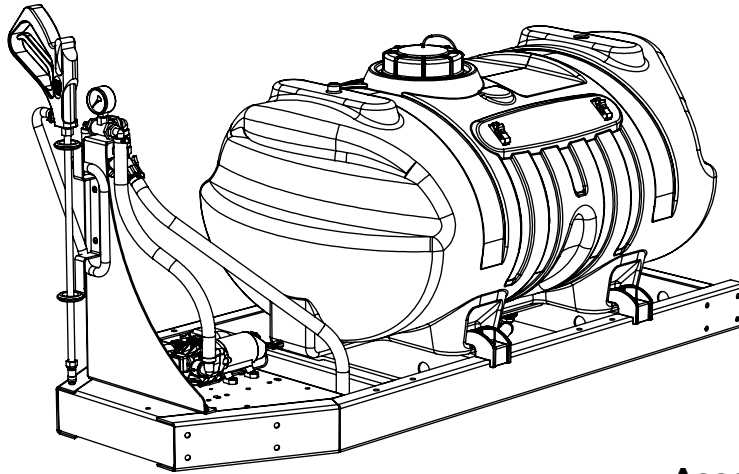


# OWNER'S MANUAL

Model: SK-61-12V (5301304)

(60 Gallon, 12 Volt, Skid Sprayer)



## Assembly

The sprayer is mostly assembled at the factory. The only assembly necessary is to thread the pressure gauge in place, and to hook up the wiring to an existing 12 volt power source. The red wire of the two 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 battery post.

## Information About The Sprayer

In this 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 opening/closing the valve which recirculates solution back into the tank..

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 product. The purpose of this manual is to assist you in operating and maintaining your trailer 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.

## Testing the Sprayer

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.**

Open the suction line valve. (located next to the pump)  
The valve is located at this point to enable the strainer to be taken apart for cleaning.



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## Testing the Sprayer (continued)

There are (2) valves located on the valve & handgun bracket. One is a shut off for a potential boom, and the other is used to bypass solution back into the tank, thus decreasing the overall system's pressure. The bypass valve is the "pressure control" for the entire plumbing system. The more that valve is open the lower the pressure. Fully closed provides maximum pressure to your boom and/or handgun.

You may now start the sprayer. Solution will begin spraying from your boom nozzles when the valve to that line is opened, if you've connected a boom assembly to the unit.

Initially 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. Check the entire system for leaks.

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 pump on the sprayer is factory set to shut off automatically at a maximum of 60 PSI. The handgun or optional boom may be shut off at anytime when the pump system is running. Pressure may be decreased by opening the regulating valve. The more it is opened the lower the pressure will be. The pump will not shut down as long as the regulating valve is open.

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.

It is important to test the sprayer with plain water before attempting actual spraying. This will enable you to check the sprayer for leaks in the plumbing system.

1. Open tank lid and be sure the tank is clean and free of foreign material. Fill the tank about half full with plain water.
2. Open valve in the suction line and allow the water to flow to the pump. The valve is located on the inlet side of the pump, within the filter/valve assembly. The screen inside this assembly can be taken out and flushed clean when the valve is in the "off" position.
3. The tank may be drained by removing the inlet fitting and screen and opening the valve, thus allowing the solution to run out. The solution may be drained into a convenient container.

**WARNING:** Some chemicals will damage the pump valves if allowed to soak untreated for a length of time. Always flush the pump after use. Do not allow chemicals to sit in pump for extended times of idleness. Flushing may be done easily by taking apart the suction line at the strainer and by connecting a garden hose to the fitting. Close the bypass valve and open the on-off valve. Turn on the garden hose and allow water to flow from the nozzles for 30 seconds. Follow chemical manufacturers instructions on disposal of all waste water from the sprayer.

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 a 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 your chemical's label to determine the chemical mixture.

- See your boom's tip chart to determine the pressure to be used. The chart should 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 your 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.

## Technical Specifications

- 60 Gallon, Corrosion-Resistant, Polyethylene Tank
- 12 Volt Diaphragm Pump: 2.1 G.P.M., 60 p.s.i., 8 AMP draw
- Adjustable Pressure
- Pistol Grip Handgun, with 25 Feet of 3/8" Hose
- Suction Line Filter
- Optional Trailer & Boom Kits Available

## 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 FIMCO Tank Neutralizer and Cleaner, 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 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.

