUTION

1. KEEP ALL SHIELDS IN PLACE.
2. MAKE CERTAIN EVERYONE IS CLEAR BEFORE STARTING MACHINE OR MOVING VEHICLE.
3. KEEP HANDS, FEET, AND CLOTHING AWAY FROM ALL POWER DRIVEN PARTS.
4. DISENGAGE PTO, SHUT OFF HYDRAULIC VALVE, AND SET PARKING BRAKE BEFORE LEAVING OPERATORS POSITION. MAKE SURE ALL MOVEMENT HAS STOPPED BEFORE SERVICING, UNCLOGGING, OR CLEANING MACHINE.
5. USE FLASHING LIGHTS WHEN OPERATING MACHINE.
6. MAKE SURE MACHINE IS SOLIDLY SUPPORTED WHEN IT IS BEING MOUNTED, DISMOUNTED, OR STORED.

IF DEFACED - ORDER PART NO. 04049 045 00

This decal appears on the left end, or the right end of the spreader trough. It cautions all to observe general safety procedures when operating this equipment.



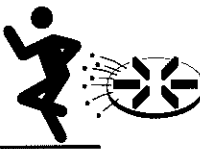



DANGER

Turn power off before
servicing or cleaning

IF DEFACED - ORDER PART NO. 04049 121 00

This decal appears on the back of the spreader trough cover plate. It alerts all to the danger of being caught in the dropout opening or from the top of the spreader trough where serious personal injury could result.





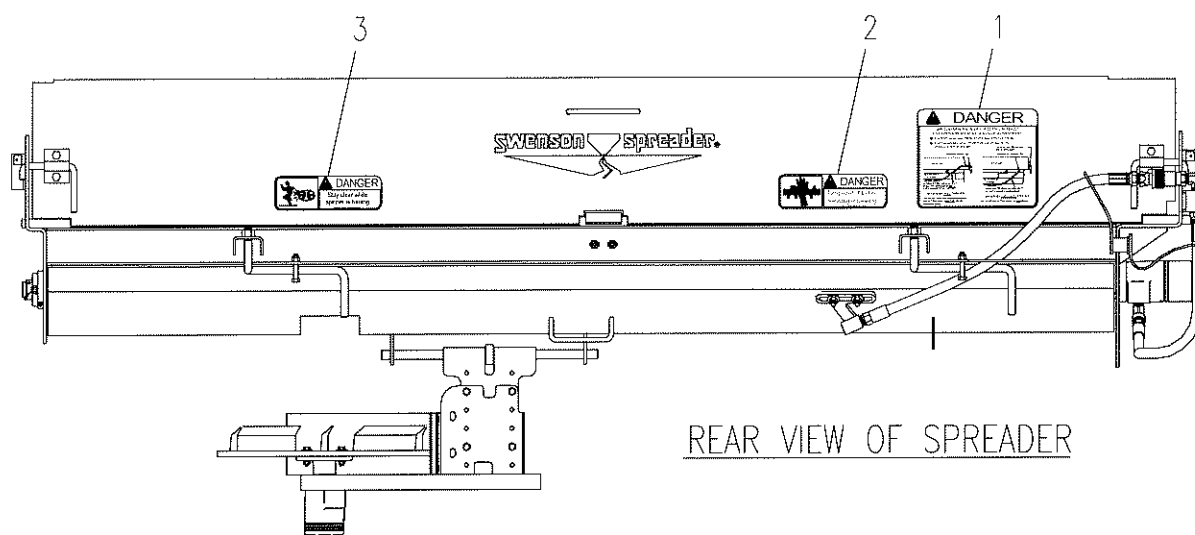
DANGER

Stay clear while
spinner is turning

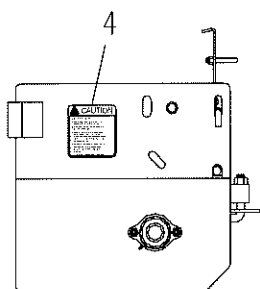
IF DEFACED - ORDER PART NO. 04049 034 00

This decal appears near the spinner assembly on the back of the spreader trough cover plate. It alerts all to the danger of being struck by material being spread by the spinner assembly which could result in serious personal injury.

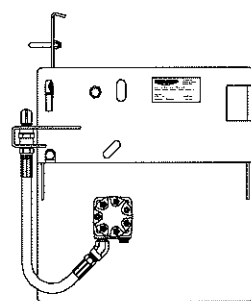
LOCATION OF SAFETY DECALS



REAR VIEW OF SPREADER



LEFT END OF SPREADER



RIGHT END OF SPREADER

(Caution Decal [Item #4] may appear
at this end of spreader at times.)

S:\MANUAL\TAILGATE\S SERIES\SAFETY DECAL LOCATION - SAD1

<u>Decal</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	04049-393-00	1	Safety Interlock Decal (8" x 10" Red & White)
2	04049-121-00	1	Auger Danger Decal (9" x 2 3/4" Red & White)
3	04049-044-00	1	Spinner Danger Decal (9" x 2 3/4" Red & White)
4	04049-045-00	1	General Caution Decal (4 1/4" x 4" Yellow & Black)

Refer to page 27 for complete drawing and parts list for Safety Interlock Device.

CONTROL HYDRAULICS SPECIFICATIONS AND INSTALLATION

CONTROL AND HYDRAULIC SYSTEM SPECIFICATIONS:

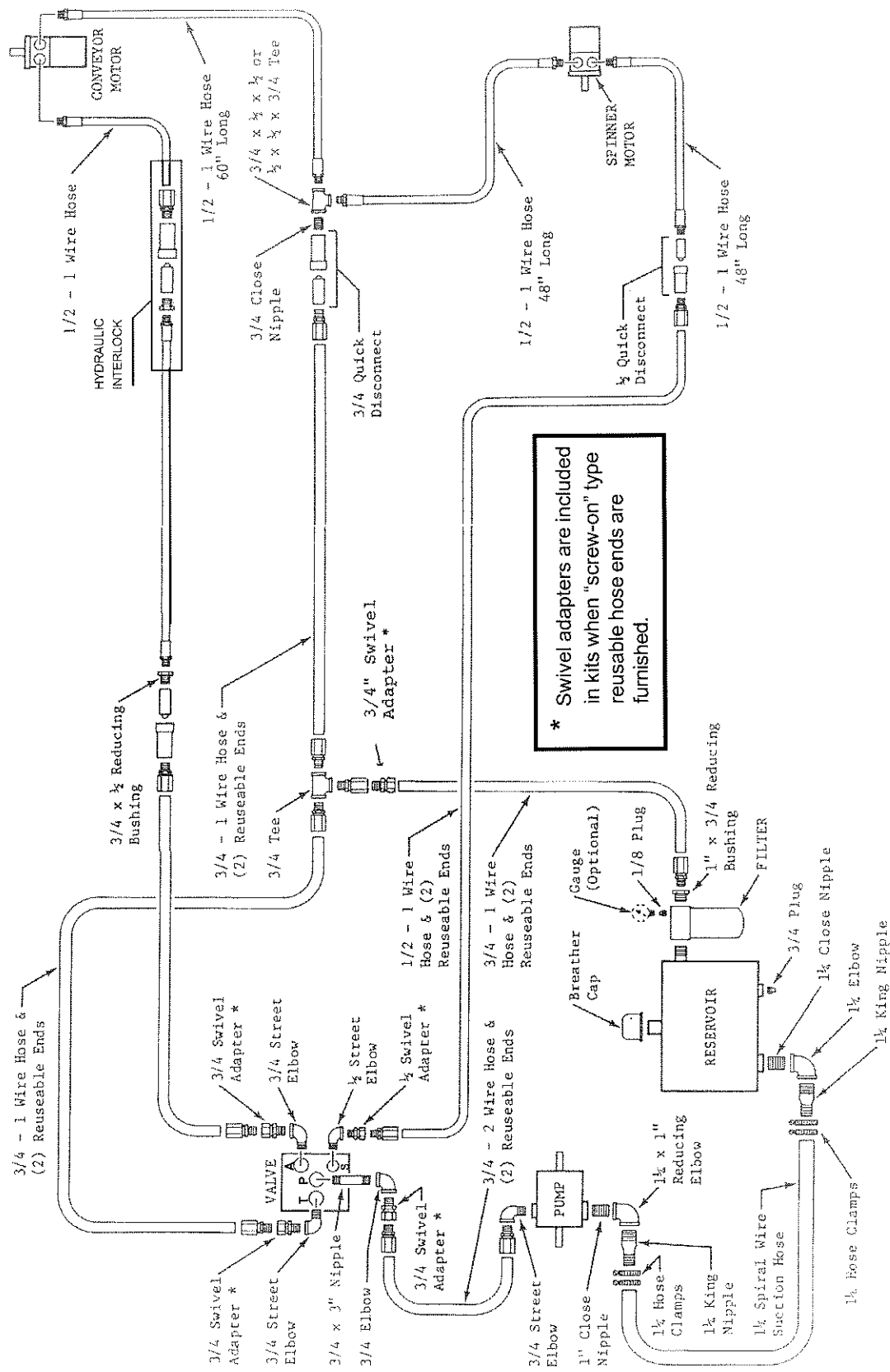
- Hydraulic Oil ----- Good Grade of MS10W Hydraulic Oil which has wear, oxidation and foam inhibitors.
- Oil Filter ----- 10 Micron Element In Return Line
- Relief Valve Setting ----- 1500 PSI
- Oil Flow ----- Conveyor (A-Port) 0-15 GPM
Spinner (S-Port) 0-7 GPM

LEFT OR RIGHT OPERATION OF SPREADER AUGER:

Your SBD-9 spreader has a material dropout opening at each end of the trough. In order to convey material to the desired opening, provisions must be made to reverse the direction of the auger drive motor. The following are suggestions for accomplishing this:

1. If spreader auger is to operate in one direction only for the life of the spreader, no special reversing method is required. Assemble basic hydraulic system as shown on pages 6 and 7. Be sure to make connections at auger motor so auger turns in desired direction. Install male and female quick disconnects on ends of hoses in an opposite manner so reconnecting can be done in only one way.
2. If spreader auger is to be reversed only once or twice a year, it is suggested that auger motor male and female quick disconnects be installed on the ends of pressure and return hoses in an identical manner so reversing hoses can be done quickly.
3. If spreader auger is to be reversed frequently during spreading and/or berming operations, it is suggested that an accessible reversing valve be installed between the primary conveyor control valve and the auger motor.

CONTROL HYDRAULICS INSTALLATION



CONTROL HYDRAULICS INSTALLATION (Continued)

1. Hydraulic components should be kept as clean as possible during assembly operations.
2. Galvanized pipe and pipe fittings must not be used because flaking of galvanizing material can cause damage to major hydraulic components.
3. A pipe joint sealant, compatible with hydraulic oil, must be applied to all screwed fittings. (Teflon tape is not recommended.)
4. Sufficient hose should be allowed for raising dump body without kinking or stretching hose.
5. Hose should be protected where severe wear may be caused by vibration or sliding movement.
6. Long runs of hose should be supported by nylon ties or clamping.
7. (Auger, Spinner)
Pressure and return hoses, connected to spinner or conveyor motors, may be reversed for proper motor rotation.
8. Three hose lines to rear of truck may be installed inside truck frame, under dump body floor, and secured in place.
9. Use hose manufacturers recommendations for fitting reusable hose ends.

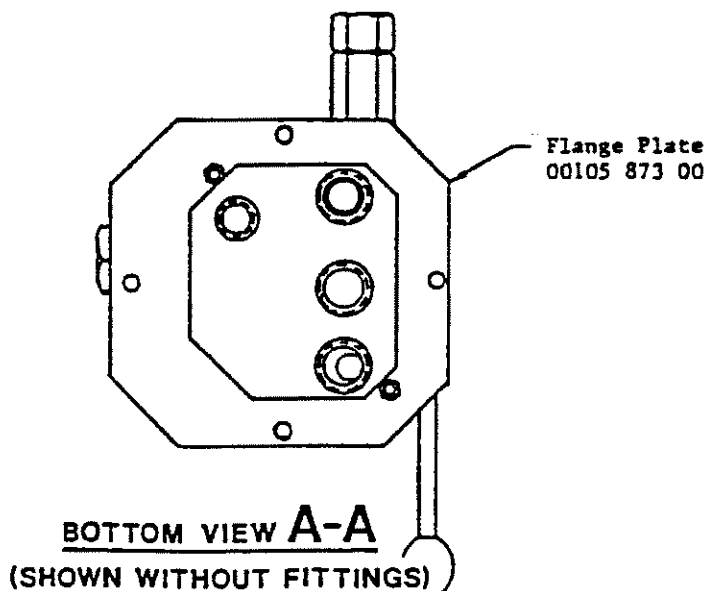
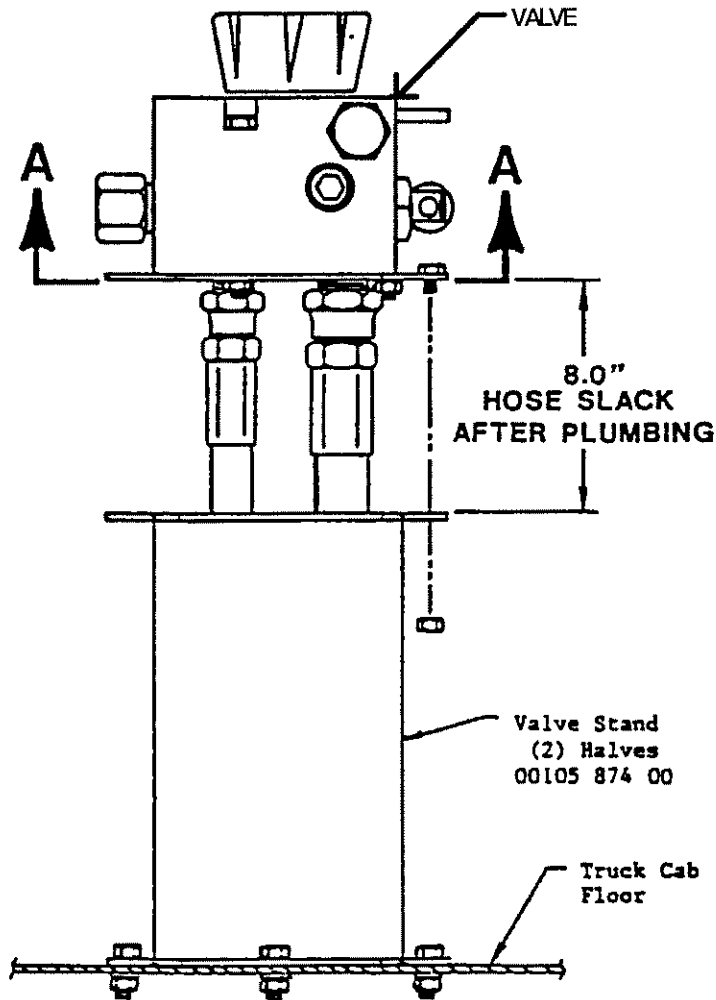
•This diagram is Swenson Spreader Company's complete recommended hydraulic system.

•Standard pump, valve, tank and hose kits make up the complete system.

•This diagram may be used to install an entire system, or part of a system, depending upon kits supplied, and existing components on truck.

