# Lafferty Equipment Manufacturing, LLC
# Installation & Operation Instructions

## Model # 950500 · 431 Miniature 4-Way Fogger

## REQUIREMENTS

**Ready-to-Use Chemical Solution**

| | |
|---|---|
| **Compressed Air** | up to 7.4 CFM @ 80 PSI |
| **Minimum Air Supply Line** | 3/8" |

## OPTIONS

**Stainless Steel Jug Racks**

| | |
|---|---|
| 1 Gallon Round/Square | # 224200 |
| 1 Gallon Round/Square Locking | # 224200-L |
| 2 ½ Gallon (8 ½" x 10 ½") | # 224210 |
| 5 Gallon Round/Square Locking (12" x 12") | # 224214 |
| 5 Gallon Round/Square (12" x 12") | # 224215 |

**To Control Solution Flow (Wetness of Fog)**

| | |
|---|---|
| Metering Tips-Color Coded (Set of 20) | # 443798 |
| Metering Tips-Color Coded (10 Smallest) | # 443794 |

## WEIGHT & DIMENSIONS

**Single Package**

| | |
|---|---|
| Shipping Weight | 1 lbs. |
| Shipping Dimensions | 7" x 7" x 7" |




Lafferty EQUIPMENT MANUFACTURING LLC

CFS TECHNOLOGIES

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**WARNING!** READ ALL INSTRUCTIONS BEFORE USING EQUIPMENT!

## OVERVIEW

The 431 Miniature 4-Way Fogger is a damp mist sprayer that uses compressed air (7.4 CFM @ 80 PSI) to draw ready-to-use chemical solution from a nearby container and project it up to 6 feet in 4 directions. This unique miniature fogger can fit into small areas.

## SAFETY & OPERATIONAL PRECAUTIONS

- Manufacturer assumes no liability for the use or misuse of this unit.
- Wear proper respiratory protection, protective clothing, gloves and eye-wear when working with chemicals.
- Always direct the discharge away from electrical devices.
- Follow the chemical manufacturer's safe handling instructions.
- Carefully follow chemical manufacturer's safe handling instructions and recommended precautions/practices when using flammable chemicals.
- **SPECIAL CAUTION: This fogger atomizes chemical into the air. Ensure that the area to be fogged has been evacuated of all people without proper respiratory protection!**

## TO INSTALL (REFER TO DIAGRAM ON NEXT PAGE)

1. Airline size must be sufficient to feed the number of foggers to be operated at one time.
2. Survey the area to be fogged and select the proper location for mounting the foggers. Keep the shading effect of obstacles in mind as you select the best location.
3. Install your air manifold and the drop down pipes for the foggers.
4. Foggers should be a minimum of 12" below ceiling.
   Install foggers, push the pickup tubes over the metering tip holders.
5. Place the tubes with strainers into containers of ready to use solution. 12' maximum draw, if foggers are mounted over 12' high the solution may have to be raised.

## TO OPERATE

**SPECIAL CAUTION: This fogger atomizes chemical into the air. Ensure that the area to be fogged has been evacuated of all people and/or animals before starting fogging. Upon completion of fogging, ensure that sufficient time has elapsed for all the fog to have dissipated before returning to the area without proper respiratory protection.**

1. Make sure you wear proper respiratory protection or are are out of the immediate area to be fogged before you turn on your air supply.
2. Fogger(s) will continue to run until air supply is turned off.
3. Depending on the application, you will have to experiment with the amount of time and solution required to achieve the desired results.

