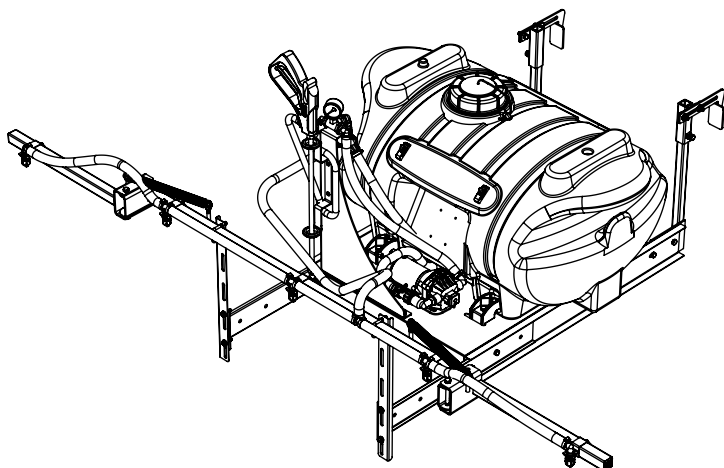


Owner's Manual

Model: UTL-40-12V (5301343)

(40 Gallon, 12 Volt, Utility Sprayer w/5-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 product. The purpose of this manual is to assist you in operating and maintaining your 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.

Technical Specifications

- 40 Gallon, Corrosion Resistant, Polyethylene Tank
- 5 Nozzle Boom Assembly, 100" Spray Coverage
- 12 Volt / 45 p.s.i. / 3.8 g.p.m. / 11 Amp Diaphragm Pump
- Deluxe Pistol-Grip Handgun w/25 Feet of 3/8" Hose
- Bypass (Recirculation) Line

Assembly

Most of the sprayer has been assembled at the factory.

Join the center boom member to the boom mounts with the bolts and nuts provided. Make sure the outer boom members fold 'backwards'. See exploded view later in this manual for reference.

Attach the boom feeder hose to the boom. Secure in place with a hose clamp provided.

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.

Before starting, open the suction line valve. (located near the pump) Check for leaks.

Open the valve for the boom. Make sure your pattern is sufficient. You may decrease pressure in the system by 'bypassing' solution back into the tank. This is achieved by opening the valve opposite of the boom valve. Regulating pressure is done in this manner.

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.



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. 877 [5004614 (02/12)] Printed in the U.S.A.

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 100" wide swath. The proper nozzle height is 17" to 20" above the object being sprayed.

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

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. You should now be ready to spray.

- 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 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.

Rate Chart for 8002 Spray Tip											
Tip No.	Spray Height	Pressure (psi)	Capacity (GPM)	Gallons Per Acre - Based on Water							
				1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	7.5 MPH	10 MPH	
2	18"	20	.14	41.8	20.9	14.0	10.5	8.4	5.6	4.2	
		30	.17	51.2	25.6	17.2	12.9	10.3	6.9	5.1	
		40	.20	59.2	29.6	19.8	14.9	11.9	7.9	5.9	
		50	.23	66.4	33.2	22.2	16.6	13.3	8.8	6.6	
Tip No.	Spray Height	Pressure (psi)	Capacity (GPM)	Gallons Per 1000 Sq. Ft. - Based on Water							
				1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	7.5 MPH	10 MPH	
2	18"	20	.14	.96	.48	.32	.24	.19	.13	.10	
		30	.17	1.18	.59	.39	.30	.24	.16	.12	
		40	.20	1.36	.68	.45	.34	.27	.18	.14	
		50	.23	1.52	.76	.51	.38	.31	.20	.15	
Tip No.	Spray Height	Pressure (psi)	Capacity (GPM)	Gallons Per 100 Sq. Ft. - Based on Water							
				1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	7.5 MPH	10 MPH	
2	18"	20	.14	.096	.048	.032	.024	.019	.013	.010	
		30	.17	.118	.059	.039	.030	.024	.016	.012	
		40	.20	.136	.068	.045	.034	.027	.018	.014	
		50	.23	.152	.076	.051	.038	.031	.020	.015	

Speed Chart			
Speed in M.P.H. (Miles per Hour)	Time Required in seconds to travel a distance of:		
	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

Maintenance During/After Spraying

Periodically close the suction line valve. Check the line strainer and clean the screen.

