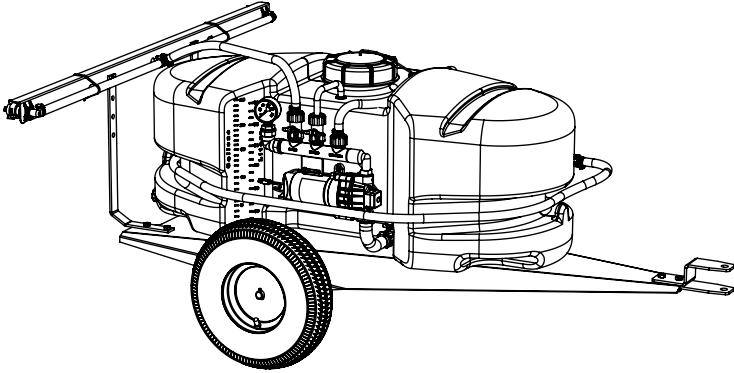


# OWNER'S MANUAL

Model: LG-2500-303 (5301065)

(25 Gallon Lawn & Garden Trailer Sprayer)



## Technical Specifications

- 25 Gal. Corrosion-Resistant Polyethylene Tank
- 12 Volt Diaphragm Pump, 2.1 g.p.m. - 60 p.s.i.
- Lever Handgun
- 15 Ft. Handgun Hose
- 15 Ft. max. vertical throw, 30 Ft. max. horizontal throw
- Low Profile Trailer & Tank
- 4.10 x 3.50 x 6 Pneumatic Tires
- Pressure Gauge
- Adjustable Pressure
- 2-Nozzle Boom Assembly, 80" Spray Coverage

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 trailer sprayer. Please read it carefully, as it furnishes information which will help you achieve years of trouble-free operation.

## Warranty/Parts/Service

For home usage, products are warranted for one year from date of purchase against manufacturer or workmanship defects.

Commercial users have a 90 day warranty.

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

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

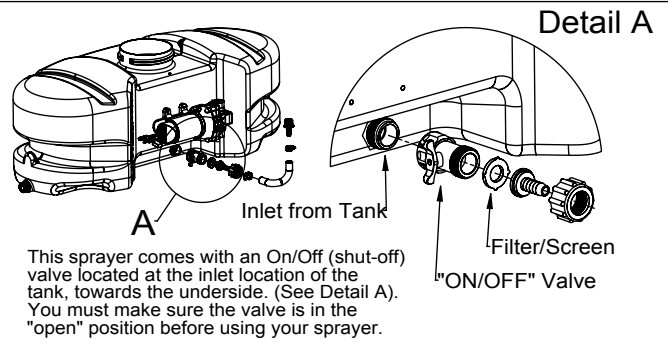
Part descriptions and part numbers can be obtained from the illustrated parts list section(s) of this manual.

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.

## Assembly

- Make sure the contents of the sprayer's carton match the items shown on page 2 of the manual.
- Follow the steps on pages 3, 4, & 5 to properly assemble the sprayer.
- After assembly is complete, and before testing your sprayer, make sure you connect the electrical hook-up (5274443) to the end of your pump and clip the alligator clip ends to a fully charged 12 volt battery. The red wire must be connected to the positive (+), and the black wire should be connected to the negative (-).
- The drain plug assembly (5274373) should already be attached to the tank.

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

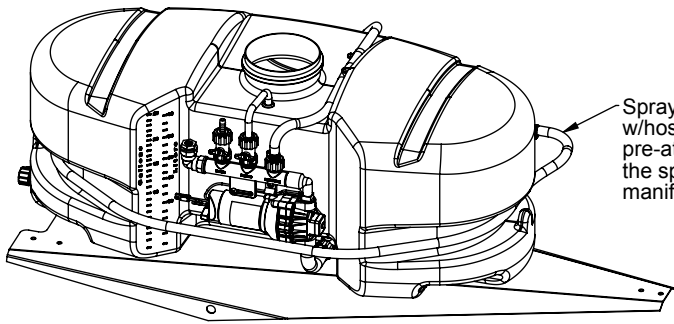


[www.fimcoindustries.com](http://www.fimcoindustries.com)

1000 FIMCO Lane, P.O. Box 1700, North Sioux City, SD 57049  
Toll Free Phone: 800-831-0027 : Toll Free Fax: 800-494-0440

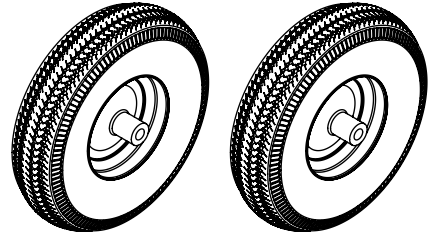
Form No. 1296 [5004791 (01/14)] Printed in the U.S.A.

## Contents of your sprayer's carton (LG-2500-303):

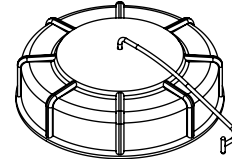


Tank/Frame Pre-Assembly

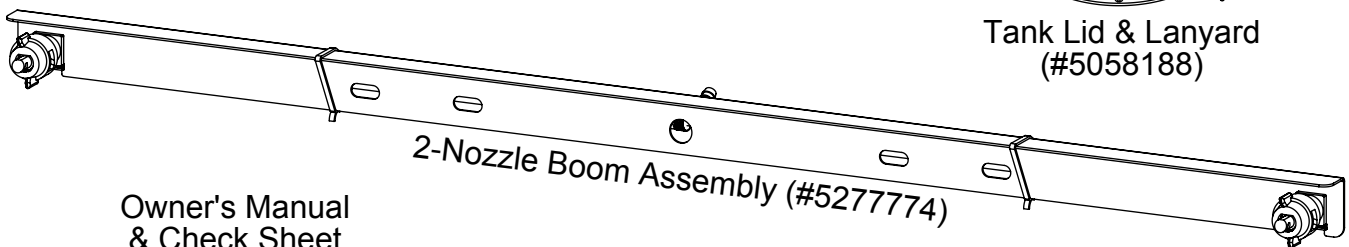
Spray wand hose w/hose clamps, pre-attached to the spray wand & manifold.



