



SPW WPC40 TRAILER SPRAYER

Operator's Manual



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TABLE OF CONTENTS

1.0 INTRODUCTION	1
2.0 SAFETY INFORMATION	2
2.1 Follow Safety Instructions	3
2.2 Operating the Sprayer Safety	3
2.3 Handling Chemical Products Safely	4
2.4 Local Poison Information Center	4
2.5 PRELIMINARY START-UP	5
3.0 HOOKING UP THE SPRAYER	6
4.0 OPERATING THE SPRAYER	7
5.0 NOZZLE SELECTION	8-10
5.1 Boom Nozzle Selection.....	8
6.0 CALIBRATION	11
6.1 Calibration (Ounce Method).....	11
7.0 MAINTENANCE	12
7.1 Cleaning the Sprayer	12
7.2 Pump Maintenance.....	13
8.0 STORAGE	14
8.1 Preparation After Storage	14
9.0 TROUBLESHOOTING	15
10.0 SHIPPING BUNDLE	15-16
11.0 ASSEMBLY INSTRUCTIONS	17-18
12.0 8000 SERIES PARTS KIT LIST	19
13.0 MAIN FRAME ASSEMBLY	20
14.0 TANK ASSEMBLY	20
15.0 V2075 VALVE ASSEMBLY	21
16.0 BOOM ASSEMBLY	21
17.0 PARTS LISTING	22
18.0 WARRANTY POLICY AND CONDITIONS	23-24

1.0 INTRODUCTION

We congratulate you for choosing a Westward sprayer.

The reliability and efficiency of this product depends on your care. The first step is to carefully read and pay attention to this operator's manual. It contains essential information for the efficient use and long life of this quality product.

This manual covers the Westward Estate Sprayers equipped with the Shurflo electric diaphragm pump and manual control. The Shurflo 12 Volt pump is self-priming and able to run dry for short periods without damage. The manual control features: on/off control for boom and handgun, pressure adjustment, pump bypass agitation and a 2-1/2" pressure gauge. These booms feature ISO flat fan nozzles with 20" spacing.



2.0 SAFETY INFORMATION

**ALWAYS READ THE OPERATOR'S MANUAL
BEFORE USING THIS EQUIPMENT**

DO NOT REMOVE ANY SAFETY DEVICES OR SHIELDS

**NEVER SERVICE, CLEAN OR REPAIR A MACHINE
WHILE IT IS OPERATING**

ALWAYS WATCH FOR THIS SYMBOL



**TO POINT OUT IMPORTANT SAFETY PRECAUTIONS
IT MEANS
ATTENTION!
BECOME ALERT!
YOUR SAFETY IS INVOLVED!**

RECOGNIZE SAFETY INFORMATION



THIS IS THE SAFETY ALERT SYMBOL.

When you see this symbol on your machine or in this manual, be alert to the potential for personal injury. Follow recommended precautions and safe operating practices.

2.1 Follow Safety Instructions

1. Carefully read all the safety messages in this manual and the safety labels fitted to the machine. Keep safety labels in good condition. Replace missing or damaged safety labels. Make sure that new equipment components include any current safety labels. Replacement safety labels are available from your authorized Westward dealer.
2. Learn how to operate the sprayer and how to use the controls properly. Do not let anyone operate the sprayer without proper instructions.
3. Keep your sprayer in proper working condition. Unauthorized modifications or use may impair the function and/or safety and affect the machine's life.
4. If you do not understand any part of this manual and need assistance, please contact your authorized Westward dealer.

2.2 Operating The Sprayer Safely

1. Read the complete manual carefully and become familiar with the operation of the equipment before initial operation in each spraying season. Failure to do so may result in possible over or under application of spray solution and may lead to personal injury.
2. Always keep children away from your estate sprayer.
3. Never pull your estate sprayer behind a truck on public roads. Load the sprayer onto a trailer or into the back of a truck for transporting.
4. Understand service procedures before undertaking any maintenance. Never lubricate, service, or adjust the machine while it's moving. Securely support any components before working on them.
5. Keep all parts in good condition and properly installed. Repair damaged parts immediately. Replace worn or broken parts.

2.3 Handling Chemical Products Safely

1. Direct exposure to hazardous chemicals can cause serious injury. These chemicals can include lubricants, coolants, paints, adhesives and agricultural chemicals. Material Safety Data Sheets (M.S.D.S.) are available for all hazardous chemicals which inform the user of specific details including, physical and health hazards, safety procedures, and emergency response techniques.
2. Protective clothing such as rubber gloves, goggles, coveralls and respirator must be worn while handling chemicals. All protective clothing should be kept in excellent condition and cleaned regularly or discarded.
3. If chemicals come in contact with any exposed skin areas, wash immediately with clean water and detergent. Never place nozzle tips or any other components that have been exposed to chemicals to lips to blow out obstructions. Use a soft brush to clean spray nozzles.
4. Dedicate an area to fill, flush, calibrate and decontaminate sprayer where chemicals will not drift or run off to contaminate people, animals, vegetation, water supply, etc. Locate this area where there is no chance of children coming in contact with this residue.
5. Decontaminate equipment used in mixing, transferring and applying chemicals after use. Follow the instructions on the chemical label for the correct procedure required. Wash spray residue from outside of the sprayer to prevent corrosion.
6. Extreme care should be taken in measuring spray products. Powders should be used in suitable sized packages or weighed accurately. Liquids should be poured into a suitable graduated container. Keep chemical containers low when pouring. Wear a filtered respirator and let the wind blow away from you to avoid dust and/or splashes contacting the skin or hair.
7. Store chemicals in a separate, plainly marked locked building. Keep the chemical in its original container with the label intact.
8. Dispose all empty containers after rinsing in accordance with local regulations & by-laws. Dispose of all unused chemicals and left over fertilizer in an approved manner
9. Keep a first aid kit and fire extinguisher available at all times when handling chemicals.

2.4 LOCAL POISON INFORMATION CENTER

PHONE NUMBER _____ - _____

Find the phone number for the poison control center in your phone book and write it in the space above.

Keep a list, in the space provided below, of all the chemicals that you have in use.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

2.5 PRELIMINARY START-UP

OPERATION

NOTE: Please read and complete operator's manual before turning on sprayer pump.

PRE-OPERATION CHECK LIST

- Tank and system should be flushed with water prior to use. This will also help remove any debris that may have gathered. Flushing the system will also reveal any possible leaks.
If leaks occur, tighten all appropriate fittings.
- Make sure all hoses are properly installed.
- Close all valves (to close, turn each of the coloured knobs clockwise).
- Open regulating valve (V900) by turning the large black knob counter clockwise until it becomes loose.
- Check to see if the wand trigger is in the OFF position.
- Make sure pump switch is in the off position.
- Connect pump wires to the tow vehicle (RED to + positive & BLACK to - negative).
- Add water until the tank is half full.
- Turn the switch to the on position and allow the pump to prime.
- Once the pump is primed, familiarize yourself with the valves, wand, nozzles, diaphragms, regulating valve, etc.

