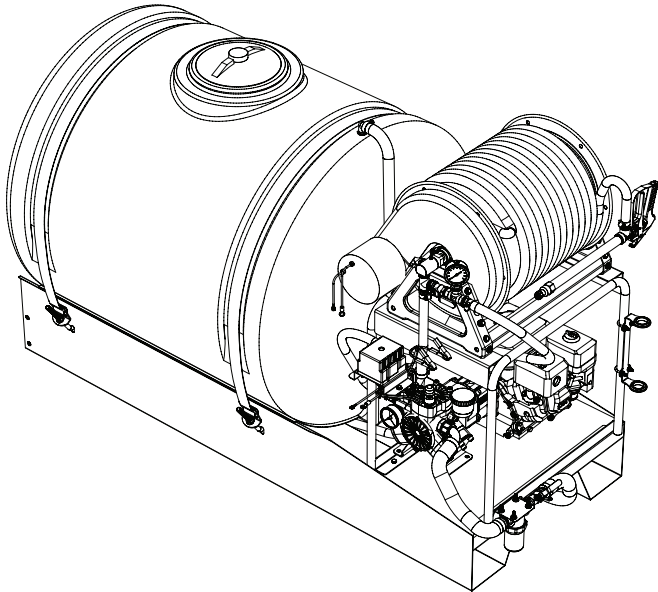


**5301070**  
**MODEL NO. LSS-235**  
**200 GALLON SKID MOUNTED HIGH PRESSURE SPRAYER**  
**ASSEMBLY / OPERATION INSTRUCTIONS / PARTS**



**BEFORE RETURNING THIS PRODUCT  
FOR ANY REASON, PLEASE CALL**

**1-800-831-0027**

**IF YOU SHOULD HAVE A QUESTION OR  
EXPERIENCE A PROBLEM WITH YOUR  
FIMCO INDUSTRIES PRODUCT:**

**1-800-831-0027**

**BEFORE YOU CALL, PLEASE HAVE THE  
FOLLOWING INFORMATION AVAILABLE:  
SALES RECEIPT & MODEL NUMBER. IN MOST  
CASES, A FIMCO INDUSTRIES EMPLOYEE CAN  
RESOLVE THE PROBLEM OVER THE PHONE.**

### **GENERAL INFORMATION**

The purpose of this manual is to assist you in operating your sprayer. Please read it carefully as it furnishes information which will help you operate and maintain your sprayer.

### **WARRANTY / PARTS / SERVICE**

Products are warranted for one year from date of purchase against manufacturer or workmanship defects.

Your authorized dealer is the best source of replacement parts and service. To obtain prompt, efficient service, always remember to give the following information.

1. Correct part description and part number.
2. Model number of your sprayer.
3. Serial number of your sprayer.

Part number and descriptions can be obtained from the illustrated parts list section of this manual.

Whenever you need parts or repair service, contact your distributor / dealer first. For warranty work, always take your original sales slip, or other evidence of purchase date, to your distributor / dealer.

### **TECHNICAL SPECIFICATIONS**

- Maximum Flow: 10.6 GPM
- Maximum Pressure: 580 PSI
- Maximum Temp.: 140° F

### **BEFORE OPERATING THE SPRAYER**

1. Add gasoline to the engine, and oil to engine crankcase. Refer to engine manual for correct oil type. Add SAE 30 to the sight level in diaphragm pump. Fill the gear case with 90W gear lube until the gear lube runs out the side plug hole.
2. Add plain water to the tank and check the system for leaks. Open the suction line valve. Open the lever valves by the pressure regulator that are connected to the handgun line and jet agitator line.
3. The pumping system includes an agitator, which will help keep the solution in suspension. Pressure to the agitator should never exceed 100 PSI. When spraying at pressures over 100 PSI, use the valve (in the agitator line) to throttle the pressure to the agitator by closing the valve. The valve may be opened slowly until the gauge reaches 100 PSI.

**DO NOT EXCEED RECOMMENDED PRESSURE ON PUMP OR SPRAYER, AS IT MAY CAUSE HOSES TO BURST AND WILL SHORTEN PUMP LIFE.**

### **OPERATING THE SPRAYER**

1. Rotate the regulator tab clockwise as far as possible (0 PSI). This aids in the starting of the engine.
2. Make sure handgun is in "off" position and start the engine.