(2) Tires/Wheels (#5021102)

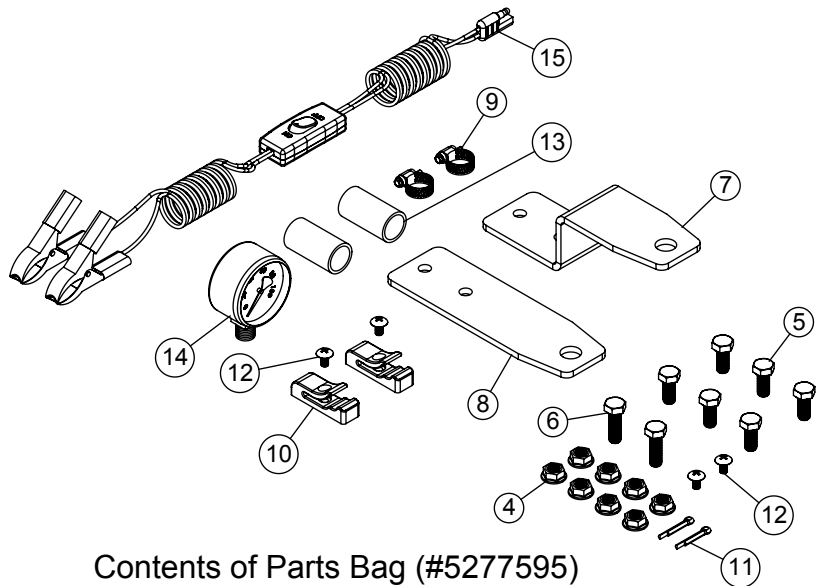
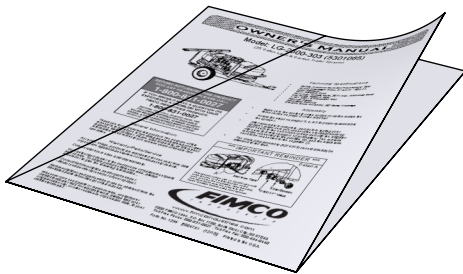


Tank Lid & Lanyard (#5058188)

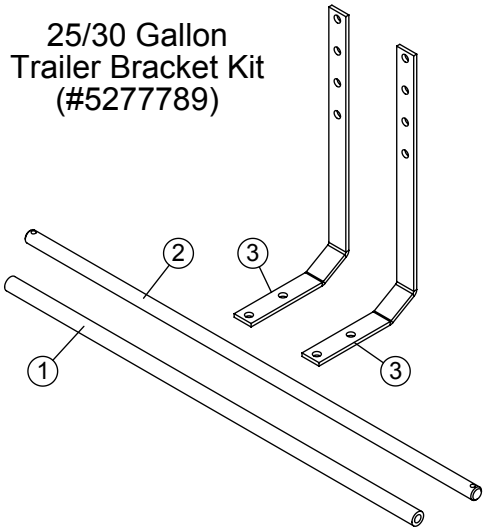


2-Nozzle Boom Assembly (#5277774)

Owner's Manual & Check Sheet



25/30 Gallon Trailer Bracket Kit (#5277789)



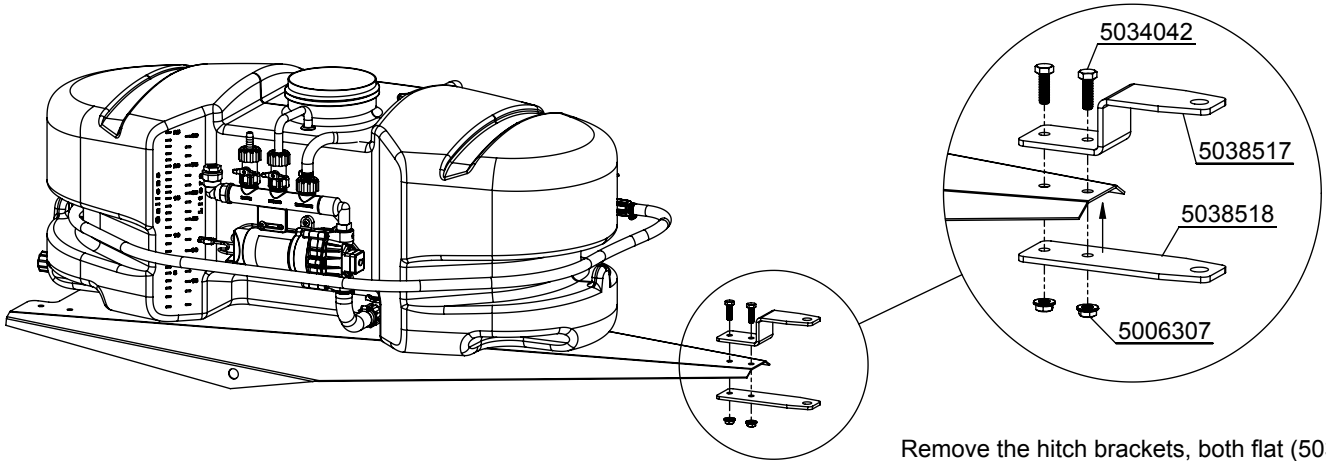
Contents of Parts Bag (#5277595)

Item No	Part Number	Qty	Description
1	5020251	1	Hose, 3/8"-1 Brd. x 24"
2	5024102	1	Axle (5/8" Dia. x 26-3/8")
3	5095198	2	Boom Bracket (Light Duty)

Item No	Part Number	Qty	Description
4	5006307	8	5/16-18nc Hex Flanged Whiz Nut Gr. 5
5	5034038	6	H.H.C.S. 5/16"-18nc x 3/4" Long
6	5034042	2	H.H.C.S. 5/16"-18nc x 1" Long
7	5038517	1	Hitch Bracket (Formed)
8	5038518	1	Hitch Bracket (Flat)
9	5051144	2	Hose Clamp, 3/8"
10	5053096	2	Spray Wand Clip, for Blow-Molded Tanks
11	5101077	2	Cotter Pin, 1/8" x 1"
12	5117293	4	#10-24 x 3/8" Truss Head Machine Screw
13	5127189	2	Wheel Spacer (for 5/8" Dia. axle)
14	5167007	1	Pressure Gauge, 0-100 p.s.i.
15	5274443	1	Lead Wire Assembly (w/Switch), 96"

## Step 1

# Assembly Procedure (LG-2500-303)



Remove the hitch brackets, both flat (5038518) and formed (5038517), from the parts bag. The flat one is to be placed under the frame, and the formed one gets placed on top of the frame.

