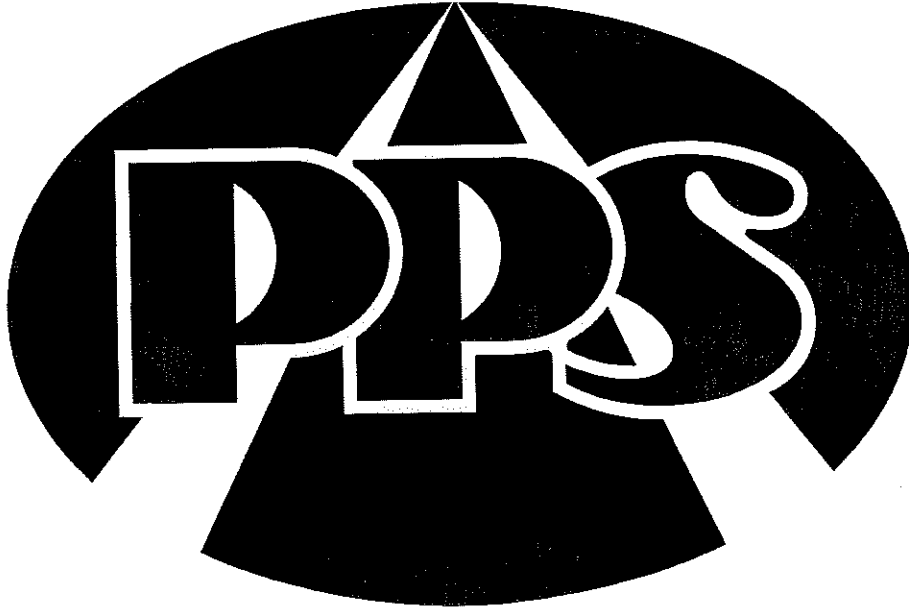


INSTALLATION *AND* OPERATING INSTRUCTION MANUAL

Read Before Installation

PRECISION PLACEMENT SPINNER



TM

INCLUDED IN THIS MANUAL:

SAFETY PRECAUTIONS	2-3
HYDRAULIC SPECIFICATIONS & INSTALLATION	4
MOUNTING INSTRUCTIONS	5-9
START UP INSTRUCTIONS	10
MAINTENANCE	11
PARTS DRAWINGS & PARTS LIST	13-18
WARRANTY	Back Cover



P.O. Box 127 - LINDENWOOD, ILLINOIS - 815/393-4455

Manual No. 00116-893-00
2-8-01

SAFETY PRECAUTIONS

The best safety device is a careful operator!



This symbol means ATTENTION!

Become Alert!

Your safety is involved!

READ AND UNDERSTAND COMPLETELY BEFORE PROCEEDING!



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 or servicing equipment. Loose jackets, shirts, sleeves or other loose clothing should not be worn because of the danger of catching them in moving parts.

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

Disengage power to all operation equipment: (1) before leaving operator's position, (2) before making any repairs or adjustments, 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:

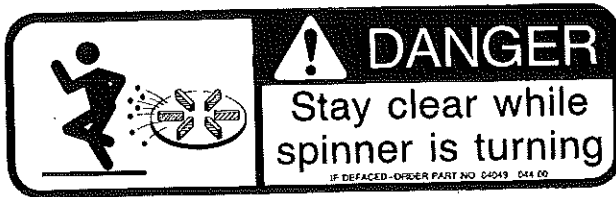
It is the responsibility of the owner of this equipment to replace any or all safety decals which become unreadable or otherwise defaced.

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.



This decal appears on or near the spinner assembly and also near auger motor. It cautions all to observe general safety procedures when operating this equipment.



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



This decal appears on or near the crossauger assembly, where unsafe access can be gained to a rotating auger operating inside the crossauger trough. It alerts all to the danger of being caught in the dropout opening of the crossauger where serious personal injury could result.

HYDRAULIC SPECIFICATIONS AND INSTALLATION

Hydraulic Oil Good grade of MS 10W
Hydraulic oil which has wear,
oxidation, and foam inhibitors

