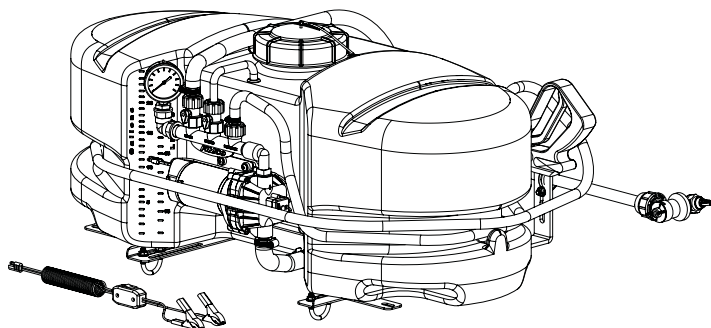


5301267

## MODEL LG-3025

12 VOLT - 25 GALLON LAWN & GARDEN SPRAYER FOR ATV MOUNTING  
(INCLUDES BOOMLESS NOZZLES)

### ASSEMBLY / OPERATION INSTRUCTIONS / PARTS



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

Part description and part numbers 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

- Corrosion Resistant Polyethylene Tank.
- 12 Volt Diaphragm Pump - Demand Switch.
- Pressure Gauge-Adjustable Pressure Range.
- Handgun w/ Adjustable Nozzle
- 15 Foot Handgun Hose.
- 30 Ft. Spray Coverage
- Corrosion Resistant Nozzles

**CAUTION:** Always check the vehicle load rating before using this sprayer. The loaded weight of the sprayer and boom assembly is about 290 lbs. when the tank is full. Care must be taken not to tip the vehicle over backwards, especially when starting or accelerating.

### ASSEMBLY

1. Install the tank mounting plates (Items 10 & 11) to the tank as shown in the exploded view drawing.
2. Place the tank with the brackets attached onto your ATV carrier rack. Attach the mounting brackets to the cross members of the rack, using (4) u-bolts supplied. (Refer to the exploded view drawing)
3. Join the boom mounting brackets (Item 9) to the tank mounting brackets with the hardware shown.
4. Attach the boom to the boom mounting brackets with the u-bolts (Item 7) & whiz locknuts (Item 2). Make sure the u-bolts are positioned within the grooves of the grommets on the boom tube.

**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 and maintaining your lawn and garden sprayer. Please read it carefully as it furnishes information which will help you achieve years of dependable trouble free operation.

**STOP**

**WARNING**

**STOP**

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

### 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:



WWW.FIMCOINDUSTRIES.COM

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. 1328 (5004821 2/07) Printed In U.S.A.

**NOTE: The purpose of these grommets (Item 24.5) is to prevent metal-to-metal contact between the u-bolts, boom tube, and boom mounting bracket.**

The grommets will “compress” as you tighten the whiz locknuts onto the u-bolts. Tighten just so that the boom tube will NOT rotate within the grommets. Alternate the tightening of the locknuts to provide even pressure on the grommet.

**\*\* DO NOT OVER-TIGHTEN the whiz locknuts, as this may cause the boom tube to flatten slightly!**

5. Thread the gauge into Item 28.8. Use a good grade of thread sealant here to insure no leaks.

6. Connect the wiring harness to the wires coming out of the pump. Connect the wiring from the wiring assembly to the 12 Volt power source of the vehicle. The red wire of the 2-wire set must be connected to the positive (+) post on the battery or the “hot” connection on a switch or to the ammeter. The brown wire may be grounded or connected to the negative (-) post on the battery.

## OPERATION

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.

Initially begin spraying by opening the handgun. This will enable the air in the line to be eliminated through the tip, while building pressure.

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

Pressure may be decreased by opening the bypass valve to the tank. When it is closed the highest spraying pressure will be reached.

- Open the handgun by squeezing the handle lever
- Rotating the adjustable nozzle tip on the handgun will change the tip from a straight stream to a cone pattern (finer mist). Be sure the thumb nut on the adjustment nozzle is tight.
- The pump motor's demand switch shuts off the motor when the handgun, bypass valve and boom lines are fully closed. The system remains pressurized, and the pump motor will restart automatically when the handgun or boom line is opened. If however, the bypass line is open, the pump will not shut off automatically.
- The 3 nozzles are fixed on 17 1/2" spacing.
- All three nozzles spraying at the same time will allow a maximum coverage of 30 ft. Overlapping of the ends of the spray pattern will not be needed.
- The center nozzle will cover a 80" swath.
- Each of the three nozzles has a means of shutting down, so you may choose the coverage that is needed.

