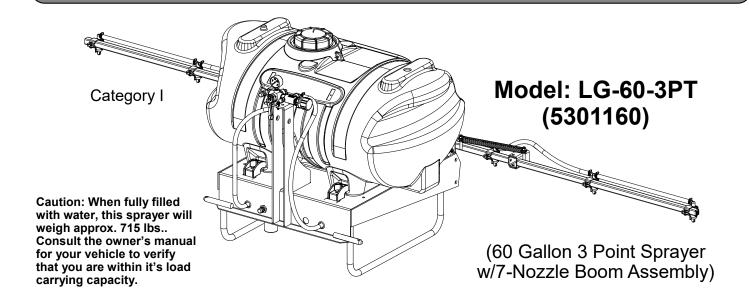
OWNER'S MANUAL



General Information

Thank you for purchasing this product. The purpose of this manual is to assist you in operating and maintaining your 3-Point sprayer



WARNING: To reduce the risk of injury, the user must read and understand the operator's manual before using this product.



WARNING: Cancer and Reproductive Harm www.P65Warnings.ca.gov

BEFORE RETURNING THIS PRODUCT FOR ANY REASON, PLEASE CALL

1-800-831-0027

MONDAY-FRIDAY, 8:00 AM TO 5:00 PM CST

If you should have a question or experience a problem with your Fimco Industries Product: Visit our website @ www.fimcoindustries.com or call the Toll free number above. Our technical support representatives will be happy to help you. In most cases a customer service rep. can resolve the problem over the phone.

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

Correct Part Description and/or part number
 Model number and Serial Number

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

Retain a copy of your receipt for your unit, as it will be required to validate any warranty service.

Warranted against manufacturer or workmanship defects from date of purchase with copy of receipt:

Homeowner Usage: One Year.

Commercial Usage: 90 Days.

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 or handgun. The pressure is controlled by a pressure relief valve, which is a spring-loaded device that controls the amount of fluid bypassed (recirculated) to the tank. The gray adjusting cap is to be tightened to increase pressure and loosened to decrease pressure.

Information About the Sprayer

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

Assembly Instructions

Most of the sprayer has been assembled at the factory.

Join the center boom member to the carrier frame with the (2) U-bolts and (4) whiz nuts provided. See exploded view later in this manual for reference.

Attach the boom feeder hose to the boom after routing it through the underside of the carrier frame as needed. Secure in place with a hose clamp provided.

Poly hose fittings (5010209) 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 this unit. It is intended for a pump to be mounted directly to the tractor PTO.



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 [5004556 (11/20] **IMPORTANT:** Remove tank lid and be sure the tank is clean and free of any foreign material. Rinse tank out of any tank residue before filling with water to test.

Testing the Sprayer

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

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.

Before starting, open the suction line valve (located underneath the carrier frame), turn the relief valve handle out to lower the line pressure. This will help prime the pump.

CAUTION: Always be sure that the water (or solution) has reached the pump before starting your sprayer. If the pump is allowed to run dry, serious damage to the pump will result.

Always have the pressure line open to the tips so that the air which may be trapped in the line will be forced (or purged) out.

Start the tractor PTO. Check the entire system for leaks. Once the pump is primed, the pressure may be increased by turning the handle of the pressure relief valve in. Keep the pressure line open to the tips when setting the pressure. Set the pressure and then lock the relief valve 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 preset 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.

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 & Calibration

The performance of any agricultural chemical depends upon the proper application.

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 a minimum of 17"-20" above the object being sprayed. 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)

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.

When you are ready to spray, mix chemicals as follows. Add the 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 the solution to return ('bypass') 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.

Four things must be considered before spraying with the boom.

- I. 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.

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 2 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). 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 line is shut off. This is normal and the pressure will return as before when you open the boom line. When selecting pressure from the tip chart, it is a good idea to try for the 20 or 30 p.s.i. range as this allows an excellent nozzle pattern. Spraying at 10 p.s.i. begins to break up the pattern and at 40 p.s.i. you may notice some drift.

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.

