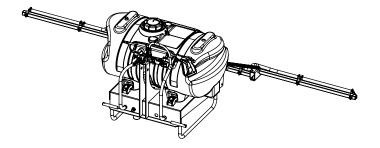


# Model: LG-60-3PT-WP-309-TSC (2152243)

(60 Gallon 3 Point Sprayer w/Pump, Coupler, & 7-Nozzle Boom Assembly)



# 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 FIMCO product. The purpose of this manual is to assist you in operating and maintaining your 3-Point sprayer. Please read it carefully, as it furnishes information which will help you achieve years of trouble-free operation.

#### Warranty/Parts/Service

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

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.

Nylon hose fittings (5010028) are included to be joined to the pump. A torque chain, 'S'-Hook, and hardware are also included for the pump. The pump IS included with this unit. It is intended for this pump to be mounted directly to the tractor PTO.

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

The 'directo-valve' is the on/off 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 the tank lid and be sure the tank is clean and free of foreign material. Fill the tank about 1/2 full with plain water.

#### 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.

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.



#### 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. 1663 [5008059 (03/09)] Printed in the U.S.A.

#### **Testing the Sprayer (continued)**

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 press 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 & 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 17" to 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.

- 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).

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.

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 (or '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.

Tip No.	Spray Height	Pressure (psi)	O an a site	Gallons Per Acre - 20" Spacing								
			(GPM)	4	5 MPH	6 MPH	7 MPH	8 MPH	10 MPH	12 MPH	14 MPH	16 MPH
8002	20"	20 25 30 40 50 60	.14 .16 .17 .20 .23 .25	10.5 11.7 12.9 14.9 16.6 18.2	11.9 13.3	7.0 7.8 8.6 9.9 11.1 12.1	6.0 6.7 7.4 8.5 9.5 10.4	5.3 5.9 6.4 7.4 8.3 9.1	4.2 4.7 5.1 5.9 6.6 7.3	3.5 3.9 4.3 5.0 5.5 6.1	3.0 3.4 3.7 4.2 4.7 5.2	2.6 2.9 3.2 3.7 4.2 4.6

Speed Chart								
	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.	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					

- 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?
- Speed Traveled (m.p.h.) while spraying?

- Refer to your chemical's 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.

- If the towing vehicle does not have a speedometer, speed can be determined as per the directions.

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.

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.

#### Maintenance During/After Spraying

Periodically close the suction line valve. Check the line strainer and clean the screen. Always flush the entire plumbing system with water or a neutralizing agent, such as Nutra-Sol, after completing the spraying operation.

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

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 a chemical neutralizer, such as 'Nutra-Sol', or equivalent, and repeat cleaning instructions above. A mix of water and some detergent, such as 'Dawn' dish soap would be a sufficient alternative.

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.

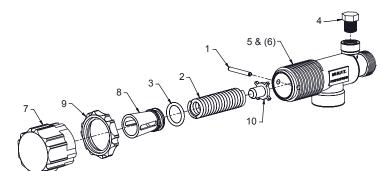
#### Winter Storage

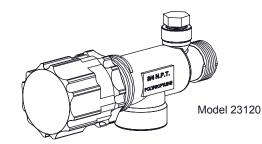
Drain all water out of your sprayer, paying special attention to the pump, handgun, and valve(s). These items are especially prone to damage from chemicals and freezing weather.

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.

## PISTON TYPE PRESSURE RELIEF/REGULATING VALVES

Bypasses excess liquid. 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.





- Polypropylene with stainless steel spring

- Excellent chemical resistance
- EPDM O-Rings
- For 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

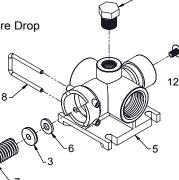
FIMCO Number	Mfg Part Number	Description	List Price
5143199	23120-3/4-PP	3/4" Poly Valve	33.33
5143200	23120-1/2-PP	1/2" Poly Valve	33.33
5168717	PK-AB23120-KIT	Repair Kit, Items Marked **	16.43

