



Made in the USA

Owner's Manual

XT-3



Electrostatic
Spraying Systems

62 Morrison St, Watkinsville, GA 30677-2749
Phone: 706-769-0025 Fax: 706-769-8072
www.maxcharge.com



Owner's Manual

ESS XT-3

Electrostatic Spraying Systems, Inc.
62 Morrison St. · Watkinsville, GA 30677-2749

CE certification applied for
Copyright © 2009, Electrostatic Spraying Systems, Inc. – All Rights Reserved

This manual last updated January 1, 2021.



ESS XT-3 OWNER'S MANUAL

CONGRATULATIONS!

You have just purchased one of the most advanced spraying systems on the market today. Electrostatic Spraying Systems, Inc.¹ (ESS) is committed to providing you with powerful spraying systems that are easy to operate and maintain. The products of ESS are the result of the efforts and creativity of many people. In addition to input from engineering, marketing and manufacturing personnel, suggestions from our customers have been implemented into the design of our equipment.

We would like to hear your ideas also! If you have any suggestions or comments regarding the products or service of ESS write or call us at:

Electrostatic Spraying Systems, Inc.
62 Morrison St.
Watkinsville, Georgia 30677-2749
Phone: 706-769-0025
1-800-213-0518
Fax: (760) 769-8072
support@maxcharge.com

Please take time to read this manual before operating your new ESS XT-3 Sprayer™. The manual contains important instructions for the safe operation of this equipment. It also includes helpful suggestions to maximize productive use of the XT-3. Essential cleaning instructions should be followed to maintain your sprayer at peak efficiency. Please carefully read and follow all instructions for your own safety and the safety of others around you.

Thank you! We appreciate your business and are proud that you have selected an ESS sprayer for your operation.

Your new sprayer has been thoroughly tested and calibrated at the factory. If you have any problems with it, please get in touch with us immediately. We will be glad to answer any questions you have concerning our equipment or service. ESS intends to support its customers with efficient, helpful and friendly service. We appreciate your business and sincerely hope that Electrostatic Spraying Systems can meet your present and future spraying equipment needs.

We encourage you to make copies of the "Spraywand Yearly Service" form in the back of this manual. Use this form every year you send your wand in for maintenance and when we service the wand, your warranty will renew for another year. The service will replace the nozzle base, replace air and liquid hoses inside wand housing, replace filters, and recalibrate the wand and thoroughly cleaning the entire spray wand.

¹ ESS XT-3 Sprayer™, XT™, MaxCharge™, and the ESS logo are copyrights or registered trademarks of Electrostatic Spraying Systems, Inc.

For your personal records

Please record the model and serial numbers of your new sprayer here.

XT-3

Model #

Serial #

Date of purchase

Notes



Table Of Contents:

Overview of ESS XT -3 Air-Assisted Electrostatic Sprayer	1
Operator's Responsibility	2
Chemical Safety Precautions	3
About the low-voltage system of the MaxCharge Spraywand	3
Safety Decals	4
Pacemaker Disclaimer	4
Front and Side view of the XT -3™	5
Operating Instructions	6
To clean the XT -3 after operation	7

REFERENCE

Spray wand	8
Air Filter	9
To clean the air filter	9
Trigger	10
To engage/disengage the trigger	10
To clean the trigger	10
Liquid Filter Assembly	11
To disassemble, clean, and reassemble the Liquid filter assembly	11
Nozzle Assembly	12
To clean nozzle assembly	12
Pre-spray check	13
Post-spray check	13
The Air & Liquid Delivery System	14
Air Compressor	14
Tank Pressure Regulator	14
The Quick Connects	15
Air connection	15
Liquid connection	15
Tank	16
Batteries	17
Spraying with Your ESS Sprayer	18
Preparing a Tank Mix	19
A note about operating temperatures	19
Trouble-Shooting Guide	20-23
Spraywand Service Parts	24
Parts List	25
Flow disk chart	25
XT -3 Service Parts	25-26
XT-3 Parts	27-33
CE Declaration	34
Warranty	35
Yearly Spraywand Service	36
Notes	37
Spraywand Repair/Yearly Service Return Form	38

Overview of the ESS Model XT-3 Air-Assisted Electrostatic Sprayer

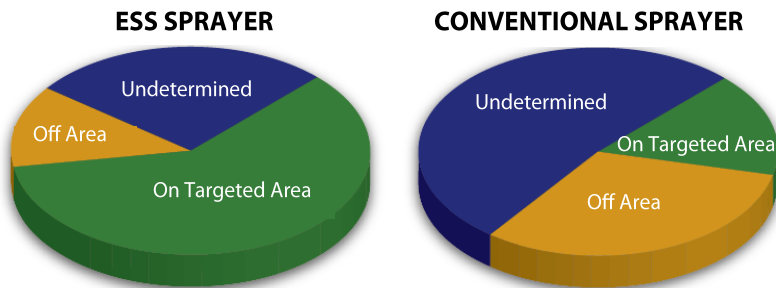
Air-assisted electrostatic sprayers produce electrically charged spray drops that are carried to the plant canopy or onto the target in a low pressure, gentle, air stream. The heart of the XT-3 Sprayer is the patented MaxCharge™ nozzle.

Air and liquid enter separately at the rear of the nozzle. Just before leaving the nozzle, the air hits the liquid stream to make many thousands of tiny spray droplets that pass through the charging ring. An electrical charge is applied to the spray droplets by the charging ring. Then the charged spray droplets are blown out of the nozzle and move into the plant canopy where they are attracted to plant material by electrostatic forces. The electrostatic charge induced by the Max-Charge™ nozzle is strong enough to allow the droplets to move in any direction to cover all plant surfaces, even defying gravity to coat the underside of leaves and the back side of fruits, vegetables, and objects. The result is uniform spray coverage on hidden surfaces that other sprayers miss. Air-assisted electrostatic sprayers give more than twice the deposition efficiency of hydraulic sprayers and non-electrostatic types of air-assisted sprayers. The grower benefits in terms of significant reductions in application costs and optimized insect and disease control, sanitization of beef or other coverage.

The MaxCharge™ nozzle is easy to clean and corrosion-proof. The interior ceramic outlet resists wear three times better than stainless steel outlets. These features combine to give the best spray coverage on the market. This quality product is virtually maintenance-free, and assures you of savings in the application of chemical.

The comparison of air-assisted electrostatic spraying versus conventional spraying is dramatic.

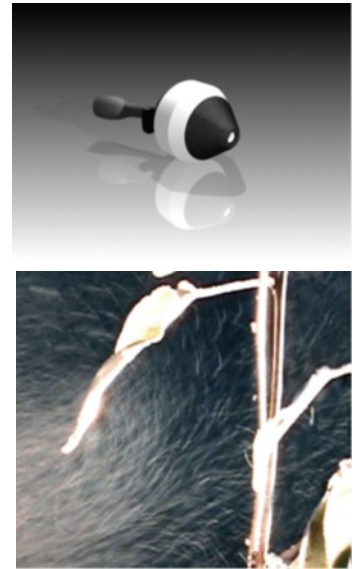
Where Does The Spray Go?



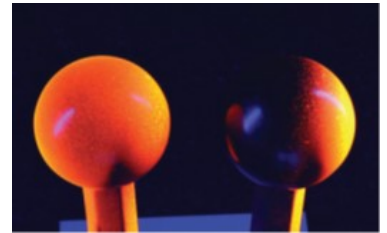
The University of California completed a series of tests to investigate what happens to spray liquid after it leaves the nozzle.

Conclusion: ESS technology places over 4 times the amount of spray onto the plant surface using 1/2 the amount of chemicals. Furthermore, they also reported that ESS sprayers send 2/3 less chemicals to the ground and into the air. Less chemical used overall, less waste, and less drift than conventional equipment.

Imagine the environmental benefit!



Electrostatically charged droplets are attracted to plant surfaces.



A picture is worth a thousand words...

In this test, florescent dye has been sprayed on two round knobs. The left knob was sprayed with the electrostatic system ON; the right knob was sprayed with the same sprayer, but with the electrostatic system OFF. Note how even the coverage is on the electrostatic knob.

Operators Responsibility

Read the Owner's Manual! Failure to do so is considered a misuse of the equipment.

It is the responsibility of the user to read the Operator's Manual to understand the safe and correct operating procedures for the sprayer and to maintain the sprayer according to the manufacturer's recommendations. It is the operator's responsibility to ensure that all who are using this equipment read this manual.

The operator is responsible for inspecting the equipment and for repairing and replacing damaged or worn parts to prevent damage or excessive wear to other parts. It is also the operator's responsibility to deliver the machine for service or to replace defective parts which are covered by the standard warranty.

Lack of attention to safety can result in reduction of efficiency, accident, personal injury, or death. Watch for safety hazards and correct deficiencies promptly. Use the following safety precautions as a guide when using this machine.

- ➔ Read the Owner's Manual. Failure to read the manual is considered a misuse of the equipment.
- ➔ Use the XT-3 sprayer ONLY for its intended use as described in this manual.
- ➔ Use the XT-3 sprayer indoors only.
- ➔ Do not allow a child to operate the XT-3 sprayer. Do not allow adults to operate the sprayer without proper instruction.
- ➔ Use extra care when spraying on stairs. Do not place sprayer on stairs.
- ➔ Do not use without tank in place.
- ➔ Always empty tank after use and before transporting the sprayer.
- ➔ Store sprayer in a dry place. Do not expose to freezing temperatures.
- ➔ Do Not leave fully charged spraywand plugged into the charger for extended periods of time.
- ➔ Do Not plug a charger into a fully charged spraywand.

CAUTION: SHOCK HAZARD

The XT-3 sprayer has been engineered to be very safe during normal operation. However, as with all line-powered electrical equipment and tools, certain safety procedures need to be followed.

- ➔ Use a GFCI (Ground Fault Circuit Interrupter) power outlet whenever possible.
- ➔ If an extension cord is necessary, use a three-wire extension cord with a 3-prong grounding type plug.
- ➔ Turn off sprayer before unplugging.
- ➔ Unplug sprayer when not in use.
- ➔ Always unplug by grasping the plug. Do not unplug by pulling on the cord.
- ➔ Never pull plug with wet hands.
- ➔ Do not pull or carry the sprayer by its power cord. Do not crimp the cord or cause it to be damaged by straining it around sharp edges. Keep power cord away from heat sources.
- ➔ Do not use the XT-3 sprayer with a damaged power cord. Call ESS for a replacement.



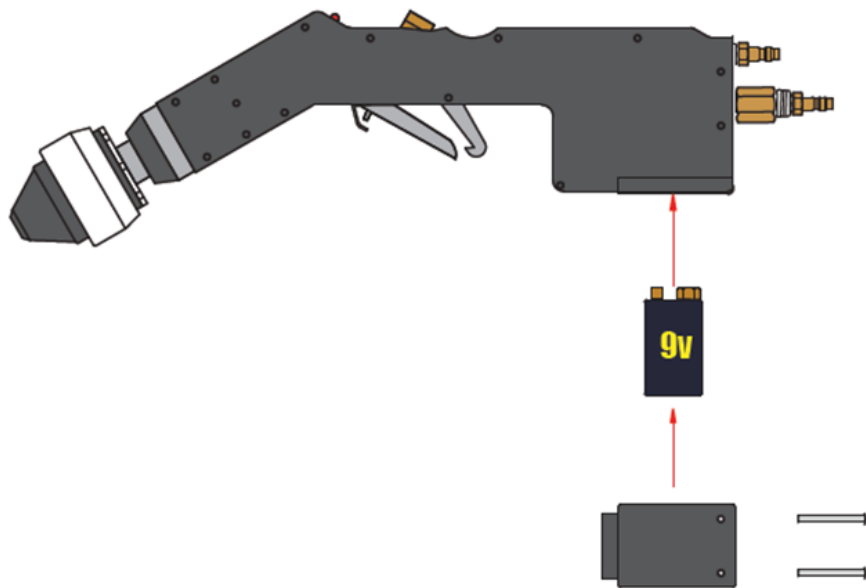
CHEMICAL SAFETY PRECAUTIONS

Read and follow all instructions on the chemical or pesticide manufacturer's label.

- ➡ Use protective clothing, eye protection and gloves when mixing chemicals to be sprayed with the XT -3 sprayer.
- ➡ Some of the chemicals that can be used in the BP1 may be harmful to the skin or if inhaled. When in doubt, use a respirator and eye protection when spraying with the spraywand.
- ➡ Follow the chemical manufacturer's recommendations in handling, mixing, applying, storing and disposing of chemicals.
- ➡ Be aware of decontamination methods in case a person, clothing, or equipment is accidentally sprayed.
- ➡ Be aware of poisoning symptoms and know the appropriate first aid.
- ➡ Know the length of time needed to pass before allowing people and pets to go back into the sprayed area.

