



**COUNTYLINE<sup>®</sup>**  
**TRACTOR SUPPLY CO<sup>®</sup>**



# ASSEMBLY & OPERATION INSTRUCTIONS MANUAL

## 40 GALLON TRAILER SPRAYER

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TSC SKU#: 1014417 • VENDOR#: TR-40-EX-TSC

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**SATISFACTION ★ GUARANTEED**

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# CONGRATULATIONS ON PURCHASING A



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## 40 GALLON TRAILER SPRAYER!

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We have done our utmost to ensure that your CountyLine® sprayer will be one of the most trouble-free and satisfying pieces of equipment that you have ever owned. Please let us know of any questions you may have. We want to answer them as quickly as possible. When you do call, please have your order number handy.

For technical assistance, visit our website @ [www.TractorSupply.com](http://www.TractorSupply.com) or call TOLL FREE @ 1-877-718-6750. Our Technical Support Representatives will be happy to help you. We also hope to hear from you on how much you like your new helper.

And, please tell your friends about your new CountyLine® sprayer! Having CountyLine® owners spread the word about our products and our way of doing business is the best advertising we can have, and the best way to help us provide even better service in the years to come.

Thanks once again!

From all of us at



Distributed By:  
Tractor Supply Company  
200 Powell Place  
Brentwood, TN 37027  
[www.Tractorsupply.com](http://www.Tractorsupply.com)

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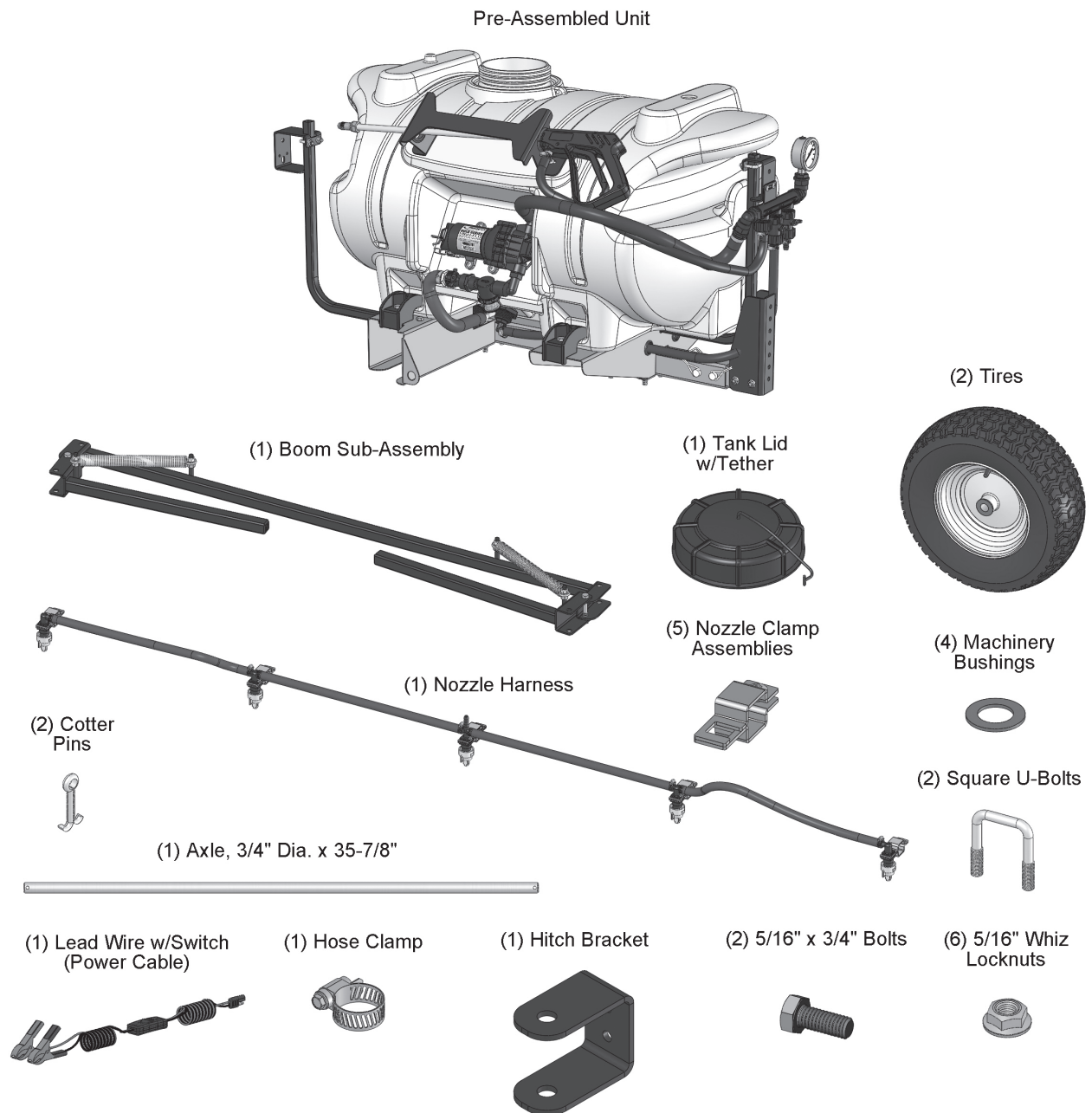


# TOOLS NEEDED

- 1/2" Wrench
- Phillips Screw Driver
- Teflon Tape
- Small Flat Blade Screw Driver or 6mm Socket

## WHAT'S INSIDE THE BOX (UNPACKING YOUR SPRAYER)

(1) Unit assembly, (1) tank lid (5058188), (1) axle shaft (5118201), (2) wheels (5021089), (1) parts bag (5277182), (1) 5 nozzle boom (5277779), (1) nozzle harness (5277695), (1) nozzle clamp bag (5277729)





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## GENERAL INFORMATION

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The purpose of this manual is to assist you in operating and maintaining your lawn & garden trailer sprayer. Please read it carefully, as it furnishes information which will help you achieve years of trouble-free operation.