When it becomes necessary to clean the screen in the suction line, remove the screen from the bottom of the suction tube. Reach into the tank through the fill opening, slide the tube to one side and slip the screen from the bottom of the tube. The screen may now be tapped or flushed with clear water for cleaning.

**WARNING:** Some chemicals will damage the pump valves if allowed to soak untreated for a length of time. Always flush the pump with water after use. Do not allow chemicals to sit in pump for extended times if idleness. Follow chemical manufacturers instructions on disposal of all waste water from the sprayer.

**CAUTION**

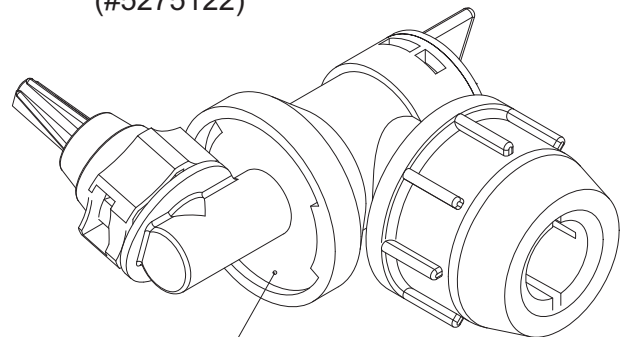
**PRESSURE SWITCH OPERATION**

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.

## ADJUSTING PRESSURE

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

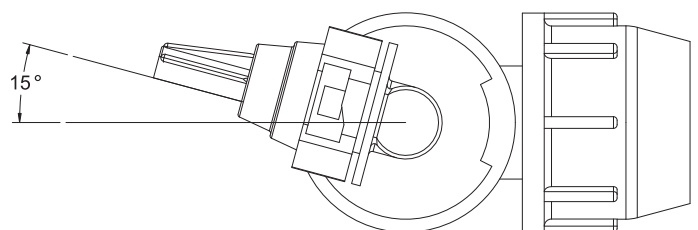
End Nozzle Information  
(#5275122)



This nozzle mounting stem has a ratcheting motion.

**\*\* Each "click" of the ratcheting motion is approx. 15° \*\***

For proper/optimal spray coverage, the nozzle must be at a 15° angle



The 15° angle shown will prevent the outer nozzles from overlapping with the center nozzle.

## Rate Chart for Boomless Nozzle (Set of 3)

Gallons per Acre Based on Water - 17 1/2" Spacing								
Note: The same figures are used for 1, 2, or 3 nozzles.								
Pressure P.S.I.	Capacity G.P.M. (for 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 - 17 1/2" Spacing								
Pressure P.S.I.	Capacity G.P.M. (for 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 - 17 1/2" Spacing								
Pressure P.S.I.	Capacity G.P.M. (for 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

MPH = Miles Per Hour / FPM = Feet Per Minute / PSI = Pounds Per Square Inch / GPM = Gallons Per Minute

\*\* 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.

## 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 (M.P.H.) while spraying.
- Refer to the chemical label to determine the 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 solid concrete surface, such as a driveway.
- The boomless nozzles should be 33" above the objects being sprayed.

## 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 above shows all three of these rating systems.

## 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	136	205
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	6.8	14	20

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).

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 carefully.**

If the vehicle does not have a speedometer, determining the proper speed of the tractor can be done by marking off 100, 200 and 300 feet. The speed chart indicates the number of seconds it takes to travel the distances. Using a watch or stop watch for time, 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 to the tank 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. The pressure will decrease slightly when the boom is spraying. Adjust the spraying pressure by operating the bypass valve.

After testing, add water and chemical to the tank. Adjust the pressure and spray as you did in the testing procedure.

## 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 spray nozzles. 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 or rinsing water.

Remove tips from the boom. Wash tips thoroughly with water or cleaning solution (appropriate for chemical used). Blow out orifice, clean and dry. If 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 tips before storing.