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1000 FIMCO LANE • P.O. BOX 1700 • NO. SIOUX CITY, SD 57049  
TOLL FREE: 800-831-0027 • TOLL FREE FAX: 800-494-0440  
Form No. 657 (5004505 4/08) Printed In U.S.A.

3. Open the handgun. Water should start to flow from the handgun almost immediately. Leave the regulator tap in position (0 PSI) for about 1 minute. Allow any air in the system to be worked out before attempting to spray. Rotate the tap in the opposite direction to increase the pressure.

4. The pressure regulator (red knob on top) may now be rotated to get the desired operating pressure. Operate the sprayer for a short time with plain water and inspect the system again for any leakage. The sprayer is ready to use.

5. The valve in the agitator line may be used to limit flow and pressure to the agitator.

## MAINTENANCE

Change the engine oil per the engine manufacturers specifications. Oil changes in the pump should be done after each 200 hours of use, or at least once a season. To fill the pump with oil, pour oil slowly into the sight tube while slowly turning the pump shaft. Turning the pump shaft purges all of the air from the crankcase. Use SAE 30 motor oil.

## AFTER SPRAYING

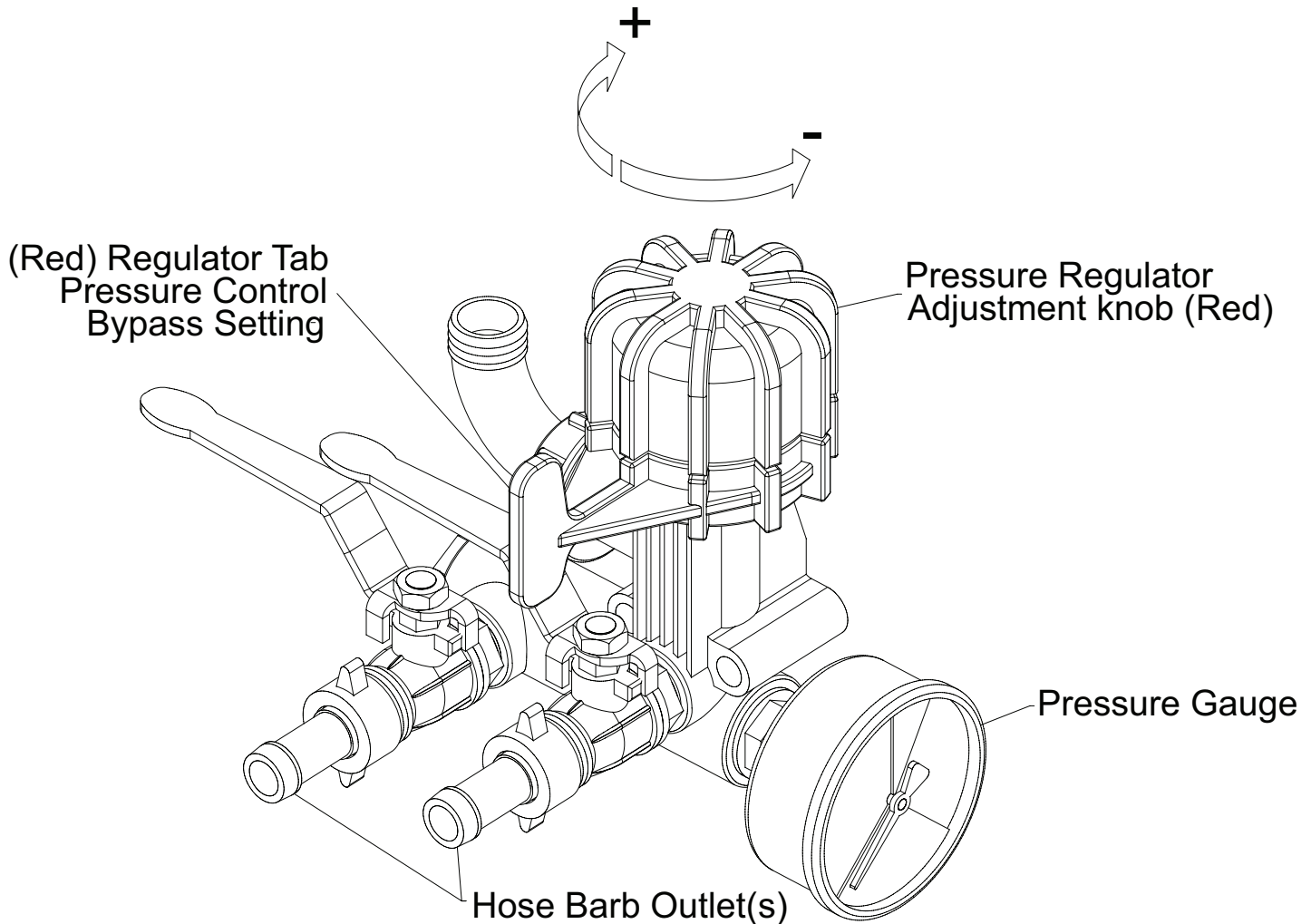
After use, fill the sprayer part way with water. Start the sprayer and allow clear water to be pumped through the plumbing system and out through the handgun. Use the handgun to thoroughly wash all internal parts of tank and tank cover.

