

### **Self-Contained Power Mister**

### **USER'S MANUAL**







### **WARNING**



### **IMPORTANT SAFETY INFORMATION INSIDE**

- Serious injury or death is possible.
- Retain these instructions for future reference.
- Read, understand and follow all safety information and instructions in this manual before using or servicing this product.



### 800-779-3267

sales@schaeferfan.com • www.schaeferfan.com

### Index

SPECIFICATIONS	2, 3
CART ASSEMBLY	4
SET-UP / OPERATION	5, 6
MAINTENANCE	7
REPLACEMENT PARTS	7
WARRANTY	8

### Thank You!

Thank you for selecting our self-contained power misting equipment for your comfort conditioning needs. These products have been engineered with the most reliable components and materials available, are are equipped with features to assure ease of mobility, use and maintenance.

The cool air you will now enjoy when using this misting equipment is created through the process of evaporation. Heat is required to change water from a liquid to a gas or "water vapor". Our self-contained power misting equipment creates a "fog" by pumping water at a very low flow rate through small nozzles. When combined with the air added by a fan, this fog is rapidly evaporated. The heat required to evaporate the fog is extracted from the air causing a reduced air temperature. This cooler air is then distributed to people or animals creating a direct cooling effect.

The performance of your misting system can be affected by local conditions. For best results, it may be necessary to experiment with the number of nozzles operating to achieve the cooling performance you desire.

Thank you again and stay cool!

### **Specifications**

Our self-contained power misting equipment is configured into three separate models:

•	One 18" fan head and pump assembly	PVM18LC
•	One 18" fan head, pump assembly and 10 gallon tank	PVM18
•	One 18" fan head, pump assembly, 10 gallon tank and cart	PVM18C

#### **ALL MODELS FAN SPECIFICATIONS** Voltage (VAC) 120 Voltage (VAC) 60 Frequency (Hz) 60 Frequency (Hz) 2.15 Amps 1.45 Total amps Pump output 1 GPM HP 168 watts Mist hub 4 nozzles installed Speeds 3 POTABLE ONLY Water supply

### **Specifications (continued)**



#### PVM18LC

- One 18" fan head with white powder-coated guard mounted on a yoke attached to the pump enclosure.
- An integral ground fault circuit interruptor (GFCI) is attached to the power cord.
- Equipped with a power cutoff tip switch.
- Includes one extra nozzle and two plugs.
- Shipped in a single carton, ready to assemble on your existing 10 gallon Igloo cooler.



#### PVM18

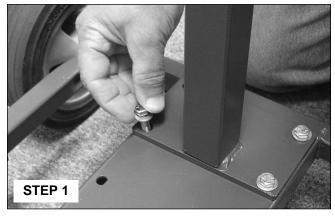
- One 18" fan head with white powder-coated guard mounted on a yoke attached to the pump enclosure.
- An integral ground fault circuit interruptor (GFCI) is attached to the power cord.
- Equipped with a power cutoff tip switch.
- Includes one extra nozzle and two plugs.
- A 10 gallon tank is included for use as water reservoir.
- Shipped in two cartons, ready to assemble.



### PVM18C

- One 18" fan head with white powder-coated guard mounted on a yoke that attaches to the cart mast.
- The cart mast extends 20".
- The cart base includes two 8" wheels.
- An integral ground fault circuit interruptor (GFCI) is attached to the power cord.
- Equipped with a power cutoff tip switch.
- Includes one extra nozzle and two plugs.
- A 10 gallon tank is included for use as water reservoir.
- Shipped in three cartons, ready to assemble.

### **PVM18C Cart Assembly**





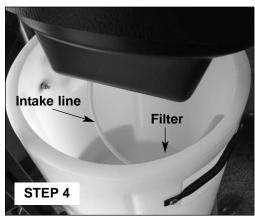


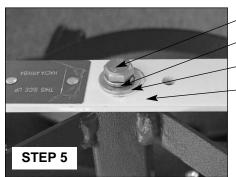
**Bolt** 

Washer

**Bracket** 

Lock washer





Remove all items from cartons, remove packing material and place on a level surface. The fan is mounted on the bracket and the pump assembly is contained in the lid, so please remove carefully.

#### STEP 1 - ASSEMBLE CART

TOOLS REQUIRED: Two 1/2" wrenches.

- Remove the four bolts, washers and flange locks from the cart base.
- 2. Position the post vertically over the four holes in the base, with the handle oriented toward the back/wheels.
- 3. Insert the bolt through the washer and then through the flange of the post and down through the hole in the base. On the underside, put a flange lock on the bolt just tight enough to hold it in place.
- 4. Repeat until all four bolts are in. Tighten the four flange locks on the four bolts.

#### STEP 2 - PLACE TANK ON CART

### **STEP 3 - REMOVE BOLT FROM POST**

TOOLS REQUIRED: One 9/16" wrench.