About the low-voltage system of the MaxCharge Spray gun

For operator safety, the power supply for the MaxCharge spraywand is entirely separate from the power supply for the sprayer's compressor. The spraywand is powered by 9-volt batteries in the handle of the XT -3 sprayer. This low-voltage charge is not enough to harm people. Some people report feeling a "tingle" or a slight stinging sensation when the spray from the spraywand falls on their bare skin.



Pacemaker Disclaimer:

If you have a pacemaker, we would recommend that you **not operate an electrostatic sprayer**, or if you elect to do so, know that you are accepting any risk associated therewith. Just to be clear, no one, with a pacemaker, has ever had a problem using our electrostatic sprayers, however, several years ago a physician expressed concern, even though his opinion was un-tested and not founded in any research. Since that time, we have taken the ultimate safe approach and recommended that those with pacemakers not operate our electrostatic sprayers.

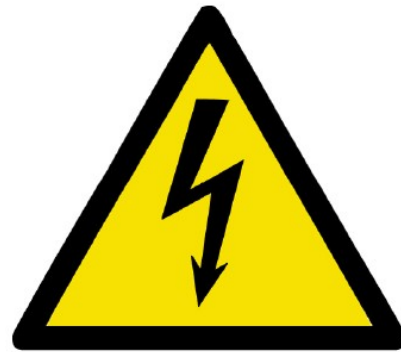
Safety Decals

Appropriate safety decals are placed on ESS equipment in order to alert the operator to possible dangers.



The SC-EB compressor becomes hot during normal operation.

DO NOT TOUCH



There will be a small shock when using our sprayers. To avoid this shock place your thumb on the bolt at the top of the spraywand.



This label is wrapped around the hose to remind you to clean the filters regularly. The number one cause of poor sprayer performance is a clogged or dirty filter.

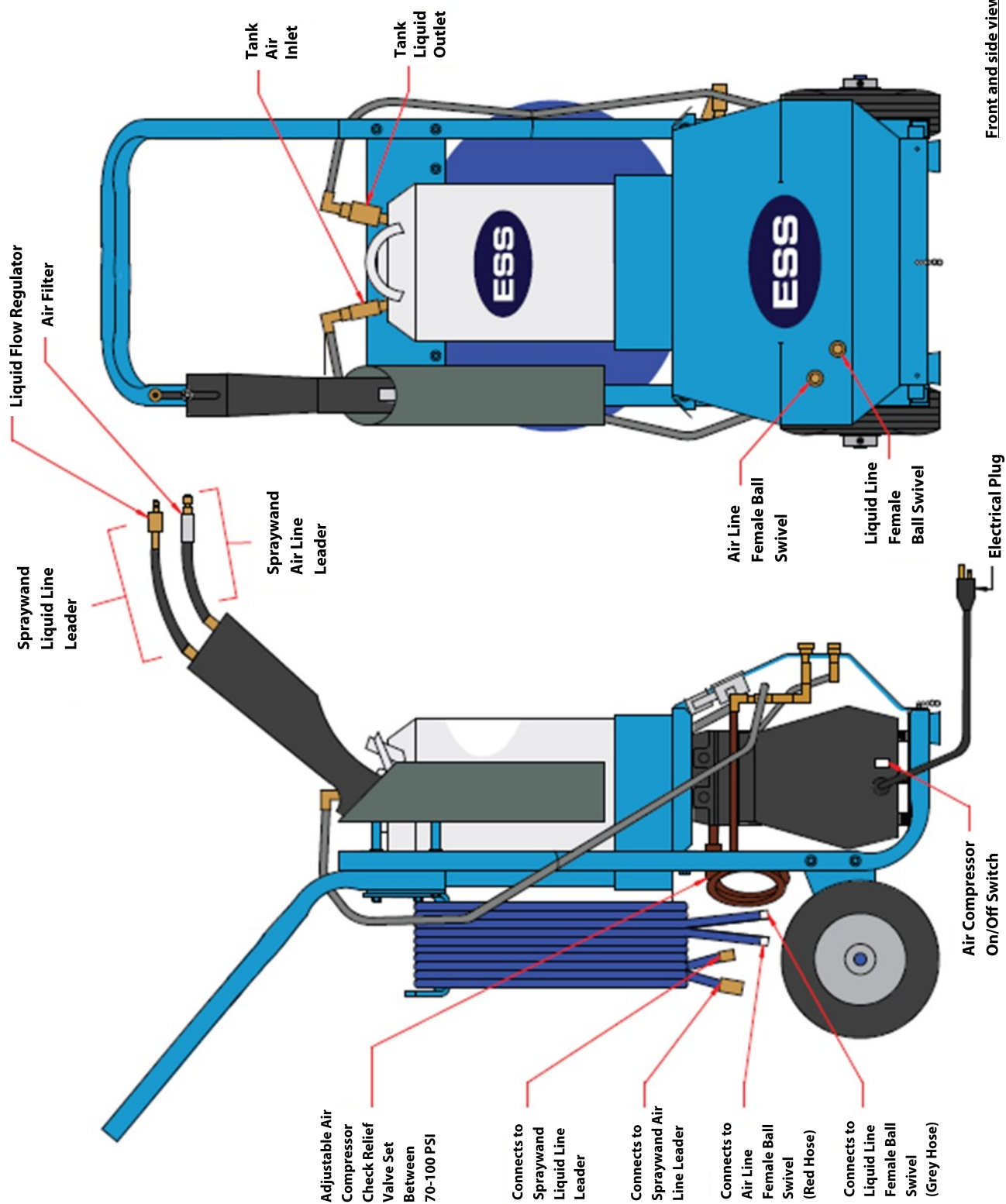
SAFETY PRECAUTION

USE RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) AS INDICATED BY YOUR CHEMICAL MANUFACTURER COMPANY AND SPRAYING CONDITIONS

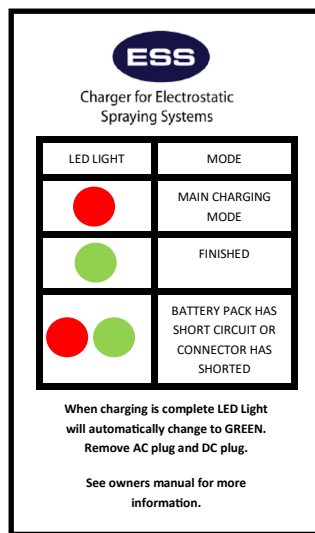
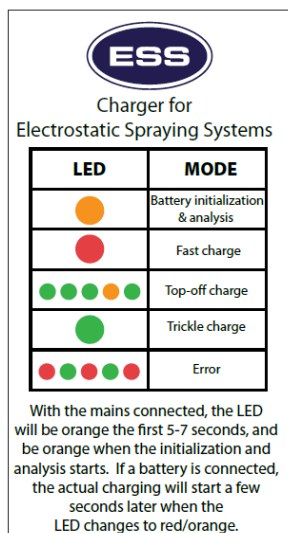
READ AND FOLLOW THE CHEMICAL MANUFACTURER'S INSTRUCTIONS CAREFULLY.

It is extremely important for the owner/operator's safety as well as the safety of other people in the vicinity that all chemical safety precautions are followed.

This label is placed on top of the XT-3 Sprayer near the quick connect sockets.



Front and side view of the ESS XT-3™



One of these labels is placed on the charger of all spraywands.



If you use a pacemaker, use our electrostatic sprayer at our own risk.



Operating Instructions

Steps for Operation

1. Prepare the tank mix.
2. Connect the twin line hose to the front panel.
3. Connect the twin line hose to the liquid and air leaders on the handgun. If using the plastic bottle, connect the gray hose of the plastic bottle hose assembly instead of the gray hose of the twin line hose to the liquid leader.
4. Plug the power cord into an appropriate receptacle. Turn on the XT-3 air compressor.
5. Engage the trigger and spray.

Cautions:

ESS recommends that you use an outlet with a Ground-Fault Circuit Interrupter (GFCI).

Do not operate the XT-3 in standing water.

Do not immerse the XT-3 compressor.

To clean the XT-3 after operation:

1. Clean the exterior of the sprayer.
2. Clean the tank and/or the plastic bottles.
3. Disconnect the twin line hose from the handgun air line and liquid line leaders.
4. Disassemble and clean the liquid filter. Be careful not to lose the flow disk.
5. Unthread the quick connect plug from the handgun liquid line leader. Use a 7/16" wrench on the plug and an 11/16" wrench on the 1/8" NPT body.
6. Connect the quick connect plug to the grey hose of the twin line hose.
7. Fill the tank with 2 gallons of clean water.
8. Turn on the air compressor to flush the line with 1.75 gallons of water. Turn off the air compressor.
9. Disconnect the quick connect plug from the twin line hose. Re-thread it into the handgun liquid line leader.
10. Reassemble the liquid filter.
11. Turn on the air compressor and engage the trigger to flush the handgun lines with the remaining water. Check the nozzles for a good spray pattern while flushing. Allow air to flow for 30 seconds after the water has been sprayed.
12. Apply silicone spray or similar lubricating oil to all quick connect fittings.

Detailed cleaning instructions for each component are found in the reference of this manual.

Cooling Fan

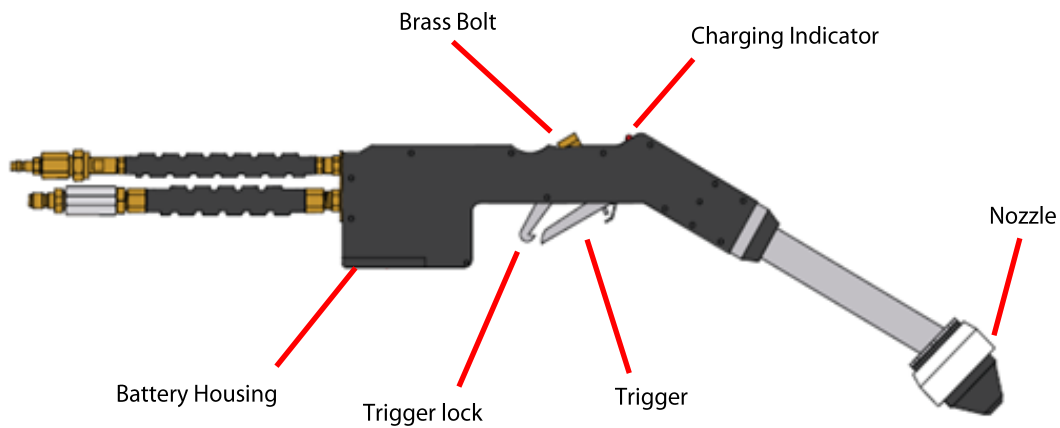
Check the cooling fan on the back of the unit to make sure that debris does not clog inside, blocking air flow into the heat exchanger. It may be necessary to use pressurized air to clean debris out, remove the fan with screwdriver and clean the coils if necessary.



REFERENCE

Spraywand

The spraywand is held by the operator during spraying. Activation of the trigger causes liquid to spray. The Spraywand has the following user-serviceable parts: the air filter, the liquid filter assembly, the nozzle assembly, and the batteries. Except for the batteries, which are accessed by removing the battery cover, nothing inside the Spraywand shell is user-serviceable. **Do not open the spraywand shell**; doing so will void the warranty on the spraywand.

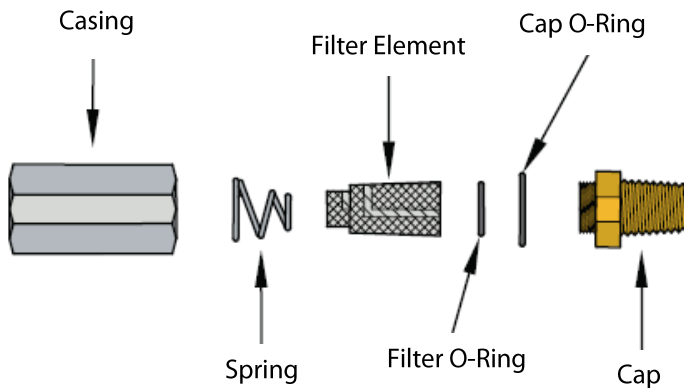


Air filter

Note: XT-3 units manufactured after March 2009 do not require an air filter on the spraywand air leader.

For XT-3 units manufactured before March 2009, there is an in-line air filter located outside the base of the spraywand in the air hose. It filters dirt out of the air lines. It's easy to tell the Air Filter from the Liquid Filter Assembly because the Air Filter is in a silver-colored casing. Replacement parts for the air filter assembly are available as a kit. The kit includes a filter, and large and small o-rings.

Order using ESS part number 231.