Speed Chart					
	Time Required	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.				
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		

Spray Tip Rate Chart (20" Spacing)									
Tip No.	Pressure (psi)	Capacity (GPM)	Gallons Per Acre - Based on Water						
			1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	6 MPH	8 MPH
	15	.12	35.6	17.8	11.8	8.9	7.1	5.9	4.5
AIXR11002VP	20	.14	41.6	20.8	13.8	10.4	8.3	6.9	5.2
AIANT1002VF	30	.17	50.4	25.2	16.8	12.6	10.1	8.4	6.3
	40	.20	59.6	29.8	19.8	14.9	11.9	9.9	7.4
Tip	Pressure	Capacity	Gallons Per 1000 Sq. Ft Based on Water						
No.	(psi)	(GPM)	1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	6 MPH	8 MPH
AIXR11002VP	15	.12		.41	.27	.20	.16		
	20	.14		.48	.32	.24	.19		
	30	.17		.58	.39	.29	.23		
	40	.20		.68	.45	.34	.27		

Maintenance During/After Spraying

Periodically check the strainer and clean the screen on your intake line

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

After use, fill the sprayer half way with clean water. Start the pump and allow the water to pump through the entire plumbing system and nozzles. Drain and then refill half full, add the recommended amount of a good quality tank cleaner, such as FIMCO Tank Neutralizer and Cleaner. (If no tank cleaner is available, you may substitute dish soap for this step). Turn pump on and circulate through system for 15 minutes and then spray out through boom and handgun nozzles. Refill sprayer half way with clean water and repeat. Follow the chemical manufacturer's disposal instructions of all wash or rinsing water.

If boom or handgun nozzles need cleaning, remove them from the sprayer and soak in warm soapy water. Clean with a soft bristled brush or toothpick if necessary. Never use a metal object. Even the slightest damage can change the flow rate and spray distribution. 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.

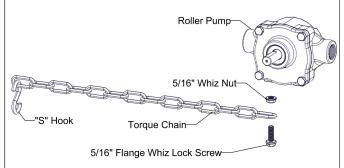
Winter Storage

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 automotive antifreeze (containing a rust inhibitor) 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.

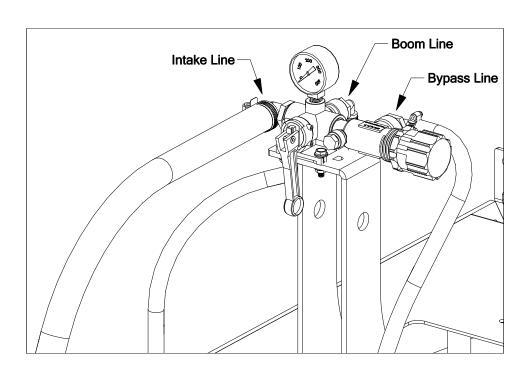
Torque Chain Attachment to a Roller Pump



A torque chain, 'S' hook, nut and bolt are included in this assembly to secure your pump during operation.

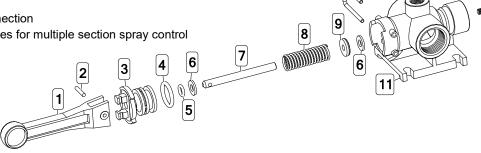
- Attach one end of the torque chain over the threaded stem of the bolt
- 2. Thread the whiz nut onto the bolt. Hand-tighten
- Thread the bolt, chain and nut 'pre-assembly' into the threaded hole on the underside of the pump. Tighten sufficiently
- 4. Affix the 'S' Hook to your frame (or hitch). Wrap the chain around the frame or hitch and 'S-Hook' it in place. Make sure this connection is very secure! Not having a good, tight connection may result in the pump spinning on your PTO shaft and damaging some components of your sprayer

*** Insure that this connection point will not allow the roller pump to spin on the PTO shaft ***

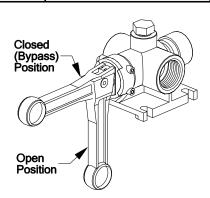


'Directo Valve' - Manually Operated Control Valve

- Corrosion Resistant Materials: Wetted Parts Polypropylene, 316SS and Polyethylene
- Maximum Pressure = 150 p.s.i.
- Large Capacity 12.5 G.P.M. @ 5 p.s.i. Pressure Drop
- 3/4" NPT (F) Inlet Connection
- 1/2" NPT (F) Spray Line Connection
- 3/4" NPT (F) Continuous By-Pass Connection
- Valves may be connected w/close nipples for multiple section spray control