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

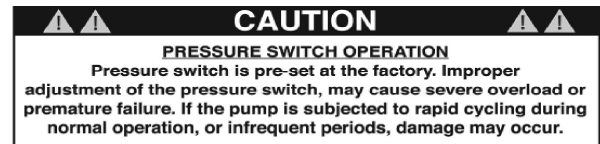
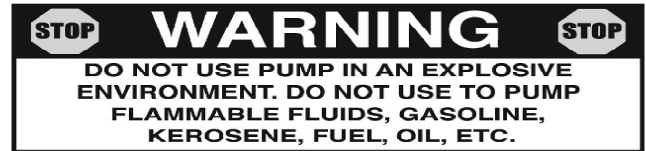
After use, fill the sprayer tank part way with water. Start the sprayer, and allow the clear water to be pumped through the plumbing system and out through the spray nozzles. Refill the tank about half full with plain water and use FIMCO Tank Neutralizer and Cleaner, and repeat cleaning instructions 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.

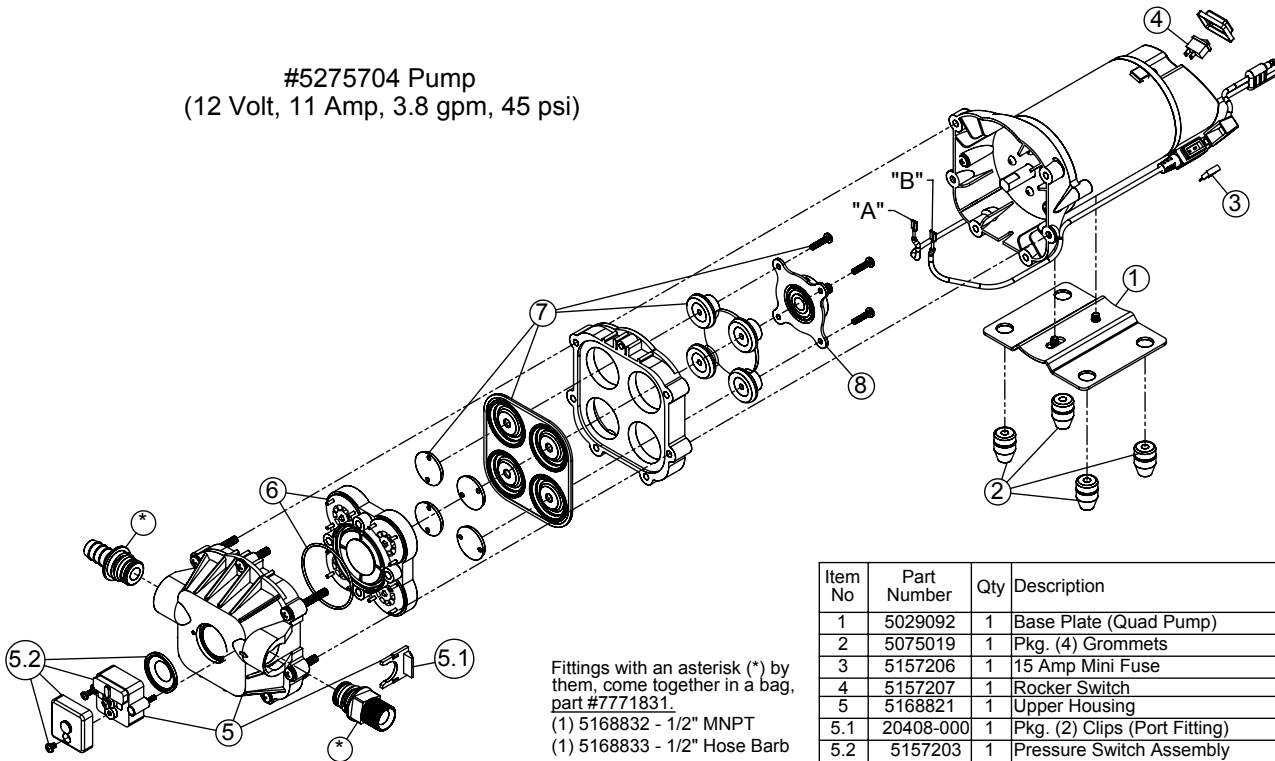
Winter Storage

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.



