

## INFRARED HEATER



**SUPERIOR**  
RADIANT PRODUCTS



**SRP BIG SHOT<sup>®</sup>**

**RADIANT AGRICULTURAL HEATER  
WIDE HEAT DISTRIBUTION**



### WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

### FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

If you smell gas:

1. Open windows
2. Don't touch electrical switches
3. Extinguish any open flame
4. Immediately call your gas supplier

### OWNER

Retain this Manual & ensure available for service. Improper installation, adjustment, alteration, service or maintenance can cause injury, death or property damage. Read the installation, operation and service instructions thoroughly before installing or servicing this equipment

### INSTALLER

Provide Manual to Owner upon completion of installation!

Read and thoroughly understand these Instructions before attempting any installation

**Canada:** 563 Barton Street, Stoney Creek, Ontario L8E 5S1

**USA:** 315 N Madison Street, Fortville, IN 46040

[www.superiorradiant.com](http://www.superiorradiant.com)

**CAUTION: FIRE OR EXPLOSION HAZARD**

Maintain clearance to combustible constructions as further specified in this manual. Failure to do so could result in a serious fire hazard. Heaters should not be located in hazardous atmospheres containing flammable vapors or combustible dusts. Signs should be provided in storage areas specifying maximum safe stacking height.

**CAUTION: MECHANICAL HAZARD**

This equipment expands and contracts with each operating cycle. The gas connection, suspension hardware and the installation itself must safely allow this movement. Failure to do so could result in serious fire or explosion hazard.

**CAUTION: FIRE OR EXPLOSION HAZARD**

This heater is equipped with an automatic ignition device. Do not attempt to light the burner by hand. Failure to comply could result in a serious fire and personal injury hazard.

**CAUTION: MECHANICAL HAZARD**

Do not use high pressure (above 1/2 psi) to test the gas supply system with the burners connected. Failure to do so could result in damage to the burner and its control components requiring replacement.

**CAUTION: SERVICE LIFE RISK**

Do not install equipment in atmospheres containing halogenated hydrocarbons or other corrosive chemicals. Failure to do so may lead to premature equipment failure and invalidation of the warranty. Additionally, it is recommended that the equipment be installed with a slope downward and away from the burner of ¼" (6mm) in 10' (3m) to allow start-up condensate drainage.

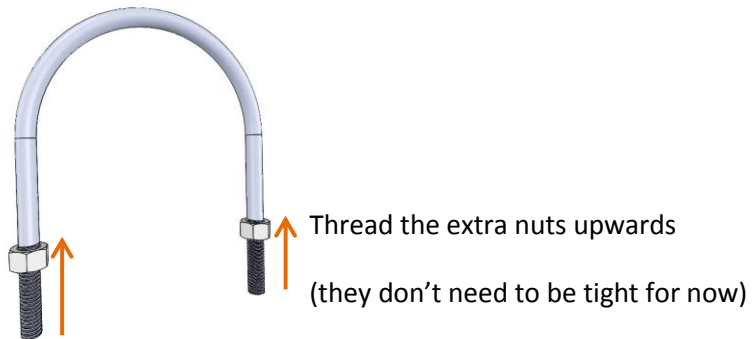
### **Step 1:**

Hang these about 100" apart.