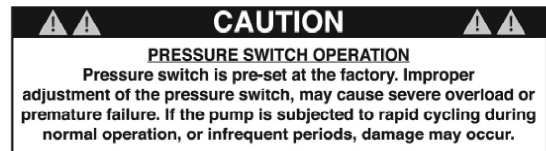
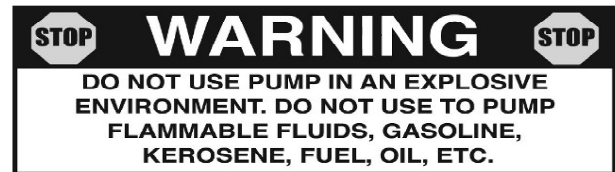
For the boom, (if applicable) remove the tips and screens from the nozzle assemblies. Wash these items out thoroughly. Blow the orifice clean and dry. If the orifice remains clogged, clean it with a fine bristle (NOT WIRE) brush, or with a toothpick. Do not damage the orifice. Water rinse and dry the 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

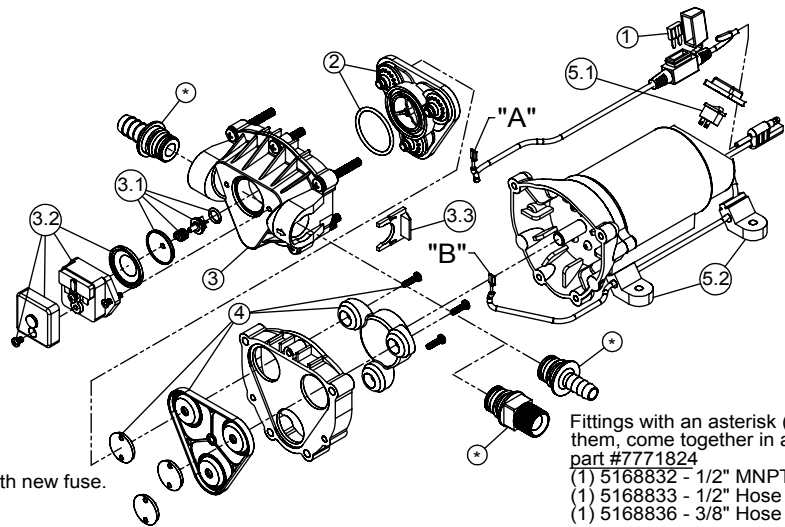
Drain all water out of your sprayer, paying special attention to the pump, handgun, and valve(s). These items are especially prone to damage from chemicals and freezing weather.

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.



#5275703 Pump  
(12 Volt, 8 Amp, 2.1 gpm, 60 psi)

Item No	Part Number	Qty	Description	List Price
1	5157205	1	7.5 Amp Mini Fuse	3.99
2	5168820	1	Check Valve Kit (w/O-Ring)	19.95
3	5168837	1	Upper Housing Assembly	39.95
3.1	5168839	1	Plunger Kit	7.99
3.2	5157202	1	Pressure Switch Assembly	23.95
3.3	20408-000	1	Pkg. (2) Clips (Port Fitting)	3.41
4	5168838	1	Diaphragm/Cam/Bearing Kit	18.99
5.1	5157207	1	Rocker Switch	6.99
5.2	5095202	1	Mounting Feet (Pkg of 4)	4.99



Fittings with an asterisk (\*) by them, come together in a bag, part #7771824  
 (1) 5168832 - 1/2" MNPT  
 (1) 5168833 - 1/2" Hose Barb  
 (1) 5168836 - 3/8" Hose Barb

### Troubleshooting the 2.1 g.p.m. Pump:

Pump will NOT run:

- Check inline fuse on the wires on the pump. If blown, replace with new fuse.
- Make sure BOTH on/off switches are in the 'on' (-) position.
- Make sure you 12 volt source (battery) is fully charged.
- Insure a tight connection at the battery clips.

