



# EX-7000

OPS MANUAL

**emist**<sup>®</sup>  
Made for life. Built to work.



Thank you for choosing the EMist® EX-7000™ TruElectrostatic™ Sprayer.

We've created an easy-to-use system that combines advanced liquid application technologies with improved mobility. The result is superior application and enhanced disinfection, as well as a convenient convertible design for users.

We recommend you read through this entire instruction manual before beginning.


Included are assembly, operating, and safety instructions. Following these manufacturer guidelines will help the system perform at peak effectiveness, extend the life of the product, and ensure operator safety.

### Questions?

Each component has been inspected prior to your purchase. However, in the event that there is a problem, please contact our technical support center at Emist.com.



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## EX-7000™ TruElectrostatic™ Sprayer Operations Manual

# LIMITED WARRANTY FOR NEW EX-7000™ EQUIPMENT

**A. GENERAL PROVISIONS:** The warranties described below are provided by SanoTech 360, LLC, dba EMist® to the original purchaser of the new EX-7000™ equipment from EMist or authorized reseller, with proof of purchase which may be accomplished by registering the product at [Emist.com/warranty/](http://Emist.com/warranty/). Under these warranties, EMist will repair or replace, at its option, any covered part which is found to be defective in material or workmanship during the applicable warranty term. Warranty service must be performed by EMist, or its authorized service providers, which will use only new or refurbished parts or components furnished by EMist. Warranty service will be performed without charge to the purchaser for parts and labor. The purchaser will be responsible for any service call, and/or transportation of product to and from EMist, for any premium charged for overtime labor requested by the purchaser, and for any source and/or maintenance not directly related to any defect covered under the warranties below.

**B. WHAT IS WARRANTED:** All parts of any new EMist equipment are warranted for the number of months or days specified below.

**C. WHAT IS NOT WARRANTED (EMIST IS NOT RESPONSIBLE FOR THE FOLLOWING):** (1) Any equipment that has been altered or modified in a way not approved by EMist including, but not limited to, EMist specifications, and such alteration or modification caused the defect or damage; (2) Depreciation or damage caused by normal wear, lack of reasonable and proper maintenance, failure to follow operating instructions, misuse, lack of proper protection during storage, or accident; (3) Normal maintenance parts and service.

**D. SECURING WARRANTY SERVICE:** To secure warranty service, the purchaser must (1) Report the product defect to EMist and request repair within the applicable warranty term; (2) Present evidence of the warranty start date (proof of purchase); (3) Make the equipment available to EMist within a reasonable period of time; (4) Use of a non water-soluble chemical in the system.

**E. NO RESELLER WARRANTY:** The reseller makes no warranty of its own and the reseller has no authority to make any representation or promise on behalf of EMist, or to modify the terms or limitations of this warranty in any way.

**F. LIMITATION ON IMPLIED WARRANTIES:** Any implied warranties granted to the original purchaser of new EX-7000™ equipment under law shall be limited to the limited warranty time frame set forth herein.

If further information is desired, contact EMist at [Emist.com](http://Emist.com).

EX-7000 EQUIPMENT		WARRANTY TERMS*
EX70BPSY00	EX-7000 System (consists of power pack, hydroelectric cord and applicator wand)	12 Months or 365 Days
EP36BTLI20	Battery	3 Months or 90 Days
EP36CHLI20	Battery Charger	3 Months or 90 Days
EX70TK7000	Tank	1 Month or 30 Days
EX70BPHA04	Harness	1 Month or 30 Days

\* Each warranty term begins on the date of product delivery to the purchaser.

## SAFETY NOTICES

This manual contains information that is important for you to know and understand before operating the EMist **Tru**Electrostatic Sprayer. This information relates to protecting your safety and ensures product reliability and performance. **It is the owner's responsibility to ensure that all who operate this equipment read this manual.**

### Warnings

Please read the manual carefully and pay special attention to the symbols and warning labels. Warning labels indicate a potentially hazardous situation which, if not avoided, could result in death or serious injury.

## WARNINGS

### PLASTIC PARTS CLEANING SOLVENT HAZARD

Many solvents can degrade plastic parts and cause them to fail, which can lead to serious injury or property damage. In order to help prevent against degradation:



- Use only water-based solvents to clean equipment or parts.