Oil Filter 10 micron element return line

Relief Valve Setting 1500 PSI

Oil Flow
Requirement to
Spinner Motor 10 GPM

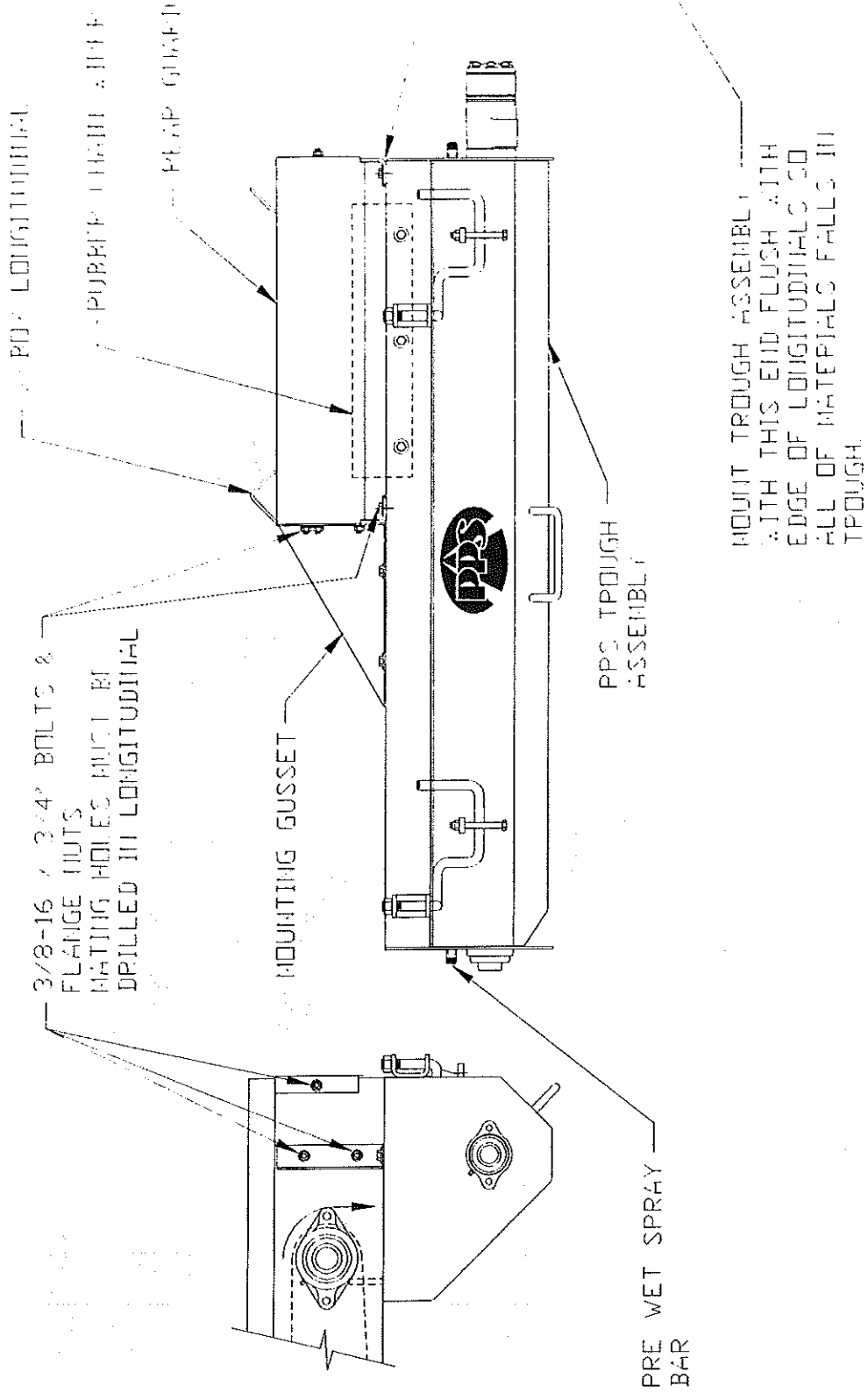
MOTOR DISPLACEMENTS

<u>Motor For:</u>	<u>Displacement Per Revolution (Cubic Inches)</u>	<u>Motor Shaft Revolutions Per Minute At 1 Gallon Of Oil Per Minute (Theoretical)</u>
Spinner	2.8	82.5

1. The hydraulic plumbing diagram on the following page may be used to install an entire system, or part of a system depending upon individual requirements.
2. Alternate proven methods and components are acceptable to suit various truck model requirements.

BREAK-AWAY ASSEMBLY

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	00115-074-00	1	Weldment, Upper Break-Away
2	00115-085-00	1	Weldment, Lower Break-Away
3	00115-098-00	1	Weldment, Break-Away Stub
4	00115-089-00	1	Weldment, Adjustment Plate
5	04003-006-23	1	Bolt, 5/8-11 X 4 1/2 HH SS
6	00115-092-00	2	Weldment, Compression Spring I-Bolt
7	00115-443-00	1	Weldment, Handle Nut
8	00115-224-00	1	Dog, Detent
9	00115-223-00	1	Plate, Detent
10	00115-219-00	1	Cap, Tube
11	00115-218-00	2	Washer, Square
12	04091-024-00	2	Spring, 15" Extension
13	04091-025-00	2	Spring, 4" Compression
14	04003-003-24	1	Bolt, 3/8-16 x 3/4 HH SS
15	04003-005-23	2	Bolt, 1/2-13 x 1 1/4 HH SS
16	04003-005-24	1	Bolt, 1/2-13 x 1 1/2 HH SS
17	04003-806-16	2	Nut, 1/2-13 Ser. Flange SS
18	04003-807-23	1	Locknut, 1/2-13 Prev. Torque SS
21	04003-006-22	2	Bolt, 5/8-11 x 1 1/4" HH SS
22	04003-006-23	2	Bolt, 5/8-11 x 4 1/2" HH 316 SS
23	04003-801-22	3	Nut, 5/8-11 Hex SS
24	04003-807-22	2	Locknut, 5/8-11 Prev. Torque SS
25	04004-002-52	4	Flatwasher, 5/8" SS
26	04003-007-19	1	Bolt, 3/4-10 x 6" HH SS
27	04014-150-02	1	Pin, Bent Hitch
31	00116-043-00	1	Weldment, Mounting Post
32	04014-101-01	2	Pin, 3/4" Hitch (w/keeper)

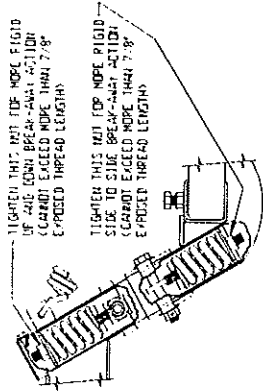


ZM/109-018

4/10/09

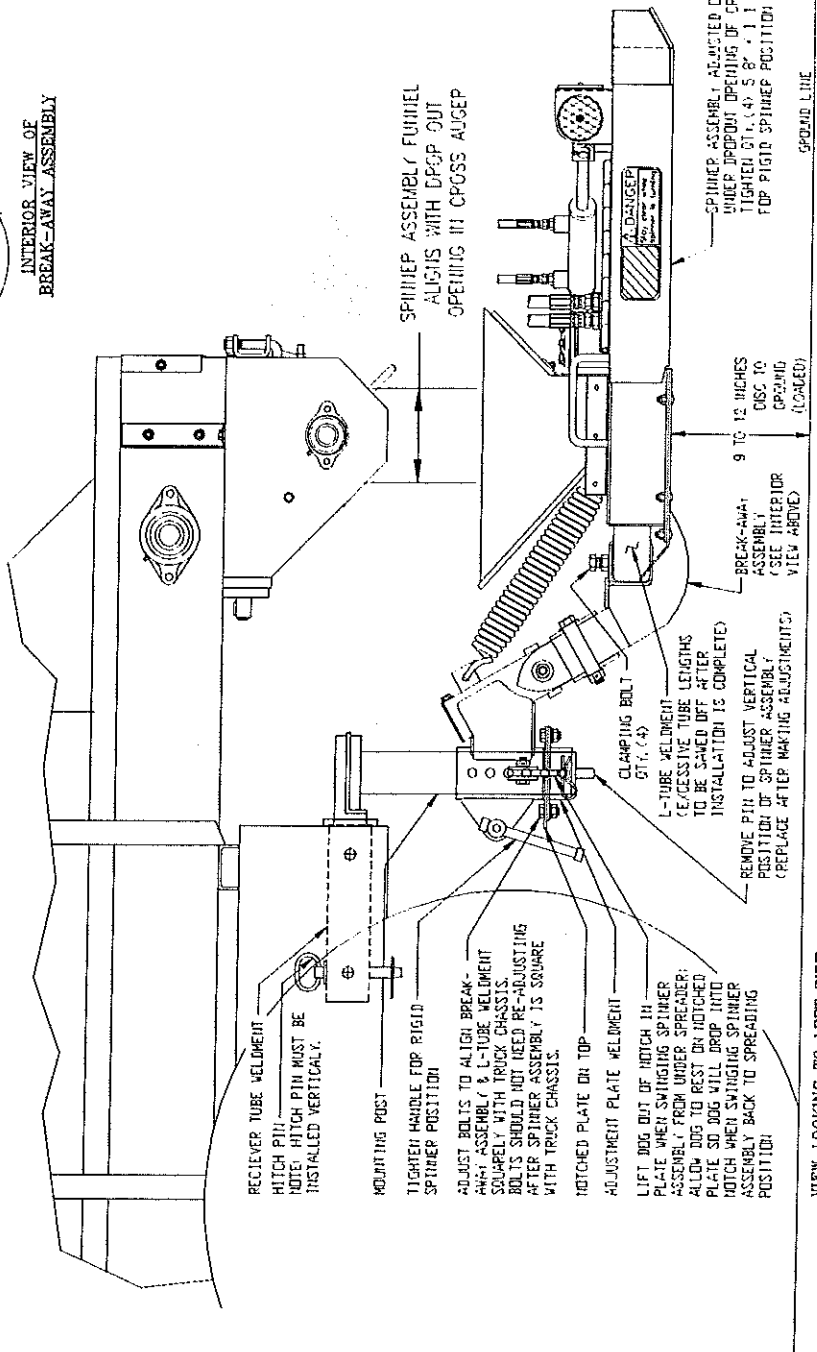
RECEIVER TUBE WELDMENT INSTALLATION NOTES

