



SprayMaster™

Warranty Registration

"Your Trusted Leader In Insect Control For Over 40 Years"
www.pyranhainc.com

Dear Pyranha SprayMaster System New Owner,

We here at Pyranha, Inc. "Thank You" for purchasing the SprayMaster System, and we look forward to many years of providing you with the comfort and protection to which all of our customers are accustomed.

In order to serve you best, please complete and mail-in the attached registration within 30 days of purchase, or go to www.pyranhainc.com and register online to ensure that your system will be covered under our One (1) Year System Top Warranty (pump, timer and motor).

Warmest Regards,

The Pyranha Family

Pyranha, Inc.
Attention: Customer Service
1162 Jordan Ranch Blvd
Brookshire, Texas 77423

Company/Individual Name _____

Address _____ **City** _____ **State** _____ **Zip Code** _____

Phone Number _____ **Email** _____

Serial # _____ **Date This SprayMaster Was Purchased** _____

Where was your SprayMaster System Purchased?

☐ **www.pyranhainc.com** ☐ **Store Name** _____
City, State _____

SYSTEM TOP INSTALLATION

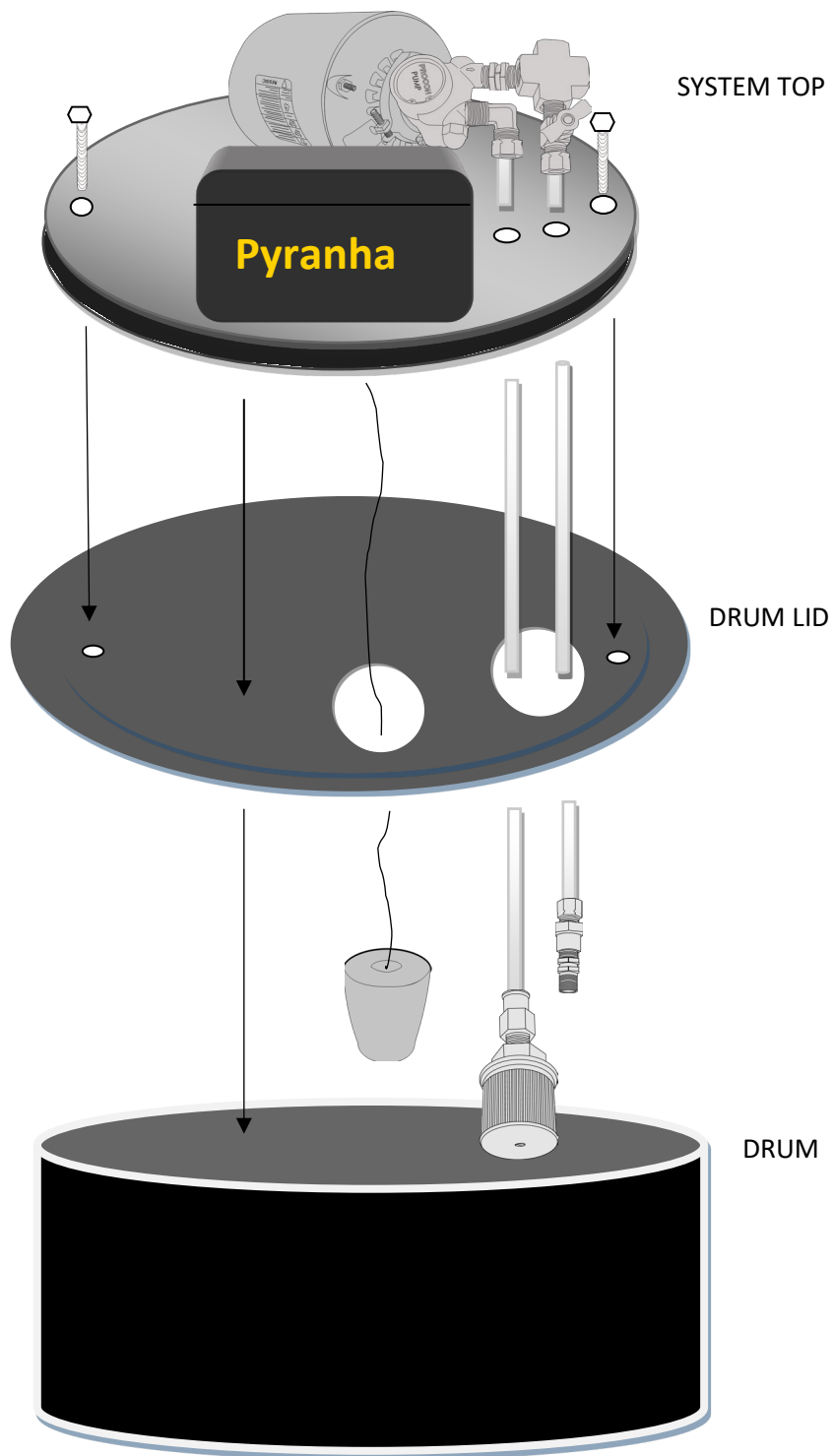
(SEE ILLUSTRATION ON NEXT PAGE)