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## WARRANTY INFORMATION

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Products are warranted for one year from date of purchase against manufacturer or workmanship defects. Commercial users have a 90 day warranty. Your local Tractor Supply Company store 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 # / Serial # 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 local Tractor Supply Company store first. For warranty work, always take your original sales slip, or other evidence of purchase date, to your local Tractor Supply Company store.

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## SAFETY WARNINGS

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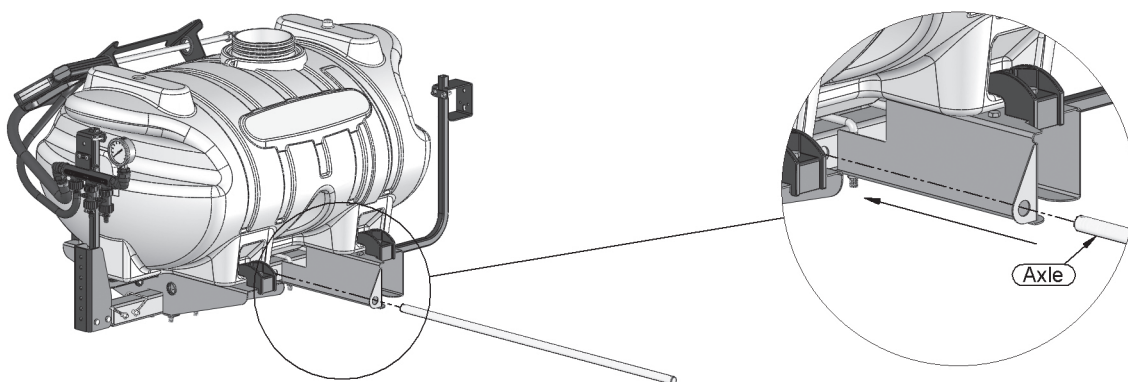
- Read and understand all safety and operating instructions before using this product.
- Never allow anyone unfamiliar with the safety or operating instructions to use this product.
- Be certain the nozzles are oriented away from the tow vehicle and operator before activating the spray.
- Keep children out of the spraying area and under the watchful care of a responsible adult
- Keep people and pets at least 100 feet away and upwind of material being sprayed.
- Use care when approaching blind corners or objects that can obscure your vision.
- Wear appropriate protective gear as specified in the MSDS information for the material being sprayed.
- Clean out excess material from the sprayer and disconnect the sprayer from the battery when not in use.
- Check the area to be sprayed for objects, rocks, depressions or uneven terrain that could upset the spray unit or cause significant changes to the spray pattern.
- DO NOT tamper with the pressure regulator switch. It is preset at the factory.
- Never operate the sprayer while under the influence of drugs, alcohol or medication.
- Use the sprayer only during daylight hours and times of good visibility
- DO NOT, under any conditions, alter standard parts on your sprayer. This could cause personal injury and will void your warranty.
- Never tow your sprayer unit on public roads or highways.
- Always travel across slopes; never up or down. DO NOT operate on slopes greater than 15 degrees
- Never attempt to lift or move the sprayer by grasping the manifold.

# ASSEMBLING YOUR SPRAYER

Your sprayer has been partially assembled at the factory. Follow the instructions below to complete the assembly of this unit.

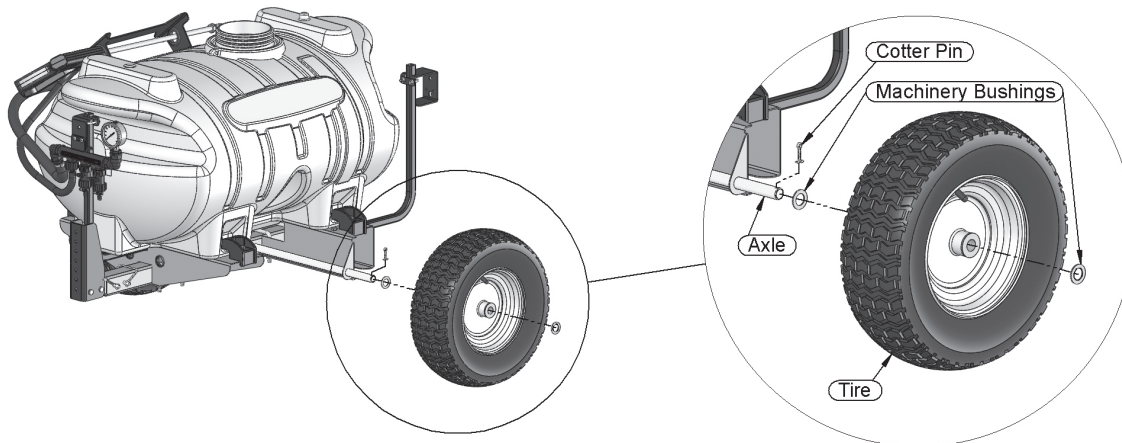
## STEP 1

Remove all parts from the box. Open the parts bags and remove the (4) machine bushings (5041094) and the (2) cotter pins (5101207). Insert the axle shaft (5118201) through the four holes in the frame under the tank.



## STEP 2

Slide a machine bushing over the axle, then a wheel (5021089) and another machine bushing. Run a cotter pin through the hole in the end of the axle and spread the open ends of the cotter pin with pliers. Repeat on the other end of the axle.