Refill the tank about half full with plain water and use a chemical neutralizer such as NUTRA-SOL or equivalent and repeat cleaning instructions above. Flush the entire sprayer with the neutralizing agent. Follow the chemical manufacturers disposal instructions of all wash and rinsing water.

## WINTER STORAGE

Drain all water out of the sprayer, paying special attention to pump, valves, and spray gun. These items are especially prone to damage from chemicals and freezing weather.

The sprayer should be winterized before storing by pumping a solution of RV antifreeze through the entire plumbing. Proper care and maintenance will prolong the life of the sprayer.



## TROUBLESHOOTING

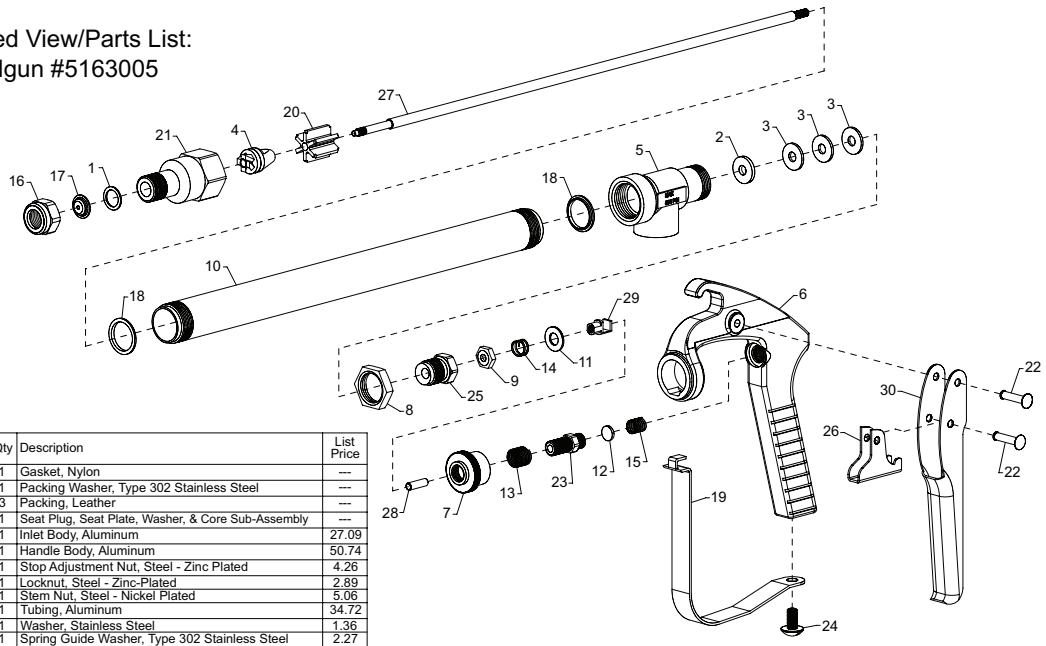
SYSTEM	PROBABLE CAUSE(S)	CORRECTIVE ACTION
The pump does not draw water	One or more valves are seating improperly.  Suction line is plugged or collapsed. Clogged strainer.	Examine the valve seatings and clean them.  Examine suction line. Clean strainer.
Pressure gauge fluctuates excessively	The pump is sucking in air through the suction line or air has not been entirely evacuated from the pump.	Examine the suction hose and make sure it is firmly secured. Run the pump with the outlet line open to evacuate air from pump.
The liquid flow is irregular.	One or more valves are seating improperly.	Examine the valve seatings and clean them.
Output drops and the pump is noisy.	Oil level is too low.	Add oil to correct level
Oil comes out of the discharge port.	One or more diaphragms split.	Drain the pump of oil. Dismantle the heads and fit new diaphragms. Fill to correct oil level with motor oil (SAE 30).

