

# Professional Outdoor Cooling 3/8 in. Misting System

U.S. Patent No. 5,441.202

**IMPORTANT:** Read all instructions and check kit contents before beginning assembly.

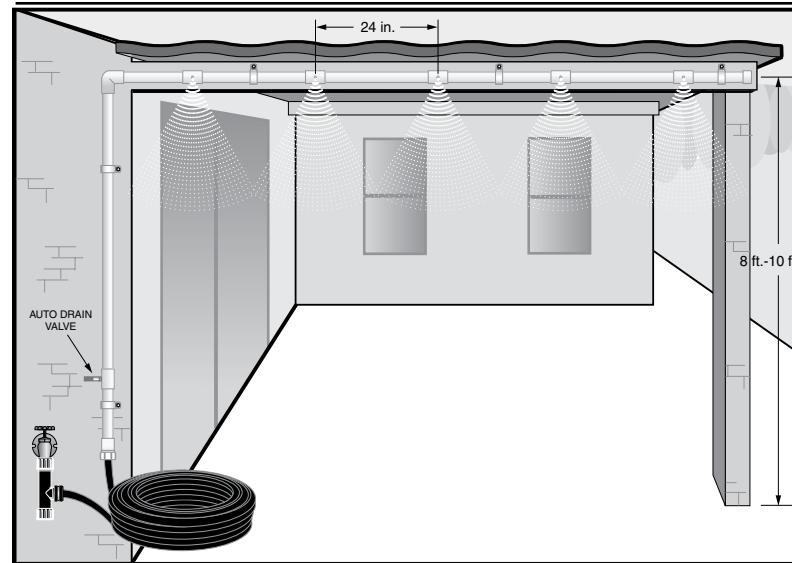
\*\*Check the contents in the parts bag. If items are missing, please return unopened to the place of purchase, or call Orbit Customer Service at (800) 488-6156.

| Part | Qty | Description  |
|------|-----|--|
|      | 1   | 3/8 in. X 3/4 in. Brass Hose Adapter                       |
|      | 1   | 10 ft. Section of 3/8 in. UV-Treated Tubing for Feed line  |
|      | 5   | Slip-Lok T Fittings with Brass and Stainless Steel Nozzles |
|      | 1   | Brass Slip-Lok Coupling                                    |
|      | 10  | 3/8 in. Hanging Clamps with Nails                          |
|      | 5   | 24 in. Pre-Cut Sections 3/8 in. Tubing (Mist line)         |
|      | 1   | Brass End Plug   |
|      | 1   | Auto Drain Valve   |
|      | 1   | T Filter   |
|      | 1   | Hose Washer  |

## Professional Outdoor Cooling 3/8 in. Misting System Contents List USEFUL TIPS FOR MIST SYSTEM LAYOUT

For the most effective cooling:

1. Mist line is placed around the perimeter of the area to be cooled. This forms a "mist curtain," a cooling barrier between the protected area and the outside heat.
2. Place mist nozzles 24 in. apart for mist lines mounted 8 ft. to 10 ft. above the ground.



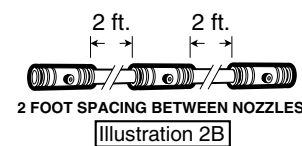
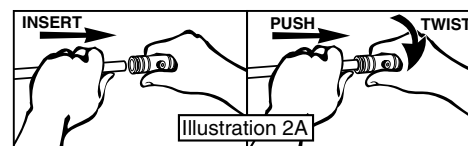
## Mist System Assembly and Installation

REMEMBER: Read all instructions before assembly.

### Mist Line Assembly

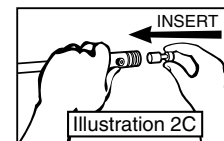
Insert one of the supplied 24 in. pre-cut sections of tubing into the end of a Slip-Lok T Fitting with a firm "push and twist" motion (see illus. 2A). The tubing must be inserted past the O-ring inside the fitting to form a leakproof seal (approximately 3/4 in.). Continue this procedure until desired length of mist line is completed. Your line should now begin and end with a Slip-Lok T Fitting (see illus. 2B).

After each push and twist of tubing in fitting, give a gentle pull on the tubing to assure proper insertion and engagement. The Brass Slip-Lok Coupling will be used to attach the 10 ft. feed line length to the beginning of your mist line.



### Inserting the End Plug

Insert end plug into the last Slip-Lok T Fitting with the tabbed end out (see illus. 2C). This will be the end of your mist line.



