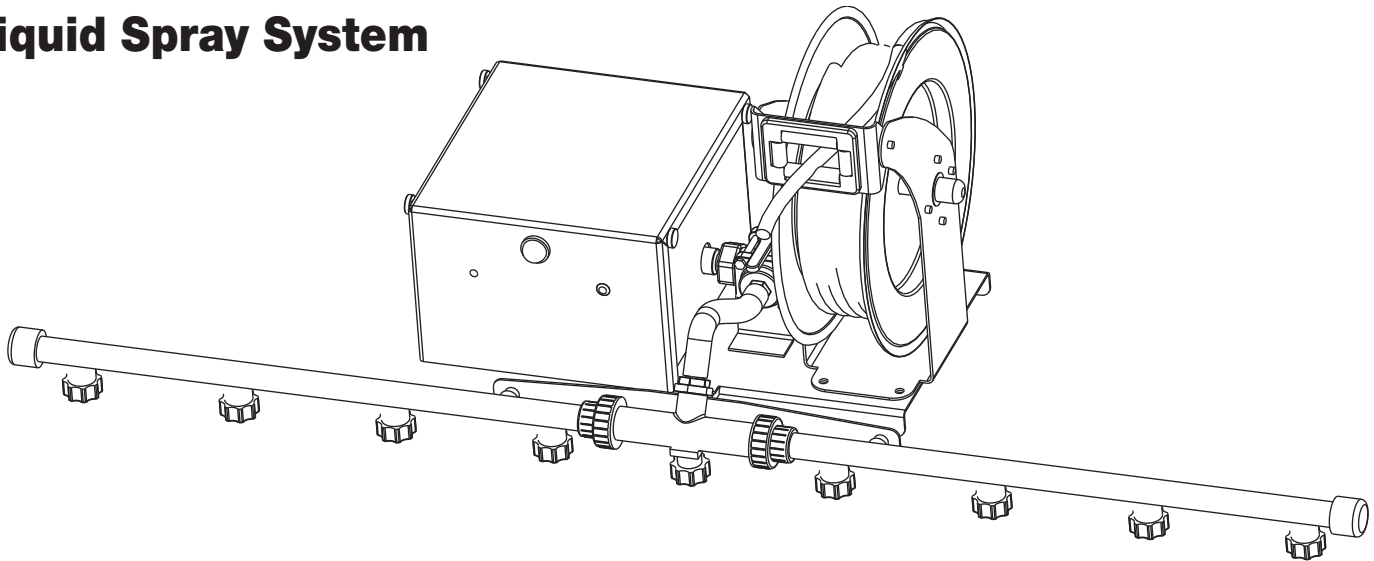


Installation & Operators Manual

6190120, 6190150, 6190160, 6190170 Liquid Spray System



Installation

The liquid spray system main body is mostly pre-assembled. Follow these instructions to install the system on the vehicle.

1. Place the poly tank in pickup bed and secure it.
2. Place the spray system into vehicle receiver and secure with provided hitch pin and hairpin.
3. Remove lid from pump unit. Slide 14" hose WSE127 through back side of pump unit and connect to 90 degree fitting. Use clamp WSE95 to secure hose properly to fitting. Install quick connect coupler WSE118 to opposite end of hose. Again, secure with clamp WSE95.
4. Assemble the bushing reducer WSE101 to poly tank if needed, along with a 90 degree fitting WSE112. Insert long 10' hose to fitting and clamp WSE95 in place. Cut the hose accordingly and finish assembly with a straight barb fitting along with clamp WSE95. The straight barb WSE119 will be used with the quick connect fitting WSE118 on the supply hose coming from the pump system.
5. Insert the remaining 14" hose on the manual valve located in the middle of the spray unit base. Use clamp WSE95 to secure in place. Place clamp WSE95 on opposite side of hose and snug for the time being. Once the spray bar is connected, connect the hose to center section of spray bar barb and secure with clamp. This hose may need to be trimmed.
6. To install the WSE164 spray bar, attach the two WSE163 clamp connectors to the spray system bracket. The two connectors will bolt to the system and will then clamp to the spray bars. Tighten the spray bars to center section by threading clockwise on both sides until the o-ring seals

are snug and the nozzles are pointing towards the ground. Reflective tape is provided to apply on the spray bar as desired.