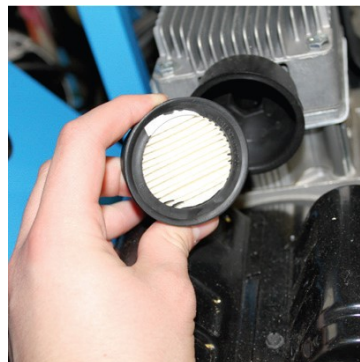
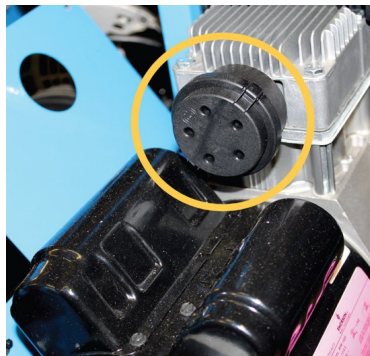
Air Filter Assembly

To clean the air filter:

1. Unthread the casing from the cap using a 3/4" wrench on both parts. Be careful not to lose the spring or the air filter inside of the casing.
2. Check inside each part for debris. Clean any dirt out with compressed air or warm, soapy water.
3. Reassemble the air filter, making sure to put it together as shown above.

Cleaning the air filter on the base unit

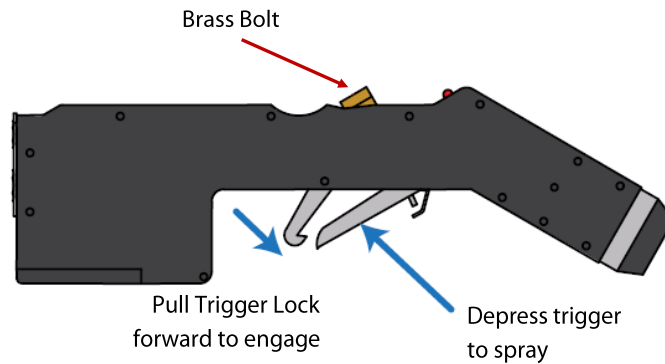
To clean the air filter for the compressor, pull off the filter cap, located inside the front panel. Inside, remove filter and blow off to clean.



Trigger

The trigger turns the spray on and off.

It can be continuously held for operation or it can be locked in place.



To engage/disengage the trigger:

1. Depress the trigger up towards the body of the spraywand to start spraying.
2. To keep spraying, either keep holding the trigger or lock it in place by pulling up the lock and hooking the trigger.
3. To stop spraying when the trigger is not locked, let go of the trigger.

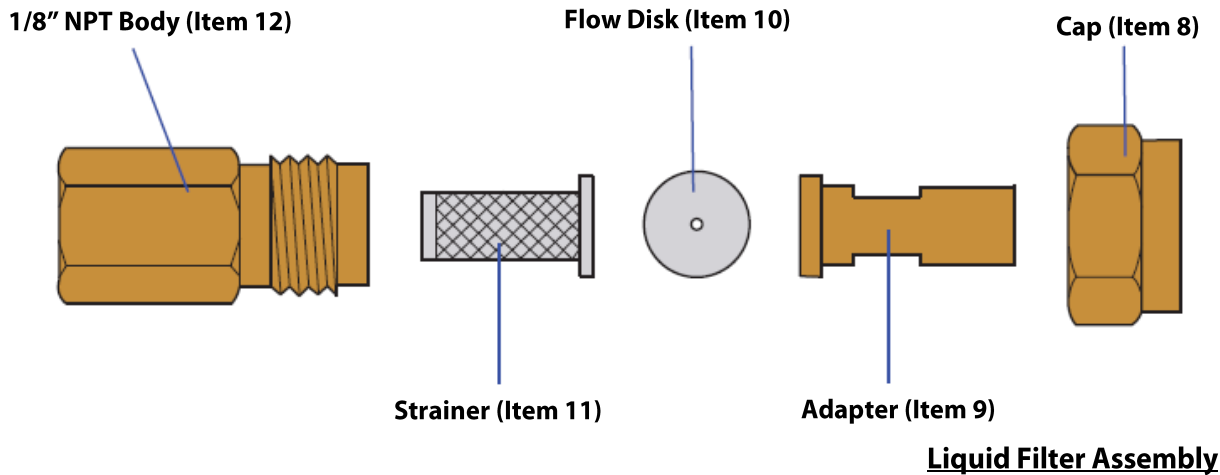
To clean the trigger:

1. Unthread the brass bolt on the top of the spraywand with a 5/8" socket wrench. Be careful not to lose the spring, plunger, copper washer, and small brass bushing inside the trigger. Note how they fit inside so they may be replaced properly.
2. Check inside the trigger for blockage. Clean out any debris with compressed air or warm, soapy water.
3. Replace the spring and plunger; rethread the brass bolt into the top of the spray gun until tight.

Liquid filter assembly

The liquid filter assembly is located outside the base of the spraywand. It is composed of these parts: a 1/8" NPT body (Item 12), a strainer (Item 11), a flow disk (Item 10), an adapter (Item 9) and a cap (Item 8). The strainer is the active filtering element in the volume of liquid that flows through the line. There is an extra flow disk and an extra strainer in the XT-3 Parts Kit in case the originals are lost or damaged.

You may have to clean the liquid filter more frequently if the XT-3 is being used to spray high-particle density solutions.



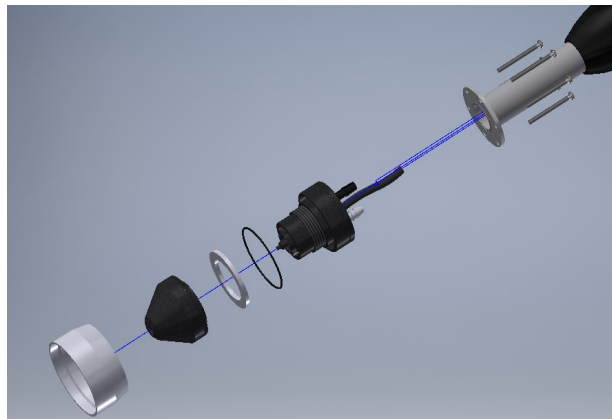
To disassemble, clean and reassemble the liquid filter **(see labeled drawing above):**

1. Using a 13/16" wrench on the cap (Item 8) and an 11/16" wrench on the 1/8" NPT body (Item 12), unthread them. Note: When you disassemble the liquid filter assembly, notice how the parts fit together in order to reassemble them properly. Be careful not to lose any parts, particularly the flow disk (Item 10) which is inside the cap. The sprayer will not function correctly without the flow disk.
2. Remove the strainer (Item 11) from the 1/8" NPT body.
3. If the 1/8" NPT body contains residue, clean it with compressed air or clean water.
4. Clean the strainer with compressed air or clean water. If residue still remains in the 50 mesh screen, disassemble the strainer. Unscrew the top brass part from the bottom brass part. The 50 mesh screen slides off the brass body and can be cleaned with compressed air or clean water. If residue still remains, soak the 50 mesh screen and screw the top brass part back on the lower brass part.
5. If the flow disk is still in the cap, remove it. Check the aperture of the flow disk for blockage. If there is any, clean it with compressed air or water. Replace the flow disk so that the numbers on the disk face the strainer.
6. Replace the strainer in the 1/8" NPT body.
7. Rethread the 1/8" NPT body and the cap.

Nozzle Assembly

It is very important to follow all the maintenance and cleaning procedures to ensure that the electrostatic sprayer will function properly. Although the MaxCharge™ nozzle will outperform all electrostatic spray technology on the market, regular cleaning will ensure peak operating performance.

The nozzle assembly is located at the end of the spray gun wand. It is composed of a nozzle body, internal o-ring, Teflon ring, cover, external o-ring, and a hood (see labeled drawing at right). To access the nozzle components, just unscrew the nozzle cover by hand.



Cleaning the spraywand

Always rinse the spraywand out with clean soapy water after every day's spraying. That is the most important thing you can do to ensure trouble free operation of your XT -3 sprayer. By cleaning after each and every working day you will avoid the long term chemical buildup that eventually causes clogs, poor spray patterns and shortens nozzle life. Establish maintenance intervals to disassemble and clean the nozzle. Your nozzle maintenance schedule will vary depending on the types of chemicals used and adherence to pre- and post- spray checks. In general it is sufficient to thoroughly clean nozzles every 50 hours. If heavy loads of wettable powers are used, the cleaning schedule should be sooner.

To clean the nozzle assembly

1. Slide the hood over the nozzle cover.
2. Unscrew the cover from the nozzle base and remove the Teflon ring. Clean any debris from around the nozzle tip. **Note:** There is a small o-ring in the nozzle around the base of the tip – take care that it doesn't fall off. If it does, clean it and press back into place. Also, take care not to damage the nozzle tip when the cover is removed.
3. Soak the ring, cover, and hood in a mild detergent solution. Use a small brush (soft or mild bristle) to clean the inside of the cover and the hole through it. Also, be sure to clean the hood. It is important to clean inside the hood and the two cavities. Rinse thoroughly.
4. Scrub the nozzle base with the detergent solution using a soft bristle brush. Clean the ceramic outlet. Be sure to thoroughly clean the base cavity and take care not to damage the nozzle tip. Rinse and make sure the small o-ring is in place.
5. Reassemble nozzle by placing the Teflon ring on the base and screwing the cover on **hand tight**. Next, slide the hood over the nozzle and seat it securely against the external o-ring. Wipe clean the exterior of all hoses and fittings connected to the nozzle.

The electrode cover should be hand tight. Never use pliers or other tools to tighten it. The insulating ring should be loose.

Pre-Spray Check

I. Inspect Nozzles

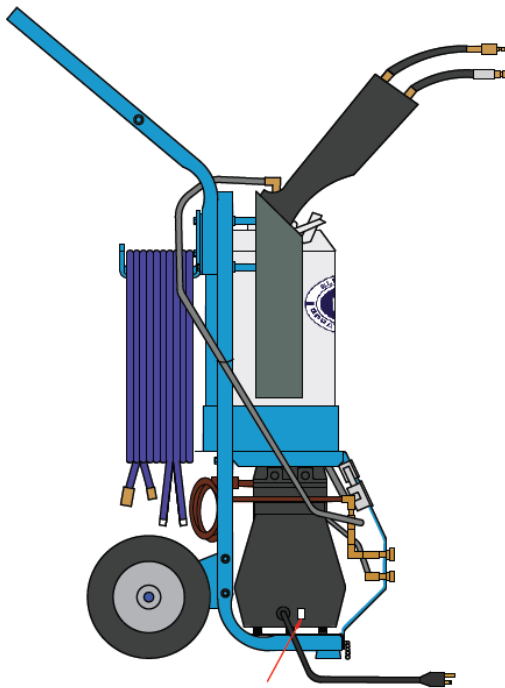
Check nozzle cover to make sure it is on hand tight (do not over tighten or use a wrench). Make sure the hood is seated firmly to the nozzle base and against the external o-ring.

II. Preparing the Tank Mix

If you will be spraying wettable powders it is a good idea to use a compatibility agent with the water and tank mix. Compatibility agents are chemicals mixed with the water that make mixing easier and keep heavy concentrations uniformly in suspension. Some brand name additives are COMPLIMENT™, UNITE®, and BALANCE™. Check with your local chemical supplier for others that are available.

Post-Spray Check

After each spray it is essential that hoses and spray gun be flushed with clean soapy water. This will help prevent chemical build-up that can clog lines and nozzles. Also, it is recommended that the nozzle exterior (black portion of nozzle) and nozzle hoods be cleaned with soapy water at this time.



Location of the XT-3 power switch.

The Air & Liquid Delivery System

Air compressor

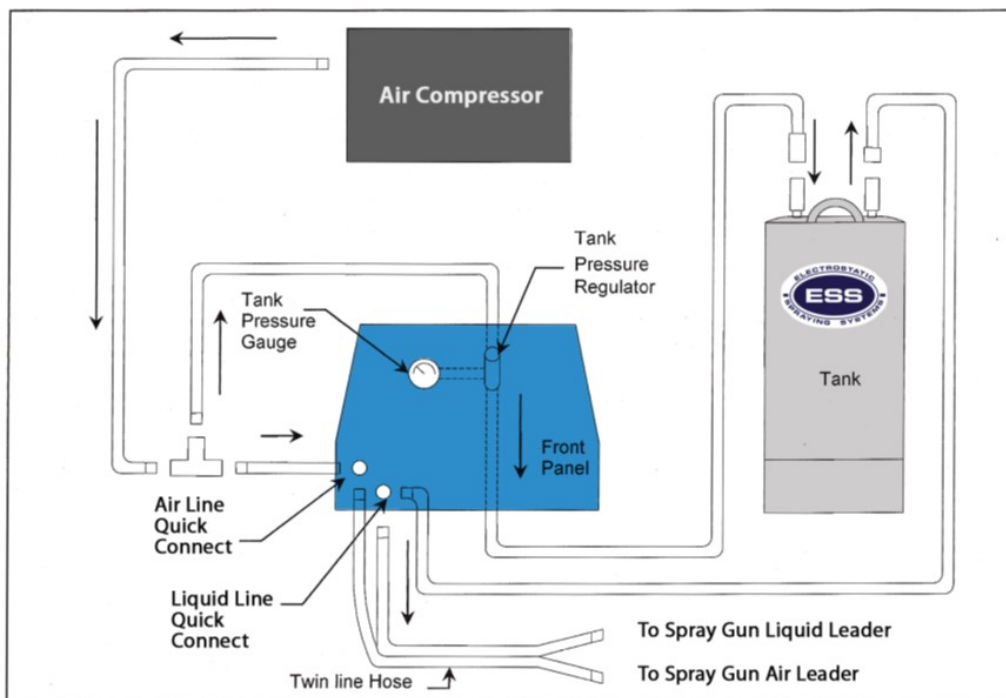
The air compressor produces compressed air which atomizes and propels the liquid. It plugs into a 110 volt electrical source. Use the XT-3™ with a three-pronged extension cord of no more than 50 feet and rated for no less than 15 amp service. The On/Off switch is on the side of the air compressor.