•Alternate proven methods and components are acceptable to suit various truck model requirements.

DUAL FLOW CONTROL VALVE INSTALLATION INSTRUCTIONS

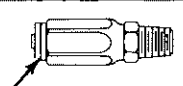
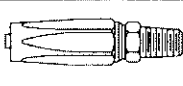
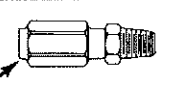
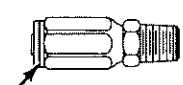
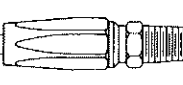
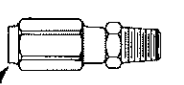
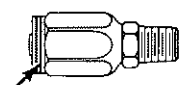
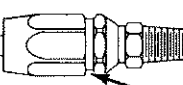
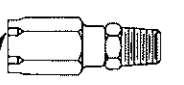


1. **IMPORTANT:** A pipe joint sealant compatible with hydraulic oil must be applied to all screwed fittings. (Teflon Tape Sealant is Not Recommended)
2. Hose ends connected to valve must be of the "swivel" type.
3. **CAUTION:** Overtightening of the fittings in flow valve may cause damage to valve body.
4. Approximately 8" of hose slack must be allowed between the valve and the valve stand after the valve has been completely plumbed. If this condition does not exist after the plumbing has been completed, removal of valve will require hoses to be removed at opposite end of hoses.
5. Assembly of valve on stand:
 - a. Cut a 5" x 5" square opening in floor of truck where the valve stand is to be located.
 - b. Bolt valve stand halves together forming a "box" over the 5" x 5" square opening. **NOTE:** When bolting valve stand halves in place, make sure holes in flanges of halves align with holes in flange plate.
 - c. Bolt flange plate to VALVE.
(Use (2) 1/4" x 3" bolts, lockwashers, and nuts.)
 - d. Insert hoses through floor opening and valve stand and connect appropriate hoses to valve. (See instruction #1 thru #4.)
 - e. Bolt flange plate to valve stand flanges.

(See page 37 for parts list.)

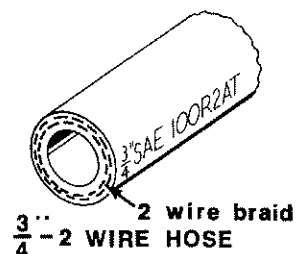
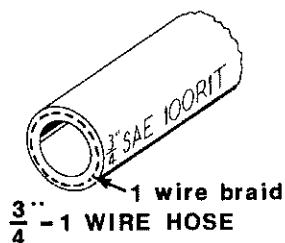
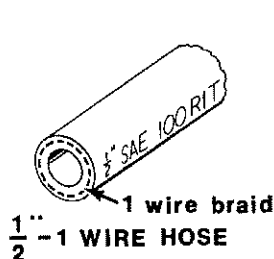
HOSE END ASSEMBLY INSTRUCTIONS

FITTING IDENTIFICATION

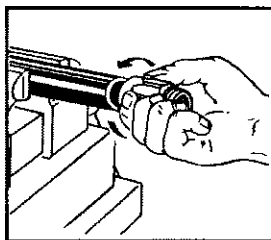
	GATES	AEROQUIP	PARKER
$\frac{1}{2}$ " 1 WIRE	 Single Groove	 Plain Machining	 Plain Shoulder
$\frac{3}{4}$ " 1 WIRE	 Single Groove	 Plain Machining	 Plain Shoulder
$\frac{3}{4}$ " 2 WIRE	 Double Groove	 Large Groove	 Machined Notches

HOSE IDENTIFICATION

(Locate SAE number printed on hose as shown below)

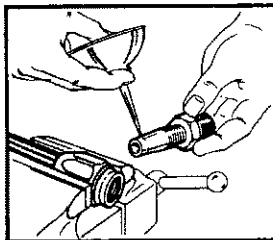


ASSEMBLY INSTRUCTIONS



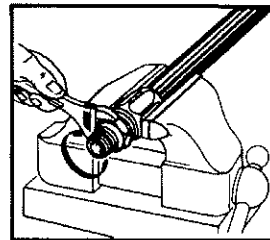
Step 1

Liberally oil hose cover with lube oil, place hose in vise just tight enough to prevent it from turning. Screw socket onto hose counter-clockwise until it bottoms. Back off 1/2 turn.



Step 2

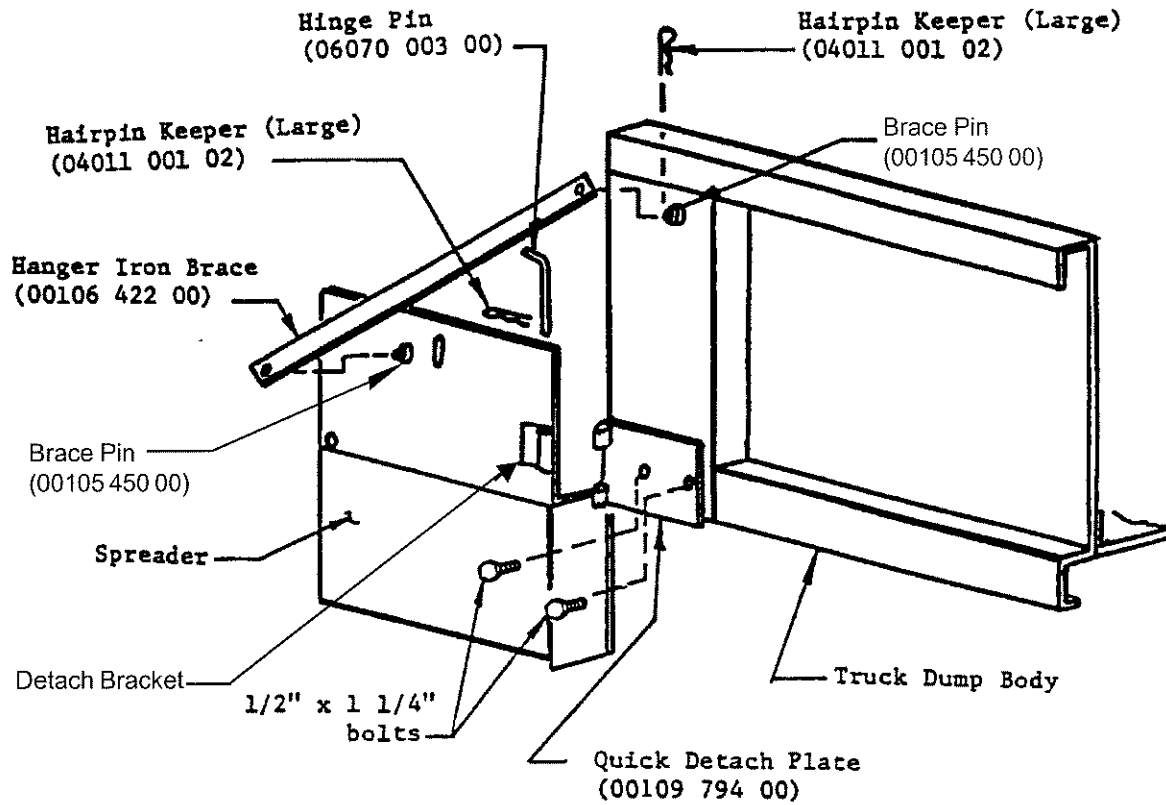
Oil nipple threads and inside of hose liberally.



Step 3

Screw nipple clockwise into socket and hose. Leave 1/32" to 1/16" clearance between nipple hex and socket. Clean and inspect all assemblies. Disassemble in reverse order.

TROUGH MOUNTING INSTRUCTIONS



TROUGH MOUNTING INSTRUCTIONS

(Continued)

GENERAL:

This spreader is designed to mount rigidly on the rear of the truck dump body, below the tailgate, and supported by brackets bolted to the rub rails of the dump body. Instructional drawing is included in this manual to show the details on page 10.

DANGER

Support spreader and other heavy components solidly when positioning for mounting on truck dump body.

IMPORTANT:

On occasion, due to improper handling during shipment or storage, the vertical ends of the trough get bent in or out slightly. Be sure these are square and true before installation. Once installed, the mounting brackets should prevent further deformation.

1. Position the spreader under the dump body tailgate with the auger drive housing to the right side of the truck. The trough lip on the forward side of the spreader should be as close as possible to the cross member under the floor of the dump body.

The tailgate of the dump body should lay down horizontally over the spreader, yet the spreader must be mounted up under the tailgate as high as possible.

2. Pin quick detach plates to spreader detach brackets.
3. Position quick detach plates against dump body cornerposts and clamp in a level position. Weld adequately to support loaded spreader trough. If bolting, is desired, drill (2) holes for 1/2" bolts simultaneously through bracket and cornerpost and bolt solidly.
4. Position hanger iron brace on brace pin located on spreader endplates.
5. Locate brace pins on dump body cornerposts approximately as shown using braces for exact positioning. (Braces may require bending for proper fit.)
6. Weld brace pins solidly to dump body, and retain braces at each end with hairpin keepers.
7. Carefully remove temporary spreader positioning apparatus.
8. If there is a gap between the trough lip and the dump body rear cross member, a "spillboard" of about 3/16" x 2" steel may be welded or bolted to the forward lip of the spreader to form a seal under the dump body floor. It may have to be notched or cut to fit around tailgate latches or other obstructions on the rear of the dump body.
9. Tailgate shields (**06024 000 00**), if required, are bolted or welded to the inside of the tailgate to prevent material spillage over the ends of the spreader.

INSTALLATION OF SPINNER ASSEMBLIES ON “S” SERIES SPREADERS

(See pages 14-20.)



**SUPPORT SPINNER ASSEMBLY SOLIDLY WHEN
MOUNTING ON SPREADER.**

SPINNER ASSEMBLY PROCEDURE:

1. Attach spinner shield to spinner frame with 5/16" x 3/4" bolts and nuts.
2. Attach spinner disc to hub with 5/16" x 1 1/2" bolts, flatwashers and lockwashers.
3. Apply anti-seize compound to spinner motor shaft.
4. Mount spinner disc/hub assembly on spinner motor shaft.
5. Secure disc/hub assembly to motor shaft with proper size hardware (provided). Bolt should engage threads in motor shaft a minimum of 3/8" when bolt is tight.
6. Attach spinner frame assembly to spinner extension mounting bracket with (4) 3/8" X 1" bolts and flange nuts.
 - a. Appropriate spinner height depends on truck frame ground clearance. A shorter spinner height for light and medium duty trucks with contractor style bodies, a taller spinner height for heavy duty trucks with full size dump bodies.
7. While holding lock collar in middle notch of spinner extension mounting bracket, slide spinner hinge rod through both the mounting bracket and lock collar.

BERM CHUTE ASSEMBLY PROCEDURES:

1. Attach berm chute pan to berm chute frame with 3/8" X 1" carriage bolts, flatwashers and lockwashers.

MOUNTING PROCEDURES:

TRUCK SHOULD BE ON LEVEL SURFACE.

1. Install spinner assembly on spreader by sliding the hinge rod into the mounting tabs on bottom door. Insert (2) keeper pins into hinge rod. Center and lock spinner assembly between mounting tabs.
2. Install berm chute on spreader by sliding the hinge rod into the mounting tabs on bottom door. Insert (2) keeper pins into hinge rod. Position and lock berm chute assembly.

INSTALLATION OF SPINNER ASSEMBLIES ON “S” SERIES SPREADERS

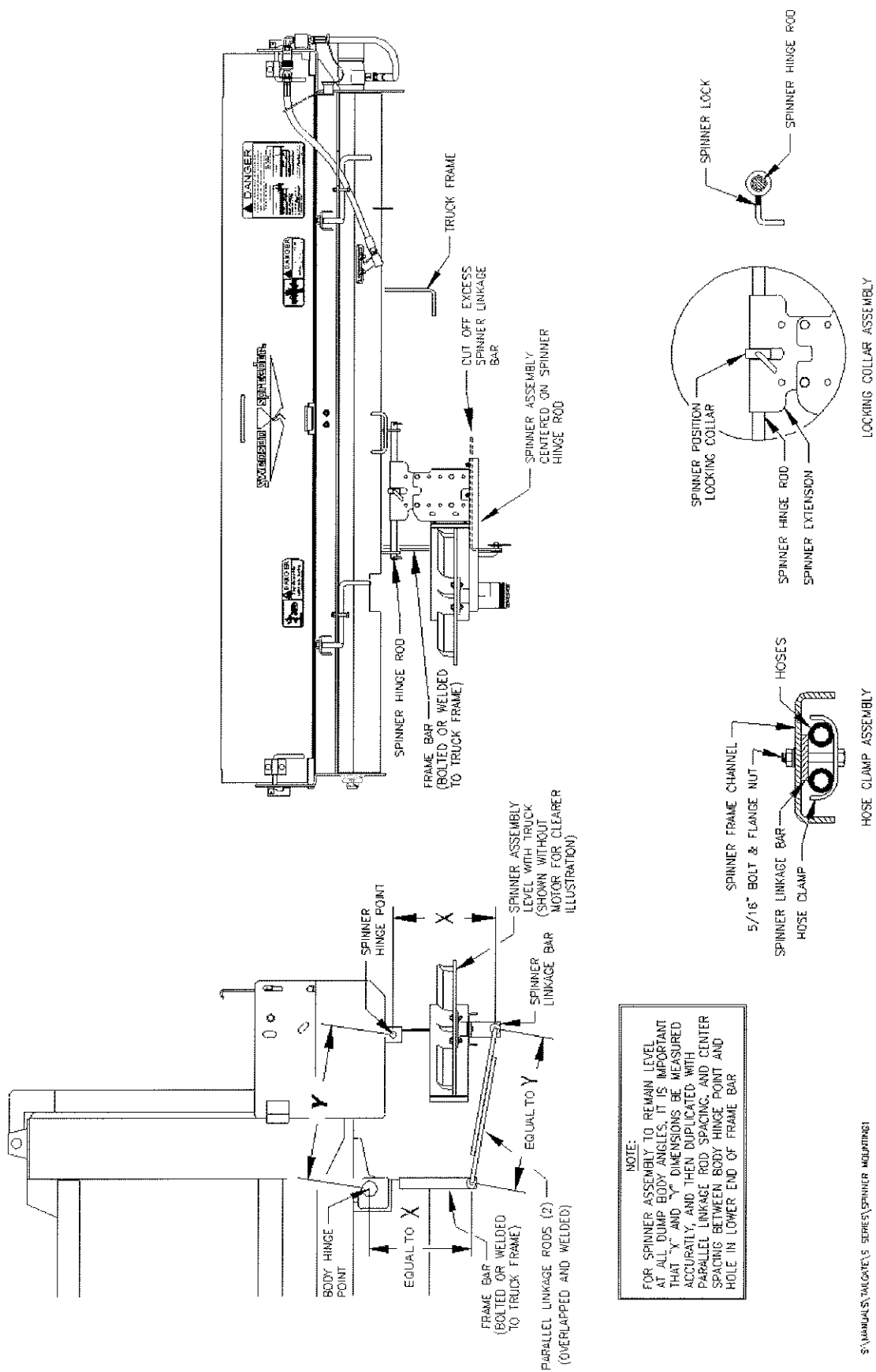
(Continued)

3. Raise and lower dump body to check spinner and berm chute ground clearances. Adjust spinner height if needed. Repeat step if adjustments are to be made.
4. Position spinner linkage bar under spinner frame channel so that L-Bend aligns with truck frame. Secure linkage bar to spinner frame with 5/16" X 1" bolt and flange nut, using the inside mounting hole. (Outside mounting hole is for hydraulic hose clamp.) Cut off any excess linkage bar if required.
5. With spinner disc/berm chute level to ground, measure and record the distance between centerline of spinner hinge rod(s) and centerline of hole in spinner/berm chute linkage bar(s) for dimension "X". Measure and record the space between centerline of dump body hinge pins and centerline of spinner hinge rod(s) for dimension "Y".