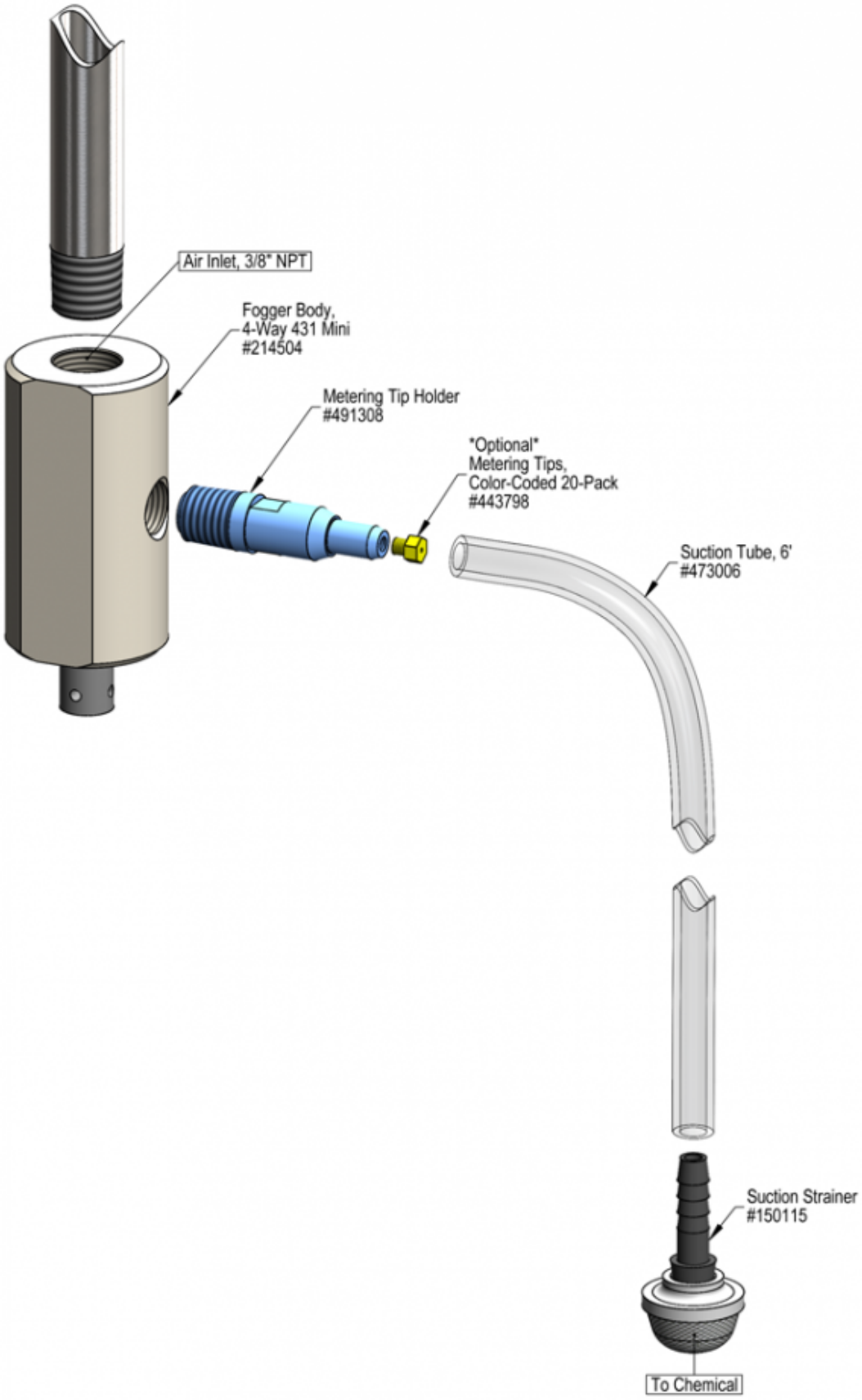
- Foggers may produce more volume than needed. If fog is too dense, optional metering tips are available for restricting the solution volume to produce a lighter fog.

**MINI 431 4-WAY FOGGER**

PROJECTS FOG/MIST UP TO 6' IN FOUR DIRECTIONS

| COMPRESSED AIR FLOW (CFM) | | |
|---|---|---|
| **PLUMES** | **60 PSI** | **80 PSI** |
| 4-Way | 5.6 | 7.4 |

| CHEMICAL SOLUTION DRAW RATE (FL-OZ/MIN) | | |
|---|---|---|
| **DISTANCE** | **60 PSI** | **80 PSI** |
| 12' Above Chemical | 2.4 | 1.8 |
| 10' Above Chemical | 2.5 | 2.1 |


Air Inlet, 3/8" NPT
Fogger Body,
4-Way 431 Mini
#214504
Metering Tip Holder
#491308
*Optional*
Metering Tips,
Color-Coded 20-Pack
#443798
Suction Tube, 6'
#473006
Suction Strainer
#150115
To Chemical

# Troubleshooting Guide

| Problem | Possible Cause / Solution | |
|---|---|---|
| | Startup | Maintenance |
| A) Fogger will not draw chemical or is sputtering | 1, 2, 3, 4 | 6, 7, 8, 9 |
| B) Fog is too wet | 1, 5 | |

## Possible Cause / Solution

### Startup

1. **Air line too small, not enough air pressure or volume**
   - See REQUIREMENTS, page 1.
2. **Air pressure too high.**
   - Slightly close the air supply valve to lower the pressure by lowering the volume until the fogger smooths out.
3. **Fogger too high to draw chemical, 12' maximum**
   - Raise the level of the chemical
4. **Chemical tube kinked or not immersed in chemical or chemical depleted.**
   - Straighten tube / replenish chemical
5. **Drawing too much solution**
   - Order and install optional metering tip or needle valve (needle valve 4 & 8-Way only).

### Maintenance

6. **Pin hole or cut in suction tube**
   - Replace suction tube.
7. **Chemical strainer clogged up**
   - Clean or replace
8. **Metering tip or metering tip holder clogged**
   - Clean or replace metering tip and/or metering tip holder.
9. **Debris clogging the fogger inlet jets**
   - Disconnect air supply, remove fogger bodies and visually inspect; remove debris from fogger inlet.

PREVENTIVE MAINTENANCE: When the unit will be out of service for extended periods, place chemical tube(s) in water and flush the chemical out of the unit to help prevent chemical from drying out and causing build-up. Periodically check and clean chemical strainer and replace if missing.