

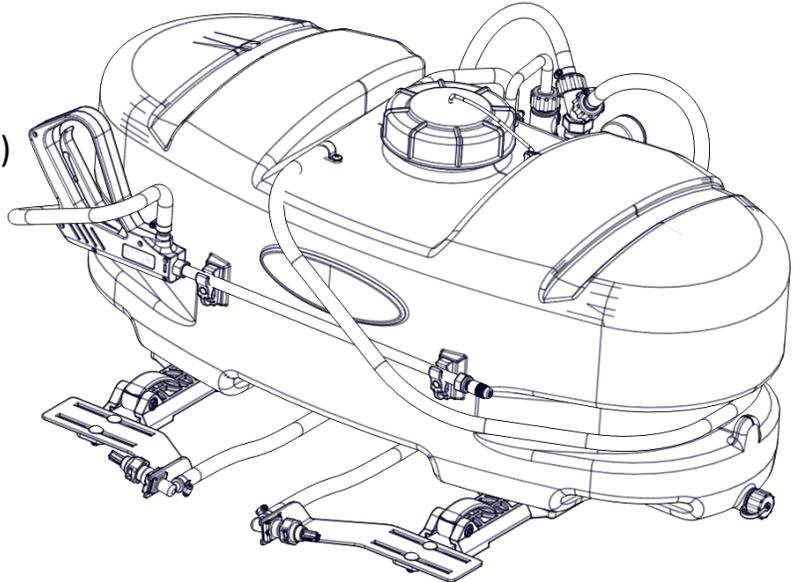
# OWNER'S MANUAL

Model: LG-25-BL-QR  
(5302323)  
(25 Gallon ATV Dual Nozzle Sprayer)

## Technical Specifications

- 25 Gal. Corrosion-Resistant Polyethylene Tank
- 12 Volt Diaphragm Pump, 3.8 g.p.m.—45 psi
- Deluxe Pistol Grip Handgun
- 15 Ft. Handgun Hose (3/8" I.D.)
- 26 Ft. Vertical throw, 35 Ft. Horizontal Throw
- 28 Foot Spray Coverage w/(2) (Boomless) Nozzles

**Caution:** When fully filled with water, this sprayer will weigh 250 lbs.. Consult the owner's manual for your vehicle to verify that you are within it's load carrying capacity.



## Assembly Instructions

- Make sure the contents of the sprayer's carton match the items shown on page 2 of the manual.
- Follow the steps on pages 2, 3 & 4 to properly assemble the sprayer.
- After assembly is complete and before testing your sprayer, make sure you connect the electrical hook-up to the end of your pump and clip the clips to a fully charged battery. The red wire must be connected to the positive (+) and the black wire should be connected to the negative (-).
- The drain plug assembly should already be attached to the tank

**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

Thank you for purchasing this product. The purpose of this manual is to assist you in operating and maintaining your lawn & garden/ATV sprayer. Please read it carefully, as it furnishes information which will help you achieve years of trouble-free operation.

## Warranty

**Products are warranted for one year from date of purchase  
against manufacturer or workmanship defects for home owner  
usage and 90 days for commercial usage.**

For technical assistance, visit our website @  
www.fimcoindustries.com or call: **TOLL FREE @ 1-800-831-0027**

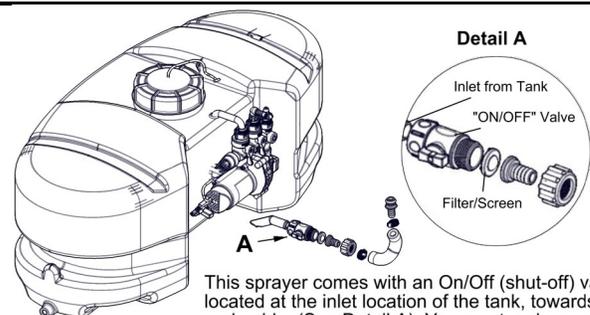
Our Technical Support Representatives will be happy to help you.

To obtain prompt, efficient service, always remember to give the following information...

- Correct Part Description and/or part number
- Model #/Serial # of your sprayer

Part descriptions and numbers can be obtained from the illustrated parts list section(s) of this manual.

## \*\*\*IMPORTANT REMINDER\*\*\*



This sprayer comes with an On/Off (shut-off) valve located at the inlet location of the tank, towards the underside. (See Detail A). You must make sure the valve is in the "open" position before using your sprayer.



**www.fimcoindustries.com**

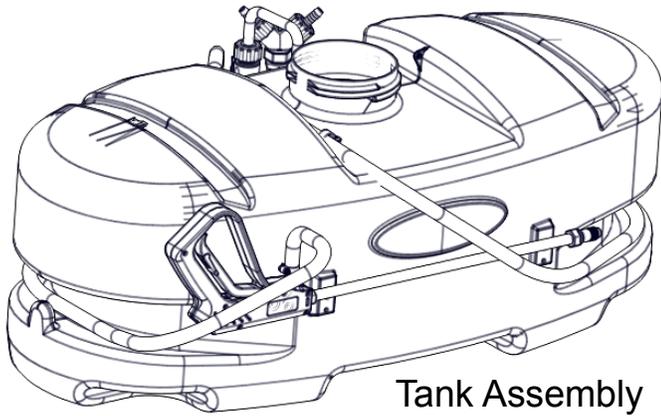
1000 FIMCO Lane, P.O. Box 1700, North Sioux City, SD 57049

Toll Free Phone: 800-831-0027 : Toll Free Fax: 800-494-0440

[5008429

06/16]

# Contents of your sprayer's carton (LG-25-BL-QR):



Tank Assembly

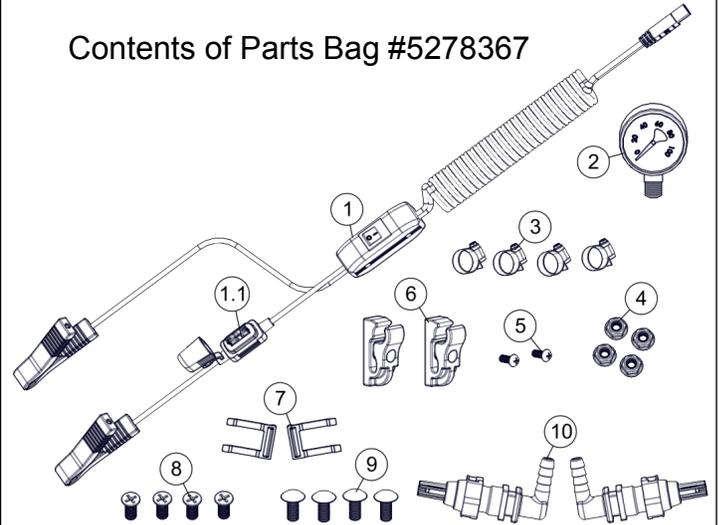


Tank Lid & Lanyard (#5058188)

