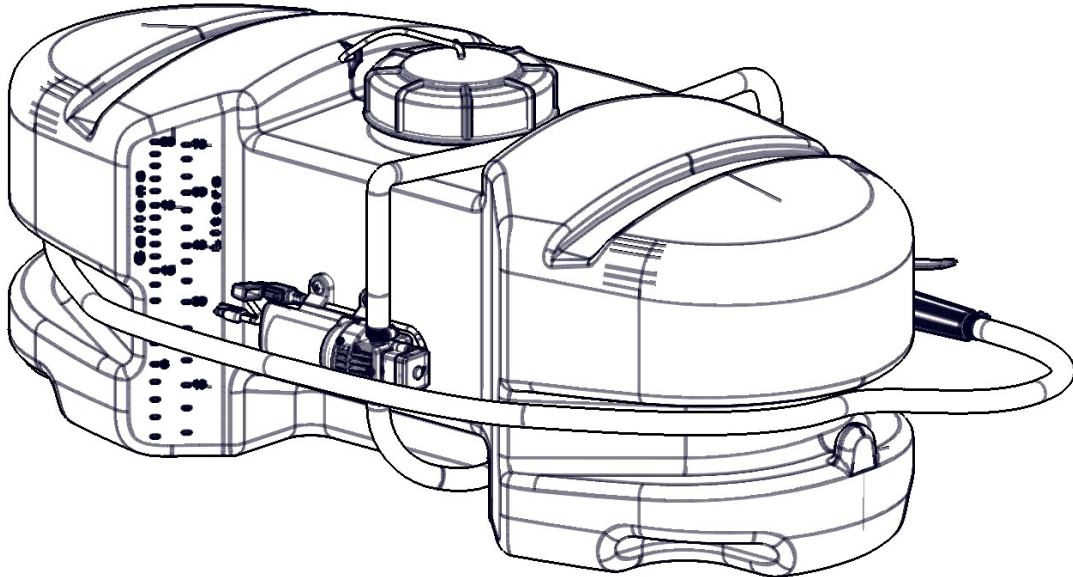


OWNER'S MANUAL

Model: LG-20-EC (5301548)

(20 Gallon Lawn & Garden Spot Sprayer)



General Information

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

Technical Specifications

- 20 Gallon Corrosion-Resistant Polyethylene Tank
- 12 Volt Diaphragm Pump, 1.0 g.p.m.—35 psi
- Lever Handgun with 15 Ft. Handgun Hose (3/8" I.D.)
- 12 Ft. max. vertical throw, 25 Ft. horizontal throw

Assembly Instructions

Your sprayer has been mostly assembled at the factory. The only requirement will be for you to attach the wand clips and hook up your battery leads to a fully charged 12 Volt battery.

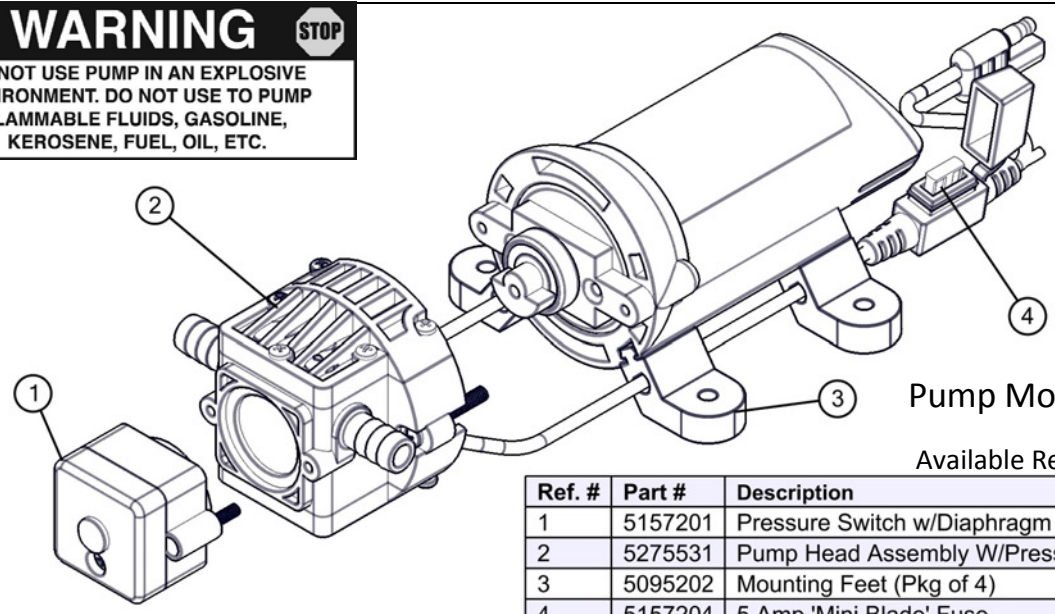
- After assembly is complete and before testing your sprayer, make sure you connect the electrical hook-up to the end of your pump and clip the clips to a fully charged battery. The red wire must be connected to the positive (+) and the black wire should be connected to the negative (-).
- The drain plug assembly should already be attached to the tank