Remove the bolt, lock washer and washer from the top of the post.

### STEP 4 - PLACE PUMP ASSEMBLY ON TANK

Place the pump assembly on the tank. Be sure the intake line and filter are in the bottom of the tank. The metal plate with the rocker switch installed should be oriented toward the back/wheels.

#### **STEP 5 - INSTALL FAN**

Place the fan and bracket on the post with the hole in the bracket over the hole in the top of the post. Insert the bolt through the lock washer and washer and down through the bracket and into the hole in the post. Tighten securely.

### CONTINUE WITH SET-UP / OPERATION INSTRUCTIONS

- 1. Always operate the power mister on a level surface. In the event the unit is tipped over or tilted more than 35 degrees, a built-in tip switch will shut off power to the pump and fan. Power will be restored when unit is returned to the upright position.
- 2. Fill cooler or tank with clean, fresh water (ice may be added) each time the mister is used. Drain remaining water after each use.
- Aim the mister downwind for best results. If more than one mister is used, arrange them in an arc around the area to be misted.
- 4. To energize, plug the GFCI safety plug into any 120 VAC 60 Hz grounded outlet. *Test GFCI per instructions below*. Turn the mister on using the rocker switch located on the top of the pump enclosure. Place the switch in the FAN position for air movement only, or FAN/MIST for air and mist.
- 5. Use the pull chain located on the back of the fan to choose fan speed (OFF, LOW, MEDIUM, HIGH). If fan does not operate when rocker switch is in the FAN or FAN/MIST position, the pull chain may be OFF.
- 6. The mist hub located in the center of the fan is equipped with four nozzles. The output volume of water vapor can be reduced by replacing one or two of the nozzles with the plugs provided.
- 7. The unit will mist for approximately five hours on 10 gallons of water.



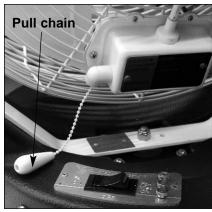
### **GFCI TEST**

The ground fault circuit interruptor (GFCI) mentioned above provides protection from electric shock by examining the product's electrical circuit for current leakage. It must be tested before each use to assure safe operation. Follow these steps:

- 1. Plug into outlet the indicator will show if power is available.
- 2. Press the TEST button indicator will turn off.
- 3. Press the RESET button. Use product only if GFCI resets.

### \*\* DO NOT USE IF TEST FAILS. \*\*







### WARNING



## ELECTRICAL SHOCK HAZARD

# PINCH HAZARD TRIP HAZARD



• Serious injury or death is possible.



• Plug these units into properly grounded receptacles only.



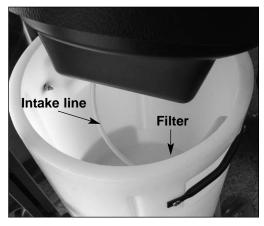
- Disconnect from electric supply before filling, servicing, or moving this equipment.
- Test GFCI before using. See instructions at left.
- Do not carry the unit by the motor, electric cords, hose line, fan guard or bracket.
- Do not touch fan motor during use or directly after; it may be hot.
- Do not operate fan without guards in place.
- Do not insert anything into fan guard while fan is operating.
- Unplug unit and dry any wet areas before resetting a unit that has tipped over.
- Position all electric cords to lie flat on the ground or floor.
- Never use during rain, sleet, hail, snow or any other inclement weather conditions.





### **CAUTION**

- Never operate pump without water supply.
- If leaks are observed, turn pump off and tighten fittings by hand.
- Excessively hard water (high solids) can plug nozzles.
- A plugged filter caused by poor water quality can restrict flow to pump and cause permanent damage.
- Never allow "fog" from the nozzles to come in contact with surfaces. This can cause condensation and water will form on those surfaces; redirect the fan to prevent this circumstance.







#### TIP HAZARD

- Serious injury is possible.
- Support weight of fan with free hand when moving cart.
- · Do not fill tank before moving cart.

### To prepare models PVM18LC and PVM18 for operation:

- 1. Place *empty* cooler/tank in approximate location to be misted. Carrying a full cooler/tank will be difficult as it will weigh approximately 80 pounds.
- 2. Fill cooler/tank with water (and ice, if desired).
- 3. Place the fan/pump enclosure on the cooler/tank.
- 4. Be sure the intake line and filter are in the bottom of the cooler/tank.
- 5. Fasten the straps to the handles on both sides of the tank.
- \* Model PVM18LC does not include a tank. Since the pump enclosure is specifically made to fit a 10 gallon Igloo cooler, it must be used only with this type of cooler, supplied by the user. **DO NOT USE THE PVM18LC WITH ANY OTHER WATER RESERVOIR!**

### To prepare model PVM18C for operation:

- 1. Assemble cart as described earlier.
- DO NOT FILL TANK BEFORE MOVING CART.
   Water in tank will add extra weight (about 80 pounds) and is likely to spill out when cart is tilted back. This can also make the cart unstable and hazardous to move.
- 3. Carefully move assembled cart to desired location.
- 4. Remove the pump enclosure and fill tank with water (and ice, if desired). Replace the pump enclosure on the tank. Be sure the intake line and filter are in the bottom of the tank.
- 5. Fasten the straps to the handles on both sides of the tank.