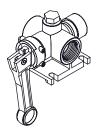
Item No.	Part Number	Mfg Part Number	5143199 Qty	5143200 Qty	Description	List Price
1	**	CP23126-302SS	1	1	Retaining Pin	
2	**	CP23127-302SS	1	1	Spring	
3	**	CP7717-15-EPR	1	1	O-Ring, EPDM Rubber	
4			1	1	Pipe Plug, 1/4" MNPT	
5		CP23121-PP	1	-	Poly Body (3/4" NPT)	
6		CP23128-PP	-	1	Poly Body (1/2" NPT)	
7	5046270	CP23122-NY	1	1	Adjusting Cap, Nylon (Gray)	10.64
8	5108095	CP23124-PP	1	1	Spring Retainer	5.40
9	5110266	CP23123-PP	1	1	Lock Ring	5.70
10	5115078	CP23125-PP	1	1	Guide Seat	4.16

How to order: Specify valve number (Example: 23120-1/2-PP Polypropylene)

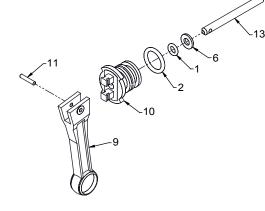
## DIRECTO VALVE CONTROL VALVE - MANUALLY OPERATED

- 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





Part Number	Mfg. Number	Description	List Price
5143316	AA6B	Control Valve	\$43.76
5168718	PK-AB6B-KIT	Repair Kit (Marked **)	\$18.33



Item No.	Part Number	Qty	Mfg Part Number	Description	List Price
1	**	1	CP7717-2 (108-VI	O-Ring, Viton	
2	**	1	CP7717-2 (209-VI	O-Ring, Viton	
3	**	1	CP38726-VI	Shut-Off Washer, Viton	6.11
4		1		Pipe Plug, 1/4" MNPT	
5	5002476	1	CP7717-2-229-VI	Poly Body (Black) for Valve Model No. AA6B	14.12
6	5016280	2	CP36307-PPB	Washer	1.54
7	5019230	1	CP36306-302SS	Spring	2.81
8	5053091	1	CP36309-302SS	Retaining Clip	2.71
9	5078178	1	CP-36301-NY	Handle, Nylon (Gray)	4.79
10	5086043	1	CP36302-PP	Poly Body Insert, (Black)	4.29
11	5101220	1	CP36308-SS	Groove Pin	1.03
12	5117281	1	CP38725-SS	#10-24 x 5/16" Phillips Truss Head Machine Screw	1.60
13	5132071	1	CP36304-SS	Stem	5.11

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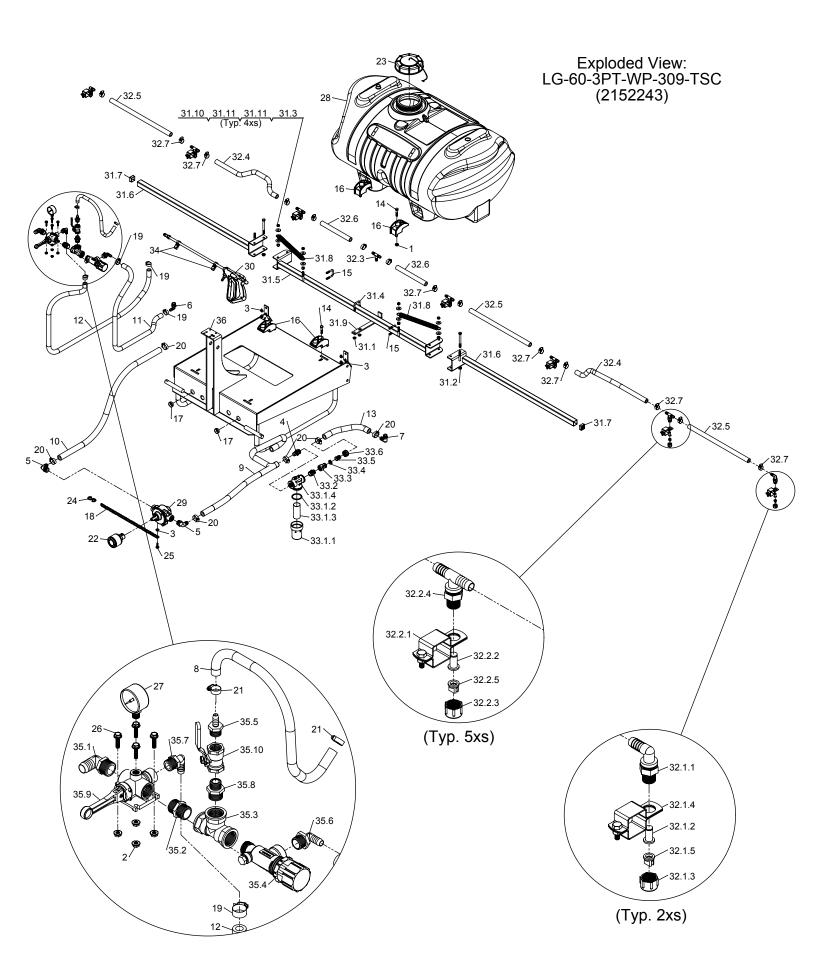
#### 5271706 6-Roller Pump Assembly