Electrical connections

Route wire harness WSE154 from spray unit to engine compartment of vehicle. Make sure the preassembled connector is located near the spray system. The bare wires will be routed to the engine compartment where the white wire will be connected to the positive side of the battery and the black wire will be connected to the negative side of the battery.

WARNING

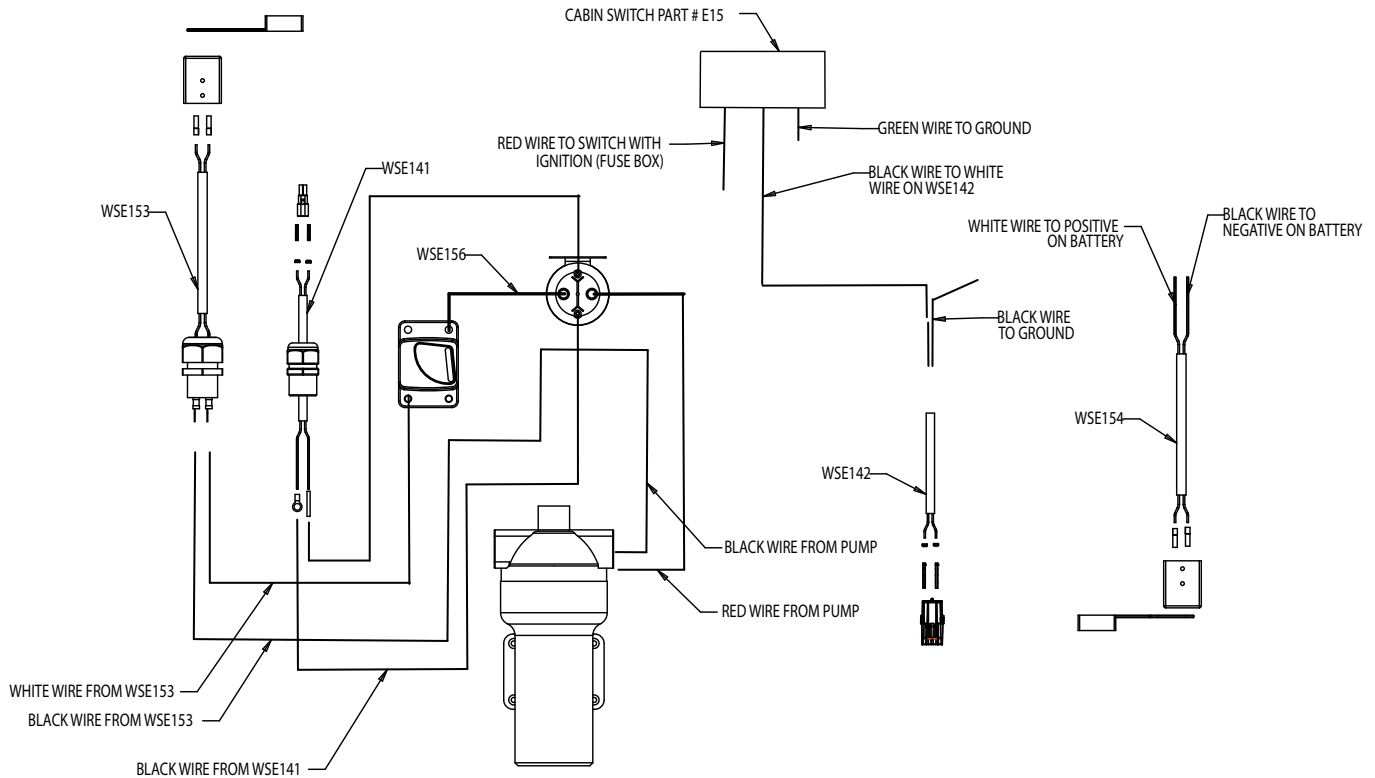
Do not connect the sprayer to the battery until all other connections are made. Ensure the wire is fastened securely in engine compartment and along entire frame. Use zip-ties to secure properly.

