



---


# OCH-SSE series

## Direct Wired Units

### Indoor \* and Outdoor Comfort Heaters



\*EXCLUDING RESIDENCES

	<b>⚠ WARNING</b>
	<p><b>IMPORTANT SAFETY INFORMATION INSIDE</b></p> <ul style="list-style-type: none"><li>• <b>Serious injury or death possible</b></li><li>• <b>Read, understand, and follow all safety information and instructions in this manual before using or servicing this product.</b></li><li>• <b>Retain these instructions for future reference.</b></li></ul>

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





# INDEX

<b>Index</b>	<b>Page 2</b>
<b>Safety Signal Word Definitions</b>	<b>Page 2</b>
<b>Specifications</b>	<b>Page 3</b>
<b>Quartz Tube Installation</b>	<b>Page 4</b>
<b>Heater Installation</b>	<b>Pages 4 &amp; 5</b>
<b>Wiring</b>	<b>Page 6</b>
<b>Maintenance</b>	<b>Page 7</b>
<b>Troubleshooting</b>	<b>Page 8</b>
<b>Warranty</b>	<b>Page 8</b>



**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

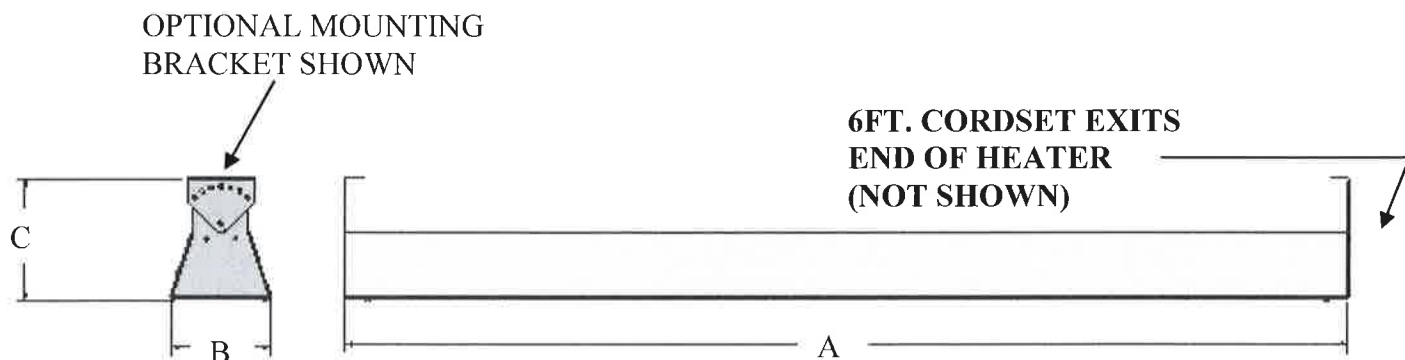
## DESCRIPTION

Fostoria multi-purpose OCH-SSE 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 **listed** for both **INDOOR (excluding residences) AND OUTDOOR applications in the USA and Canada.**



  	<h3 style="margin: 0;">⚠ WARNING</h3> <p style="margin: 5px 0;"><b>EXPLOSION HAZARD FIRE HAZARD</b></p> <ul style="list-style-type: none"> <li><b>Serious injury or death may occur.</b></li> <li><b>Do not use in locations containing hazardous atmospheres.</b></li> <li><b>Do not use inside residences.</b></li> </ul>
--	---

<b>Housing</b>	24 ga. Type 304 Grain line Stainless Steel
<b>Finish</b>	No. 3
<b>Reflectors, end caps</b>	0.040" gold anodized aluminum
<b>Suspension</b>	Adjustable Mounting Bracket or Chain

Model	P/N	Tube P/N	Watts	Volts	Amps	Dim A*	Dim B	Dim C
OCH-46-120V-SSE	04805202	04432302	1500	120	12.5	48.0"	5.375"	6.500"
OCH-46-208V-SSE	04805302	04418102	2000	208	9.6	48.0"	5.375"	6.500"
OCH-46-240V-SSE	04805402	04418002	2000	240	8.3	48.0"	5.375"	6.500"
OCH-46-277V-SSE	04805502	04419302	2000	277	7.2	48.0"	5.375"	6.500"
OCH-57-208V-SSE	04805702	04416602	3000	208	14.4	59.0"	5.375"	6.500"
OCH-57-240V-SSE	04805602	04414702	3000	240	12.5	59.0"	5.375"	6.500"
OCH-57-277V-SSE	04805802	04419402	3000	277	10.8	59.0"	5.375"	6.500"
OCH-57-480V-SSE	04805902	04419502	2250	480	4.7	59.0"	5.375"	6.500"



