

PM10 MISTER PUMP

Installation & Operation Instructions

PLEASE READ THE ENTIRE INSTRUCTIONS BEFORE BEGINNING YOUR INSTALLATION. FOR BEST RESULTS, PLAN AND SKETCH YOUR ENTIRE SYSTEM BEFORE BEGINNING. THIS WILL HELP TO AVOID WASTE AND REDUCE INSTALLATION TIME.

1. When the equipment is received, all items should be carefully checked against the packing slip to ensure that the order is complete. Examine carton(s) for shipping damage. If the unit is damaged, the carrier, if still present, should make the proper notification on the receipt noting the damage. Otherwise report the damage directly to the carrier.
2. The pump is the heart of our system and prior to installing there are a few things to consider. Location, Location, Location. Keep in mind that the pump needs to be supplied with power and water, plus the high pressure vinyl tubing (mist line tubing) connects to the outlet of the pump and access to the pump is necessary. A good location is one that accommodates all these connections without difficulty.
 - Marine based application: For a typical marine installation, a good place for the pump is in the engine room, machinery compartment, lazarette, or even sometimes under the flybridge, all suit the needs. Though the pump module enclosure is powder coated aluminum, we still recommend that the unit be protected from salt water intrusion. WARNING: Our pumps are not ignition protected and therefore should not be placed in a bilge or hold that could contain flammable vapors i.e. gasoline.
 - Residential and Commercial based applications: For a typical residential or commercial installation, a good place for the pump is next to other pumps, such as a pool filtration system or an air conditioning unit. Rain will not affect our pumps, but we do recommend a covered location if at all possible.

Once this location is decided upon, secure the pump to a firm surface utilizing the mounting flange.

3. Prior to start up, situate and mount your Mister Pump in the Machinery wherever water & power are most readily available. See above for recommended locations. Incorporated into your Mister Pump is a 1000psi pressure gauge and an adjustable unloader valve to control the output pressure. At any given time while operating, the operational pressure should be between 600 -1000psi. Do not exceed 1000psi. When ready, ENSURE the WATER IS ON BEFORE YOU TURN ON THE PUMP.
4. Connect the 1/2" blue water supply line to a standard 3/4" hose bibb, utilizing the adapter fitting provided, or tee into an existing water line. The water supply line should be seated into the 1/2" Quick Connect fitting on the pump

module labeled INLET. When ready, ENSURE THE WATER IS TURNED ON BEFORE YOU TURN ON THE PUMP.

5. From your pump location, map out the route for the mist line (high pressure tubing) and placement of the Mister Jet™. Once you have determined the position of the jets and the path of the mist line to each of the jets, begin cutting the mist line tubing to the appropriate lengths, make sure the mist line tubing is cut straight and clean. Only cut the needed lengths.
6. Begin assembling the mist line by connecting the pre-cut mist line tubing into the Quick Connect Mister Jet™ tees. Make sure the tubing slides beyond the o-ring seal located inside the Quick Connect fitting; this is achieved with a firm push and turn motion.
7. The mist line is now ready to be mounted. Whether mounting the mist line to the underside of an overhead structure, routing through the interior of a structure, or routing the line through landscaping with Mister Stakes™, place and mount the tees (NOT including the Mister Jets™ at this time) which are all connected via the mist line. When securing the mist line near a Quick Connect fitting, allow 3 inches on each side of the fittings for a P-Clamp or zip ties. Pull mist line tightly as you secure the tubing to the structure, as to hold the tubing straight into the Quick Connect fittings.
8. Now that the mist line is routed, it is time to connect the OUTLET Quick Connect on the Mister Pump. Continue outward from the OUTLET Quick Connect fitting on the pump to the first tee fitting on the mist line, securing the line every 2 feet with P-clamps or zip ties along the way. Be careful not to twist or crimp the line. Trim any excess tubing and Quick Connect the first tee fitting on the mist line.
9. Ensure water supply is ON, (providing at least 25psi INLET pressure), then turn the system on. Allow the system to flush for approximately 5 minutes. Then, start screwing in the Mister Jets™ beginning with the one closest to the pump, working away from the pump until finished – turn off the pump. Note the pressure of the streaming water will increase as you mount the jets into each individual fitting.
10. Now that any possible debris or particles have been cleared from the line, it is time to Tee into the OUTLET mist line, near the pump and install the Auto-Drain Valve assembly. Cut the OUTLET mist line near the pump and insert the Auto-Drain Valve assembly at a point in the line where water can run out of the valve – this helps in the building of pressure when the system is turned ON and clears the line of water each time the system is turned OFF. Turn the pump on and allow the system to operate for a few minutes to completely fill the mist line. Do not be alarmed, water will shoot from the Auto-Drain Valve assembly when the water is initially turned ON, until pressure in the mist line is achieved. The valve will shut off when the line is pressurized.
 - **NOTE:** The area below the Auto-Drain Valve will receive the water that is left in the system. Be sure this area is suitable for moisture.

11. Ensure the water supply is ON and turn the pump ON. Make sure the pump pressurizes to the operating pressure, beginning at 600psi and working up to 1000psi. This will cause the tubing to expand in the fittings. Check for any leaks at this point. Should a leak occur, turn the pump off and remove the fittings by depressing the locking ferrule against the fittings and pulling away from the tubing. Be sure the tubing end is cut cleanly and re-insert the tubing into the fitting, making sure the tubing seats beyond the o-ring. Push in hard.
12. Check the operation of the Auto Drain Valve by running the system for several minutes and then shutting the system OFF. The valve should open to release any excess water from the system within a few minutes.
13. Congratulations! Your system is installed.