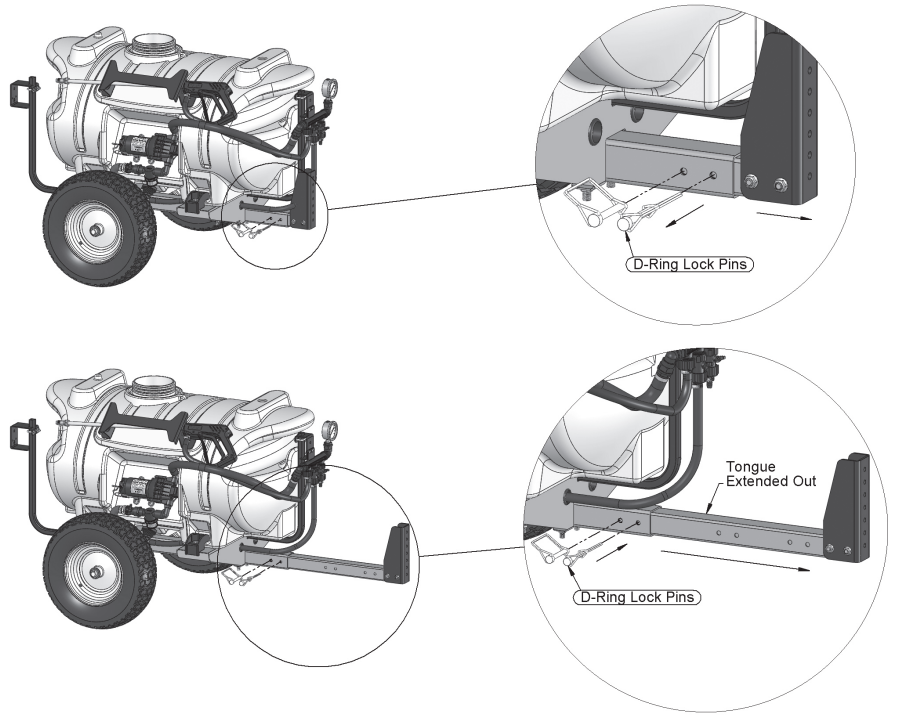




# ASSEMBLING YOUR SPRAYER CONTINUED

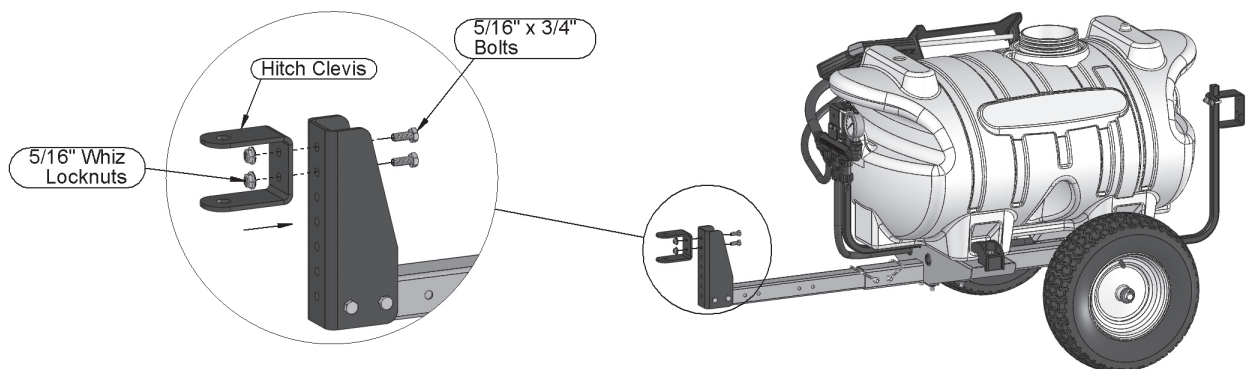
## ★ STEP 3

Remove the D-Ring lock pins from the frame tube. Slide the tongue tube out until the pins can be repositioned into the holes of the frame tube that match up with the holes of the tongue tube, when fully extended.



## ★ STEP 4

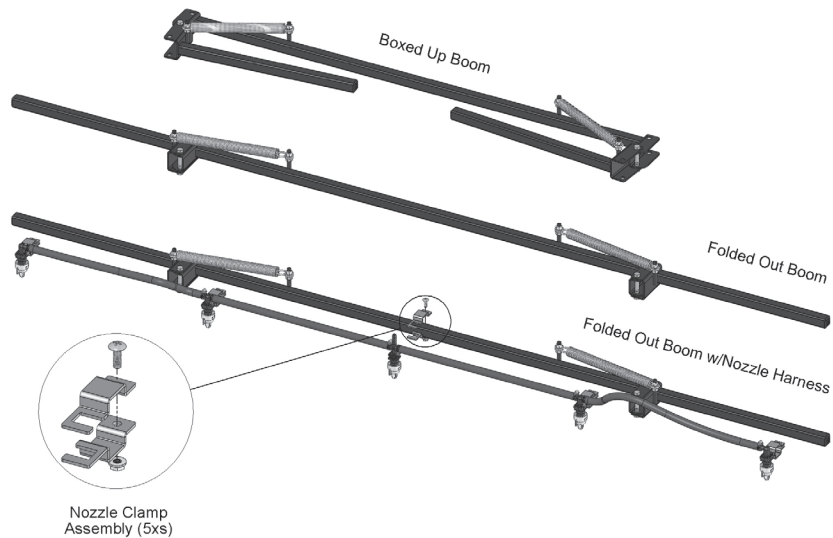
Fasten the hitch (5038777) to the hitch bracket with the (2) 5/16" X 3/4" screws (5034038) and (2) whiz nuts (5006307).