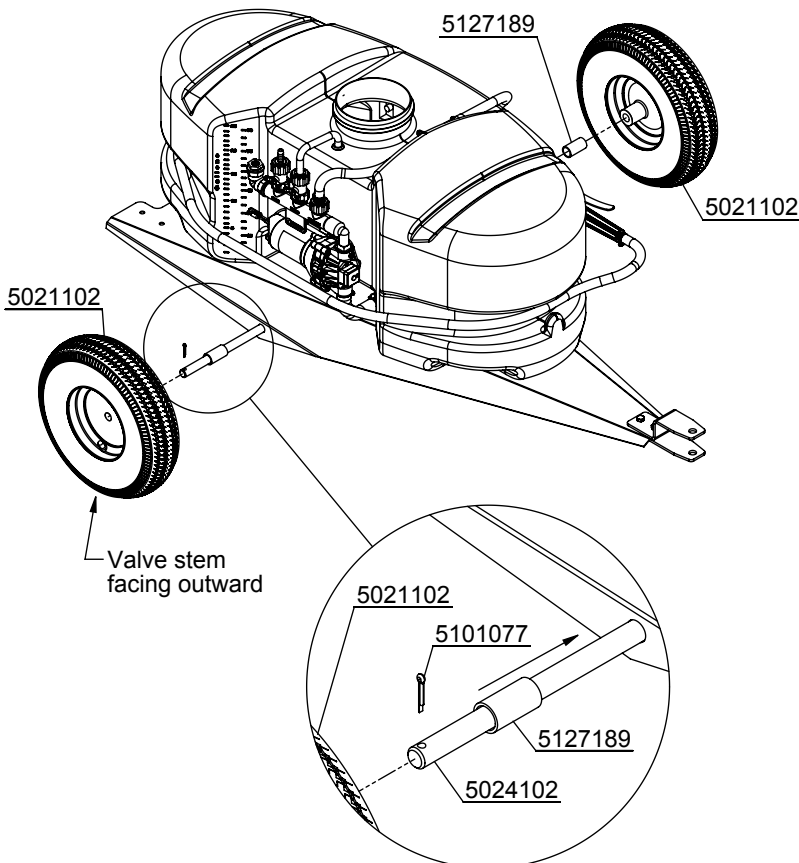
Bolt them together, 'sandwiching' the frame between both of the brackets.

Using a 1/2" socket, or wrench, tighten the 1" long bolts (5034042) securely.

Use the 5/16" whiz nuts (5006307) with the bolts.

They should grab tightly against the frame as you tighten the bolts down.

## Step 2



Remove the axle (5024102) and (2) wheels (5021102) from the carton.

Remove the (2) wheel spacers (5127189) and (2) cotter pins (5101077) from the parts bag.

Slide the axle through the hole in one the side of the frame, and through the cooresponding hole on the other side of the frame. You may need to manuver (squeeze) the frame slightly while doing this to get the axle through both holes. Center the axle about the frame as best as possible.

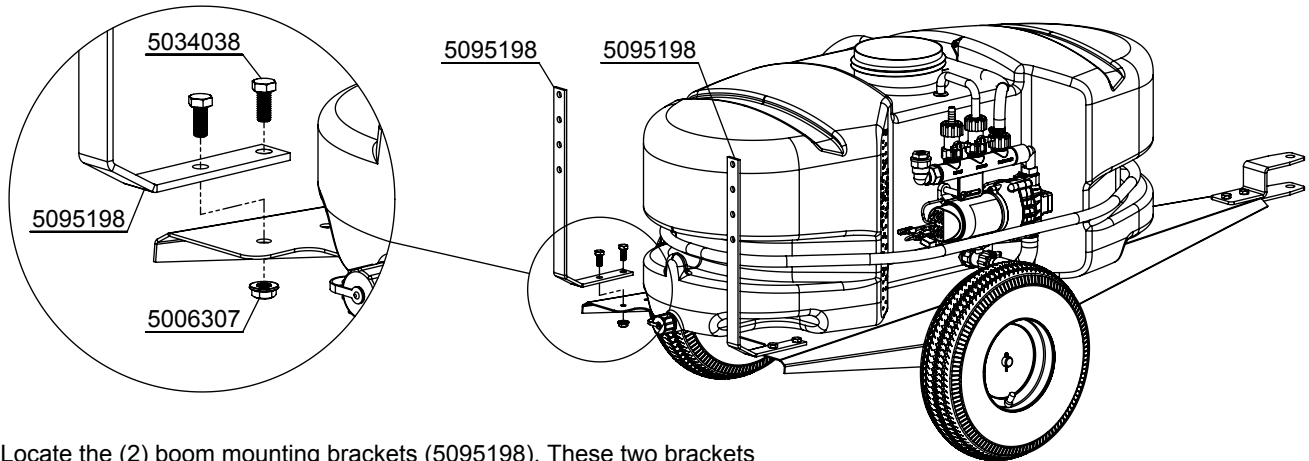
Slide the wheel spacers onto the axle.

Next, slide the wheels over the axle and up against the wheel spacers. Make sure the valve stems of the wheels are facing outward.

Retain the wheels on the axle with the cotter pins. Place the pins through the holes at the end of the axle. Using a needle nose pliers, or similar tool, bend the pins over the axle, so that they will not slip out, and that the wheel will be retained on the axle.