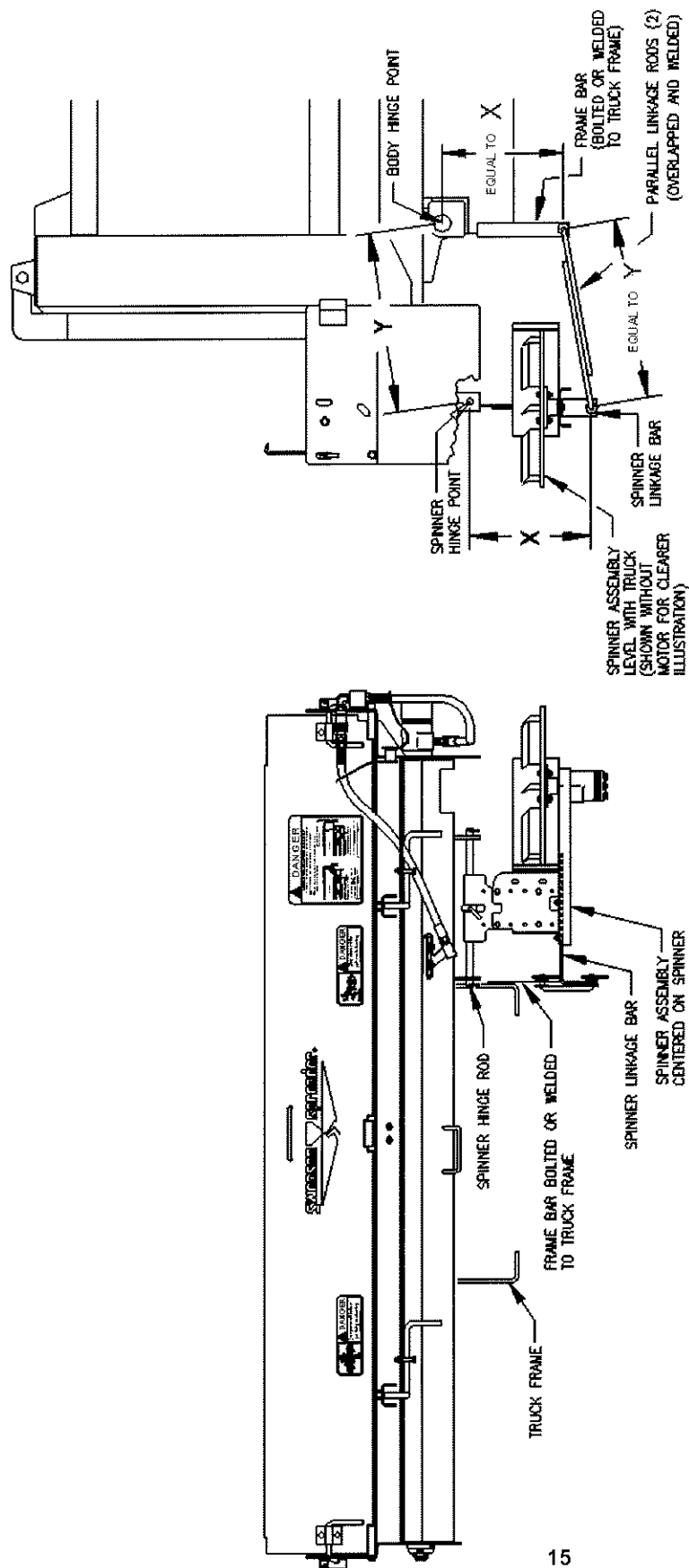
DIMENSION "X" _____

DIMENSION "Y" _____

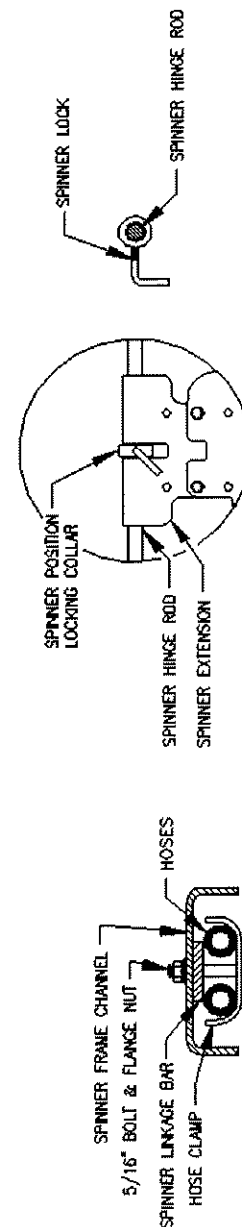
6. Temporarily clamp frame bar(s) in position (hole pointing down) against truck frame. Locate mounting hole below dump body hinge pins using "X" and "Y" dimensions from step 5.
7. Attach parallel linkage rods to the frame bars and in the spinner/berm chute linkage bar(s) with 1/2" flatwasher and keeper pins. Overlap and temporarily clamp rods together.
8. Raise and lower dump body while checking spinner/berm chute for binding and level operation at all dump angles. Check that temporary connection bars are not moving.
9. Secure frame bar(s) to truck frame in compliance with truck manufacturer's recommendations. Weld parallel linkage rod together. Remove all temporary clamps.
10. Attach spinner hydraulic hoses to spinner motor (use pipe thread sealant if applicable). Secure hoses to spinner frame with clamp and hardware provided.



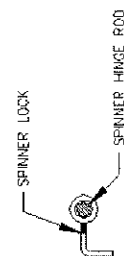
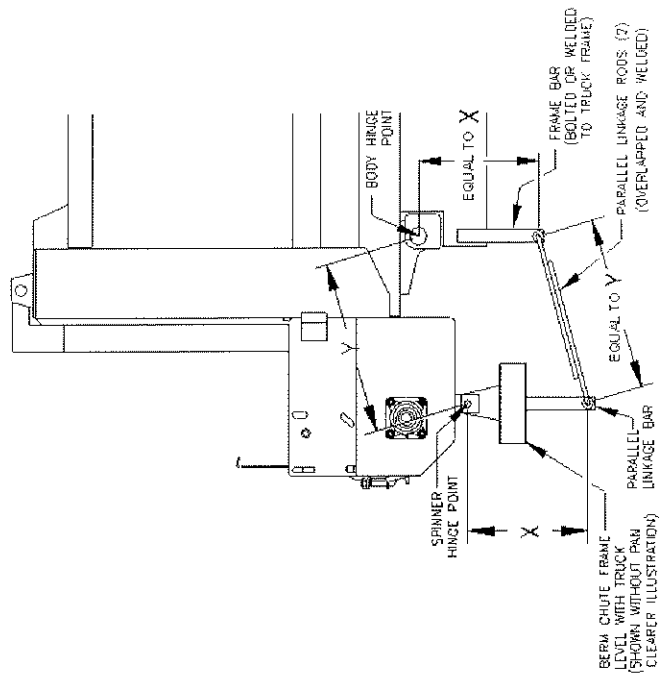
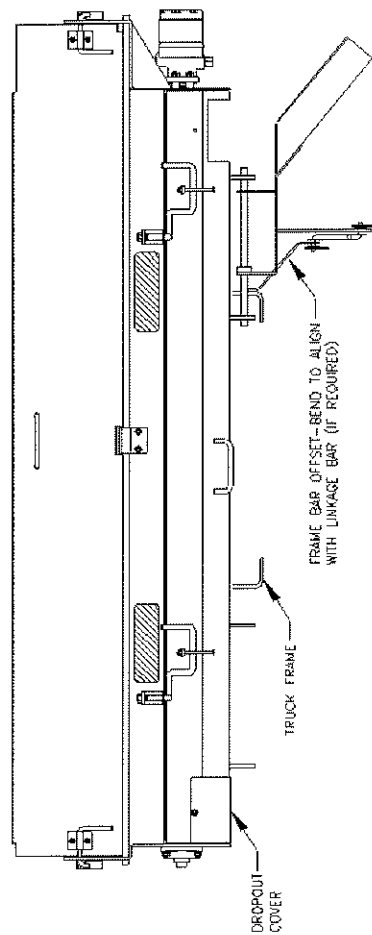
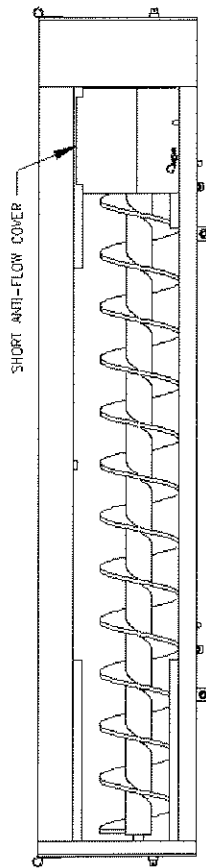
LEFT HAND (CCW) SPINNER ASSEMBLY
S SERIES SPREADER



NOTE:
FOR SPINNER ASSEMBLY TO REMAIN LEVEL AT ALL DUMP BODY ANGLES, IT IS IMPORTANT THAT "X" AND "Y" DIMENSIONS BE MEASURED ACCURATELY, AND THEN DUPLICATED WITH PARALLEL LINKAGE ROD SPACING, AND CENTER SPACING BETWEEN BODY HINGE POINT AND HOLE IN LOWER END OF FRAME BAR



RIGHT HAND (CW) SPINNER ASSEMBLY S SERIES SPREADER



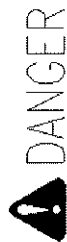
NOTE:
FOR SPINNER ASSEMBLY TO REMAIN LEVEL AT ALL DUMP BODY ANGLES, IT IS IMPORTANT THAT "Y" AND "X" DIMENSIONS BE MEASURED ACCURATELY AND THEN DUPLICATED WITH PARALLEL LINKAGE ROD SPACING AND CENTER SPACING BETWEEN BODY HINGE POINT AND HOLE IN LOWER END OF FRAME BAR

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BERM CHUTE ASSEMBLY MODEL SBD-9 DUAL DROPOUT SPREADER

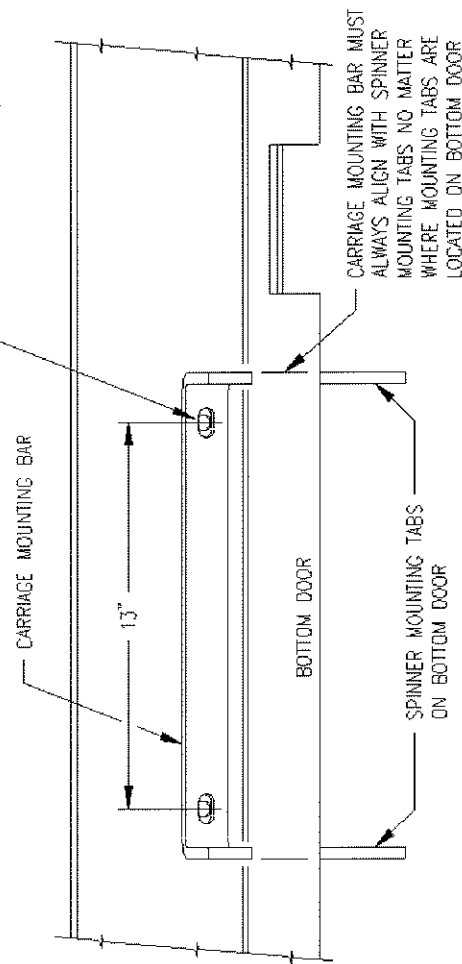
INSTALLATION AND OPERATING INSTRUCTIONS FOR FRONT TROUGH MOUNTED SPINNER CARRIAGE ASSEMBLY

THESE INSTRUCTIONS APPLY TO ALL UNDER-TAILGATE TYPE SPREADERS HAVING A SWING-DOWN BOTTOM DOOR INCLUDING SPREADERS WITH RIGHT END DISCHARGE (EXCEPT MODEL ST-SERIES)

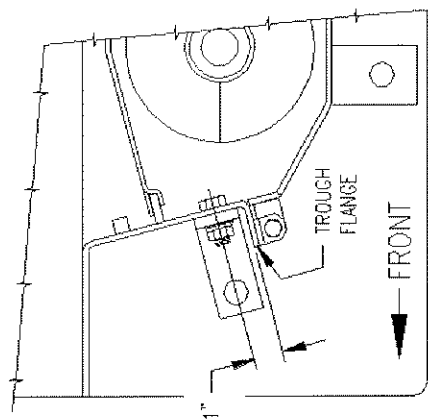


SUPPORT SPREADER AND OTHER HEAVY COMPONENTS SOLIDLY WHEN POSITIONING FOR INSTALLATION OF FRONT TROUGH MOUNTED SPINNER CARRIAGE ASSEMBLY.

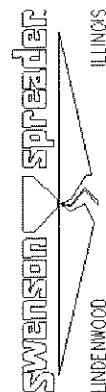
IN FRONT WALL OF TROUGH DRILL (2) HOLES FOR 1/2" BOLTS ON 13" CENTER SPACING AND UP 1" FROM TOP SURFACE OF FLANGE AS SHOWN (SEE "NOTE" BELOW)



NOTE: FOR EASIER PINNING-UP OF SPINNER CARRIAGE, CARRIAGE MOUNTING BAR MUST BE INSTALLED AS PARALLEL AS POSSIBLE WITH TROUGH FLANGE AT THE 1" SPACING AS SHOWN AT RIGHT.

