

## OPERATION - INSTALLATION MANUAL

**TPI Corporation**  
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## INFRARED HEATER

MODEL NO.:

**PCH-48C**

**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 PCH-48C heaters are designed to provide efficient spot heating for construction sites, farms, warehouses, garages, truck docks, paint and plaster drying, etc. **NOT FOR INDOOR RESIDENTIAL USE.** Heaters are equipped with steel grid type protective guards. A toggle switch is supplied to de-energize the element should the heater be turned over.

#### REQUIRED CLEARANCE

Caution-Spacing: (suspension mount) Heaters must be mounted a minimum of 24" from a vertical surface, 72" from the floor and direct radiation path to combustibles and 24" from the ceiling.

#### Attention de dégagement requis-espacement :

appareils de chauffage (montage de suspension) doivent être monté un minimum de 24" d'une surface verticale, 72" de l'étage et le chemin de rayonnement direct aux matériaux combustibles et 24" au plafond.

### SPECIFICATIONS

Heat source.....5/8" Diameter Quartz Tube  
Element Life (Avg.)..... 5000 Hours  
Wire Guard..... 0.125" Diameter Steel Wire  
Housing..... 20 gauge Powder Coated Steel  
  
PCH-48C  
Powercord.....15', 14/3 Grounded Type  
with Nema 5-20P Plug  
Power Requirements..... 120V  
Element Wattage..... 1500

### IMPORTANT SAFETY INFORMATION

**When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, injury to persons, and hyperthermia including the following:**

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

1. Make certain that the power source conforms to the electrical requirements of the heater.
2. Unplug power cord before installing or servicing.
3. **NEVER** leave the heater unattended for extended periods while it is in operation.
4. Power cord is equipped with a three-wire bonding (grounding) type plug that must be inserted into a matching receptacle. Under no circumstances should the bonding prong be cut off plug. Where a two-prong wall receptacle is encountered, it must be replaced with a properly bonded (grounded) three-prong receptacle installed in accordance with the National Electric Code
5. (NEC) and all applicable local codes and ordinances. This work must be done only by a qualified electrician, using copper wire only. **WARNING: USE OF A THREE-PRONG TO TWO-PRONG ADAPTER IS NOT RECOMMENDED.** Improper connection may create the risk of electrocution. Use of such adapters is not permitted in Canada.
6. All wiring should be performed by a qualified electrician.
7. This heater can be used for 120v, single phase power. These units are supplied with 3-wire cordsets for portability. **To reduce the risk of electric shock, the heater must be securely and adequately bonded (grounded)!** This can be accomplished by either: 1) Inserting the plug directly into a properly installed and bonded 3-prong bonding type receptacle. 2) Using a separate bonding wire connected to the bare metal of the heater. 3) Using other suitable means. The green (or green and yellow) conductor in the cord is the bonding (grounding) wire.

## IMPORTANT SAFETY

**WARNING: Never connect the green (or green and yellow) wire to a live terminal!**

- Where possible, avoid the use of extension cords. If they must be used, minimize the risk of overheating by ensuring that they are Listed and are of the proper gauge and length, and that they have 3-prong bonding (grounding) type plugs. Use 3-pole receptacles that accept the 3-prong plugs. Never use a single extension cord to operate more than one heater.
- 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.
- 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.
- Be sure all electrical parts are enclosed to prevent personal injury.
- 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).
- This heater is NOT waterproof and is not intended to be used in saunas, showers, or in potentially wet locations.
- Hyperthermia can result in death. Symptoms of hyperthermia include high body temperature, headache, nausea, vomiting, tiredness, dizziness, fainting, and rapid pulse. If you begin to experience symptoms related to hyperthermia, turn off the heater and seek medical attention.
- To avoid excessive room temperatures which can cause hyperthermia: DO NOT leave product running unattended in a confined space around infants, or individuals with reduced physical, sensory, or mental capabilities.

## ASSEMBLY

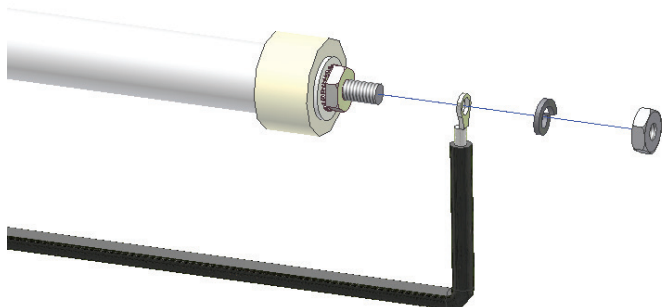
**CAUTION: DISCONNECT POWER BEFORE INSTALLING OR REPLACING QUARTZ TUBES. THESE TUBES CAN AND SHOULD BE INSTALLED PRIOR TO MOUNTING HEATER.** These heaters should always be mounted so that the quartz tubes are horizontal, or tube burnout will occur.

Be sure that the power source conforms to the heater requirements. Make sure the quartz tube conforms to your power source requirements.