1. A RECEIVER TUBE WELDMENT HAS BEEN SUPPLIED FOR WELDING TO THE TRUCK FRAME FOR MOUNTING THE ENTIRE SPINNER ASSEMBLY. CORRECTIONS CAN BE MODIFIED AS NECESSARY TO SUIT VARIOUS TRUCK CONFIGURATIONS.
2. RECEIVER TUBE LOCATION IS DETERMINED BY THE MATERIAL DROP LOCATION AND THE SPREADER HEIGHT. LOCATE THE SPINNER ASSEMBLY AS SHOWN, KEEPING DISTANCE OUT ON L-TUBE AS SHOWN AS POSSIBLE. INITIAL RECEIVER TUBE WELDMENT TO BE MOUNTED WITH INTERNAL FLASH ON SIDE, NOT ON TOP OR BOTTOM.
3. RECEIVER TUBE WELDMENT MUST BE PIGTAIL ANCHORED TO TRUCK FRAME. THE SPINNER ASSEMBLY IS HEAVY SO IT IS NECESSARY TO DO ALL THAT IS POSSIBLE TO PREVENT THE RECEIVER TUBE FROM TWISTING OR BENDING WHILE THE SPINNER IS IN USE. IT MUST BE PROOF BOLDED.
4. RECEIVER TUBE WELDMENT MUST BE SQUARE AND ALIGNED WITH TRUCK FRAME TOP STRAIGHT AND LEVEL SPINNER MOUNTING CHASSIS SPRING HANGER AND OTHER TRUCK FRAME COMPONENTS. MAY HAVE IT DIFFICULT TO INSTALL THE RECEIVER TUBE IN EXACT LOCATION SHOWN. THE SPINNER ASSEMBLY HAS THE CAPABILITY TO BE ADJUSTED FROM CURE-TO-CURE AND FROM FORWARD-TO-REARWARD IF EXACT LOCATION AS SHOWN CANNOT BE ACHIEVED.