### WARNING!

This product when used can be dangerous and can cause bodily harm  
Only if not properly used or guarded.  
**STAY AWAY FROM EQUIPMENT WHEN IT IS IN OPERATION**  
Read information and the full instructions furnished with the product before  
installing and operating

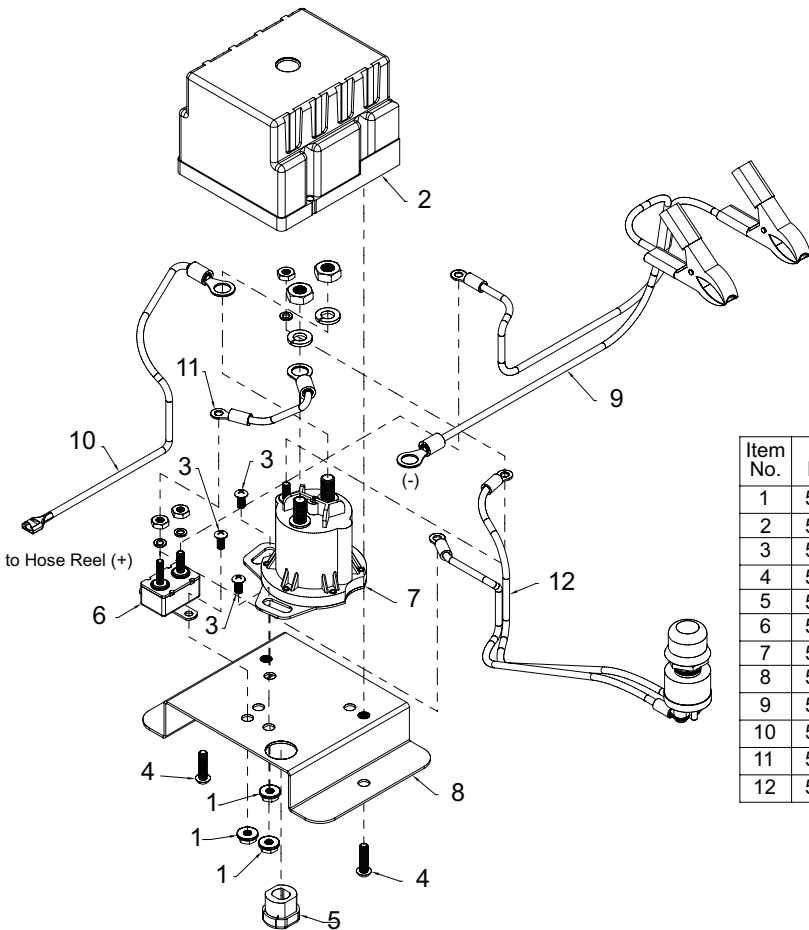
1. Be sure all guards covering exposed moving parts, such as shafts, are in place at all times. DO NOT USE the sprayer unless all guards are in place.
2. Test sprayer with plain water before adding chemicals to the tank.
3. DO NOT EXCEED recommended speed, pressure and temperature for the sprayer and pump.
4. High pressure spray can cause serious bodily injury. Handle with care. Grasp gun firmly before starting to spray. During spraying operation, hold gun firmly.
5. DO NOT put hands or fingers in front of the gun or point the gun at your body or anyone else.
6. Before working on, servicing or making adjustments to equipment, disengage power, shut off engine, make sure all moving parts have stopped, and all pressure in the system is relieved.
7. Perform periodic cleaning, maintenance and inspection of fittings and hoses for operator safety. Replace any fittings or hoses that are shown to have defects.
8. DO NOT use sprayer for pumping water or other liquid for human or animal consumption.
9. If equipment is used in freezing or near freezing conditions, protect pump and plumbing on sprayer from freezing. Drain liquid from system and add RV antifreeze.