#5275704 Pump
(12 Volt, 11 Amp, 3.8 gpm, 45 psi)



Fittings with an asterisk (*) by them, come together in a bag, part #7771831.
(1) 5168832 - 1/2" MNPT
(1) 5168833 - 1/2" Hose Barb

Item No	Part Number	Qty	Description	List Price
1	5029092	1	Base Plate (Quad Pump)	9.25
2	5075019	1	Pkg. (4) Grommets	2.99
3	5157206	1	15 Amp Mini Fuse	3.99
4	5157207	1	Rocker Switch	6.99
5	5168821	1	Upper Housing	39.95
5.1	20408-000	1	Pkg. (2) Clips (Port Fitting)	3.41
5.2	5157203	1	Pressure Switch Assembly	23.95
6	5168824	1	Check Valve Kit w/O-Ring & Ferrules	24.99
7	5168826	1	Diaphragm Kit w/Pistons & (4) Screws	19.96
8	5168828	1	Cam/Bearing Kit, w/Set Screw	12.95

Troubleshooting a 3.8 g.p.m. Pump:

Pump will NOT run:

- Check inline fuse on the wires on the pump. If blown, replace with new fuse. (15 Amp mini-blade fuse #5157206)
- 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.

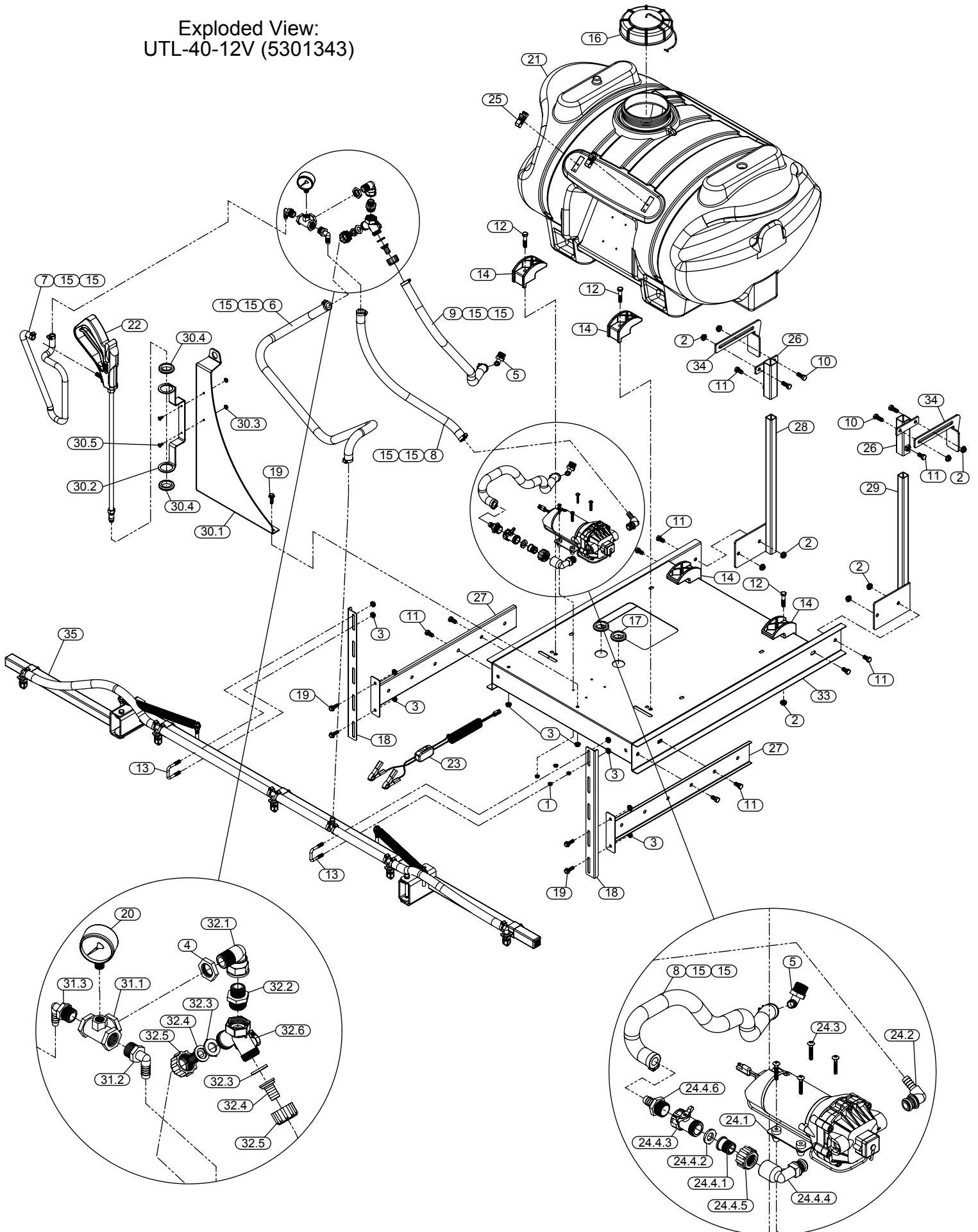
If none of the above will work, try pulling wire terminal "A" off of the spade terminal of the pressure switch, and cross it over and touch terminal "B". (You will need to remove the pressure switch cap before doing this) If your pump runs when you do this, you know you will need to replace your pressure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