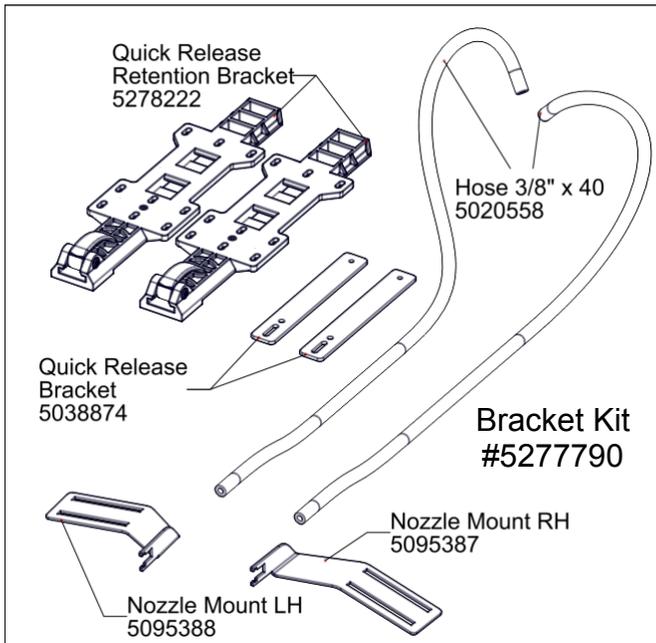
Owner's Manual



## Contents of Parts Bag #5278367

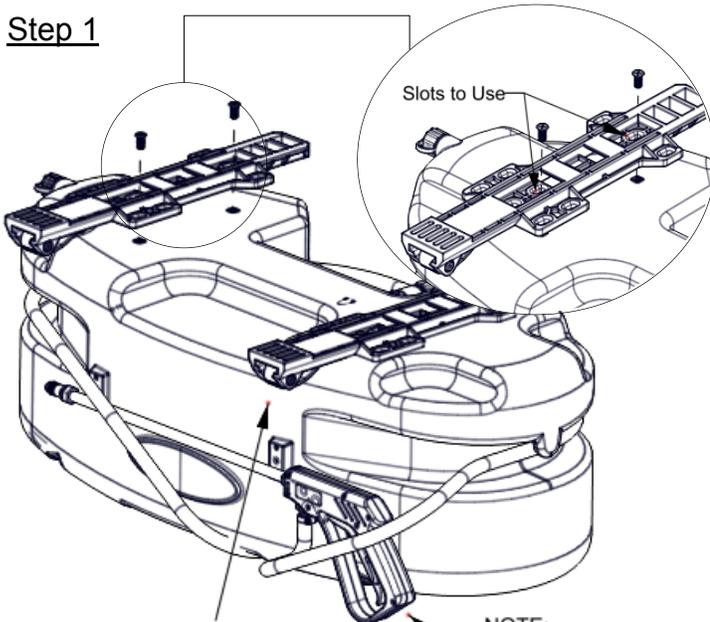


Ref. #	Part #	Description	Qty
1	5278114	Lead Wire Assembly w/15A Fuse & 30A Clips (96" Long)	1
1.1	5157238	15 Amp Regular Blade Fuse	1
2	5167007	Pressure Gauge, 0-100 p.s.i.	1
3	5051144	Hose Clamp, 3/8"	4
4	5006307	5/16-18nc Hex Flanged Whiz Nut Gr. 5	4
5	5117334	#10-24 x 1/2" Machine Screw, Phillips Round Head	2
6	5053112	Handgun Clip - Deluxe	2
7	5053111	Plastic Retaining Clip (11 Ga.)	2
8	5034149	5/16-18nc x 3/4" lg Flat Head Screw (100) W/Locking Patch	4
9	5034578	Carriage Bolt, 5/16"-18 x 3/4" (short neck)	4
10	5277798	Elbow Nozzle Assembly (Boomless Tips)	2



Bracket Kit #5277790

### Step 1



(\*\*) Cam Handle on bracket should be facing towards the 'back' side of the tank. (opposite of the pump/manifold assembly)

NOTE: Spray Gun will already be attached to the spray line hose

## Assembly Procedure (LG-25-BL-QR)

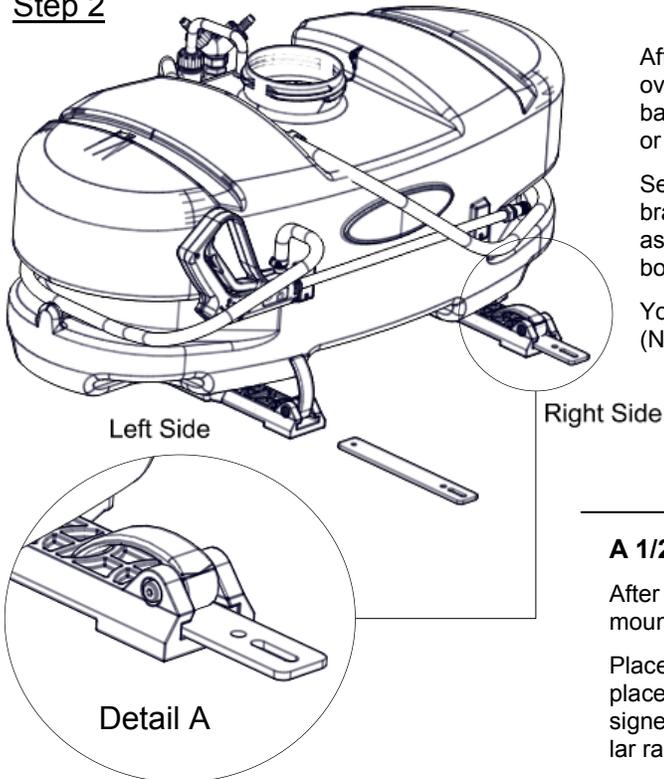
Normally, the sprayer will be mounted on an ATV with the pump assembly at the operator's back and the spray wand will be at the rear of the unit. Right Hand (RH) and Left Hand (LH) sides of the sprayer are determined as if you are standing behind the sprayer, looking at it (facing forward)

After removing the tank from the box, start the assembly procedure by turning the tank upside on a stable, flat surface.

