



Quality Since 1917



TPI Corporation  
P.O. Box 4973  
Johnson City, TN 37602

**MODEL & PART NO.:**

MM-13A	(04440102)
MM-18A	(04427602)
MM-24A	(04495402)
MM-33A	(04427202)
MM-46A	(04420302)

**WARNING! DO NOT ATTEMPT TO INSTALL, OPERATE, OR SERVICE THIS PRODUCT BEFORE READING ALL INSTRUCTIONS CAREFULLY. FAILURE TO COMPLY WITH THESE INSTRUCTIONS COULD RESULT IN FIRE, PERSONAL INJURY AND/OR PROPERTY DAMAGE! RETAIN INSTRUCTIONS FOR FUTURE REFERENCE.**

**DESCRIPTION**

The Mitey Midget heater is available in five lengths, ranging from 13 inches to 46 inches. Select from a wide variety of wattage's and voltages, from 500W/120V to 3800W/577V. These models have a heavy duty aluminum extrusion with a bright aluminum insert, an aluminum housing, mounting brackets for permanent installation or chain suspension, and an end-to-end wireway for single end wiring and easy installation.

All models are listed for indoor commercial and industrial comfort heat applications.

**Not for indoor residential use.**

**REQUIRED CLEARANCE**

**Caution - Spacing:** Heaters must be mounted a minimum of 24" from a vertical surface, a minimum of 24" from the ceiling, a minimum of 24" from direct radiation to combustibles, and a minimum of 2.4M (7.87') above the floor. Heaters must be at least 36" apart.

**SPECIFICATIONS**

MODEL NUMBER	WIDTH	LENGTH (in.)	WATTS	VOLTS
MM-13A		13	500	120
MM-18A		18	1000	208
MM-18A		18	1000	240
MM-24A	3-3/4"	24	1600	208
MM-24A		24	1600	240
MM-24A		24	1600	277
MM-33A		33	2500	480
MM-33A		33	2500	577
MM-46A		46	3000	480
MM-46A		46	3800	577
MM-46A		46	3650	480

**IMPORTANT SAFETY INFORMATION**

**Read all instructions before using this heater.**

1. Make certain that the power source conforms to the electrical requirements of the heater. Disconnect power before installing or servicing. If the power disconnect is out of sight, lock it in the open position and tag it to prevent unexpected application of power. Failure to do so could result in fatal electric shock.

**WARNING: DO NOT DEPEND UPON A THERMOSTAT OR OTHER SWITCH AS THE SOLE MEANS OF DISCONNECTING POWER WHEN INSTALLING OR SERVICING THE HEATER. ALWAYS DISCONNECT THE POWER AT THE MAIN CIRCUIT BREAKER AS DESCRIBED ABOVE. FAILURE TO DO SO COULD RESULT IN FATAL ELECTRIC SHOCK.**

2. This heater is intended ONLY for permanent installation in accordance with the National Electric Code (NEC), all applicable local codes and ordinances, and all sections of this manual. Any variance voids the warranty and may create unsafe conditions. All wiring should be done by a qualified electrician, using copper wire only.
3. This heater is intended for general heating applications ONLY. It must NOT be used in potentially dangerous locations such as flammable, explosive, chemical-laden or wet atmospheres.

4. Special attention must be given to any bonding (grounding) information pertaining to this heater. To prevent the risk of electrocution, the heater must be securely and adequately bonded. This should be accomplished by connecting a conductor between the service panel and the green ground screw provided in the heater. To ensure a proper bond, the bonding means must be tested by a qualified electrician.

5. Do not insert fingers or foreign objects into the heater. Do not block or tamper with the heater while it is in operation. Do not touch heater while it is in operation or just after it has been turned off, as some parts may be hot enough to cause injury.

6. Do not attach ductwork to this heater or attempt to use it as a make-up air heater. Such use voids the warranty and may create unsafe conditions.

7. In cases where property damage may result from malfunction of the heater, a back-up system or a temperature alarm should be used.

**CAUTION:** Check branch voltage. Heaters should be operated at voltages no higher than the heating elements and the heater are designed for. (Lower voltages, however, pose no problem other than a loss of wattage).

# CAUTION

## POSSIBLE LAMP FAILURE

The heating elements used in this product can be damaged by contamination (salt deposits from perspiration or coastal air) on the surface of the quartz sleeve. At high temperatures, these salts will cause the quartz to become porous and leak allowing air to come in contact with the tungsten element. When this occurs, the element will burn out quickly and the quartz tube can break. The instructions below must be followed.