Exploded View/Parts List:  
Handgun #5163005



Item No.	Part Number	Qty	Description	List Price
1	**	1	Gasket, Nylon	---
2	**	1	Packing Washer, Type 302 Stainless Steel	---
3	**	3	Packing, Leather	---
4	**	1	Seat Plug, Seat Plate, Washer, & Core Sub-Assembly	---
5	5002203	1	Inlet Body, Aluminum	27.09
6	5002205	1	Handle Body, Aluminum	50.74
7	5006072	1	Stop Adjustment Nut, Steel - Zinc Plated	4.26
8	5006118	1	Locknut, Steel - Zinc-Plated	2.89
9	5006244	1	Stem Nut, Steel - Nickel Plated	5.06
10	5009080	1	Tubing, Aluminum	34.72
11	5016061	1	Washer, Stainless Steel	1.36
12	5016071	1	Spring Guide Washer, Type 302 Stainless Steel	2.27
13	5019069	1	Spring for Stop Adjustment Nut, Stainless Steel	1.43
14	5019083	1	Trigger Stop Spring, Stainless Steel	2.73
15	5019107	1	Main Spring, Stainless Steel	4.62
16	5046033	1	Cap, Aluminum	1.16
17	5063071	1	Orifice Disc, Stainless Steel	1.33
18	5072171	2	Gasket, Nylon	---
19	5076011	1	Trigger Guard, Steel - Nickel Plated	9.75
20	5077015	1	Guide Vane, Nylon	6.63
21	5084016	1	Nozzle Housing, Aluminum	16.23
22	5111017	2	Rivet, Steel - Zinc Plated	1.36
23	5117070	1	Spring Screw, Steel - Zinc Plated	4.50
24	5117143	1	Screw, Stainless Steel	1.67
25	5117165	1	Packing Screw, Aluminum	4.62
26	5131012	1	Trigger Stop, Steel - Nickel Plated	4.79
27	5132039	1	Stem, Type 416 Stainless Steel	21.38
28	5134010	1	Spring Stud, Stainless Steel	3.26
29	5166017	1	Trigger Guide, Steel - Nickel Plated	14.44
30	5166026	1	Trigger, Steel - Nickel Plated	5.46