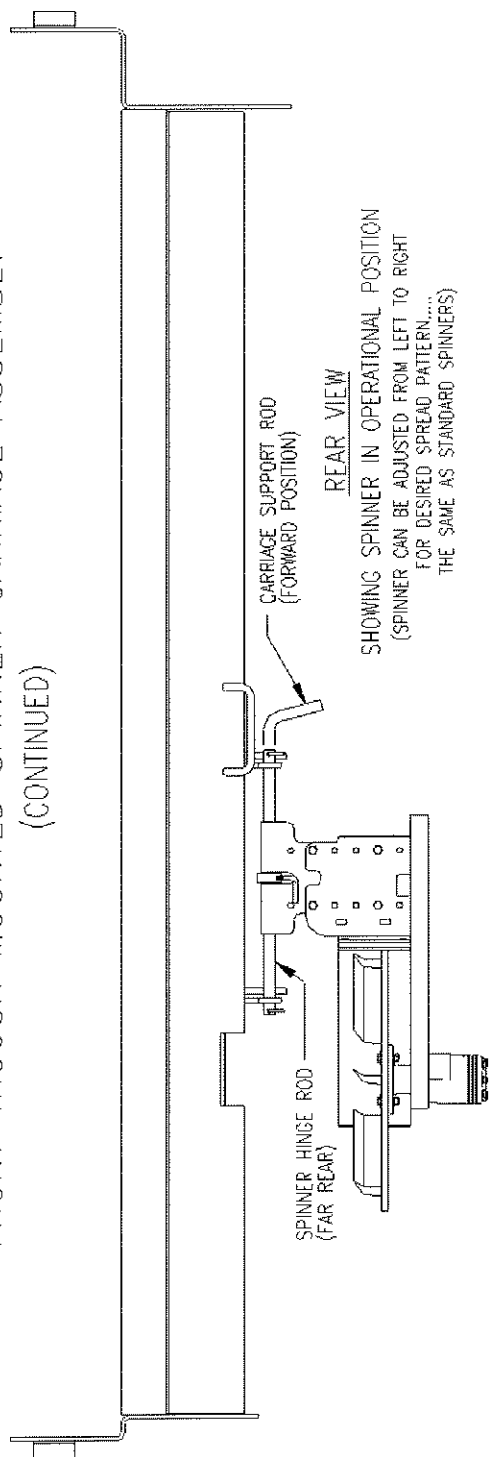


FOR IDENTIFICATION OF PARTS
SEE PAGE 20

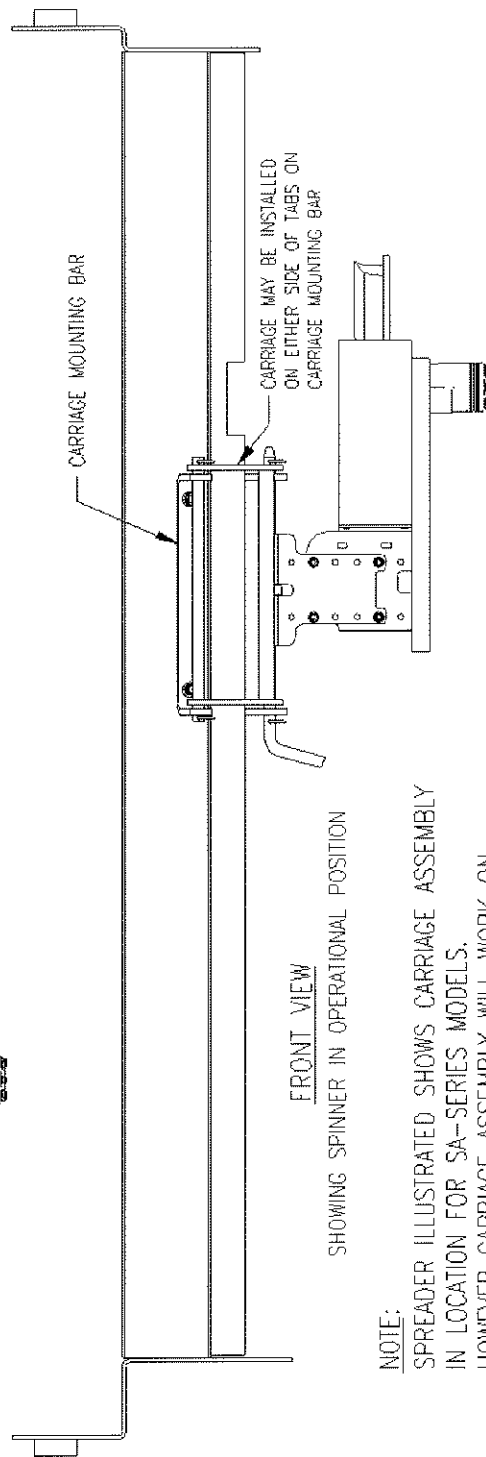


FORM NO: 00119 5/15 QD

INSTALLATION AND OPERATING INSTRUCTIONS FOR FRONT TROUGH MOUNTED SPINNER CARRIAGE ASSEMBLY (CONTINUED)



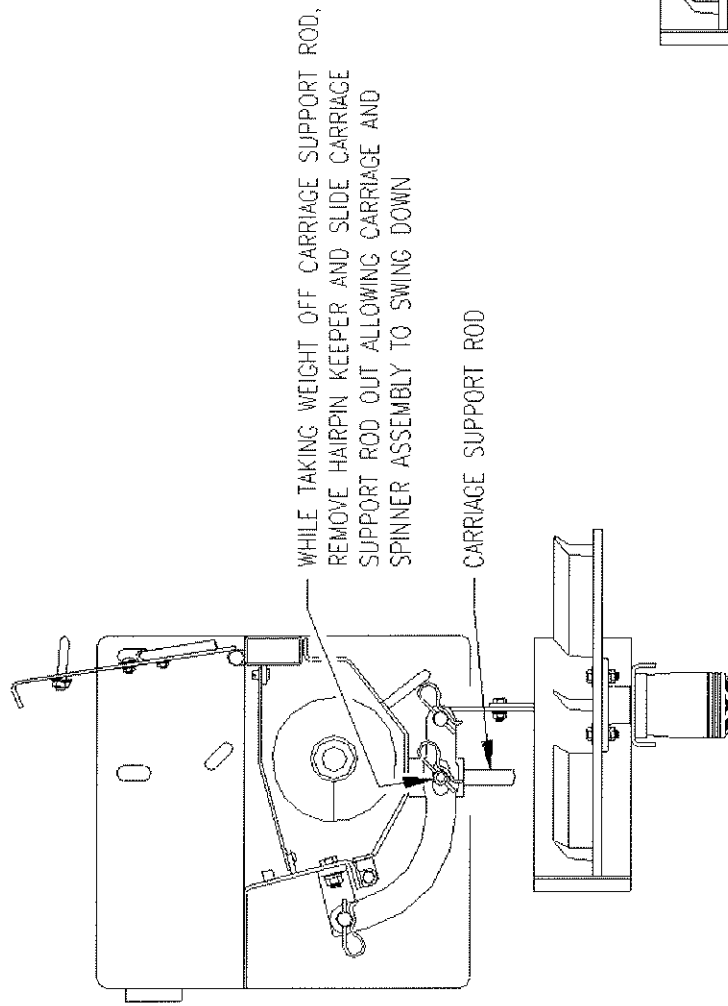
REAR VIEW
SHOWING SPINNER IN OPERATIONAL POSITION
(SPINNER CAN BE ADJUSTED FROM LEFT TO RIGHT
FOR DESIRED SPREAD PATTERN....
THE SAME AS STANDARD SPINNERS)



FRONT VIEW
SHOWING SPINNER IN OPERATIONAL POSITION

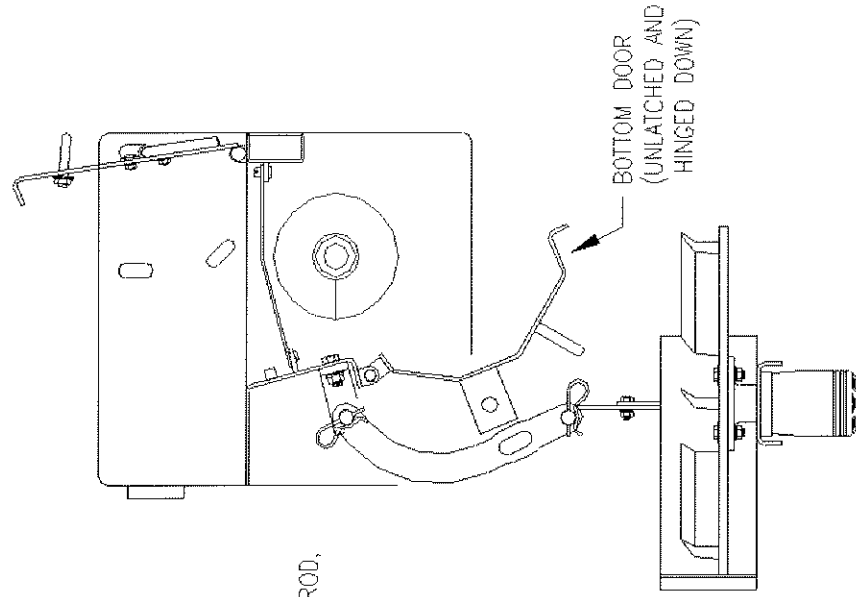
NOTE:
SPREADER ILLUSTRATED SHOWS CARRIAGE ASSEMBLY
IN LOCATION FOR SA-SERIES MODELS.
HOWEVER CARRIAGE ASSEMBLY WILL WORK ON
MODELS WITH MATERIAL DROPOUT OPENINGS IN
MOST OTHER LOCATIONS.

INSTALLATION AND OPERATING INSTRUCTIONS FOR FRONT TROUGH MOUNTED SPINNER CARRIAGE ASSEMBLY (CONTINUED)



LEFT END VIEW SHOWING SPINNER
IN OPERATIONAL POSITION

(LEFT ENDPLATE ON TROUGH HAS BEEN
REMOVED TO BETTER SHOW ASSEMBLY)

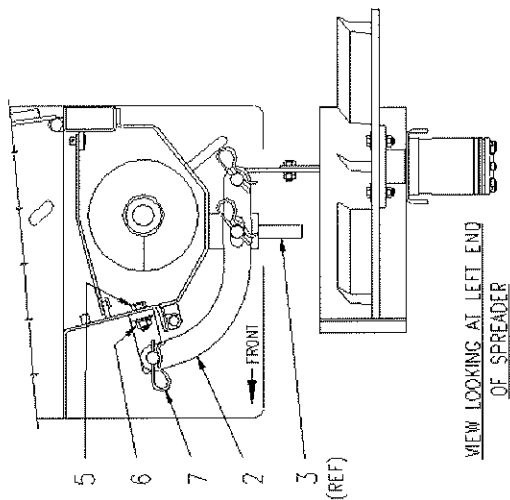
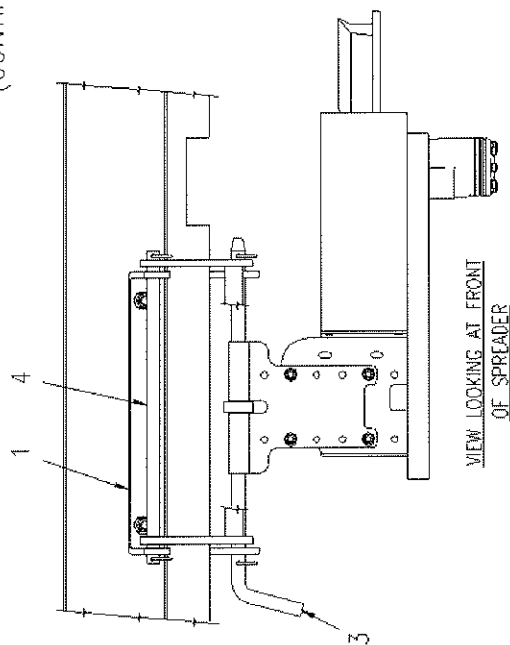


LEFT END VIEW SHOWING SPINNER
IN SWUNG-DOWN POSITION

(LEFT ENDPLATE ON TROUGH HAS BEEN
REMOVED TO BETTER SHOW ASSEMBLY)

FORM NO: 00119 515 00

INSTALLATION AND OPERATING INSTRUCTIONS FOR FRONT TROUGH MOUNTED SPINNER CARRIAGE ASSEMBLY (CONTINUED)



PARTS LIST FOR NON-STANDARD COMPONENTS RELATED TO FRONT TROUGH MOUNTED SPINNER CARRIAGE ASSEMBLY

(Refer to instruction manual parts lists for all other components.)

Item	Carbon	Stainless	Qty.	Description
1	00119-551-01	00119-551-02	1	Bar, Carriage Mounting
2	00119-555-01	00119-555-02	1	Weldment, Spinner Carriage (SBD-9 Series)
3	00119-538-01	00119-538-02	2	Rod, carriage Support
4	00106-401-00	00109-374-00	2	Rod, Hinge
5	04003-005-02	04003-005-23	2	Bolt, 1/2" X 1-1/4" HH Gr. 5
6	04003-806-03	04003-806-16	2	Nut, 1/2" Hex Flange
7	04011-001-02	04011-001-04	4	Keeper, Hairpin

OPERATING INSTRUCTIONS



1. WHEN STARTING UP NEW EQUIPMENT, BE SURE EVERYONE IS STANDING CLEAR, WATCH FOR ANYTHING THAT MAY REQUIRE SHUTTING SYSTEM DOWN. EQUIPMENT MUST BE STARTED UP SLOWLY AND WATCHED FROM A SAFE DISTANCE. WATCH FOR ANYTHING THAT MAY BE HITTING SOMETHING THAT IT SHOULD NOT BE HITTING, AND LISTEN FOR SOUNDS THAT ARE ABNORMAL. CORRECT ANYTHING THAT IS ABNORMAL BEFORE CONTINUING USE OF THE EQUIPMENT.
2. BEFORE INSTALLATION, MAINTENANCE, CLEANING, OR REMOVAL OF SPREADER, ALL HYDRAULIC VALVES, PTO, AND TRUCK ENGINE MUST BE SHUT OFF.
3. WHEN SPREADER IS REMOVED FROM VEHICLE, OR NOT IN USE, THE VALVE ON-OFF LEVER SHOULD BE IN THE "OFF" POSITION. IF LEFT IN "ON" POSITION EXCESSIVE HEAT MAY OCCUR IF PUMP CONTINUES TO PUMP OIL THROUGH THE HYDRAULIC VALVE. THIS THEN COULD CAUSE A HOSE TO BURST SPRAYING HOT OIL ON THOSE NEARBY.

INITIAL START UP:

This spreader is equipped with a hydraulic safety interlock device designed to interrupt oil flow to the auger motor when disconnected. The spreader is shipped with the interlock device in the disconnected position and must be connected for operating the spreader.

1. Connect hydraulic hoses to safety interlock, spreader and spinner.
2. Fill reservoir about three-fourths full with hydraulic oil. (See page 5 for type.)
KEEP OIL CLEAN.
3. Start truck engine.
4. Be sure valve ON-OFF lever is in "OFF" position.
5. Keep auger and spinner knobs on valve in closed position.
6. Engage PTO and allow hydraulic oil to circulate several minutes to warm up.
7. Open both valve knobs to first position.
8. Move valve ON-OFF lever to "ON" position.
9. Examine auger and spinner to see if they are functioning properly. (They will be operating slowly.) (Left hand mounted spinner should turn in CCW rotation, and right hand mounted spinner should turn in CW rotation, as viewed from above spinner. Auger should turn in direction which makes auger flitting appear to move towards trough dropout opening.)
10. Open valve knobs to other positions and check to see if spinner and auger operate faster as knobs are opened, and slower as knobs are closed.
11. Turn valve knobs to closed position and move ON-OFF lever to "OFF" position.
12. Shut truck engine off.
13. Check entire hydraulic system for leaks.
14. Refill reservoir to three-fourths full.
15. Hydraulic system is now ready for use.