**A phillips head screwdriver is required for this step.**

(\*\*) Mount tank brackets (5278222) to the underside of the tank as shown in Step 1. Use (4) flat head screws (5034149) to secure them to the tank. The tank will rest on the surface of the brackets. Make sure the brackets are parallel with each other before tightening down the bolts. Do not over-tighten.

## Step 2



## Assembly Procedure (LG-25-BL-QR)

After your tank brackets are securely attached, turn the tank assembly over and position it so that the cam handles which extend beyond the back of the tank are facing you and just hanging over the edge of the table or flat surface you are assembling this on.

Secure the boom mounting brackets (5038874) to the tank mounting brackets with Cam handles as shown in Detail A. You can position them as needed within the slot on the bracket. Just be sure that the surfaces of both brackets are even with each other.

You are now ready to mount this unit to an ATV, using ratchet straps (NOT INCLUDED)

---

### A 1/2" socket or wrench is required for this step.

After the brackets are securely attached to the tank, you are now ready to mount this to an ATV rack system.

Place the sprayer on to the ATV rack and find the most optimal place for placement. Remember that all rack systems are not alike and this was designed to fit 'most' rack systems. There is a chance it may not fit your particular rack.

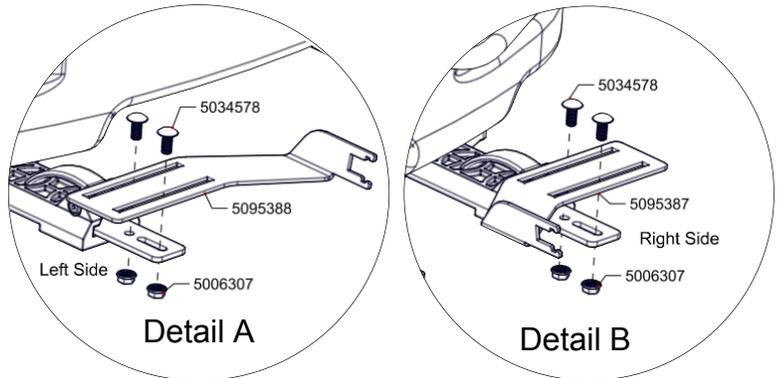
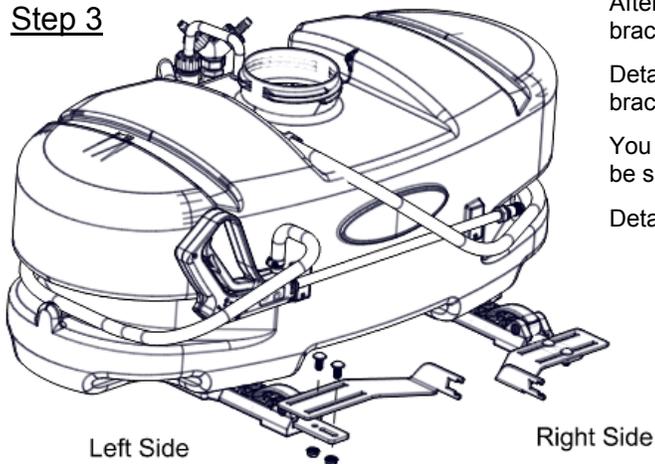
After the sprayer is secured to the rack, assemble the nozzle mounts to the brackets.

Detail A: Secure the LH nozzle mount (5095388) to the LH tank mounting bracket with two carriage bolts (5034578) and three whiz nuts (5006307).

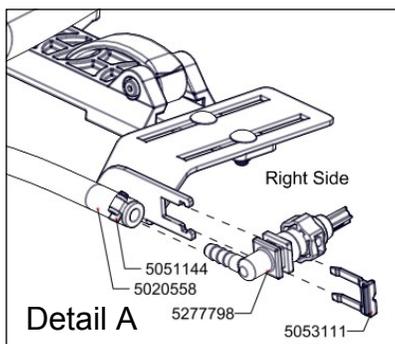
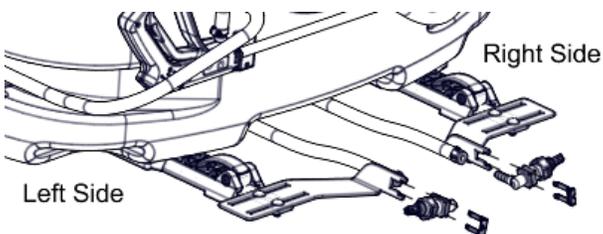
You can position the nozzle mounts as needed within the slot on the tab. Just be sure that the surfaces of both brackets are even with each other.

Detail B: Repeat for RH nozzle mount (5095387)

## Step 3



## Step 4



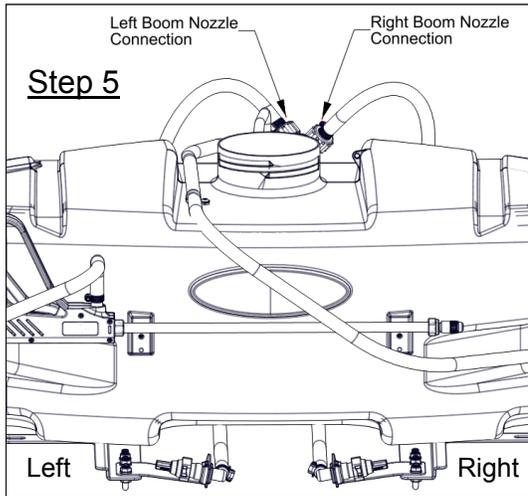
After your nozzle mounts are secured in place, attach the nozzle assemblies (5277798).

Slip a hose clamp (5051144) over each end of the hose. Slightly tighten so they won't fall off the hose.

