





1200 North Main St. Fostoria, OH 44830 Phone: 800-495-4525 Fax: 419-435-0842

Fax: 419-435-08 www.tpicorp.com



SELF-CONTAINED POWER MISTER

MODELS: PM-18FO, PM-18S, PM-18C







PM-18S



AWARNING

IMPORTANT SAFETY INFORMATION INSIDE



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

CONTENTS

Specifications	Pages 2,3
PM-18C Assembly	Pages 3,4
Set-up / Operation	Pages 5,6
Replacement parts	Page 7
Maintenance	Page 8
Warranty	Page 8

THANK YOU!!

Thank you very much for selecting TPI Corporation's self-contained power misting equipment for your comfort conditioning needs. These products were engineered with the most reliable components and materials available and 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". TPI Corporation's 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

TPI Corporation's self-contained power misting equipment is configured into three separate models:

- □ An 18-inch fan head and pump enclosure. Model no. **PM-18FO**
- □ An 18 inch fan head, pump enclosure, and 10 gallon cooler. Model no. **PM-18S**
- □ An 18-inch fan head, pump enclosure, 10 gallon cooler and cart. Model no. **PM-18C**

All Models			
Voltage (VAC)	120		
Frequency (Hz)	60		
Total Amps	2.2		
Pump output	2 gph @ 130psi		
Misting hub	4 nozzles installed		
Filter	50 mesh stainless steel		
Water supply	PORTABLE ONLY		

Fan Specifications			
Voltage (VAC)	120		
Frequency (Hz)	60		
Amps	1.5		
HP	1/8		
CFM	5750		
Speeds	1		



MODEL: PM-18FO

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

Issue Date: 3-11-05 Rev. Date: 9-12-07 Rev. Level: 13 ECN: n/a OIPM P/N: 3420433 $Page\ 2\ of\ 8$

SPECIFICATIONS (continued)



MODEL: PM-18S

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

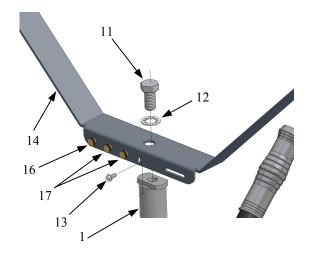


MODEL: PM-18C

- One 18-inch fan head with white powder-coated guard mounted on a yoke that attaches to the cart mast.
- The cart base is supplied with two 10-inch wheels and a tray. (Customer assembly of these components is required. See assembly instructions on page 4.)
- An integral ground fault circuit interrupter (GFCI) is attached to the power cord.
- Equipped with a power cutoff tip switch.
- One extra nozzle and two plugs included.
- A 10-gallon Igloo cooler is included for use as water reservoir.
- Shipped in a single carton and ready to assemble.

PM-18C CART ASSEMBLY & PARTS LIST

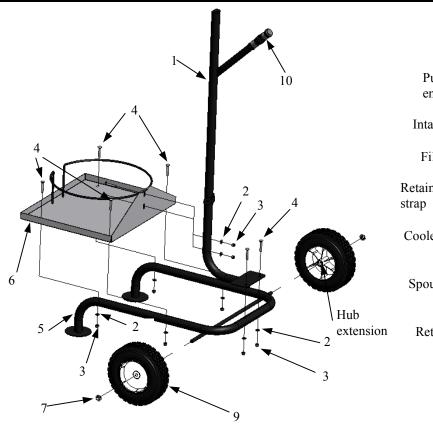
NO.	DESCRIPTION	PART NO.	QTY.
1	Mast	35042001	1
2	Washer Flat 1/4	3442532	8
3	Hex Nut 1/4-20	3440132	8
4	Bolt Carriage 1/4-20 x 1-3/4"	3409456	8
5	Base	8499700	1
6	Base Tray	3504121	1
7	Push Nut	8045700	2
8	Washer Curved	3448056	2
9	Wheel 10"	8483100	2
10	Handle Grip	3409100	1
11	Screw Hex Head 1/2-13 x 1	2474400	1
12	Washer Lock 1/2"	3419500	1
13	Screw HWH 8-32 x 3/8	2326500	1
14	Yoke	3314721	1
15	Retaining strap	44134001	1
16	Nozzle (Brass)	44108001	5
17	Plug	44108002	2