## WINTER STORAGE

Drain all water out of sprayer paying special attention to pump, handgun & valve. 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 anti-freeze through the entire plumbing. Proper care and maintenance will prolong the life of the sprayer.

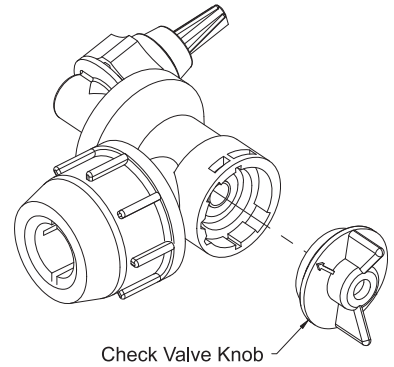
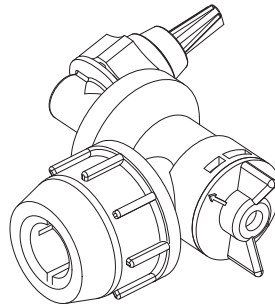
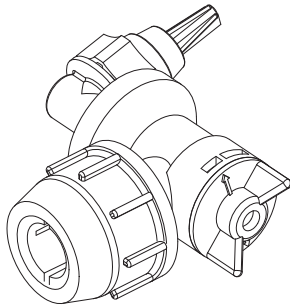
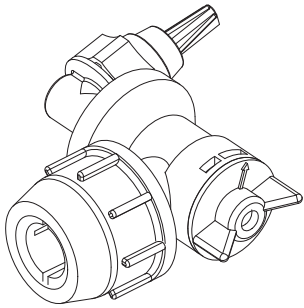
# CHECK VALVE POSITIONS

Valve "Open"

Valve "Closed"