OPERATING INSTRUCTIONS

(Continued)

PREPARING SPREADER FOR USE:

1. Position spreader cover plate vertically and secure with latches.
2. With dump body empty, unlatch dump body tailgate from bottom and open as wide as possible but not bearing against cover plate, set the stop (or spread) chains.
3. Loosen spinner lock and slide spinner assembly to far left and retighten lock. (Position for spreading three or four lane highway from right lane.)
4. Start truck engine and allow hydraulic system to warm up by shutting off spinner and auger knobs and moving ON-OFF lever to "ON" position.
5. Move ON-OFF lever to "OFF" position after warming up.
6. Put spreading material in dump body and raise dump body to fill spreader trough.
7. Lower dump body to safe position.
8. Open spinner and auger knobs, and move ON-OFF lever to "ON" position. Spread small amount of material to determine placement of material at various spinner and auger speeds with spinner in this far left position.
9. Move valve lever to "OFF" position and shut off truck engine.
10. Loosen spinner lock and slide spinner assembly to far right and retighten lock. (Position for spreading behind truck and to extreme right covering up to four lanes from left lane.)
11. Start truck engine.
12. Open spinner and auger knobs, and move ON-OFF lever to "ON" position. Spread small amount of material to determine placement of material at various spinner and auger speeds with spinner in this far right position.
13. It should now be visible that various spread patterns may be obtained by placing spinner at various positions from left to right, and by changing spinner speeds on valve.

OPERATING SPREADER:

1. For operating hydraulic system, follow same procedures as for preparing spreader for use.
2. Any valve knob setting changes may be made while truck is in motion.
3. Spinner and auger may be stopped at the same time, without changing their valve settings, by moving ON-OFF lever to "OFF" position.
4. For normal use of dump truck, cover plate may be laid flat over spreader trough and locked in place. Dump body tailgate may be opened from top or bottom.
5. When using truck for normal hauling and dumping, it is recommended that hydraulic safety interlock be disconnected. Feed hose out of slot and place hose end in hose holder under bottom door. Push dust cap over disconnect at end of hose.
6. Pivot upper end of disconnect around to end of spreader. Push plug into end of disconnect while at same time position strap (on plug) in slot at forward end of fitting support bracket (which is welded to spreader endplate).
7. Refer to safety interlock danger decal on trough cover plate for proper use of safety interlock.
8. To avoid spinner damage, spinner may be removed when truck is used for extensive hauling. Protect hydraulic quick disconnects with appropriate plugs and caps.

ADJUSTING SPINNER FOR DESIRED SPREAD PATTERN



DANGER!

Serious personal injury can result from being caught in a turning spinner. Stay clear and keep all others clear when spinner is turning.

Serious personal injury can result if hit by flying particles being thrown by a turning spinner.

Stand back, and keep all others back at least 50 feet while spinner is turning. **DO NOT ASSUME** that particles cannot be thrown by a turning spinner just because material is not being dropped onto the spinner; particles that have been sticking to the spinner may suddenly come loose and be thrown causing possible injury.

In general, for the most commonly desired spread patterns, the material drop zone should be **over forward half** and **within outside edge of disc**. See below and next page. Adjusting the specific location where material falls on the forward half of the spinner disc is very important. This allows the greatest portion of the material to be placed on the road surface in the three most commonly desired locations: 1. To the left of the vehicle. 2. To the left and rear of the vehicle. 3. To the rear and right of the vehicle.

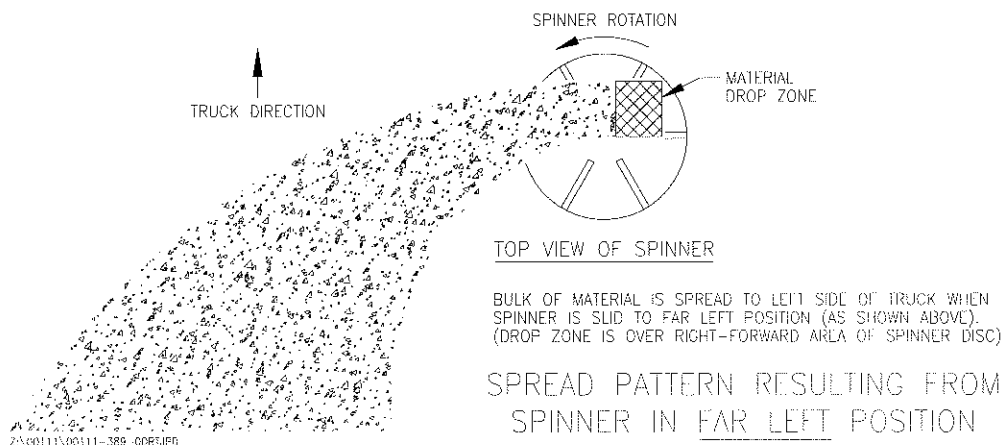
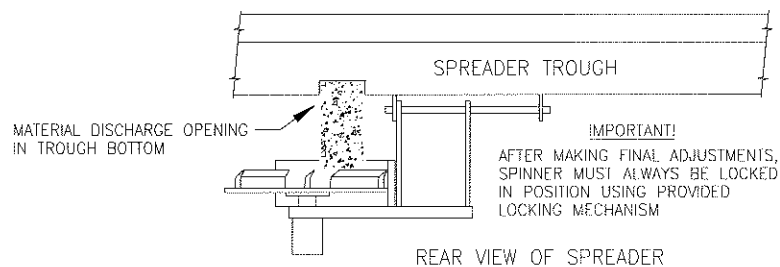
The spinner shield which is positioned approximately at the right forward quadrant of the spinner disc, is intended to restrict "stray" material to the spinner area and to aid in a more defined spread pattern.

Once the desired spread pattern has been obtained, increasing the spinner speed by opening the spinner control knob will give a wider spread pattern, and closing the spinner control knob will give a narrower spread pattern.

It should be noted that the spread pattern width will vary as the dump body is raised and lowered during spreading operations. This is due to the spinner becoming closer to the road surface as the body is raised, and farther away from the road surface as the body is lowered. A higher spinner assembly above the road surface will give a wider spread pattern, and a lower spinner assembly above the road surface will give a narrower spread pattern. When establishing spread pattern width, raise the body to the dump angle normally used during spreading operations, and have the spinner control knob at the setting normally used during spreading operations.

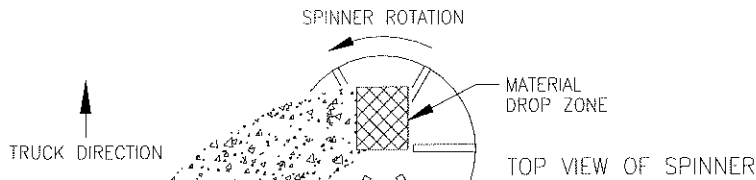
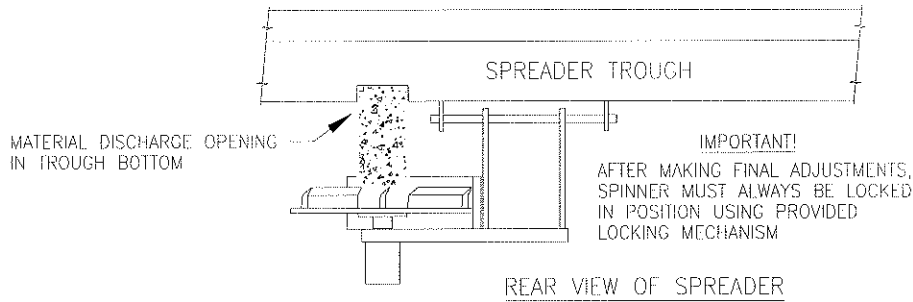
Sliding the spinner to intermediate positions from those shown below and on the following page will give variations of spread patterns to those shown. After establishing the desired spread pattern, it is suggested that the spinner position on the hinge rod, the dump body angle, and the valve spinner control setting be recorded for future use.

IMPORTANT! After making final adjustments, the spinner assembly must always be locked in position using the provided locking mechanism.



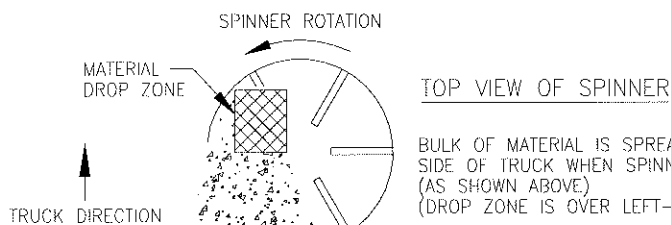
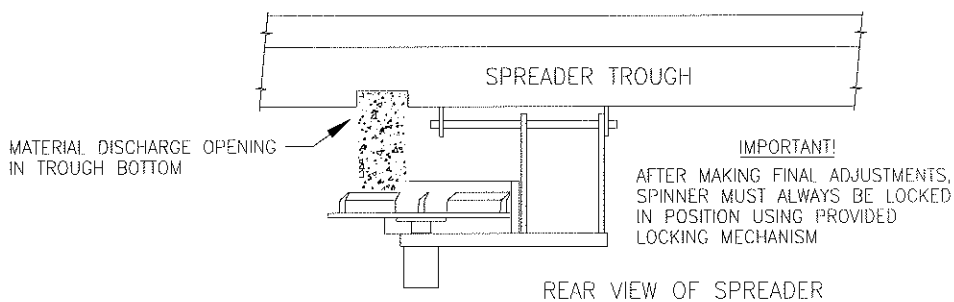
ADJUSTING SPINNER FOR DESIRED SPREAD PATTERN

(Continued)



BULK OF MATERIAL IS SPREAD TO LEFT SIDE AND TO REAR OF TRUCK WHEN SPINNER IS SLID TO CENTER POSITION (AS SHOWN ABOVE). (DROP ZONE IS OVER CENTER-FORWARD AREA OF SPINNER DISC)

SPREAD PATTERN RESULTING FROM SPINNER IN CENTER POSITION



BULK OF MATERIAL IS SPREAD AROUND TO REAR AND TO RIGHT SIDE OF TRUCK WHEN SPINNER IS SLID TO FAR RIGHT POSITION (AS SHOWN ABOVE). (DROP ZONE IS OVER LEFT-FORWARD AREA OF SPINNER DISC)

SPREAD PATTERN RESULTING FROM SPINNER IN FAR RIGHT POSITION

RECOMMENDED REGULAR MAINTENANCE

DANGER

SERIOUS PERSONAL INJURY CAN RESULT FROM BEING CAUGHT IN A TURNING AUGER, A TURNING SPINNER, OR OTHER OPERATING TRUCK EQUIPMENT. BEFORE PERFORMING MAINTENANCE OPERATIONS, PARK VEHICLE ON LEVEL GROUND. SET PARKING BRAKE, SHUT OFF ALL POWER, AND SHUT OFF TRUCK ENGINE. ALWAYS REPLACE SHIELDS AND COVERS WHEN MAINTENANCE IS COMPLETE.

1. Maintain a three-fourths full reservoir using high grade non-foaming hydraulic oil. (See page 5.)
2. Avoid getting contaminants in reservoir when filling.
3. Replace filter cartridge with new cartridge at least twice a year and more often if necessary. (If installed, filter condition gauge has red zone indicating when cartridge needs changing.)
4. Clean hydraulic quick disconnects before taking apart or connecting.
5. Protect hydraulic quick disconnects while in use and after taking apart with oily rag or other suitable protection.
6. Auger bearing requires periodic greasing every 15 hours of use and more frequent greasing during periods of greater use.
7. Oiling or greasing spinner hinge rod is suggested.
8. Hosing down and cleaning spreader after each use, and repainting or oiling after each season will greatly prolong spreader life.
9. Spreader trough should be completely emptied after each use during severe cold weather to prevent material from freezing around auger.

HYDRAULIC TROUBLE-SHOOTING CHART

CONDITION 1

Pump cavitation recognized by excessive noise.

CAUSE

- a. Air entering system through suction lines.
- b. Suction line kinked, twisted or too long.
- c. Inadequate size suction line.
- d. Hydraulic oil too heavy.
- e. Excessive pump speed. Normal pump speed should be 1200 to 1500 RPM.

CORRECTION

- a. Check line from reservoir for possible leaks.
- b. Install suction line as short and straight as possible.
- c. Increase suction line size.
- d. Drain and replace with a lower viscosity hydraulic oil.
- e. Pump capacity is 16 GPM at 1000 RPM. Decrease PTO speed accordingly.

CONDITION 3

Erratic operation of auger and/or spinner.

CAUSE

- a. Low Oil.
- b. Worn or defective motor.
- c. Dirty, worn or defective flow control valve.
- d. Plugged filter.
- e. Relief valve setting too low.
- f. Pump cavitation.
- g. Air vent on reservoir tank is blocked.

CORRECTION

- a. Fill reservoir to a 3/4 full level.
- b. Repair or replace motor.
- c. Clean repair or replace flow control.
- d. Replace filter element and clean filter base.
- e. Adjust relief valve for 1500 PSI.
- f. Refer to condition 1.
- g. Clean or replace vent cap to admit atmospheric pressure to inside of tank.

CONDITION 2

Slow operation of auger and/or spinner.

CAUSE

- a. Worn or defective pump.
- b. Worn or defective motor.
- c. Pump cavitation.
- d. Insufficient pump speed.

CORRECTION

- a. Repair or replace pump.
- b. Repair or replace motor.
- c. Refer to pump section.
- d. Pump capacity is 16 GPM at 1000 RPM. Increase PTO accordingly.

CONDITION 4

Auger and/or spinner will not operate, or operates in wrong direction.

CAUSE

- a. Quick disconnects are dirty or damaged causing incomplete connection.
- b. System hose connections wrong.
- c. Hose connections wrong, causing motors to operate in wrong direction.
- d. Foreign material in valve compensator section.

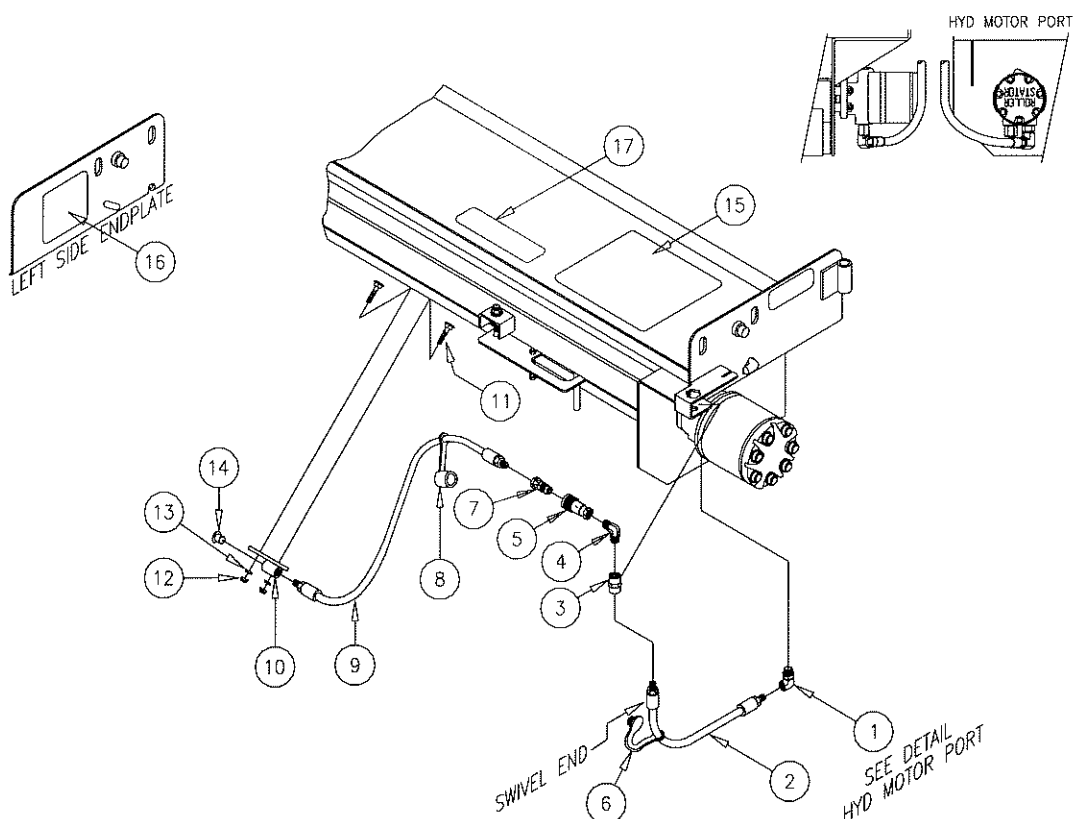
CORRECTION

- a. Clean or replace and properly connect.
- b. Refer to plumbing diagram for proper hose connections, and reconnect.
- c. Refer to illustration for proper hose connections at motor and reconnect.
- d. Remove compensator section and clean.