## QUARTZ TUBE INSTALLATION

 	<b>⚠ WARNING</b>
	<b>ELECTRICAL SHOCK HAZARD</b> <ul style="list-style-type: none"><li>• Serious injury or death may occur.</li><li>• Disconnect from electrical supply before installing or servicing this heater.</li><li>• Reflector end caps must be installed prior to powering the unit; refer to note #3.</li></ul>

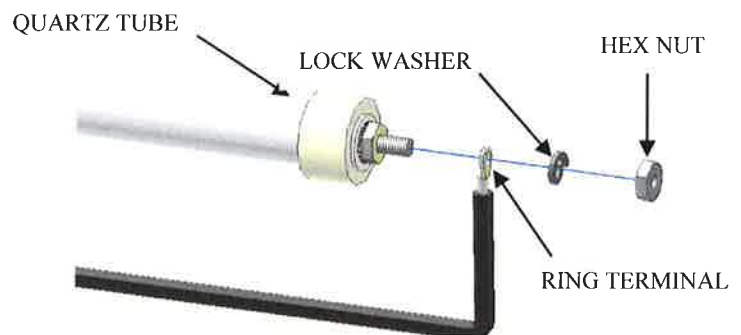
### CAUTION

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.

Each heater is equipped with two black hi-temperature silicone lead wires and one green lead wire for 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.
  - One lead wire is already installed in your heater, the second lead wire is located in the 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.

## HEATER INSTALLATION

### MINIMUM INSTALLATION CLEARANCES

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

- 12 inches minimum 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 OCH 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 OCH-46 models, and 8 to 10 feet for OCH-57 models.

## SUSPENSION ALTERNATIVES

Your OCH-SSE series heater can be mounted with either adjustable mounting brackets or chain suspension. Both options are included with your heater.

### Standard Mounting:

In the hardware bag shipped with your heater you will find two adjustable mounting brackets and fastening hardware. Using the mounting centers specified in figures 1 & 2, mount your adjustable mounting brackets (bends to the inside). Once mounted, assemble the heater to brackets (figure 3) with mounting hardware, these brackets enable the heater to be angled in 15-degree increments up to 45 degrees.

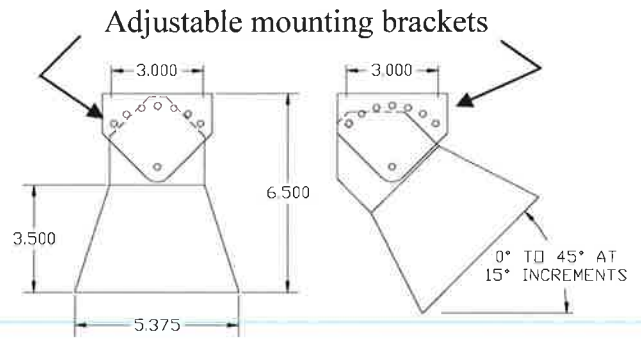
### Chain Suspension:

The heater can also be chain-hung as shown in figure 4. 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.

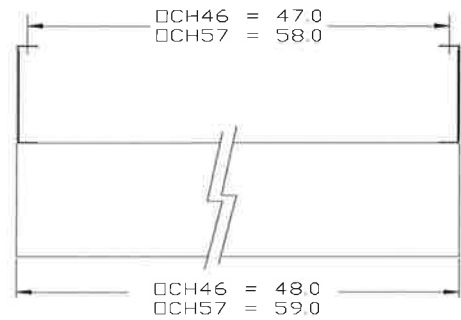
**CAUTION**

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.