Fimco #	Mfg. Part#	Description
5143316	AA6B	Directo-Valve (AA6B)
5168718	PK-AB6B-KIT	Repair Kit, Items Marked * *



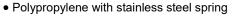
Ref. #	Part #	Mfg. Part #	Description	Qty
1	5078178	CP36301-NY	Handle (Gray)	1
2	5101220	CP36308-SS	Groove Pin	1
3	5086043	CP36302-PP	Poly Body Insert, (Black)	1
4	* *	CP7717-2/209-VI	O-Ring, Viton	1
5	* *	CP7717-2/108-VI	O-Ring, Viton	1
6	* *	CP36307-PPB	Washer	2
7	* *	CP36304-SS	Stem	1
8	* *	CP36306-302SS	Spring	1
9	* *	CP38726-VI	Shut-Off Washer, Viton	1
10	* *	CP36309-302SS	Retaining Clip	1
11	5002476	CP36303-PP	Poly Body (AA6B)	1
12	5102022	F14	Pipe Plug, 1/4" MNPT	1
13	5117281	CP38725-SS	#10-24 x 5/16" Phillips Truss Head Mach. Screw	1

13

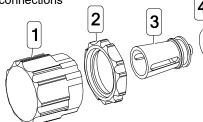
- * * Available only in Repair Kit
- ◆ ◆: Only Available in Complete Assembly

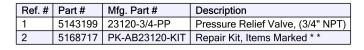
Piston Type Pressure Relief/Regulating Valves

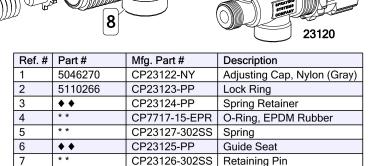
Bypasses excess fluid. Adjustable to maintain control of line pressure at any pressure within the valve operating range. Selected pressure setting firmly held in place by locknut. Extra large passages to handle large flows.



- Excellent chemical resistance
- EPDM O-Rings
- Fore pressure to 150 p.s.i.
- 1/4" port for pressure gauge
- Choice of 1/2" or 3/4" NPT (M) inlet & (F) outlet connections







Poly Body (3/4" NPT)

Pipe Plug, 1/4" MNPT

CP23121-PP

F14

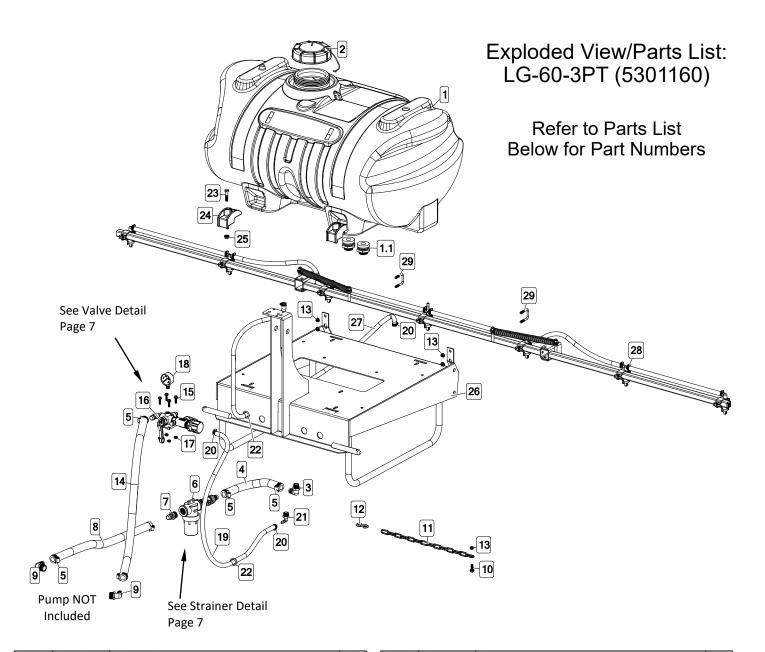
5102022 * * Available only in Repair Kit