The XT-3 is also available with a 220-volt compressor.

Tank pressure regulator

As of January 1, 2010, the XT model no longer has a regulator and gauge. If you have a model after that date, you can no longer regulate the tank pressure. Once you turn the sprayer on, the tank will fill with pressure and the sprayer will function as it did before. If you have a model before, see the paragraph below.

There is a pressure regulator to control air pressure to the tank. It corresponds with the pressure gauge on the left side of the front panel. This regulator is operated by pulling out the dial and turning it clockwise to increase pressure or counter-clockwise to decrease pressure in the tank. This regulator controls the air pressure going to the tank not to the spraygun. Generally tank pressure should be 15 psi. There are two purposes for the tank pressurization: first, to push the liquid solution from the tank to the spraygun, and second, to agitate the liquid in the tank, so that the chemical stays in solution. Once the desired pressure is achieved, push in the dial to lock it in place. Some chemicals have a tendency to foam. If you see any foam coming out the pressure release tank value, either reduce the tank air pressure or add an "antifoaming" agent to the solution. In some occasions, it may be necessary to lower tank pressure to avoid foaming, to even as low as 5 psi. When adjusting tank pressure, one should dial pressure up to desired setting, rather than down. Two air lines run from the tank pressure regulator. One line runs to the tank pressure gauge on the front panel. The other runs to the inlet quick connect on the tank.



Quick connects

There are four sets of quick connects (plug and socket) on the sprayer:

- Compressor (air) outlet
- Tank (liquid) outlet,
- Spray gun air inlet
- Spray gun liquid inlet

In all cases, the plug is on the outlet side of the connection.

Air connection

The air hose is the larger of the two hoses that make up the blue twin line hose. The quick connect for the air connection is on the front panel of the XT-3 body. The air socket and plug are larger in diameter than the liquid connections – it is not possible to connect the air hose to the liquid socket. The other end of the air hose connects to the air leader of the spraywand (lower leader). It's easily recognizable because its plug is larger than the liquid connector.

Liquid connection

The liquid line is noticeably smaller than the air hose. Its quick connect socket is also on the front panel of the XT -3 body. It is smaller than the air quick connect socket – it is not possible to connect the liquid hose to the air socket. The other end of the liquid hose connects to the liquid leader of the spraywand (upper leader).

To connect the quick connects at the spray gun leaders:

1. Slide the sleeve of the quick connect socket up.
2. While holding the sleeve up, push the socket onto the quick connect plug.
3. Release the sleeve.
4. Pull on the socket body to ensure that it is properly seated and cannot be pulled off the plug when the sleeve is down.

To connect the quick connects at the front panel of the XT-3:

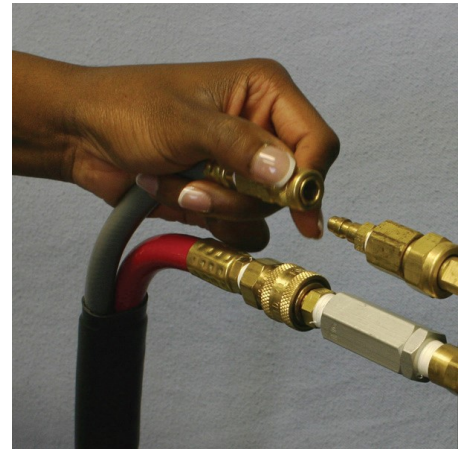
1. Push the liquid and air plugs into their respective sockets until you feel them latch.
2. Pull gently to make sure the connector is properly seated.

To disconnect the quick connects at the spray gun leaders:

1. Slide the sleeve on the quick connect socket up.
2. While holding the sleeve up, pull the socket off the quick connect plug.

To disconnect the quick connects at the front panel of the XT-3:

1. Push the sleeve on the quick connect socket towards the sprayer body.
2. While holding the sleeve down, pull the plug out of the quick connect socket.



To connect or disconnect the air or liquid connections on the sprayer or spray gun, pull back the outer sleeve of the quick-connect to release.

Tank

The XT -3 has a 3-gallon (11.4 liter) stainless steel tank. When the compressor is operating and the tank pressure gauge is set between 12-15 psi, the liquid in the tank is continuously agitated. This helps prevent separation and settling of the chemical. There is a pressure release valve on the tank lid that allows the operator to release tank pressure before opening the tank. Due to agitation, you will hear a small amount of air escaping from the tank lid even when the lid is fastened. This is normal.



Latched and pressurized

Open (after being depressurized)

To open the tank:

1. Slowly open the Pressure release valve by turning it counter-clockwise (left). This depressurizes the tank.
2. Pull the tank lid's latch up.
3. Holding on to the latch, rotate the tank lid 90° clockwise.
4. Pull out the tank lid. Notice the direction of the tank lid in relationship to the tank opening.

To close the tank:

1. Slide the lid into the tank opening, using the same direction as when it was removed.
2. Rotate the lid 90° counterclockwise.
3. While pulling the lid up to seal it against the tank opening, push down on the lid latch until it is parallel with the tank lid and seals tightly.
4. Close the Pressure release valve by turning it clockwise.

Note: Do not operate the sprayer when the tank lid is not securely closed. Tank agitation is powerful and liquid may splash out if the lid is not sealed.

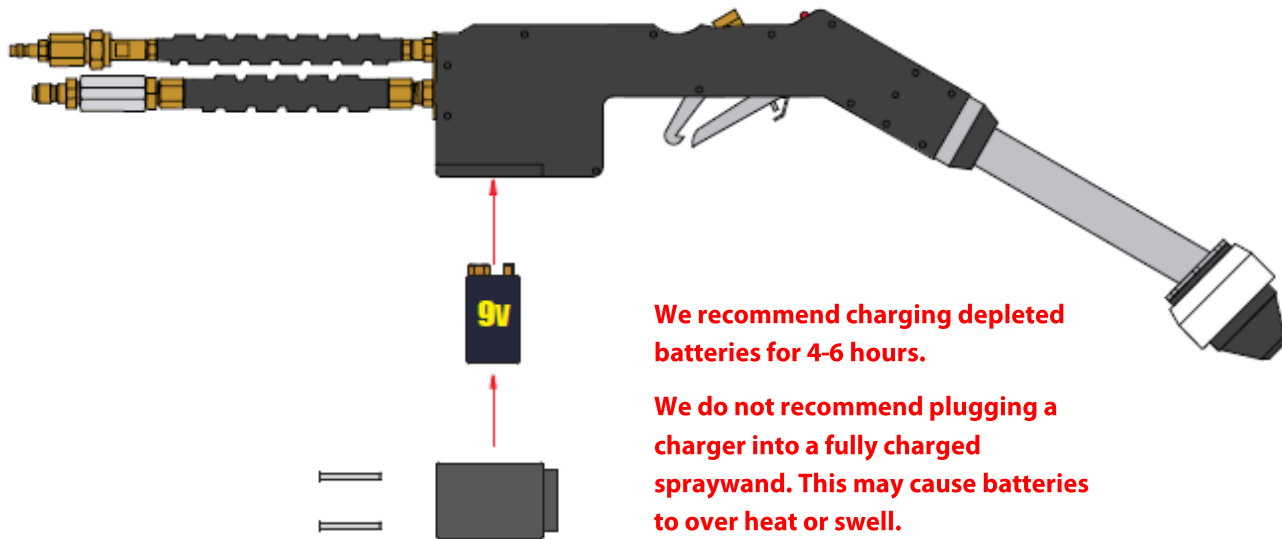
It is recommended that, at times, the tank should be thoroughly cleaned by triple-rinsing the tank. A commercially available tank cleaner, like Nutra-Sol, may be used when the XT-3 is used to spray wettable powders on a regular basis.



CAUTION:
TANK CONTENTS UNDER PRESSURE
Stand back when opening the
Pressure release valve.

Batteries

The nozzle charging system operates on two 9-volt rechargeable batteries which are located in the base of the spraywand. Please charge the batteries fully before the first use. In average conditions, the batteries will perform 5-6 hours of operation on an individual charge. The batteries should be recharged when the charging indicator light on top of the spraywand shell fails to glow even though air continues to flow through the spraywand. After approximately 800-1000 hours of service, the batteries will no longer be able to hold an adequate charge and will need to be replaced. Substitute with 9-volt nickel-hydride rechargeable batteries, until the XT-3's replacement rechargeable battery pack from ESS can be ordered.



To change the batteries:

1. Unscrew the two 6-32 x 1/2" Phillips head machine screws which hold the battery cover in place.
2. While holding the leads in one hand, gently disconnect the batteries from the leads. Be careful not to tear the leads off the wires or tear the lead wires out of the power supply.
3. Connect the fresh battery pack to the leads.
4. Replace the battery cover. Screw the two 6-32 x 1/2" Phillips head machine screws back in to secure the battery cover.
5. Charge the spray gun before attempting to use it.

Remember to charge the spraywand batteries after every work session!

Be advised: Non-rechargeable 9-volt batteries can be used, however do not plug the battery charger into the spraywand while non-rechargeable batteries are installed. This will result in serious damage to the nozzles charging system and null the warranty.

Spraying with your ESS sprayer

Note: When using unfamiliar equipment or chemicals, always test on a small area before treating the entire surface. Do not use a chemical with the ESS sprayer if the label prohibits use in low-volume sprayers. This unit is for heavy-duty use. During operation the hose will heat up naturally, therefore, be aware of heat and periodically allow for breaks if it gets too hot.

Spray Technique

As in spray painting, the goal is to achieve even coverage over the surface. The ESS MaxCharge spray gun is designed to help you do just that - by propelling the chemical spray with a gentle air flow, you can stay well away from the target surface and let the electrostatic attraction do the rest of the work.

Please note: the spray droplets are very, very fine --- about 40 microns each. If you are used to working with a conventional sprayer, you may make the mistake of thinking the target is not wet enough because you do not see large beads of liquid. In fact, after a pass with the XT -3's MaxCharge spray gun, the surface of the target should just barely glisten with moisture. The fine droplets will evaporate quickly.

Here are some tips to achieve the best possible coverage with the ESS XT-3 sprayer.

1. Before each job, ensure that your sprayer is in good working order (see the pre-spray checklist on page 13 of this manual).
2. The optimal spraying distance is at least 18 inches away from the target surface, however 36 to 48 inches may provide a more even coating. This gives the fine mist produced by the MaxCharge nozzle room to develop into a chaotic cloud that will be attracted to the target surface.
3. Hold the spray gun at right angles to the target surface. Starting at the highest point and using zig-zag horizontal strokes about 1 meter (3 ft.) wide, spray down to the lowest point. Try to have each stroke overlap the previous stroke by about 50%.
4. You can use vertical strokes if it suits the area better. Just make sure to work in a methodical pattern and let your strokes overlap.
5. When moving to the next section, allow it to overlap the previous section by a few inches. Do not leave a gap.
6. The target surface should just barely glisten with the spray. Do not over-saturate the surface; if you see runs or puddles it means you are wasting chemicals. Do check to make sure the newly-sprayed surface is very slightly damp.
7. Be careful to keep the spray gun barrel as level as possible. If you allow the nozzle to point down too much, it may drip occasionally.
8. Unlike spray painting, you don't have to stop the spray on every return stroke. Just engage the trigger lock and concentrate on the regular pattern of spraying.
9. Periodically check to make sure the red light is illuminated on the spray gun.



Preparing a Tank Mix

The tank mix depends on two factors: water requirement and dosage. Water requirement is the amount of water needed to cover the given treatment area. Dosage is the amount of chemical which should be applied in a given treatment area.

First determine the water requirement for your sprayer over a known area. An easy way to determine water requirement is to spray a trial application with water. Put a gallon of clean water in the ESS XT-3 tank and thoroughly spray a known area. After spraying the known area, determine how much water was used from the amount left in the tank. This is the water requirement for the given area. Next measure the known area to determine how many square feet were sprayed. Write down both values for future reference.