# ASSEMBLING YOUR SPRAYER CONTINUED

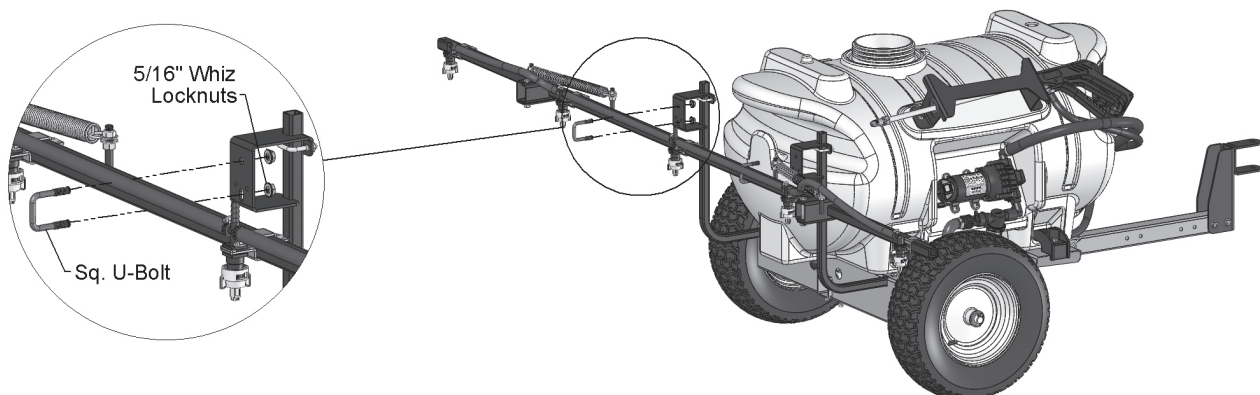
## STEP 5

It is recommended to assemble the nozzle harness (5277695) to the boom (5277779) on a workbench. Unfold the outer boom arms. With the boom springs on top and the nozzles to the inside of the fold, pointing down, starting with the center cross nozzle of the nozzle harness centered on the boom, mount the nozzles 20" apart. Place a clamp half over the top of the boom tube and another clamp half below the boom tube, slide the clamp halves together into the groove in the square part of the nozzle. Use a Phillips machine screw and a small whiz nut to fasten the nozzle clamps. Tighten in position with the Phillips screw driver.



## STEP 6

The boom is now ready to mount to the boom mount brackets with (2) square U-bolts (5034159) and (4) whiz nuts (5006307).



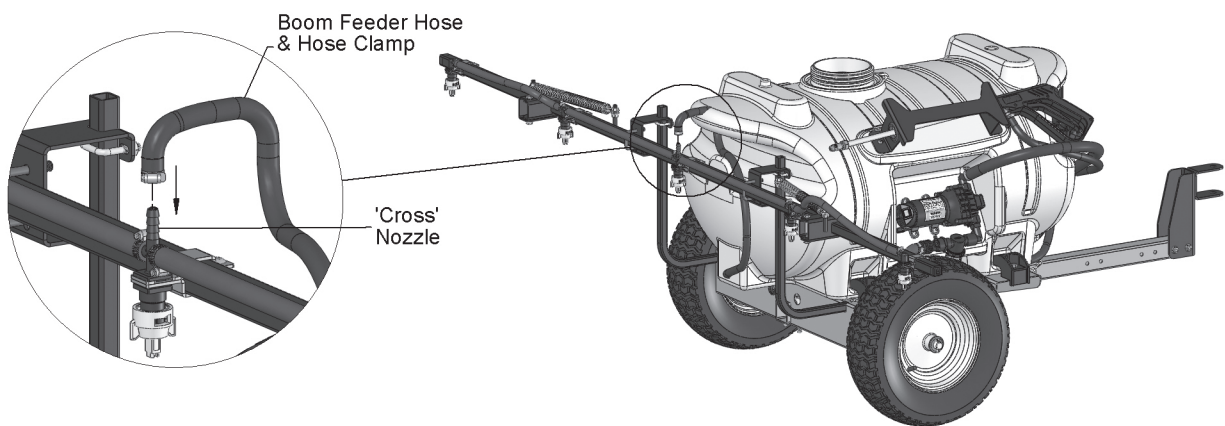




# ASSEMBLING YOUR SPRAYER CONTINUED

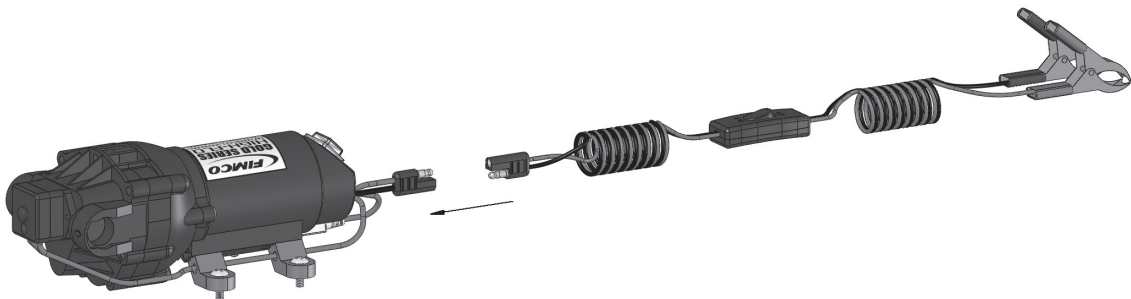
## ★ STEP 7

Connect the boom feeder hose to the cross nozzle on the boom using the hose clamp (5051144).



## ★ STEP 8

Plug the lead wire (5274443) into the plug off the pump and hook to a 12 volt battery source. Note: There is a switch on the pump and a switch on the lead wire.



# TESTING YOUR SPRAYER

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.

Add water to the tank & drive to the starting place for spraying. When you are ready to spray, turn the boom valve to the "on" position. This will start solution spraying from the tips of the boom. The pressure will decrease slightly when the boom is spraying. Adjust the pressure by turning the "ON/OFF" valve lever on the bypass line valve.

Read the operating instructions. When everything tests all right (no leaks, & good pressure), add the desired chemicals to the mixture and water combination and start your spraying operation. Adjust the pressure and spray as you did in the testing procedure.