8

9

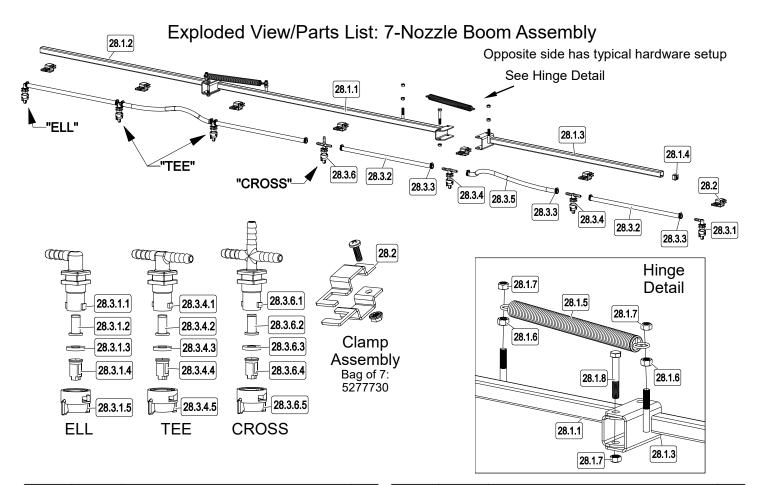
CP23121-PP

♦: Only Available in Complete Assembly



Ref. #	Part #	Description	Qty
1	5169249	60 Gallon Elliptical Tank (White)	1
1.1	TF50DTN	1/2" Bulkhead Fitting Assembly	2
2	5058188	Tank Lid w/Lanyard	1
3	5010205	Poly Elbow, 1/2" MNPT x 3/4" HB	1
4	5020495	Hose, 3/4"-2 Brd. x 8"	1
5	5051024	Hose Clamp (3/4")	6
6	5274745	Strainer Sub-Assembly	1
6.1	5006209	Poly Knurled Swivel Nut, 3/4" FGHT	1
6.2	5149037	Poly Swivel, 3/4" Flat Seat Hose Barb	1
6.3	5016066	1" Rubber Washer	1
6.4	5143419	Swivel Shut-Off	1
6.5	5005196	Poly Adapter, 3/4" MNPT x 3/4" MGHT	1
6.6	5116322	3/4" Black Poly Strainer	1
6.6.1	* *	Strainer Cap (Available ONLY in Comp. Assy)	1
6.6.2	5072229	EPDM Gasket	1
6.6.3	5116323	40 Mesh Screen	1
6.6.4	* *	Strainer Bowl (Available ONLY in Comp. Assy)	1
7	5067127	Poly Fitting, 3/4" MNPT x 3/4" HB	1
8	5020105	Hose, 3/4"-2 Brd. x 36"	1
9	5010209	Poly Elbow, 3/4" MNPT x 3/4" HB	2
10	5117300	5/16-18 x 1.00 Flanged Hex Bolt	1
11	5049017	Torque Chain, 24"	1
12	5082006	"S" Hook	1

Ref. #	Part #	Description	Qty
13	5006307	5/16-18 Serrated Flanged Hex Nut	5
14	5020227	Hose, 3/4"-1 Brd. x 48"	1
15	5117301	1/4-20 x 1.00 Flanged Hex Bolt	4
16	5277756	Valve SubAssembly (LG-55/60-3PT)	1
16.1	5010209	Poly Elbow, 3/4" MNPT x 3/4" HB	1
16.2	5143316	Directo-Valve (AA6B)	1
16.3	5010202	Poly Elbow, 1/2" MNPT x 3/8" HB	1
16.4	5143199	Pressure Relief Valve, (3/4" NPT)	1
16.5	5010206	Poly Elbow, 3/4" MNPT x 3/8" HB	1
17	5006306	1/4-20 Serrated Flanged Hex Nut	4
18	5167005	Gauge, 0-400 p.s.i. (Dry)	1
19	5020537	Hose, 3/8"-1 Brd. x 38"	1
20	5051144	Hose Clamp (3/8")	4
21	5010202	Poly Elbow, 1/2" MNPT x 3/8" HB	1
22	5041105	Snap Bushing	2
23	5034101	3/8-16 x 1.75 Hex Bolt	4
24	5038698	Plastic Tank Hold-Down Leg Clip	4
25	5006259	3/8-16 Serrated Flanged Hex Nut	4
26	5275716	60 GAL. 3-Pt. Frame Weldment	1
27	5020519	Hose, 3/8"-1 Brd. x 64"	1
28	5301897	7-Nozzle Boom Assembly	1
29	5034159	5/16-18 x 1.3125 x 1.875 Square U-Bolt	2