1. Cut out or peel off tape covering large holes.
2. Unlatch metal ring and slide it down so it remains around the drum.
3. Remove drum lid.

The following steps can be completed with the drum top resting on the lip of the drum, or on any support that allows access to the bottom of the drum lid.

4. Carefully drop float through top of matching large hole. Make sure float line isn't pinched between the drum lid and system disk.
5. Insert supplied bolts through the bolt holes near the edges of the plastic disk and secure to the drum top. Tighten by hand to hold system disk in place and then use wrenches to finish tightening. **Don't over-tighten as plastic system disk can crack.*
6. Check float line again to make sure it is not pinched and hangs free.

The latch on the metal ring can be locked in place for security to keep the drum from being opened.



Installation of Your Spray System

1. At the installation site, remove all equipment from the corrugated box and the polyethylene drum and replace the drum lid. Check the picture to identify each piece of equipment from box and drum (figure 1).



Figure 1 – Equipment From Box and Drum

NOTE: HIGH PRESSURE TUBING MUST BE USED OR WARRANTY IS VOID!!

2. Run the end of the tubing from the intake filter through the lid and PVC circle and connect it to the pump suction inlet elbow (figure 2).
3. Insert the check valve assembly through the lid and PVC circle and connect it to the pressure-regulating valve (figure 2).
4. Place the lid on the drum making sure that the black float with nylon line passes through the cut-out with all lines hanging freely.
5. Remove the pressure gauge from its package and screw it into the top of the brass cross assembly (figure 3).
6. Make sure that the male discharge elbow points away from timer.

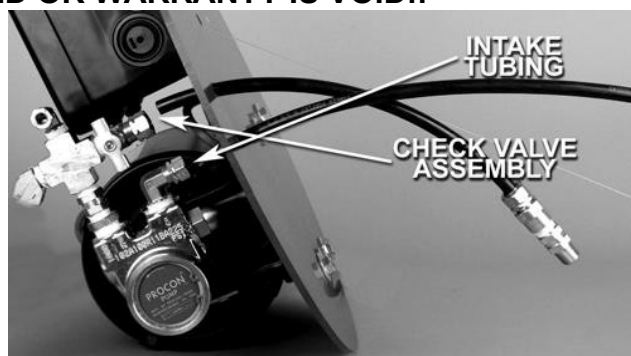


Figure 2 – PVC Circle with Intake Tubing and Check Valve Assembly



Figure 3 – Pressure Gauge Mounted Into Brass Cross Assembly

1. Remove the spray nozzles from package. Using the barn diagrams as a guide (figure 4), run the $\frac{1}{4}$ inch nylon tubing on the ground around the stall area to be treated, beginning at the tank.

