

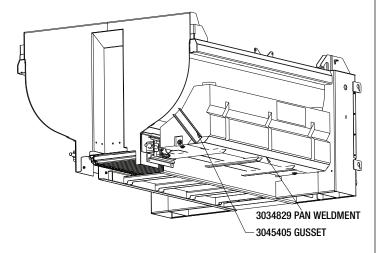
Installation & Operator's Manual

LS11H Liquid Spray System

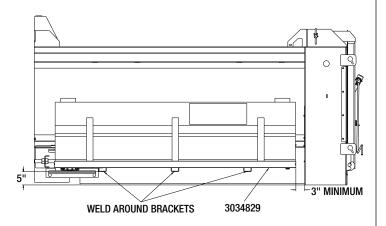
2 x 160 Gallon Tanks

Tank Installation

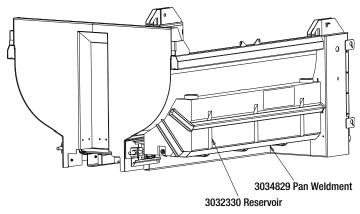
1. Position Pan Weldment on spreader's body as shown below.



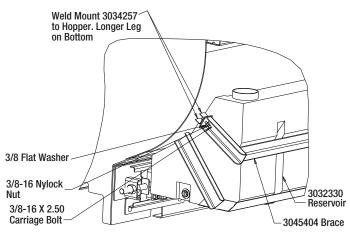
2. Weld Pan Weldment and Gussets to spreaders body using dimensions shown below.



3. Place tank #3032330, brace #3045404 as shown below.



4. Attach Tank Mounts #3034257 to #3045404 using carriage bolts, flat washers and lock nuts as shown below. Adjust mounts #3034257, so they touch spreader body as shown in picture below. Welt mounts to spreader body. Tighten nuts evenly to secure tank on spreader.



5. Plumb: Reservoir, ball valve, filter, pump enclosure, and spray nozzles according to plumbing schematic using supplied fittings, hose, and hose clamps. Do not use Teflon tape on threads. Use liquid thread sealant.

Cab Controller Installation

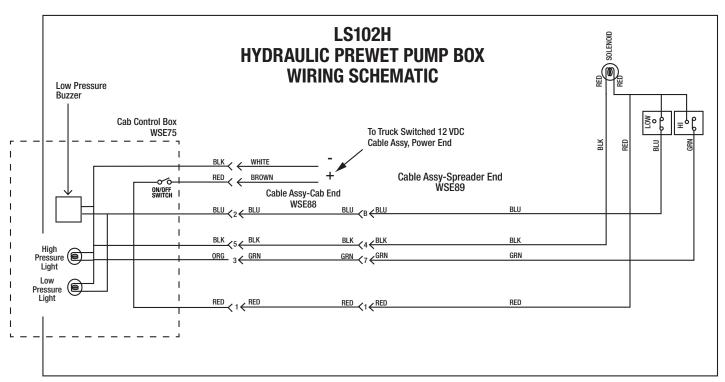
1. Install cab controller (#WSE75) in cab for convenient driver operation. Mounting bracket and fasteners included. (see Fig. 5)