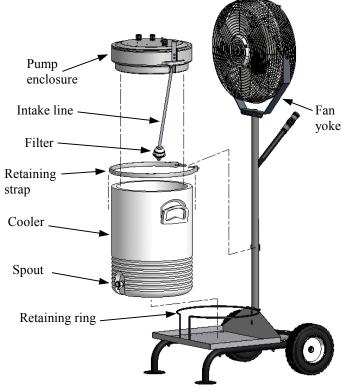


Fan yoke / Mast assembly

OIPM P/N: 3420433 Page 3 of 8

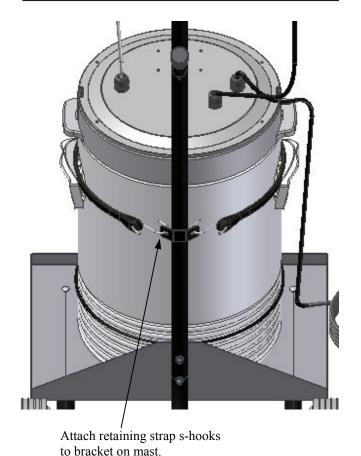
PM-18C CART ASSEMBLY (continued)





TOOLS REQUIRED: Screwdriver, adjustable wrench, hammer, and pliers.

- 1. Place base (item 5) on flat work surface with legs downward as shown above. Install wheels onto axle; making sure the hub extension is facing inward toward the base. Next place one push-nut (item 7) on axle and using a hammer, seat in place with a sharp blow. Repeat for other wheel.
- Install tray (item 6) on base using four carriage bolts (item 4), and four each of washers and nuts (items 2 & 3) as shown. NOTE: Finger-tighten only. Adjustment may be necessary when securing mast to tray.
- 3. Install mast (item 1) by bolting mast to tray and base assembly as shown above. Now tighten all bolts.
- 4. Place Igloo cooler inside retaining ring on tray with spout toward front.
- 5. Secure cooler to mast with retaining strap (item 15).
- 6. Place pump enclosure on cooler. Make sure intake line and filter are in bottom of cooler.
- 7. Attach fan yoke (item 14) to top of mast (item 1) using 1/2-13 x 1" screw (item 11) and 1/2" lock washer (item 12). (See illustration on page 3.)
- 8. Position fan yoke as shown and install 8-32 x 3/8" screw (item 13) through yoke and into hole in mast. Tighten securely. (See illustration on page 3.)



OIPM P/N: 3420433 Page 4 of 8

SET-UP / OPERATION

- 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-over switch will shut off power to the pump and fan. Power will be restored when unit is placed in the upright position.
- 2. Fill cooler with clean fresh water (ice may be added) each time mister is used. Drain unused water at the end of use period.
- 3. Aim 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. <u>Test GFCI per instructions below.</u> Turn on the two-position switch located on the top of the pump case. Turn to either "Fan" (for air movement only) or "Fan / Pump" (for air and mist).
- 5. The misting 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.
- 6. The unit will mist for approximately 5 hours on 10 gallons of water.

GFCI SAFETY PLUG TEST

The GFCI plug 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. Test as described below:

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

Do not use if above test fails.

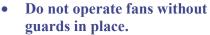
AWARNING

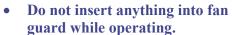
ELECTRICAL SHOCK HAZARD PINCH HAZARD TRIP HAZARD



- A
- TRIP HAZARD

 Serious injury or death may occur.
- Only plug these models into properly grounded receptacles.
- Disconnect from electric supply before filling, servicing, or moving this equipment.
- Test GFCI before using. See instructions at left.
- Do not carry unit by the motor, electric cords, hose line, fan guard or support bars.
- Do not touch fan motor during use or directly after, it may be hot.





- Unplug unit and dry wet areas before resetting unit that has been tipped over.
- Position all electric cords to lie flat on ground or floor.
- Never use during rain, sleet, hail, snow or any other inclement weather conditions.



CAUTION

- Never operate pump without water supply.
- Check for leaks. If there are any, turn pump off and hand tighten leaky fittings.
- Excessively hard (hi-solids) water can plug nozzles.