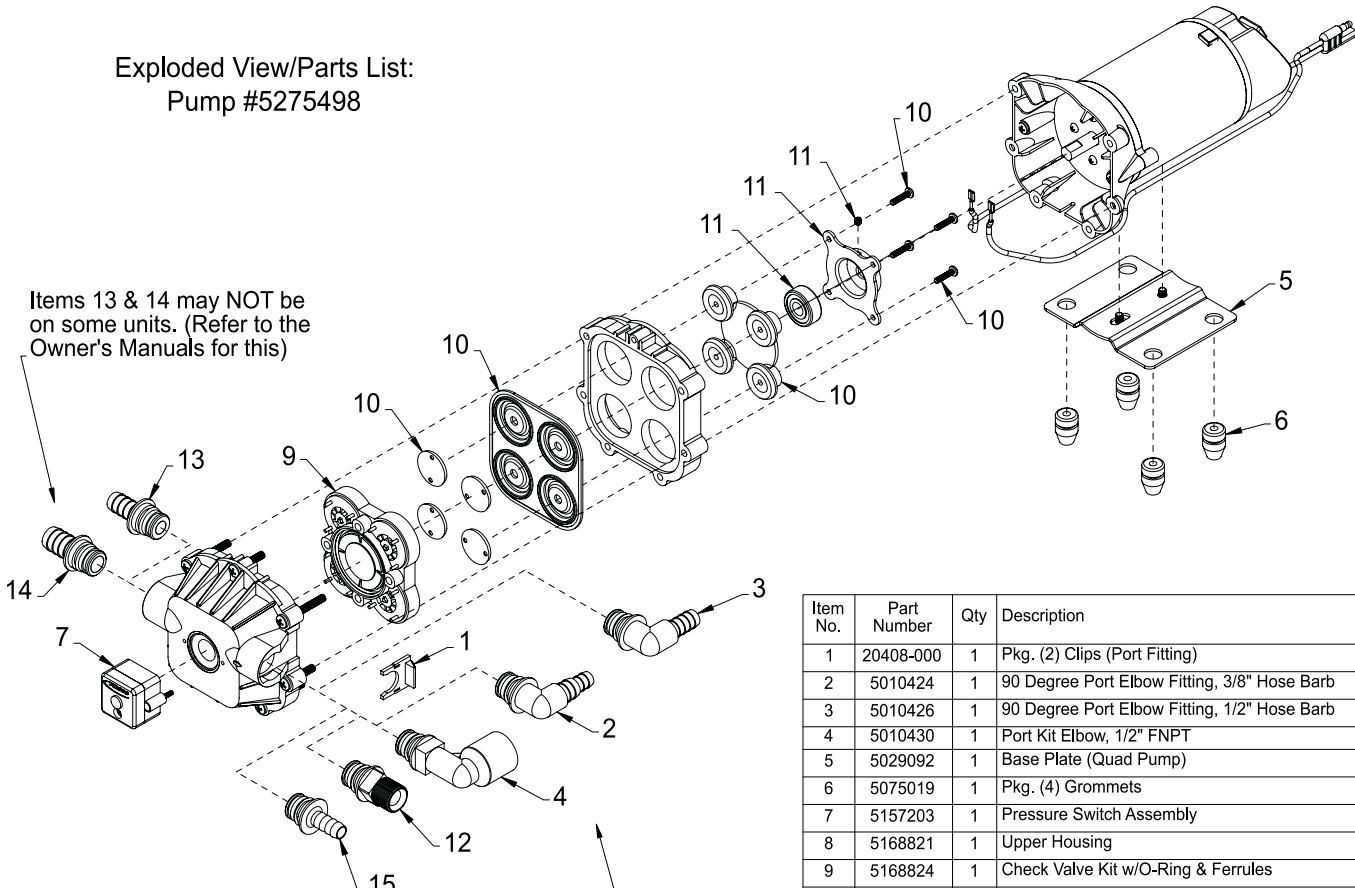
Service Position

Eliminate line pressure, then pull out to check diaphragm condition.



Note: The check valve & diaphragm can fall out during transport, if the knob is not turned to the "ON" or "OFF" position.

Exploded View/Parts List:  
Pump #5275498



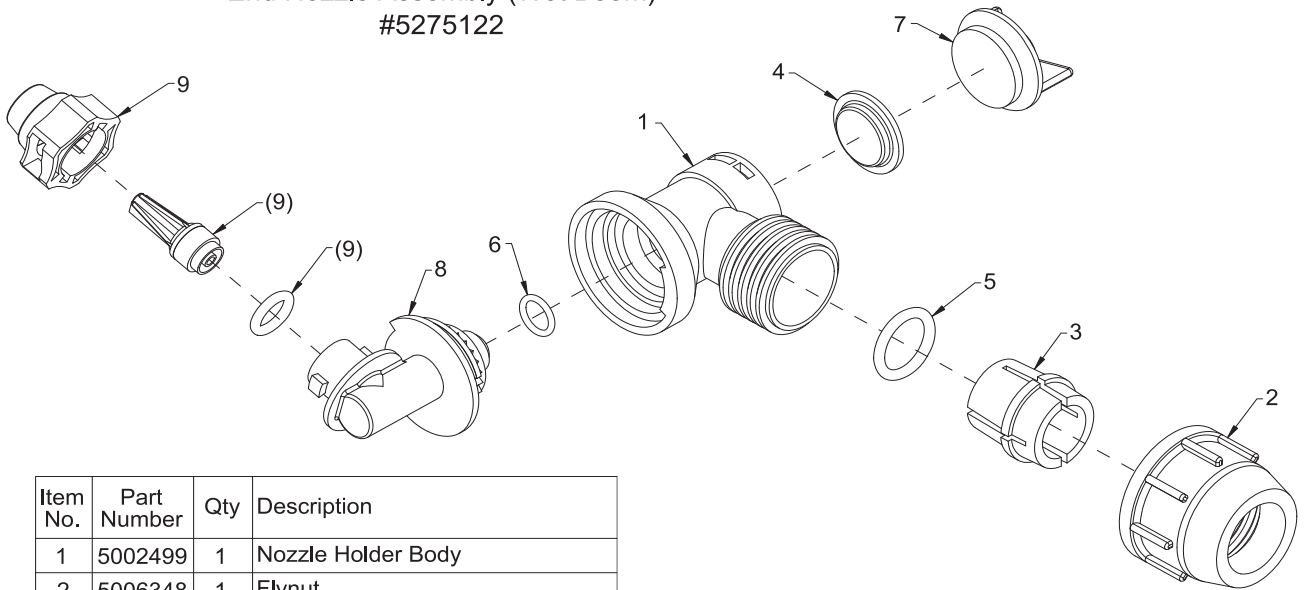
Items 13 & 14 may NOT be on some units. (Refer to the Owner's Manuals for this)