_____ (gallons) Water Requirement
for _____ (size of known area in ft²)

Next determine the dosage. This is the amount of chemical you wish to dispense in a given area. Appropriate dosage depends upon chemical label recommendations, disinfection or sanitization goals, level of pest or disease infestation, past experience with particular chemicals, and other variables.

Because electrostatic spraying is a much more effective spraying method, ESS recommends that you experiment to find the optimum chemical concentration. Start spraying using the same chemical rate used in the past with other sprayers. Test to ensure that infective agent levels have been reduced to desired levels. At the next application, start reducing the amount of chemical used for each spray. Keeping the amount of water in the tank constant, cut the amount of chemical mixed in by 15 to 25% for each spray, testing after each experiment to see if the desired results are being accomplished. If you are planning to cut rates then it is very important to conduct these experiments to determine the optimum chemical concentration.

A note about operating temperatures

The MaxCharge nozzle should always be operated at temperatures above 10° Celsius (50° Fahrenheit). When the ambient temperature is colder than this, the evaporative cooling caused as the spray is atomized will freeze the nozzle opening.

Nozzle freeze-up can also occur when the liquid to be sprayed is colder than 10° C (50° F).

How to conduct a jar test

Needed:

Solutions of chemicals in
approximate dilutions
Jar with lid
Gloves and Safety
Glasses

After mixing solutions of the desired chemicals, place them in a large jar, cap it securely, and shake vigorously. Carefully observe the interaction between the chemical compounds. If the water becomes milky or cloudy, the combined solution may plug the nozzles. Let the jar sit for one to two hours. If there is precipitate on the bottom of the jar, then seek another combination of chemicals.

IMPORTANT

Water temperature must be at least 10° C (50° F). When the liquid and air meet in the nozzle, the temperature of the liquid decreases. As a result, water at temperatures below 10° C (50° F) may freeze and clog the nozzle.

Troubleshooting Guide

When you encounter the problems listed below, use the suggested trouble-shooting methods. If you cannot solve the problem or have a problem with the Spray Gun that is not addressed in this manual, contact ESS at (706) 769-0025, or 1-800-213-0518, toll-free.

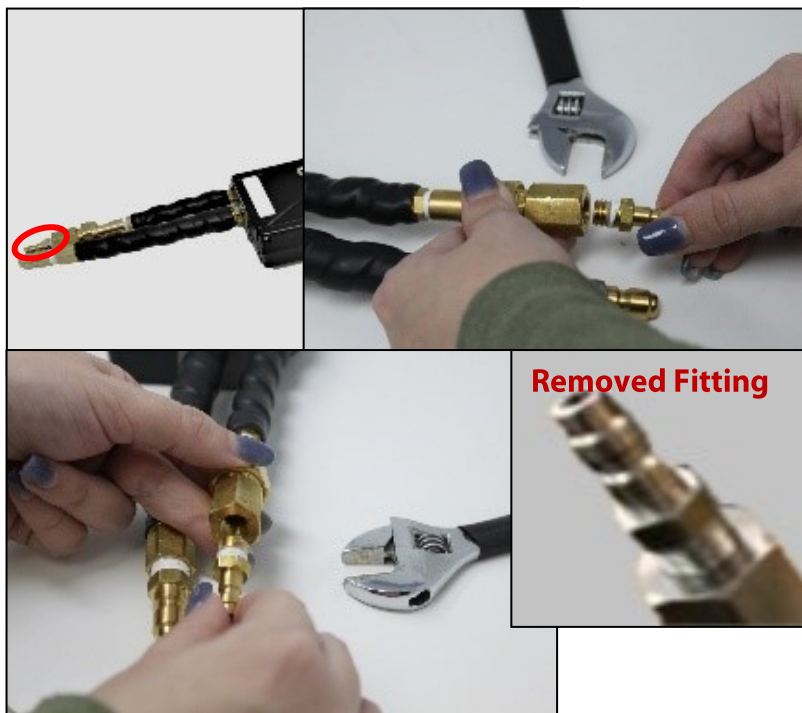
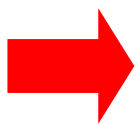
Symptom	Possible Problem(s)	Corrective Action
Air pressure of spray appears low	Clogged Liquid Filter	Clean the Liquid Filter Assembly (see <i>Liquid Filter Assembly</i> section of this manual).
	Liquid fittings are loose	Make sure the Liquid Filter Assembly is installed correctly.
	Air fittings are loose or damaged	Make sure that the Air Filter is installed correctly. Inspect for loose hoses or failed air lines—Spray fittings with soapy water—tighten ones that bubble, replace if necessary.
	Clogged Air Filter	Clean the Air Filter (see the <i>Air Filter Assembly</i> section of this manual).
	Dirty Trigger	Clean the Trigger (see the <i>To Clean the Trigger</i> section of the manual).
No spray from nozzle or the spray from nozzle is erratic or spits	Debris in the nozzle	Clean nozzle according to instructions.
	Spray is freezing due to evaporative cooling	Make sure that water temperature is at least 50°F (10°C).
	Liquid Filters are dogged	Clean the Liquid Filter Assembly (see <i>Liquid Filter Assembly</i> section of this manual).
	Low liquid levels in the tank	Refill tank.
	Loose liquid or air fitting	Inspect hose quick connects at case and at spraywand leader. Make sure that all liquid fittings and air fittings are properly seated.
	Dirty Trigger	Clean the Trigger (see the <i>To Clean the Trigger</i> section of the manual).
	Overtightened nozzle cover	Loosen cover. It should only be finger-tight.
Charging indicator (LED) blinks or goes out during operation	Batteries are exhausted	Recharge batteries. If problem persists, replace battery pack.
	Dirty nozzle	Clean nozzle according to instructions.
Air compressor cuts off during operation	Compressor has overheated	Let unit cool for approximately 1 hour; restart.
XT-3 will not start	No power	Make sure the unit is plugged into an appropriate electrical receptacle.
	XT-3 is not switched on	Make sure the power switch is on.

XT-3 Troubleshooting Guide

First step determine where the clog is:

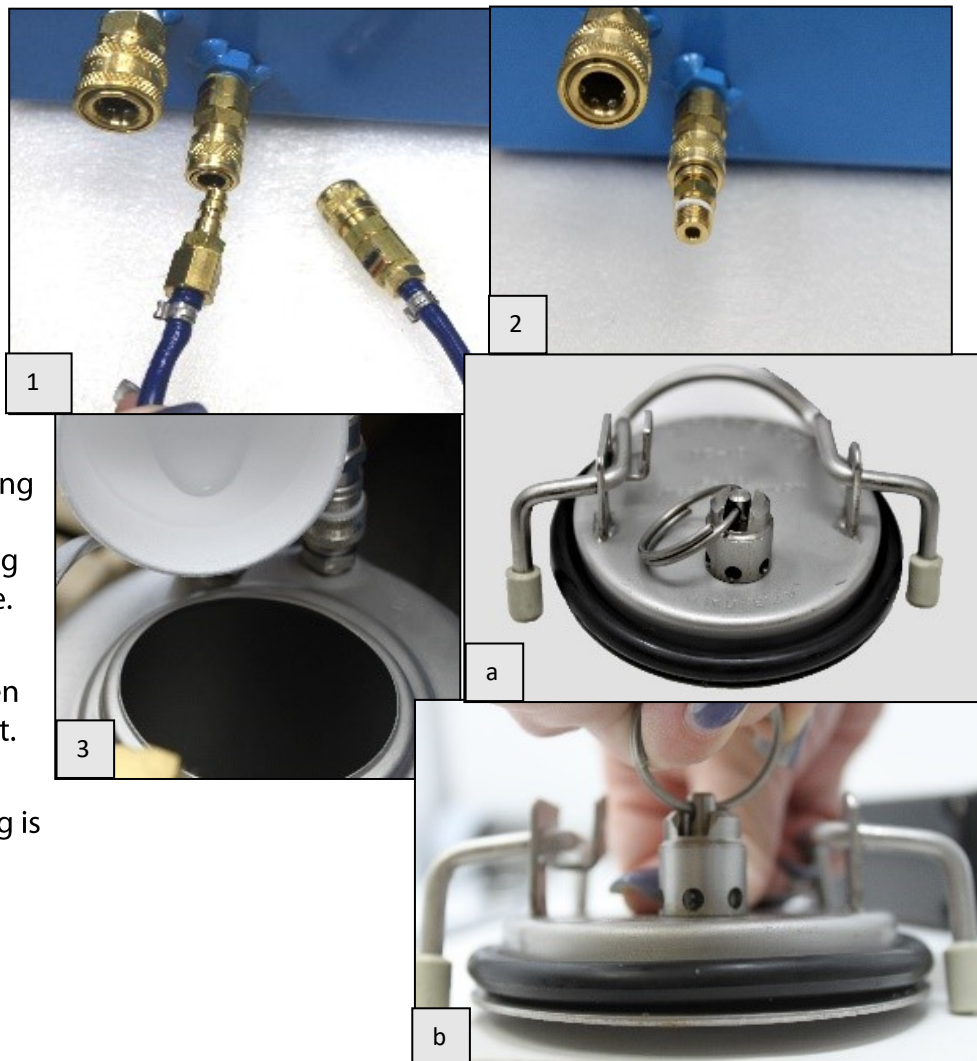
- The base unit
- Liquid hose quick connections
- The flow disc and filter
- The Sprawand.

Remove the Fitting on the back of the gun that looks like this, (could be brass or stainless steel) We will refer to this as the “removed fitting”



The Base Unit:

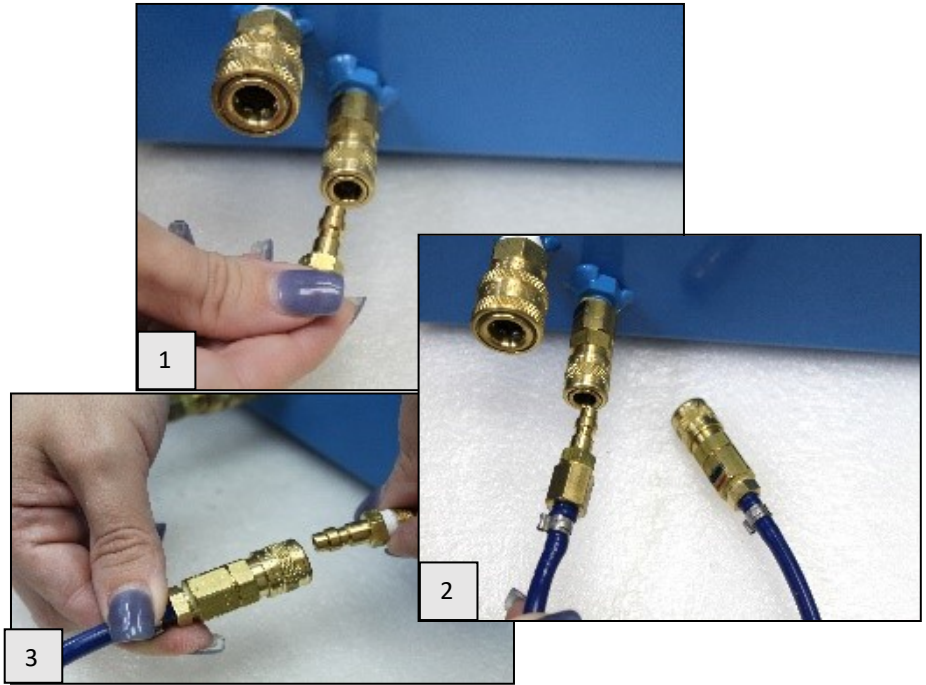
1. Unplug the blue hose from the base unit
2. Plug the removed fitting into the base unit
3. Fill the tank at least half full with water, turn on sprayer.
 - a. Make sure the pressure relief valve on the compressor is well-seated and not leaking.
 - b. Make sure pressure is building up inside the tank, with the compressor running, by pulling slightly on the tank relief valve.
4. Water should spray out the “removed fitting” that has been plugged directly into base unit.