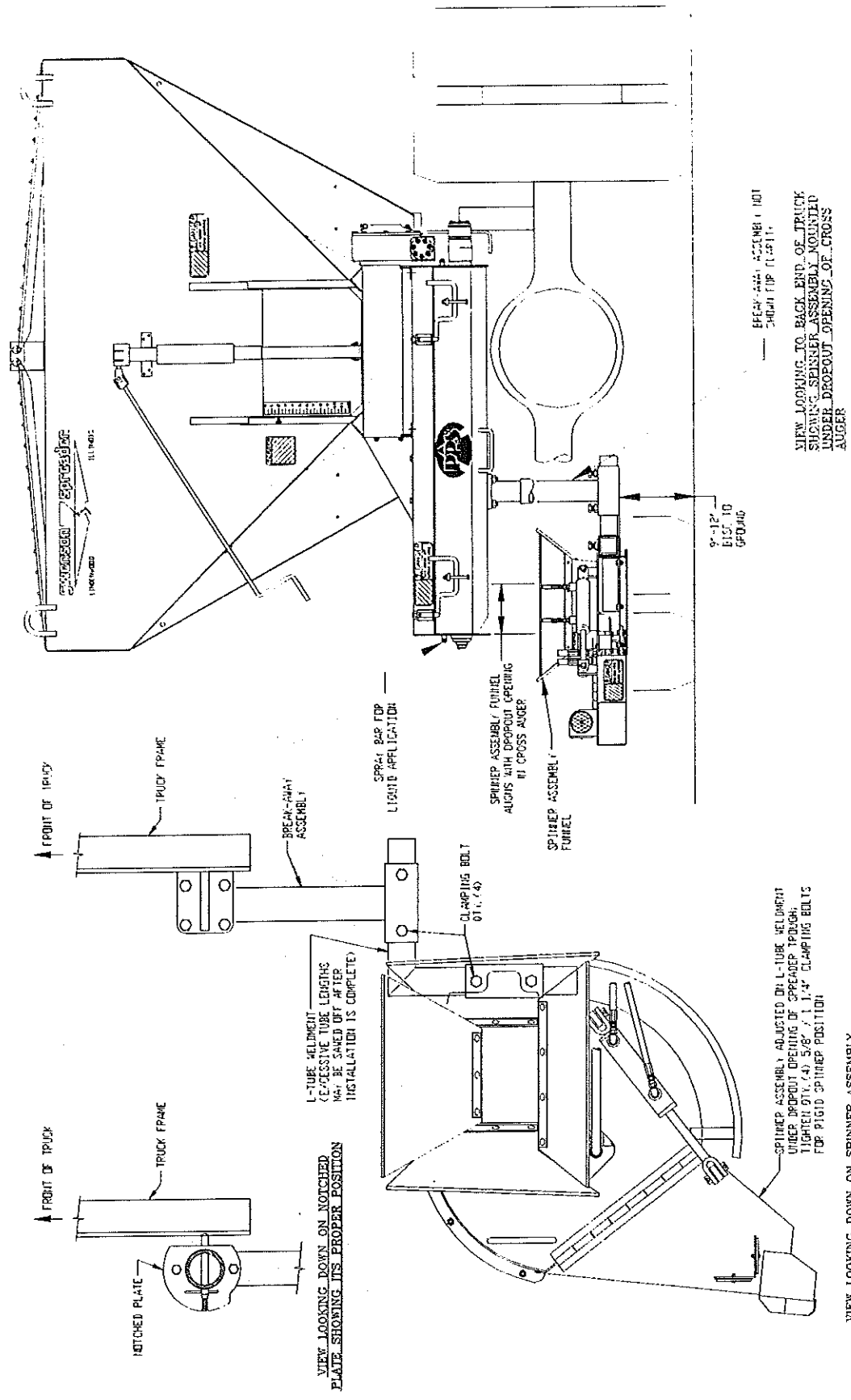
INTERIOR VIEW OF BREAK-AWAY ASSEMBLY

INTERNAL NUTS
 STAINLESS STEEL FASTENERS WILL GALL AND SEIZE UP WHEN BEING TIGHTENED (TOP BEING LOOSENED AFTER BEING TIGHT).
 APPLY NEVER-SEIZE COMPOUND TO ALL STAINLESS STEEL FASTENERS (INCLUDING LOCKING FASTENERS) FOR BETTER ASSEMBLY AND DISASSEMBLY.
 CONSIDER BEARING LUBRICATING GREASE DOES NOT WORK SUCCESSFULLY TO REDUCE GALLING ON STAINLESS STEEL FASTENERS.



NOTE
 ENOUGH HOSE LENGTH SHOULD BE ALLOWED FROM SPINNER ASSEMBLY TO CONNECTIONS AT BACK OF TRUCK TO SPINNER ASSEMBLY. CAN BE SAVED FROM UNDER SPREADER WITHOUT SHAPPLY BENDING HOSES

INSTALLATION INSTRUCTIONS FOR SPINNER ASSEMBLY



VIEW LOOKING TO BACK END OF TRUCK SHOWING SPINNER ASSEMBLY MOUNTED UNDER DROPOUT OPENING OF CROSS AUGER

8'-12" DIST. TO GROUND

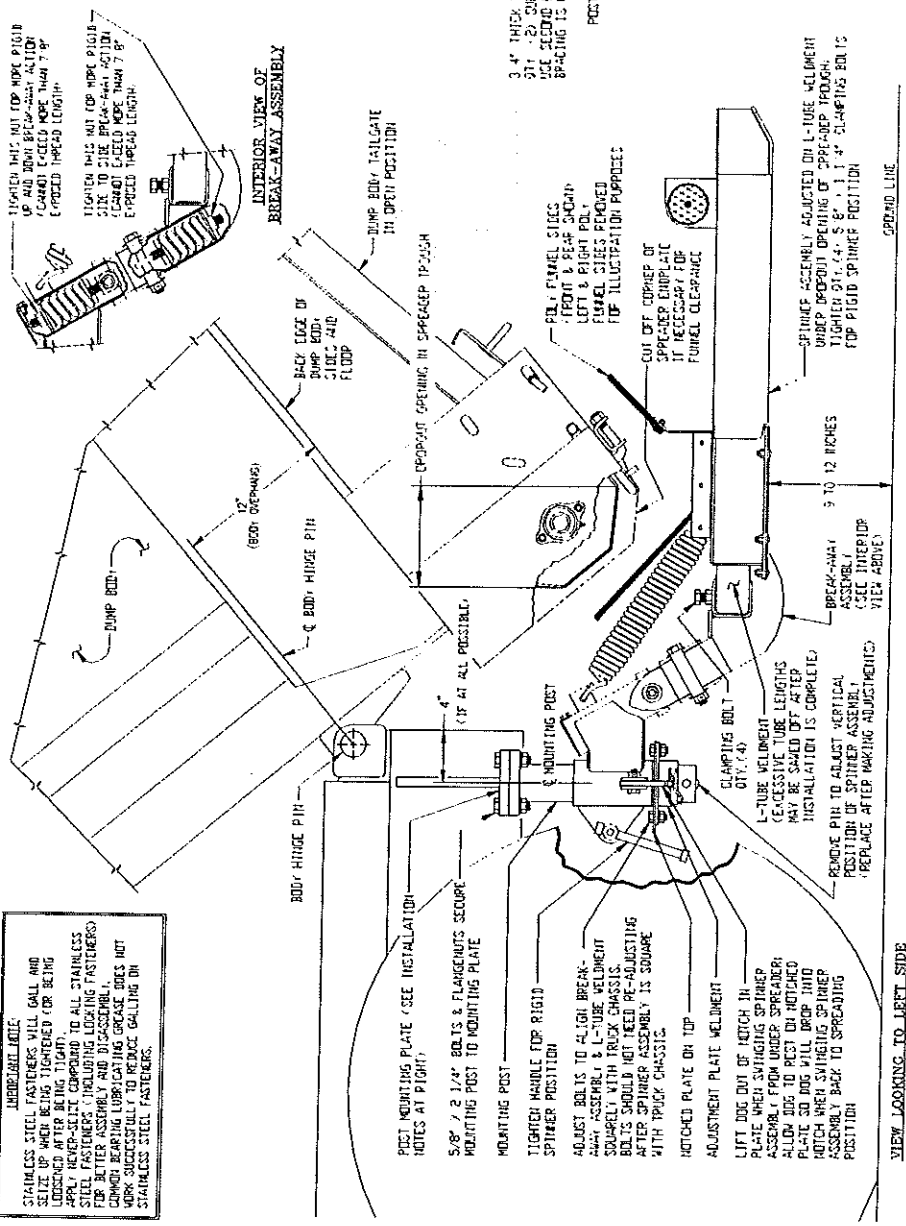
SPINNER ASSEMBLY ADJUSTED ON L-TUBE WELDMENT UNDER DROPOUT OPENING OF SPREADER TRUCK. TIGHTEN 011.44 CLAMPING BOLTS FOR PROPER POSITION