VALVE OPERATION

- The valve control gives complete control of the spray boom and trigger wand.
- To open a valve, turn it counter clockwise.
- To close a valve, turn it clockwise.
- Wand is controlled with the red knob.

Regulating Valve (Relief valve) (V900)

To increase pressure, turn large knob clockwise. To decrease pressure, turn counter clockwise. Once desired pressure is reached, use locknut to hold in place.

3.0 HOOKING UP THE SPRAYER

TOW VEHICLE REQUIREMENTS:

Lawn & Garden tractor or ATV with a drawbar with sufficient horse-power and braking ability to safely control the sprayer.

1. Use Fig. 1 as a guide to connect the pump to the wiring harness.
2. Ensure when attaching the 2 pin connector to battery clips or convenience plug, wires are black to black and red to red.
3. With the switch in the "off" position, connect the battery clip on the red wire (+) to the positive terminal of the 12 Volt battery and connect the battery clip on the black wire (-) to the negative terminal of the battery. Ensure that there is enough slack in the wiring between tow vehicle and sprayer to prevent damage to wires when turning.

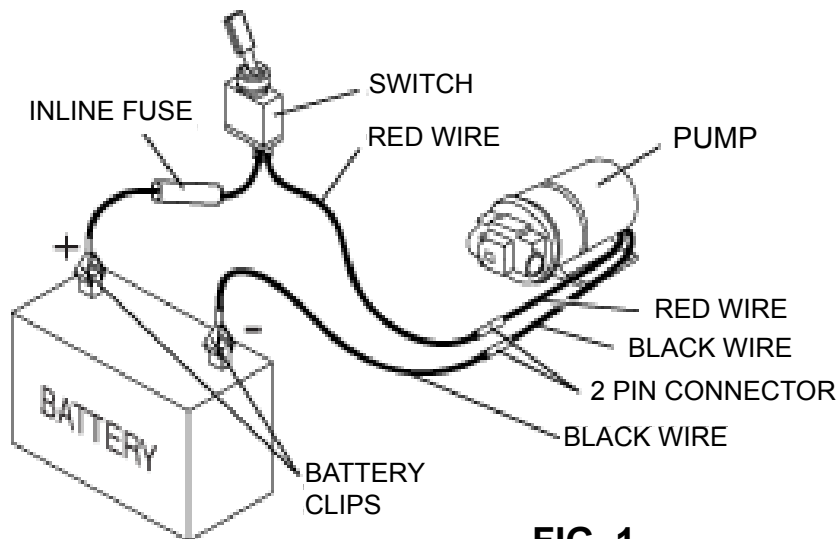


FIG. 1

4.0 OPERATING THE SPRAYER



IMPORTANT:

Always fill your estate sprayer with clean water only. Never let the filling hose enter the tank. Chemicals may contaminate the water supply lines, plant and/or well.

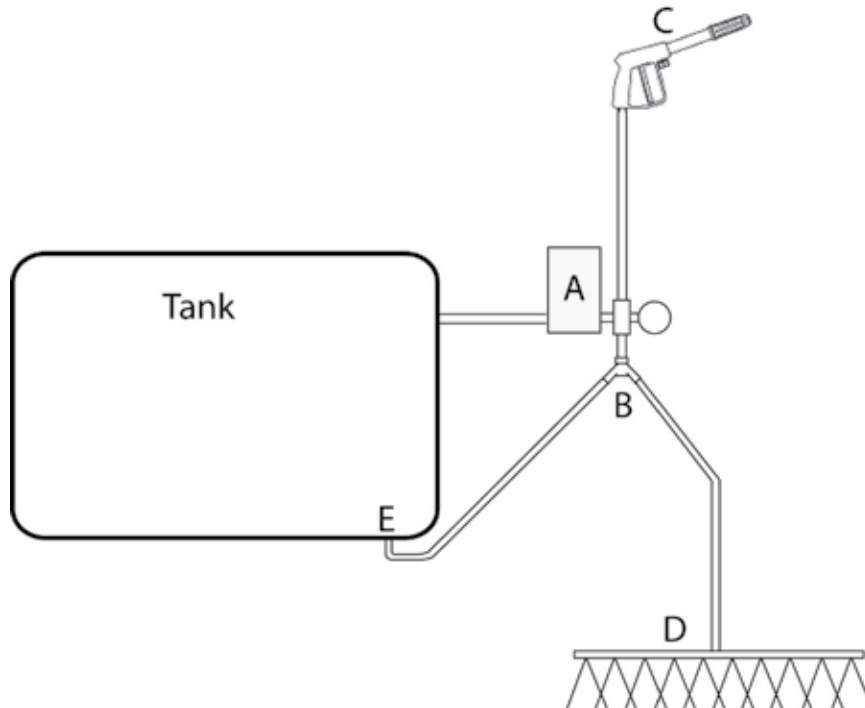


Figure 2

- A. 12 Volt Pump
- B. Distribution Valves
- C. Spraygun
- D. Boom
- E. Agitation

Plumbing Overview

When the 12 Volt Shurflo pump A (Fig 2) is on, fluid flows from the tank to the distribution valves B (Fig 2). Fluid that is not required for use by the boom or spraygun is returned to the tank through the bypass line and agitation nozzle E (Fig 2). When the boom valve is open, fluid flows to the boom D (Fig 2). When the spraygun valve is open and the red handle on the spraygun is depressed, fluid flows to the spraygun C (Fig 2).

5.0 NOZZLE SELECTION

5.1 Boom Nozzle Selection

Wilger ER80-02 Yellow tip & cap Combo-Jet nozzles are standard on the 100" (WPFA100), 140" (WPFA140), & 60" (WPFA60) boom. If you find by using the following directions and nozzle chart, that these nozzles are not the correct size for your spraying needs, other nozzles are available from your Westward Dealer.

TO USE THE FOLLOWING CHART:

1. You must know your desired forward speed (example 3 MPH).
2. You must know the pressure (PSI) you want to spray at (example 30 psi).
3. You must know your desired application rate (example 14 gallons per acre).

KNOWING THESE THREE FACTS, PROCEED AS FOLLOWS:

1. Locate the correct speed column on the chart below (example 3 M.P.H.).
2. Find the number in that column which is closest to your desired application rate and is also opposite the desired pressure (example 14.2 GPA is closest to 14 GPA and opposite 30 psi).
3. For this example, you would select the 02 YELLOW nozzle.



NOTE:

Using this chart will bring you very close to your desired application rate. However, for final pressure setting, you must calibrate your sprayer (Section 6.0).