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.**

## OPERATING INFORMATION

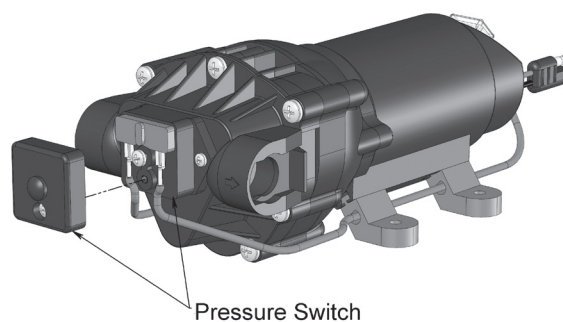
Your sprayer is equipped with (2) ON/OFF switches. One is on the wire assembly that you hook up to your battery, the other is on the pump itself, on the opposite end of the pressure switch. The "-" is the "ON" position and the "o" is the "OFF" position for the switches. Make sure both switches are depressed in the "-" position for operation.

In addition to the ON/OFF switch, the pump is equipped with an electronic pressure switch that is factory pre-set for it to shut off at 60 p.s.i.. This switch assembly is the 'square box' on the head portion of the pump.

Always fill the tank with a desired amount of water first, and then add the chemical slowly, mixing as you pour the chemical into the tank. You may use the handgun to spray into the solution in order to mix the chemical and water.

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).





# CALIBRATING YOUR SPRAYER

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 all 3 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).

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.

## Tip Chart

30" Spacing									
				Gallons Per Acre - Based on Water					
Tip Number	Spray Height	Pressure (psi)	Capacity (GPM)	1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	6 MPH
		15	0.12	23.50	11.70	7.80	5.90	4.70	3.90
AIXR11002VP	18"	20	0.14	27.50	13.70	9.10	6.90	5.50	4.60
		30	0.17	33.30	16.60	11.10	8.30	6.70	5.50
		40	0.20	39.30	19.70	13.10	9.80	7.90	6.50

30" spacing									
				Gallons Per 1000 Sq. Ft. - Based on Water					
Tip Number	Spray Height	Pressure (psi)	Capacity (GPM)	1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	
		15	0.12	0.54	0.27	0.18	0.13	0.11	
AIXR11002VP	18"	20	0.14	0.64	0.32	0.21	0.16	0.13	
		30	0.17	0.76	0.38	0.26	0.19	0.15	
		40	0.20	0.90	0.45	0.30	0.22	0.18	

## 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	68.0	136	205
2.0	34.0	68	102
3.0	23.0	45	68
4.0	17.0	34	51
5.0	14.0	27	41
6.0	11.0	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 (AFTER SPRAYING)

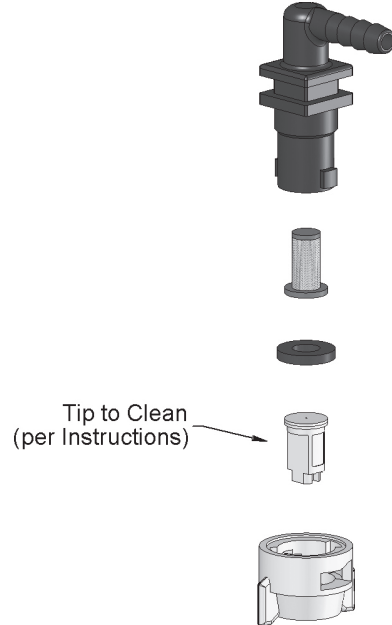
After use, fill the sprayer tank part way with water. Start the sprayer, and allow the clear water to be pumped through the plumbing system and out through the spray nozzles.

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 good quality dish detergent 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 components thoroughly with water or cleaning solution appropriate for the chemical being used. Blow out the orifice clean, and dry. If 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 tips before storing.



# 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.

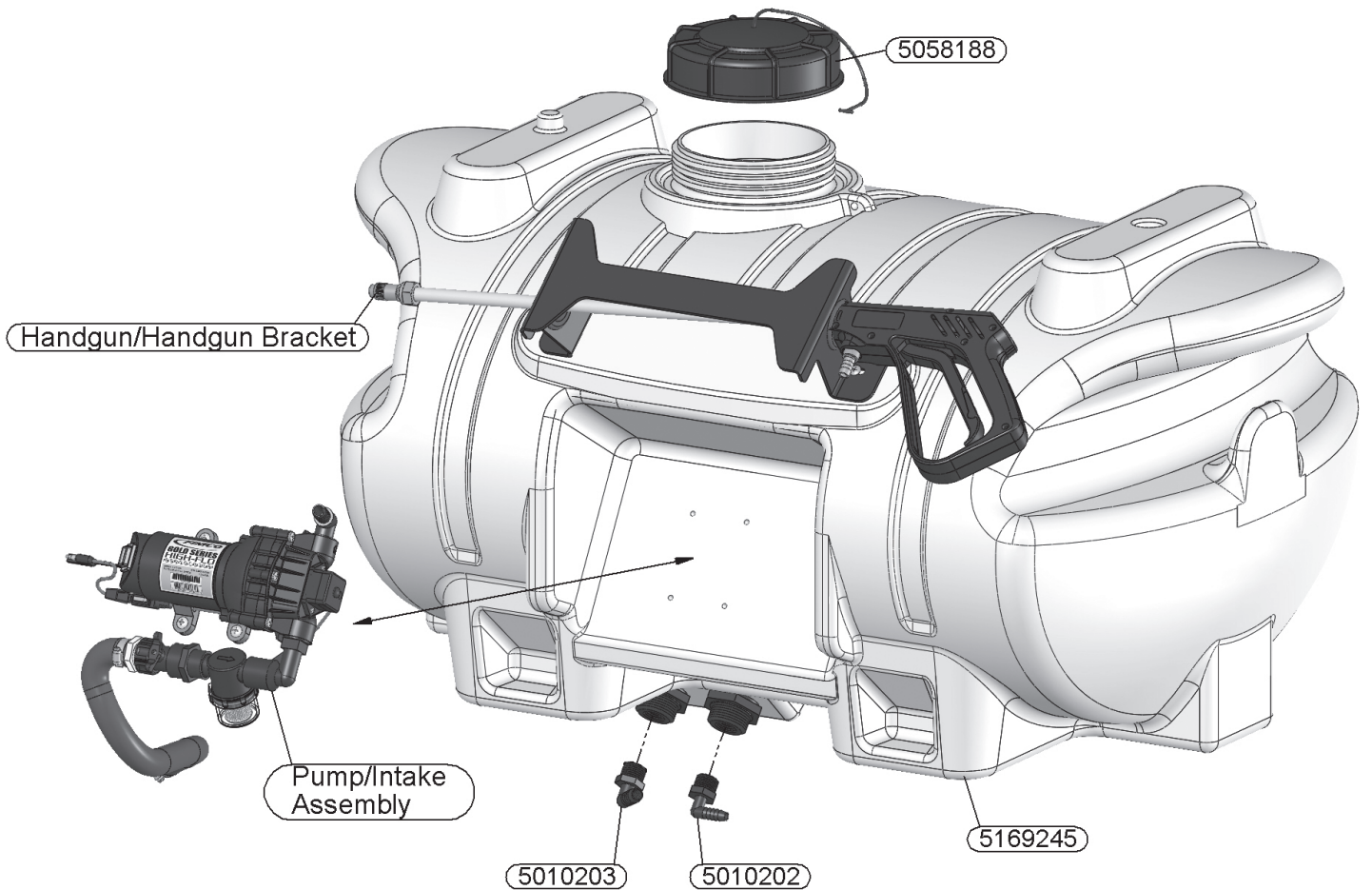
The sprayer should be winterized before storage by pumping a solution of RV antifreeze through the entire