VIEW LOOKING DOWN ON SPINNER ASSEMBLY AS IT IS MOUNTED ON TRUCK FRAME

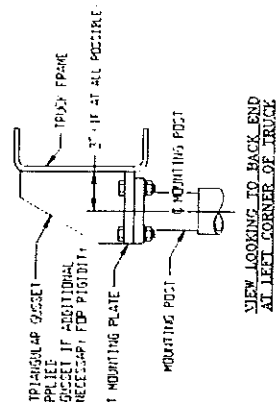
MOUNTING ILLUSTRATION

EX-109-042

UNDESIRABLE PRACTICES
 STAINLESS STEEL FASTENERS WILL GALL AND SEIZE UP WHEN BEING TIGHTENED (OR BEING LOOSENED AFTER BEING TIGHT). APPLY REVER-SITIVE COMPOUND TO ALL STAINLESS STEEL FASTENERS (INCLUDING LOCKING FASTENERS) FOR THE ASSEMBLY AND DISASSEMBLY. COMMON REASONS FOR THIS GALLING DOES NOT WORK SUCCESSFULLY TO PREVENT GALLING ON STAINLESS STEEL FASTENERS.



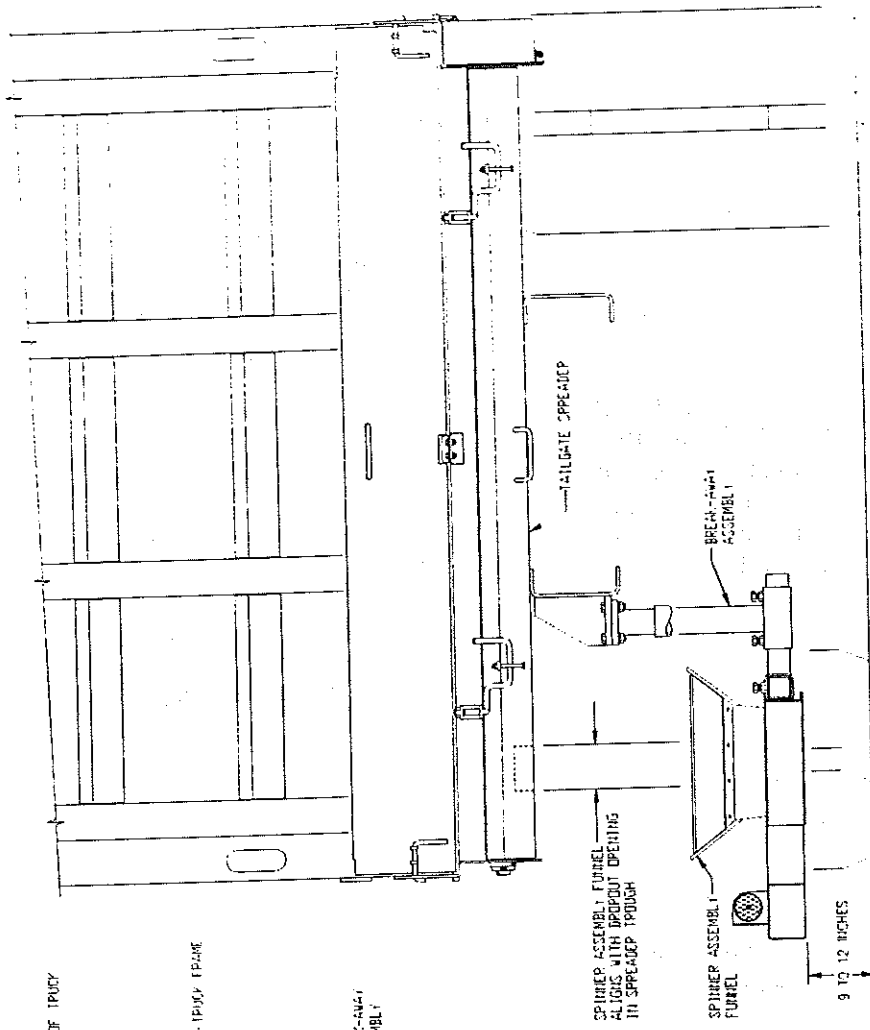
1. POST MOUNTING PLATE (SEE INSTALLATION NOTES AT P. 10)
2. POST MOUNTING PLATE WITH FOUR HOLES AT ONE END AND TWO 3/4" THICK TRIANGULAR GUSSETS HAVE BEEN DELETED FOR WELDING TO THE TRUCK FRAME FOR MOUNTING THE ENTIRE SPINNER ASSEMBLY. THESE COMMENTS CAN BE MODIFIED AS NECESSARY TO SUIT VARIOUS TRUCK CONFIGURATIONS.
3. POST MOUNTING PLATE WITH 3/4" THICK GUSSETS MUST BE RIGIDLY ATTACHED TO THE TRUCK FRAME. THE PFS SPINNER ASSEMBLY IS SOMEWHAT HEAVY SO IT IS NECESSARY TO DO ALL THAT IS POSSIBLE TO THE PLATE DOES NOT TWIST OR BEND WHILE PFS IS IN USE. IT MUST BE BUILT SOLID.
4. CHASSIS SPRING HANGERS AND OTHER TRUCK FRAME COMPONENTS MAY MAKE IT DIFFICULT TO INSTALL POST MOUNTING PLATE IN EXACT LOCATION SHOWN. THE PFS SPINNER ASSEMBLY HAS BE CAPABILITY TO BE ADJUSTED FROM SIDE-TO-SIDE AND FOR UPWARD-OR-DOWNWARD IF EXACT LOCATION AS SHOWN CANNOT BE ACHIEVED.
5. POST MOUNTING PLATE MUST BE SQUARE AND ALIGNED WITH TRUCK FRAME TOP FLATNESS AND LEVEL SPINNER MOUNTING.