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, soapy water. A good name-brand dishsoap works well for this. 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:
UTL-40-12V (5301343)

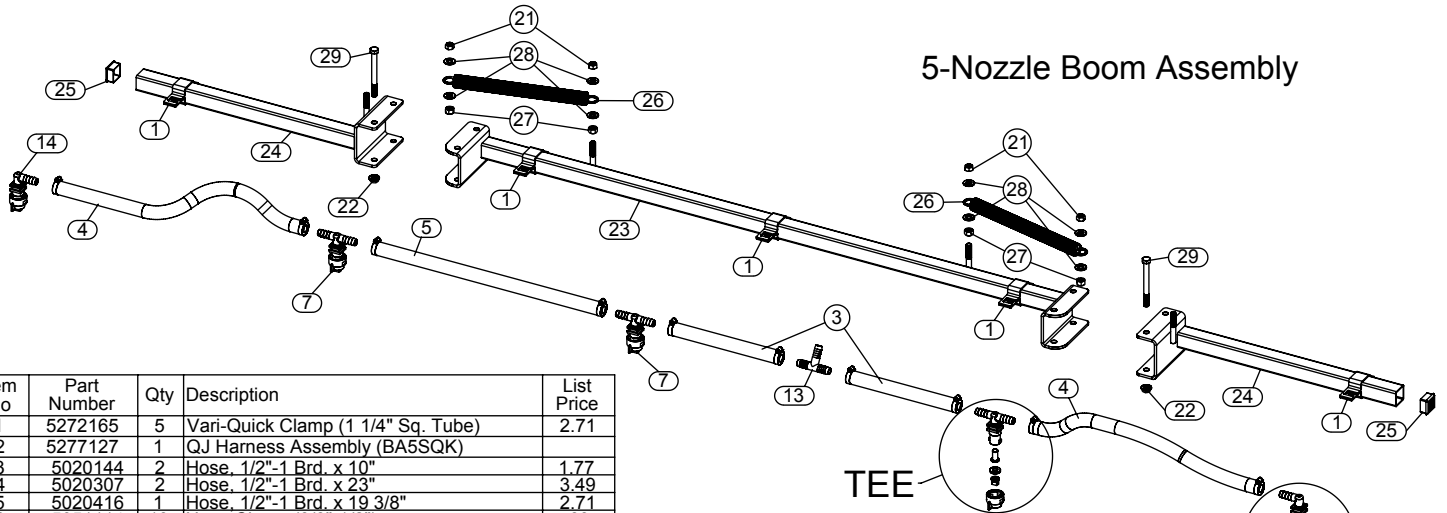


Parts List: UTL-40-12V (5301343)