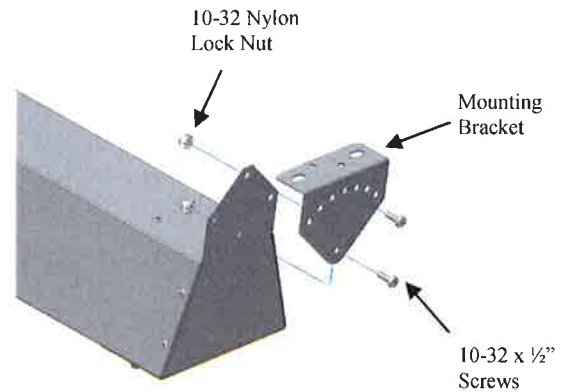
	<h2 style="margin: 0;">⚠ WARNING</h2>
	<h3 style="margin: 0;">ELECTRICAL SHOCK HAZARD</h3> <ul style="list-style-type: none"> <li>Serious injury or death may occur.</li> <li>Disconnect from electrical supply before installing or servicing this heater.</li> <li>Read and follow installation clearance requirements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



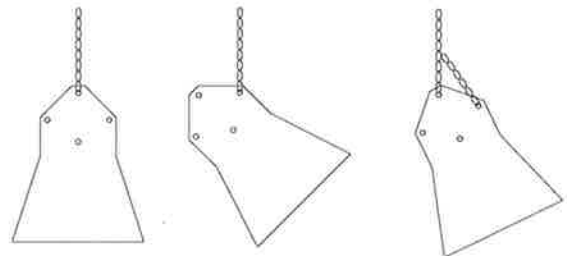
**Figure 1: end view**



**Figure 2: side view**



**Figure 3: mounting view**



**Figure 4: end view**

# WIRING

## CONDUIT

Required conduit size: 1/2"

All conduit fittings and conduit are supplied by the customer.

## TOTALLY EXPOSED OUTDOOR APPLICATIONS

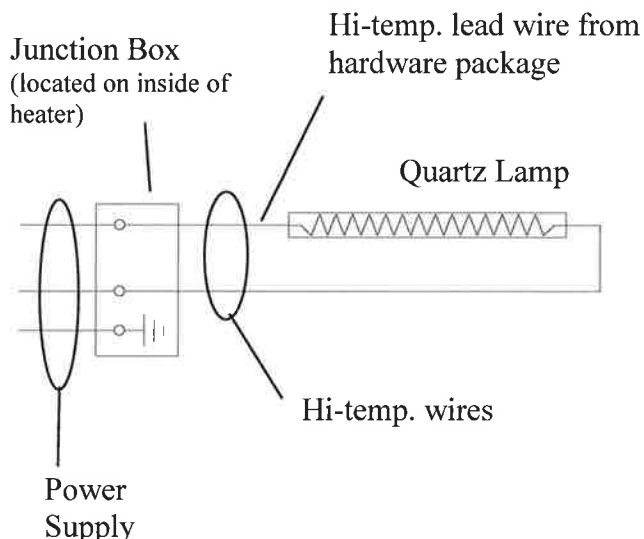
For totally exposed outdoor applications (not ceiling protected) all conduit and fittings must be NEMA Type 4 or equal.

**The junction box cover gasket (supplied with unit) must be used to maintain the outdoor rating of the heater.**

## INTERNAL WIRING DIAGRAM

OCH-SSE heaters are equipped with two hi-temperature silicone lead wires and a bonding\* (ground) termination. Supply wires must be copper and rated for at least 90° C.

1. Fasten field bonding wire to the ground screw and assure tight connection.
2. Terminate L1 and L2 field wires to the power wires of the heater with wire nuts (customer supplied)



## **⚠ WARNING**

### **ELECTRICAL SHOCK HAZARD**





- **Serious injury or death may occur.**
- **Disconnect from electrical supply before installing or servicing this heater.**
- **This appliance must be connected to a properly bonded (grounded) electrical source.**
- **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 open the safety switch and lock it open.**
- **All wiring must be performed by a licensed electrician.**
- **Never connect the green or green-yellow wire to a live or "hot" conductor.**

\*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.

## 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.

  	<b>⚠ WARNING</b>
	<p><b>ELECTRICAL SHOCK HAZARD</b></p> <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> </ul>

## 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>

## 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	10 Years
Baseboards	1 Year
All other Heating Products	2 Years
Thermostats and Controls	

<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