## Assembly Procedure (LG-2500-303)

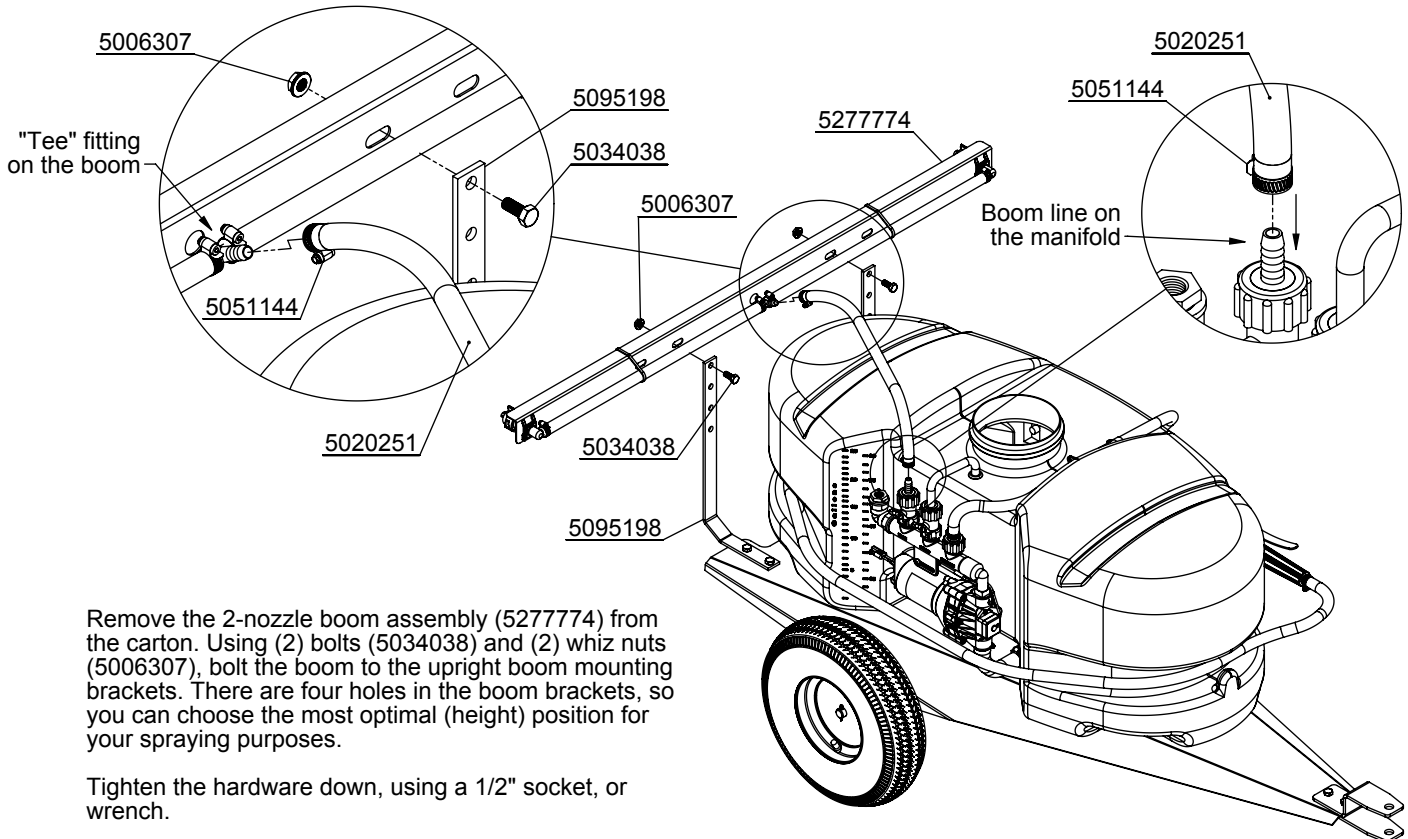
### Step 3



Locate the (2) boom mounting brackets (5095198). These two brackets mount to the rear of the frame with (2) bolts (5034038) and (2) whiz nuts (5006307). (each bracket)

Use a 1/2" socket, or wrench, to tighten the hardware securely. The whiz nuts will grab tightly against the frame as you tighten the bolts down.

### Step 4



Remove the 2-nozzle boom assembly (5277774) from the carton. Using (2) bolts (5034038) and (2) whiz nuts (5006307), bolt the boom to the upright boom mounting brackets. There are four holes in the boom brackets, so you can choose the most optimal (height) position for your spraying purposes.

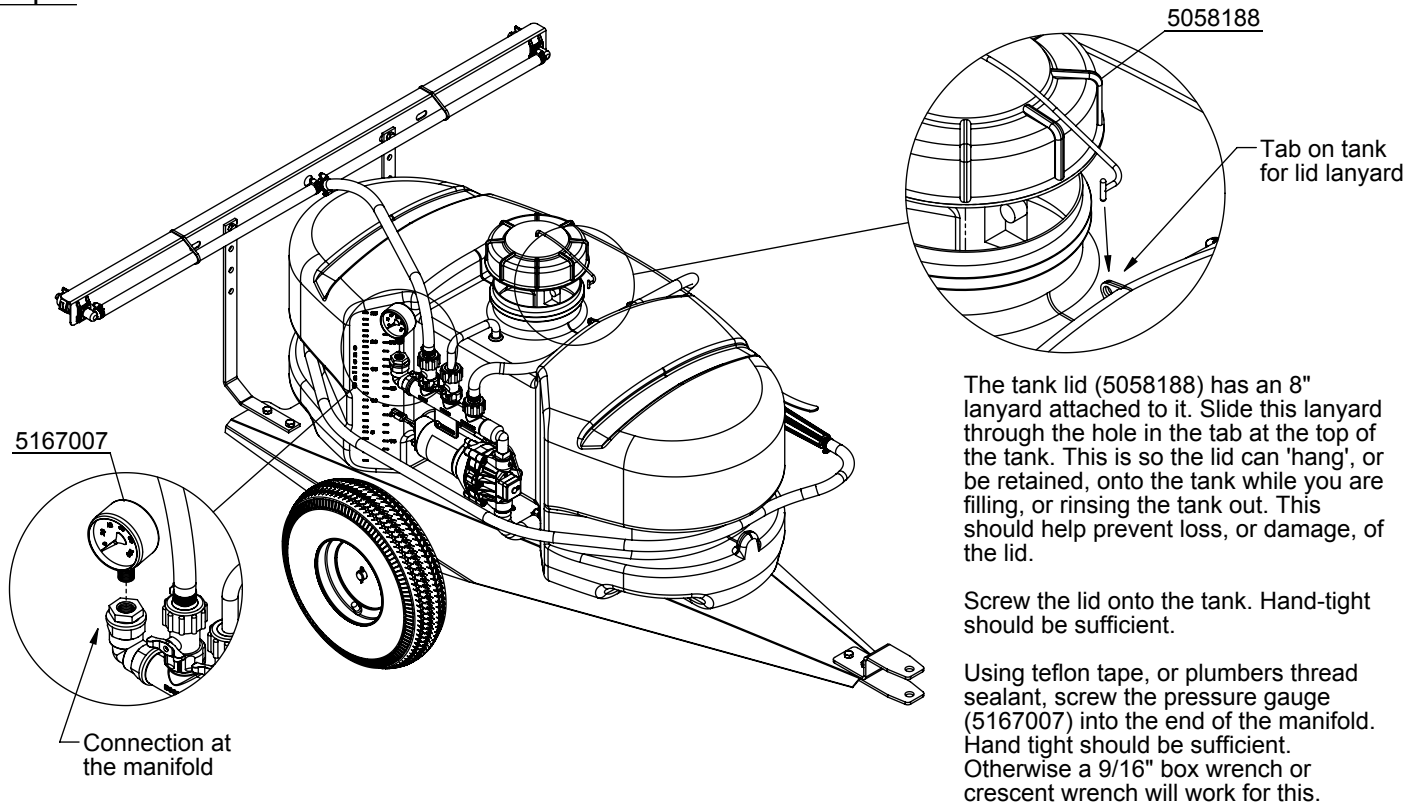
Tighten the hardware down, using a 1/2" socket, or wrench.