Item No	Part Number	Qty	Description	List Price
1	5006186	4	#10-24 Hex Whiz (Flange) Locknut	.25
2	5006259	16	3/8"-16 Hex Whiz (Flange) Locknut	.25
3	5006307	10	5/16"-18 Hex Whiz (Flange) Locknut	.25
4	5006351	1	1/2" Poly Nut	.59
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	5020307	2	Hose, 1/2"-1 Brd. x 23"	3.49
9	5020462	1	Hose, 1/2"-1 Brd. x 31"	2.77
10	5034079	4	H.H.C.S. 3/8"-16nc x 1" Long	.25
11	5034099	10	H.H.C.S., 3/8"-16 x 3/4"	.50
12	5034101	4	H.H.C.S., 3/8"-16 x 1 3/4"	.50
13	5034159	2	Square U-Bolt, 5/16" x 1 5/16" x 1 7/8"	.99
14	5038698	4	Plastic Tank Hold-Down Leg Clip	2.93
15	5051114	10	Hose Clamp (3/8"-1/2")	.63
16	5058188	1	Tank Lid w/Lanyard	10.50
17	5075014	2	Rubber Grommet (Black)	2.79
18	5095176	2	Boom Mount, 40/60 Gallon Utility Sprayer	4.09
19	5117300	6	5/16"-18 x 1" Flange Whiz Lock Screw	.25
20	5167007	1	Pressure Gauge, 0-100 p.s.i.	6.75
21	5169245	1	40 Gallon Elliptical Tank (White)	105.00
22	5273959	1	Deluxe Pistol-Grip Handgun w/X-26 Tip	30.00
23	5274443	1	Lead Wire Assembly (w/Switch), 96"	9.99
24	5274808	1	Pump Sub-Assembly	175.00
24.1	5275704	1	Gold Series 3.8 g.p.m. Pump	159.00
24.2	5010426	1	90 Deg. Port Elbow x 1/2" HB	2.25
24.3	5117166	4	#10-24 x 1 1/4" Phillips Truss Head Screw	.25
24.4	5275570	1	Filter/Valve Sub-Assembly	11.38
24.4.1	5005241	1	Nylon Swivel Adapter Spud, 1/2" NPT	1.25
24.4.2	5116242	1	Strainer, 1" Filter Washer	.31
24.4.3	5143188	1	Nylon Shut-Off Valve (3/4" GHT)	3.29
24.4.4	5010430	1	Port Kit Elbow, 1/2" FNPT	2.79