Ref. #	Part #	Description	Qty
28.1	5277780	7-Nozzle Boom Assembly	1
28.1.1	5277838	Center Boom Weldment 1" Sq. Tube	1
28.1.2	5277837	Outer Boom Weldment (LH) (1" Sq Tube)	1
28.1.3	5277836	Outer Boom Weldment (RH) (1" Sq Tube)	1
28.1.4	5046106	Square Cap, Black (1" Square Tube)	2
28.1.5	5019228	Extension Spring	2
28.1.6	5006259	3/8"-16 Flange Hex Whiz Locknut	4
28.1.7	5006345	3/8"-16 Flange Locknut	6
28.1.8	5034169	H.H.C.S., 3/8"-16 x 2 1/2"	2
28.2	5277923	Nozzle Clamp (1" Sq. Tube)	7
28.3	5277696	7-Nozzle Harness (3/8")	1
28.3.1	5281304	"ELL" Nozzle Sub-Assembly (3/8")	2
28.3.1.1	5056113	Single Hose Shank (3/8" Hose)	1
28.3.1.2	5143543	Check Valve Strainer, 50 Mesh, 5 PSI	1
28.3.1.3	5016157	Seat Washer (QJ Caps)	1
28.3.1.4	5018371	Air-Induction XR Flat Spray Tip (AIXR11002VP)	1
28.3.1.5	5046219	Quick TeeJet Cap ONLY (Yellow)	1

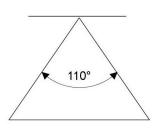
Ref. #	Part #	Description	Qty
28.3.2	5020510	Hose, 3/8"-1 Brd. x 19-3/8"	4
28.3.3	5051144	Hose Clamp, 3/8"	12
28.3.4	5281307	"TEE" Nozzle Sub-Assembly (3/8")	4
28.3.4.1	5056114	Double Hose Shank (3/8" Hose)	1
28.3.4.2	5143543	Check Valve Strainer, 50 Mesh, 5 PSI	1
28.3.4.3	5016157	Seat Washer (QJ Caps)	1
28.3.4.4	5018371	Air-Induction XR Flat Spray Tip (AIXR11002VP)	1
28.3.4.5	5046219	Quick TeeJet Cap ONLY (Yellow)	1
28.3.5	5020511	Hose, 3/8"-1 Brd. x 21"	2
28.3.6	5281308	"Cross" Nozzle Sub-Assembly (3/8")	1
28.3.6.1	5056115	Triple Hose Shank (3/8" Hose)	1
28.3.6.2	5143543	Check Valve Strainer, 50 Mesh, 5 PSI	1
28.3.6.3	5016157	Seat Washer (QJ Caps)	1
28.3.6.4	5018371	Air-Induction XR Flat Spray Tip (AIXR11002VP)	1
28.3.6.5	5046219	Quick TeeJet Cap ONLY (Yellow)	1

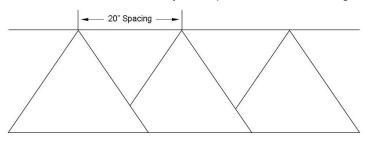
Based on the minimum overlap required to obtain uniform distribution with 110° tips and 20" spacing.

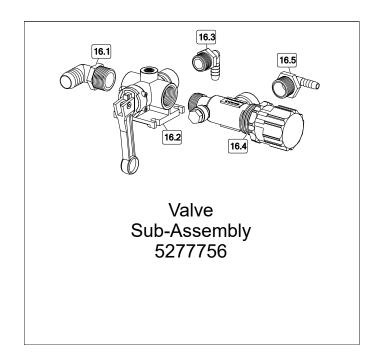
Suggested Minimum Spray Height: 16"-18" above what is being sprayed (to plant, not ground).