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.



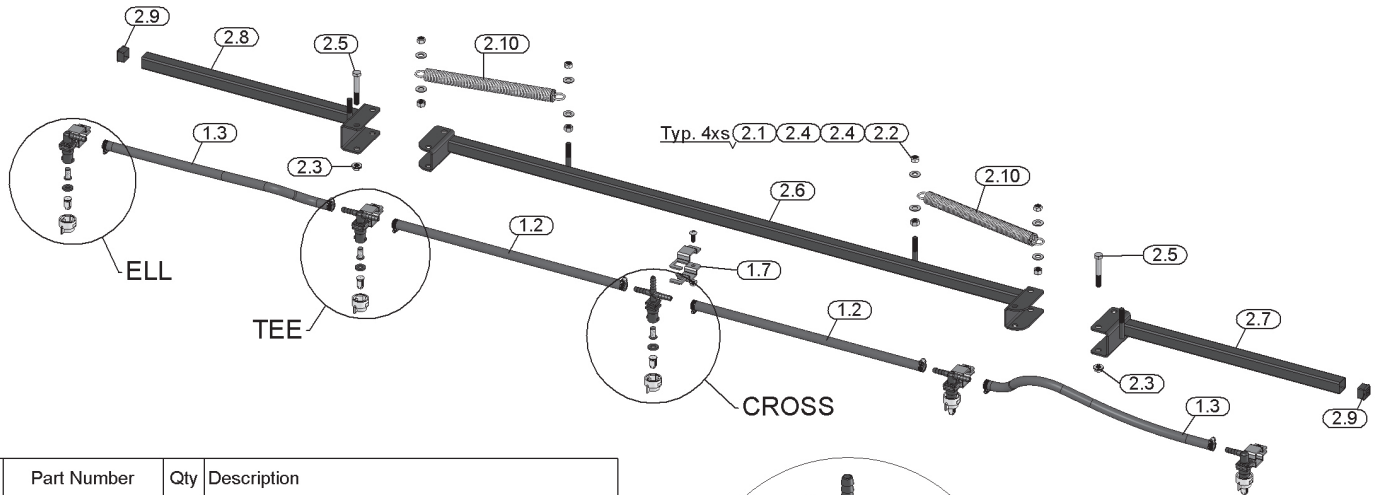
# EXPLODED VIEWS & PARTS LISTS

## ★ GENERAL TANK ASSEMBLY

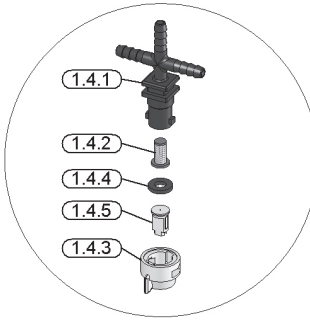


# EXPLODED VIEWS & PARTS LISTS CONTINUED

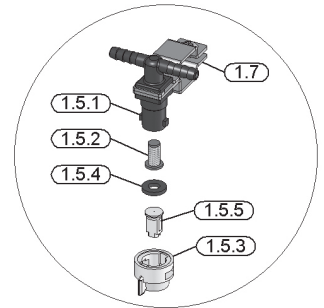
## BOOM ASSEMBLY



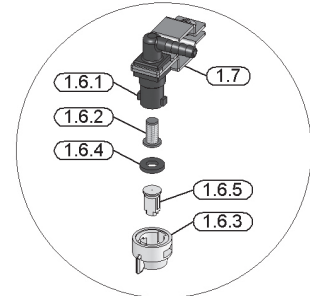
Item No	Part Number	Qty	Description
1	5277695	1	5-Nozzle Harness (3/8" & 1" Sq Tube)
1.1	5051144	8	Hose Clamp (3/8")
1.2	5020510	2	Hose, 3/8"-1 Brd. x 19-3/8"
1.3	5020347	2	Hose, 3/8"-1 Brd. x 21"
1.4	5277691	1	"Cross" Nozzle Sub-Assembly (3/8")
1.4.1	5056115	1	Triple Hose Shank (3/8" Hose)
1.4.2	5116019	1	Nozzle Strainer, Red (50 Mesh)
1.4.3	5046219	1	Quick TeeJet Cap ONLY (Yellow)
1.4.4	5016157	1	Seat Washer (QJ Caps)
1.4.5	AIXR11002VP	1	Air-Induction XR Flat Spray Tip
1.5	5277690	2	"TEE" Nozzle Sub-Assembly (3/8")
1.5.1	5056114	1	Double Hose Shank (3/8" Hose)
1.5.2	5116019	1	Nozzle Strainer, Red (50 Mesh)
1.5.3	5046219	1	Quick TeeJet Cap ONLY (Yellow)
1.5.4	5016157	1	Seat Washer (QJ Caps)
1.5.5	AIXR11002VP	1	Air-Induction XR Flat Spray Tip
1.6	5277689	2	"ELL" Nozzle Sub-Assembly (3/8")
1.6.1	5056113	1	Single Hose Shank (3/8" Hose)
1.6.2	5116019	1	Nozzle Strainer, Red (50 Mesh)
1.6.3	5046219	1	Quick TeeJet Cap ONLY (Yellow)
1.6.4	5016157	1	Seat Washer (QJ Caps)
1.6.5	AIXR11002VP	1	Air-Induction XR Flat Spray Tip
1.7	5277923	5	Boom Clamp Assembly (1in Sq.)
2	5277779	1	Boom Sub-Assembly (5-Nozzle, 1" Sq. Tube)
2.1	5006054	4	3/8"-16 Hex Nut
2.2	5006092	4	3/8"-16 Hex Locknut
2.3	5006345	2	3/8"-16 Flange Locknut (Grade F)
2.4	5016030	8	Flatwasher - 3/8"
2.5	5034169	2	H.H.C.S., 3/8"-16 x 2 1/2"
2.6	5277838	1	Center Boom Weldment 1" Sq. Tube
2.7	5277835	1	Outer Boom Weldment 1" Sq. Tube R.H.
2.8	5277834	1	Outer Boom Weldment 1" Sq. Tube L.H.
2.9	5046106	2	Square Cap, Black (1" Square Tube)
2.10	5019228	2	Extension Spring