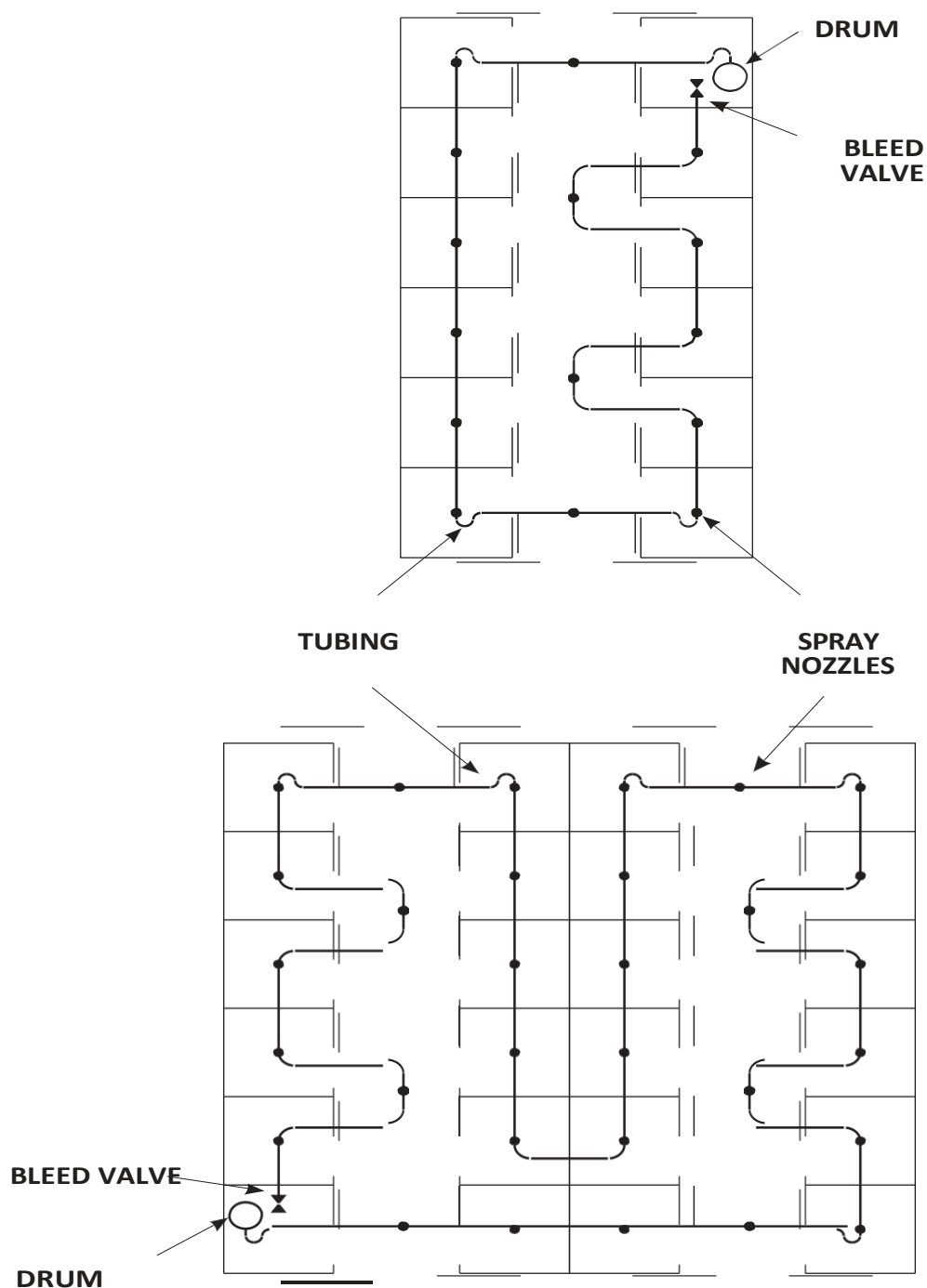


Figure 4 – Sample Barn Diagrams

2. Using supplied tubing cutter, cut the tubing squarely to ensure airtight connections at each spray nozzle.
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3. Push the tubing firmly into the side of the spray nozzle tee (figure 5). Pull gently to confirm that you have secure connections then push back in. If leakage occurs, remove tubing by pressing down on green circle, pushing the tubing in, pulling the tubing out and then releasing the green circle. Trim $\frac{1}{4}$ inch off the tubing before reinserting.