Find the 3/8" hose (24" long) (5020251) and place hose clamps (5051144) loosely onto each end of the hose. Connect this hose to the 'TEE' fitting on the boom, and to the 'Boom' line on the manifold. Tighten the hose clamps snugly.

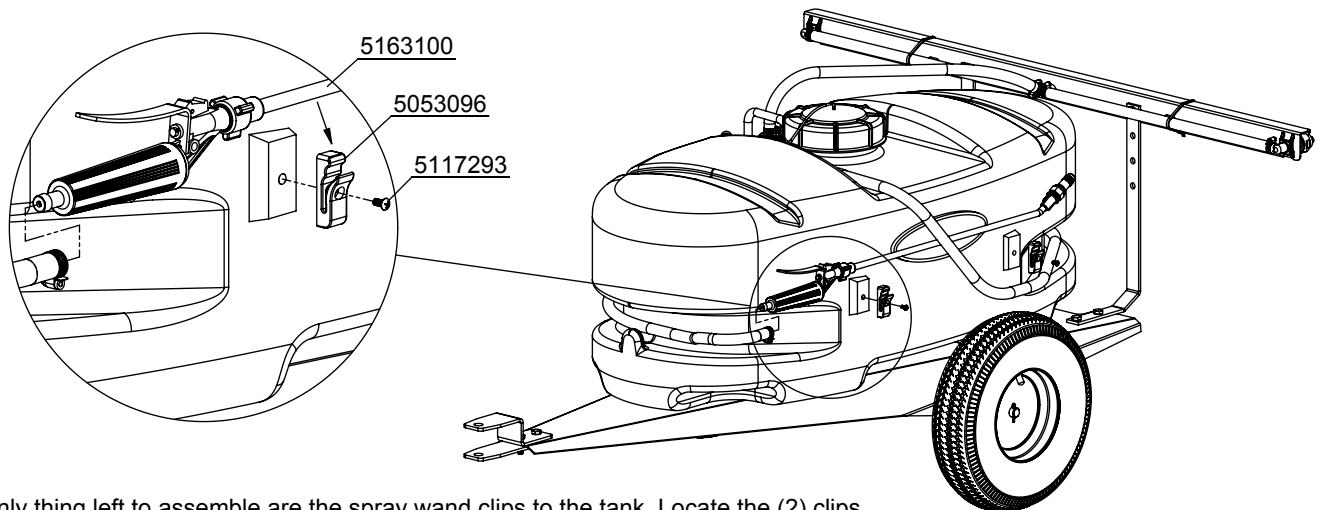
The boom is now installed.

## Assembly Procedure (LG-2500-303)

### Step 5



### Step 6



The only thing left to assemble are the spray wand clips to the tank. Locate the (2) clips (5053096) and (2) phillips head machine screws (5117293) 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 side of the tank, opposite of the pump) Use the phillips head screwdriver to secure the clip/screw to the tank. Tighten so that the clips are secure. \*\* 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.

#### NOTE:

The spray wand (5163100) should already be attached to the 15 foot hose, prior to assembly.

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

## Testing the Sprayer

### NOTE:

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

Add water to the tank & 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.

Read the operating instructions and Initially begin spraying by closing the 'bypass' valve (this is the center ON/OFF valve located at the center port of your manifold assembly) and opening the boom line valve (this is the 'other' valve on the manifold). 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, & 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) correctly!**

**WARNING:** Some chemicals will damage the pump valves if allowed to soak untreated for a length of time. ALWAYS thoroughly flush the pump with water after 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.

## Operation

Your sprayer is equipped with (1) ON/OFF switch. It is on the wire assembly that you hook up to your battery. The "-" is the "ON" position and the "o" is the "OFF" position for the switches. Make sure the switch is depressed in the "-" position for operation.

The pump is equipped with an electronic pressure switch that is factory pre-set for it to shut off at 60 p.s.i.. This switch assembly is the 'square box' on the head portion of the pump.

Always fill the tank with a desired amount of water first, and then add the chemical slowly, mixing as you pour the chemical into the tank. You may use the handgun to spray into the solution 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.

- Open 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 (finer mist).

This sprayer is designed to be towed behind a garden tractor.

The nozzles on the boom will spray an 80 inch wide swath. Check the nozzle pattern by spraying water on a concrete surface. Raise the boom to a higher mounting position to get more spray pattern overlap, if desired.

## 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 all 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.

## After Spraying

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.**

## Winter Storage

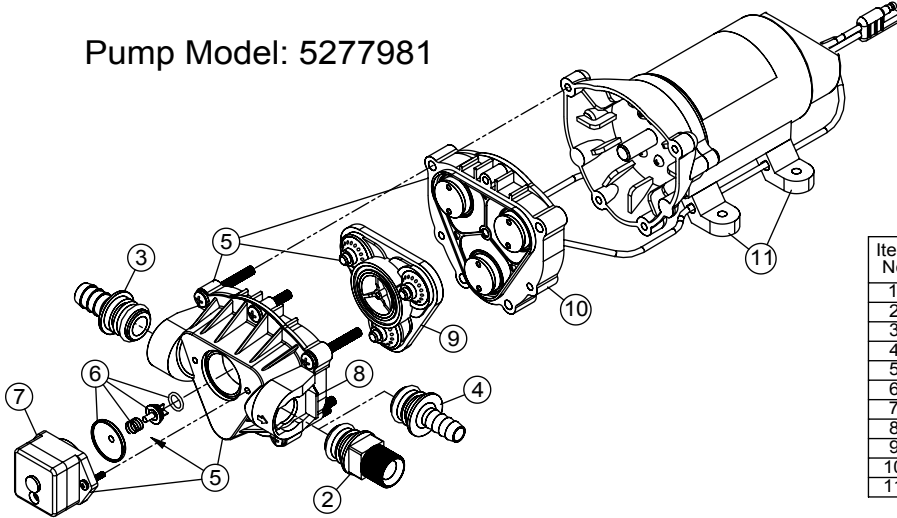
Drain all water out of your sprayer, paying special attention to the pump, handgun, and valve(s). These items are especially prone to damage from chemicals and freezing weather.