NOTE: If a motor operates in the wrong direction, reverse hose connections at motor ports (usually easier).

NOTE: Swenson Spreader LLC warranty does not cover unauthorized disassembly of Hydraulic pumps, motors, valves or Electric components.

PARTS LIST FOR SBD-9 DIRECT DRIVE HYDRAULIC SAFETY INTERLOCK

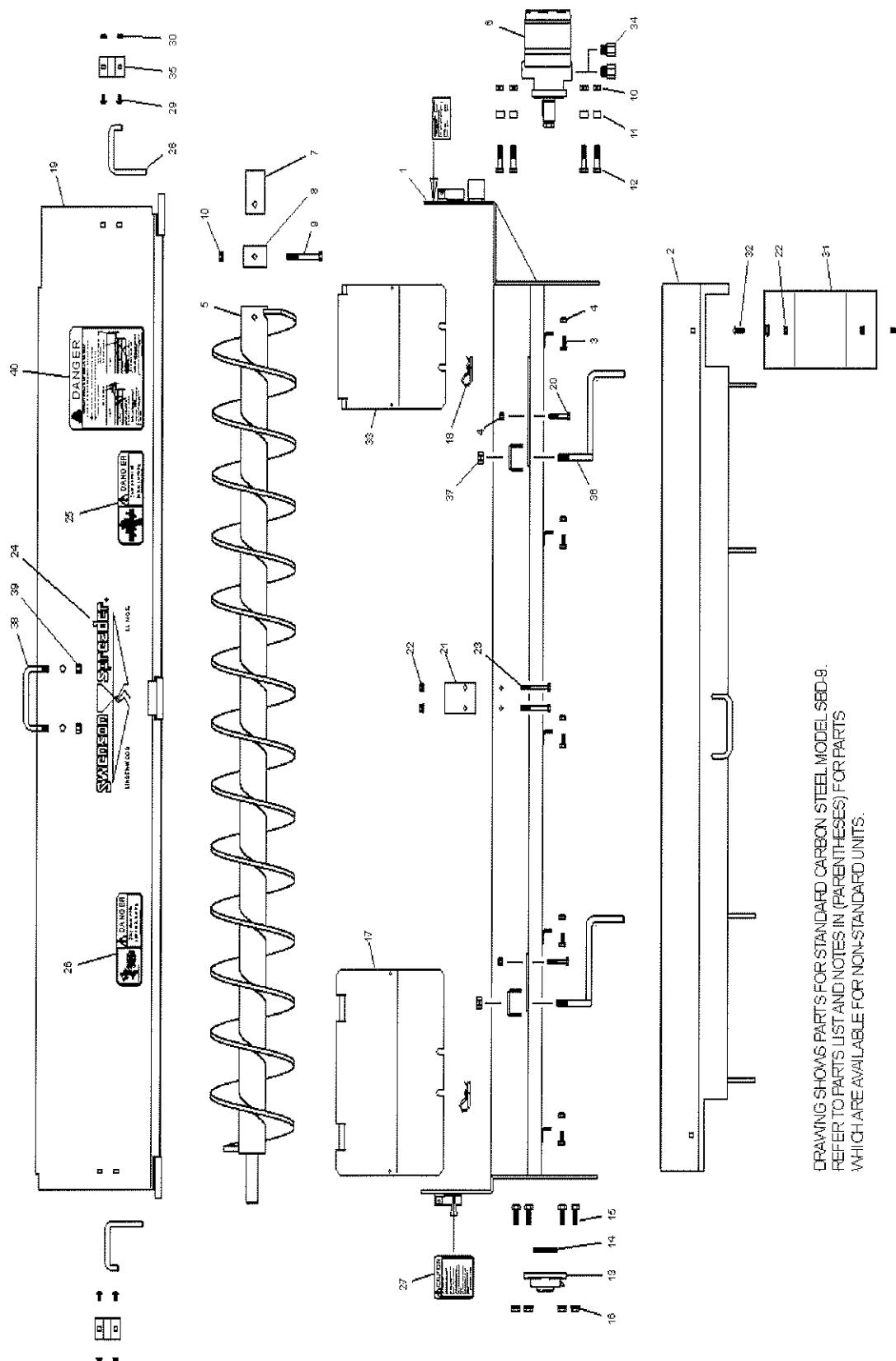


PARKER SBD-9 SAFETY INTERLOCK

Parker SBD-9 Safety Interlock

Item	Swenson	Qty.	Description
1	04121-016-02	1	Elbow, 1/2" Female Pipe
2	04120-003-07	1	Hose, 1/2" (18")
3	04121-073-01	1	Coupling, 1/2"
4	04121-033-02	1	Elbow, 1/2" X 90 Degrees
5	04119-110-00	1	Coupler, Quick Disc. (4000 Series)
6	04118-019-00	1	Plug, 1/2" Dust (4000 Series)
7	04119-111-00	1	Nipple, Quick Disc. (4000 Series)
8	04118-043-00	1	Cap, 1/2" Dust (4000 Series)
9	04120-020-17	1	Hose, 1/2" (31")
10	00117-035-01	1	Weld, Coupling Plate
11	*	2	Bolt, 3/8-16 X 1" Carriage
12	*	2	Locknut, 3/8-16 Top Lock
13	*	2	Flatwasher, 3/8"
14	04111-009-00	1	Plug, 1/2" NPT (CA9)
15	04049-393-00	1	Decal, Safety Interlock
16	04049-045-00	1	Decal, Caution
17	04049-121-00	1	Decal, Danger (Auger)

* Indicates items readily available locally.



DRAWING SHOWS PARTS FOR STANDARD CARBON STEEL MODEL SBD-8.
REFER TO PARTS LIST AND NOTES IN (PARENTHESES) FOR PARTS
WHICH ARE AVAILABLE FOR NON-STANDARD UNITS.

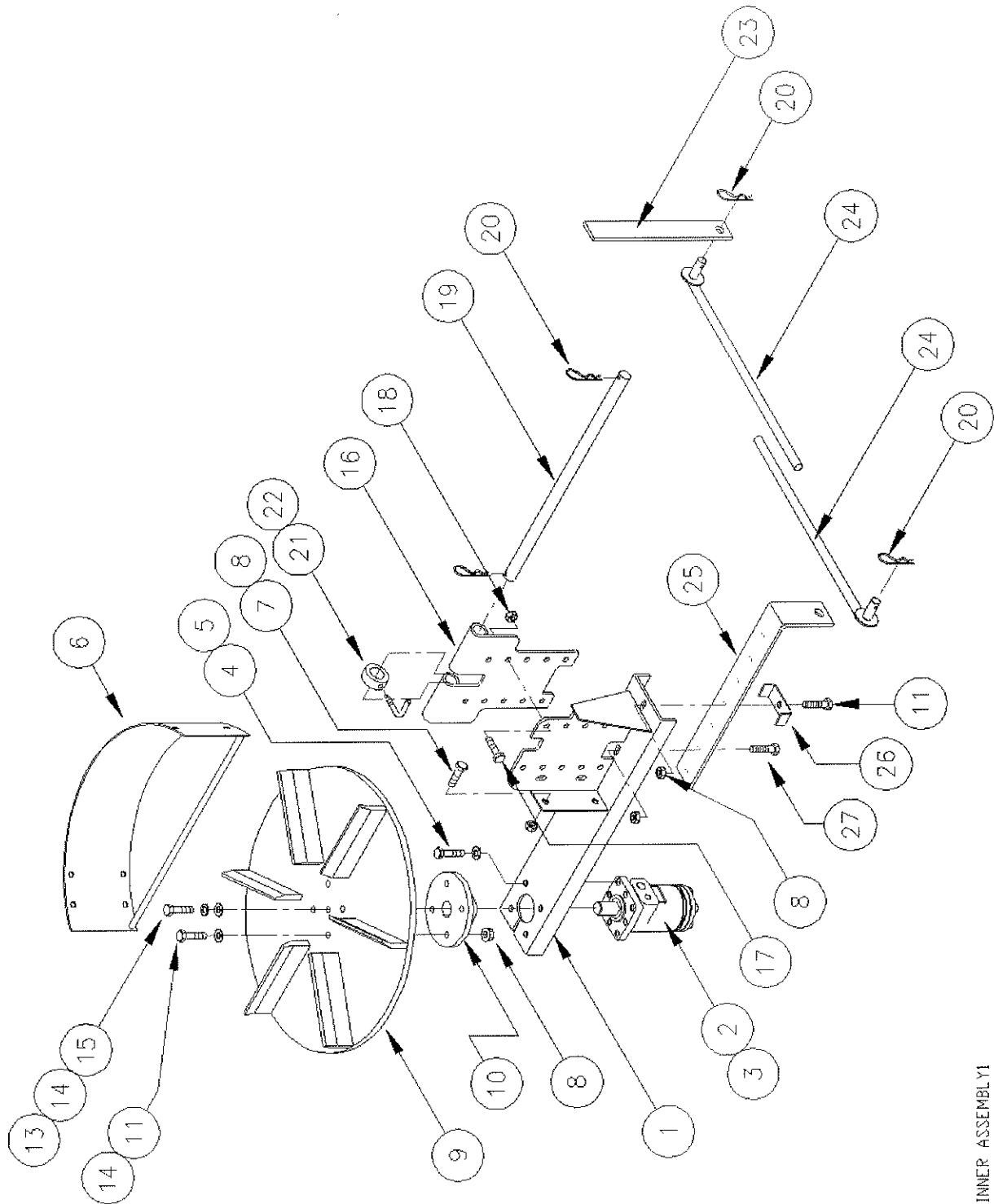
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TROUGH ASSEMBLY (WITH MORE THAN ONE MATERIAL)

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	00120-815-01	1	Weldment, Trough (Standard Carbon Steel)
	00120-815-02	1	Weldment, Trough (304 Stainless Steel)
2	00119-654-03	1	Weldment, Bottom Door (Standard Carbon Steel)
	00119-654-04	1	Weldment, Bottom Door (304 Stainless Steel)
3	*	5	Bolt, 3/8"-16 X 1" HH Gr. 5
4	*	7	Locknut, 3/8"-16 Nylon Insert
5	00111-177-00	1	Weldment, Auger (Standard Carbon Steel)
	00115-538-00	1	Weldment, Auger (Special 4" Pitch)
	00116-160-00	1	Weldment, Auger (Special w/Sensor Bore in Idler End Shaft)(North Dakota)
6	04101-125-00	1	Motor, Hydraulic
	04101-126-00	1	Motor, Hydraulic (w/Sensor)
7	00111-293-00	1	Sleeve, Drive
8	00111-294-00	1	Insert, Auger
9	*	1	Bolt, 1/2"-13 X 3 1/2" HH Gr. 8
10	*	5	Locknut, 1/2"-13 Center Lock
11	04008-005-00	4	Bushing, Spacer (Standard Carbon Steel)
	04008-005-01	4	Bushing, Spacer (Stainless Steel)
12	*	4	Bolt, 1/2"-13 X 2 1/4" HH Gr. 5
13	04080-003-00	1	Bearing, 1 1/4"
14	04005-002-00	1	Washer, Felt
15	*	4	Bolt, 1/2"-13 X 1 1/2" HH Gr. 5
16	*	4	Nut, 1/2"-13 Serrated Flange
17	00111-183-00	1	Cover, Anti-Flow (Long) (Standard Carbon Steel)
	00111-183-01	1	Cover, Anti-Flow (Long) (304 Stainless Steel)
18	04011-001-02	2	Clip, Hitch Pin (Hairpin)(Standard Carbon Steel)
	04011-001-04	2	Clip, Hitch Pin (Hairpin)(304 Stainless Steel)
19	00119-653-03	1	Weldment, Top Cover (Standard Carbon Steel)
	00119-653-04	1	Weldment, Top Cover (304 Stainless Steel)
20	*	2	Bolt, 3/8"-16 X 3 1/2" HH Gr. 5
21	00117-097-01	1	Clip, Cover Holddown (Standard Carbon Steel)
	00117-097-02	1	Clip, Cover Holddown (304 Stainless Steel)
22	*	4	Nut, 3/8"-16 Serrated Flange
23	*	2	Bolt, 3/8"-16 X 3" HH Gr. 5 ZP
24	04049-002-00	1	Decal, Swenson Logo
25	04049-121-00	1	Decal, Danger (Auger)
26	04049-044-00	1	Decal, Danger (Spinner)
27	04049-045-00	1	Decal, General Caution
28	00106-315-00	2	Handle, Top Cover Latch(Standard Carbon Steel)
	00109-360-00	2	Handle, Top Cover Latch (304 Stainless Steel)
29	*	4	Bolt, 5/16"-18 X 5/8" Carriage
30	*	4	Nut, 5/16"-18 Serrated Flange
31	00115-061-01	1	Cover, Bottom Door Opening (Standard Carbon)
	00116-061-02	1	Cover, Bottom Door Opening (304 Stainless)
32	*	2	Bolt, 3/8"-16 X 1" Carriage Gr. 5
33	00111-975-01	1	Cover, Anti-Flow (Short)(Standard Carbon Steel)
	00111-975-02	1	Cover, Anti-Flow (Short)(304 Stainless Steel)
34	04121-008-07	2	Adapter, (7/8" O-Ring X 1/2" NPT)
35	00115-060-00	2	Bracket, Latch Handle
36	00119-664-01	2	Handle, Bottom Door Latch(Standard Carbon Steel)
	00119-664-02	2	Handle, Bottom Door Latch(304 Stainless Steel)
37	*	2	Locknut, 5/8"-11 Center Lock
38	00119-665-01	1	Handle, Top Cover Lift (Standard Carbon Steel)
	00119-665-02	1	Handle, Top Cover Lift (Stainless Steel)
39	*	2	Locknut, 1/2"-13 Nylon Insert
40	04049-393-00	1	Decal, Danger (Safety Interlock)