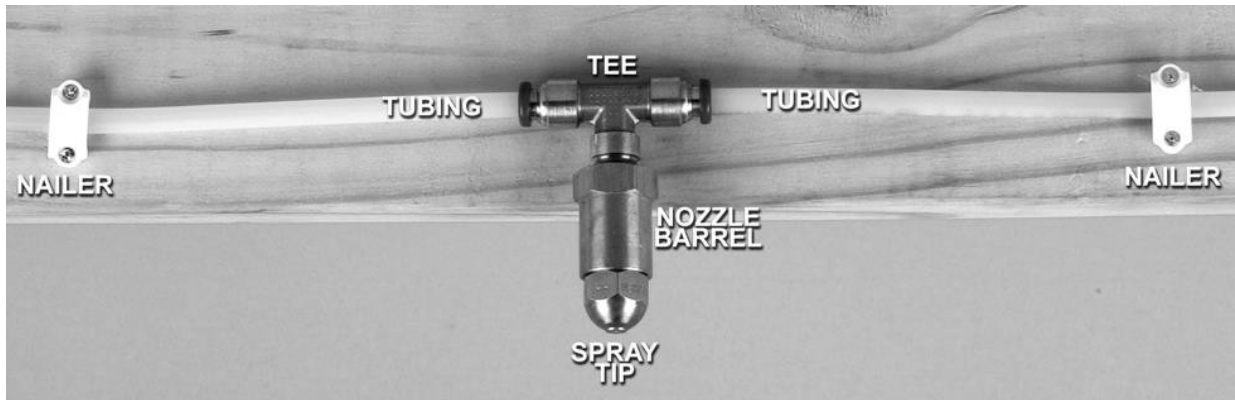


Figure 5 – Spray Nozzle Tee with Tubing and Fasteners

4. Using the plastic fasteners (figure 5) or zip ties, install the tubing and spray nozzles above the center of each stall and six (6) feet inside each exterior door. Do not install above 15' from the floor. Use cable wire if necessary. Make sweeping turns with the tubing around corners to **avoid kinking**.
5. After all the spray nozzles have been installed, run the beginning of the tubing from the male discharge elbow on the brass cross assembly (figure 3). Tighten with wrench. Leave four (4) feet of slack in the line to allow for easy shifting of lid to add insecticide or to remove lid for drum cleaning.
6. At the return end of the tubing attach a bleed valve to shut off the line and hold pressure (figure 6). It is recommended to end at the drum for bleeding liquid and air from the line into the drum.



Figure 6 – Bleed Valve

7. Remove the lid from the top of the drum and fill the drum to the half-way mark with clean water. **Do NOT put insecticide in the drum until testing is completed.** Replace the lid on top of the drum. Do not restrict the float line and tubing.
8. Connect the electrical cord of the timer to an 110V outlet. Open the bleed valve and hold inside the drum. Open the timer cover and start the system by flipping the toggle switch to “**TEST**”. Allow the system to operate for several minutes to be certain the pump is priming and that there are no leaks at the various tubing connections. Some nozzles may be spraying at this time, but this is normal. Once a steady stream is present, close the bleed valve.
9. Turn the pressure regulating valve clockwise until the pressure gauge reads between 190 and 210 PSI (figure 7) and all nozzles are spraying a consistently fine mist. Check again for leaks at the tubing connections.

NOTE: The system works best at 190-210 PSI and must not be set below 185 PSI or over 215 PSI. **DO NOT OPERATE SYSTEM WITH PRESSURE REGULATING VALVE CLOSED!**