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.

Tip Chart for TKT-VP3, TF-VP3, & 30DT3.0 Tips										
Tip No. (Color)	Spray Height	Pressure (psi)	Capacity (GPM)	Gallons Per Acre - Based on Water						
				1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	7.5 MPH	10 MPH
3 (Gray)	18"	10	.30	44	22	14.9	11.1	8.9	5.9	4.5
		20	.42	63	31.5	20.9	15.7	12.6	8.4	6.3
		30	.52	76	38	26	19.3	15.4	10.3	7.7
		40	.60	90	45	30	22	17.8	11.8	8.9
Tip No.	Spray Height	Pressure (psi)	Capacity (GPM)	Gallons Per 1000 Sq. Ft. - Based on Water						
				1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	7.5 MPH	10 MPH
3 (Gray)	18"	10	.30	1.01	.50	.34	.254	.204	.135	.103
		20	.42	1.4	.72	.48	.36	.29	.19	.14
		30	.52	1.74	.87	.596	.44	.35	.236	.176
		40	.60	2.06	1.00	.688	.50	.408	.27	.20
Tip No.	Spray Height	Pressure (psi)	Capacity (GPM)	Gallons Per 100 Sq. Ft. - Based on Water						
				1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	7.5 MPH	10 MPH
3 (Gray)	18"	10	.30	.10	.05	.034	.025	.02	.013	.01
		20	.42	.14	.072	.048	.036	.029	.019	.014
		30	.52	.174	.087	.059	.044	.035	.023	.017
		40	.60	.206	.10	.068	.05	.04	.027	.02

Speed Chart			
Speed in M.P.H. (Miles per Hour)	Time Required in seconds to travel a distance of:		
	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

Pump Model: 5277981



Available Replacement Parts

Item No	Part Number	Qty	Description
1	5157205	1	7.5 Amp 'Mini Blade' Fuse
2	5168832	1	Port Kit Fitting, 1/2" MNPT
3	5168833	1	Port Kit Fitting, 1/2" Hose Barb
4	5168836	1	Port Kit Fitting, 3/8" Hose Barb
5	5168837	1	Upper Housing Assembly
6	5168839	1	Plunger Kit
7	5157202	1	Pressure Switch Assembly
8	20408-000	1	Pkg. (2) Clips (Port Fitting)
9	5168820	1	Check Valve Kit (w/O-Ring)
10	5168838	1	Diaphragm/Piston/Cam/Bearing Kit
11	5095202	1	Mounting Feet (Pkg of 4)

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 your on/off switch is 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.

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.

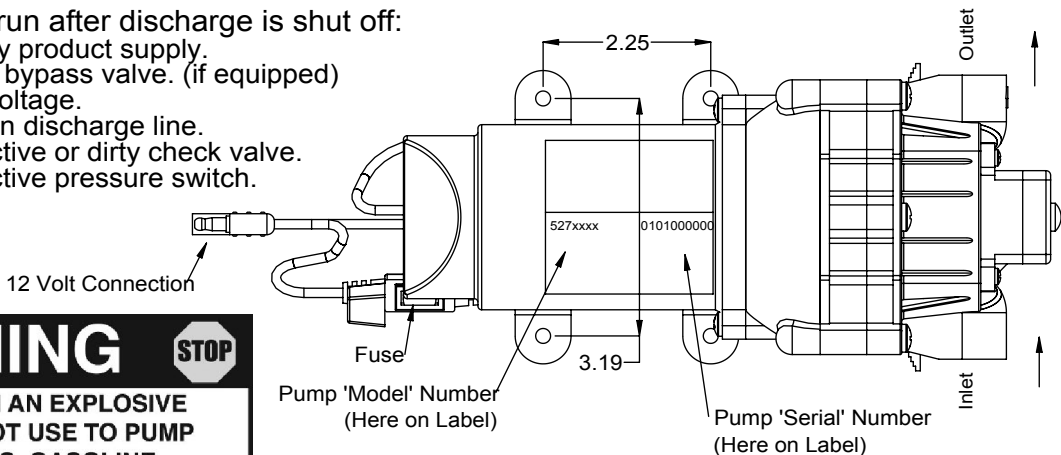
**CAUTION**

**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.

Pump Specifications	
Flow Rate:	2.1 GPM @ Open Flow
Current:	4.5 Amps @ 30 PSI
Check Valve:	Viton
Port Type:	Plug-In Port
Motor Voltage:	12 Volts DC
Wetted Parts Housing:	Polypropylene
Diaphragm:	Santoprene
Liquid Temperature:	130° F max.