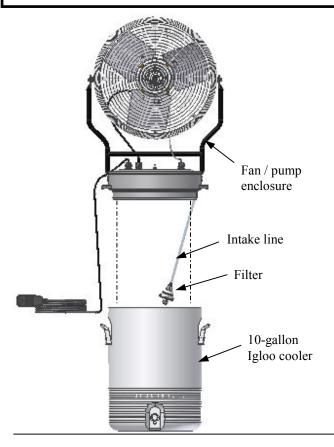
Issue Date: 3-11-05 Rev. Date: 9-12-07 Rev. Level: 13

- A plugged filter caused by poor quality water can restrict flow to pump causing permanent damage.
- Never allow the "fog" from the nozzles to come in contact with surfaces. This will cause condensation and water will form on those surfaces. Redirect the fan to prevent this circumstance.

ECN: n/a

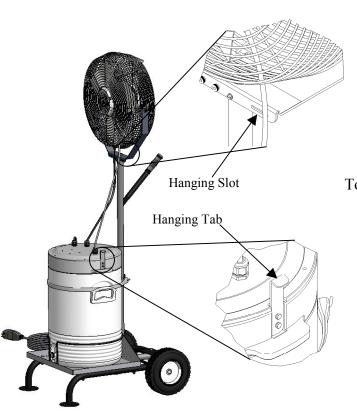
OIPM P/N: 3420433 Page 5 of 8

SET-UP / OPERATION (continued)



To prepare models PM-18S and PM-18FO for operation:

- 1. Take empty cooler to the approximate location to be misted. Carrying a full cooler will be difficult to do since it will weigh approximately 80-pounds.
- 2. Fill cooler.
- 3. Place the fan / pump enclosure on the Igloo cooler as shown at left. *
- 4. Make sure intake line and filter are in bottom of cooler.
- 5. Follow Set-up / Operation instructions on page 5.
- * Model PM-18FO comes without a cooler. Since the pump enclosure is specifically made to fit a 10-gallon Igloo cooler, it must be used only with a similar Igloo cooler, supplied by the user. DO NOT USE THE PM-18FO WITH ANY OTHER WATER RESERVOIR!



A WARNING TIP HAZARD

- Serious injury may occur.
- Support weight of fan with free hand when moving cart.
- Do not fill cooler before moving cart.

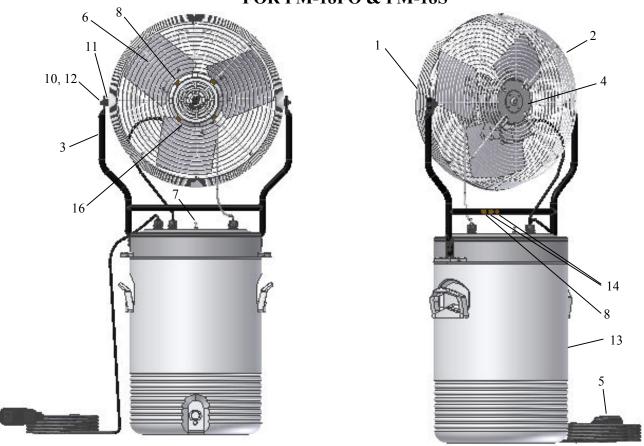
To prepare model PM-18C for operation:

- 1. Assemble as described on pages 3 and 4.
- 2. **DO NOT FILL COOLER BEFORE MOVING**MISTER CART. Water in cooler will add extra weight (approx. 80 lbs.) and is likely to spill out when cart is tilted back and will make the cart unstable and hazardous to move.
- 3. Carefully move mister cart to desired location
- 4. Remove pump enclosure and hang it on the slot located on the fan yoke (see detail views at left)
- 5. Fill cooler
- 6. Replace pump enclosure on cooler
- 7. Follow Set-up / Operation instructions on page 5

NOTE – Pump enclosure should not be hung from yoke for extended periods of time.