## INSTALLATION OF HEATING ELEMENTS

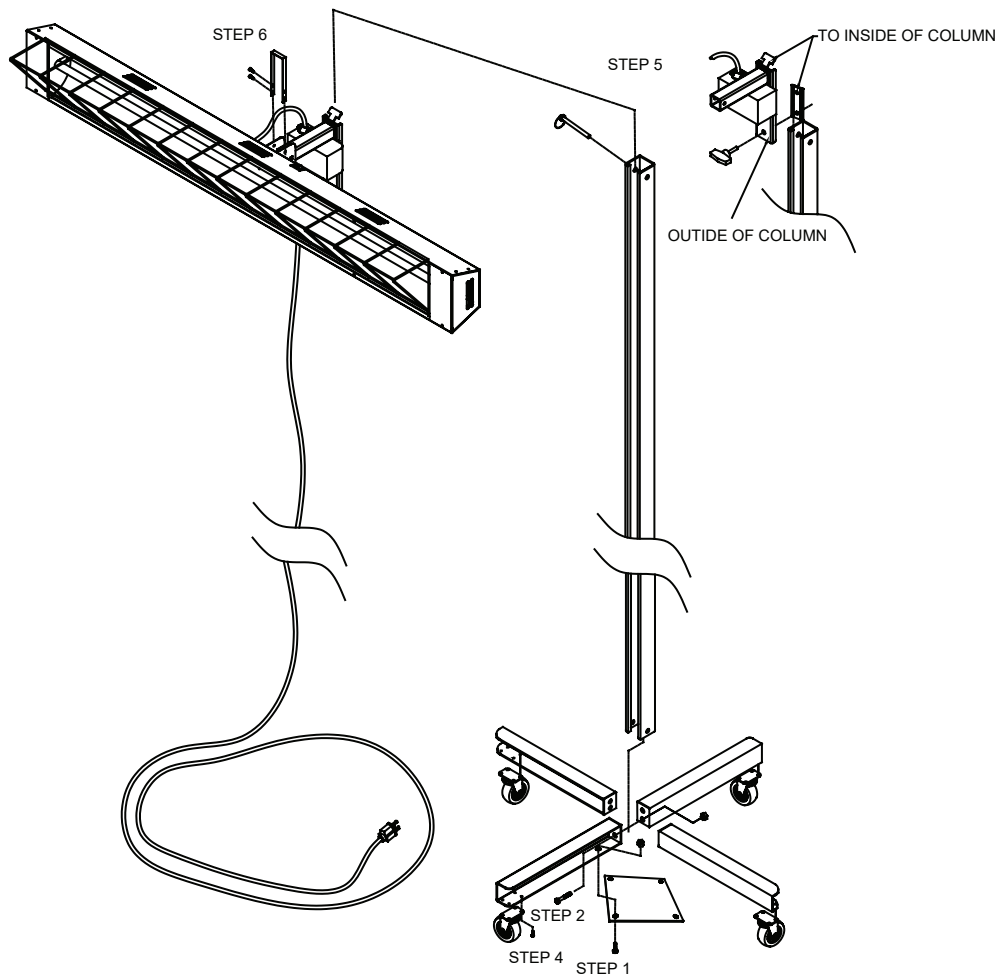
The heater is equipped with two hi-temperature 14 gauge silicone lead wires and a ground termination. Make sure power source conforms to the heater requirements. Use only Fostoria quartz tubes.

- Remove the sheet metal screws that hold fixture end caps and lamp guard in place.
- Insert quartz tube in the "I" - shaped slots in heater housing.
- On each end of the quartz tube, place (1) lead wire ring terminal, (1) split washer and (1) hex nut on the threaded stud and **tighten securely** (see image below). Split washers and hex nuts are provided in hardware package.
- Replace one end cap and insert one end of lamp guard, place opposite end of lamp guard into the remaining end cap and secure with screws.



NOTE - Use a second wrench to hold the inner hex nut in place while tightening the outer hex nut. Failure to securely tighten this connection will cause the element to fail prematurely.

## STAND ASSEMBLY



1. Mount the (4) legs to support plate. Do not completely tighten bolts at this time.
2. Place column inside of legs and secure with bolts. One bolt in bottom hole of opposing legs and one bolt in top of second set of opposing legs.
3. Tighten support plate bolts.
4. Secure casters as shown.
5. Assemble heater to column and insert stop pin as shown.
6. Install adjustment handle as shown.

## OPERATING INSTRUCTIONS

1. Plug heater into a bonded (grounded) receptacle with a power source conforming to the heater requirements. Ensure that total current does not exceed circuit rating.
2. Adjust heater height by sliding adjustment arm up or down the upright strut, tighten handle.
3. Adjust angle of heater to desired position and tighten handle.
4. To energize heater, flip the toggle switch on housing.

## MAINTENANCE

**WARNING: DISCONNECT HEATER FROM POWER SUPPLY BEFORE SERVICING OR INSPECTING FOR ANY REASON. FAILURE TO DO SO COULD RESULT IN ELECTRICAL SHOCK OR INJURY.**

Quartz tubes and reflectors should be kept free from fingerprints, grease and foreign matter. Periodic washing will assure the most efficient heater operation. Periodically wipe reflectors and quartz tubes with a clean, soft cloth; also periodically wipe the tubes with alcohol and a clean, soft cloth. Be sure to allow tubes to full cool down prior to cleaning or performing maintenance.

Replace or repair damaged or worn cords immediately.