5300587 Model No. LG27-3PT 25 Gallon Sprayer

5300576 Model No. LG55-3PT 55 Gallon Sprayer

3 Point Lawn & Garden Sprayer



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 3 Point Hitch 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.

ASSEMBLY

Part of the sprayer has been assembled at the factory. Be sure the tank straps are tight and that the tank is straight in the saddle. Note each hook bolt uses (2) whiz lock hex nuts.

The units are completely factory assembled, with the exception of the boom.

Note: There are two mounting positions available for the center boom. The lower position may be more desirable because of the angle. This angle will be of help when transporting the booms in the folded position.

Join the center boom to the carrier frame with the two u-bolts, and flange locknuts.

Attach the nozzle harness assembly to the booms. Normally, the nozzles should be spaced at 20" intervals. Join the boom feeder hose to the boom and secure in place with hose clamps. This feeder hose is routed around the right side of the sprayer, and through the two clamps which are held in place by the strap bolts.

(2) Nylon hose fittings (Ref. 7) are included to be joined to the pump. A torque chain, S-hook, and hardware are also included for the pump. The pump is not included with the assembly, but must be supplied by the customer. It is intended for this pump to be mounted directly to the tractor PTO. A 6 or 8 roller pump with a coupler will work quite nicely. Always use a good quality thread sealant when threading the fittings together to prevent leaks. Use care when starting the nylon fittings together so as not to cross thread or strip the fittings.

INFORMATION ABOUT THE SPRAYER

Roller pumps are positive displacement pumps which means that the entire solution being pumped must go somewhere or the pump will break. In this roller pumping system, solution is drawn from the tank and forced to a planned source such as boom nozzles, handgun, or jet agitator. The pressure is controlled by a relief valve which is a spring loaded device that controls the amount of fluid bypassed to the tank. The handle is to be tightened to increase pressure and loosened to decrease the pressure.

The directo-valve is the "off-on" control which allows the operator to manually control the solution going to the boom.

TESTING THE SPRAYER

Attach the sprayer to the tractor 3 point hitch. Mount the pump to the PTO and affix the torque chain.

Open tank lid and be sure the tank is clean and free of foreign material. Fill the tank about one half full with plain water.



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It is important to test the sprayer with plain water before actual • Since the towing vehicle does not have a speedometer, spraying is attempted. This will enable you to check the sprayer for leaks in the plumbing system.

Before starting, open the suction line valve, turn the relief valve tee handle out to lower the line pressure, and thereby to help to prime the pump. CAUTION: Always be sure that water has reached the pump before starting your sprayer. If the pump is run dry, serious damage to the pump will result. Always have the pressure line open to the tips so that any air which may be trapped in the line will be forced out.

Start the tractor PTO. Check the entire system for leaks. Once the pump is primed the pressure may be increased by turning the tee handle in. Keep the pressure line open to the tips when setting the pressure. Set the pressure and then lock the relief valve tee handle in place. Shut off the directo-valve and check for leaks again. Pressure will increase when the pressure line valve is closed and then return to the set pressure when the valve is opened again.

During the testing period be sure to observe the spray pattern given by the spray nozzles. If there is any pattern distortion, it will be necessary to remove and clean the affected tips.

CAUTION: Never use a metal object or other sharp item for cleaning a nozzle tip. It is better to use a nozzle brush (not wire brush) or compressed air for tip cleaning.

OPERATION AND CALIBRATION:

The performance of any agricultural chemical depends upon the proper application of the correct amount. Be sure that your equipment has been calibrated before spraying.

The tips supplied as standard with the sprayer can be used for a wide variety of spraying applications. Other tip sizes are available for different coverages. The speed and pressure charts shown indicate the rates can be changed considerably by changing speed and pressure. The nozzles on the boom will spray a 140" wide swath.

The proper nozzle height is 17 to 19 inches above the object being sprayed.

Check the spray patterns. Each nozzle should overlap the next nozzle approximately 30%.

- 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.

speed can be determined as per the directions.

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). The pressure can be set by running the sprayer with the boom nozzles "on" and then adjusting the relief valve until the gauge reads the desired pressure. Notice that the pressure will go up when the boom lines are shut off. This is normal and the pressure will return as before when you open the boom lines.