### Assembling Water Feed line

Insert one end of the supplied 10 ft. section of tubing into the 3/8 in. end of the brass slip lok hose adapter. Insert opposite end of tubing into the Slip-Lok T fitting at the beginning of the mist line.

**\*Note: Auto Drain Valve** The auto drain valve should be installed in the feed line for most installations. Cut the feed line approximately one foot from the Hose Adapter. Thread the auto drain valve into Slip-Lok T Fitting. Install the fitting where you cut the tubing, as illustrated above. This will automatically drain off excess water from the line when water is turned off, reducing calcium build up in the nozzles. If there are multiple elevation changes, more than one drain valve may be needed. Additional drain valves should be installed at the lowest points in your system.

## Before Mounting Your Mist System

### Flush Mist Line

Remove nozzles from fittings (unscrew by hand and set aside in a safe place) and connect Hose Adapter to garden hose or tap. Turn on the water for a few minutes to flush out any dirt or debris from within the mist line. Turn off the water and replace nozzles in fittings. (hand tighten only).

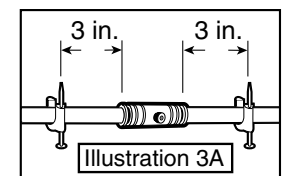
### Pressure Test Mist System

With mist line still attached to water source, turn water on to test line pressure and fittings for proper installation. Water will shoot from the drain valve when the water is turned on. Do not be alarmed. The valve will shut off when the line is pressurized. Inspect each fitting. Should any fitting leak, see the section on Troubleshooting for instructions.

## Mounting Your Mist System

Make sure your Mist System has been flushed and pressure tested prior to mounting mist line.

**Step 1** It is recommended that the system be mounted on the bottom of the supporting structure. Begin by placing one of the 3/8 in. hanging clamps over the mist line 3 in. from the first Slip Lok T Fitting. The first fitting in your Mist System should begin 2 ft. from the house on a patio cover. Hammer the clamp into the BOTTOM of the support beam or fascia board.



**Step 2** Continue placing a hanging clamp 3 in. on each side of each Slip Lok T Fitting and hammering in place (see illus. 3A). Pull tubing slightly while applying each clamp to avoid sagging in mist line. If installing into a metal material, you will need to purchase self tapping sheet metal screws and use in place of the nails.

**Step 3** Connect feed line to water source and turn on the water to operate mist system.

## Maintenance

The following recommendations will assist you in maintaining your mist nozzles and preventing unnecessary clogging.

**Draining Water from Mist Line** - Whenever the mist system is not in use the residual water should be drained to minimize nozzle clogging. If your system has had an Auto Drain Valve installed correctly at the lowest points in the system no additional steps are required after turning off the system. If an Auto Drain Valve has not been installed, detach system at the water source and allow the water to drain completely.

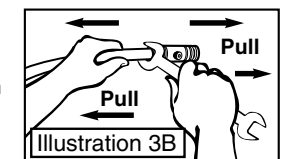
**Orbit®|Arizona Mist® Nozzle Cleaner (Model 10103)** - Periodically clean the nozzles in system. See bottle for instructions.

**Filters** - The T Filter, supplied in the system, will filter out solid sediments from your line. If needed, Orbit®|Arizona Mist® also offers a Calcium Inhibitor Filter (Model 10130W) that will filter solid sediments from the line and contains poly-phosphates which help prevent mineral build-up within the line. (see accessories list)

**Flushing System** - Always remove nozzles at the end of the summer season. Before re-installing your nozzles, flush the system for 5 minutes. To keep the mist line free from debris in the off-season, install Orbit®|Arizona Mist® Nozzle Plugs (Model 10107H) in place of nozzle. You should also flush the system if it has been idle for longer than a month.

## Troubleshooting

The 3/8 in. Professional System can be easily disassembled to correct problems, replace parts, or extend the system. To disassemble the 3/8 in. Professional System tubing from any Slip Lok fitting, place a 3/8 in. or 1/2 in. open end wrench over the tubing next to the fitting. Pull the tubing away from the fitting while pushing the wrench against the fitting. This will depress the locking ferrule, releasing the tubing from the fitting (see illus. 3B).