NOTE:

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



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: 5277980

Available Replacement Parts

Ref. #	Part #	Description	Qty
1	5157201	Pressure Switch w/Diaphragm	1
2	5275531	Pump Head Assembly W/Pressure Switch	1
3	5095202	Mounting Feet (Pkg of 4)	1
4	5157204	5 Amp 'Mini Blade' Fuse	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

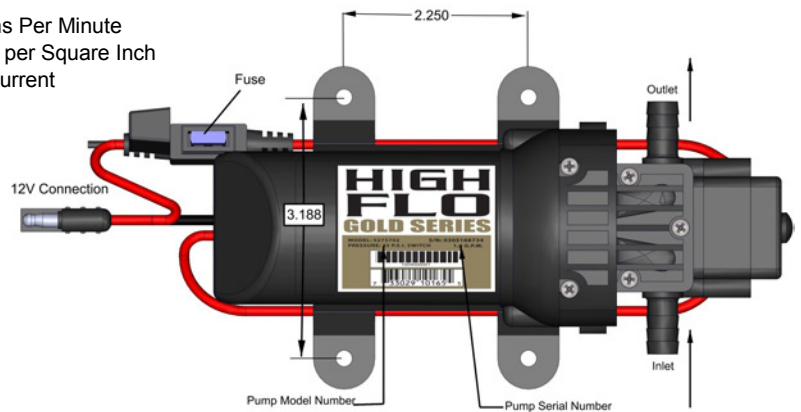
CAUTION
PRESSURE SWITCH OPERATION
 Pressure switch is pre-set at the factory. Improper adjustment of the pressure switch, may cause severe overload or premature failure. If the pump is subjected to rapid cycling during normal operation, or infrequent periods, damage may occur.

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 clogged strainer/filter.
 - Check for cracks in the pump housing.
 - Check for empty product supply.

Pump Specifications	
Current:	2.2 Amps @ 30 PSI
Check Valve:	Viton
Wetted Parts Housing:	Polypropylene
Diaphragm:	Santoprene
Liquid Temperature:	110° 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 pressure switch.

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.

Read the operating instructions. 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.

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 "I" is the "ON" position and the "O" is the "OFF" position for the switch. Make sure the switch is depressed in the "I" position for operation.