DETAIL CROSS



DETAIL TEE

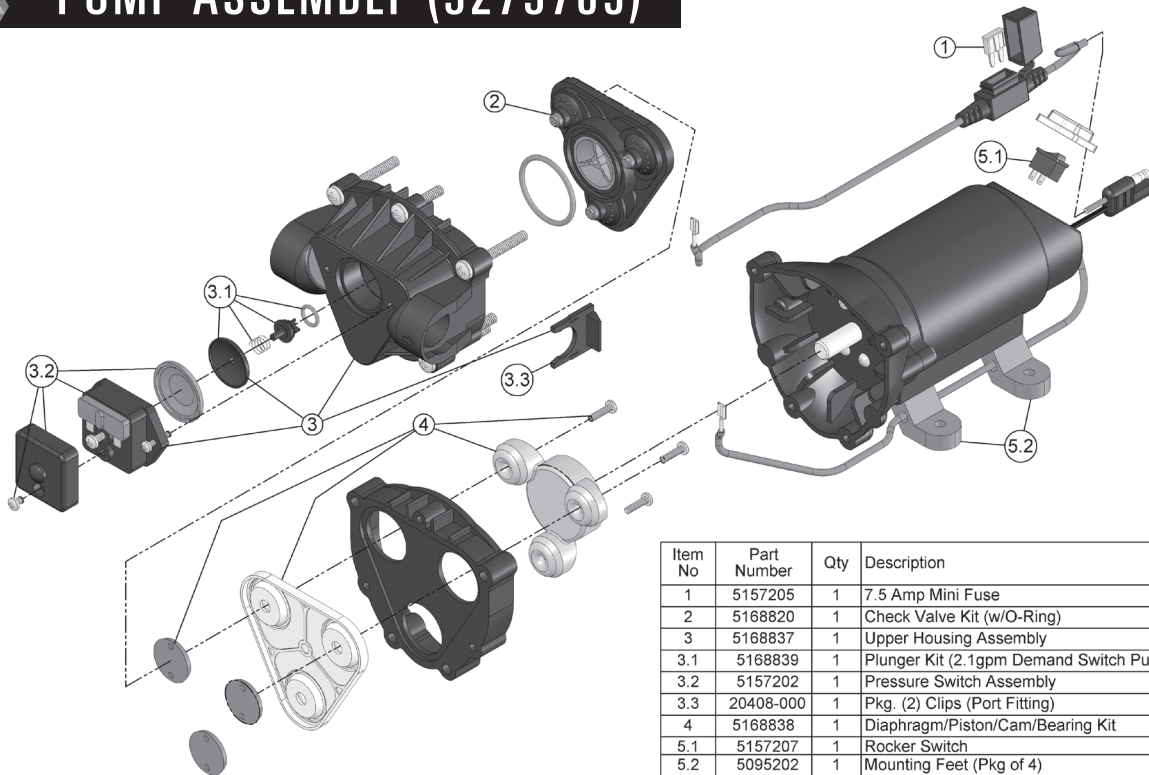


DETAIL ELL



# EXPLODED VIEWS & PARTS LISTS CONTINUED

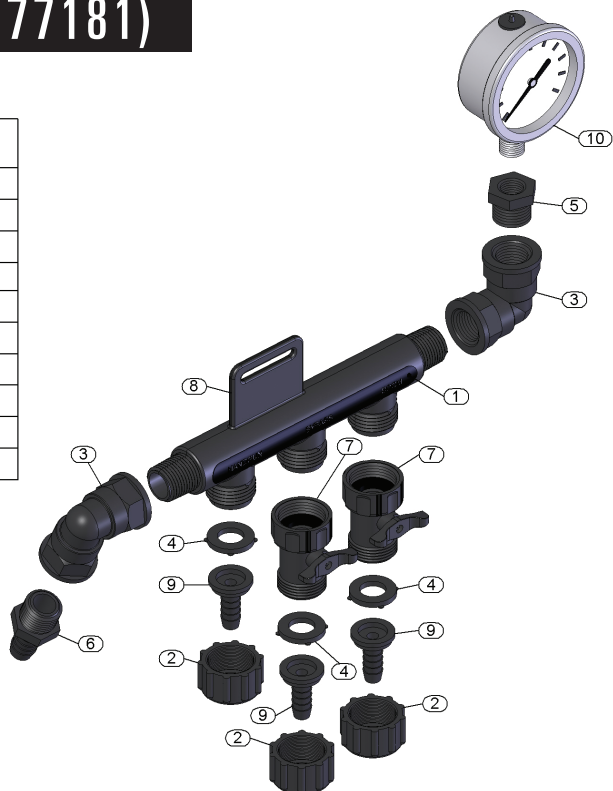
## PUMP ASSEMBLY (5275703)



Item No	Part Number	Qty	Description
1	5157205	1	7.5 Amp Mini Fuse
2	5168820	1	Check Valve Kit (w/O-Ring)
3	5168837	1	Upper Housing Assembly
3.1	5168839	1	Plunger Kit (2.1gpm Demand Switch Pump)
3.2	5157202	1	Pressure Switch Assembly
3.3	20408-000	1	Pkg. (2) Clips (Port Fitting)
4	5168838	1	Diaphragm/Piston/Cam/Bearing Kit
5.1	5157207	1	Rocker Switch
5.2	5095202	1	Mounting Feet (Pkg of 4)

## MANIFOLD ASSEMBLY (5277181)

Item No	Part Number	Qty	Description
1	5001624	1	Decal - Handgun/Bypass/Boom
2	5006209	3	Poly Knurled Swivel Nut, 3/4" FGHT
3	5010236	2	Poly Elbow, 1/2" FNPT x 1/2" FNPT
4	5016066	3	Garden Hose Washer
5	5041073	1	Poly Reducing Bushing, 1/2" MNPT x 1/4" FNPT
6	5067131	1	Poly Fitting, 1/2" MNPT x 1/2" HB
7	5143188	2	Nylon Shut-Off Valve (3/4" GHT)
8	5143405	1	Manifold w/Mounting Tab
9	5149034	3	Poly Swivel, 3/8" Hose Barb
10	5167031	1	Gauge, Liquid-Filled, 0-100 PSI





# FREQUENTLY ASKED QUESTIONS

## WHAT MATERIALS ARE NOT COMPATIBLE WITH MY SPRAYER?

- This sprayer is designed to spray common liquid pesticides mixed in water. It is not compatible with petroleum products such as diesel fuel, kerosene, gasoline or other flammable liquids.
- This sprayer is not compatible with bleach or other caustic cleaning fluids.
- When using wettable powders or other dry soluble pesticides, make sure to fill the tank 1/2 full, premix the pesticide into a slurry in a smaller container, add this to the sprayer tank and then fill with balance of the needed water. Dry materials should be sprayed as soon as possible and the sprayer should then be rinsed immediately with clean water.

## WHY DOES THE MOTOR NOT RUN?

- Check for loose wiring connection.
- Make sure on-off switches in both the lead wire assembly and on the pump motor are in the on position. – is on, O is off.
- Check for defective pressure switch.
- Check for low voltage at the power supply.
- System is pressurized and pressure switch has turned the motor off. Squeeze the lever on the handgun or open the bypass valve .