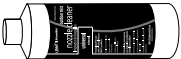




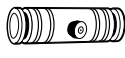
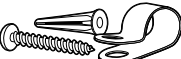




## Troubleshooting (Continued)

| Problem                  | Solution   |
|--------------------------|--|
| Leak in Tubing           | If a leak occurs in the actual tubing itself (not the point where the tubing meets the fitting), the tubing must be replaced where the leak has occurred.  |
| Leak at Nozzle           | 1. Make sure the nozzle is sufficiently tightened into place. <b>HAND TIGHTEN ONLY DO NOT USE TOOLS.</b><br>2. Check to make sure the nozzle O-ring is in place.<br>3. Nozzle may be clogged which can give the appearance of "leaking" or dripping. Clean with nozzle cleaner.  |
| Leak at Slip-Lok Fitting | 1. Remove tubing from Slip-Lok and look inside each end to make sure that the O-ring is in place.<br>2. Remove tubing from Slip-Lok and check tubing. There should be a line scored around tubing exactly 1/4 in. from the end of the tubing. If not, tubing has not been inserted past the O-ring in the fitting. Re-insert tubing correctly - push and twist.<br>3. Any horizontal scoring of the tubing could cause leaking. Trim the tubing above any scoring marks with a clean vertical cut and re-install tubing correctly. <b>DO NOT USE SCISSORS.</b> |

## System Expansion /Accessories

3/8 in. Professional System kit can be easily expanded up to 62 nozzles/125 ft. of mist line by adding additional Slip Lok T Fittings, clamps, and tubing. Simply remove the end plug from the last Slip Lok T Fitting of your existing mist line and add tubing, clamps, and fittings to your desired length.

| Picture   | Part #          | Product Description   |
|---|-----------------|---|
|    | 10107           | Nozzle Plug - Use to close unneeded misting outlets   |
|    | 10109           | Calcium Inhibitor Filter - Attaches directly to 3/4 in. hose bib Protects nozzles from clogging due to sediment |
|   | 10103           | Nozzle Cleaner - 8 oz. bottle. Used to dissolve mineral deposits on nozzles                                     |
|  | 92110           | Slip-Lok Elbow - Used wherever a clean 90 degree turn is needed in mist line                                    |
|  | 92120           | 3-Way Slip-Lok T - Allows you to split mist system and run in multiple directions                               |
|  | 92225,<br>92228 | 3/8 in. Flexible Tubing   |
|  | 10106           | Brass and stainless steel nozzles available as replacements   |
|  | 10121           | Slip-Lok T - Fittings with nozzles are available to expand your mist system                                     |
|  | 20001           | Stucco Installation Kit   |
|  | 92100           | Booster Pump  |
|  | 10115           | Auto Drain Valve  |

## Warranty and Statement

Orbit® Irrigation Products, Inc. warrants to its customers that its Orbit/Arizona Mist products will be free from defects in materials and workmanship for a period of four years from the date of purchase. We will replace, free of charge, the defective part or parts found to be defective under normal use and service for a period of up to four years after purchase (proof of purchase required). We reserve the right to inspect the defective part prior to replacement. Orbit® Irrigation Products, Inc. will not be responsible for consequential or incidental cost or damage caused by the product failure. Orbit® liability under this warranty is limited solely to the replacement or repair of defective parts.

To exercise your warranty, return the unit to your dealer with a copy of the sales receipt.

Questions please call: 1-800-488-6156 or 1-801-299-5555  
www.orbitonline.com



Register your product online at [www.orbitonline.com](http://www.orbitonline.com)

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P/N 10060-24 Rev F



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**PROOF NO: 1**

**DATE:** 03.11.10

**DES:** MZ **SPCK:** MZ

**JOB NO:** N/A

**CLIENT:** Orbit

**SKU:** 10060

**UPC:** N/A

**FILE NAME:** 10060-24 rFindd








**SOFTWARE:** InDesign CS3

**DIMENSIONS:**

**FLAT: W: 14" H: 8.5"**

**FINISHED: W: 14" D: 0" H: 8.5"**

**COLORS**

|  |   |  |  |
|--|---|--|--|
|  Registration |  color non printing |  color non printing |  |
|  BLACK        |  PMS ????           |  PMS ????           |  PMS ???? |

**ADDITIONAL INSTRUCTIONS:**

· **Font sizes cannot be smaller than 7 pt.**

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Printers are responsible for meeting print production requirements. Any changes must be approved by the client and Fluid Studio.

**PRINTED PIECE MUST MEET DESIGNATED SPECIFICATIONS ON THIS FORM.**

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