Mount the 6391001 toggle switch in a convenient place inside the vehicle cabin. Now route the WSE142 wire harness to the switch, again make sure to leave the pre-assembled connector on the spray system side. Once the harness is in place:

Connect the black wire to good ground. Connect the white wire to the black wire on the toggle switch.

On the toggle switch: Connect the green wire to a solid chassis ground. Connect the red wire to a "switched" accessory slot in the vehicles fuse box. See fig #1 for wiring diagram.

Fig. 1 Wiring Diagram



Hose Reel (Optional)

3039076 Steel

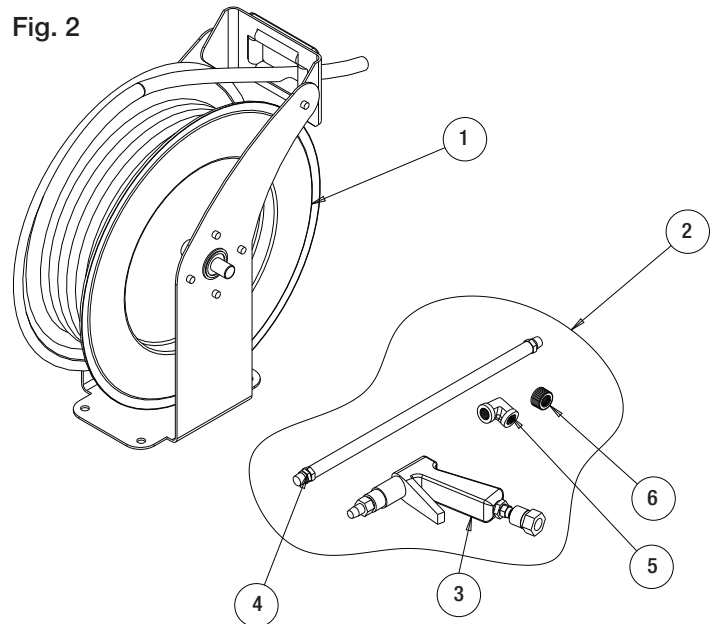
Follow these instructions if you plan to install the optional hose reel.

1. Install the hose reel on the spray system base and bolt in place in four locations.
2. Remove the plug on the back side of the manual valve on the spray system and replace with the reducer bushing WSE132, using a thread sealer to prevent leaks. Use Loctite™ #30534 or Permatex™ #2 thread sealant only. Do not use Teflon-type products as they can damage threads and cause leaks.

Install the WSE130 hose to the reducer bushing, using the non-swivel end. Insert and tighten the WSE131 90 degree fitting to the hose reel and then connect the swivel end of the hose. Again seal all joints with sealer.

3. Connect the WSE125 spray gun to end of hose reel using thread sealer. See fig #2 for bill of materials.

Fig. 2



Bill of Materials

ITEM	PART NO.	QTY.	DESCRIPTION
1	HR3850	1	Hose Reel, Steel (Optional)
2	3017796	1	Spray Gun Kit (Contains all parts listed below)
3	WSE125	1	Spray Gun
4	WSE130	1	Hose 3/8" x 3/8" Swivel
5	WSE131	1	90 Pipe Elbow
6	WSE132	1	Reducing Bushing 3/4" x 50' Urethane

Using the System

Once the system is installed and working properly, it can be filled. Fill the poly tank with salt brine or deicing solution. The tank will hold 55, 210, 325, or 550 gallons, depending on the model.

Once the tank is filled the system can be activated. Turn the system on, ensure the system is set to the spray bar and allow the pump to prime the system; this may take a few minutes.