Liquid Hose & Quick Connections:

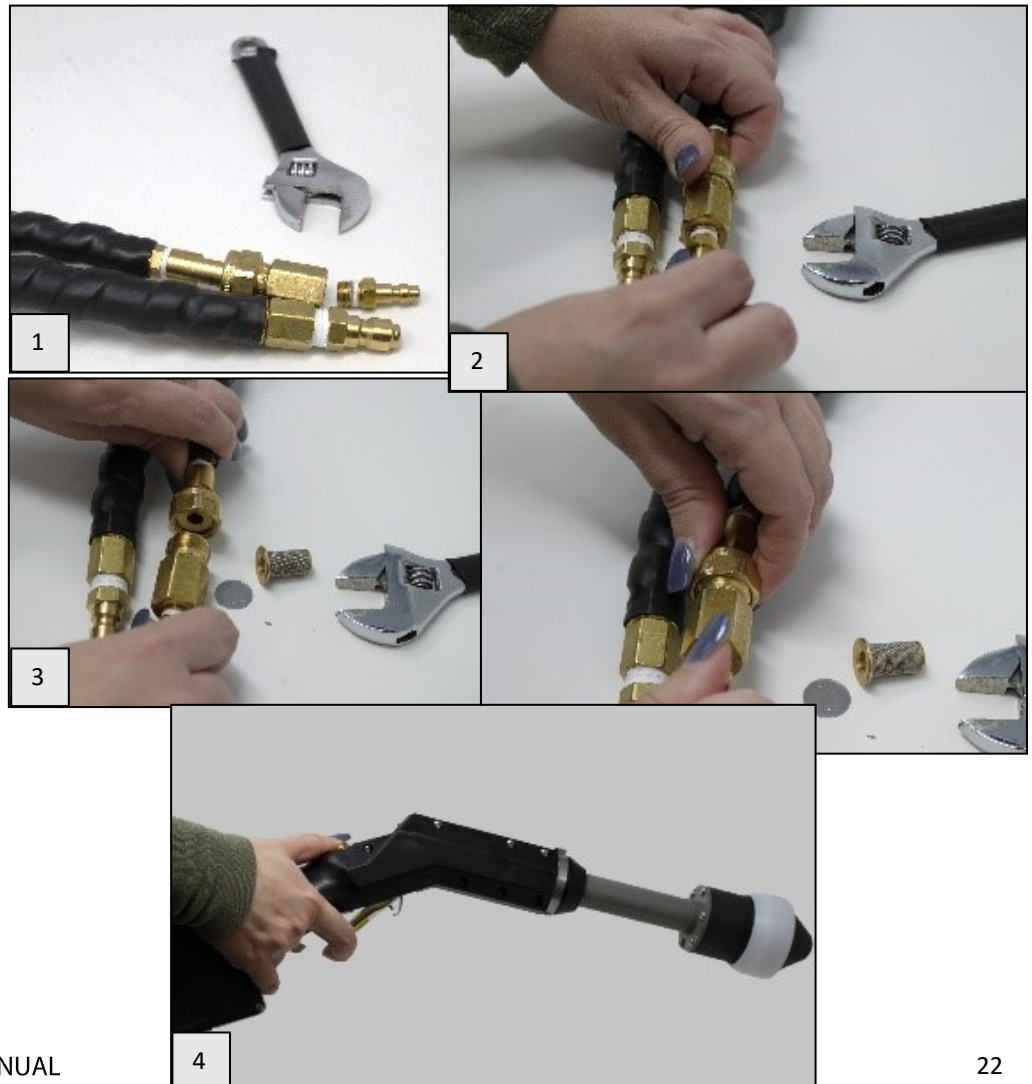
1. Turn off the sprayer, and take the removed fitting out of the base unit.
2. Reconnect the blue hose to the base unit.
3. Plug the "removed fitting" into the other end of the blue hose where the liquid quick connect is.
4. Turn on the sprayer, water should spray out of the end of the hose.

If the water sprays out of the fitting we now know it is not in the base or the hose.



The Flow Disc and filter:

1. Turn off the Sprayer and reconnect the "Removed Fitting" to the back of the Spray gun.
2. Remove the flow disc and filter
3. Reconnect the coupling without the flow disc and filter inside.
4. Turn on the sprayer and depress the trigger.
5. If water sprays out the spray wand you know the clog is not in the flow disc or the filter.

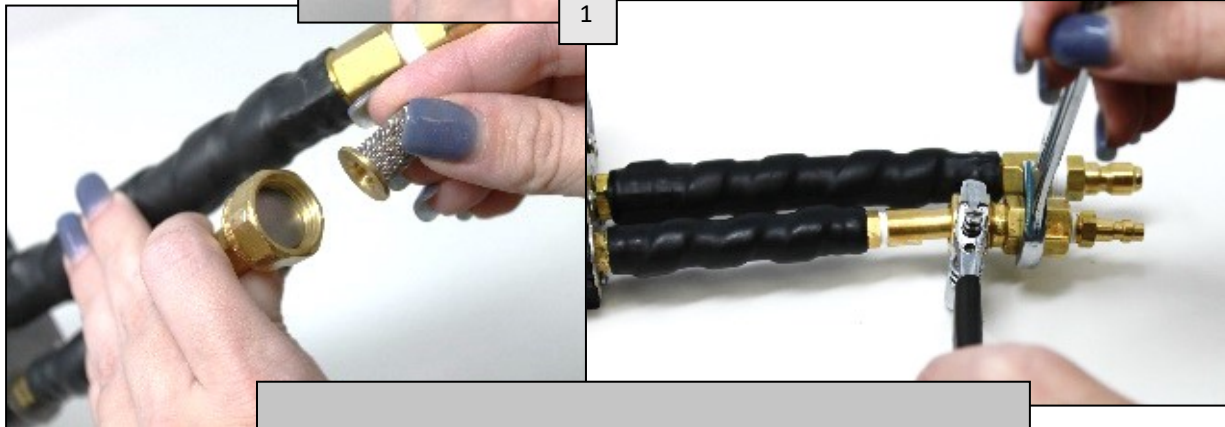
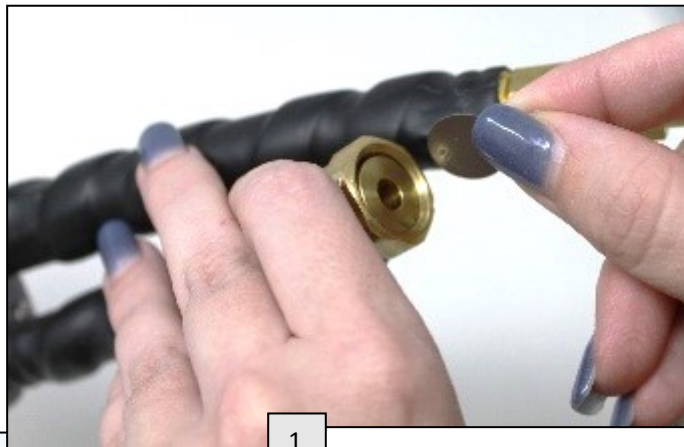


The Spraywand:

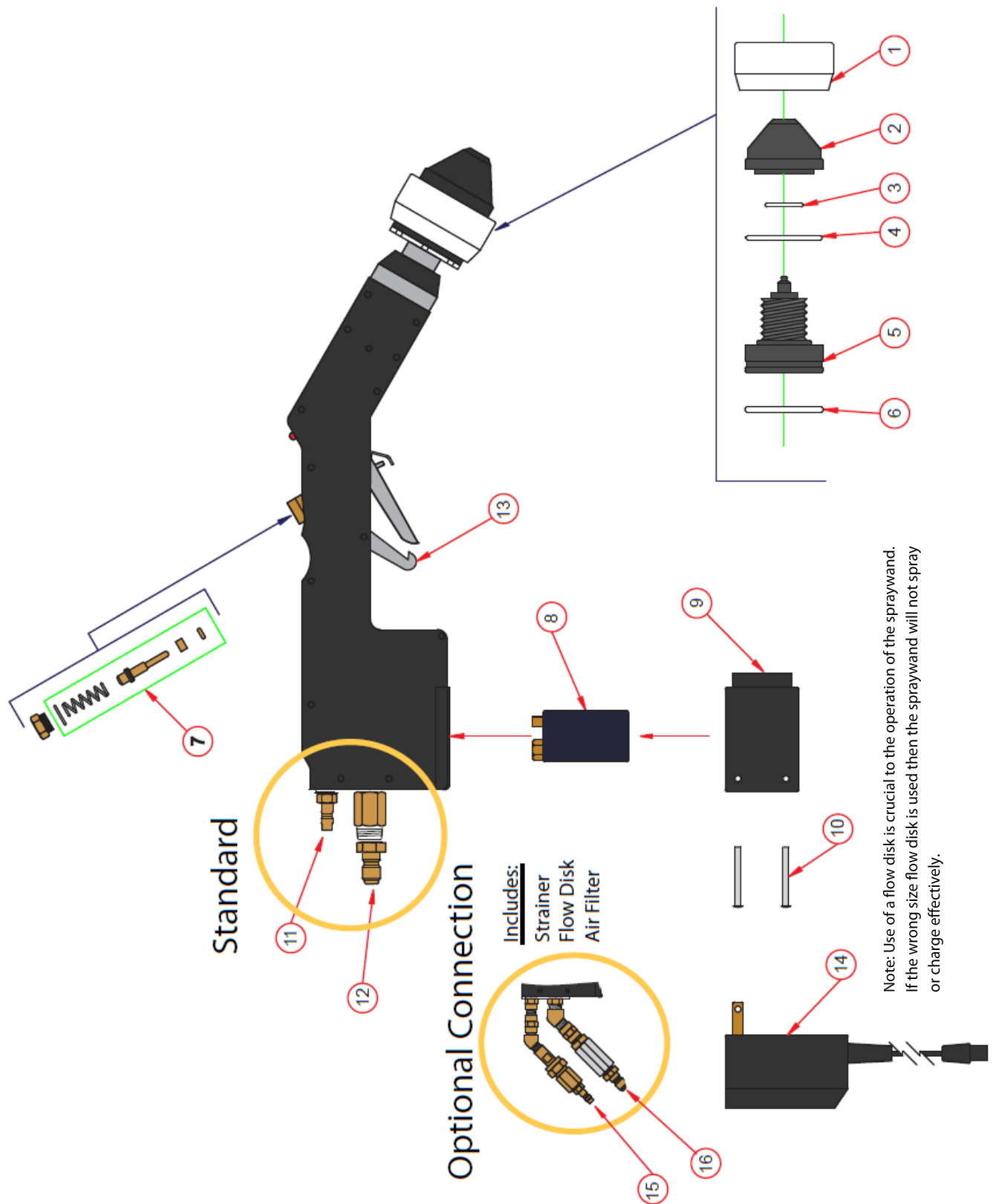
1. Turn off the sprayer and replace the flow disc and sprayer back into the coupling
2. Turn on the sprayer and depress the trigger.

If water does not spray out of the nozzle we know that the clog is inside the spraywand.

If you have already removed and cleaned the plunger on the trigger you have major clogging inside the spraywand. This needs serviced by our tech.



XT-3 Spraywand Parts



XT-3 Spraywand Service Parts

Item Number	ESS Part Number	Description	Quantity Ordered
1	AP-5795	Hood	1
2	NC 5764	Nozzle Cover	1
3	5771	O,Ring, Internal	1
4	AP-5694	Teflon Ring	1
5	NP-5983	Nozzle body, Greenhouse (Note: Must send Spraywand in for Repair)	1
6	5770	O-ring, External	1
7	3731	Repair kit, Trigger	1
8	767	Cap, Flow Regulator	1
9	768	Adapter, 1/8"-27 FPT	1
10	1755	Orifice Disk (Flow Disk)	1
11	437	Strainer, #50 Mesh	1
12	770	Body, 1/8"-27 FPT, Greenhouse	1
13	227	Filter, Air, In Line	1
14	231	Air Filter	1
15	4512	Battery, Alkaline, 9v	2
16	118	Battery Cover, Spraywand Shell	1
17	316	Screw, #6-32 x 3/8 long, Phillips SS	2
18	239	QC Plug, 1/8" MPT, Brass (Spraywand Liquid)	1
19	AS-1748	Spraywand Leader Assembly Liquid	1
20	240	QC Plug, 1/4", 1/4" MPT, Brass (Spraywand)	1
21	AS-1749	Spraywand Leader Assembly, Air	1
22	6518	Trigger Pawl	1
23	4430	Battery Charger	1