VIEW LOOKING TO BACK END AT LEFT CORNER OF TRUCK

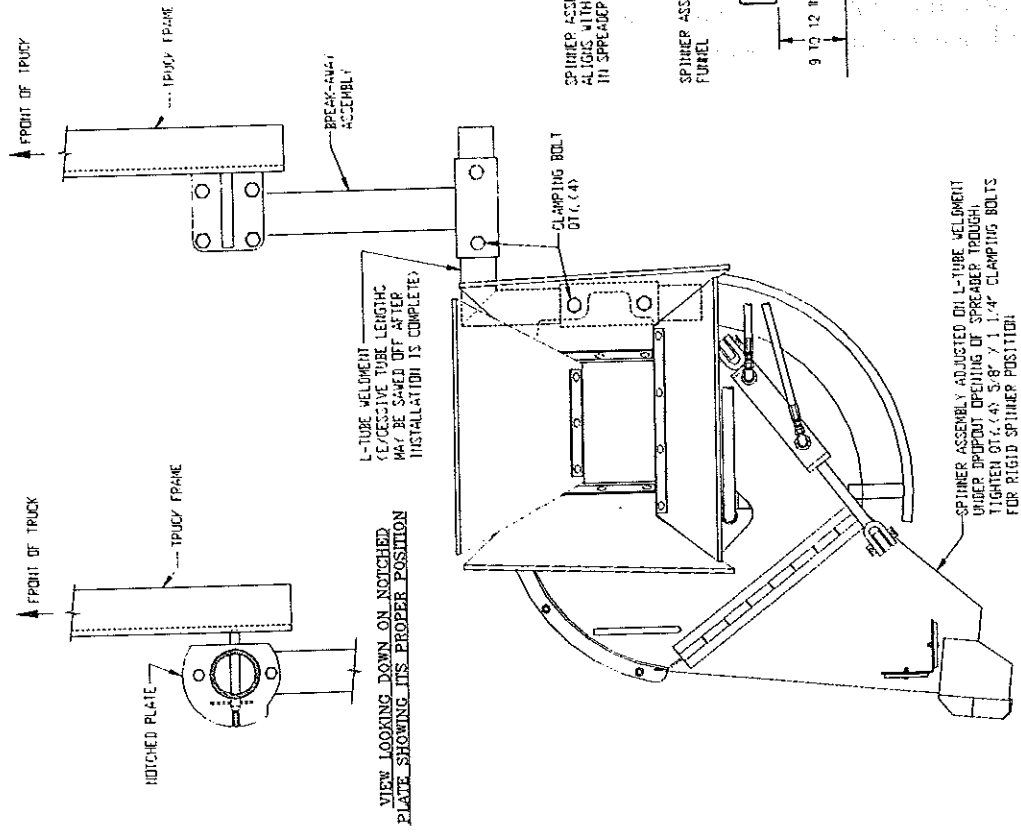
VIEW LOOKING TO LEFT SIDE AT BACK END OF TRUCK

- GENERAL NOTES:**
1. WHEN DUMP BODY IS RAISED AND SPREADER TROUGH LOCKS INTO PULLEY FUNNEL, LEFT AND RIGHT PULLEY FUNNEL SIDES ARE INTENDED TO BE ON OUTWARD. FRONT AND REAR PULLEY FUNNEL SIDES MAY FLY ALSO.
 2. ENOUGH HOSE LENGTH SHOULD BE ALLOWED FROM SPINNER ASSEMBLY TO CONNECTIONS AT BACK OF TRUCK. SPINNER ASSEMBLY CAN BE SAWS FROM HOSE SPREADER WITHOUT SHARPLY BENDING HOSE.



VIEW LOOKING TO BACK END OF TRUCK SHOWING SPINNER ASSEMBLY MOUNTED UNDER DROPOUT OPENING OF SPREADER

MOUNTING INSTRUCTIONS FOR TAILGATE SPREADER



VIEW LOOKING DOWN ON SPINNER ASSEMBLY AS IT IS MOUNTED ON TRUCK FRAME

FILENAME F:0015-084008 1-8 12-24-98

F:\V\109-005 SCALE: 1:12.5

START UP INSTRUCTIONS



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.



DANGER!

1. When starting up equipment, be sure everyone is standing clear; watch for anything that may require shutting system down.
2. Be sure equipment is "LOCKED-OUT" before working in or around spreading equipment. Hydraulic supply must not be functional while maintenance is being performed on equipment.

Initial Start Up

1. Be sure hydraulic reservoir is about three-fourths full with high grade non-foaming hydraulic oil. **KEEP OIL CLEAN!**
2. Engage PTO and allow hydraulic oil to circulate several minutes to warm up.
3. Check entire hydraulic system for leaks.
4. Examine spinner to see if it is turning in proper direction.
5. Refill reservoir to three-fourths full.
6. Hydraulic system is ready for use.

MAINTENANCE

WARNING

Before performing any maintenance on this unit, ensure that all power is turned off and cannot be turned on during maintenance operations.

1. Keep electrical contacts clean and protected with a coat of dielectric grease. Failure to grease connections may void warranty.
2. When unit is not in use clean all parts of de-icing products, and plug or cap all electrical connections.
3. Check spinner disc daily for worn or loose fasteners. Replace or tighten as required.

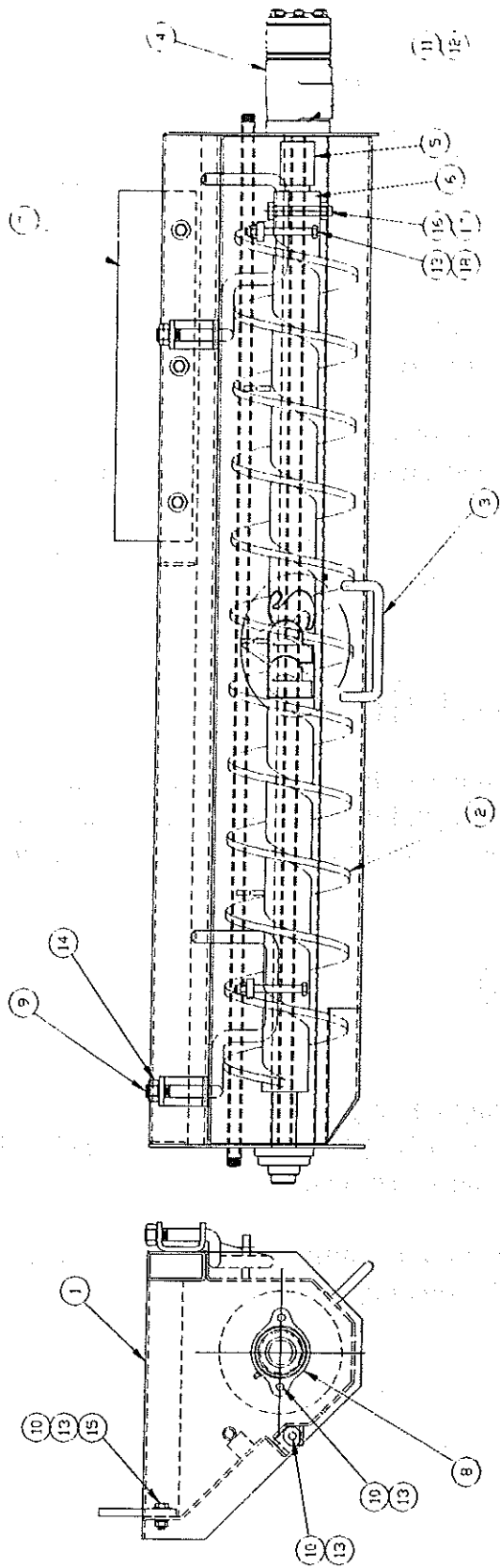
WARNING

Spinner disc turns at a very high speed. Spinner disc fastener inspection and maintenance is critical to the safety of all people and property around the unit during operation.