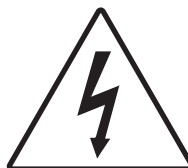
## WARNINGS

- Read and fully understand the EMist **Tru**Electrostatic Sprayer Operations Manual prior to using the electrostatic sprayer.
- EMist **Tru**Electrostatic Sprayers should never be used in a hazardous environment.
- EMist **Tru**Electrostatic Sprayers should never be used in an area containing volatile chemicals. Nor should it be used in any area containing volatile or explosive levels of gas, vapor or particulates.
- EMist **Tru**Electrostatic Sprayers should never be used by untrained personnel.

## WARNINGS

### FIRE, EXPLOSION AND ELECTRIC SHOCK HAZARD

Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. To help prevent fire, explosion and electric shock:



- Electrostatic equipment must be used only by trained, qualified personnel who understand the requirements of this manual.
- Stop operation immediately if static sparking occurs or you feel shock. Do not use equipment until you identify and correct the problem.
- Use and clean equipment only in well ventilated area.
- Never spray a flammable chemical (with a flashpoint less than 60°C).
- Do not turn lights on or off when flammable fumes are present.
- Keep spray area free of debris, including solvents, rags, gasoline or any flammable chemicals.
- Keep a working fire extinguisher in the work area.
- **CAUTION, TO AVOID ELECTRICAL SHOCK, DO NOT TOUCH OR INSERT ANYTHING IN THE NOZZLE OF THE SPRAYER**

## WARNINGS

### PRESSURIZED EQUIPMENT HAZARD

Liquid from equipment that leaks or ruptures from a component can splash in the eyes or on skin, causing serious injury. In order help prevent a leak or rupture:



- Check equipment daily. Replace worn or damaged parts immediately.

## WARNINGS

### PERSONAL PROTECTIVE EQUIPMENT

Wear appropriate protective equipment to help prevent serious injury.



- Recommend use of fully enclosed eyewear protections, such as goggles, when using this device.

## WARNINGS

### EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury



- Do not operate the unit when fatigued or under the influence of drugs or alcohol.
- Use only water soluble fluids that are compatible with equipment wetted parts.
- Check equipment daily. Repair or replace worn or damaged parts immediately with genuine replacement parts from trusted EMist partners only.
- Do not alter or modify equipment. Alterations or modifications void your EMist warranty, and create safety hazards.

## WARNINGS

### CHEMICAL USE HAZARD

Each chemical, such as a disinfectant, has a unique set of hazards and needs to be handled properly to ensure worker safety.

- Be aware of first aid procedures related to the product in use.
- It is a violation of Federal law to use a chemical in a manner inconsistent with its label.
- For use with water-soluble, non-flammable, non-combustible and non-volatile liquids only. Never spray a flammable chemical (flash point less than 60°C).
- Ensure the area being sprayed has proper ventilation.
- Store all chemicals in original containers in a cool, dry place, away from heat and open flames.
- Do not reuse or refill a chemical container.

## WARNINGS



### SAFETY WARNING!

**DO NOT USE THE ELECTROSTATIC APPLICATION SYSTEM IF YOU HAVE A PACEMAKER OR AN IMPLANTABLE CARDIOVERTER DEFIBRILLATOR (ICD).**

## WARNINGS



### STATE OF CALIFORNIA

- This product may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.



# INITIAL INSPECTION & SET UP

## EMIST EX-7000 TRUELECTROSTATIC SPRAYER COMPONENTS



### POWER PACK

Power pack with applicator may be used with either the backpack harness or carried by the handles.



### TANK

Interchangeable 3.1 L liquid tank includes strain filter and cap. It is inserted with a light downward pressure then locked in place by the tank latch located on the back of the power pack.



### APPLICATOR WAND

The applicator is connected to the application power pack housing by a hydroelectric cord. This hand-held device is trigger activated for the charging and applying of your liquids.



### BATTERY

The system comes with two 14.4V lithium ion batteries. Each has a green LED indicator to determine charge. The system can accommodate two batteries for longer run time, but only requires one to operate.



### BATTERY CHARGER

The battery charger kit comes with AC adapter, cable, charger and provides approximately 45 minutes recharge time.



### HARNESS

This commercial harness for the backpack configuration is designed for comfort and safety. It is adjustable to the user from small to large frame individuals.

### INSPECTION

AFTER UNPACKING, INSPECT COMPONENTS FOR ANY DAMAGE OR MISSING HARDWARE PIECES, ETC.