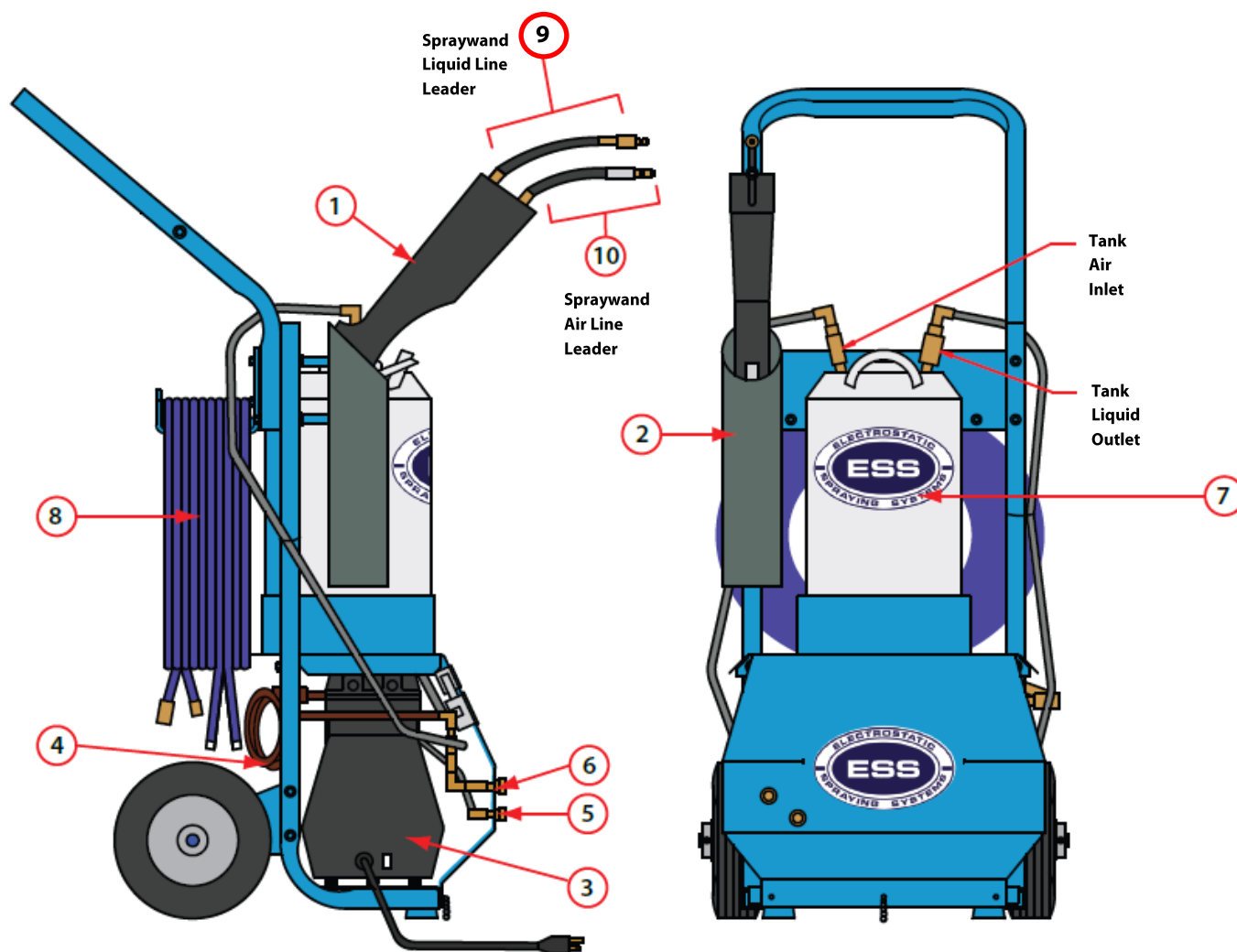
Flow Disk Chart

UNIT STYLE	TANK SIZE	ORIFICE NUMBER	ESS PART NUMBER
XT	3 GALLON TANK	#20	765
XT	QUART BOTTLE	#40	766
GPS	4 GALLON TANK	#30	1755
EPS	4 GALLON TANK	#30	1755
TRG	4 GALLON TANK	#30	1755
J SERIES	15 GALLON TANK	#30	1755
BP-2.5	2.5 GALLON TANK	#59	4350
BP-4	4 GALLON TANK	#59	4350

Note: Use of a flow disk is crucial to the operation of the spray gun. If the wrong size flow disk, or no flow disk is used, then the spray gun will not spray or charge efficiently.

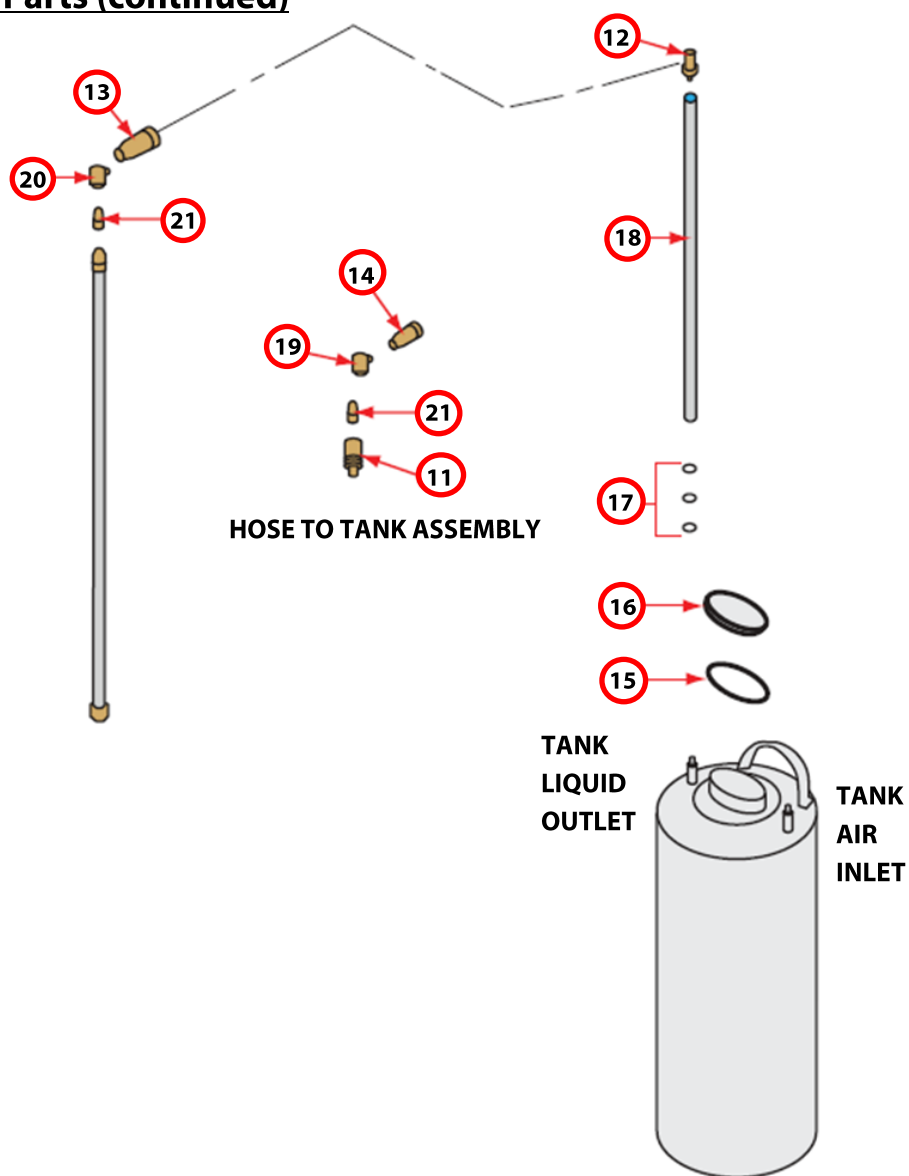


XT-3 Service Parts



ITEM NUMBER	ESS PART NUMBER	DESCRIPTION	# ON MACHINE
1	HG-6.5-1RP	SPRAY GUN ASSEMBLY, SINGLE PORT	1
2	1525	HOLSTER, XT	1
3	1520	COMPRESSOR, 1 HP, 4.5 CFM @ 40 PSI, 120 VOLT	1
4	2139	ROUND TUBING, 3/8" OD X .032" WALL, SOFT COPPER, C	1
5	90	QC SOCKET, 1/8" 1/8" FPT, BRASS (SPRAY GUN LIQUID)	1
6	92	QC SOCKET, 1/4", 1/4" FPT, BRASS (SPRAY GUN AIR)	1
7	2141	TANK ASSEMBLY, 3 GALLON, COMPLETE	1
8	AS-1238	HOSE ASSEMBLY, TW INLINE, XT	1
9	AS-3238	SPRAY GUN LIQUID LINE LEADER	1
10	AS-1953	SPRAY GUN AIR LINE LEADER	1

XT-3 Service Parts (continued)



ITEM NUMBER	ESS PART NUMBER	DESCRIPTION	# ON MACHINE
11	1149	CHECK VALVE, 1/4"NPT WITH/VITON	1
12	447	QC PLUG, 1/4", 1/4" FPT, BRASS (TANK OUTLET)	1
13	450	QC SOCKET, 1/4", 1/4" FPT, BRASS (TANK OUTLET)	1
14	248	QC SOCKET 1/8", 1/8"FPT, BRASS (TANK INLET)	1
15	1664	O-RING, TANK LID	1
16	398	TANK LID	1
17	266	O-RING	4
18	198	PICK-UP TUBE	1
19	67	ELL, 1/8" NPT, STREET, 90 DEG, BRASS	1
20	156	ELL, 1/4" NPT, STREET, 90 DEG, BRASS	8
21	725	HEX NIPPLE 1/4" MPT	1

Parts



**P/N AS1238: Twinline Hose -
Blue—Assembly—25 ft.**



**P/N AS1238-1: Twinline Hose—
Blue Assembly—50 ft.**



**P/N AS1238-3: Twinline Hose—
Blue Assembly—25 ft.—SS**



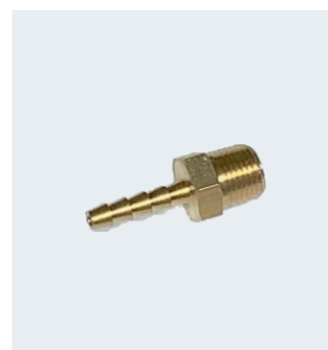
**P/N 10109: Fitting—1.4"HB x 1/4"
MPT-BR**



**P/N 1480: 1/4" HB x 1/4" FPT—
BR**



**P/N 16128: Heat Shrink—1"
BR**



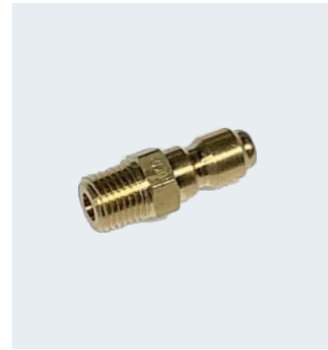
P/N 169: 1/8" HB x 1/8" MPT-BR



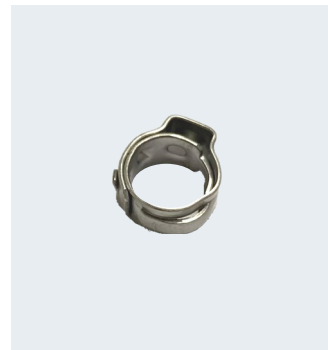
P/N 17573: Hose Bend Restrictor



P/N 239: QC Plug to Tank—Liquid



**P/N 240: Quick Connect
Spraywand Air**



P/N 3259: Clamp-One Ear-SS



P/N 663: Hose Clamp-Two Ear



P/N 7497: Hose- Twinline-Blue



**P/N 90: QC Socket to Spraywand-
Liquid**



**P/N 9190: 1/8" HB x 1/8" FPT—
BR**



**P/N 92: QC Socket to Spraywand-
Air**



Base Unit (Standard 110V)



**P/N 1055: Connector
Ring—Male-Vinyl**



**P/N 109: Fitting—
1.4" HB x 1/4" MPT—BR**



P/N 1149: Check Valve



P1150: Cotter Pin—1/8"x1-3/4"



**P/N 1160: Elbow—1/4" NPT—45
Deg**



P/N 1221: Plug



P/N 1222: Vibration Insulator



P/N 1225: Switch Plate—On/Off



P/N 1226: Wheel



P/N 1234: Tee—1/4" NPT—BR



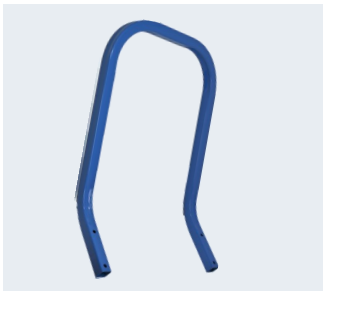
P/N 1480: 1/4" HB x 1/4" FPT—BR



P/N 1518: Coupling Nut, 1/4"



P/N 1519: Carriage Bolt, 1/4" - SS



P/N AP1210: Handle



P/N AP1199: Bracket for Hose

220 V



P/N 17522: Plug Adaptor



P/N 17521: Plug Adaptor-Euro



P/N 17600: Square Tube Axial Fan



P/N 17550: Power Supply Cord—220 Volt

Stainless Steel



P/N 10032: Liquid Connection SS



P/N 10033 : Air Connection SS



P/N 10104: Elbow—1/4" NPT—SS



P/N 10106: Tee—1/4" NPT—SS



P/N 10109: Hose Barb—1/4" HB x 1/4" MPT—SS



P/N 17687: Compression Tube Fitting 3/8" OD x 3/8" OD—SS



P/N 17688: Compression Tube Fitting 3/8" OD x 1/4" MPT- SS



P/N 17697: Barbed Hose Fitting—1/4" HB x 1/4—18FPT—SS



P/N 17690: Pressure Relief Valve—SS



P/N 9854: Nipple Hex, 1/4" SS



P/N 9853: Nipple Close, 1/4" NPT SS



P/N 9847: Check Valve—1/4"- SS

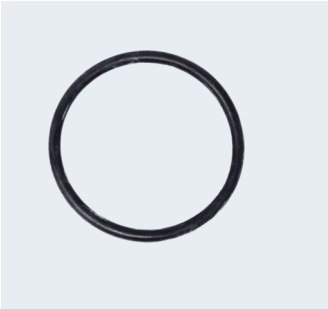
Tank



P/N AS12141: 3 Gal Tank Assembly



P/N 1230: Tank (Inc: Lid, O-ring and Pick Up Tubes)



