

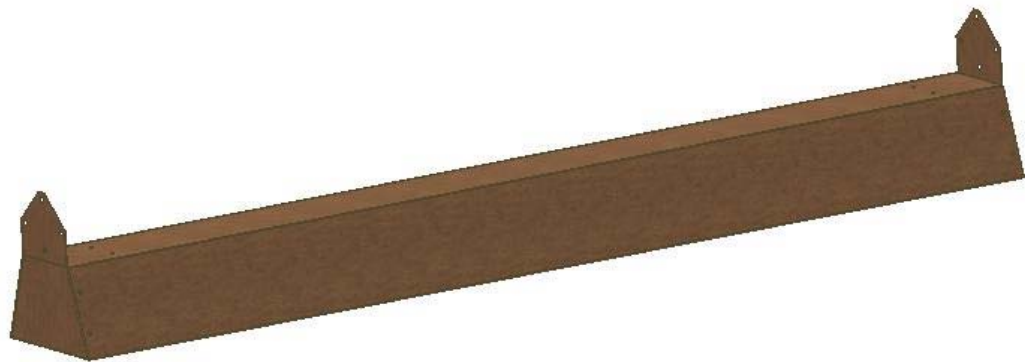


# 107002 / 107003

## COMFORT HEATERS

for

INDOOR\* and Semi-Protected\*\* OUTDOOR USE



\*EXCLUDING RESIDENCES

\*\*COVERED APPLICATIONS

REFER TO COMPLETE  
INDEX OF  
INFORMATION ON  
**PAGE 2**



If you have questions about the product you have purchased or would like to leave us feedback, please contact us via our website [www.fostoriaindustries.com](http://www.fostoriaindustries.com) or by calling 1-800-495-4525.

### **WARNING**

#### 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.







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**ATTENTION:**

The table to the right provides definitions of the signal words that can be found throughout this manual. These signal words are used to express the severity of the hazard at hand. The signal words are generally used in conjunction with safety symbols that correspond to the text for that particular hazard. As you read this manual, refer back to this table when you are unsure of the signal word definition.

SIGNAL WORD DEFINITIONS	
	DANGER indicates an imminently hazardous situation which, if not avoided, <b>will</b> result in death or serious injury.
	WARNING indicates a potentially hazardous situation which, if not avoided, <b>could</b> result in death or serious injury.
	CAUTION indicates a potentially hazardous situation which, if not avoided, <b>may</b> result in minor or moderate injury.
	CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, <b>may</b> result in property damage.
As defined in ANSI Z535.4-2002	

# SPECIFICATIONS

## DESCRIPTION

Fostoria multi-purpose CH series electric infrared heaters are designed to provide efficient spot heating for many commercial and industrial applications. All models operate with a single quartz tube emitter included with the heater, are easily installed, and are equipped with spectral reflectors for excellent radiant output. They are built with corrosion-resistant materials and are **U.L. listed** for **INDOOR and Semi-Protected OUTDOOR applications in the USA and Canada**. When used outdoors, they should be installed under a canopy or other similar type installation that is semi-protected.



## **WARNING**

### EXPLOSION HAZARD FIRE HAZARD

- Serious injury or death may occur.
- Do not use in locations containing hazardous atmospheres.
- Do not use as a residential or household heater.

## SPECIFICATIONS

<b>Housing</b>	24 ga. Galvannealed
<b>Finish</b>	Hi temp. brown powder coat
<b>Reflectors, end caps</b>	0.040" gold anodized aluminum
<b>Suspension</b>	Chain or Optional Adjustment Mounting Bracket(CH-MB)
<b>U.L. file number</b>	E32304

Voltage	Cordset Plugs	Matching Receptacle
120V	NEMA 5-15P	NEMA 5-15R
240V	NEMA 6-15P	NEMA 6-15R

Model	P/N	Tube P/N	Watts	Volts	Amps	Cordset	Dim A	Dim B	Dim C
CH-46C	04860002	04432302	1500	120	12.5	YES	42.0"	5.375"	6.500"
CH-57C	04860102	04414702	3000	240	12.5	YES	53.0"	5.375"	6.500"

OPTIONAL MOUNTING BRACKET SHOWN

6FT. CORDSET EXITS END OF HEATER. (NOT SHOWN)



## QUARTZ TUBE INSTALLATION

### ⚠ WARNING

#### ELECTRICAL SHOCK HAZARD

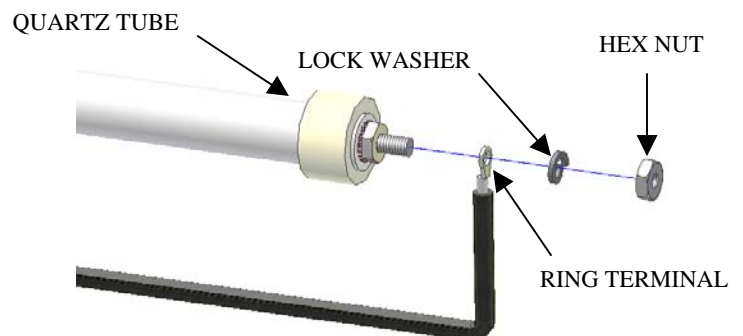
- **Serious injury or death may occur.**
- **Disconnect from electrical supply before installing or servicing this heater.**
- **Reflector end caps must be installed prior to powering the unit; refer to note #3.**



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

1. Insert quartz tube in the “L”-shaped slots in heater housing.
2. On each end of the quartz tube, place (1) lead wire ring terminal, (1) lock washer and (1) hex nut on the threaded stud and **tighten securely** (see image below). Lock washers and hex nuts are provided in hardware package.