- Always wear cotton or latex gloves when installing or replacing elements.
- Always clean the quartz tube with an alcohol-moistened soft cloth before using the heater.
- Whenever contamination (milky white appearance on quartz tube) is observed, the element must be immediately replaced.

## LAMP INSTALLATION

**CAUTION: DISCONNECT POWER BEFORE INSTALLING OR REPLACING LAMPS. THESE LAMPS CAN AND SHOULD BE INSTALLED PRIOR TO MOUNTING HEATER.**

To insert quartz lamp:

- 1 Remove the 4 sheet metal screws (2 each end) that hold fixture end caps in place.
- 2 Carefully wrap the heating element pigtail clockwise around the terminal screws (see Figure 1). **NOTE:** Cut excess pigtail wire off at the terminal to prevent the lead wire from touching metal parts. Avoid handling quartz glass as much as practical. Quartz should be wiped off with a clean cloth.
- 3 Tighten terminal screws (see Figure 1). **CAUTION: Do not draw pigtail so tight that pressure is put on the heating element. Maintain a partial loop (or looseness) in the pigtail.**
- 4 Replace the end caps using the screws removed in Step 1.

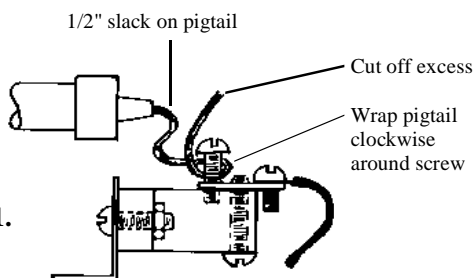


Figure 1.

## WIRING

1. Select appropriate knockout on the terminal box and install the 6" conduit nipple and splice box (both customer supplied).
2. Place silicone wire leads (18" free length provided) from the terminal box through the customer provided conduit, and connect the supply wiring inside the customer provided splice box. (See Figure 2 below)
3. Follow local and national electric codes.
4. **Do not use the heater as a field-wiring compartment.**

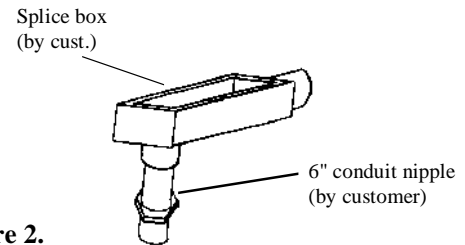
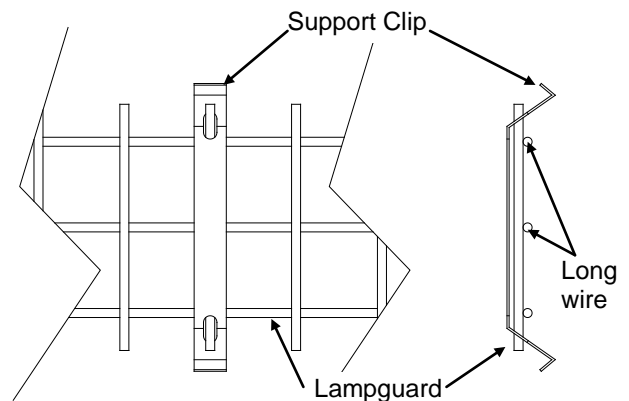


Figure 2.

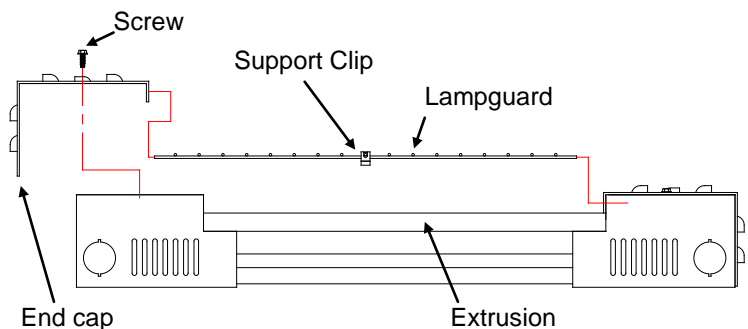
## MAINTENANCE

**Always disconnect the heater from the power source before performing any service or maintenance.** Periodically clean the reflector with a dampened soft cloth, using a mild detergent. Rinse with water and wipe dry with a clean, soft cloth.