Slip one end of each hose under tank to secure to manifold in the next step.

Attach other end of hose to the hose barb on the nozzle body. Slip hose over barb with a twisting motion and tighten hose clamp. Repeat for the other nozzle assembly.

Detail A: Attach nozzle assemblies to nozzle mounts and secure in place with poly spring clips (5053111).

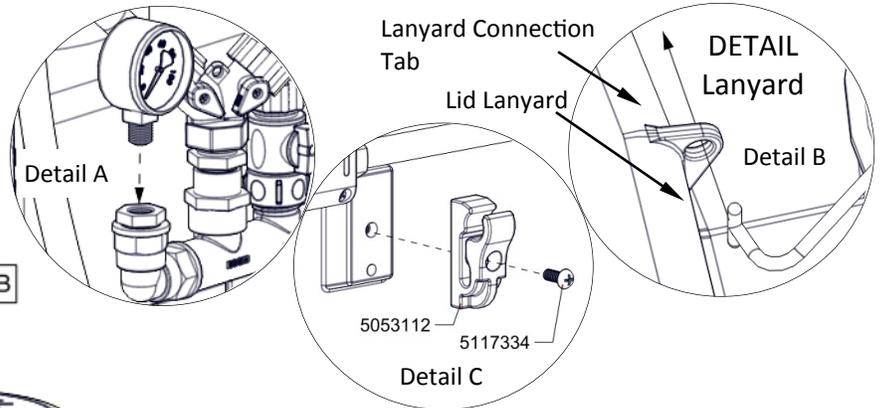


**Step 5**

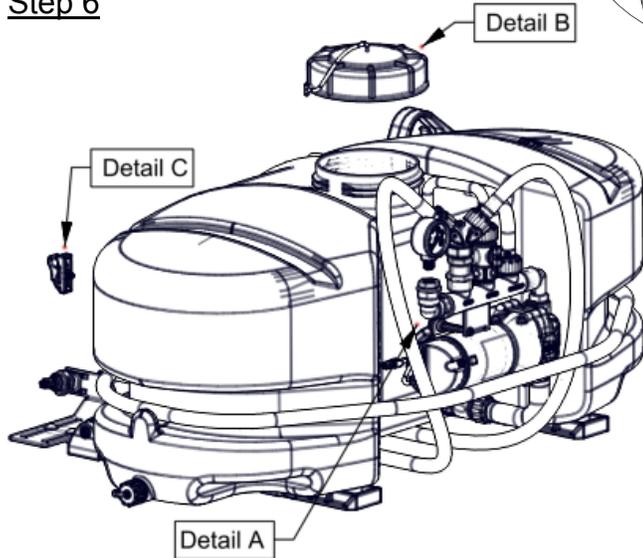
**Assembly Procedure (LG-25-BL-QR)**

After securing the nozzle assemblies to the nozzle mounts, secure other end of hoses to the hose bars on the y-valve on the manifold, with a twisting motion and secure with hose clamps..

Each nozzle will have its own shut-off valve control.



**Step 6**



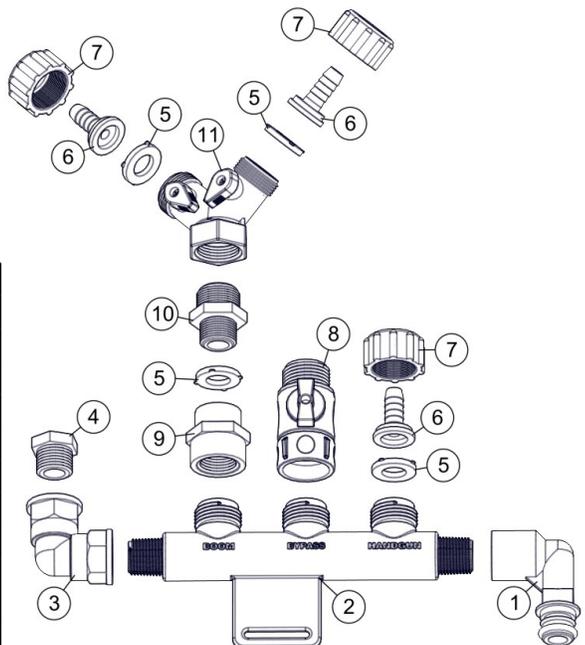
- Detail A: Install the pressure gauge. Hand tighten securely.  
**\*\* DO NOT OVER-TIGHTEN \*\***
- Detail B: Screw the lid onto the tank. Place the end of the lanyard through the tab in the tank. This is so the lid can 'hang' off the tank when filling/rinsing the tank out.
- Detail C: Locate the (2) clips and (2) phillips head machine screws from the parts bag.  
**A phillips head screwdriver is required for this step**  
Place a screw through the hole in the clip and bring it up to the tank, where the embossments for the clips are (located on the rear side of the tank)  
Secure the clip/screw to the tank. Tighten so that the clip is secure. Do this for each clip.  
**\*\* DO NOT OVER-TIGHTEN \*\***

The spray wand will snap into the clips once installed. Do not use excessive force when placing the spray wand into the clips, as this could cause the clips to break.

**\*\*\* The Sprayer should now be ready for use \*\*\***

**Manifold Assembly  
#5277787**

Ref. #	Part #	Description	Qty
1	5010430	Port Kit Elbow, 1/2" FNPT	1
2	5143405	Manifold w/Mounting Tab	1
3	5010236	Poly Elbow, 1/2" FNPT x 1/2" FNPT	1
4	5041073	Poly Reducing Bushing, 1/2" MNPT x 1/4" FNPT	1
5	5016066	Garden Hose Washer	4
6	5149034	Poly Swivel, 3/8" Hose Barb	3
7	5006209	Poly Knurled Swivel Nut, 3/4" FGHT	3
8	5143419	Swivel Shut-Off, 3/4" GHT	1
9	5005190	Poly Adapter Coupler, 3/4" FGHT x 1/2" FNPT	1
10	5005195	Poly Adapter, 1/2" MNPT x 3/4" MGHT	1
11	5143204	Dual Hose Shut-Off "Y" Valve	1



## Testing the Sprayer

**NOTE:** It is **VERY** important for to test your sprayer with plain water before actual spraying is attempted. This will enable you to check for leaks without the possibility of losing any expensive chemicals.