- Power Pack with Applicator
- 3.1 L Interchangeable Liquid Tank
- (2) 14.4V Rechargeable Batteries
  - Battery Charger
  - Backpack Harness

## 1. INSTALL BATTERY (PROCEDURE SAME FOR BOTH BATTERY PORTS):

Charge the battery first:

- a. Plug charger cord into wall outlet.
  1. Install battery into charger.
  2. Reference power indicator (3 bars = full charge).
- b. With the power pack battery ports located toward the bottom of each side:
  1. Install the battery into one port.
  2. Gently push battery into the port, with the battery release button facing up, the battery will click into place.
  3. Depress the trigger on the applicator to verify power is on. Red indicator light on the back of the handle will turn red and the system will engage.

## 2. LIQUID TANK REMOVAL:

- a. Locate the tank latch toward the top center of the back panel of the power pack. **Gently** pull and hold the latch away from the unit, this will release the tank.
- b. With the latch pulled back, firmly grip the tank's handle and pull straight up.
- c. Lift the liquid tank out of the power pack.

## 3. LIQUID TANK INSTALLATION:

- a. For initial set up/test, fill the liquid tank 1/4 full with water.
- b. Gently slide the tank back into the power pack.
- c. When the tank is fully insterted, it will lock/click into place.

#### 4. POWER PACK HARNESS STRAP ADJUSTMENTS:

- a. Place the power pack on just as you would a backpack and adjust the straps to fit comfortably.

#### 5. POWER PACK AND APPLICATION FUNCTION CHECK:

- a. With the tank and battery installed, depress the trigger switch located on the front of the applicator handle.
- b. The clear LED on the back of the applicator handle will light up RED. This indicates power on and the high voltage power system is charging the liquid droplets.
- c. Once the trigger switch is released, the liquid spray will stop, and the fan will turn off. This indicates the system is turned off.

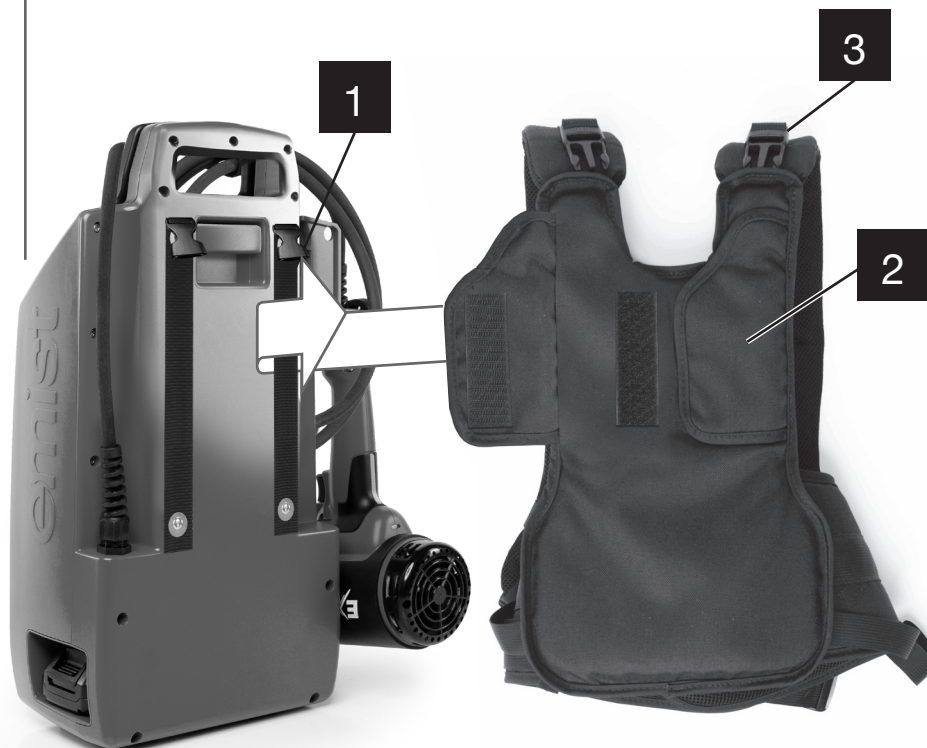
#### 6. HARNESS INSTALLATION INSTRUCTIONS:

- a. Refer to instructions below on how to attach the power pack to the harness. Following harness installation, put the power pack on like you would a backpack and adjust the straps to fit comfortably.



Assembled System

#### HOW TO ATTACH POWER PACK TO HARNESS



1. Position the hydroelectric cord toward the front of the system. Open the flap on the harness. Feed it under the vertical nylon strap attached to the power pack of the EX-7000 system. Fold it back toward the harness and match the two sides of hook and loop fastening strips, securing the harness to the power pack.
2. Repeat step 1 for the second strap.
3. Connect the two ends of the side squeeze buckle connectors between the harness and the power pack.