WILGER COMBO-JET 800 CAPS & TIPS

TIP CAP NO.	FLOW RATE (GPM)	PSI	GPA AT MPH					
			SPRAYER SPEED - MILES/HOUR					
			3	4	5	6	7	8
01 ORANGE	0.06	20	5.8	4.4	3.6	2.9	2.5	2.2
	0.07	30	7.2	5.4	4.2	3.6	3.1	2.7
	0.08	40	8.2	6.2	5.0	4.1	3.5	3.1
	0.09	50	9.2	7.0	5.6	4.6	4.0	3.5
	0.10	60	10.2	7.6	6.0	5.1	4.3	3.8
	0.11	70	11.0	8.2	6.6	5.5	4.7	4.1
	0.12	80	11.6	8.8	7.0	5.8	5.0	4.4
015 GREEN	0.09	20	8.8	6.6	5.2	4.4	3.8	3.3
	0.11	30	10.8	8.0	6.4	5.4	4.6	4.0
	0.13	40	12.4	9.2	7.4	6.2	5.3	4.6
	0.14	50	13.8	10.4	8.4	6.9	5.9	5.2
	0.15	60	15.2	11.4	9.0	7.6	6.5	5.7
	0.17	70	16.4	12.2	9.8	8.2	7.0	6.1
	0.18	80	17.6	13.2	10.6	8.8	7.5	6.6
02 YELLOW	0.12	20	11.6	8.8	7.0	5.8	5.0	4.4
	0.14	30	14.2	10.8	8.6	7.1	6.1	5.4
	0.17	40	16.6	12.4	10.0	8.3	7.1	6.2
	0.19	50	18.4	13.8	11.0	9.2	7.9	6.9
	0.20	60	20.2	15.2	12.2	10.1	8.7	7.6
	0.22	70	21.8	16.4	13.0	10.9	9.4	8.2
	0.24	80	23.4	17.6	14.0	11.7	10.0	8.8
025 PURPLE	0.15	20	14.6	11.0	8.8	7.3	6.3	5.5
	0.18	30	17.8	13.4	10.8	8.9	7.7	6.7
	0.21	40	20.6	15.4	12.4	10.3	8.8	7.7
	0.23	50	23.0	11.2	13.8	11.5	9.9	8.6
	0.26	60	25.2	19.0	15.2	12.6	10.8	9.5
	0.28	70	27.2	20.4	16.4	13.6	11.7	10.2
	0.29	80	29.2	21.8	17.6	14.6	12.5	10.9
03 BLUE	0.18	20	17.6	13.2	10.6	8.8	7.5	6.6
	0.22	30	21.4	16.0	12.8	10.7	9.2	8.0
	0.25	40	24.8	18.6	14.8	12.4	10.6	9.3
	0.28	50	27.6	20.8	16.6	13.8	11.9	10.4
	0.31	60	30.4	22.8	18.2	15.2	13.0	11.4
	0.33	70	32.8	24.6	19.6	16.4	14.0	12.3
	0.35	80	35.0	26.2	21.0	17.5	15.0	13.1

TEEJET FLOODJET TIPS

NYLON 	ORIFICE SIZE	PSI	CAPACITY 1-NOZZLE IN GPM	GPA Smaller Capacity FloodJet Nozzles Typical spacing is 40 inches.				
				GPA 	4 mph	4.5 mph	5 mph	5.5 mph
SPP 72642	1	10	0.10	3.7	3.3	3	2.7	2.5
		20	0.14	5.2	4.6	4.2	3.8	3.5
		30	0.17	6.3	5.6	5	4.6	4.2
		40	0.20	7.4	6.6	5.9	5.4	5
SPP 72643	1.5	10	0.15	5.6	5	4.5	4.1	3.7
		20	0.21	7.8	5.9	6.2	5.7	5.2
		30	0.26	9.7	8.6	7.7	7	6.4
		40	0.30	11.1	9.9	8.9	8.1	7.4
SPP 72645	2	10	0.20	7.4	6.6	5.9	5.4	5
		20	0.28	10.4	9.2	8.3	7.8	5.9
		30	0.35	13	11.6	10.4	9.5	8.7
		40	0.40	14.9	13.2	11.9	10.8	9.9
SPP 72647	2.5	10	0.25	9.3	8.3	7.4	6.8	6.2
		20	0.35	13	11.6	10.4	9.5	8.7
		30	0.43	16	14.2	12.8	11.6	10.6
		40	0.50	18.6	16.5	14.9	13.5	12.4
SPP 72648	3	10	0.30	11.1	9.9	8.9	8.1	7.4
		20	0.42	15.6	13.9	12.5	11.3	10.4
		30	0.52	19.3	17.2	15.4	14	12.9
		40	0.60	22	19.8	17.8	16.2	14.9
SPP 72649	4	10	0.40	14.9	13.2	11.9	10.8	9.9
		20	0.57	21	18.8	16.9	15.4	14.1
		30	0.69	26	23	20	18.6	17.1
		40	0.80	30	26	24	22	19.8

TO USE THE CHART CORRECTLY:

1. Locate the correct speed column on the chart below (example 4 M.P.H.).
2. Find the number in that column which is closest to your desired application rate and is also opposite the desired pressure (example 19.3 GPA is closest to 19 GPA and opposite 30 psi).
3. For this example, you would select the SPP 72648 nozzle.



6.0 CALIBRATION

WARNING:

ALWAYS CALIBRATE YOUR SPRAYER WITH CLEAN WATER ONLY!
WEAR PROTECTIVE CLOTHING SUCH AS RUBBER GLOVES,
GOGGLES AND COVERALLS

Why must you calibrate a sprayer?

A nozzle selection chart will tell you what application rate you should expect. Variations due to nozzle wear, errors in pressure adjustment, and tractor speedometer can result in a large error in application rate.

How do you calibrate a sprayer?

Calibration kits are available from WESTWARD, #818493 for U.S. Gallons and #818492 for metric calibration.

For accurate calibration, the sprayer is driven a specific distance at spraying speed and the length of time is recorded. The operator then measures the amount of water sprayed from one nozzle at spraying pressure for the same length of time noted. The amount of water sprayed provides a direct reading of application rate. Slight adjustments are then made by varying the pressure.

Here are some tips to remember when using the calibration kit method:

1. Calibrate with clean water only.
2. Follow the instructions in the calibration kit carefully.
3. Before calibration, check the flow of each nozzle.
If it puts out more than 10% of its original volume, replace it.
4. When determining the length of time required to drive a recommended distance, drive in actual field or lawn conditions with a half full sprayer. Repeat the test several times, then take the average of the times recorded.
5. Calibration of the sprayer should be completed at the beginning of the season and repeated every 2 to 3 full days of spraying, and every time you change volume rate or use different nozzles.

6.1 Calibration (Ounce Method)

If you do not wish to use the calibration kit method, the following method may be used. All you need is a tape measure, stop watch and a container that accurately measures U.S. fluid ounces.

1. Fill the sprayer tank approximately half full with clean water.
2. Set up two stakes, 204 ft. apart in actual spraying conditions.
3. While driving at spraying speed, note the length of time required to drive 204 ft. Repeat several times and take the average of the times recorded.
4. With the sprayer operating at intended spraying pressure, collect the output from one nozzle for the length of time determined in step 3. The number of U.S. fluid ounces will exactly measure the application rate.

e.g. 15 U.S. fluid ounces = 15 U.S. gallons per acre

NOTE: This method only works if the nozzle spacing is 20".