## OPTIONAL LAMPGUARD INSTALLATION



Loop Support clip around short cross wire as shown with long wires away from clip.



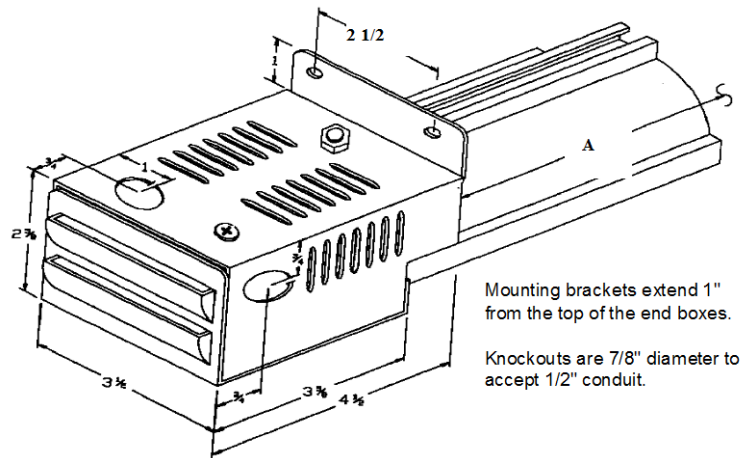
1. Remove (2) screws and endcap.
2. Insert wireguard as shown.
3. Replace end cap and screws.
4. Insert ends of clip under edges of extrusion.

## TROUBLESHOOTING CHART

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Element does not energize.	1. Defective element. 2. Improper connection.  3. Pigtail loose from socket connection.	1. Replace element. 2. Check connection to outlet. Check power. 3. Rewind pigtail on socket.
Not enough heat.	1. Heater too small for application. 2. Heater mounted too high or too far.	1. Add additional heaters. 2. Decrease mounting height or distance.
Too much heat.	1. Heater too large for application. 2. Heater mounted too low or too close.	1. Replace with smaller heater. 2. Increase mounting height or distance.

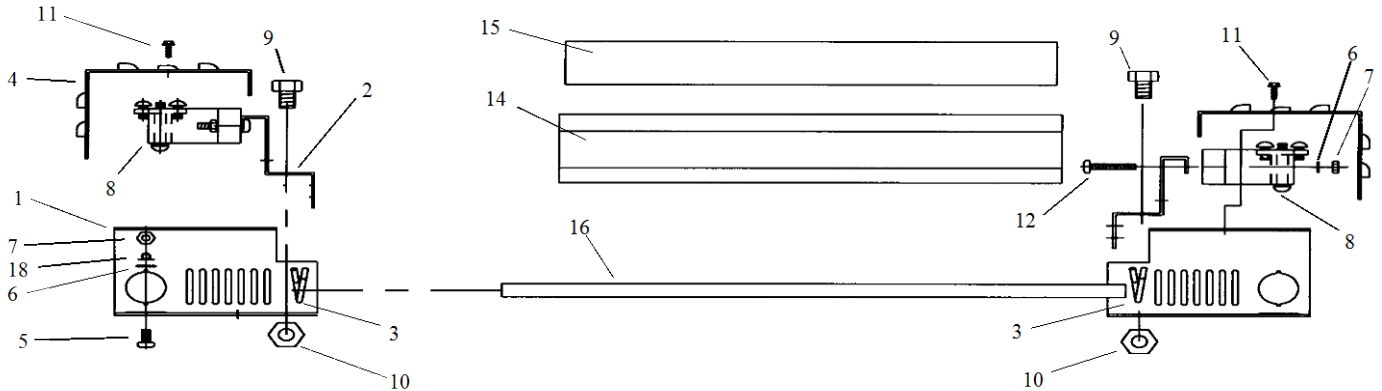
## MOUNTING DIMENSIONS

Model	"A" Dim.
MM-13A	4"
MM-18A	9"
MM-24A	15"
MM-33A	24"
MM-46A	37"



"A" dimension indicates exact spacing between mounting brackets. (See sketch at right.)