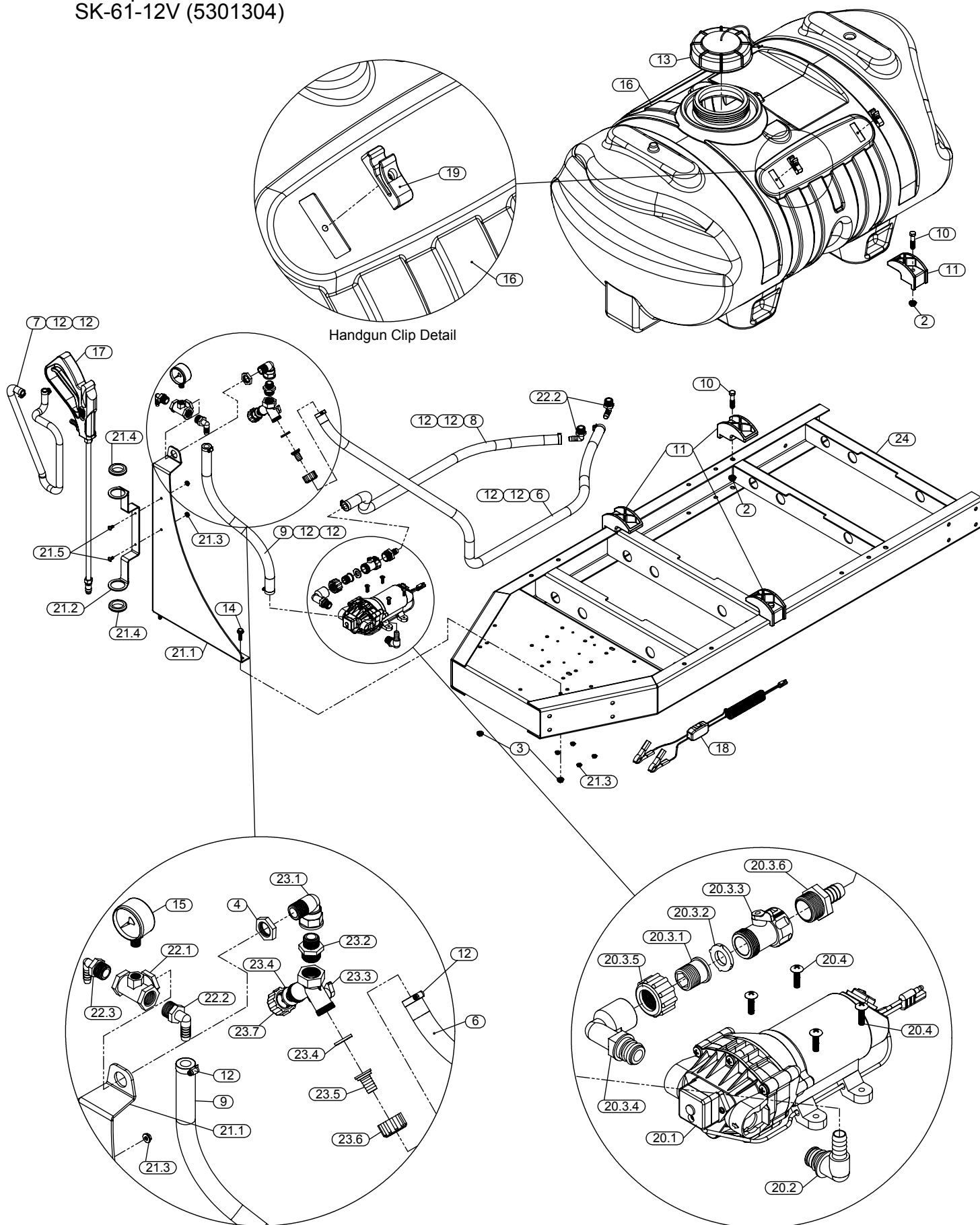
If none of the above will work, try pulling wire terminal "A" off of the spade terminal of the pressure switch, and cross it over and touch terminal "B". (You will need to remove the pressure switch cap before doing this) If your pump runs when you do this, you know you will need to replace your pressure switch.

Another thing you can try is to take apart the switch box on the lead wire assembly (#5274443) with the (2) phillips head screws, and 'hot-wire' it together. Take the (2) wires that are screwed to the rocker switch, off of the switch and twist them together. This will insure you are getting the full 12 volts to the pump. If your pump

Pump runs, but does not prime:

- Check line strainer (screen) at the inlet location, at the tank. You will need to unscrew the knurled nut to access this screen. (see exploded view later in this manual)
- The ON/OFF valve should be closed while performing this, to insure you do not lose any solution. Periodically take the screen at this location out and clean it.
- Make sure the bypass line valve is closed, to allow the pressure to build up in your system.
- Unscrew the head portion of your pump and remove the check valve assembly from inside. You need to make sure the O-Ring comes out with this piece as well. (See the exploded view to help identify these components) These pieces can be cleaned which, in most cases, will help restore some, if not most, of your prime. Soak this check valve in a solution of hot water & a good quality brand of dishsoap. A little bit of 'scrubbing' with perhaps an old toothbrush may be required to actually break up any build-up that may be on the check valve. Rinse off the pieces and replace them back into your pump. Reassemble the pump. Hook it back up and test.