NOTE:

One of these (5) fittings (Items 2, 3, 4, 12, & 15) is used on this pump, depending on unit. (Refer to individual Owner's Manuals)

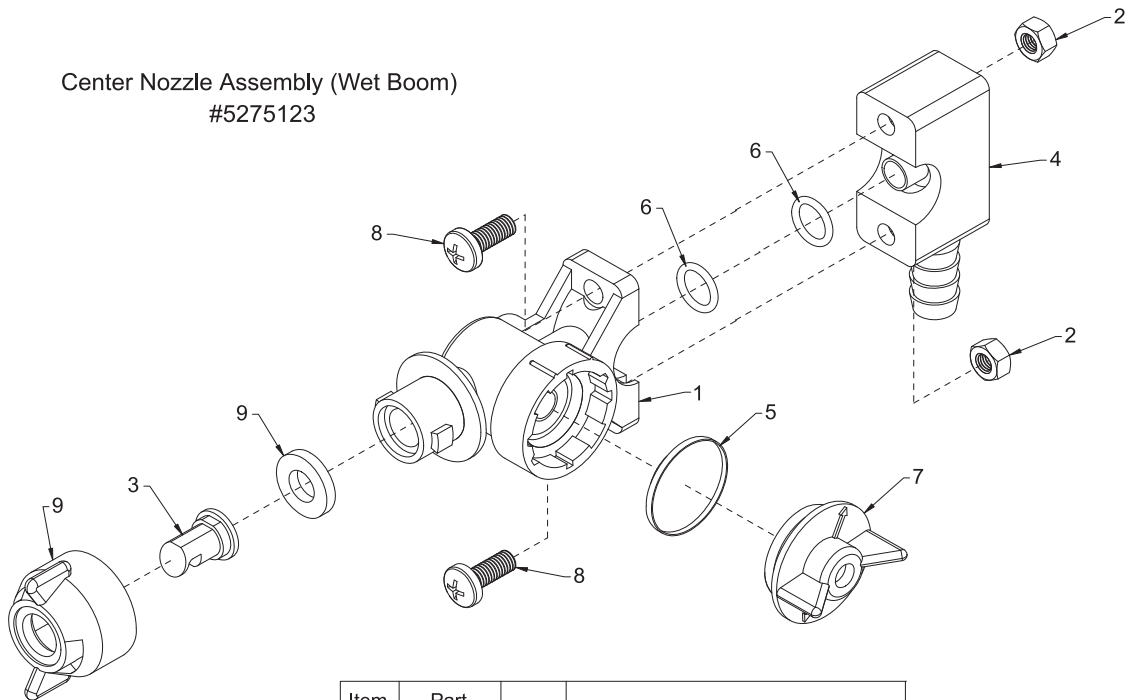
Item No.	Part Number	Qty	Description
1	20408-000	1	Pkg. (2) Clips (Port Fitting)
2	5010424	1	90 Degree Port Elbow Fitting, 3/8" Hose Barb
3	5010426	1	90 Degree Port Elbow Fitting, 1/2" Hose Barb
4	5010430	1	Port Kit Elbow, 1/2" FNPT
5	5029092	1	Base Plate (Quad Pump)
6	5075019	1	Pkg. (4) Grommets
7	5157203	1	Pressure Switch Assembly
8	5168821	1	Upper Housing
9	5168824	1	Check Valve Kit w/O-Ring & Ferrules
10	5168826	1	Diaphragm Kit w/Pistons & (4) Screws
11	5168828	1	Cam/Bearing Kit, w/Set Screw
12	5168832	1	Port Kit Fitting, 1/2" MNPT
13	5168833	1	Port Kit Fitting, 1/2" Hose Barb
14	5168835	1	Port Kit Fitting, 5/8" Hose Barb
15	5168836	1	Port Kit Fitting, 3/8" Hose Barb