## REPLACEMENT PARTS LIST and EXPLODED VIEW



REF. NO.	DESCRIPTION	PART NUMBER	QTY.
1	Housing end	8509100	2
2	Lamp holder (prior to Aug 2006)	8509200	2
	Lamp holder (after Aug 2006)	8509800	2
3	Spring hose clamp	2400539	2
4	End cap	8509000	2
5	Screw PHD P 10-32 X 3/8 lg.	3401539	1
6	Washer lock external tooth #10 (prior to Aug 2006)	4368	5
	Washer lock external tooth #10 (after Aug 2006)	4368	1
7	Hex nut #10-32(prior to Aug 2006)	1041	5
	Hex nut #10-32(after Aug 2006)	1041	1
8	Socket assy. w/brass centered	8500001	2
9	Screw HHM 3/8-16 X 1/2 lg.	3474339	2
10	Hex nut 3/8-16	3494039	2
11	Screw HHD S #6 X 3/8 Type B (prior to Aug 2006)	3400439	4
	Screw HWH #8-18 7/8(after Aug 2006)	24650-000	4
12	Screw PHD P 10-32 X 1 lg.	3401939	4
13	Wire assembly 12 Ga. SF-2 Bl.	See Table A	1
14	Extrusion	See Table A	1
15	Reflector	See Table A	1
16	Aluminum tubing 3/8 OD	See Table A	1
17	Wire assembly 12 Ga. SF-2 Bl.	31606033	1
18	Wire assembly 12 Ga. SF-2 Gr.	31607004	1
19			
20			

Table A

Model Series	Item #13 Part No.	Item # 14 Part No.	Item #15 Part No.	Item #16 Part No.
MM-13A	31606033	9720712	8049001	8509601
MM-18A	31606007	9721215	8049002	8509602
MM-24A	31606010	9721821	8049003	8509603
MM-33A	31606020	9722730	8049004	8509604
MM-46A	31606004	9724043	8049005	8509605

### Electric Infrared Element Information

**When ordering a quartz lamp, be sure to designate whether your application requires a Horizontal or Vertical quartz lamp model number. Non-vertical burning quartz lamps must be horizontally mounted to avoid premature burnout.**

## LIMITED WARRANTY

Products manufactured by TPI Corporation are warranted to the original consumer to be free from defects in material and workmanship for twelve (12) months from the original purchase date.

The TPI limited warranty does not cover products that have been modified outside of our factory, damage or failure caused by acts of God, abuse, misuse, connected to or placed on other than rated voltage, abnormal usage, fault, installation, failure to follow suggested maintenance procedures enclosed with the product, improper maintenance or any repairs other than those provided by an authorized TPI service center.

**There are no obligations or liabilities on the part of the Corporation for consequential damages arising out of or in connection with the use or performance of the product or other indirect damages with respect to loss of property, revenues, profit, costs of removal installation, or reinstallation.**

**All implied warranties with respect to TPI products, including implied warranties for merchantability and implied warranties for fitness, are limited in duration to twelve (12) months from original date of purchase, except those products or parts of products which are warranted for long periods thereon.**

Some states do not allow the exclusions or limitation of incidental or consequential damages and some states do not allow limitations on how long an implied warranty lasts. The above exclusions or limitations may not apply to you.

During the warranty period, TPI Corporation will, at its sole option, repair or replace any defective parts or products returned, freight prepaid, to the TPI Corporation factory or such other locations as TPI Corporation may designate. Returned products must be packaged carefully and TPI Corporation shall not be responsible for damage in transit.

When returning parts, the owner must provide the model number of the product and nature of difficulty being experienced. This warranty does not obligate TPI Corporation to bear the cost of labor in replacing any assembly, unit or component part thereof, nor does the company assume any liability for secondary charges, expenses for installing or removal, freight or damages. There will be charges rendered for product repairs made after the warranty period has expired. Proof of purchase, including date, must accompany request for in-warranty service. In any event, TPI Corporation's maximum liability shall not in any case exceed the list price for the product claimed to be defective. This warranty gives to you specific legal rights and you may have other rights, which may vary from state to state. For the name of your nearest authorized TPI Corporation service center, please write to TPI Corporation, P.O. Box 4973, Johnson City, TN 37602.

<b>HEATING PRODUCTS WARRANTY COVERAGE</b>	
Heating Products Elements in Baseboards	10 Years
All other Heating Products	1 Year
Thermostats and Controls	2 Years

<b>VENTILATION PRODUCTS WARRANTY COVERAGE</b>	
Series HD or HDH Fans	5 Years
Series UHP or IHP Fans	3 Years
All other Ventilation Products	1 Year