Exploded View:  
SK-61-12V (5301304)



## Parts List: SK-61-12V (5301304)

Item No	Part Number	Qty	Description	List Price
1	5006186	4	#10-24 Hex Whiz (Flange) Locknut	.25
2	5006259	4	3/8"-16 Hex Whiz (Flange) Locknut	.25
3	5006307	2	5/16"-18 Hex Whiz (Flange) Locknut	.25
4	5006351	1	Nylon Nut	
5	5010039	2	Nylon Elbow, 1/2" MNPT x 1/2" HB	1.06
6	5020122	1	Hose, 1/2"-1 Brd. x 48"	5.88
7	5020135	1	Hose, 3/8"-1 Brd. x 25 Ft.	17.25
8	5020228	1	Hose 1/2"-1 Brd. x 36"	4.20
9	5020416	1	Hose, 1/2"-1 Brd. x 19 3/8"	2.71
10	5034101	4	H.H.C.S., 3/8"-16 x 1 3/4"	.50
11	5038698	4	Plastic Tank Hold-Down Leg Clip	2.93
12	5051114	8	Hose Clamp (3/8"-1/2")	.63
13	5058188	1	Tank Lid w/Lanyard	10.50
14	5117300	2	5/16"-18 x 1" Flange Whiz Lock Screw	.25
15	5167007	1	Gauge, 0-100 p.s.i.	6.25
16	5169249	1	60 Gallon Elliptical Tank (White)	139.00
17	5273959	1	Deluxe Pistol-Grip Handgun w/X-26 Tip	24.95
18	5274443	1	Lead Wire Assembly (w/Switch), 96"	9.99
19	5274880	1	Pkg. (2) Handgun Clips & (2) Screws	2.85
20	5275146	1	Pump Sub-Assembly	135.00
20.1	5275703	1	Gold Series 2.1 g.p.m. Pump	112.00
20.2	5010426	1	90 Deg. Port Elbow x 1/2" HB	2.25
20.3	5275570	1	Filter/Valve Sub-Assembly	11.38
20.3.1	5005241	1	Nylon Swivel Adapter Spud, 1/2" NPT	1.25
20.3.2	5116242	1	Strainer, 1" Filter Washer	.31
20.3.3	5143188	1	Nylon Shut-Off Valve	3.19
20.3.4	5010430	1	Port Kit Elbow, 1/2" FNPT	2.79
20.3.5	5006209	1	Poly Knurled Swivel Nut, 3/4" FGHT	.71
20.3.6	5067121	1	Poly Hose Fitting, 3/4" MGHT 1/2" HB	.81
20.4	5117176	4	#10-24 x 3/4" Phillips Truss Head Machine Screw	.25
21	5275405	1	Valve Mount Sub-Assembly	36.33
21.1	5038704	1	Valve Mount Bracket	21.63
21.2	5038638	1	Handgun Holder Bracket	11.83
21.3	5006186	2	#10-24 Hex Whiz (Flange) Locknut	.25
21.4	5075014	2	Rubber Grommet (Black)	2.79
21.5	5117234	2	#10-24 x 1/2" Phillips Truss Head Machine Screw	.25
22	5275501	1	Top Valve Sub-Assembly	12.44
22.1	5010193	1	Nylon Tee, 1/2" FNPT w/1/4" Port (Gauge)	12.08
22.2	5010039	1	Nylon Elbow, 1/2" MNPT x 1/2" HB	1.06
22.3	5010038	1	Nylon Elbow, 1/2" MNPT x 3/8" HB	1.05
23	5275503	1	Bottom Valve Sub-Assembly	10.90
23.1	5010148	1	Nylon Street Elbow, 1/2" MNPT x 1/2" FNPT	3.12
23.2	5005021	1	Nylon Adapter, 1/2" MNPT x 3/4" MGHT	.79
23.3	5143204	1	Dual-Shut-Off Y-Valve, 3/4" GHT	4.38
23.4	5016066	2	Garden Hose Washer	.20
23.5	5149011	1	Nylon Swivel, 1/2" Flat Seat Hose Barb	.58
23.6	5006055	1	Nylon Swivel Nut, 3/4" FGHT	.64
23.7	5046132	1	Nylon Cap (3/4" MGHT)	.64
24	5275758	1	60 Gallon Skid Weldment (Red)	218.26

(List Prices are Subject to Change)

### Approximate Unit Dimensions