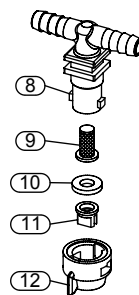
Item No	Part Number	Qty	Description	List Price
24.4.5	5006209	1	Poly Knurled Swivel Nut, 3/4" FGHT	.70
24.4.6	5067121	1	Poly Hose Fitting, 3/4" MGHT 1/2" HB	.55
25	5274880	1	Pkg. (2) Handgun Clips & (2) Screws	2.85
26	5274994	2	Slide Tube Weldment	8.99
27	5274997	2	Boom Mount Bracket Weldment	12.50
28	5275000	1	Upright Tube Weldment (L.H.)	12.01
29	5275001	1	Upright Tube Weldment (R.H.)	12.01
30	5275405	1	Valve Mount Sub-Assembly	36.33
30.1	5038704	1	Valve Mount Bracket	21.63
30.2	5038638	1	Handgun Holder Bracket	11.83
30.3	5006186	2	#10-24 Hex Whiz (Flange) Locknut	.25
30.4	5075014	2	Rubber Grommet (Black)	2.79
30.5	5117234	2	#10-24 x 1/2" Phillips Truss Head Machine Screw	.25
31	5275501	1	Top Valve Sub-Assembly	12.44
31.1	5010193	1	Nylon Tee, 1/2" FNPT w/1/4" Port (Gauge)	9.44
31.2	5010039	1	Nylon Elbow, 1/2" MNPT x 1/2" HB	1.06
31.3	5010038	1	Nylon Elbow, 1/2" MNPT x 3/8" HB	1.05
32	5275502	1	Bottom Valve Sub-Assembly	11.28
32.1	5010148	1	Nylon Street Elbow, 1/2" MNPT x 1/2" FNPT	3.12
32.2	5005021	1	Nylon Adapter, 1/2" MNPT x 3/4" MGHT	.79
32.3	5016066	2	Garden Hose Washer	.20
32.4	5149011	2	Nylon Swivel, 1/2" Flat Seat Hose Barb	.58
32.5	5006055	2	Nylon Swivel Nut, 3/4" FGHT	.64
32.6	5143204	1	Dual Hose Shut-Off "Y" Valve	4.38
33	5275756	1	40-60 Gallon Utility Frame Weldment (Red)	95.00
34	5277486	2	Clamp Arm	
35	BK-50	1	5-Nozzle Boom Assembly	147.50

(List Prices are Subject to Change)

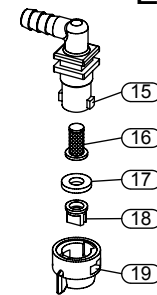


5-Nozzle Boom Assembly

Item No	Part Number	Qty	Description	List Price
1	5272165	5	Vari-Quick Clamp (1 1/4" Sq. Tube)	2.71
2	5277127	1	QJ Harness Assembly (BA5SQK)	
3	5020144	2	Hose, 1/2"-1 Brd. x 10"	1.77
4	5020307	2	Hose, 1/2"-1 Brd. x 23"	3.49
5	5020416	1	Hose, 1/2"-1 Brd. x 19 3/8"	2.71
6	5051114	10	Hose Clamp (3/8"-1/2")	.63
7	5277028	3	QJ TEE Nozzle Assembly	
8	5056067	1	Double Hose Shank (1/2" Hose)	3.84
9	5116019	1	Nozzle Strainer, Red (50 Mesh)	1.21
10	5016157	1	Seat Washer (QJ Caps)	.47
11	5018265	1	80 Degree Flat Spray Tip, Yellow	.89
12	5046219	1	Quick TeeJet Cap ONLY (Yellow)	.77
13	5086003	1	Nylon Hose Tee, 1/2" HB	1.06
14	5277026	2	QJ ELL Nozzle Assembly	
15	5056065	1	Single Hose Shank (1/2" Hose)	3.84
16	5116019	1	Nozzle Strainer, Red (50 Mesh)	1.21
17	5016157	1	Seat Washer (QJ Caps)	.47
18	5018265	1	80 Degree Flat Spray Tip, Yellow	.89
19	5046219	1	Quick TeeJet Cap ONLY (Yellow)	.77
20	5277482	1	Boom Sub-Assembly (5-Nozzle)	
21	5006092	4	3/8"-16 Hex Locknut	.25
22	5006345	2	3/8"-16 Flange Locknut (Grade F)	.25
23	5274458	1	Center Boom Weldment (BK-70)	40.55
24	5277475	2	Outer Boom Weldment (5 Nozzle)	
25	5046344	2	Square Cap, Black (1 1/4" Square Tube)	.36
26	5019228	2	Extension Spring	5.50
27	5006054	4	3/8"-16 Hex Nut	.25
28	5016030	8	Flatwasher - 3/8"	.25
29	5034563	2	H.H.C.S. 3/8"-16nc x 3 3/4" long	.84



TEE
Typ. 3xs



ELL
Typ. 2xs