# ASSEMBLY & OPERATING INSTRUCTIONS

## ASSEMBLY INSTRUCTIONS AND TIPS



Keep the battery release button facing upwards as it slides into the battery ports.

### 1. RECHARGEABLE BATTERY:

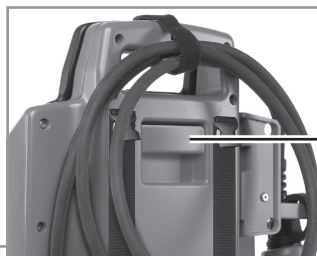
The system uses up to two lithium-ion batteries.

- The battery should be fully charged prior to the start of a project.
- Inspect the quick connectors for any debris or damage prior to inserting.
- The indication bar at the end of the battery will light up to show remaining charge (3 bars = full charge).
- One bar during startup may limit time of use without charging.
- The connector side of the battery enters the power pack case.
- The battery easily seats in the power pack. Over applying pressure may make the battery difficult to remove without causing overall damage.

### 2. INTERCHANGEABLE 3.1 LITER LIQUID TANK:

- Remove the vented cap, leaving strain filter in place.
- Fill as needed and replace vented cap.
- Utilize liquids for duration of project or until refill is required.
- You may exchange tanks with different liquids at any time.

**IMPORTANT: DO NOT DROP TANK INTO THE TANK WELL. CAREFULLY SLIDE THE TANK BACK INTO THE POWER PACK TANK WELL UNTIL IT LOCKS/CLICKS INTO PLACE.**



TANK  
LATCH



TANK

**CAUTION: ATTEMPTING TO REMOVE THE TANK WITHOUT RELEASING THE TANK LATCH CAN CAUSE DAMAGE OR BREAK THE LATCH. DROPPING OR FORCING THE TANK INTO THE POWER PACK TANK WELL CAN CAUSE DAMAGE TO THE SPRAYER.**

### TIPS

- Optimal distance from a target is **24"-36"**.
- Applicator will shut off once battery is completely drained of charge.
- Ensure applicator is secured while putting the backpack on/adjusting straps/taking backpack off to avoid damaging the applicator.



# SPRAY APPLICATION



## A. PREPARING THE SPRAY AREA:

1. Make sure food and drinks are removed, or covered before application.
2. Spotless, clean interiors require no prep work prior to application.
3. Loose debris must be swept from floors and other surfaces prior to application.
4. Inspect the area for mechanical barriers such as: magazines on table tops, chairs touching each other, a table or a wall. The intended target surface area for application will need to be accessible.
5. Please cover and remove valuables. Electronics, furniture, paper or other common necessities do not need to be removed from the area.
6. Once the area has been cleaned, application can begin.
7. This system is NOT a mechanical cleaner.

## B. SPRAY APPLICATION PROCESS:

1. Begin at the farthest point from the doorway, work back toward the doorway so you can step out when application is complete.
2. Aim applicator **24"-36" (optimal distance)** from the surface target area, begin with a smooth figure "S" movement aiming below, at, and above the surface target area while walking at an average pace (continuously moving).
3. Make sure you are working in a methodical "S" pattern and let your passes overlap when moving to the next surface target area.
4. Allow treated area to sit for contact time as recommended by the chemical manufacturer's label before re-entry into the area.

**TIP: IF THE APPLICATOR BECOMES WET OR BEGINS TO DRIP, YOU ARE MOVING TOO SLOW OVER THE SURFACE TARGET AREA AND NEED TO SPEED UP THE APPLICATION PROCESS. DO NOT OVER-SATURATE THE SURFACE. IF YOU SEE RUNS OR PUDDLES YOU ARE APPLYING TOO MUCH CHEMICAL. THE GOAL IS TO ACHIEVE EVEN COVERAGE OVER THE TARGET SURFACE AREA.**

## C. FLUID MANAGEMENT:

The system is designed for single or multiple application environments. Please use the multiple tank applications carefully by marking tanks with your chemical identifiers when necessary.

Application Tips:

1. While depressing the trigger button, move the applicator in an "S" pattern from bottom to the top of the surface target area in a continuous motion.
2. Stay in motion, electrostatically charged droplets will accumulate in higher levels at the tip of the applicator if you move too slowly while the device is in use.
3. Do not over apply.
4. In between chemical changes, press the trigger while pointing to the floor or other safe target area for four to five seconds to clear the remaining chemical in the system.