When the system starts spraying, the line and pump have been primed and are ready for use. Select the spray bar or hose reel if ordered by moving the manual valve lever. The 6 o'clock position will operate the spray bar while the 9 o'clock position will operate the hose reel.

Use the spray bar for drive ways, parking lots, etc. Use the hose reel for sidewalks, steps, walkways, etc.

The system contains several safety features to protect the unit.

The unit is equipped with a circuit breaker if the current exceeds 35 amps. If this occurs check your electric system for possible errors. Then manually reset the breaker located inside the pump unit.

The pump will automatically shut off if the pressure in the system exceeds 80 psi. This is most likely to occur during use of the hand reel, when the gun is in the off position the pressure will build shutting the pump off until the gun trigger is pulled.

The system is also equipped with a pressure relief valve. This valve is located on the bottom of the pump unit and will allow the system to discharge if need be. The pressure relief valve is adjustable but is set from the factory.

Bill of Materials

ITEM	PART NO.	QTY.	DESCRIPTION
1	WSE95	6	Clamp, Type F
2	WSE101	1	Bushing Reducer, 2" x 3/4"
3	WSE112	2	Barb, Hose, 90°
4	WSE118	1	FDA Cam Lever Coupling 3/4"
5	WSE119	1	Barb, Threaded, 3/4"
6	WSE154	1	Harness, 10 GA. 240" long
7	WSE142	1	Wire Harness, 14 GA, 240" long
8	HP6253WC	1	Hitch Pin w/HP Cotter
9	CT150RW	1	Reflective Tape, 1' 6" Long
10	6391001	1	Switch w/Fuse
11	WSE127	2	Hose 3/4" x 14"
12	WSE129	1	Hose 3/4" x 10'

Liquid Spray System Routine Maintenance Poly Tank

- Inspect the tank and fittings for leaks from cracks or looseness.

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

- Inspect wiring for wear and loose or corroded connections.
- Check fasteners. Check wire connections.

Nozzles

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

Storage

- Store inside to prevent freezing in extreme low temperatures.
- Drain liquids from tank and hoses when not in use for more than two days or during extremely low temperatures.
- Flush pump and system with clean water to prevent damage to sealing surfaces upon every use.