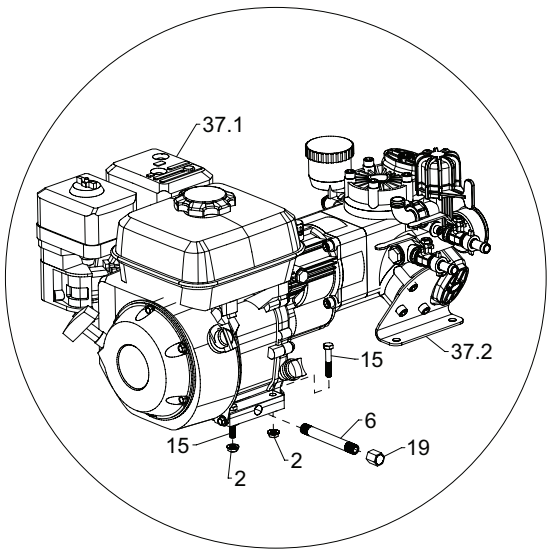
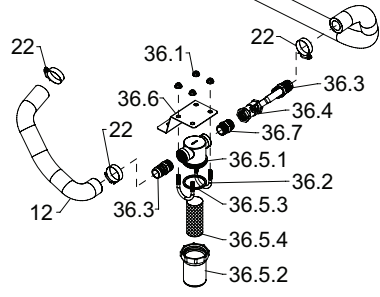
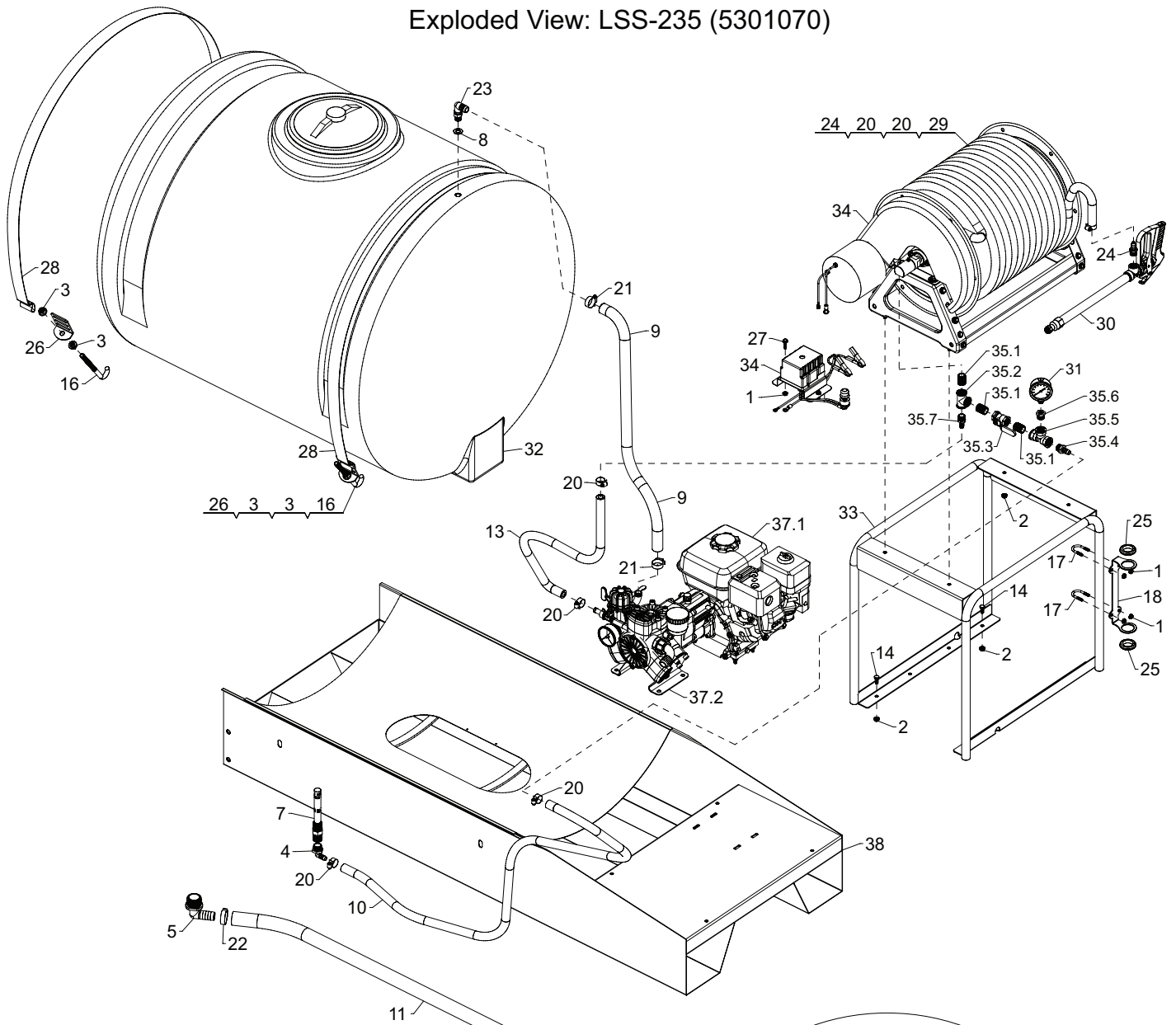
\*\* = Available in Spare Parts Kit ONLY!  
5168190 (#PK-AB43-AL-KIT) (\$35.70)



Electrical Components Assembly  
#5275416

Item No.	Part Number	Qty	Description	List Price
1	5006186	3	#10-24 Hex Whiz (Flange) Locknut	.10
2	5058101	1	Switch Box Cover	4.56
3	5117293	3	#10-24 x 3/8" Phillips Round Head Machine Screw	.25
4	5117299	2	#10-24 x 3/4" Slotted Round Head Machine Screw	.25
5	5157025	1	Strain Relief	.30
6	5157057	1	Auto-Reset Circuit Breaker (40 Amp)	5.49
7	5157075	1	Solenoid (12 Volt)	64.10
8	5272286	1	Electrical Components Base Weldment	8.95
9	5272287	1	Battery Wire Assembly	35.35
10	5272288	1	Lead Wire Assembly (Positive)	5.22
11	5272289	1	Jumper Wire Assembly	4.05
12	5272290	1	Push-Button Switch Assembly	29.35

# Exploded View: LSS-235 (5301070)



Engine Drain Detail

Parts List: LSS-235 (5301070)