**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.**



3. Attach reflector end caps to both ends of housing using the (4) screws provided in hardware package.

### CAUTION

Install heater so that the quartz tubes are horizontal. Failure to do this may cause the heating element within the tube to sag and cause premature burnout.

## HEATER INSTALLATION

### MINIMUM INSTALLATION CLEARANCES

These heaters **MUST** be installed as follows:

- **CH-46C:**
  - 12 inches min. from a vertical surface.
- **CH-57C:**
  - 24 inches min. from a vertical surface.
- **72 inches minimum from ANY combustible material**
- **3 inches minimum from the ceiling**
- **36 inches minimum from other heaters**



### ⚠ WARNING

#### FIRE HAZARD

- **Serious injury or death may occur.**
- **Read and follow clearances shown in box at left for ALL CH series heater installations.**
- **Do not use inside residences.**

NOTE: For optimum spot heating performance, it is recommended that the distance from the floor should be approximately 7 to 9 feet for CH-46 models, and 8 to 10 feet for CH-57 models.

# HEATER INSTALLATION continued

## SUSPENSION ALTERNATIVES

Your CH series heater can be mounted with either the standard chain suspension or optional CH-MB(p/n-04863802), adjustable mounting bracket kit.

### Standard Mounting:

The heater is to be chain-hung as shown in figure 1. Cut the 16ga. chains (two 4 foot chains are provided) to desired length. Attach chains to heater with "S"-hooks provided and suspend from overhead structure. Crimp "S"-hooks closed after assembly.

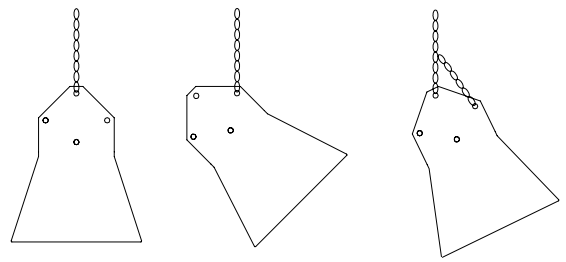
### Optional Bracket Mounting Kit; CH-MB(p/n-04863802):

As an option you can mount your heater with two adjustable mounting brackets and fastening hardware. Using the mounting centers specified in figures 2 & 3, mount your adjustable mounting brackets (bends to the inside). Once mounted, assemble the heater to brackets with mounting hardware, these brackets enable the heater to be angled in 15-degree increments up to 45 degrees. This kit includes two adjustable brackets, four 10-32 x 1/2" screws and four 10-32 keps nuts.

**CAUTION**

**Install heater so that the quartz tubes are horizontal. Failure to do this may cause the heating element within the tube to sag and cause premature burnout.**