Fill the tank about 1/2 full with plain water and drive to the starting place for spraying. When you are ready to spray, turn the boom valve to the "on" position. This will start solution spraying from the tips of the boom. The pressure will decrease slightly when the boom is spraying. Adjust the pressure by turning the "ON/OFF" valve lever on the bypass line valve. Make sure your pattern is sufficient. You may down-pressure the system by 'bypassing' solution back into the tank. This is achieved by opening the bypass valve. Regulating pressure is done in this manner.

Read the operating instructions and initially begin spraying by closing the 'bypass' valve (Press. Adj.) and opening the boom line valve. This will enable the air in the line to be eliminated (purged) through all the tips, while building pressure. When everything tests all right (no leaks and good pressure), add the desired chemicals to the mixture and water combination and start your spraying operation. Adjust the pressure and spray as you did in the testing procedure.

Conditions of weather and terrain must be considered when setting the sprayer. Do not spray on windy days. Protective clothing must be worn in some cases

**Be sure to read the chemical label(s) before application!**

## Operation

Your sprayer is equipped with (1) ON/OFF switch in the wire assembly that you hook up to your battery. The "-" is the "ON" position and the "o" is the "OFF" position for the switch. Make sure the switch is depressed in the "-" position for operation. The pump is equipped with a pressure switch that is factory pre-set for it to shut off at 45 p.s.i. This switch assembly is the 'square box' on the head portion of the pump.

Always fill the tank 1/2 full with water first and then add the chemical slowly, mixing as you pour the chemical into the tank and then fill the rest of the way. You may use the bypass in order to mix the chemical and water.

The pumping system draws solution from the tank, through the strainer/filter and to the pump. The pump forces the solution under pressure to the handgun and/or boom nozzles.

- Activate the handgun by squeezing the handle lever
- Rotating the adjustable nozzle tip on the handgun will change the tip pattern from a straight stream to a cone pattern (fine mist)
- Both nozzles spraying at the same time will allow a maximum coverage of 28 feet
- Both nozzles have a shutoff valve, so you can shut off each nozzle individually. This may help in achieving the actual coverage needed for your application.

## Calibration

Chemical labels may show application rates in gallons per acre, gallons per 1000 square feet or gallons per 100 square feet. You will note that the tip chart shows 3 of these rating systems. Once you know how much you are going to spray, then determine (from the tip chart) the spraying pressure (PSI), and the spraying speed (MPH).

Determining the proper speed of the pulling vehicle can be done by marking off 100, 200 & 300 feet. The speed chart indicates the number of seconds it takes to travel the distances. Set the throttle and with a running start, travel the distances. Adjust the throttle until you travel the distances in the number of seconds indicated by the speed chart. Once you have reached the throttle setting needed, mark the throttle location so you can stop and go again, returning to the same speed.

Add water and proper amount of chemical to the tank and drive to the starting place for spraying.

## Adjusting Pressure

- When the bypass valve is closed, pressure is at the highest point.
- Opening the valve will decrease pressure.

## Using the Boom Nozzles

Four things must be considered before spraying with the boom.

1. How much chemical must be mixed in the tank.
  2. Rate of spray (gallons per acre to be sprayed).
  3. What pressure (p.s.i.) will be used.
  4. Speed traveled (mph) while spraying.
- \* Refer to the chemical label to determine your chemical mixture
  - \* See the tip chart to determine the pressure to be used. The chart will also show the speed used when spraying.
  - \* Start the pump and open the valve to the boom nozzles.
  - \* Check the spray pattern. Usually you can see the coverage better on a solid concrete surface, such as a driveway.
  - \* The boomless nozzles should be approx. 33" above the objects being sprayed.

Speed Chart			
	Time Required in seconds to travel a distance of		
Speed in M.P.H. (Miles Per Hour)	100 Ft.	200 Ft.	300 Ft.
1.0	68 sec.	136 sec.	205 sec.
2.0	34	68	102
3.0	23	45	68
4.0	17	34	51
5.0	14	27	41
6.0	11	23	34
7.0	9.7	19	29
8.0	8.5	17	26
9.0	7.6	15	23
10.0	6.8	14	20

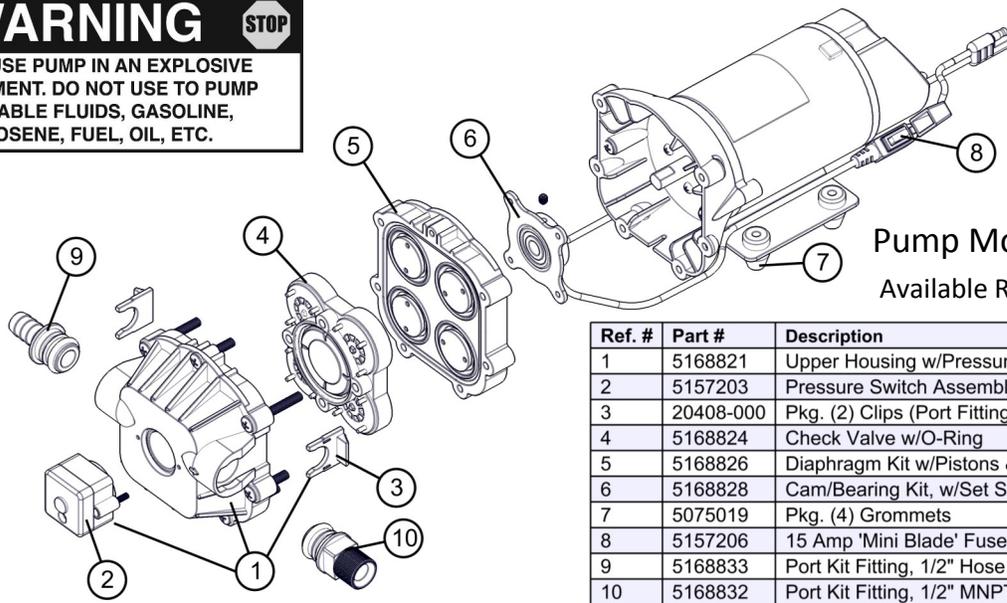
Rate Chart for Boomless Nozzle								
Gallons per Acre Based on Water								
Pressure P.S.I.	Capacity G.P.M. (3 Nozzles)	1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	6 MPH	8 MPH
20	1.68	28.0	14.0	9.4	7.0	5.6	4.7	3.5
30	2.05	34.4	17.2	11.4	8.6	6.9	5.7	4.3
40	2.40	39.6	19.8	13.2	9.9	7.9	6.6	5.0
Gallons per 1000 Sq. Ft. Based on Water								
Pressure P.S.I.	Capacity G.P.M. (3 Nozzles)	1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	6 MPH	8 MPH
20	1.68	0.64	0.32	0.21	0.16	0.13	0.11	0.08
30	2.05	0.78	0.39	0.26	0.20	0.16	0.13	0.10
40	2.40	0.90	0.45	0.30	0.23	0.18	0.15	0.12
Gallons per 100 Sq. Ft. Based on Water								
Pressure P.S.I.	Capacity G.P.M. (3 Nozzles)	1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	6 MPH	8 MPH
20	1.68	0.064	0.032	0.021	0.016	0.013	0.011	0.008
30	2.05	0.078	0.039	0.026	0.020	0.016	0.013	0.010
40	2.40	0.090	0.045	0.030	0.023	0.018	0.015	0.012