Fig. 3

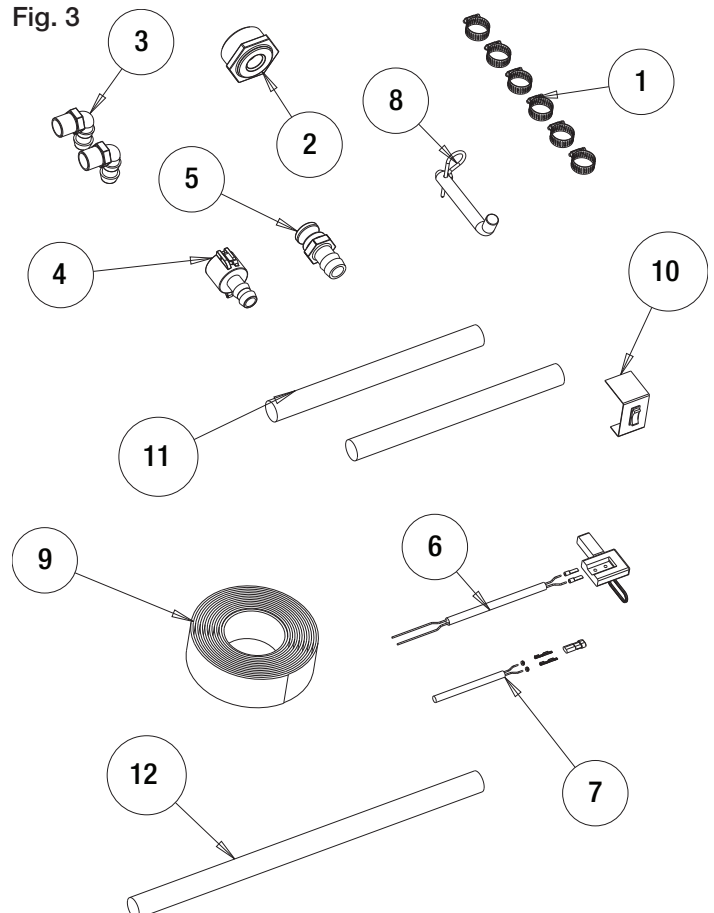
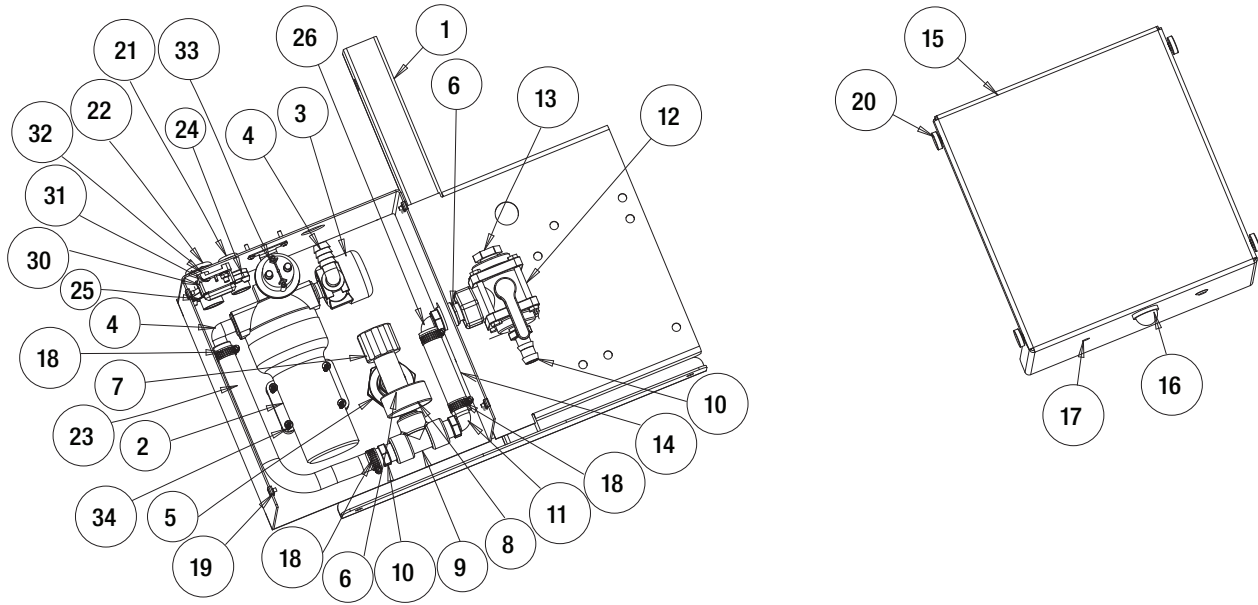