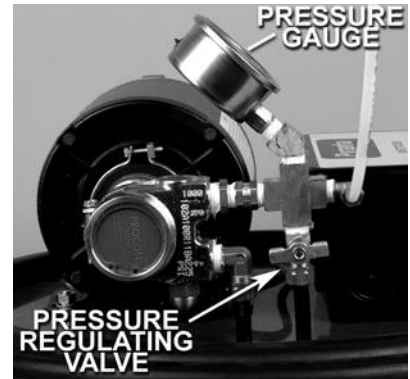


Figure 7 – Top of Drum Showing Pressure Gauge and Pressure Regulating Valve

10. After confirming that the spray nozzles are operating correctly with no leaks at the tubing connections, flip the toggle switch to “**OFF**” and disconnect the electrical cord from the outlet. Close the timer lid.
 11. Carefully lift the drum lid and shift it to the side of the drum top. Add the entire contents of the insecticide concentrate to the drum and finish filling the drum with clean water to 4” from the top of the drum. Replace the lid on the drum (being careful not to pinch the float line or kink the tubing) and reconnect the electrical cord. Secure the lid in place with the metal ring. **The latch on the metal ring can be locked in place for security to keep the drum from being opened.**
 12. Open timer cover. Open the bleed valve and hold in drum. Flip the toggle switch to “**TEST**” to fill the nozzle line with insecticide. Close the bleed valve once liquid is flowing through it. Adjust pressure to 190-210 PSI, if necessary.
 13. Rotate outer ring of clock dial clockwise to set time of day.
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14. Select the pin for the time of day you want the system to operate by using a ball point pen or similar object to move the switch outward into the set position (figure 8). Repeat the above for each time you want the system to operate. Spray times should be set from early morning to dusk. Your unit is shipped with the timer set for six firing times: 6:00am, 8:00am, Noon, 4:00pm, 6:00pm and 8:00pm.

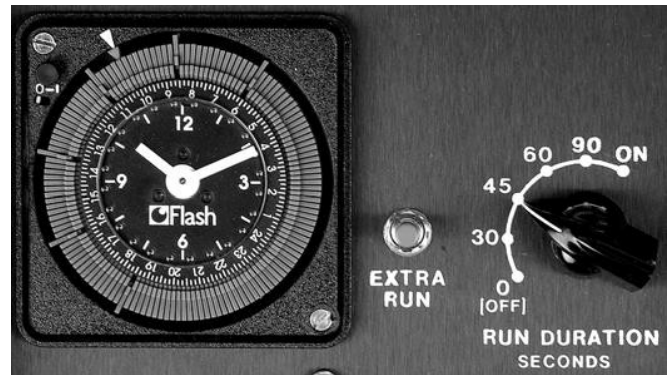


Figure 8 – Timer, Extra Run Button and Duration Selector Switch

15. Set the run duration selector switch to length of spray time desired. When you are first starting the system, we recommend setting the timer to operate 6 times a day for 45 seconds each time. When area is under satisfactory control (10 to 14 days), cut back the number of spray cycles and duration time to maintain control.

NOTE: System will run continuously when the toggle switch is in “TEST” position. System will not operate when switch is in “OFF” position. The “EXTRA RUN” button can be used at any time to test system or for extra spraying (figure 8). The REMOTE can also be used for additional sprays as desired.

CLOSE TIMER LID WHEN FINISHED.

PLACE CLOTH COVER OVER SYSTEM TOP.

Servicing Your Spray System

When the liquid is low and the drum needs to be refilled, the Float Switch will automatically shut the system off.

To service and refill the system, use the following procedure:

1. Unplug the system from the powersupply.
2. Lift the lid and set it to one side of the drum top. Normal refilling does not require that you completely remove the lid from the drum; but if you do remove it, take care to not crimp or damage the discharge tubing, intake tubing, float line or check valve assembly.
3. Inspect the intake filter and clean. We recommend changing the intake filter annually and replacing every two (2) years.
4. Check the interior of the drum for residue or dirt. Flush and clean the drum before adding water and concentrate. **If drum appears clean, just add water and concentrate.**

***Note:** If flushing out the drum; consider collecting the insecticide at the bottom of the drum prior to cleaning and spreading it on your manure pile.*

5. Fill the drum about halfway with water. Put the lid back on the drum (being careful to not pinch the float line or tubing). Plug the system into the power source.
 6. Open the bleed valve and hold in the drum. Flip the toggle switch to “**TEST**”. Once liquid is flowing through the bleed valve, close it. Check the pressure gauge is between 190psi and 210psi. Use Pressure Regulating Valve to adjust, if needed.
 7. Inspect all spray nozzles and confirm spray is a fine, even mist. If the nozzles fail to spray properly, see troubleshooting guide.
 8. With the nozzles spraying as desired; flip the toggle switch to “**OFF**”. Slide the lid to the side of the drum top. Add insecticide concentrate, then continue filling the drum with water to around four (4) inches from the top. Put the lid back on the drum and latch in place.
 9. Reset the timerclock, if needed. Flip toggle switch to the “**AUTO**” position.
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Winterizing Your Spray System