Fig. 5







LS102H Hydraulic Prewet Pumpbox Reference

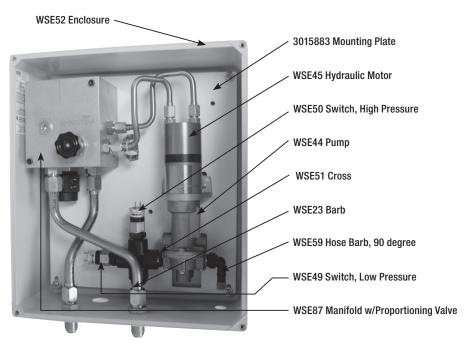




Fig. 6

HYDRAULIC SCHEMATIC

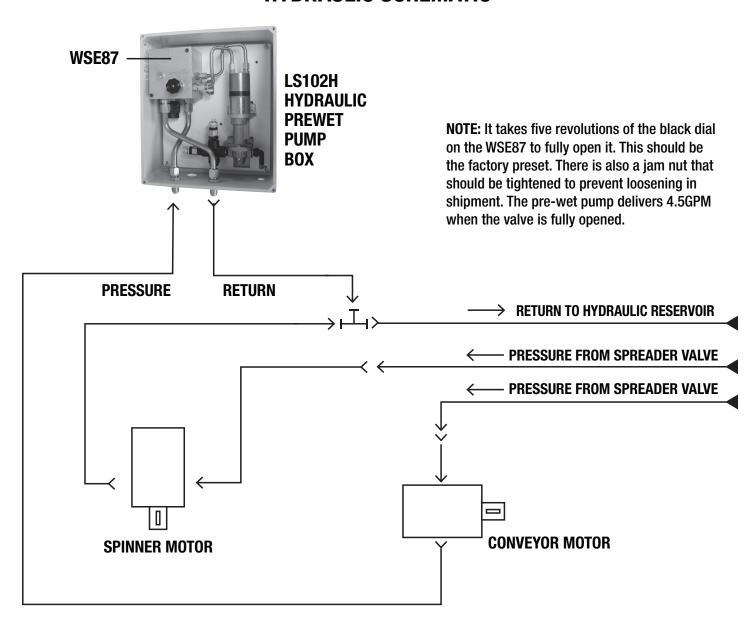
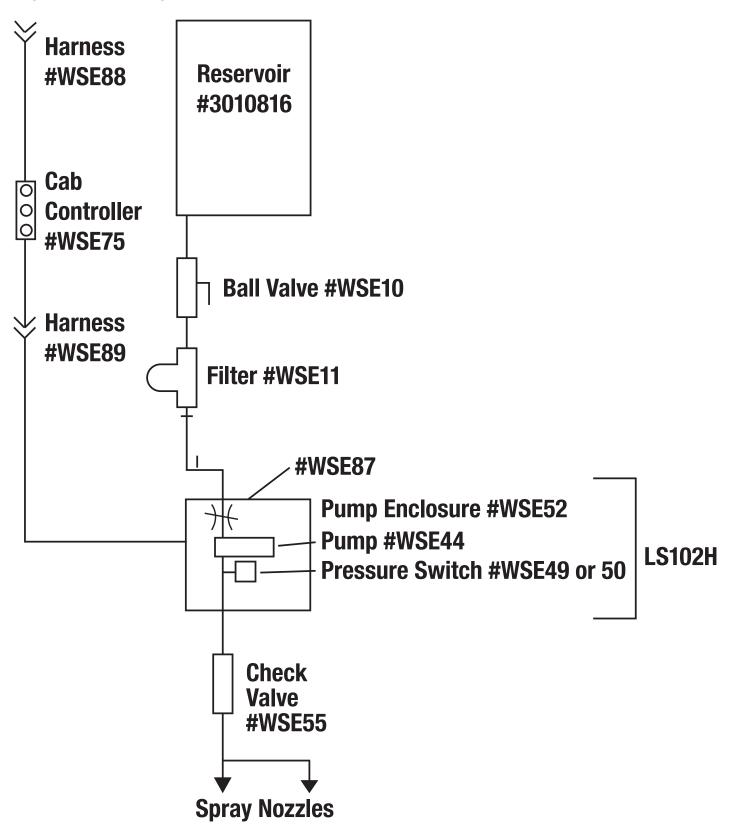




Fig. 7 Prewet Plumbing Dia.