Issue Date: 3-11-05 Rev. Date: 9-12-07 Rev. Level: 13 ECN: n/a OIPM P/N: 3420433 $Page\ 6\ of\ 8$

ASSEMBLED VIEW AND REPLACEMENT PARTS LIST FOR PM-18FO & PM-18S



ITEM#	QTY.	P/N	DESCRIPTION
1	1	6399099	FRONT GUARD (PAINTED)
2	1	63991002	REAR GUARD (PAINTED)
3	1	58381001	SUPPORT TUBE ASSEMBLY
4	1	58364003	MOTOR TOTALLY ENCLOSED
5	1	44115001	CORDSET
6	1	58299008	FAN BLADE ASSEMBLY
7	1	44114001	SWITCH (TOGGLE-WATER PROOF)
8	5	44108001	NOZZLE (BRASS)
9	1	44105001	TUBING (1/4" NYLON) 80" LENGTH
10	2	3443032	BOLT 1/4" - 20 X 1.500" CARRIAGE
11	2	2480700	RUBBER BUSHING
12	2	0004901	NUT 1/4" - 20 HI-CROWN NYLON
13	1	63924001	COOLER (10 GAL.)
14	2	44108002	PLUG
15	1	44104001	FILTER
16	1	58467001	MISTING HUB
17	1	2489800	BARB FITTING – NOT SHOWN
			(Connects intake line hose to filter)
18	1	2490000	TUBING 14-1/2" – NOT SHOWN
			(Intake line hose)
19	1	2419200	Half Coupling – NOT SHOWN
			(Connects to intake side of filter)

OIPM P/N: 3420433 Page 7 of 8

MAINTENANCE



AWARNING

ELECTRICAL SHOCK HAZARD

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

FILTER

Filter maintenance requirements will change 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.

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.

Clogged nozzles can be cleaned by removing them from the misting hub and soaking them in a scale or lime removing solution. If nozzles fail to work after cleaning, replace them with spare nozzles provided. Tighten nozzles by hand only.

Before reinstalling nozzles, flush water line to misting hub.

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. Also be sure to empty the Igloo cooler.

Regularly clean the mister and Igloo cooler with an anti-bacterial solution.

ssue Date: 3-11-05 Rev. Date: 9-12-07 Rev. Level: 13

WARRANTY

TPI CORPORATION - P.O. Box 4973 Johnson City, TN 37602-4973 (800) 251-0382

TPI Corporation's Guaranteed Customer Satisfaction Warranty States:

If you are ever dissatisfied with the quality of our workmanship or in the design or function of our equipment, you may return it to us for repair, replacement, or credit at our discretion. A returned goods number will be issued at the time you contact us. This number is necessary to assure that you get proper credit for your return. Shipping costs for returns are at the expense of the customer unless otherwise negotiated.

We want satisfied Customers and will make every effort to satisfy our customers.

IN CASE OF PRODUCT FAILURE:

- It shall be the obligation of the owner to furnish to the company the following information:
- 1. Model Number and date of manufacture of product involved.
- 2. Complete description of the problem encountered with product.

SELLER'S LIABILITY

Seller will not be liable for any loss, damage, cost of repair, incidental or consequential damages of any kind, whether based on warranty, contract or negligence, and arising in connection with the sale, use or repair of the Products. Seller's maximum liability shall not in any case exceed the contract price for the Products claimed to be defective or unsuitable.

RETURNED GOODS

Equipment may be accepted for return with in 90 days of shipment, when authorized by us with our return labels. Request necessary permission and special Return Authorization Tags. Currently listed equipment in new and unused condition, and in factory sealed cartons, may normally be returned for full credit less 25% (minimum charge \$20.00) charge for handling, repacking and restocking, and less transportation charges both ways, at net prices prevailing at time of purchase or time of return, whichever is lower. TPI Corporation, however, reserves the right to refuse any return, at our discretion, if TPI Corporation is not responsible for error. All special, custom made or equipment with special finishes, and modified versions of cataloged numbers are not returnable. All returned merchandise is subject to inspection. Unsalvageable and damaged merchandise will be credited at salvage value or less costs of repairs.

DAMAGED GOODS

ECN: n/a

Minimum charge on replacement will be waived if order is accompanied by copy of proof of claim submitted to carrier. No repair, replacement, or other adjustment by the customer is authorized by us, unless so stated in writing by our Sales Service department.

OIPM P/N: 3420433 Page 8 of 8