1. Disconnect the nozzle tubing at the discharge elbow (liquid will pour from the tubing) and open the bleed valve at the other end. We recommend having both ends of the tubing empty into the drum. **Be sure the brass nut and ferrule on the nozzle tubing stay in place.**
2. Lift or move the lid to raise the intake filter out of the liquid. Flip toggle switch to “**TEST**” and let run for 15 seconds to purge any liquid in the equipment (liquid will spray from discharge elbow). Flip toggle switch to “**OFF**”. Unplug system from power source.
3. Allow nozzle tubing to drain for several minutes to empty as much liquid as possible. Be sure intake filter stays out of any liquid remaining in the drum.
4. **If the drum freezes during the winter, you will need to stir any contents before reusing.**

Re-connecting System after Winterizing

1. After stirring the contents of your barrel, reattach the nozzle tubing to the system by pushing the tubing into the discharge elbow and tightening with the nut and ferrule.
 2. Follow steps 5 through 9 under “**Servicing Your Spray System**” on page 7.
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Troubleshooting Guidelines

Problem:	Check For:
The system does not operate at the correct times.	Check the timer box and see that the clock is set with the current time (military).
The system will not build pressure.	1. Leaks in tubing or nozzles. Replace tubing or nozzle tips. 2. Clogged intake filter. Clean or replace filter. 3. Airlock in pump. Remove discharge line at elbow. Turn pump on briefly to check for liquid discharge. 4. Broken pump. Remove intake filter. Lift tubing out of liquid and place thumb over end of tubing. Operate system; if strong suction is not evident, replace pump.
The system builds pressure but the nozzles do not spray.	1. Clogged tips. Clean outside with damp cloth or steel wool. If this does not work, see page 10 for cleaning suggestions. 2. Restricted tubing. Remove any kinks in line or replace tubing.
The spray nozzles drip.	1. Excessive pressure. Pressure should not exceed 200 PSI. Reduce pressure by turning pressure regulating valve counterclockwise until pressure is in proper range (185-195 PSI). 2. Air in lines. Locate bubbles in line, check tubing connection for leaks. Tighten fittings or replace tubing. Close bleed valve. If there is no bleed valve, operate system until spray is steady. 3. Loose tip. Tighten nozzle tip. 4. Malfunctioning check valve in return line to tank. If pressure drops to bottom of gauge, replace check valve. 5. Insufficient pressure. Pressure should not be less than 150 PSI. Increase pressure by turning pressure regulating valve clockwise until pressure is in proper range (185-195 PSI). DO NOT TURN VALVE COMPLETELY CLOSED! Check bleed valve for leaks. Replace if necessary.

Problem:	Check For:
The system will not operate.	1. Not enough liquid. Float will shut off system when liquid level is low so that pump will not run dry. Add new insecticide concentrate and water. 2. No power. Confirm power to electric outlet. 3. Loose connections. Review motor/timer connections. 4. Malfunctioning timer. Replace timer.
The spray is not killing insects.	1. Insufficient pressure. Pressure should be 185-195 PSI. Increase pressure by turning pressure regulating valve clockwise until pressure is in proper range. DO NOT TURN VALVE COMPLETELY CLOSED! 2. Incorrect spraying times. Confirm clock has correct time in military time. It may be off by 12 hours. System may need to be changed to increase number of spraying times and increase duration time. We recommend 6 times a day for 45 seconds to obtain control; then the duration time can be reduced. 3. Clogged tips. Clean outside with damp cloth or steel wool. If this does not work, see page 10 for suggestions. 4. Inoperative check valve in return line to tank. If pressure drops to bottom of gauge, replace check valve. This can cause air in lines and delay spraying of tips.

HOW TO CLEAN NOZZLE TIPS

1. First you will need 2 crescent wrenches to break loose the tip. You do this by putting one wrench on the body of the nozzle and one wrench tip of the nozzle and twist to break the tip loose.
2. Place nozzle tip in a can of distilled white vinegar and let sit for 24 hr. then rinse and scrub clean with an old toothbrush.