For conversion to Imperial gallons per acre, multiply U.S. GPA x .833. For conversion to liters per hectare, multiply U.S. GPA x 9.34. For conversion to liters per acre, multiply U.S. GPA x 3.78.

7.0 MAINTENANCE

IMPORTANT:

Always clean the boom at the end of your workday or before servicing is done to avoid unnecessary contact with chemicals.

In order to derive full benefit from the sprayer for many years, the following few, but important rules should be followed.

7.1 Cleaning the Sprayer

Read the entire label of the chemical used. Take note of any particular instructions regarding recommended protective clothing, deactivating agents, etc. Read the detergent and deactivating agent labels. If cleaning procedures are given, follow them closely.

Be familiar with local legislation regarding disposal of agricultural chemicals, mandatory decontamination methods, etc. Contact the appropriate office, e.g. Department of Agriculture.

Cleaning starts with calibration as a well calibrated sprayer will ensure the minimal amount of remaining spray liquid. It is a good practice to clean the sprayer immediately after use thereby rendering the sprayer safe and ready for the next application. This also prolongs the life of the components.

It is sometimes necessary to leave the spray liquid in the tank for short periods of time (e.g. overnight), or until the weather becomes suitable for spraying again. Unauthorized persons and animals must not have access to the sprayer under these circumstances.

Cleaning

1. Dilute the remaining spray liquid in the tank with at least 10 parts water and spray the liquid out into the field or lawn you have just sprayed.
2. Select and use the appropriate protective clothing. Select detergent suitable for cleaning and suitable deactivation agents if necessary.
3. Rinse and clean sprayer and tractor externally. Use detergent if necessary.
4. Remove all filters and clean them. Be careful not to damage the mesh. Replace filters when the sprayer is completely clean.
5. With the pump running, rinse the inside of the tank. Remember the tank roof. Rinse and operate all components and any equipment that has been in contact with the chemical.
6. After spraying the liquid out again in the field or lawn, stop the pump and fill at least 1/5 of the tank with clean water. Note that some chemicals require the tank to be completely filled. Add appropriate detergent and/or deactivating agent, e.g. Washing soda or Triple ammonia.

NOTE: If a cleaning procedure is given on the chemical label, follow it closely.

7. Start the pump and operate all controls enabling the liquid to come in contact with all the components. Leave the distribution valves until last. Some detergents and deactivating agents work best if left in the tank for a short period. Check the label.
8. Drain the tank and let the pump run dry. Rinse inside of tank, again letting the pump run dry.
9. Stop the pump. If the chemicals used have a tendency to block nozzles, remove and clean them now.
10. Replace all filters and nozzles and store the sprayer. If, from previous experiences, it is noted that the solvents in the chemicals are particularly aggressive, store the sprayer with the tank lid open.

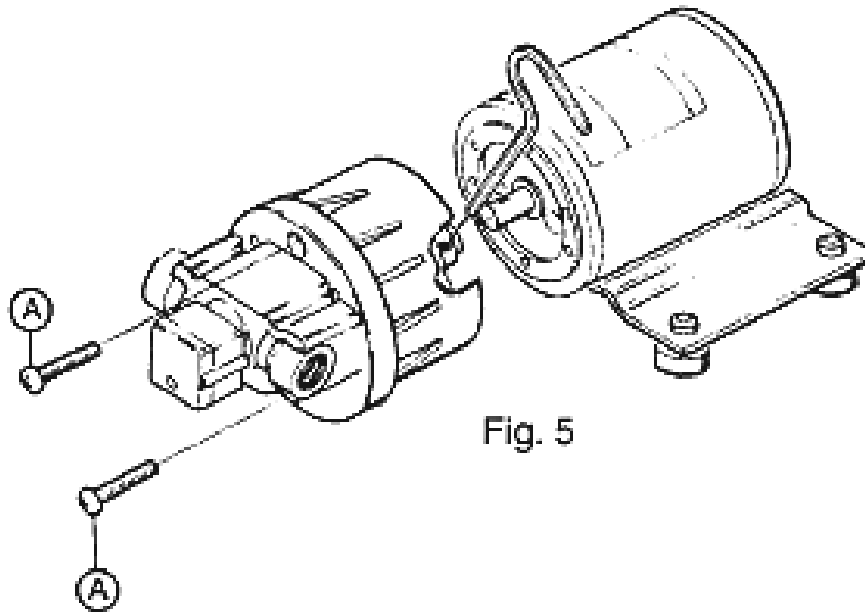
NOTE: If the sprayer is cleaned with a high pressure cleaner, we recommend lubrication of the entire machine.

7.2 Pump Maintenance

To disassemble pump head assembly, remove two screws A (Fig. 5) at front of pump. Rotate bearing cover so access notch is aligned with cam/bearing set screw on motor shaft. Loosen set screw with 1/8" allen wrench and slide pump head off motor shaft.

To install replacement pump head, coat motor shaft with grease prior to assembly. Slide cam/bearing assembly over motor shaft. Align set screw with dimple in motor shaft and tighten securely. Set screw must center in shaft dimple for correct cam position, otherwise diaphragm may be damaged. Rotate pump head to original position. Install top and bottom screws A (Fig. 5) and tighten.

Operate pump to make sure flow and motor speed are normal. If operation is noisy, flow is down or pressure is low, recheck cam/ bearing set screw to make sure it is centered in the shaft dimple (See Section 12.0, page 18 for SHURFLO PUMP BREAKDOWN).



8.0 STORAGE

When the spraying season is over, you should devote some extra time to the sprayer. If chemical residues are left over in the sprayer for long periods, it can reduce the life of the individual components. To preserve the sprayer and protect the components, carry out the following off-season storage program:

1. Clean the sprayer completely - inside and outside - as described in Section 7.1 "Cleaning the Sprayer". Make sure that all valves, hoses and auxiliary equipment have been cleaned with detergent and flushed with clean water afterwards, so no chemical residues are left in the sprayer.
2. Replace any damaged seals and repair any leaks.
3. Empty the sprayer completely and let the pump work for a few minutes. Operate all valves and handles to drain as much water out of the spraying circuit as possible. Let the pump run until air is coming out of all nozzles.
4. Fill the tank with 3 - 5 gallons of an ethylene glycol base anti-freeze mixture at the ratio for the desired temperature protection. Run the pump and circulate the anti-freeze through the distribution valves and boom lines. Spray the handgun into the tank until anti-freeze sprays out to make sure the line is full of anti-freeze.

NOTE: Never use diesel fuel in a sprayer.

5. When the sprayer is dry, remove rust from any scratches in the paint and touch up the paint.
6. Lubricate the boom.
7. Remove the glycerine-filled pressure gauge and store in a vertical position in a frost-free environment.
8. Store the electric wires, switch and inline fuse in a dry plastic bag to protect them against moisture, dirt, and corrosion.
9. To protect against dust, the sprayer can be covered by a tarpaulin. Ensure ventilation to prevent condensation.