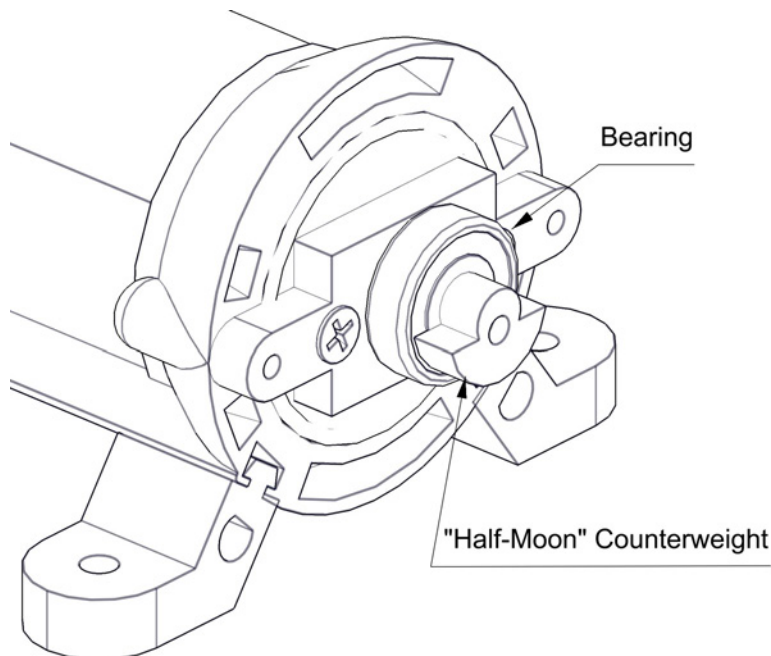
The pump is equipped with a pressure switch that is factory pre-set for it to shut off at 35 p.s.i. This switch assembly is the 'square box' on the head portion of the pump.

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 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 purged through the handgun tip, while building pressure.

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)



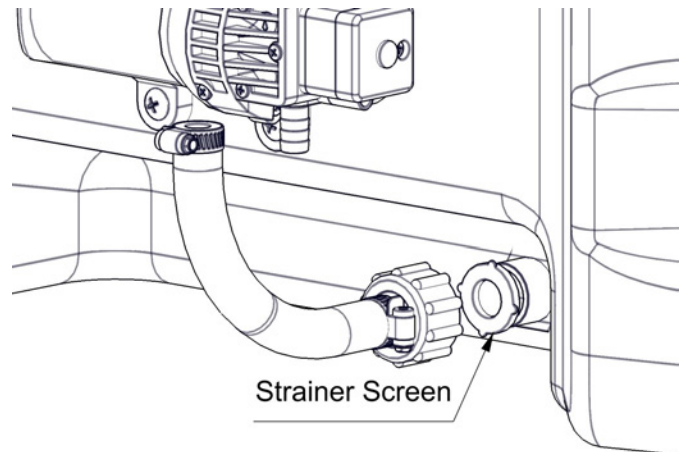
After Spraying

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 nozzle. 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.

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 and handgun. 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.



Checking/Cleaning the sprayer's filter/screen:

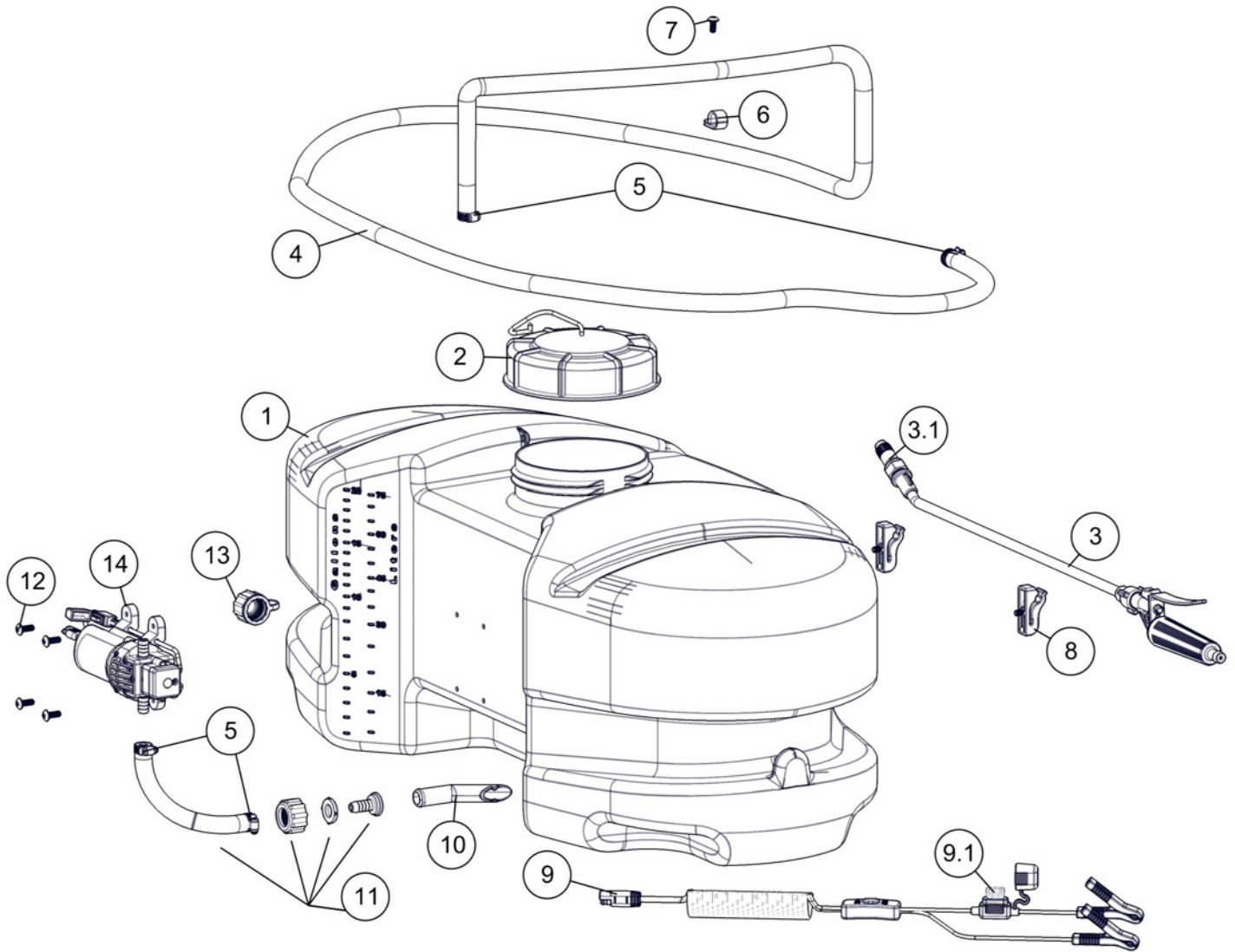
- ◆ Empty the tank
- ◆ Unscrew the knurled nut from the tank.
- ◆ Swing (swivel) the intake assembly towards you. Look in the nut you JUST unscrewed. There is a screen/washer there.
- ◆ Remove the screen and clean as necessary. Replace when done and reassemble the entire assembly.

Motor runs, but no pressure:

CHECK:

Both the counterweight and the bearing need to spin freely and both need to spin INDEPENDENTLY of each other. If these 2 pieces are 'stuck' together, you will need to break them free and whether or not they are sticking, spray some good quality lubricant or something similar on them and let it soak in and this should restore most of your prime.

Exploded View/Parts List: LG-20-EC (5301548)



Ref. #	Part #	Description	Qty
1	5169241	20 Gallon Tank (White)	1
2	5058188	Tank Lid w/Lanyard	1
3	5163100	Low-Flow Spray Wand w/X-26 Tip	1
3.1	5018330	Handgun Tip (X-26)	1
4	5020524	Hose, 3/8"-1 Brd. x 15 Ft.	1
5	5051144	Hose Clamp, 3/8"	4
6	5051122	5/8" Black Nylon Loom Cable Clamp	1
7	5117234	#10-24 x 1/2" Phillips Truss Head Machine Screw	1
8	5274880	Wand Clips & Screws (Pkg/2) (#10-24 Thread)	1
9	5278017	Lead Wire Assembly w/5A Fuse & 30A Clips (96" Long)	1
9.1	5157237	5 Amp Regular Blade Fuse	1
10	5100452	Siphon Tube	1
11	5275526	Inlet Sub-Assembly	1
11.1	5149034	Poly Swivel, 3/8" Hose Barb	1
11.2	5116242	Strainer, 1" Filter Washer	1
11.3	5006209	Poly Knurled Swivel Nut, 3/4" FGHT	1
11.4	5020490	Hose, 3/8"-1 Brd. x 7 1/4"	1
12	5117167	#10-24 x 5/8" Phillips Truss Head Machine Screw	4
13	5274373	Drain Plug Cap, Tether, and Washer Assembly	1
14	5277980	High Flo Gold Series 1.0 GPM Pump	1