* INDICATES ITEMS READILY
AVAILABLE LOCALLY

LEFT HAND (CCW) SPINNER ASSEMBLY

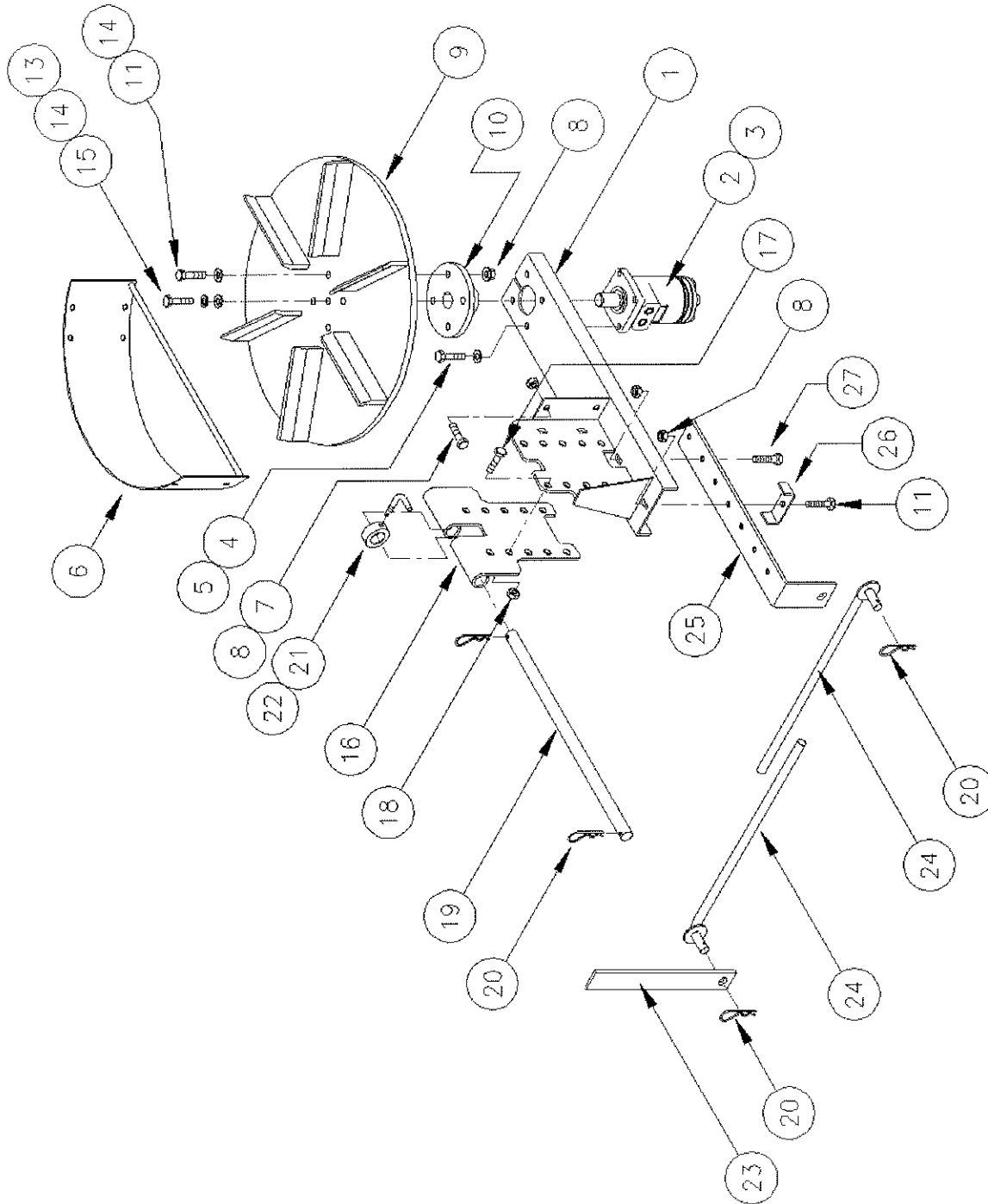


SPINNER ASSEMBLY1

PARTS LIST FOR LEFT HAND (CCW) SPINNER ASSEMBLY

<u>Item</u>	<u>Carbon</u>	<u>Stainless</u>	<u>Qty.</u>	<u>Description</u>
1	00119-521-01	00119-521-02	1	Weld, Spinner Frame
2	04101-035-00	04101-035-00	1	Motor, Hydraulic (3.0 CID)
3	04009-001-03	04009-001-03	1	Key, 1/4" X 1" Woodruff
4	04003-003-01	04003-003-24	4	Bolt, 3/8"-16 X 3/4" HH
5	04004-001-07	04004-001-14	4	Lockwasher, 3/8"
6	06043-001-00	00101-831-00	1	Weld, Spinner Shield
7	04003-002-02	04003-002-23	4	Bolt, 5/16"-18 X 3/4" HH
8	04003-806-01	04003-806-13	10	Nut, 5/16"-18 Serrated Flange
9	04622-002-00	04622-002-00	1	Disc, Poly 18" (CCW)
10	06012-003-00	06012-003-00	1	Hub, Spinner
11	04003-002-06	04003-002-21	5	Bolt, 5/16"-18 X 1-1/2" HH,
13	04003-001-11	04003-001-11	1	Bolt, 1/4"-20 X 3/4" HH SS(For Eaton Motor)
	04003-001-16	04003-001-16	1	Bolt, 1/4"-20 X 1" HH SS (For Eaton Motor)
	04003-002-24	04003-002-24	1	Bolt, 5/16"-18 X 1" HH SS (For White Motor)
	04003-002-26	04003-002-26	1	Bolt, 5/16"-18 X 1-1/4" HH SS(For White Motor)
14	04004-002-05	04004-002-05	1	Flatwasher, 1/4"
	04004-002-07	04004-002-07	5	Flatwasher, 5/16"
15	04004-001-05	04004-001-06	1	Lockwasher, 5/16"
16	00119-524-01	00119-524-02	1	Weld, Spinner Extension
17	04003-003-05	04003-003-20	4	Bolt, 3/8"-16 X 1" HH
18	04003-806-02	04003-806-20	4	Nut, 3/8"-16 Serrated Flange
19	00106-401-00	00109-374-00	1	Rod, Hinge
20	04011-001-02	04011-001-04	4	Keeper, Large
21	04001-001-01	04001-001-01	1	Collar Set 1"
22	00106-314-00	00106-314-00	1	Lock, Spinner, SS
23	00100-715-00	00100-715-01	1	Bar, Frame
24	08036-001-00	08036-001-01	2	Weld, Linkage Rod
25	00110-665-00	00110-665-01	1	Bar, Spinner Linkage
26	06010-000-00	06010-000-01	1	Clamp, Hose
27	04003-002-04	04003-002-24	1	Bolt, 5/16-18 X 1" HH
N/S	04540-007-00	04540-007-00	1	Tube, Anti-Seize

RIGHT HAND (CW) SPINNER ASSEMBLY

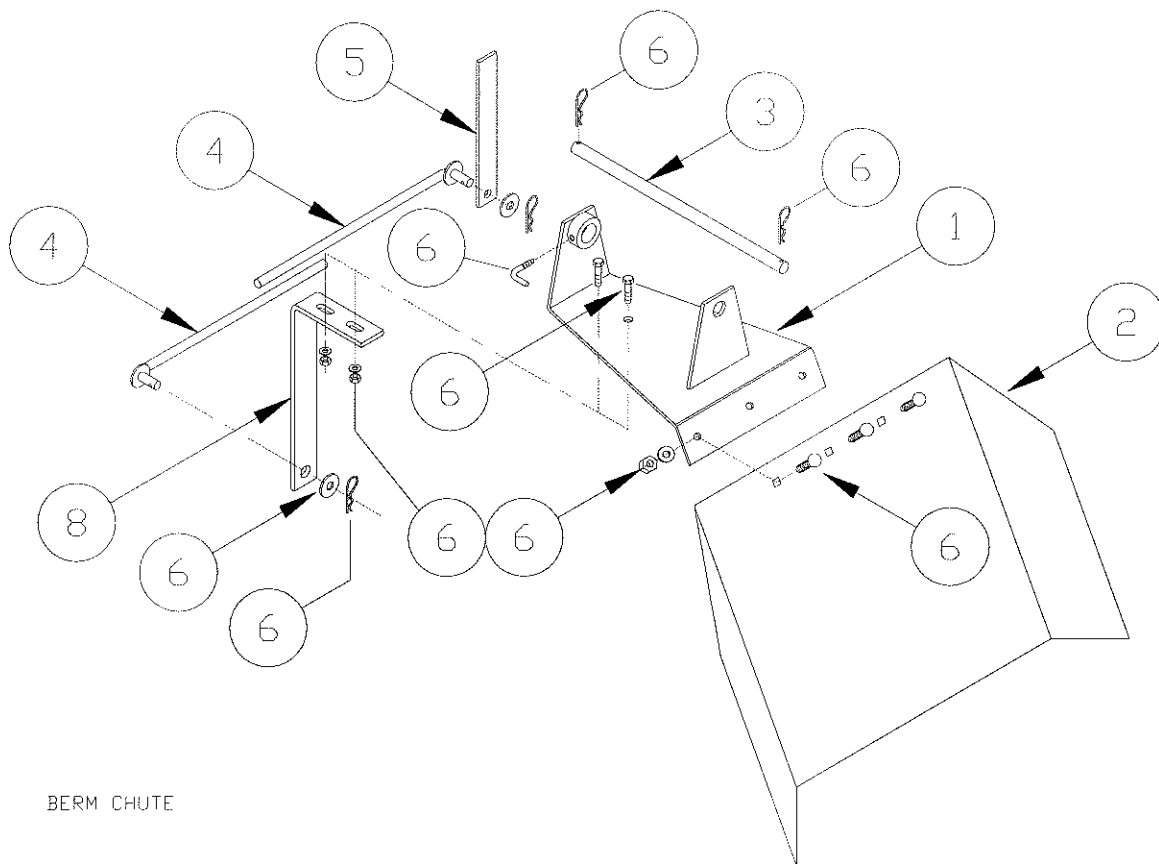


RH SPINNER ASSEMBLY Y1

PARTS LIST FOR RIGHT HAND (CW) SPINNER ASSEMBLY

<u>Item</u>	<u>Carbon</u>	<u>Stainless</u>	<u>Qty.</u>	<u>Description</u>
1	00119-521-01	00119-521-02	1	Weld, Spinner Frame
2	04101-035-00	04101-035-00	1	Motor, Hydraulic (3.0 CID)
3	04009-001-03	04009-001-03	1	Key, 1/4" X 1" Woodruff
4	04003-003-01	04003-003-24	4	Bolt, 3/8"-16 X 3/4" HH
5	04004-001-07	04004-001-14	4	Lockwasher, 3/8"
6	06043-001-00	00101-831-00	1	Weld, Spinner Shield
7	04003-002-02	04003-002-23	4	Bolt, 5/16"-18 X 3/4" HH
8	04003-806-01	04003-806-13	10	Nut, 5/16"-18 Serrated Flange
9	04622-009-00	04622-009-00	1	Disc, Poly 18" (CW)
10	06012-003-00	06012-003-00	1	Hub, Spinner
11	04003-002-06	04003-002-21	5	Bolt, 5/16"-18 X 1-1/2" HH
13	04003-001-11	04003-001-11	1	Bolt, 1/4"-20 X 3/4" HH SS(For Eaton Motor)
	04003-001-16	04003-001-16	1	Bolt, 1/4"-20 X 1" HH SS (For Eaton Motor)
	04003-002-24	04003-002-24	1	Bolt, 5/16"-18 X 1" HH SS (For White Motor)
	04003-002-26	04003-002-26	1	Bolt, 5/16"-18 X 1-1/4" HH SS(For White Motor)
	04004-002-05	04004-002-05	1	Flatwasher, 1/4"
14	04004-002-07	04004-002-07	5	Flatwasher, 5/16"
	04004-001-05	04004-001-06	1	Lockwasher, 5/16"
15	00119-524-01	00119-524-02	1	Weld, Spinner Extension
16	04003-003-05	04003-003-20	4	Bolt, 3/8"-16 X 1" HH
17	04003-806-02	04003-806-20	4	Nut, 3/8"-16 Serrated Flange
18	00106-401-00	00109-374-00	1	Rod, Hinge
19	04011-001-02	04011-001-04	4	Keeper, Large
20	04001-001-01	04001-001-01	1	Collar Set 1"
21	00106-314-00	00106-314-00	1	Lock, Spinner, SS
22	00100-715-00	00100-715-01	1	Bar, Frame
23	08036-001-00	08036-001-01	2	Weld, Linkage Rod
24	00110-665-00	00110-665-01	1	Bar, Spinner Linkage
25	06010-000-00	06010-000-01	1	Clamp, Hose
26	04003-002-04	04003-002-24	1	Bolt, 5/16-18 X 1" HH
27	04540-007-00	04540-007-00	1	Tube, Anti-Seize
N/S				

DRAWINGS & PARTS LISTS FOR BERM CHUTE



BERM CHUTE

PARTS LIST FOR BERM CHUTE KIT

(00001-875-01)

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	00119-606-01	1	Weldment, Berm Chute
2	00119-607-01	1	Forming, Chute
3	00106-401-00	1	Rod, Hinge,
5	08036-001-00	2	Weldment, Parallel Linkage Bar
6	00100-715-00	1	Bar, Frame
7	00106-574-00	1	Bag, Hardware (Includes items listed below.)
	04011-001-02	4	Keeper, Hairpin Large
	00106-314-00	1	Lock, Spinner, SS
	04003-033-03	3	Bolt, 3/8-16 X 1" Carriage, SS
	04004-002-20	5	Flatwasher, 3/8" U.S.S., SS
	04003-804-08	5	Locknut, 3/8-16 Nylon Insert, SS
	04003-003-20	2	Bolt, 3/8-16 X 1" HH, SS
	04004-002-22	2	Flatwasher, 1/2" U.S.S., SS
87	00119-608-01	1	Leg, Stabilizer,

PARTS LIST FOR HYDRAULIC HOSE & FITTING KIT

(8'-11' Dump Body)

(00001 206 00) See page 6 for drawing.