8.1 Preparation After Storage

After a storage period, the sprayer should be prepared for the next season in the following way:

1. Remove the cover (If fitted).
2. Fit the pressure gauge again. Seal with Teflon tape.
3. Connect the sprayer to the tow vehicle (Section 3.0).
4. Empty the remaining antifreeze into an approved container.
5. Rinse the entire liquid circuit on the sprayer with clean water. Don't forget to flush the boom and handgun lines also.
6. Fill with clean water and check all functions (Section 4.0).

9.0 TROUBLESHOOTING

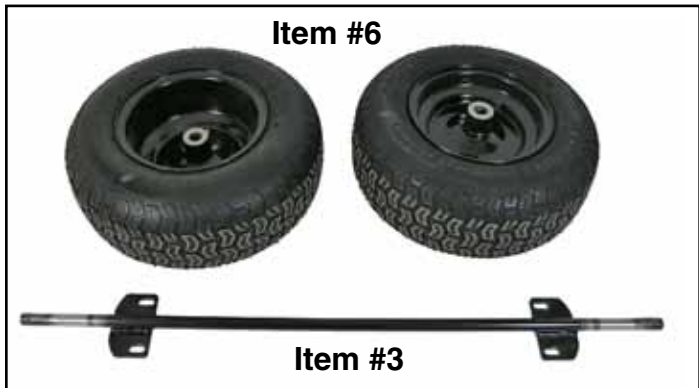
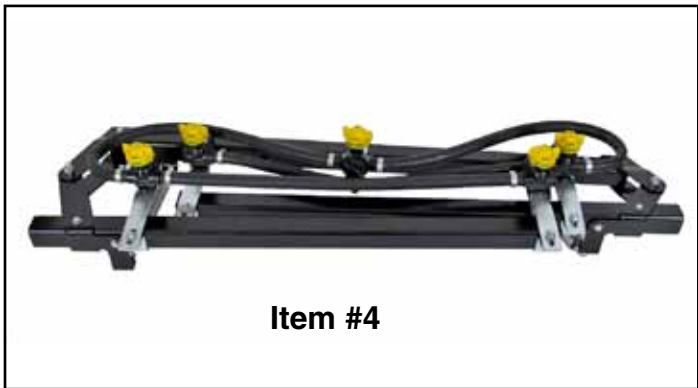
PROBLEM	SOLUTION
Lack of pressure	A. Check that suction filter is not clogged.
	B. Check suction line from tank to pump for leaks.
	C. Check that pressure regulator seat is not damaged.
	D. Check pressure gauge.
Pressure jumping	A. Check that suction filter is not partially clogged.
	B. Check that pressure regulator is functioning properly.
	C. Check that non-drip nozzle diaphragms are functioning correctly (should open at 10 psi)
	D. Check safety valve for weak or broken valve spring.
	E. Check pressure gauge.
Pump not working	A. Check connections at battery.
	B. Check for blown fuse.
	C. Check electrical wiring for bad connection.
	D. Check that on/off switch is functioning properly.
Inadequate weed control	A. Re-calibrate sprayer.
	B. Check chemical container instructions.
	C. Did weather conditions affect application?
	D. Take care when driving not to overlap or miss spraying.
	E. Did you stop vehicle in field or lawn and leave sprayer running?

10.0 SHIPPING BUNDLE

SPW WPC40 SHIPPING BUNDLE	
Item #1	Frame/Tank Assembly
Item #2	Hitch Assembly
Item #3	Axle Weldment
Item #4	Boom Assembly
Item #5	Pump Assembly w/Suction Hose
Item #6	Wheel Assembly (2)
Item #7	Hand Gun Stand and Pressure Regulator Assembly
Item #8	* Parts Bag
Item #9	Hand Gun w/Hose

*Parts Bag Contents

- 1 – 1 1/4" x 1 5/16" x 2" Sq. U-Bolt
- 1 – Wiring Harness
- 2 – Axle Spacers
- 2 – Hub Caps
- 1 – 100# Pressure Gauge (in box)
- 4 – 3/8" x 1" Cap Screws
- 5 – 5/16" x 3/4" Cap Screws
- 2 – 5/16" U-Bolts
- 4 – #10 x 1-1/4" Machine Bolts
- 4 – #10 Flat Washers
- 8 – #10 Nyloc Nuts
- 3 – Hose Clamps
- 4 – 3/8" Nyloc Nuts
- 9 – 5/16" Nyloc Nuts
- 2 – 1/8" x 1 1/2" Cotter Pins



11.0 ASSEMBLY INSTRUCTIONS



1. Remove tank filler cap and invert Frame/Tank Assembly (Item #1)
2. Mount axle weldment (Item #3) with 4-3/8" x 1" cap screws and Nyloc Nuts.



Mount valve stand (item #7) to the left side of hitch assembly (Item #2) with 1-1/4" x 3/4" cap screw, nylock nut and 1 1/4" x 1 5/16" x 2" square U-bolt and 1/4" nylock nuts. Mount stand with hose wrap bracket to rear of sprayer.

Attach hitch assembly (Item 2) to frame/tank assembly (Item 1) with 4 - 5/16" x 3/4" bolts and nylock nuts. Thread 3/8" x 90" boom supply hose through the left hand hole in the tank frame and between the axle and tank frame to the rear of the sprayer. Be sure that the grommet is in the frame hole prior to insertion of the hose.

Install wheel assemblies (Item 6) and secure with axle spacers and 1/8" x 1 1/4" cotter pins. Install hub caps over axle spacers.



Thread the 1/2" suction hose on the pump assembly (Item 5) through the right hand hole in the tank frame and secure it to the elbow on the bottom of the tank with the 1/2" gear hose clamp. Be sure the grommet is in the frame hole prior to insertion of the hose.

Attach the pump to the hitch assembly with 4 - #10-24 x 1 1/4" machine screws, #10-24 nylock nuts and flat washers. Attach the supply hose (green cap) to the right hand body of the valve assembly. The seal for this cap is attached to the valve body with a zip-tie.

Install the pressure gauge in the top of the right hand body of the valve assembly.