CAUTION

Before performing any welding on the vehical or spreader, disconnect both the negative (-) and the positive (+) electrical connections for the control system.

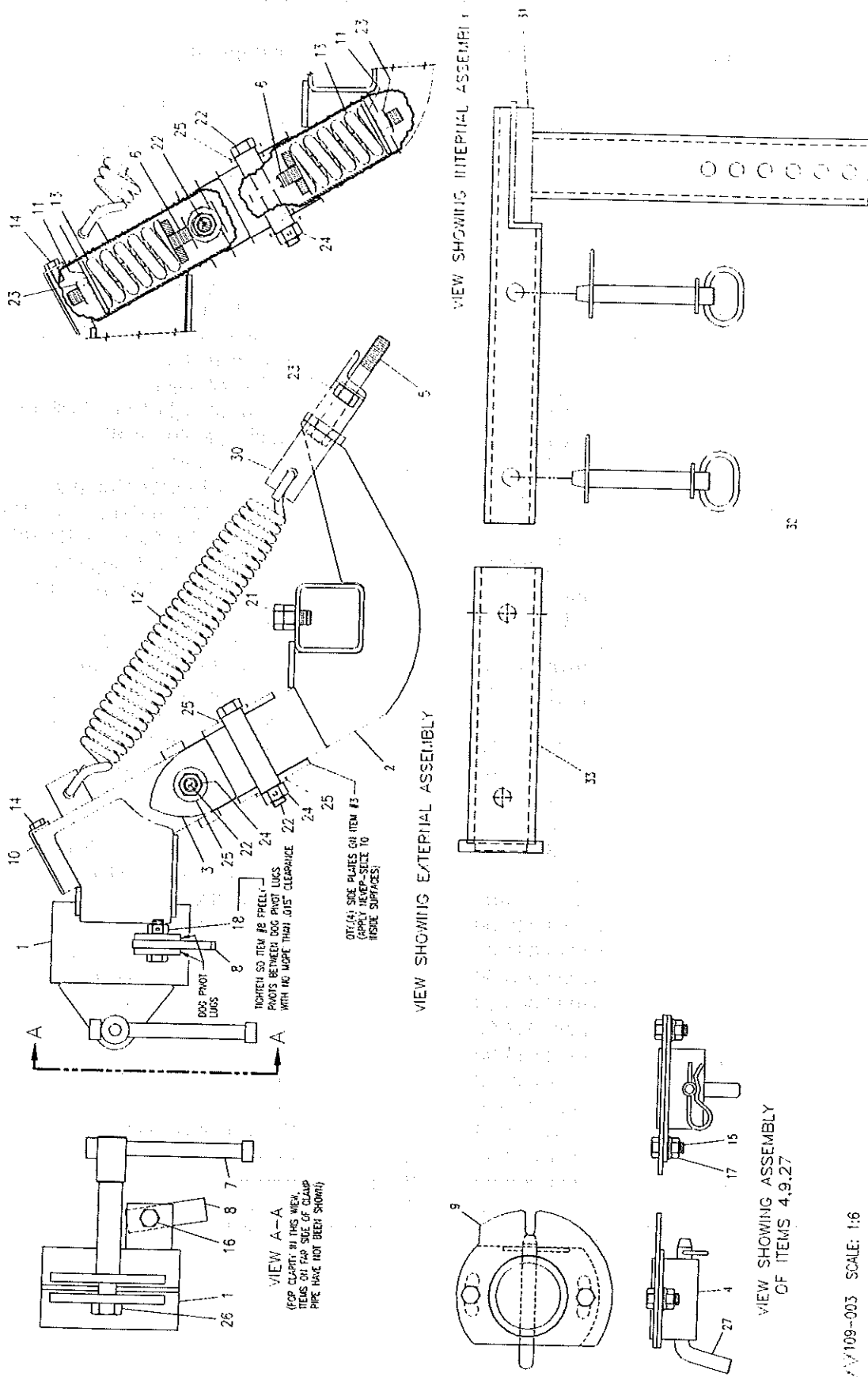
Failure to disconnect power supply could damage system components and void warranty.