Fig. 4

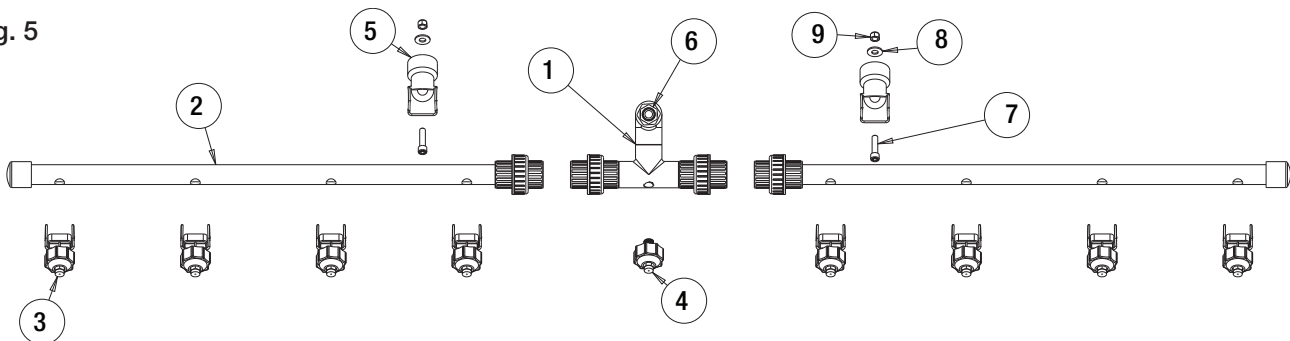


Bill of Materials

ITEM	PART NO.	QTY.	DESCRIPTION
1	3017780	1	Weldment, Base, Spray SYS
2	WSE90 A	1	Pump, 7 GPM, 80 PSI
3	WSE90 C	1	Strainer, Relief 1/2"
4	WSE90 D	2	Barb 90°, Quick Connect
5	WSE92	1	Bulk Head Fitting 3/4"
6	WSE102	2	Nipple, Hex, 3/4 x 3/4
7	WSE93	1	Pressure Relief Valve, 3/4"
8	HPGS100	1	Pressure Gauge 100 PSI
9	WSE91	1	Tee Poly 3/4" x 3/4" x 3/4"
10	WSE99	2	Barb, Straight 3/4"
11	WSE112	1	Barb, Hose, 90°
12	WSE116	1	3 Way Side Load Ball Valve
13	WSE126	1	Plug, 3/8 NPT, Poly
14	WSE128	5 in	Hose 3/4" x 5"
15	3017789	1	Cover, Spray SYS, SS
16	5621534	1	Light, License Plate, LED
17	BBPF-3-8-3	2	Plug, Toolbox, Hanging Hole
18	WSE95	4	Clamp, Type F
19	3016933	4	Nut, Speed, U-Style, Extruded, 10-24

ITEM	PART NO.	QTY.	DESCRIPTION
20	3012194	4	Screw, Thumb Assembly, 10-24 x 3/4
21	WSE104	1	Strain Relief 1/2" NPT
22	WSE134	1	Strain Relief 3/4" NPT
23	WSE127	1	Hose 3/4" x 14"
24	WSE29	1	Nut, Plastic, 1/2" NPT
25	WSE105	1	Nut, Plastic, 3/4" NPT
26	WSE135	1	Barb, Hose, 90°
27	WSE153	1	Harness, 10 GA. 12" Long
28	WSE141	1	Wire Harness, 14 GA. 36" Spray SYS
29	WSE156	1	Jumper, 10 GA. 12" Long
30	CB30PB	1	Breaker, 30 AMP
31	FBSH01002475SS	4	Screw #10-24 x .75
32	FNE010024024SS	8	Nut, Elastic Stop 10-24 SS
33	13047191	1	Solenoid
34	3032351	4	#10-24 x 1-1/2" Machine Screw
	WSE26	-	55 Gallon Poly Tank
	3042685	-	210 Gallon Poly Tank
	3045169	-	325 Gallon Poly Tank
	3042687	-	550 Gallon Poly Tank

Fig. 5



Bill of Materials

ITEM	PART NO.	QTY.	DESCRIPTION
1	3056818	1	CENTER TEE ASSEMBLY, PVC SPRAY BAR
2	3056817	2	PIPE, ASSEMBLY, PVC SPRAY BAR ONE SIDE
3	WSE159	8	NOZZLE ASSEMBLY, CLIP-EYELET, 0.65 GPM, STRAIGHT
4	WSE133	1	NOZZLE ASSEMBLY, 3/8" NPT, 0.65GPM, STRAIGHT
5	WSE163	2	SUPPORT, RISER, 1IN, QUICK-RELEASE
6	WSE162	1	FITTING, HOSE BARB, 3/4"X3/4" NPT, SCH80,PP
7	3040077	2	SCREW, HEX SOCKET HEAD, 3/8-16 X 1-1/2, SST
8	FWF038100007SS	2	WASHER, FLAT 3/8 USS SST
9	FNE038016044SSC	2	NUT, NYLOCK 3/8-16 X 7/16 SST W/COATING

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.