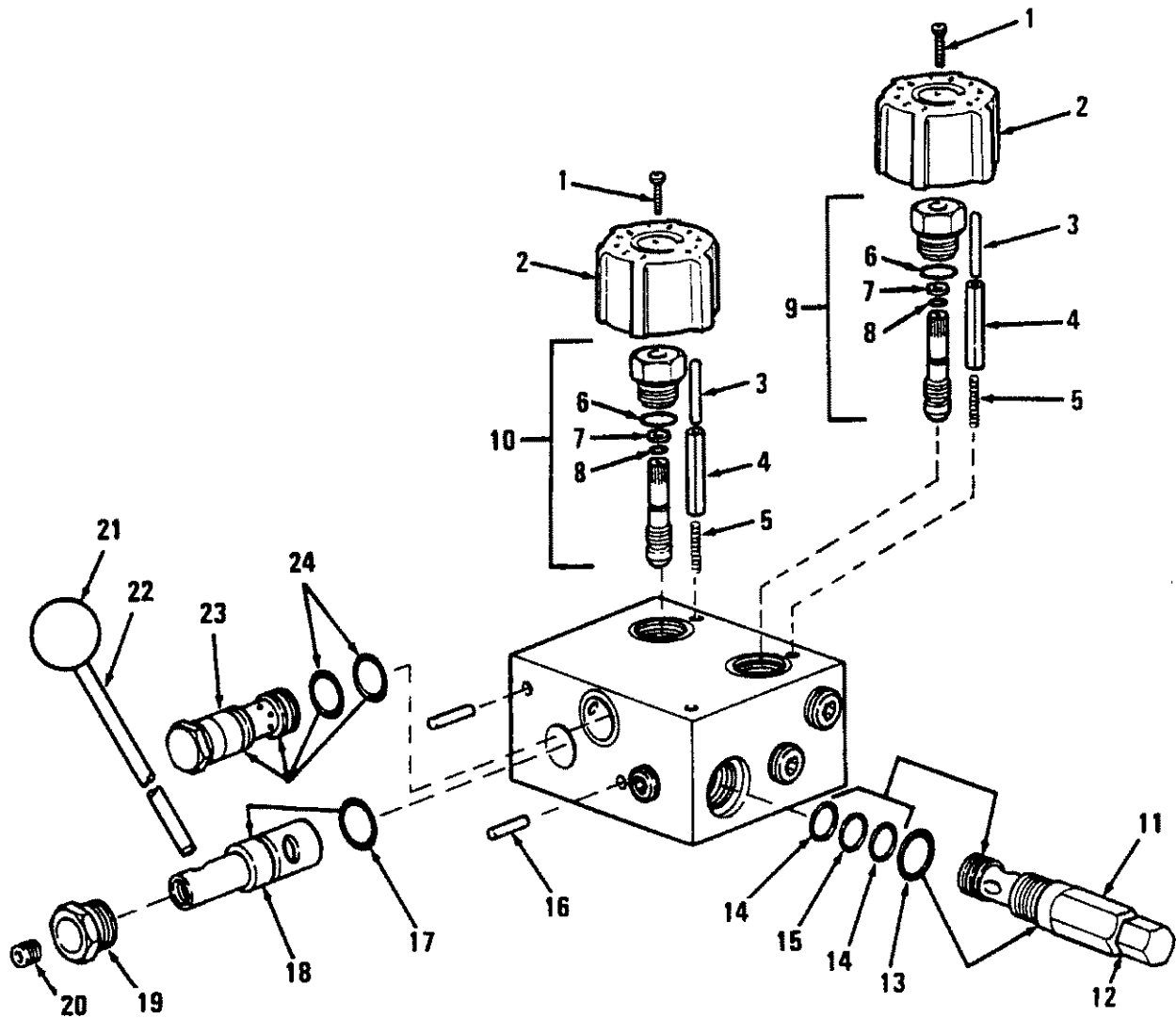
<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	04120-003-01	2	Hose, 1/2" x 48" x (1) Wire
2	04120-003-12	2	Hose, 1/2" x 60" x (1) Wire
3	04120-026-04	1	Hose, 1/2" x 15' x (1) Wire
4	04120-014-04	1	Hose, 3/4" x 15' x (1) Wire
5	04120-033-01	1	Hose, 3/4" x 25' x (2) Wire
6	04119-110-00	2	Quick Disconnect, 1/2" (Female)
	04119-111-00	2	Quick Disconnect, 1/2" (Male)
7	04119-112-00	2	Quick Disconnect, 3/4" (Female)
	04119-113-00	2	Quick Disconnect, 3/4" (Male)
8	04121-002-01	2	Reusable Hose End, 1/2"
9	04121-002-03	6	Reusable Hose End, 3/4"
10	04121-002-04	4	Reusable Hose End, 3/4"
11	04121-003-04	1	Swivel Adapter, 1/2" (F) x 1/2" (M)
12	04121-003-05	4	Swivel Adapter, 3/4"
13	04110-016-05	1	Bushing, 1" x 3/4" Reducing
17	04110-011-01	1	Tee, 3/4" x 1/2" x 1/2" Reducing
18	04110-027-05	1	Nipple, 1/2" x 3"
19	04110-004-04	1	Elbow, 1/2" 90 Degree
20	04110-006-04	1	Elbow, 1/2" 90 Degree Street
21	04118-019-00	2	Dust Plug 1/2"
22	04118-043-00	2	Dust Cap 1/2"
23	04118-018-00	2	Dust Plug 3/4"
24	04118-028-00	2	Dust Cap 3/4"

PARTS AVAILABLE FOR HYDRAULIC MOTORS

<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
04101-125-01	1	Seal Kit for "White" Roller Stator Conveyor Hydraulic Motor (45.6 C.I.D./REV.) (Swenson Motor No. <u>04101-125-00</u>)
04101-035-98	1	Seal Kit for "White" Roller Stator Spinner Hydraulic Motor (3.2 C.I.D./REV.) (Swenson Motor No. <u>04101-035-00</u>)
04101-102-09	1	Seal Kit for "Eaton" (Char-Lynn) Spinner Hydraulic Motor (2.8 C.I.D./REV.) (Swenson Motor No. <u>04101-035-00</u>)
04101-102-02	1	4-Bolt Motor Mounting Flange for "Eaton" (Char-Lynn) Spinner Hydraulic Motor only (Will not work on other manufacturer's motors.)

HYDRAULIC DUAL FLOW CONTROL VALVE

(04105 285 00)



PARTS LIST FOR HYDRAULIC DUAL FLOW CONTROL VALVE

(04105 285 00)

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1A	04105-285-46		Detent Repair Kit (Consists of 1,2,3,4 & 5)
1B	04105-285-09		Kit, Seal for Item # 9 & 10 Consists of Items 6, 7 & 8
1D	04105-285-31		Kit, Seal
			Consists of Items: 6,7,8,12,13,14,15,17,23 & 24
1		2	Screw
2		2	Handknob
3		2	Dowel Pin
4		2	Roll Pin
5		2	Spring
6		2	O-Ring®
7		2	Back-up, Teflon®
8		2	O-Ring, Vitron®
9	04105-285-10	1	Auger Adj. Assy. - 7 GPM
	04105-285-11	1	Auger Adj. Assy. - 10 GPM
	04105-285-12	1	Auger Adj. Assy. - 15 GPM
	04105-285-13	1	Auger Adj. Assy. - 20 GPM
	04105-285-14	1	Auger Adj. Assy. - 25 GPM
	04105-285-15	1	Auger Adj. Assy. - 30 GPM
10	04105-285-16	1	Spinner Adj. Assy. - 5 GPM
	04105-285-17	1	Spinner Adj. Assy. - 7 GPM
	04105-285-18		Spinner Adj. Assy. - 10 GPM
11	04105-285-19	1	Relief Cartridge
12		1	Gasket
13		1	O-Ring, Vitron®
14		2	Ring, Back-up, Teflon®
15		1	O-Ring, Vitron®
16	04105-285-24	2	Roll Pin
17		1	O-Ring (Dump Stem)
18	04105-032-21	1	Stem (Not Available - Can no longer service)
19	04105-285-26	1	Plug
20	04105-032-26	1	Setscrew
21	04105-032-28	1	Handknob
22	04105-032-25	1	Handle
23		1	Bypass Assy.
24		2	O-Ring, Vitron®

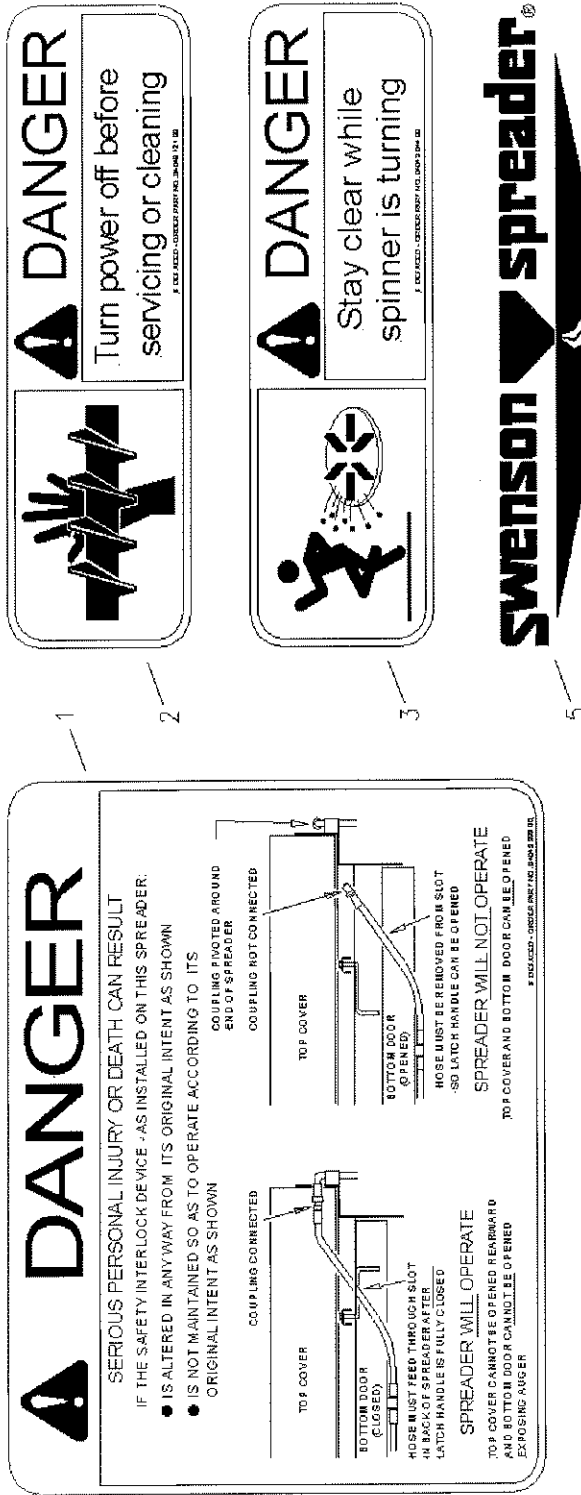
PARTS LIST FOR VALVE STAND KIT

(#00001-692-00)

(See page 8 for Drawing)

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	00105-874-00	2	Valve Stand (Upright
2	00105-873-00	1	Flange Plate
3	04003-001-10	2	Bolt, 1/4" X 3" H.H.
4	04003-001-05	8	Bolt, 1/4" X 1" H.H.
5	04003-801-07	10	Nut, 1/4" H.H.
6	04004-001-05	10	Lockwasher, 1/4"

DECAL GROUP



NOTE:
DECALS HAVE BEEN SHOWN LARGE ENOUGH SO INFORMATION CAN BE EASILY READ.
DECALS ARE NOT PROPORTIONALLY SIZED WITH REFERENCE TO EACH OTHER.

Decal	Part Number	Qty	Description
1	04049-393-00	1	Safety Interlock Decal (8" X 10" Red & White)
2	04049-121-00	1	Auger Danger Decal (9" X 2 3/4" Red & White)
3	04049-044-00	1	Spinner Danger Decal (9" X 2 3/4" Red & White)
4	04049-045-00	1	General Caution Decal (4 1/4" X 4" Yellow & Black)
5	04049-002-00	1	Swenson Logo Decal
-	00002-464-00	-	Decal Package (Consists of Items 1 - 5)

S:\MANUAL\TAILGATE\5 SERIES\DECAL PARTS DWG

NAME PLATE INFORMATION

- ☐ When ordering parts or requesting information or assistance, always include the information listed below.
- ☐ The Model Number and Serial Number for the Spreader are shown on the name plate.
- ☐ The space below is provided as a convenient place to record these numbers; just fill in the blanks.

MODEL NUMBER _____

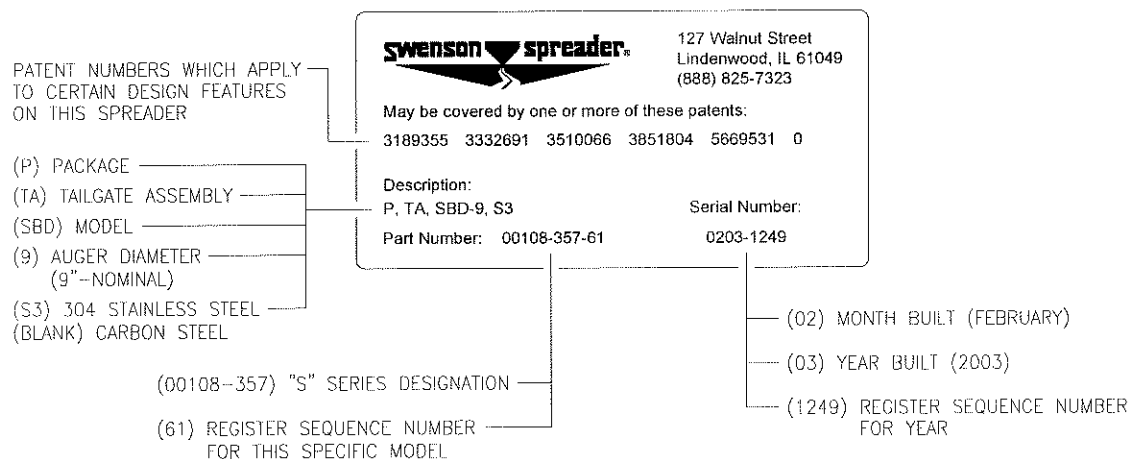
SERIAL NUMBER _____

DATE PURCHASED _____

DEALER PURCHASED FROM _____

DEALER'S SERVICE DEPARTMENT PHONE NUMBER _____

EXPLANATION OF SERIAL NUMBER DECAL



CALL YOUR AUTHORIZED SWENSON SPREADER DEALER FOR PARTS AND SERVICE
SWENSON SPREADER (815) 393-4455
TOLL FREE (888) 825-7323
FAX (866) 310-0300
email: swensonsales@swensonspreader.com

NOTICE: INSTRUCTIONAL MATERIAL AND PARTS LISTS INCLUDED IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE.



Effective 5/1/99

Dealers have the responsibility of calling to the attention of their customers the following warranty prior to acceptance of an order from that customer for any SWENSON® product.

WARRANTY

SWENSON warrants to the original purchaser for use that, if any part of the product proves to be defective in material or workmanship within one year from the date of original installation, and is returned to SWENSON within 30 days after such defect is discovered, SWENSON will (at our option) either replace or repair said part. This warranty does not apply to damage resulting from misuse, neglect, accident or improper installation or maintenance. Said part will not be considered defective if it substantially fulfills the performance specifications. THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES OF MERCHANTABILITY, FITNESS FOR PURPOSE AND OF ANY OTHER TYPE, WHETHER EXPRESS OR IMPLIED. SWENSON® neither assumes nor authorizes anyone to assume for it any other obligation or liability in connection with said part and will not be liable for consequential damages.

All gasoline engines and hydraulic pumps are warranted by their manufacturer and not by Swenson Spreader LLC. Electrical or hydraulic components are not to be disassembled without the express written permission of Swenson Spreader LLC. Defective parts returned to Swenson Spreader LLC must be accompanied by the following information: spreader model, serial number, date installed and dealer from whom purchased.

Purchaser accepts these terms and warranty limitations unless the product is returned within fifteen days for full refund of purchase price.



SWENSON SPREADER LLC
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SALES & SERVICE FAX: (866)310-0300

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website: www.swensonspreader.com

**IMPORTANT
INFORMATION
ENCLOSED**