P/N 1664: O-Ring Tank Lid



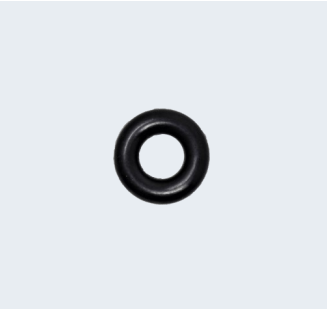
P/N 17429: FTP Socket SS



P/N 17430: FTP Socket- SS (air side of tank)



P/N 181: Wire/Cable Tie-Nylon



P/N 266: O-Ring for Connections

Spraywand Parts



P/N AS3239: Flow Regulator



P/N AP4227: Spraywand Shell Left



P/N AP4228: Spraywand Shell Right



P/N AP4229: Battery Cover



P/N ES5141: Power Supply

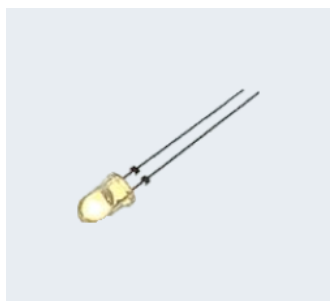


P/N AS4430: Charger



P/N 17520: Plug Adaptor- US

Spraywand Parts (continued)



P/N 129: LED-Light-Red



P/N 130: Battery 9v



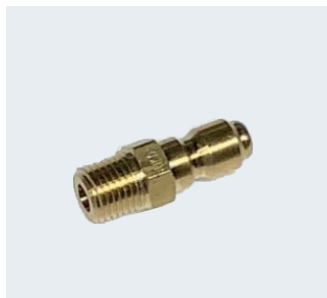
P/N 137: Air Switch



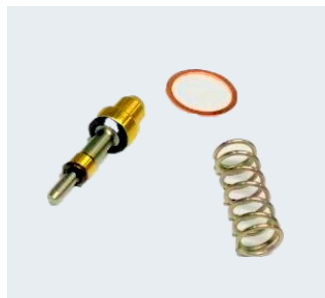
P/N 17152: Battery-Rechargeable



**P/N 239: Quick Connect
Spraywand Liquid**



**P/N 240: Quick Connect
Spraywand Air**



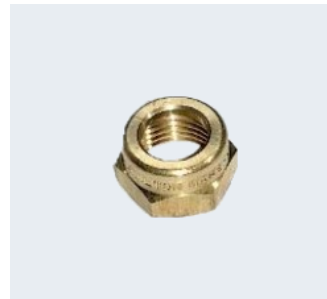
P/N 3731: Trigger Repair Kit



P/N 41: 3/8" BH x 1/8" MPT Brass



P/N 437: Liquid Filter



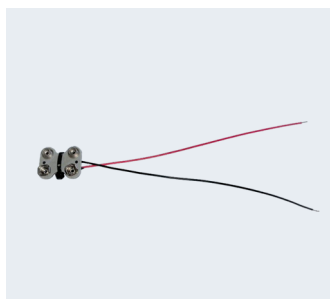
P/N 767: Cap-Flow Regulator



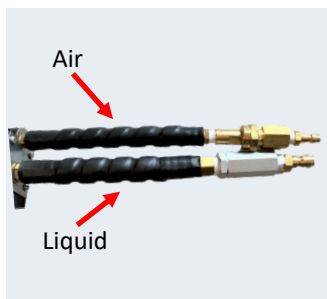
**P/N 768: Adaptor-Flow
Regulator**



P/N 770: Body-Flow Regulator



P/N 835: Battery Terminal

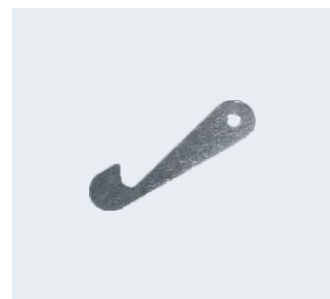


**P/N AS1953: Air Line Leader
P/N AS3238: Liquid Line**

***Spraywand with the longer bar-**



P/N AS1957: Trigger Assembly



P/N PP6518: Trigger Pawl

Misc Parts



P/N 959: Connector Tab Female



P/N 1520-5: Filter Assembly



**P/N 1527: Adapter, Compression,
1/4" FPT x 3/8" OD**



**P/N 156: Elbow - 1/4" NPT—90
Deg**



P/N 16215: Switch Box, 230 Volt



P/N 17002: Tee—1/4" Bronze



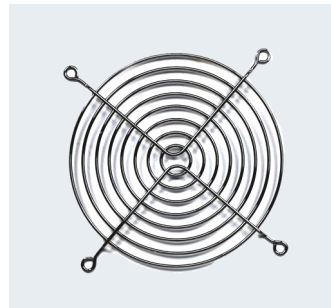
P/N 17105: Power Supply Cord



P/N 17599: Heat Exchanger



P/N 17601: Aquare Tube Axial Fan



P/N 17602: Cooling Fan Guard



P/N 3252: Toggle Seal



P/N 370: Chain



P/N 3727: Adapter
Compression—1/4" MPT x 3/8"
OD



P/N 396: Hose—1/4" ID—Grey



**P/N 92: QC Socket to Spray-
wand—Air**



P/N 663: Hose Clamp—Two Ear—1/4" SS



P/N 445: Hex Plug— 1/4 NPT— BR



P/N 4945: Pop-Off Valve



P/N 6339: Hose Clamp—1-1/2" - Vinyl



P/N 9194: Connector, Liquid Tight



P/N 90: QC Socket to Spray-wand—Liquid



P/N 9078: Switch Plastic—On/Off



P/N 9149: Loop Strap



P/N AW1215: Optional Tray



P/N 109: Fitting—1.4"HB x 1/4" MPT-BR



P/N 227: Filter, In Line



P/N 231: Air Filter



P/N AK9152: Parts Kit



P/N 6365: Clamp, Cable, 1/2" Loop SS



DECLARATION OF CONFORMITY

(According to ISO/IEC Guide 22 And EN 45014)



Unique Product No.: XT, SC-1, SC-ET, SC-EB, EPS-5

Manufacturer: Electrostatic Spraying Systems, Inc.
Company name: Electrostatic Spraying Systems, Inc.
Street: 62 Morrison St.
City: Watkinsville
Postal Code: 30677
State/County: Georgia
Country: United States
Telephone: 1(706) 769-0025
Email: bruce@maxcharge.com

Tester: Peter Gans
Date of Test: January 5, 2011
Authorized Representative: BSL Technologies Inc.

This declaration of conformity is issued under the sole responsibility of the manufacturer.


Object(s) of the declaration:
Electrostatic Sprayer Model numbers
XT-3/110 XT-3/220
SC-1/110 SC-1/220
SC-ET/110 SC-ET/220
SC-EB/110 SC-EB/220
EPS-5/220

The object of the declaration described above is in conformity with the relevant Community harmonization legislation:
Directive 2004/108/EC EMC
Directive 2006/95/EC Low Voltage

References to the relevant harmonised standards used or references to the specifications in relation to which conformity is declared:
EN 1953:1998 + A1:2009 EN 60204-1:2006 + A1:2009
EN 62479:2010 EN 61140:2002 + A1:2006
EN 61293:1994

Signed for and on behalf of Electrostatic Spraying Systems, Inc.
Watkinsville, GA, USA on July 26, 2011.

Bruce Whiting, President





62 Morrison St. · Watkinsville, Georgia 30677-2749

706-769-0025 · 1-800-213-0518 · Fax: 706-760-8072

ESS WARRANTY:

Electrostatic Spraying Systems, Inc. warrants to the original purchaser of any Electrostatic Spraying Systems equipment shall be free from defects in material and workmanship for a period of one year after date of delivery. The ESS warranty form must be filled out online for verification of purchase. To register please visit:

<http://maxcharge.com/registration/>

Disclaimer of Implied Warranties and Consequential Damages

Electrostatic Spraying Systems' obligation under this warranty, to the extent allowed by law, is in lieu of all warranties, implied or expressed, including implied warranties of merchantability and fitness for a particular purpose and any liability for incidental and consequential damages with respect to the sale or use of the items warranted. Such incidental and consequential damages shall include, but not limited to: transportation, charges other than normal freight charges cost of installation other than cost approved by Electrostatic Spraying Systems, Inc., duty taxes, charges for normal service or adjustments, or any other loss of income, expenses due to loss, damage, detention or delay in the delivery of equipment or parts resulting from acts beyond the control of Electrostatic Spraying Systems, Inc.

THIS WARRANTY SHALL NOT APPLY:

1. To vendor items which carry their own warranties such as, but not limited to, engines, air compressors, and liquid pumps. Electrostatic Spraying Systems, Inc. shall supply replacement parts at list price pending the warranty investigation of the vendor item. Vendor items parts such as air compressors, liquid pumps, solenoids, and other such items must be returned before warranty credit.
2. If the unit has been subject to misapplication, abuse, misuse, negligence, fire or other accident.
3. If parts not made or supplied by Electrostatic Spraying Systems, Inc. have been used in connection of the unit, if, in the sole judgement of Electrostatic Spraying Systems, Inc. such parts affect its performance, stability or reliability.
4. If the unit has been altered or repaired in a manner which, in the sole judgement of Electrostatic Spraying Systems, Inc. such alteration or repair affects its performance, stability or reliability. This shall include but not be limited to opening of the spraywand shell by anyone not authorized by Electrostatic Spraying systems, Inc. to do so.
5. **To normal maintenance, service and replacement items such as, but not limited to, engine lubricant, filters, or to normal deterioration of such thing as, but not limited to, belts and exterior finish, due to use and exposure.**

**NO EMPLOYEE OR REPRESENTATIVE OF
ELECTROSTATIC SPRAYING SYSTEMS, INC.
IS AUTHORIZED TO CHANGE THIS WARRANTY
IN ANY WAY OR GRANT ANY OTHER WARRANTY
UNLESS SUCH CHANGE IS MADE IN WRITING
AND IS SIGNED BY A CORPORATE OFFICER OF
ELECTROSTATIC SPRAYING SYSTEMS, INC.**



YEARLY SPRAYWAND SERVICE

Electrostatic Spraying Systems, Inc. offers and recommends yearly services on ESS spraywands. For a nominal fee plus the cost of replacement parts, ESS will thoroughly clean the spraywand, replace any worn parts and recalibrate the electronics and nozzle. The Yearly Service also extends the spraywand warranty for another year. Consistent yearly service by ESS will increase spraying performance and prolong the life of the spraywand.

Contact ESS at (706) 769-0025 to schedule a spraywand service. Then package the spraywand securely since it can be damaged in shipment. Ship the spraywand in its original packing material if possible. If the original packing material is not available, wrap the spraywand in bubble wrap, place it in a strong cardboard box and surround the handle with foam packing. Please obtain a tracking number, and recommended insurance for your shipment and include a return shipping address with a telephone number.

A form is provided for you at the back of the manual:

Ship the spraywand via courier to:
Electrostatic Spraying Systems, Inc.
62 Morrison St.
Watkinsville, GA 30677

Yearly service will be conducted within one day of receipt by ESS. If any parts need to be replaced, the owner will be contacted for authorization before replacement. The spraywand will be returned via UPS, COD, or return shipping costs may be invoiced, contingent upon credit approval. ESS also accepts Visa and Master Card.

**As an additional benefit, the Yearly Spraywand Service “turns back the clock”.
The original 1 Year Warranty on the spraywand is renewed for another year.**

**Yet another good reason to send your spraywand in to ESS for
factory-authorized service!**



Notes

SPRAYWAND RETURN FORM

When returning a spraywand for warranty or repair services to ESS, please pack it securely and include the following form with the your spraywand. We require you to fill out all information completely. With many changes to companies our records may not have the correct contact information. We at ESS want to expedite the process quickly but communication is the key to a quick repair.

Spraywand Serial Number: _____

RETURNED FROM:

Company: _____

Contact Person: _____

Phone number: _____

Email Address: _____

Shipping Address: _____

Mailing Address: _____

(if different) _____

Date last serviced: _____

Problems with the Spraywand or is this just a yearly service?

Method of Payment:

☐ Account (must be an approved account)

☐ COD

☐ Credit Card (Visa)

☐ (Master Card)

☐ (American Express)

Card Number: _____ CCV: _____

Card Holders Name: _____ Expiration

Date _____

Full Mailing Address: _____