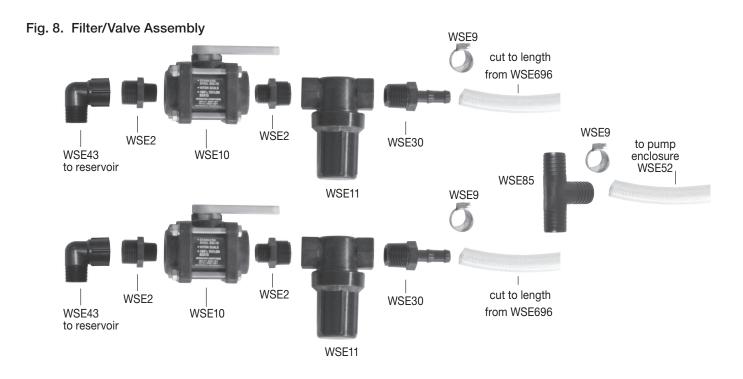
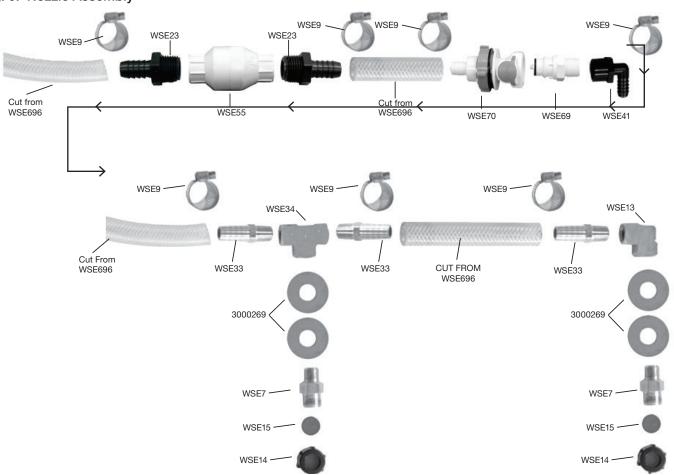


Fig. 9. Nozzle Assembly





Liquid Spray System Operating Instructions

A CAUTION

- 1. Read all instructions before operating. Always wear hand, eye, and skin protection when working with deicing chemicals. Make sure everyone is standing clear of liquid spray system before operating.
- 2. Inspect all plumbing for leaks.
- 3. Open ball valve (#WSE10) at the reservoir.
- 4. Make sure reservoir has adequate supply of clean de-icing liquid. Do not operate pump without liquid.
- **5.** To energize system, turn red power button to "on" position.
- 6. If the red low pressure warning light/alarm comes on, the reservoir is empty or the pump is off. Do not operate pump without liquid. Note: Low pressure light and alarm will sound each time system is started. This is normal and occurs until sufficient pressure is achieved to open pressure switch (turning off light/buzzer).
- 7. Close ball valve (#WSE10) at the reservoir when not in use.

Liquid Spray System Trouble Shooting Guide

Motor & Pump Operate Erratically: 1,2,3,4,5 (Possible Problem)

Motor runs – Pump does not: 1,2,3,4,5,6,7 (Possible Problem) Motor & Pump fail to operate: 8,9,10,11,12 (Possible Problem)

POSSIBLE PROBLEM:	REPAIR:
1. Little or no de-icer in tank/s	Fill
2. Clogged filter	Clean
3. Clogged Nozzles	Clean
4. Damaged suction hose	
5. Pump failure	Replace
6. Ball valve is closed at tank/s	Open valve
7. Frozen parts	Thaw out
8. Bad electrical connection	Inspect
9. Motor failure- seized	Replace
10. Cab controller on-off switch not turned on	Turn on
11. Bad cab controller on-off switch	Replace
12. Blown fuse in cab controller or fuse panelIns	pect/replace

A CAUTION

Always wear hand, eye, and skin protection when working with de-icing chemicals. Use extreme care!

Liquid Spray System Routine Maintenance

RESERVOIR:

- -Inspect fittings for leaks from cracks or looseness
- -Inspect filler/breather for cracks. Depress breather to check for adequate spring pressure or binding

PLUMBING:

-Inspect hoses/fittings/ball valve for leaks, cracks, looseness, chafing, binding etc.

FILTER:

-Remove and clean filter element every 8 to 10 hours or as needed depending on how clean de-icing liquid is

PUMP-PRESSURE SWITCH & ENCLOSURE:

- -Inspect wiring for wear and loose or corroded connections
- -Inspect door and gasket to prevent corrosion

NOZZLES:

-Inspect operation for even spray pattern. Remove and clean as needed

CAB CONTROLLER:

- -Inspect lights, switch.
- -Inspect wire harness and connections for wear and loose or corroded connections

CLEANING:

-Wash with hot water and soap after each use

STORAGE:

- -Store inside to prevent freezing
- -Drain liquid de-icer from tank/s and hoses when not in use for more than two days or during extremely low temperatures
- -RV anti-freeze or windshield washer fluid should be run through the system for several minutes to flush de-icer from the system to prevent component freezing especially for end of season storage

A CAUTION

Always wear hand, eye, and skin protection when working with de-icing chemicals. Use extreme care!