## WHY DOESN'T THE PUMP PRIME?

- Check for air leak in supply/suction line.
- Check for debris in check valve assembly
- Check for defective check valve.
- Check for clogged strainer.
- Check for crack in pump housing.

## WHY IS THERE PULSATING FLOW (SURGING)?

- Check for restriction in discharge line, or debris in nozzle orifice.
- Discharge hose is too long.
- Adjustable tip on the handgun is set to too fine of a mist. Adjust tip for more flow or slightly open the bypass valve.

## WHY DOES THE MOTOR CONTINUE TO RUN AFTER THE DISCHARGE IS SHUT OFF?

- Check for leak in discharge line.
- Check for defective or dirty check valve
- Check for defective pressure switch.

## WHAT IS THE RECOMMENDED PRESSURE FOR THE TRAILER TIRES?

- 30 PSI is recommended

## HOW DO I ADJUST SPRAYING PRESSURE?

- Spraying pressure is adjusted using the bypass valve. With the boom on and pump running, open or close the bypass valve to get the desired pressure. With the bypass valve closed, you will get maximum pressure.

## WHY DOES THE FUSE ON MY PUMP BLOW?

- Excessive voltage. The pump is designed for use with a 12 volt system only.
- Defective pressure switch.
- Motor is stuck.
- Defective wire harness.





# TROUBLESHOOTING

## PROBLEM / CAUSES AND REMEDIES:

### PUMP WILL NOT START

**Check:**

- Correct voltage ( $\pm 10\%$ ) and electrical connections
- Fuse or breaker
- Pressure switch operation and correct voltage at switch
- Rectifier or motor for open or grounded circuit
- Locked drive assembly

### PUMP WILL NOT PRIME

(No discharge with motor running)

**Check:**

- Debris in strainer
- Restriction (kinks) in inlet/outlet tubes
- Debris or swelling in inlet/outlet valves

### PUMP WILL NOT SHUT OFF

(Output line closed and no leaks)

**Check:**

- Air trapped in outlet line or pump head
- Correct voltage to pump
- Debris in pump inlet/outlet valves
- Loose drive assembly or pump head screws
- Pressure switch operations/adjustments

### LEAKS FROM PUMP HEAD OR SWITCH

**Check:**

- Loose screws at switch or pump head
- Switch diaphragm ruptured or pinched
- Punctured diaphragm if fluid is present



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TRACTOR SUPPLY CO.<sup>®</sup>

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