## D. BATTERY MANAGEMENT:

Tips:

1. Fully charge each battery before use.
2. Keep connectors clean and dry at all times.
3. Insert with the battery release button facing upwards into the battery port. The battery indicator light bar will be inside the system when insertion is completed into battery port.
4. Do not expose batteries to standing liquid.

# MAINTENANCE & CLEANING

## FLUSHING THE ELECTROSTATIC SPRAYER

**TIP:** IT IS GOOD PRACTICE TO FLUSH THE APPLICATION SYSTEM EVERY 24 HOURS WITH CLEAN WATER. DO NOT STORE CHEMICALS IN THE RESERVOIR WHILE THE SYSTEM IS NOT IN USE FOR GREATER THAN A 24 HOUR PERIOD.

The system is designed to minimize maintenance and cleaning.

### Tips:

- Clear the system at least once a day by spraying clean water through the system for at least ten seconds.
- Keep batteries charged.
- Inspect cord for cuts, tears or damage.
- Inspect applicator for debris or damage.

## CHANGING CHEMICALS:

**TIP:** IT'S IMPORTANT TO FLUSH THE SYSTEM IN BETWEEN USE OR WHEN SWITCHING CHEMISTRY TO PREVENT RESIDUAL BUILD UP AND TO AVOID MIXING CHEMICALS.

- To flush the system, empty the liquid tank and fill with at least 1 inch (2.5cm) of clean water.
- Spray for at least 45-60 seconds to flush the previous fluid from the system.

**CAUTION:** TO PREVENT CROSS CONTAMINATION OF CHEMICALS, YOU MUST PERFORM A FLUSH ANY TIME YOU CHANGE THE TYPE OF CHEMICALS BEING USED.

## BATTERY REMOVAL

- Remove battery by depressing the battery release button.
- The battery will slide easily from the port once it is disengaged.
- When covers are off, a pull-tab will be visible to assist in removal of the batteries.
- Place batteries into charger to fully charge for next usage. Each battery takes approximately 45 minutes to fully charge.

**CAUTION:** DO NOT STORE THE SYSTEM IN AN AREA THAT MAY FREEZE (TO AVOID DAMAGE FROM LIQUID REMAINING IN THE SYSTEM AND LINES). THIS WILL VOID THE WARRANTY.

## STORAGE

- Empty fluid or run until empty.
- Insert at least 1 inch (2.5cm) of clean water in the liquid tank.
- Run the electrostatic sprayer for at least 45-60 seconds to flush active chemicals from the system.
- Remove batteries and re-charge by placing on the charger.
- Wipe down exterior with water or alcohol to remove dirt and soil.
- Use the power indicator on the end of the battery to determine the battery state of charge (3 bars = full charge).
- Coil the hydroelectric cord up neatly and securely.

# TROUBLESHOOTING, SUPPORT, & REPAIR

The EX-7000™ is designed and manufactured to function without defects. The system will operate normally with properly maintained batteries and without abuse to the connector or other system parts.

## INDICATIONS & REMEDIES

PLEASE SEE BELOW FOR EASY INSTRUCTIONS FOR ADDRESSING ISSUES THAT MAY ARISE WHILE USING THE EX-7000™

Issue	Reason	Troubleshooting	Result
No power to the system	Battery not charged	Fully charge the battery (3 bars = full)	Return to normal use
	Battery not installed correctly	Install battery with connector side of battery entering the power pack; keep battery release button facing upwards as it slides into the port	Return to normal use
	Battery connection not working	Verify battery connector issue by using the opposing battery port with charged battery	Return to normal use
	Red LED not illuminating when trigger switch is engaged	Verify a fully charged battery, installation of battery is correct, no obstruction when inserting the battery	Return to normal use
No mist/inadequate mist	Tank is empty	Fill tank with appropriate liquid	Return to normal use
	Battery not charged	Fully charge the battery (3 bars = full)	Return to normal use
	Tank is not installed correctly in the power pack	Verify the tank is locked into place as instructed for insertion	Return to normal use
	Leaking at the nozzle	Verify the nozzle tip is <b>hand tightened</b> in place	Return to normal use
	Nozzle clogged	Remove nozzle tip from sprayer, rinse with water. Reinstall, <b>hand tightened</b>	Return to normal use
	Pump not engaged	Verify all the above troubleshooting steps for results	Contact tech support

## SUPPORT OR REPAIR

If your system fails to function, excluding obvious user damage, please contact EMist or your authorized EMist distributor.

If an issue occurs that is not addressed in the troubleshooting methods, please contact a technical support representative at: 888.534.7001 or visit Emist.com.

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