\*\* The rate of spray as shown in the chart will remain the same with 1, 2 or 3 Nozzles \*\*

The only difference will be with the width of the spray swath

**STOP WARNING STOP**

DO NOT USE PUMP IN AN EXPLOSIVE ENVIRONMENT. DO NOT USE TO PUMP FLAMMABLE FLUIDS, GASOLINE, KEROSENE, FUEL, OIL, ETC.



Pump Model: 5277982  
Available Replacement Parts

Ref. #	Part #	Description	Qty
1	5168821	Upper Housing w/Pressure Switch	1
2	5157203	Pressure Switch Assembly	1
3	20408-000	Pkg. (2) Clips (Port Fitting)	1
4	5168824	Check Valve w/O-Ring	1
5	5168826	Diaphragm Kit w/Pistons & (4) Screws	1
6	5168828	Cam/Bearing Kit, w/Set Screw	1
7	5075019	Pkg. (4) Grommets	1
8	5157206	15 Amp 'Mini Blade' Fuse	1
9	5168833	Port Kit Fitting, 1/2" Hose Barb	1
10	5168832	Port Kit Fitting, 1/2" MNPT	1

**DO**

- Clean and rinse your pump after each use with Fimco Tank Neutralizer
- Winterize your pump or sprayer by rinsing, draining and running RV Antifreeze through it before storing for the winter.
- Use clean water for your spray mixture
- Store inside a building when not in use.

**DON'T**

- Use to pump bleach.
- Use to pump petroleum products such as diesel fuel, gasoline or kerosene
- Leave your pump sit with spray mixture in it for extended periods
- Use dirty or unfiltered water for spraying

**CAUTION**

**PRESSURE SWITCH OPERATION**

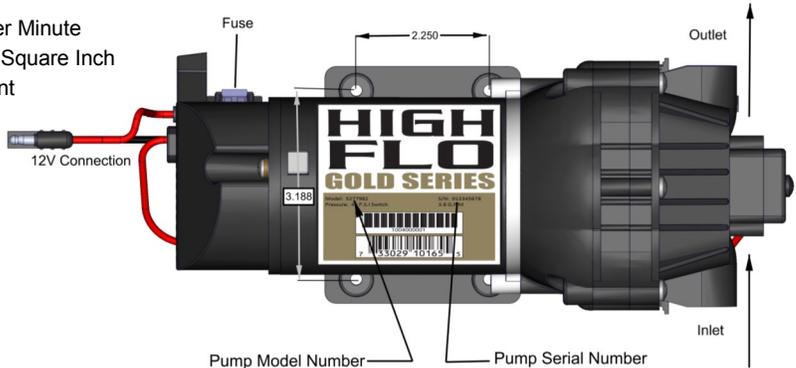
Pressure switch is pre-set at the factory. Improper adjustment of the pressure switch, may cause severe overload or premature failure. If the pump is subjected to rapid cycling during normal operation, or infrequent periods, damage may occur.

Troubleshooting the Pump:

- Motor does not run:
- Check for loose wiring connection(s).
  - Make sure the 'ON/OFF' switch in the lead wire assembly is in the 'ON' position. "I" is the 'ON' position and 'O' is the 'OFF' position.
  - Check for defective pressure switch. Make sure you are connected to a good 12 volt power source. Make sure any on/off switches are in the 'on' position.
  - Remove the cap to the pressure switch. Pull both red wires off of their terminals, and touch the two ends together. If your pump runs when you do this, your pressure switch will need to be replaced.
  - Check the fuse.
  - Check for low voltage at the power supply.
- Pump does not prime:
- Check for air leaks in supply line.
  - Check for debris in the check valve assembly.
  - Check for defective check valve.
  - Check for clogged strainer/filter.
  - Check for cracks in the pump housing.
  - Check for empty product supply.