End Nozzle Assembly (Wet Boom)  
#5275122



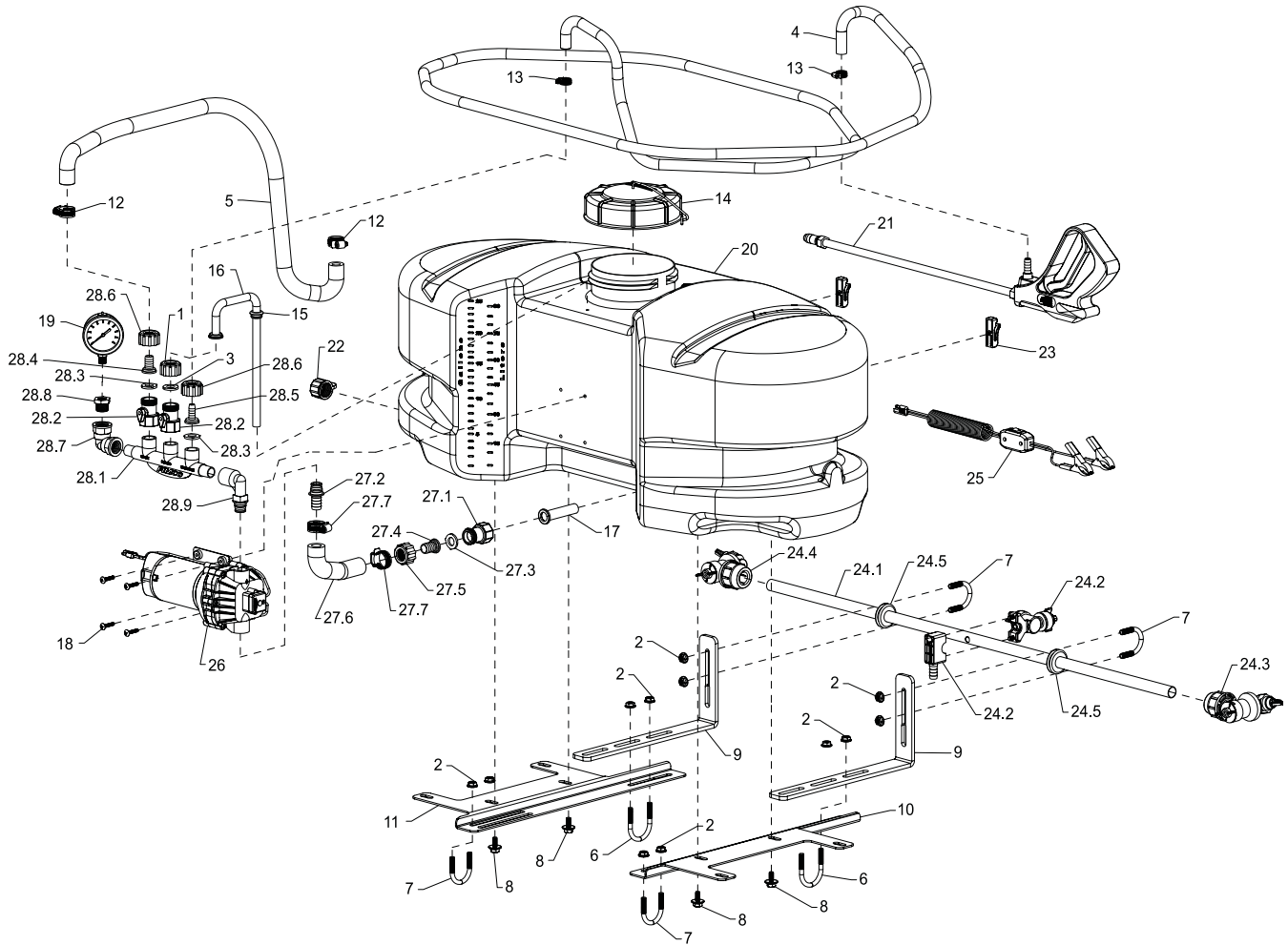
Item No.	Part Number	Qty	Description
1	5002499	1	Nozzle Holder Body
2	5006348	1	Flynut
3	5010427	1	Compression Olive
4	5063255	1	Diaphragm
5	5072517	1	Compression O-Ring
6	5072518	1	Stem O-Ring
7	5088024	1	Yellow Pressure Disc Assembly
8	5132073	1	Nozzle Holder Stem
9	5274861	1	XT Spray Nozzle, Cap, & O-Ring