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Item No.	Part Number	Qty	Description	List Price
1	* 5110052	2	Seal (Viton)	8.15
2	* 5112030	6	Super Roller (Standard)	2.75
3	5002274	1	Body w/Seal (Cast Iron)	76.50
4	5017146	1	End Plate (Cast Iron)	45.25
5	5017480	1	Shaft Bearing Cover	1.15
6	5017481	1	Bearing Cover	1.10
7	5031025	2	Ball Bearing (Sealed)	6.60
8	5034038	4	H.H.C.S., 5/16"-18 x 3/4"	.55
9	5072056	1	O-Ring Gasket	1.15
10	5172038	1	Rotor/Shaft Assembly	89.00



## Parts List: LG-60-3PT-WP-309-TSC (2152243)

ltem No	Part Number	Qty	Description	List Price
1	5006259	4	3/8"-16 Hex Whiz (Flange) Locknut	.25
2	5006306	4	1/4"-20 Hex Whiz (Flange) Locknut	.05
3	5006307	5	5/16"-18 Hex Whiz (Flange) Locknut	.25
4	5010020	1	Nylon Fitting, 3/4" MNPT x 3/4" HB	.61
5	5010028	2	Nylon Elbow, 3/4" MNPT x 3/4" HB	.96
6	5010039	1	Nylon Elbow, 1/2" MNPT x 1/2" HB	.82
7	5010152	1	Nylon Elbow, 1/2" MNPT x 3/4" HB	.88
8	5020099	1	Hose, 3/8"-2 Brd. x 25 Ft.	19.60
9 10	5020105 5020227	1	Hose, 3/4"-2 Brd. x 36" Hose, 3/4"-1 Brd. x 48"	5.52 7.15
11	5020379	1	Hose, 1/2"-1 Brd. x 38"	3.11
12	5020388	1	Hose, 1/2"-1 Brd. x 64"	6.89
13	5020495	1	Hose, 3/4"-2 Brd. x 8"	1.29
14	5034101	4	H.H.C.S., 3/8"-16 x 1 3/4"	.50
15	5034159	2	Square U-Bolt, 5/16" x 1 5/16" x 1 7/8"	.65
16	5038698	4	Plastic Tank Hold-Down Leg Clip	2.93
17	5041105	2	Snap Bushing	.30
18	5049017	1	Torque Chain, 24"	1.24
19	5051022	4	Hose Clamp, 1/2"	.62
20	5051024	6	Hose Clamp, 3/4"	.67
21	5051114	2	Hose Clamp, 3/8"	.63
22	5057145	1	Quick Coupler (5/8")	35.25
23	5058188	1	Tank Lid w/Lanyard	10.50
24 25	5082006 5117300	1	"S" Hook 5/16"-18 x 1" Flange Whiz Lock Screw	.55
26	5117301	4	1/4"-20 x 1" Hex Flange Screw	.14
20	5167005	1	Gauge, 0-400 p.s.i. (Dry)	5.99
28	5169249	1	60 Gallon Elliptical Tank (White)	129.00
20	5271706	1	6-Roller Pump Assembly (6500C)	184.00
30	5273959	1	Handgun w/X-26 Tip	24.95
31	5274507	1	Boom Sub-Assembly (7-Nozzle)	91.50
31.1	5006307	2	5/16"-18 Hex Whiz (Flange) Locknut	.25
31.2	5006345	2	3/8"-16 Flange Locknut (Grade F)	.17
31.3	5006092	4	3/8"-16 Hex Locknut	.25
31.4	5034159	1	Square U-Bolt, 5/16" x 1 5/16" x 1 7/8"	.65
31.5	5274458	1	Center Boom Weldment (BK-70)	24.06
31.6	5274459	2	Outer Boom Weldment	14.11
31.7	5046344	2	Square Cap, Black (1 1/4" Square Tube)	.21