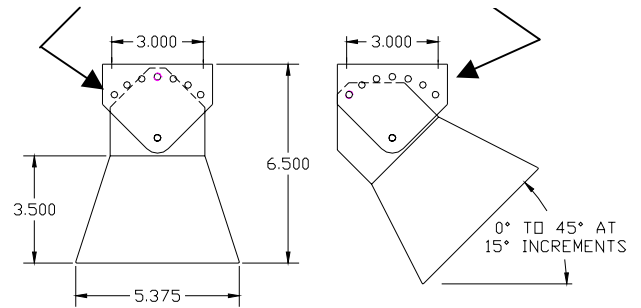
## STANDARD MOUNTING



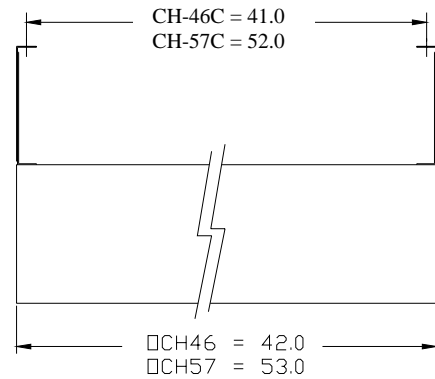
**Figure 1: end view**

## OPTIONAL BRACKET MOUNTING

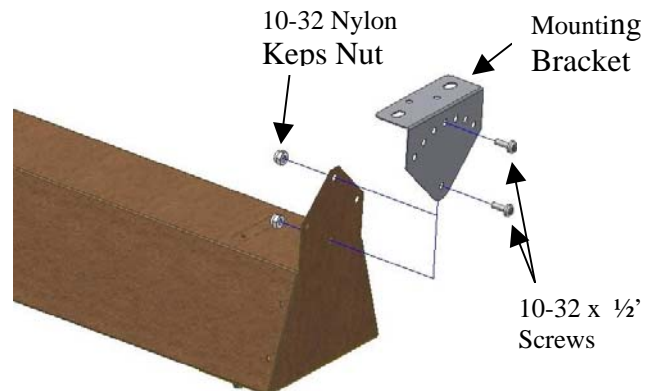
### Optional mounting brackets



**Figure 2: end view**



**Figure 3: side view**



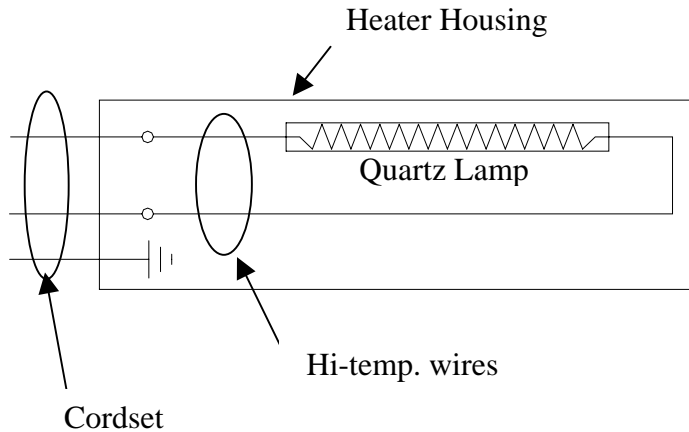
**Figure 4: optional mounting view**

	<h2 style="margin: 0;">WARNING</h2>
	<h3 style="margin: 0;">ELECTRICAL SHOCK HAZARD</h3>
	<ul style="list-style-type: none"> <li><b>Serious injury or death may occur.</b></li> <li><b>Disconnect from electrical supply before installing or servicing this heater.</b></li> <li><b>Read and follow installation clearance requirements on page 4</b></li> </ul>

## WIRING

### INTERNAL WIRING DIAGRAM

CH heaters are equipped with two Hi-temperature silicone lead wires and a bonding\* (ground) termination.



\*Bonding is the term that describes the completion of the electrical circuit back to its source, which allows a breaker or fuse to clear if a short occurs in the line.

### **⚠ WARNING**



#### **ELECTRICAL SHOCK HAZARD**

- **Serious injury or death may occur.**
- **Disconnect from electrical supply before installing or servicing this heater.**
- **Read and follow all safety information in box below.**



- **Make certain the power source conforms to specifications on the heater label.**
- **Do not depend on a thermostat or other switch as the sole means of disconnecting power when installing or servicing heater. Always unplug the cordset or open the safety switch and lock it open.**
- **All wiring must be performed by a licensed electrician.**
- **The cordsets supplied with these heaters are equipped with provisions for proper bonding (grounding). Always mate the cordset plug with the proper bonded (grounded) receptacle in accordance with the National Electric Code and all governing local codes and ordinances.**
- **Do not use an extension cord to provide power to these heaters.**
- **Never connect the green or green-yellow wire to a live or “hot” conductor.**

## REPLACEMENT PARTS LIST

<b>ITEM</b>	<b>QTY</b>	<b>CH-46C PART NO.</b>	<b>CH-57C PART NO.</b>	<b>DESCRIPTION</b>
1	1	8561801	8560401	<b>REFLECTOR</b>
2	2 4	8561201 2326500		<b>REFLECTOR END CAP SCREW 8-32 X 3/8</b>
3	1	04432302	04414702	<b>QUARTZ TUBE</b>
4	1	3440300		<b>CHAIN KIT</b>

## MAINTENANCE

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



### ⚠ WARNING

#### ELECTRICAL SHOCK HAZARD

- Serious injury or death may occur.
- Disconnect from electrical supply before installing or servicing this heater.

## TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Element does not energize.	<ol style="list-style-type: none"> <li>1. Defective element.</li> <li>2. Improper connection.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace element.</li> <li>2. Check connection to power outlet.</li> </ol>
Not enough heat.	<ol style="list-style-type: none"> <li>1. Heater too small for application.</li> <li>2. Heater mounted too high or too far.</li> </ol>	<ol style="list-style-type: none"> <li>1. Add additional heater(s)</li> <li>2. Decrease mounting height or distance.</li> </ol>
Too much heat.	<ol style="list-style-type: none"> <li>1. Heater too large for application.</li> <li>2. Heater mounted too low or too close.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace with smaller heater.</li> <li>2. Increase mounting height or distance.</li> </ol>
Hot spot in tube.	<ol style="list-style-type: none"> <li>1. Heater is not level.</li> <li>2. Grease or moisture on tube.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust to a level mount.</li> <li>2. Clean tube-replace if problem persists.</li> </ol>