Item No	Part Number	Qty	Description	List Price
1	5006306	6	1/4"-20 Hex Whiz (Flange) Locknut	.05
2	5006307	12	5/16"-18 Hex Whiz (Flange) Locknut	.25
3	5006337	8	1/2"-13 Hex Whiz (Flange) Locknut	.17
4	5010036	1	Nylon Elbow, 3/4" MNPT x 1/2" HB	.96
5	5010151	1	Nylon Elbow, 1 1/4" MNPT x 1" HB	3.12
6	5011126	1	1/4" x 4 1/2" Galv. Pipe Nipple	3.80
7	5014011	1	Delta Jet Agitator	4.21
8	5016066	1	Garden Hose Washer	.20
9	5020076	1	Hose, 3/4"-2 Brd. x 38"	4.83
10	5020112	1	Hose, 1/2"-2 Brd. x 60"	4.97
11	5020314	1	Hose, 1"-2 Brd. x 60"	10.52
12	5020315	1	Hose, 1"-2 Brd. x 24"	5.93
13	5020372	1	Hose, 1/2" Yellow PVC Hose x 36"	3.77
14	5034038	8	H.H.C.S., 5/16"-18 x 3/4"	.55
15	5034088	4	H.H.C.S., 5/16"-18 x 1 3/4"	.25
16	5034111	4	1/2" x 6" Hook Bolt	2.60
17	5034197	2	Round U-Bolt, 1/4"-20 x 1" x 1 3/4" (3/4" Thread)	.90
18	5038637	1	Handgun Holder Bracket	4.29
19	5046057	1	1/4" N.P.T. Galv. Hex Pipe Cap	1.25
20	5051022	6	Hose Clamp, 1/2"	.62
21	5051024	2	Hose Clamp, 3/4"	.67
22	5051025	4	Hose Clamp, 1"	.73
23	5056057	1	Nylon Elbow, 11/16" U.N.F. x 3/4" HB	1.24
24	5067052	2	Steel Fitting, 1/2" MNPT x 1/2" HB	4.60
25	5075014	2	Rubber Grommet (Black)	2.79
26	5108041	4	Tank Strap Buckle, Bent	3.10
27	5117301	2	1/4"-20 x 1" Hex Flange Screw	.14
28	5133103	2	Nylon Strap (1 3/4" x 96")	7.00
29	5153097	1	Hose, 1/2" PVC 600# (Yellow) x 300 Ft.	568.00
30	5163005	1	GunJet Spray Gun	120.98
31	5167034	1	Gauge, Liquid-Filled, 0-400# p.s.i.	14.50
32	5169004	1	200 Gallon Horizontal Tank	349.00
33	5274195	1	Reel Mount Weldment	67.00
34	5274309	1	Electric Hose Reel Assembly	1299.00
35	5275335	1	Hose Reel/Agitator Plumbing Assembly (LSS-280)	19.15
35.1	5011046	3	1/2" Galvanized Close Nipple	1.32
35.2	5010086	1	1/2" NPT Galvanized Tee	1.95
35.3	5143197	1	1/2" T-800 Brass Ball Valve	8.99
35.4	5067017	1	Nylon Fitting, 1/2" MNPT x 1/2" HB	.48
35.5	5010113	1	Nylon "Tee" Fitting, 1/2" FNPT	3.09
35.6	5041055	1	Nylon Reducing Bushing, 1/2" MNPT x 1/4" FNPT	1.12
35.7	5067052	1	Steel Fitting, 1/2" MNPT x 1/2" HB	4.60
36	5275463	1	Strainer Assembly (LSS-235)	35.89
36.1	5006307	4	5/16"-18 Hex Whiz (Flange) Locknut	.25
36.2	5034065	2	Round U-Bolt, 5/16"-18 x 1 1/2" x 2 3/16"	1.15
36.3	5067014	2	Nylon Fitting, 3/4" MNPT x 1" HB	.82
36.4	5143190	1	3/4" "T-800" Brass Ball Valve	9.99
36.5	5116136	1	Strainer	14.25
36.5.1	5046173	1	Strainer Cap	.94
36.5.2	5058035	1	Strainer Bowl	3.55
36.5.3	5072194	1	Viton Gasket	5.85
36.5.4	5116131	1	Screen (50 Mesh)	5.25
36.6	5038258	1	Strainer Bracket	3.99
36.7	5011055	1	Nylon Close Nipple, 3/4" MNPT	.56
37	5275672	1	Diaphragm Pump/Engine Assembly	1726.58
37.1	5152105	1	Engine, 6.5 HP EPA/CARB (Less Gear Reduction)	
37.2	5274358	1	3-Diaphragm Pump	1421.00
38	5275770	1	Skid (9-200 - RED)	312.25