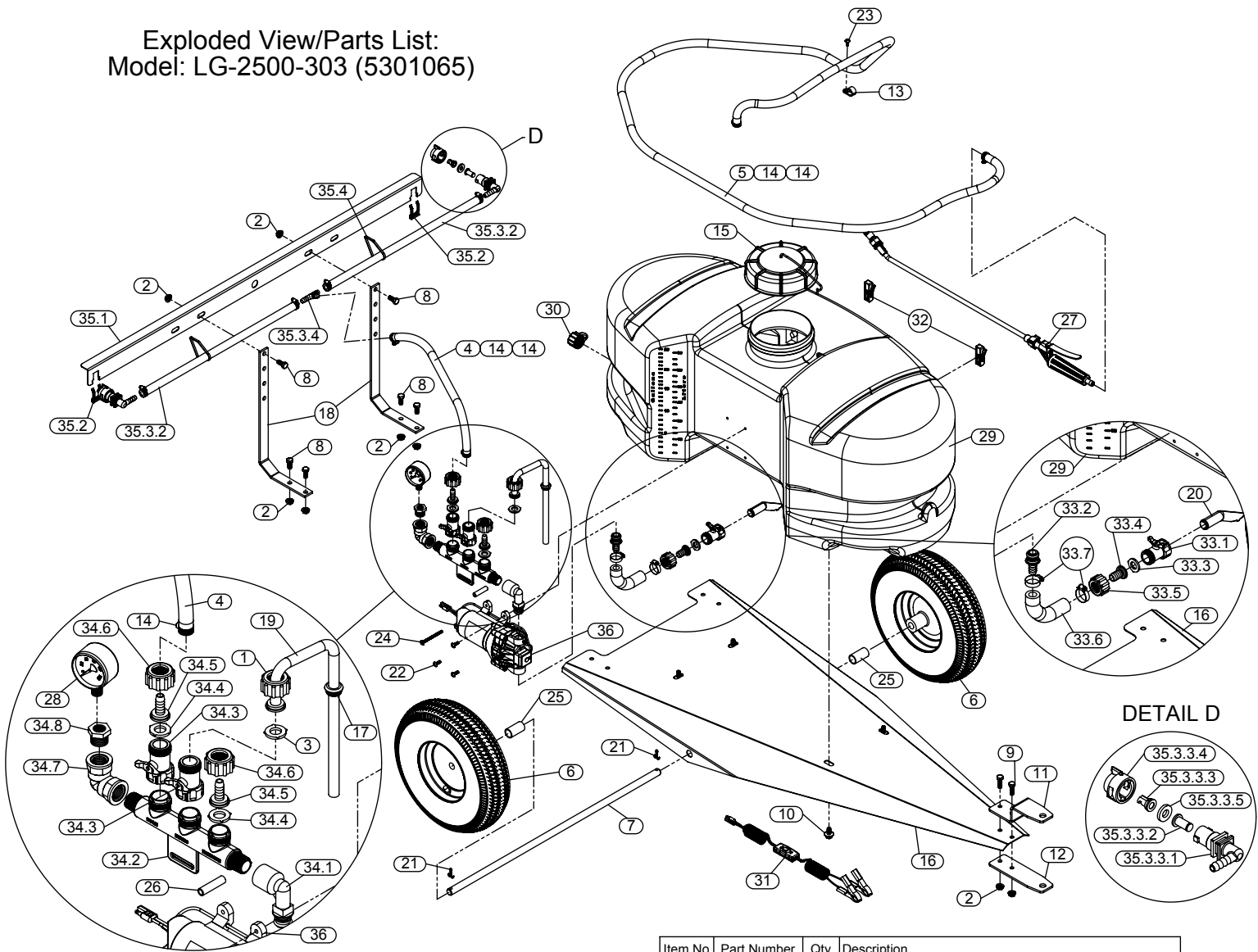
GPM = Gallons Per Minute  
 PSI = Pounds per Square Inch  
 DC = Direct Current



**STOP WARNING STOP**

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

Exploded View/Parts List:  
Model: LG-2500-303 (5301065)