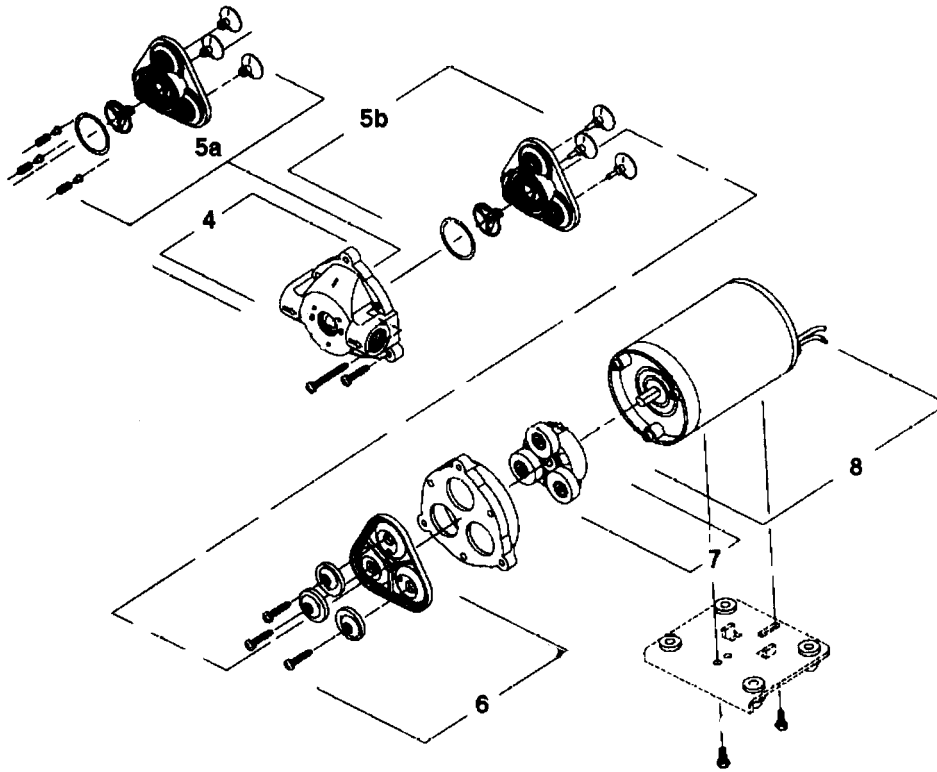
Attach the return line (black cap) to the fitting on the right side of the tank and secure with the 3/8" gear type hose clamp.



Attach the boom assembly (Item 4) to the boom mounts with 2 - 5/16" x 1 3/8" x 1 15/16" square u-bolts and nylock nuts. Connect the boom supply line to the top of the center nozzle assembly and secure with a 3/8" gear type hose clamp.

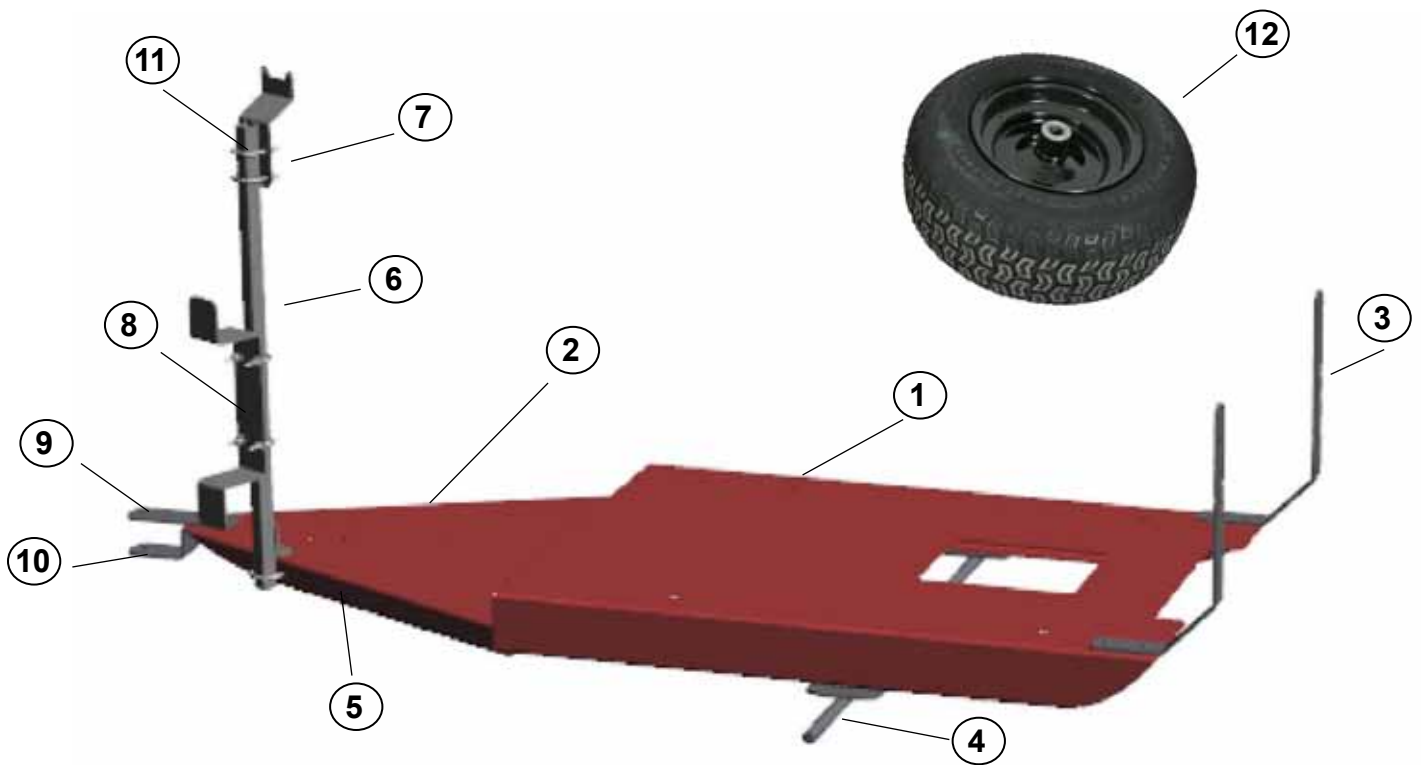
Remove the drain plug from the rear of the tank and completely flush the tank with clean water before using sprayer.