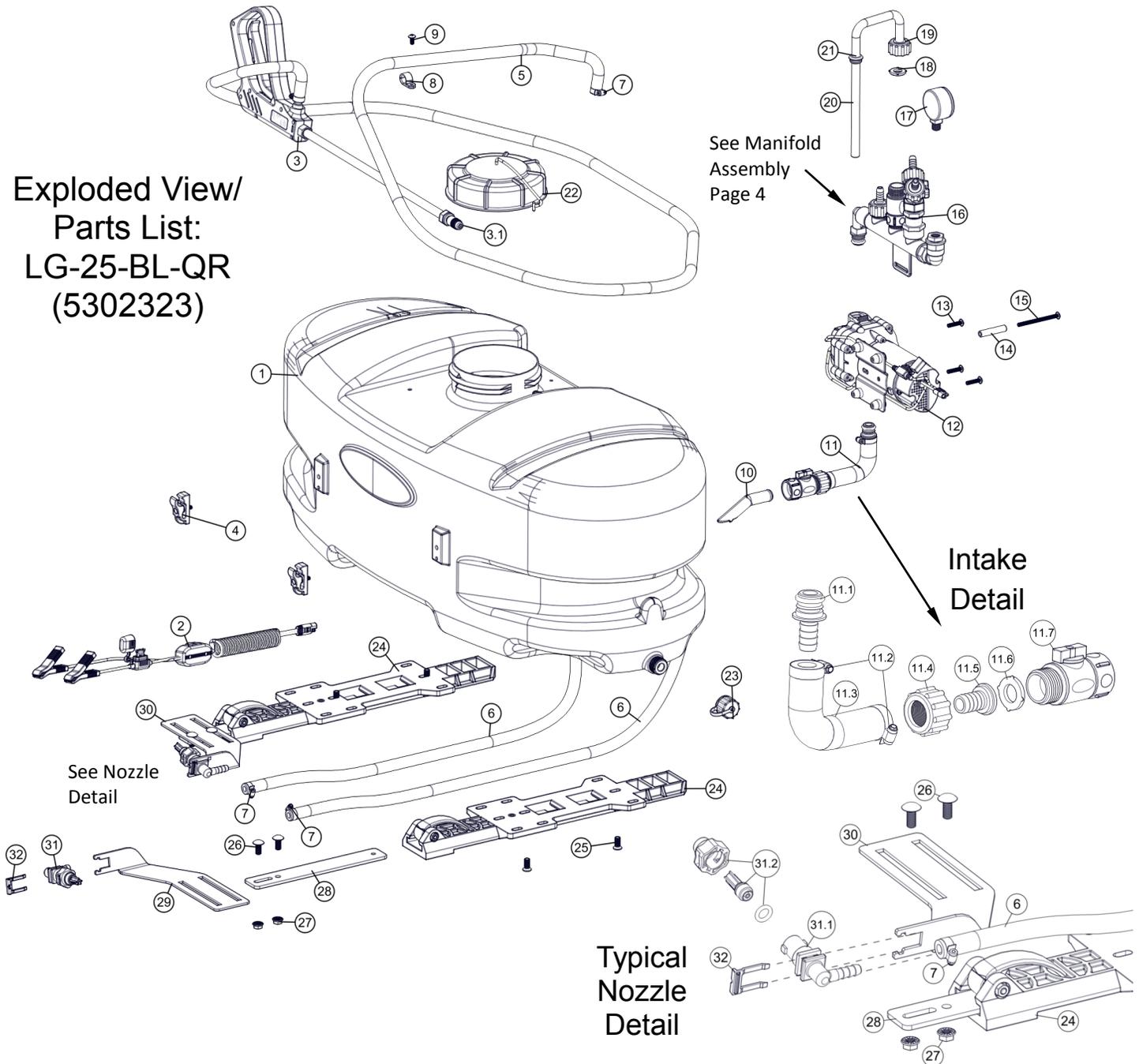
Pump Specifications	
Current:	7.4 Amps @ 40 PSI
Check Valve:	Viton
Wetted Parts Housing:	Polypropylene
Diaphragm:	Santoprene
Liquid Temperature:	130° F max.

GPM=Gallons Per Minute  
PSI=Pounds per Square Inch  
DC=Direct Current



- Pulsating flow (surging):
- Check for defective pressure switch.
  - Check for leaks in the discharge line.
  - Check for restriction in the discharge line.
  - Check for debris in nozzle orifice.
  - Discharge hose may be too long.
  - Check for clogged strainer.
- Motor continues to run after discharge is shut off:
- Check for empty product supply.
  - Check for open bypass valve. (if equipped)
  - Check for low voltage.
  - Check for leak in discharge line.
  - Check for defective or dirty check valve.
  - Check for defective pressure switch.

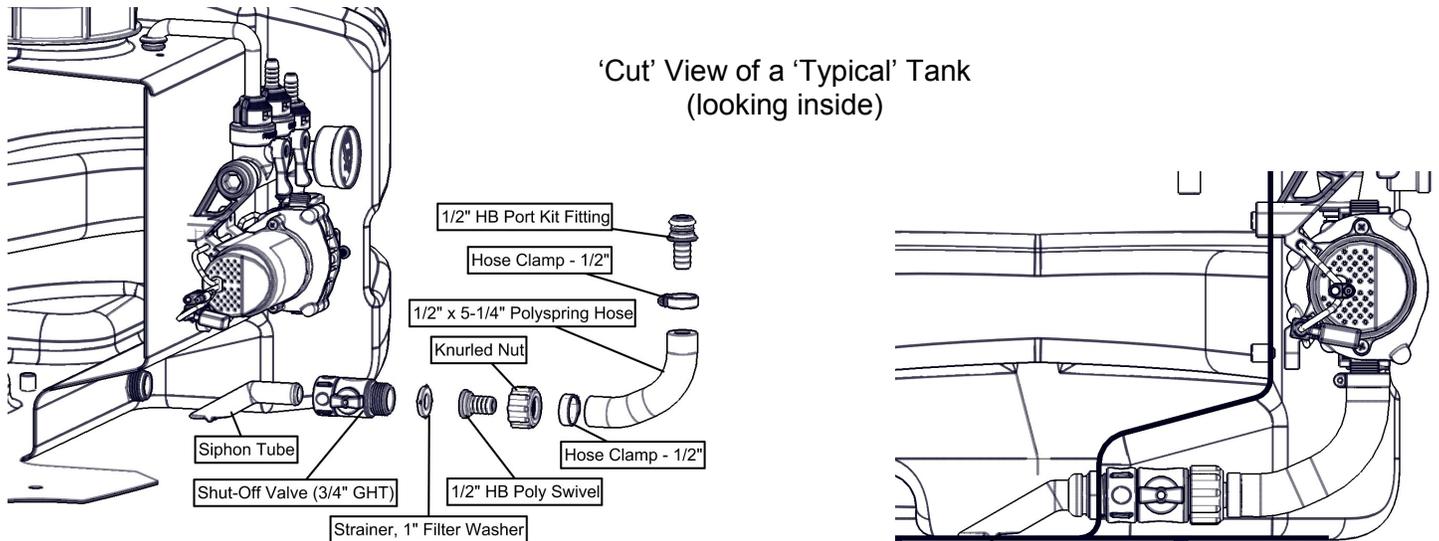
# Exploded View/ Parts List: LG-25-BL-QR (5302323)