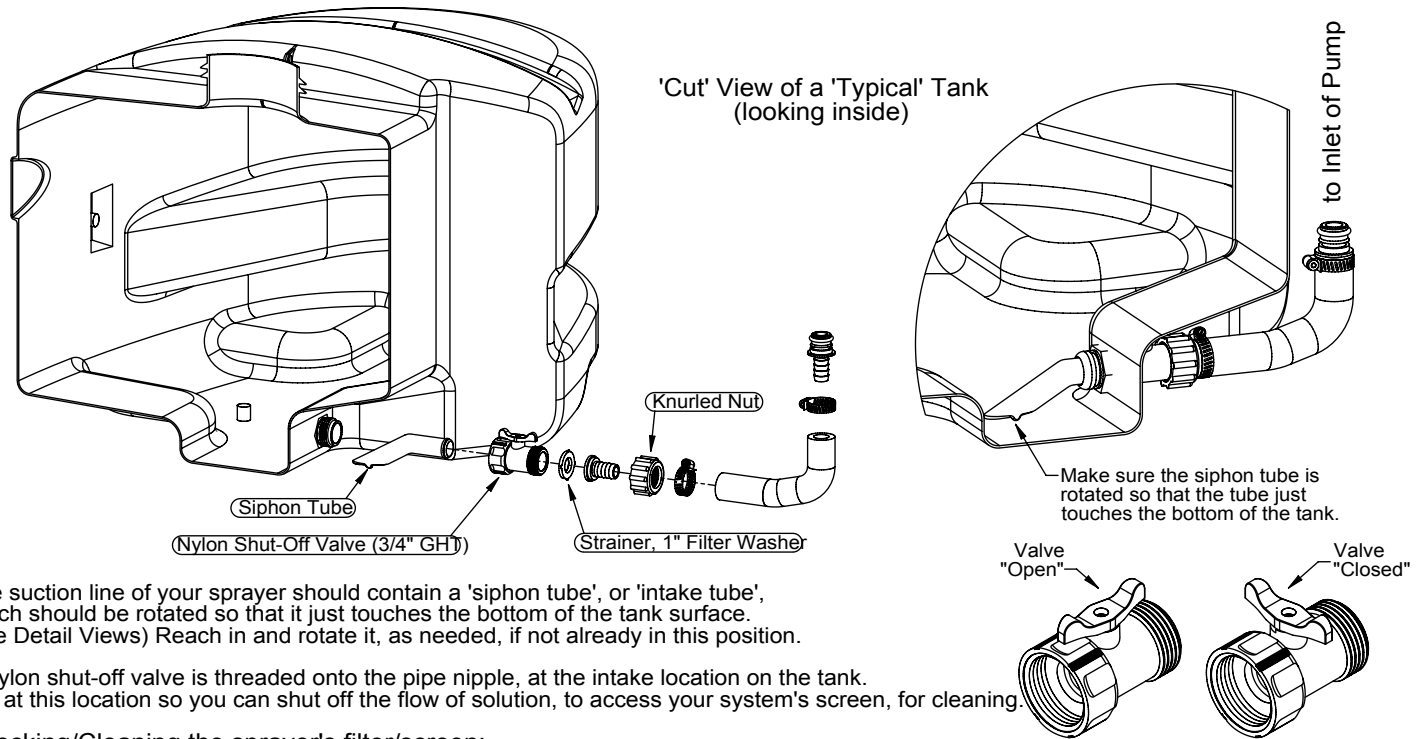
DETAIL D

Item No	Part Number	Qty	Description
1	5006209	1	Poly Knurled Swivel Nut, 3/4" FGHT
2	5006307	8	5/16"-18 Hex Whiz (Flange) Locknut
3	5016066	1	Garden Hose Washer
4	5020251	1	Hose, 3/8"-1 Brd. x 24"
5	5020524	1	Hose, 3/8"-1 Brd. x 15 Ft.
6	5021102	2	4.10/3.50-6 Wheel (White) w/2 1/4" Offset & 5/8" BB
7	5024102	1	Axle (5/8" Dia. x 26-3/8")
8	5034038	6	H.H.C.S. 5/16"-18nc x 3/4" Long
9	5034042	2	H.H.C.S. 5/16"-18nc x 1" Long
10	5034531	4	5/16"-18 x 5/8" Flange Lock Screw
11	5038517	1	Hitch Bracket (Formed)
12	5038518	1	Hitch Bracket (Flat)
13	5051122	1	5/8" Black Nylon Loom Cable Clamp
14	5051144	4	Hose Clamp, 3/8"
15	5058188	1	Tank Lid w/Lanyard
16	5070063	1	Trailer Frame (25-30 Gal) (Red)
17	5075018	1	Grommet
18	5095198	2	Boom Bracket (Light Duty)
19	5100359	1	Poly Bypass "J" Hose (3.8/2.1 - 25 Gal.)
20	5100452	1	Siphon Tube
21	5101077	2	Cotter Pin, 1/8" x 1"
22	5117167	3	#10-24 x 5/8" Phillips Truss Head Machine Screw
23	5117234	1	#10-24 x 1/2" Phillips Truss Head Machine Screw
24	5117313	1	#10-24 x 2 1/2" Truss Head Machine Screw
25	5127189	2	Wheel Spacer (for 5/8" Dia. axle)
26	5127191	1	Manifold Spacer (2.1gpm)
27	5163100	1	Low-Flow Spray Wand w/X-26 Tip
28	5167007	1	Pressure Gauge, 0-100 p.s.i.
29	5169243	1	25 Gallon Tank (White/Side-Mount Pump)
30	5274373	1	Drain Plug Cap, Tether, and Washer Assembly
31	5274443	1	Lead Wire Assembly (w/Switch), 96"

Item No	Part Number	Qty	Description
32	5274880	1	Handgun Clips & Screws (Pkg/2) (#10-24 Thread)
33	5275877	1	Intake Sub-Assembly
33.1	5143188	1	Nylon Shut-Off Valve (3/4" GHT)
33.2	5168833	1	Port Kit Fitting, 1/2" Hose Barb
33.3	5116242	1	Strainer, 1" Filter Washer
33.4	5149035	1	Poly Swivel, 1/2" Hose Barb
33.5	5006209	1	Poly Knurled Swivel Nut, 3/4" FGHT
33.6	5020497	1	1/2" Polyspring Hose x 6"
33.7	5051114	2	Hose Clamp (3/8"-1/2")
34	5277685	1	Manifold Assembly (Trailer/ATV)
34.1	5010430	1	Port Kit Elbow, 1/2" FNPT
34.2	5143405	1	Manifold w/Mounting Tab
34.3	5143188	2	Nylon Shut-Off Valve (3/4" GHT)
34.4	5016066	2	Garden Hose Washer
34.5	5149034	2	Poly Swivel, 3/8" Hose Barb
34.6	5006209	2	Poly Knurled Swivel Nut, 3/4" FGHT
34.7	5010236	1	Poly Elbow, 1/2" FNPT x 1/4" FNPT
34.8	5041073	1	Poly Reducing Bushing, 1/2" MNPT x 1/4" FNPT
35	5277774	1	2-Nozzle Boom (QJ)
35.1	5022431	1	Boom Mount Angle -2 Nozzle (QJ100)
35.2	5053110	2	Plastic Retaining Clip (14 & 16 Ga.)
35.3	5277692	1	2-Nozzle Harness (3/8")
35.3.1	5051144	4	Hose Clamp, 3/8"
35.3.2	5020510	2	Hose, 3/8"-1 Brd. x 19-3/8"
35.3.3	5277688	2	ELL Nozzle Sub-Assembly (3/8")
35.3.3.1	5056113	1	Single Hose Shank (3/8" Hose)
35.3.3.2	5116019	1	Nozzle Strainer, Red (50 Mesh)
35.3.3.3	5018274	1	Turbo FloodJet Tip (TF-VP3)
35.3.3.4	5046251	1	QJ Cap Only (Black)
35.3.3.5	5016157	1	Seat Washer (QJ Caps)
35.3.4	5086025	1	Poly Hose Tee, 3/8" HB
35.4	5133094	2	Nylon Cable Tie
36	5277981	1	Gold Series 2.1 g.p.m. Pump (60 psi, 8 Amp)



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

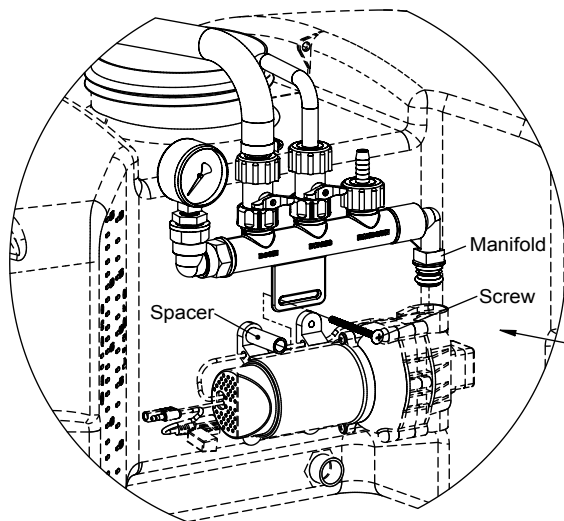


The suction line of your sprayer should contain a 'siphon tube', or 'intake tube', which should be rotated so that it just touches the bottom of the tank surface. (see Detail Views) Reach in and rotate it, as needed, if not already in this position.

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:

- Shut the nylon valve to the 'Closed' position. (lever is perpendicular to the flow of fluid)
- 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.



## Manifold Spacer Attachment

**NOTE:**  
To install the manifold spacer, remove one screw holding the pump to the tank (upper left location as you're looking at the pump) and place the spacer between the manifold and the pump's foot. Replace original screw with the long machine screw, feeding it through the slot in the manifold and through the spacer, thus securing the manifold. This screw will be 2-1/2" long for the 2.1gpm pump, and 3" long for the 3.8gpm pump.

This does not apply to units that use a 1.0 gpm pump.