SAFETY ALERT SYMBOL



This Symbol Means **ATTENTION!**Please Read & Understand Completely
Before Operating!

EQUIPMENT INSTALLERS & OPERATORS:

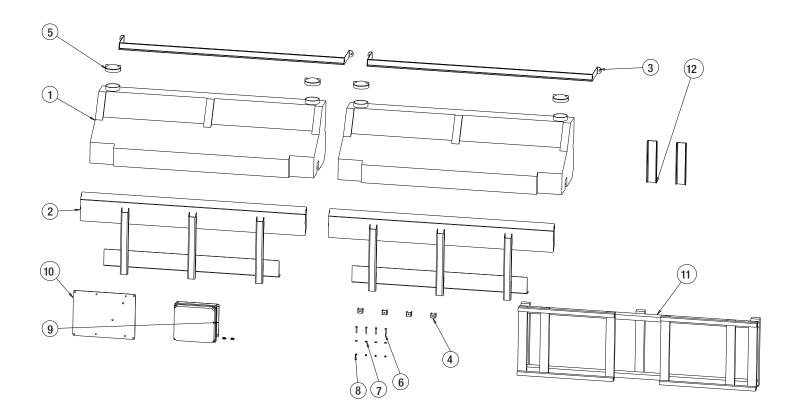
TURN OFF ALL POWER BEFORE PERFORMING ANY SERVICE OPERATIONS.

- Follow Recommended Operating Procedure.
- Keep Equipment In Safe Operating Condition At All Times.
- Recognize & Avoid Hazards While Operating, Servicing and Maintaining Equipment.





Parts Diagram



Bill of Materials

ITEM	PART NO.	QTY.	DESCRIPTION
1	3032330	2	RESERVOIR, 160 GAL POLY, COMBO BODY
2	3034829	2	PAN WELDMENT
3	3045404	2	TANK BRACKET
4	3034257	4	TANK MOUNT MDS
5	3011044	4	LID 5"W/ BALL CHECK VENT
6	3020600	4	BOLT, CRG, 3/8-16x2.50 SST
7	FWE038100007SS	4	WASHER, ELAT 3/8 USS SST
8	FNE038016044SS	4	NUT, NYLOCK 3/8-16X7/16 SST
9	LS102H	1	CONTROL ASSYJETTING SYST, HYD
10	3017949	1	BRACKET,MOUNT, WSE100

ITEM	PART NO.	QTY.	DESCRIPTION
11	3013075	1	PALLET, MD68/MD75/MD80 MOLDBOARDS
12	3045405	2	GUSSET SIDE, PAN
-	CTIOBX	1	BOX, 17-1/4 \ 13-1/2 X 17-1/4 200# RSC
-	3004755	1	BAG, POLY 10 X 12 X .004 MIL
	3018421	1	ANTI SEIZE LUBRICANT POUCH 5 GRAMM
-	3027462	1	BAG POLY 24IN X 36 IN, 6 MILLS BLACK OPAQUE 2X UVI
-	30 0 016 5	1	LABEL, 1" X 3" ADHESIVE
-	3009750	1	DECAL, LIQUID SYSTEM
-	WSE6168	1	HOSE POLY 1/2 X 168 IN



WARRANTY

Buyers Products Co. warrants all truck/trailer hardware manufactured or distributed by it, to be free from defects in material and workmanship for a period of one year from date of shipment. Parts must be properly installed and used under normal conditions. Any product which has been altered, including modification, misuse, accident or lack of maintenance will not be considered under warranty. Normal wear is excluded. The sole responsibility of Buyers Products Co. under this warranty is limited to repairing or replacing any part or parts which are returned, prepaid, and are found to be defective by Buyers Products Co. Authorization from Buyers Products Co. must be obtained before returning any part. No charges for transportation or labor performed on Buyers' products will be allowed under this warranty.