### WARNING



### ELECTRICAL SHOCK HAZARD

- Serious injury or death is possible.
- Disconnect from electrical supply before performing any maintenance operations.

#### SYSTEM DRAIN / STORAGE

When it is time to store the Power Mister or take it out of use for more than a few days, it is strongly recommended that the water be drained from the system to prevent calcification problems and the formation of algae. Be sure to empty the cooler or tank and allow it to air dry.

Clean the unit with a mild anti-bacterial solution regularly.

#### **NOZZLES**

The fog or spray pattern exiting from the nozzles should have an even cone shape. If this is not the case, the nozzle should be cleaned or replaced. Nozzle function should be checked regularly to assure best misting and evaporation performance.

To clean or replace a nozzle:

- 1. Disconnect the unit from electrical supply.
- 2. Unscrew and remove the nozzle.
- Soak in vinegar, rinse in water OR replace with new nozzle.
- 4. Flush the water line to the mist hub before replacing nozzle.
- Screw the nozzle into the mist hub by hand.
   NO TOOLS SHOULD BE USED TO TIGHTEN THE NOZZLE.

#### **FILTER**

Filter maintenance requirements will vary with changing water conditions. The filter should be inspected frequently and changed as needed. A dirty filter will restrict water flow to the pump and can cause permanent damage.

### **Replacement Parts**

#### **REPLACEMENT PARTS**

P/NDESCRIPTION18WF18" circulation fanMK-BRASSPLUGMisting plug

BN12 Brass replacement nozzle 0.012 MM-ROCKERSWITCH Three-position rocker switch

PVM-PUMP Shurflo pump
PVM-TIPSWITCH Tip switch
PVM18-KNOB Knob, metric
PVMC White tank
MISTHUB2 Mist disk
PVM-STRAP Velcro strap
PVM-HANDLE Tank handle

C2500GFCI 25 ft power cord with GFCI 0WHEEL8X212R Rubber wheel, 8" x 2<sup>1</sup>/<sub>2</sub>" Knob, 2" (for cart)

### Schaefer Ventilation Equipment, LLC Schaefer Limited Warranty Policy

Schaefer Ventilation Equipment, LLC (SVE) provides the following limited warranty from the date of purchase to the original purchaser of our products:

- I. Two-year coverage (unless otherwise indicated below) applies to all products, components and assemblies provided by SVE that prove to be defective in material or workmanship. Any such defective product will be repaired or replaced at SVE's option, with the defective product returned upon approval to SVE, F.O.B Schaefer Ventilation Equipment, LLC, Sauk Rapids, Minnesota.
- II. This warranty does not cover:
  - a. Failure, damage or malfunction as a result of:
    - i. Improper installation or installation not in accordance with installation instructions.
    - ii. Operating conditions that vary from SVE's operating instructions.
    - iii. Misuse, abuse, negligence, alteration, or accident.
    - iv. Transporting the product.
    - v. Improper operation or lack of appropriate or regular maintenance of the product.
  - b. Loss of time, inconvenience, loss of use of the product or other consequential or incidental damages.
  - c. Parts that need replacement due to normal wear and tear.
  - d. Superficial or cosmetic rust or corrosion.
  - e. Any product whose name plate has been removed.

Products with warranty periods that differ from the standard 2-year warranty are as follows:

•	Poly Housings	25 years
•	Fiberglass Housings	15 years
•	Low-intensity Tube Heater Exchange Tubes	5 years
•	K-Series, 2-Stage, Compact and Stainless Steel Tube Heaters	1 year
•	Quartz and Zubri Heaters	1 year
•	Shutter Motors and Aluminum Riveted Fan Blades	1 year
•	HotZone™ Electric Elements	120 days
•	Quartz Bulbs	90 days
•	Evaporative Cooling Pads	90 days
•	Economy Line Fans	90 davs

 Any product or part noted as an exception to the standard 2-year warranty in the product's operating manual.

SVE reserves the right to add or delete products from this exception list at any time.

THERE ARE NO WARRANTIES OF MERCHANTABILITY OR FITNESS OF USE.

SVE reserves the right to change product design and specification without prior notice or liability. The above constitutes the sole warranty offered by Schaefer Ventilation Equipment, LLC. Effective Date: February 1, 2009

All information, illustrations and specifications provided here are based on the latest product information available at the time of printing. Product specifications subject to change.



800-779-3267

sales@schaeferfan.com • www.schaeferfan.com