Ref. #	Part #	Description	Qty
1	5169243	25 Gallon Tank (White)	1
2	5278114	Lead Wire Assembly w/15A Fuse & 30A Clips (96" Long)	1
2.1	5157238	15 Amp Regular Blade Fuse	1
3	5273959	Deluxe Pistol-Grip Handgun w/X-26 Tip	1
3.1	5018331	Brass Handgun Tip (X-26)	1
4	5278348	Deluxe Wand Clips & Screws (Pkg/2) (#10-24 Thread)	1
5	5020524	Hose, 3/8"-1 Brd. x 15 Ft.	1
6	5020558	Hose, 3/8"-1 Brd. x 40"	2
7	5051144	Hose Clamp, 3/8"	6
8	5051122	5/8" Black Nylon Loom Cable Clamp	1
9	5117234	#10-24 x 1/2" Phillips Truss Head Machine Screw	1
10	5100452	Siphon Tube	1
11	5275877	Intake Sub-Assembly	1
11.1	5168833	Port Kit Fitting, 1/2" Hose Barb	1
11.2	5051114	Hose Clamp, 1/2"	2
11.3	5020557	1/2" Polyspring Hose x 5 1/4"	1
11.4	5006209	Poly Knurled Swivel Nut, 3/4" FGHT	1
11.5	5149035	Poly Swivel, 1/2" Hose Barb	1
11.6	5116242	Strainer, 1" Filter Washer	1
11.7	5143419	Swivel Shut-Off, 3/4" GHT	1
12	5277982	Hi Flo Gold Series 3.8 GPM Pump	1
13	5117168	#10-24 x 1" Phillips Truss Head Machine Screw	3

Ref. #	Part #	Description	Qty
14	5127192	Manifold Spacer (3.8 gpm)	1
15	5117314	#10-24 x 3" Truss Head Machine Screw	1
16	5277787	Manifold Assembly	1
17	5167007	Pressure Gauge, 0-100 p.s.i.	1
18	5016066	Garden Hose Washer	1
19	5006209	Poly Knurled Swivel Nut, 3/4" FGHT	1
20	5100359	Rigid By-Pass Tube Assembly	1
21	5075018	Grommet, 1/2" I.D.	1
22	5058188	Tank Lid w/Lanyard	1
23	5274373	Drain Plug Cap, Tether, and Washer Assembly	1
24	5278222	ATV Quick Release Bracket Assembly	2
25	5034149	5/16-18nc x 3/4" lg Flat Head Screw (100) W/Locking Patch	4
26	5034578	Carriage Bolt, 5/16"-18 x 3/4" (short neck)	4
27	5006307	5/16-18nc Hex Flanged Whiz Nut Gr. 5	4
28	5038874	Quick Release Boom Mount Bracket - Fixed Height	2
29	5095387	Nozzle Mount QR - QJ100 (Right Side)	1
30	5095388	Nozzle Mount QR - QJ100 (Left Side)	1
31	5277798	Elbow Nozzle Assembly (Boomless Tips)	2
31.1	5056113	Single Hose Shank (3/8" Hose)	1
31.2	5274861	XT Spray Nozzle, Cap, & O-Ring	1
32	5053111	Plastic Retaining Clip (11 Ga.)	2

## Intake/Siphon Tube/Screen Detail of a Typical L&G/ATV Sprayer (not including the 'EC' Units)

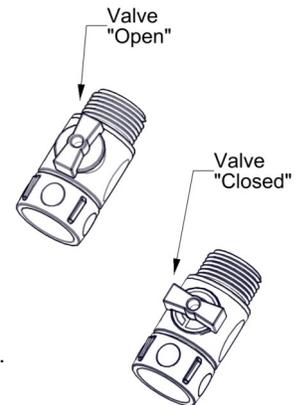


The suction line of your sprayer should contain a 'siphon tube' or intake tube which should be rotated so that it just touches the bottom of the tank surface. (see Detail Views). Reach in and rotate it, as needed, if not already in this position.

A nylon shut-off valve is threaded onto the pipe nipple at the intake location on the tank. It is at this location so you can shut off the flow of solution to access your system's screen for cleaning.

### Checking/Cleaning the sprayer's filter/screen:

- ◆ Start your pump and before it shuts off, reach down and Shut the nylon valve to the 'Closed' position (lever is perpendicular to the flow of fluid), then shut off your pump.
- ◆ Unscrew the knurled nut from the shut-off valve, leaving the valve connected to the tank.
- ◆ Swing (swivel) the intake assembly towards you. Look in the nut you JUST unscrewed. There is a screen/washer there.
- ◆ Remove the screen and clean as necessary. Replace when done and reassemble the entire assembly.
- ◆ Make sure the valve is turned to the 'Open' position before restarting your pump.



### **Maintenance During/After Spraying**

Periodically check the strainer and clean the screen at the bottom of your intake tube.

Proper care and maintenance will prolong the life of your sprayer.

After use, fill the sprayer tank part way with water. Start the sprayer and allow the clear water to be pumped through the plumbing system and out through the spray nozzles. Refill the tank about half full with plain water and use FIMCO Tank Neutralizer and Cleaner and repeat cleaning instructions above. Flush the entire sprayer with the neutralizing/cleaning agent, then flush out one more time with plain water. Follow the chemical manufacturer's disposal instructions of all wash or rinsing water. For the boom (if applicable) remove the tips and screens from the nozzle assemblies. Wash these items out thoroughly. Blow the orifice clean and dry. If the orifice remains clogged, clean it with a fine bristle (NOT WIRE) brush or with a toothpick. Do not damage the orifice. Water rinse and dry the tips before storing.

**WARNING: Some chemicals will damage the pump valves if allowed to soak untreated for a length of time! ALWAYS flush the pump as instructed after each use. DO NOT allow chemicals to sit in the pump for extended times of idleness. Follow the chemical manufacturer's instructions on disposal of all waste water from the sprayer.**

### **Winter Storage**

Drain all water out of your sprayer, paying special attention to the pump, handgun and valve(s). These items are especially prone to damage from chemicals and freezing weather.

The sprayer should be winterized before storage by pumping a solution of RV antifreeze through the entire plumbing system. This antifreeze solution should remain in the plumbing system during the winter months. When spring time comes and you are preparing your sprayer for the spray season, rinse the entire plumbing system out, clearing the lines of the antifreeze solution. Proper care and maintenance will prolong the life of your sprayer.