12.0 8000 SERIES PARTS KIT LIST

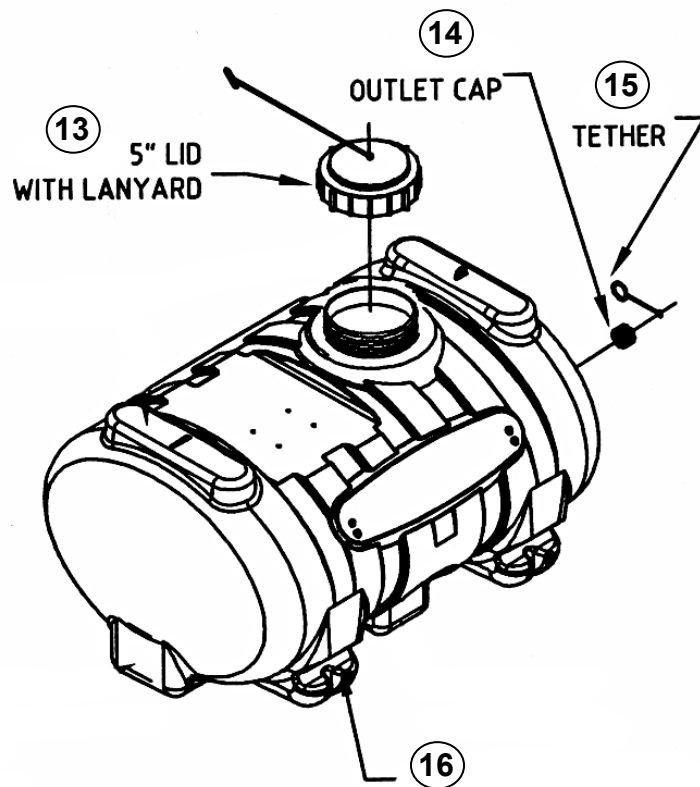


PUMP PART NO.	PUMP MODEL NO.	4 UPPER HOUSING	5A 5B BY-PASS NON BY-PASS VALVE ASSEMBLY	6 DIAPHRAGM ASSEMBLY	7 DRIVE IMPELLER ASSEMBLY	8 MOTOR
SPP 70284	8007-543-850	94-379-00 71761	94-391-07 71777	94-395-06 71764	94-385-03 71765	11-168-01 71778
Used on all Westward Sprayers						
SPP 71758	Rocker switch only 10-360 fits Pump No. 70284 up to 2003					
SPP 71759	Complete electric pkg c/w rocker switch 84-712-00 fits Pump No. 70284 up to 2003					
SPP 78319	Wire Assy 96" c/w Alligator Clips					
SPP 74978	Fuse Cover for SPP70284 pump, 2003 and up.					
SPP 71723	Rubber foot for all pumps					