Center Nozzle Assembly (Wet Boom)  
#5275123



Item No.	Part Number	Qty	Description
1	5002500	1	Body
2	5006347	2	SS Nut, 6mm
3	5018329	1	Red Spray Tip
4	5051137	1	Hose Barb Saddle
5	5063255	1	Diaphragm
6	5072509	2	O-Ring
7	5088024	1	Yellow Pressure Disc Assembly
8	5117310	2	SS Screw, 6mm x 16mm (5/8")
9	5274862	1	Red QuickJet Cap w/Gasket

## Exploded View/Parts List: LG-3025 (5301267)



Item No.	Part Number	Qty	Description
1	5006209	1	Poly Knurled Swivel Nut, 3/4" FGHT
2	5006307	12	5/16"-18 Hex Whiz (Flange) Locknut
3	5016066	1	#102 Hose Washer (Gasket) 1" O.D. Rubber
4	5020215	1	Hose, 3/8"-1 Brd. x 15 Ft.
5	5020389	1	Hose, 1/2"-1 Brd. x 43"
6	5034065	2	Round U-Bolt, 5/16"-18 x 1 1/2" x 2 3/16"
7	5034220	4	Round U-Bolt, 5/16"-18 x 1 5/16" x 1 3/4"
8	5034531	4	5/16"-18 x 5/8" Flange Lock Screw
9	5038665	2	Boom Mounting Bracket
10	5038667	1	Tank Mounting Plate (L.H.) (ATV)
11	5038725	1	Tank Mounting Plate (R.H.) (ATV)
12	5051022	2	Hose Clamp, 1/2"
13	5051114	2	Hose Clamp, 3/8"
14	5058183	1	FIMCO 5" Threaded Tank Lid
15	5075018	1	Grommet
16	5100359	1	Poly Bypass "J" Hose (3.8 Pumps & 2.1 [25] Gallon)
17	5116416	1	PVC Filter Screen, 1" O.D. x 2.81" Long (30 Mesh)
18	5117168	4	#10-24 x 1" Phillips Truss Head Machine Screw
19	5167031	1	Gauge, Liquid-Filled, 0-100# p.s.i.
20	5169243	1	25 Gallon (New Style) Tank
21	5273959	1	Handgun w/X-26 Tip
22	5274373	1	Drain Plug Cap, Tether, and Washer Assembly
23	5274880	1	Pkg. (2) Handgun Clips & (2) Screws

Item No.	Part Number	Qty	Description
24	5275260	1	"Wet Boom" Assembly
24.1	5100316	1	Boom Tube
24.2	5275123	1	Center Nozzle Assembly (Wet Boom)
24.3	5275122	1	End Nozzle Assembly (Wet Boom)
24.4	5275122	1	End Nozzle Assembly (Wet Boom)
24.5	5075016	2	Rubber Grommet
25	5275459	1	14 Ga. Lead Wire Ass'y (w/Switch), 96"
26	5275498	1	New Generation 3.8 g.p.m. Pump
27	5275515	1	Intake Sub-Assembly (2.1 & 3.8 Pumps) (Except 15 Gal. Units)
27.1	5143188	1	#35 Nylon Shut-Off Valve
27.2	5168835	1	Port Kit Fitting, 5/8" Hose Barb
27.3	5016066	1	#102 Hose Washer (Gasket) 1" O.D. Rubber
27.4	5149036	1	Poly Swivel, 5/8" Hose Barb
27.5	5006209	1	Poly Knurled Swivel Nut, 3/4" FGHT
27.6	5020080	1	Hose, 5/8"-1 Brd. x 6"
27.7	5051023	2	Hose Clamp, 5/8"
28	5275516	1	Manifold Assembly
28.1	5143404	1	Manifold
28.2	5143188	2	#35 Nylon Shut-Off Valve
28.3	5016066	2	#102 Hose Washer (Gasket) 1" O.D. Rubber
28.4	5149035	1	Poly Swivel, 1/2" Hose Barb
28.5	5149034	1	Poly Swivel, 3/8" Hose Barb
28.6	5006209	2	Poly Knurled Swivel Nut, 3/4" FGHT
28.7	5010236	1	Poly Elbow, 1/2" FNPT x 1/2" FNPT
28.8	5041073	1	Poly Reducing Bushing, 1/2" MNPT x 1/4" FNPT
28.9	5010430	1	Port Kit Elbow, 1/2" FNPT