When selecting pressure from the tip chart, it is a good idea to try for the 20 or 30 PSI range as this allows an excellent nozzle pattern. 10 PSI begins to break up the pattern and at 40 PSI, you may notice some drift.

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.

Determining the proper speed of the tractor can be done by marking off 100, 200, and 300 ft. 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).

After measuring off the 100, 200, and 300 feet distances, fill the tank with water and prepare to make the trial runs. The speed chart lists the time to be 68, 136, and 205 seconds. The sprayer does not need to be running at this time. It is best to start about 10 feet ahead of the starting mark so you will be at the set throttle speed by the time you reach the starting mark.

A stopwatch would be best to use for timing the travel but a watch with a second hand can be used. Check each distance separately. By doing this you can check yourself until the time is correct.

Once you have the throttle setting determined, mark the setting so you can return to it each time you want to spray at this rate.

When you are ready to spray mix chemical as follows. Add proper amount of water to the tank. Run the sprayer while adding chemical to the water. Do not spray through the boom at this time. This will allow solution to (bypass) return to the tank. The movement of solution through the bypass will aid in mixing the water and chemicals. If this water movement is not enough to keep the chemical in suspension, it may be necessary to add an optional Agitator kit. You should now be ready to spray.

MAINTENANCE WHILE SPRAYING

Periodically close the suction line valve, check the line strainer and clean the screen. Always flush the entire pumping system

Ground Speed Chart

Speed in M.P.H.	Time Required in Seconds to Travel a distan			
(Miles Per Hour)	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	

with water or a neutralizing agent such as Nutra-Sol after completing the spraying operation.

Care and maintenance will prolong the life of the sprayer.

AFTER SPRAYING

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 of idleness. 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. After use dispose of unused chemicals per instructions of chemical manufacturer. 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 and screens 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 & valves. These items are especially prone to damage from chemicals and freezing weather.

The sprayer should be winterized before storage by pumping a 50-50 solution of water and anti-freeze through the entire plumbing. Proper care and maintenance will prolong the life of the sprayer.

Gallons Per Acre — 20" Spacing											
Tip Size	Pressure	G.P.M.	4	5	6	7	8	10	12	14	16
	PSI	Per Nozzle	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH
	20	.14	10.5	8.4	7.0	6.0	5.3	4.2	3.5	3.0	2.6
	25	.16	11.7	9.4	7.8	6.7	5.9	4.7	3.9	3.4	2.9
8002	30	.17	12.9	10.3	8.6	7.4	6.4	5.1	4.3	3.7	3.2
	40	.20	14.9	11.9	9.9	8.5	7.4	5.9	5.0	4.2	3.7
	50	.23	16.6	13.3	11.1	9.5	8.3	6.6	5.5	4.7	4.2
	60	.25	18.2	14.6	12.1	10.4	9.1	7.3	6.1	5.2	4.6

Strap Attachment to a "Flat" Buckle







Plumbing List for Models: LG-55-3PT & LG-27-3PT



REPAIR PARTS LIST MODEL No. LG55-3PT SPRAYER (55 GALLON) AND MODEL No. LG27-3PT SPRAYER (25 GALLON)