31.8	5019228	2	Extension Spring	5.50
31.9	5038620	1	Boom Retainer Bracket	2.60
31.10 31.11	5006054 5016030	4 8	3/8"-16 Hex Nut Flatwasher, 3/8"	.25
31.12	5034563	2	H.H.C.S., 3/8"-16 X 3 3/4"	.84
32	5274555	1	Harness Assembly (BK-70)	71.65
32.1	5275067	2	Standard "ELL" Nozzle Sub-Assembly	6.57
32.1.1	5056023	1	Nylon Elbow Assembly, 11/16" U.N.F. x 1/2" HB	1.35
32.1.2	5116019	1	50 Mesh Nozzle Strainer, Red	1.05
32.1.3	5046052	1	Nylon Nozzle Cap, 11/16" U.N.F. Thread	.38
32.1.4	5273796	1	1 1/4" Square Boom Nozzle Clamp (BC114)	2.66
32.1.5	5018265	1	Flat Spray Tip, Yellow	.78
32.1.6	5138571	1	Nylon Standard Flat Tip, 80 Degree, Yellow	.74
32.2	5275068	5	Standard "Tee" Nozzle Sub-Assembly	6.57
32.2.1	5273796	1	1 1/4" Square Boom Nozzle Clamp (BC114)	2.66
32.2.2	5116019	1	50 Mesh Nozzle Strainer, Red	1.05
32.2.3 32.2.4	5046052 5056027	1	Nylon Nozzle Cap, 11/16" U.N.F. I hread Nylon Tee, 11/16" U.N.F. x 1/2" HB-1/2" HB	1.38
32.2.4	5056027	1	Flat Spray Tip, Yellow	.78
32.3	5086003	1	Nylon Hose Tee, 1/2" HB	.70
32.3	5020307	2	Hose, 1/2"-1 Brd. x 23"	3.49
32.5	5020307	3	Hose, 1/2"-1 Brd. x 19 3/8"	2.17
32.6	5020144	2	Hose, 1/2"-1 Brd. x 10"	1.77
32.7	5051022	14	Hose Clamp, 1/2"	.62
33	5274745	1	Strainer Sub-Assembly	16.92
33.1	5116322	1	3/4" Black Poly Strainer	10.75
3.1.1	5058125	1	Strainer Bowl EPDM Gasket	9.60
33.1.2 33.1.3	5072229 5116323	1	40 Mesh Screen	2.10
3.1.4	5046088	1	Strainer Cap	10.00
33.2	5005022	1	Nylon Male Street Adapter, 3/4" MGHT x 3/4" MNPT	.64
33.3	5143188	1	Nylon Shut-Off Valve	3.10
33.4	5016066	1	Garden Hose Washer	.20
33.5	5149013	1	Nylon Swivel, 3/4" Flat Seat Hose Barb	.46
33.6	5006055	1	Nylon Swivel Nut, 3/4" FGHT	.48
34	5274880	1	Pkg. (2) Handgun Clips & (2) Screws	2.85
35	5275071	1	Valve Sub-Assembly	96.78
35.1	5010028	1	Nylon Elbow, 3/4" MNPT x 3/4" HB	.96
35.2	5011055	1	Nylon Close Nipple, 3/4" MNPT	.56
35.3	5010089	1	Nylon Tee, 3/4" FNPT	4.00
35.4	5143199	1	Pressure Relief Valve, (3/4" NPT)	31.74
35.5	5067016	1	Nylon Fitting, 1/2" MNPT x 3/8" HB	.50
35.6	5010036	1	Nylon Elbow, 3/4" MNPT x 1/2" HB	.96
35.7	5010039	1	Nylon Elbow, 1/2" MNPT x 1/2" HB	.82
35.8	5011129	1	Nylon Reducing Nipple, 3/4" MNPT x 1/2" MNPT	.50
35.9 35.10	5143316 5143197	1	Directo-Valve 1/2" T-800 Brass Ball Valve	46.89

(List Prices are Subject to Change)