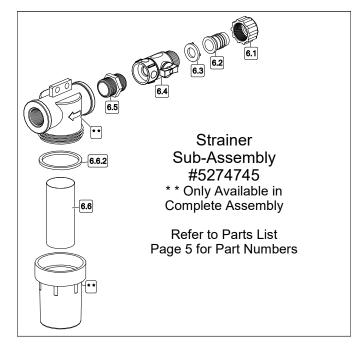
Optimum Spray Height: 20"

- 110° wide, tapered flat spray angle with air induction technology for better drift management
- Made of 2-piece UHMWPE polymer construction which provides excellent chemical resistance, including acids, as well as exceptional wear life
- Compact size to prevent tip damage
- Excellent for systemic products and drift management









NOTES:

Warranty

LIMITED WARRANTY FOR NEW FIMCO, IND. EQUIPMENT

WHO MAY USE THIS LIMITED WARRANTY. This limited warranty (the "Limited Warranty") is provided by Fimco, Ind. to the original purchaser ("you") of the Equipment (as defined below) from Fimco, Ind. or one of Fimco, Ind.'s authorized dealers. This Limited Warranty does not apply to any subsequent owner or other transferee of the Equipment. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

WHAT THIS LIMITED WARRANTY COVERS AND FOR HOW LONG. Fimco, Ind. warrants that any new Equipment will be free from defects in material and workmanship for a period of **one (1) year** (homeowner), **90 days** (commercial user), after delivery of the Equipment to you (the "Warranty Period"). The Warranty Period is not extended if Fimco, Ind. repairs or replaces the Equipment.

WHAT IS NOT COVERED BY THIS LIMITED WARRANTY. This Limited Warranty does not apply to: (1) used Equipment; (2) any Equipment that has been altered, changed, repaired or treated since its delivery to you, other than by Fimco, Ind. or its authorized dealers; (3) damage or depreciation due to normal wear and tear; (4) defects or damage due to failure to follow Fimco, Ind.'s operator's manual, specifications or other written instructions, or improper storage, operation, maintenance, application or installation of parts; (5) defects or damage due to misuse, accident or neglect, "acts of God" or other events beyond Fimco, Ind.'s reasonable control; (6) accessories, attachments, tools or parts that were not manufactured by Fimco, Ind., whether or not sold or operated with the Equipment; or (7) rubber parts, such as tires, hoses and grommets.

HOW TO OBTAIN WARRANTY SERVICE. To obtain warranty service under this Limited Warranty, you must (1) provide written notice to Fimco, Ind. of the defect during the Warranty Period and within **thirty (30)** days after the defect becomes apparent or the repair becomes necessary, at the following address: Fimco, Ind., 1000 Fimco Lane, North Sioux City, SD 57049; and (2) make the Equipment available to Fimco, Ind. or an authorized dealer within a reasonable period of time. For more information about this Limited Warranty, please call: **800-831-0027**.

WHAT REMEDIES ARE AVAILABLE UNDER THIS LIMITED WARRANTY. If the conditions set forth above are fulfilled and the Equipment or any part thereof is found to be defective, Fimco, Ind. shall, at its own cost, and at its option, either repair or replace the defective Equipment or part. Fimco, Ind. will pay for shipping and handling fees to return the repaired or replacement Equipment or part to you.

LIMITATION OF IMPLIED WARRANTIES AND OTHER REMEDIES. THE REMEDIES DESCRIBED ABOVE ARE YOUR SOLE AND EXCLUSIVE REMEDIES, AND FIMCO, IND.'S SOLE LIABILITY, FOR ANY BREACH OF THIS LIMITED WARRANTY. TO THE EXTENT APPLICABLE, ANY IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN DURATION TO THE WARRANTY PERIOD, AND THE REMEDIES AVAILABLE FOR BREACH THEREOF SHALL BE LIMITED TO THE REMEDIES AVAILABLE UNDER THIS EXPRESS LIMITED WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. IN NO EVENT SHALL FIMCO, IND.'S LIABILITY UNDER THIS LIMITED WARRANTY EXCEED THE ACTUAL AMOUNT PAID BY YOU FOR THE DEFECTIVE EQUIPMENT, NOR SHALL FIMCO, IND. BE LIABLE, UNDER ANY CIRCUMSTANCES, FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGES OR LOSSES, WHETHER DIRECT OR INDIRECT. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.