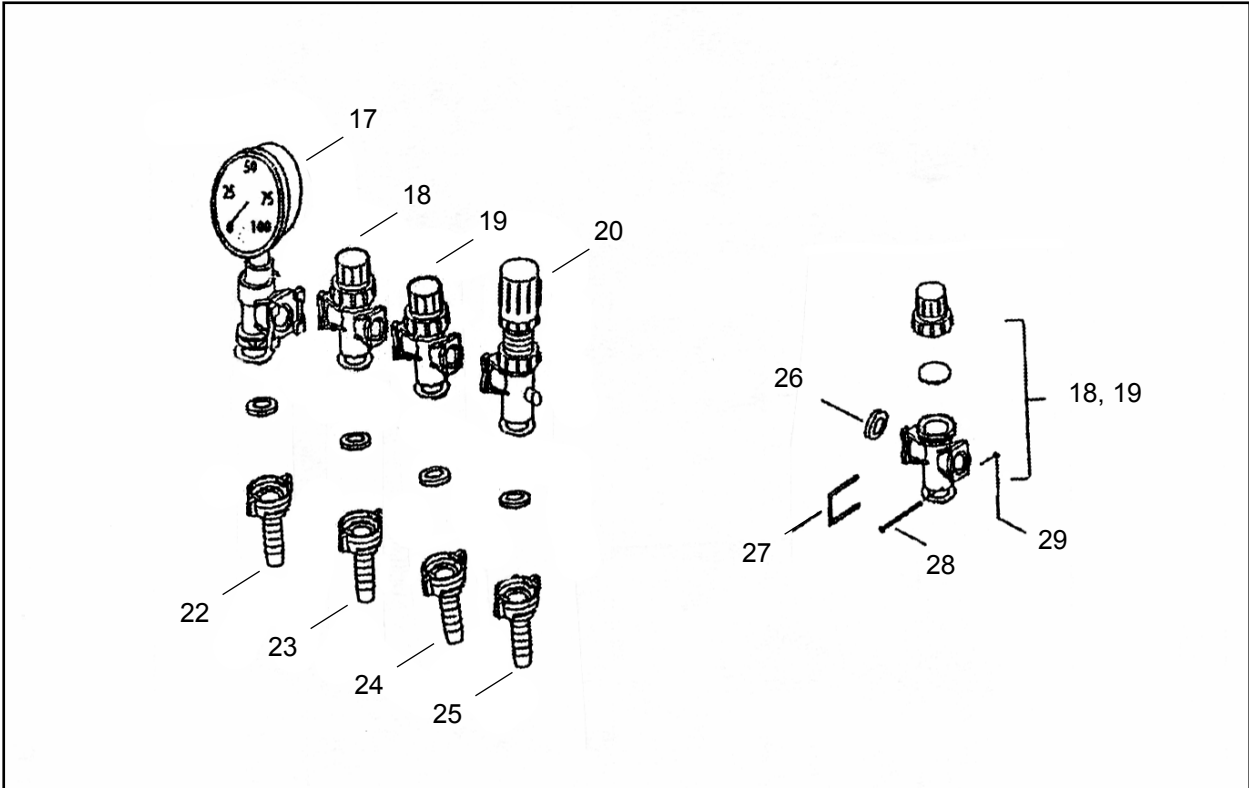
13.0 MAIN FRAME ASSEMBLY



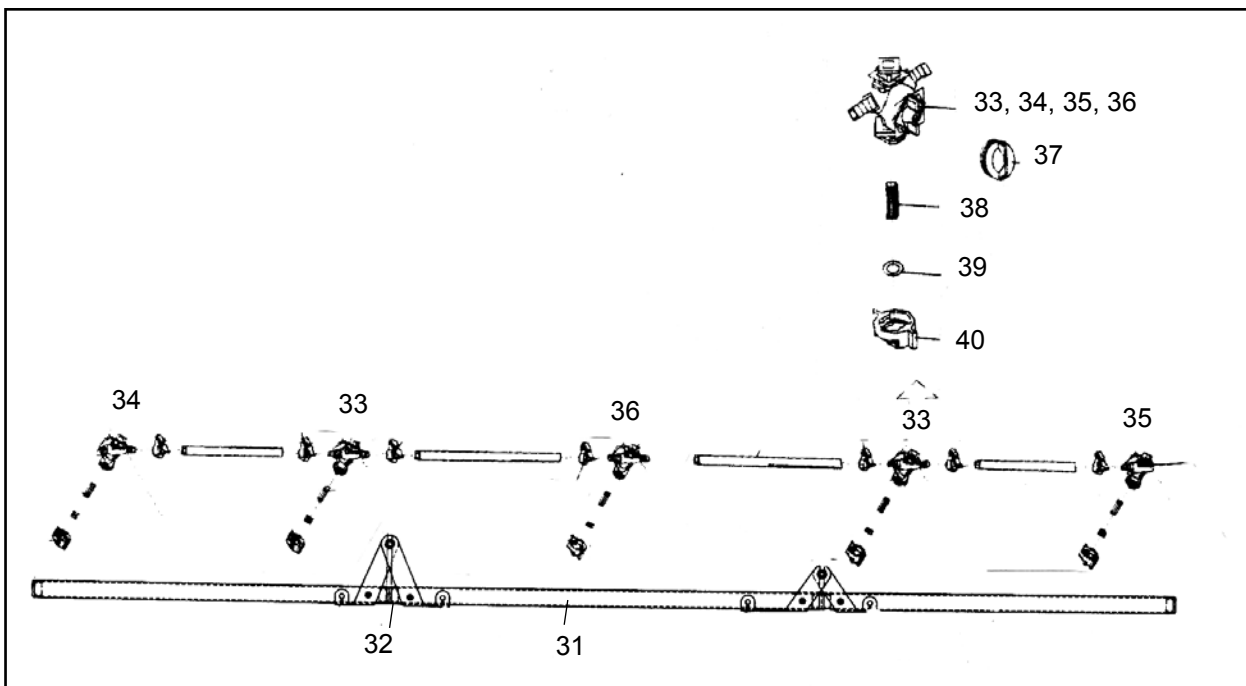
14.0 TANK ASSEMBLY



15.0 V2075 VALVE ASSEMBLY



16.0 BOOM ASSEMBLY



17.0 PARTS LISTING

Item Number	Part Number	Description	Qty.
1	SPP 40001	Main Frame	1
2	SPP 40002	Hitch Frame	1
3	SPP 40003	Boom Support	2
4	SPP 40004	Axle Weldment	1
5	SPP 40005	Wand Support Bracket	1
6	SPP 40006	Wand Support	1
7	SPP V520A	Valve Bracket	1
8	SPT ES130A.02	Hose Wrap	1
9	SPP 40007	Hitch Clevis (flat)	1
10	SPP 40008	Hitch Clevis (bent)	1
11	SPT H055.10	1 1/4" x 1 5/16" x 2" Square U-bolt	5
12	SPT ES120	Wheel Assembly	2
13	SPP 12499	Tank Lid w/Lanyard	1
14	SPP 19024	Outlet Cap	1
15	SPP 19025	Cap Tether	1
16	SPP SB00040SYSS	Tank - 40 Gallon	1
17	SPT G212	Gauge 0-100 psi	1
18	SPT V505.01B	Boom Control Valve (Blue Cap)	1
19	SPT V505.01R	Wand Control Valve (Red Cap)	1
20	SPT V900	Pressure Control Valve	1
21	SPT V501	Gauge Body	1
22	SPT V510G	Green 3/8" Barb Valve Cap	1
23	SPT V510RED	Red 3/8" Barb Valve Cap	1
24	SPT V510BLUE	Blue 3/8" Barb Valve Cap	1
25	SPT V510BLACK	Black 3/8" Barb Valve Cap	1
26	SPT V504	O-Ring #206	3
27	SPT V505	Retainer Clip	3
28	SPT H001.22	#4 - 32 x 1 3/4" Machine Screw	4
29	SPT H001.02	#4 - 32 Locknut	4
30	SPP 72449	Rubber Seal	4
31	SPP 79012	3 Section Boom	1
32	SPP 79015	Boom Springs	2
33	SPT 40382-00	T Nozzle Body	2
34	SPT 40381-00	RH Nozzle Body	1
35	SPT 40380-00	LH Nozzle Body	1
36	SPT 40383-00	3 Way Nozzle Body	1
37	SPP 72155	Diaphragm Module Assembly	5
38	SPP 72119	50 Mesh Screen	5
39	SPP 72121	O-Ring	5
40	SPP 72137	Tip/Cap Combination	5
NOT SHOWN	SPP 72436	Nozzle Mount Clamp	5

18.0 WARRANTY POLICY AND CONDITIONS

Westward Parts Services Ltd., hereinafter called “Westward”, offers the following limited warranty in accordance with the provisions below to each original retail purchaser of Westward new equipment of its own manufacturer, from an authorized Westward dealer, that such equipment is at the time of delivery to such purchaser, free from defects in material and workmanship and that such equipment will be warranted for a period of one year from the date of delivery to the end user providing the machine is used and serviced in accordance with the recommendations in the Operator’s Manual and is operated under normal farm conditions.

1. This limited warranty is subject to the following exceptions:
Parts of the machine not manufactured by Westward, (i.e. engines, tires, tubes, electronic controls, and other components or trade accessories, etc.) are not covered by this warranty but are subject to the warranty of the original manufacturer. Any claim falling into this category will be taken up with the manufacturer concerned. This warranty will be withdrawn if any equipment has been used for purposes other than for which it was intended or if it has been misused, neglected, or damaged by accident, let out on hire or furnished by a rental agency. Nor can claims be accepted if parts other than those manufactured by Westward have been incorporated in any of our equipment. Further, Westward shall not be responsible for damage in transit or handling by any common carrier and under no circumstances within or without the warranty period will Westward be liable for damages of loss of use, or damages resulting from delay or any consequential damage.
2. We cannot be held responsible for loss of livestock, loss of crops, loss because of delays in harvesting or any expense or loss incurred for labor, supplies, substitute machinery, rental for any other reason, or for injuries either to the owner or to a third party, nor can we be called upon to be responsible for labor charges, other than originally agreed, incurred in the removal or replacement of components.
3. The customer will be responsible for and bear the costs of:
 - a) Normal maintenance such as greasing, maintenance of oil levels, minor adjustments, etc.
 - b) Transportation of any Westward product to and from where the warranty work is performed.
 - c) Dealer travel time to and from the machine or to deliver and return the machine from the service workshop for repair.
 - d) Dealer traveling costs.
4. Parts defined as normal wearing items, (i.e. tires and V-belts) are not in any way covered under this warranty.
5. This warranty will not apply to any product which is altered or modified without the express written permission of Westward and/or repaired by anyone other than an Authorized Service Dealer.
6. Warranty is dependent upon the strict observance by the purchaser of the following provisions:
 - a) That this warranty may not be assigned or transferred to anyone.
 - b) That all safety instructions in the operators manual shall be followed and all safety guards regularly inspected and replaced where necessary.

18.0 WARRANTY POLICY AND CONDITIONS

7. No warranty is given on second-hand products and none is to be implied.
8. Westward reserves the right to incorporate any change in design in its products without obligation to make such changes on units previously manufactured.
9. The judgement of Westward in all cases of claims under this warranty shall be final and conclusive and the purchaser agrees to accept its decisions on all questions as to defect and to the exchange of any part or parts.
10. No employee or representative is authorized to change this warranty in any way or grant any other warranty unless such change is made in writing and signed by an officer of Westward at its head office.
11. Any warranty work performed which will exceed \$400.00 MUST be approved IN ADVANCE by the Service Manager.
12. Any pump replacement must be approved in advance by the Service Manager.
13. Claims under this policy must be filled with Westward within thirty (30) days of work performed or warranty shall be void.
14. Parts requested must be returned prepaid within thirty (30) days for warranty settlement.
15. Warranty claims must be COMPLETELY filled out properly or will be returned.

DISCLAIMER OF FURTHER WARRANTY

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, EXCEPT AS SET FORTH ABOVE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION OF THE PRODUCT CONTAINED HEREIN. IN NO EVENT SHALL THE COMPANY BE LIABLE FOR INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES (SUCH AS LOSS OF ANTICIPATED PROFITS) IN CONNECTION WITH THE RETAIL PURCHASER'S USE OF THE PRODUCT.