ITEM	PART	LG-27-3PT	LG-55-3PT	DESCRIPTION	
NO.	NUMBER	QTY.	QTY.		
1	5005022	1	1	Nylon Male Street Adapter, 3/4" MGHT x 3/4" MNPT	
2	5006055	1	1	Nylon Knurled Swivel Nut, 3/4" FGHT	
3	5006259		8	3/8"-16 Hex Whiz (Flange) Locknut	
4	5006306	4	4	1/4"-20 Hex Whiz (Flange) Locknut	
5	5006307	9	5	5/16"-18 Hex Whiz (Flange) Locknut	
6	5010020	1	1	Nylon Hose Fitting, 3/4" MNPT x 3/4" HB	
7	5010028	3	3	Nylon Elbow, 3/4" MNPT x 3/4" HB	
8	5010036	1	1	Nylon Elbow, 3/4" MNPT x 1/2" HB	
9	5010039	2	2	Nylon Elbow, 1/2" MNPT x 1/2" HB	
10	5010152	1	1	Nylon Elbow, 1/2" MNPT x 3/4" HB	
11	5016030		4	3/8" Flatwasher	
12	5016066	1	1	#102 Hose Washer (Gasket) 1" O.D. Rubber	
13	5020105	1	1	Hose, 3/4"-2 Brd. x 36"	
14	5020227	1	1	Hose, 3/4"-1 Brd. x 48"	
15	5020387	1	1	Hose, 3/4"-2 Brd. x 10"	
16	5020388	1	1	Hose, 1/2"-1 Brd. x 64"	
17	5020389	1	1	Hose, 1/2"-1 Brd. x 43"	
18	5034159	2	2	Square U-Bolt, 5/16" x 1 5/16" (Inside) x 1 7/8" (Inside)	
19	5034298		4	"L" Head Hook Bolt	
20	5041105	1	1	Bushing, Heyco #2879-01 (Black)	
21	5051022	4	4	Hose Clamp, 1/2"	
22	5051024	6	6	3/4" Hose Clamp	
23	5053027	2	2	Hose Clip (Mfg. #: CO-1313)	
24	5058183	1	1	FIMCO 5" Threaded Tank Lid w/.25" Hole for Lanyard	
25	5108042		4	Tank Strap Buckle, Straight	
26	5116322	1	1	3/4" Black Poly Strainer	
27	5117301	4	4	1/4"-20 x 1" Hex Flange Screw	
28	5133100		2	Nylon Strap, 60"	
29	5143188	1	1	#35 Nylon Shut-Off Valve (Black) w/Zero Pressure	
30	5143199	1	1	Pressure Relief Valve	
31	5143316	1	1	Directo-Valve (AA6B)	
32	5149013	1	1	Nylon Swivel, 3/4" Flat Seat Hose Barb	
33	5167005	1	1	Gauge, 0-400 p.s.i. (Dry)	
34	5169236		1	55 Gallon Leg Tank, White, (2) 1/2" Fittings	
34	5169058	1		25 Gallon Tank	
35	5273023	1	1	LG-55 Weldment	
36	BK-70 (5301197)	1	1	BK-70 Boom (See alternate exploded view)	
37	5271945	2		Saddle (25 Gallon)	
38	5133093	2		Rubber Strap	
39	5117300	5	1	5/16"-18 x 1" Flange Whiz Lockscrew, Indented Hex Head	
40	5082006	1	1	"S" Hook	
41	5049017	1	1	Torque Chain, 24"	



Repair Parts List for Models: LG-55-3PT & LG-27-3PT



Typical Nozzle Configuration

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NO.	PART NUMBER	QTY.	DESCRIPTION
1	5006054	4	3/8"-16 Hex Nut
2	5006092	6	3/8"-16 Hex Locknut
3	5006307	6	5/16"-18 Hex Whiz (Flange) Locknut
4	5016030	8	3/8" Flatwasher
5	5019228	2	Extension Spring
6	5020144	2	Hose, 1/2"-1 Brd. x 10"
7	5020307	2	Hose, 1/2"-1 Brd. x 23"
8	5020416	3	Hose, 1/2"-1 Brd. x 19 3/8"
9	5034159	3	Square U-Bolt, 5/16" x 1 5/16" (Inside) x 1 7/8" (Inside)
10	5034171	2	H.H.C.S., 3/8"-16 x 3 1/2" (Grade 5)
11	5038620	1	Boom Retainer Bracket
12	5046344	2	Square Cap, Black (1 1/4" Square Tube)
13	5051022	14	Hose Clamp, 1/2"
14	5086003	1	Nylon Hose Tee, 1/2" HB
15	5274458	1	Center Boom Weldment (BK-70)
16	5274459	2	Outer Boom Weldment
17	5275067	2	Standard "ELL" Nozzle Sub-Aassembly (Square Tube)
18	5275068	5	Standard "Tee" Nozzle Sub-Assembly
19	5056027	5	Nylon Tee, 11/16" U.N.F. x 1/2" HB x 1/2" HB
20	5056023	2	Nylon Elbow, 11/16" U.N.F. x 1/2" HB
21	5273796	7	1 1/4" Square Boom Nozzle Clamp
22	5116019	7	PolyPro 50 Mesh Nozzle Strainer (Red)
23	5138571	7	Lurmark Nylon Standard Flat Tip, 80 Degree, Yellow
24	5046052	7	Nylon Nozzle Cap, 11/16" U.N.F. Thread
25	5274555	1	7-Nozzle Harness Assembly