ASSEMBLY TROUGH

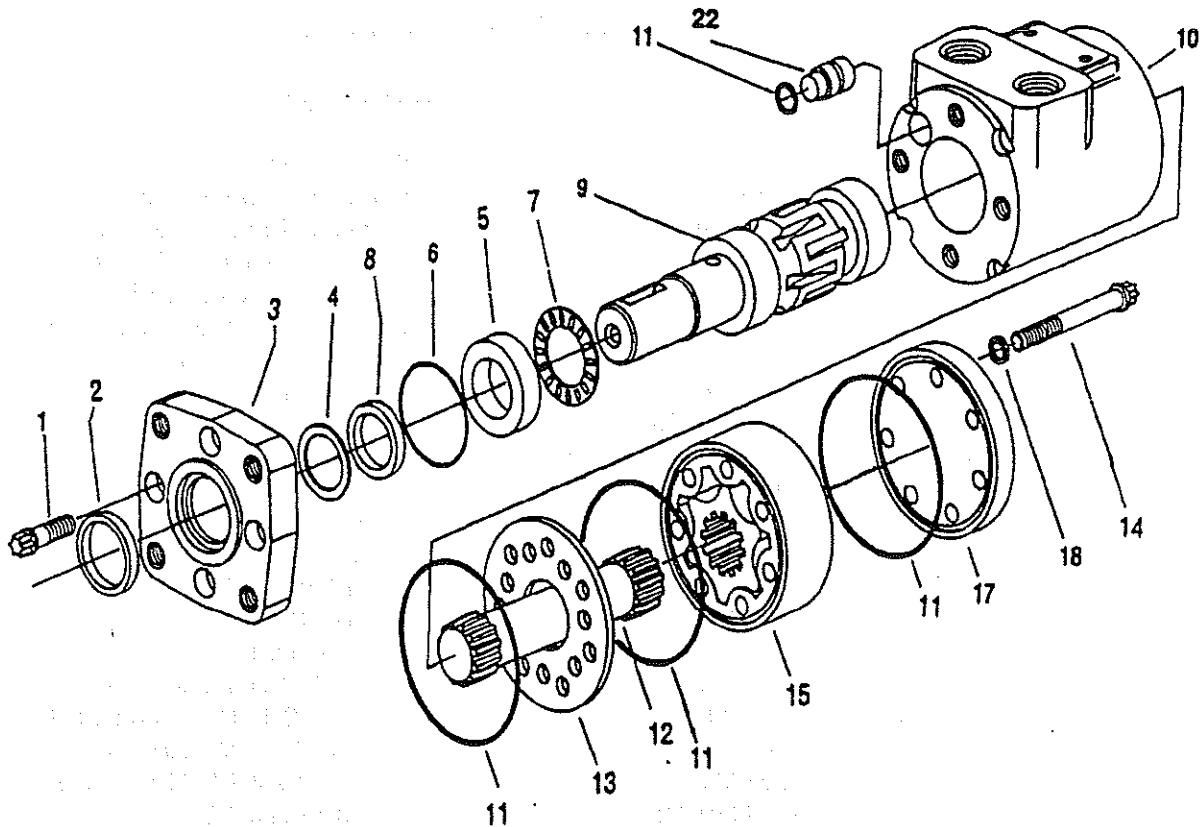
<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	00116-009-00	1	Weldment, Trough
2	00116-008-00	1	Weldment, Auger
3	00116-007-00	1	Weldment, Bottom Door
4	04101-040-00	1	Motor, Hydraulic (AE)
5	00108-482-00	1	Weld, Adaptor
6	00106-321-00	1	Insert, Auger (2")
7	04086-010-00	1	Blade, Wiper
8	04080-005-00	1	Bearing, 1 1/4"
9	00113-800-00	2	Latch Handle, Door
10	04003-003-26	8	Bolt, 3/8-16 x 1 1/4 HH SS
11	04003-003-20	4	Bolt, 3/8-16 x 1 HH SS
12	04004-001-14	4	Lockwasher, 3/8" Med Split SS
13	04003-804-08	10	Locknut, 3/8-16 Nylon Insert SS
14	04003-807-22	2	Locknut, 5/8-11 Prev. Torque SS
15	04004-002-20	3	Flatwasher, 3/8" U.S.S. SS
16	04003-005-10	1	Bolt, 1/2-13 x 3 HH GR5 ZP
17	04003-807-11	1	Locknut, 1/2-13 Cen. Lock ZP
18	04003-003-15	2	Bolt, 3/8-16 x 3 1/2 HH SS

PPS BREAK-AWAY ASSEMBLY
(AND MOUNTING PARTS)



BREAK-AWAY ASSEMBLY

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	00115-074-00	1	Weldment, Upper Break-Away
2	00115-085-00	1	Weldment, Lower Break-Away
3	00115-098-00	1	Weldment, Break-Away Stub
4	00115-089-00	1	Weldment, Adjustment Plate
5	04003-006-23	1	Bolt, 5/8-11 X 4 1/2 HH SS
6	00115-092-00	2	Weldment, Compression Spring I-Bolt
7	00115-443-00	1	Weldment, Handle Nut
8	00115-224-00	1	Dog, Detent
9	00115-223-00	1	Plate, Detent
10	00115-219-00	1	Cap, Tube
11	00115-218-00	2	Washer, Square
12	04091-024-00	2	Spring, 15" Extension
13	04091-025-00	2	Spring, 4" Compression
14	04003-003-24	1	Bolt, 3/8-16 x 3/4 HH SS
15	04003-005-23	2	Bolt, 1/2-13 x 1 1/4 HH SS
16	04003-005-24	1	Bolt, 1/2-13 x 1 1/2 HH SS
17	04003-806-16	2	Nut, 1/2-13 Ser. Flange SS
18	04003-807-23	1	Locknut, 1/2-13 Prev. Torque SS
21	04003-006-22	2	Bolt, 5/8-11 x 1 1/4" HH SS
22	04003-006-23	2	Bolt, 5/8-11 x 4 1/2" HH 316 SS
23	04003-801-22	3	Nut, 5/8-11 Hex SS
24	04003-807-22	2	Locknut, 5/8-11 Prev. Torque SS
25	04004-002-52	4	Flatwasher, 5/8" SS
26	04003-007-19	1	Bolt, 3/4-10 x 6" HH SS
27	04014-150-02	1	Pin, Bent Hitch
31	00116-043-00	1	Weldment, Mounting Post
32	04014-101-01	2	Pin, 3/4" Hitch (w/keeper)



PARTS LIST FOR HYDRAULIC MOTOR
(04101-153-00)

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	04101-035-01	4	Screw, Cap 5/16-24 x 7/8"
2	See *	-	Seal
3	04101-102-02	1	Flange, Mounting (4 bolt)
4	See *	-	Seal, O-Ring
5	04101-035-05	1	Race, Bearing
6	See *	-	Seal, O-Ring
7	04101-035-07	1	Bearing, Needle Thrust
8	04101-102-59	1	Seal
9	04101-035-09	1	Shaft, Output
10	04101-102-42	1	Housing
11	See *	-	Seal
12	04101-035-12	1	Drive
13	04101-035-13	1	Plate, Spacer
14	04101-035-14	4	Screw, Cap 5/16-24 x 1/2"
15	04101-035-15	1	Gerotor Set
17	04101-035-17	1	Cap, End
18	04101-035-18	7	Washer, Seal
20	See *	-	Seal
21	04101-035-21	1	Repaired Motor
22	04101-102-60	1	Plug
*	04101-102-09	1	Seal Kit (Char-Lynn)

SWENSON  **spreader**®

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 Company. Electrical or hydraulic components are not to be disassembled without the express written permission of Swenson Spreader Company. Defective parts returned to Swenson Spreader Company 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.

IMPORTANT INFORMATION ENCLOSED