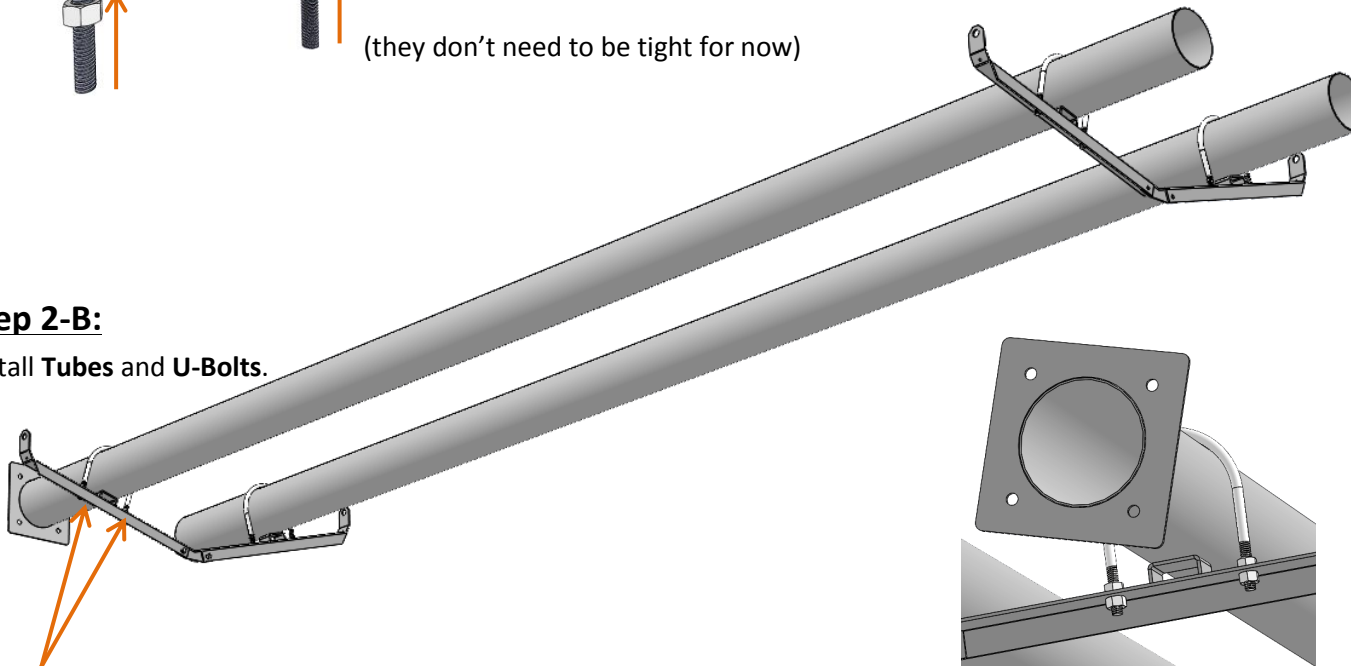
### **Step 2-A:**

Before installing the four **U-Bolts**, just ONE of the **U-Bolts** gets extra nuts, as shown here:



### **Step 2-B:**

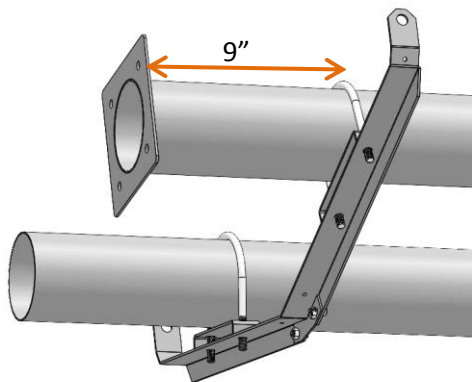
Install **Tubes** and **U-Bolts**.



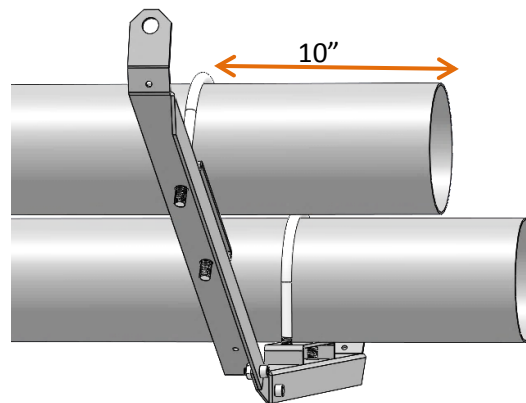
**U-Bolt** with extra nuts – close to **Flange**. The nuts sandwich the **Hanger Bracket** as pictured above.

### Step 3:

Orient the **Tubes** within the **U-Bolts**.



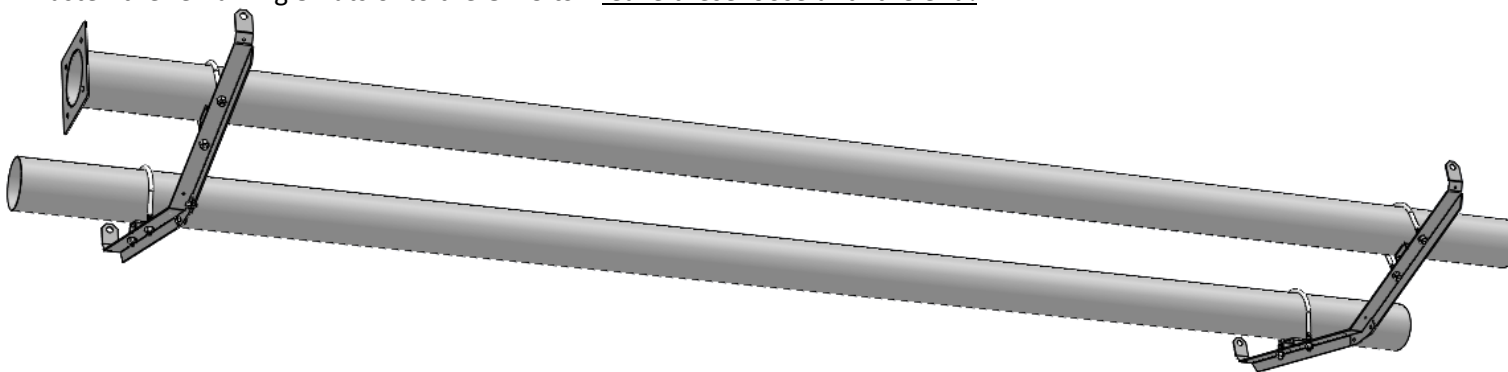
On the burner side, the distance between the **Flange** and **U-Bolt** should be 9"



On the **U-Tube** side, the distance between the **Tube's** end and **U-Bolt** should be 10"

### Step 4:

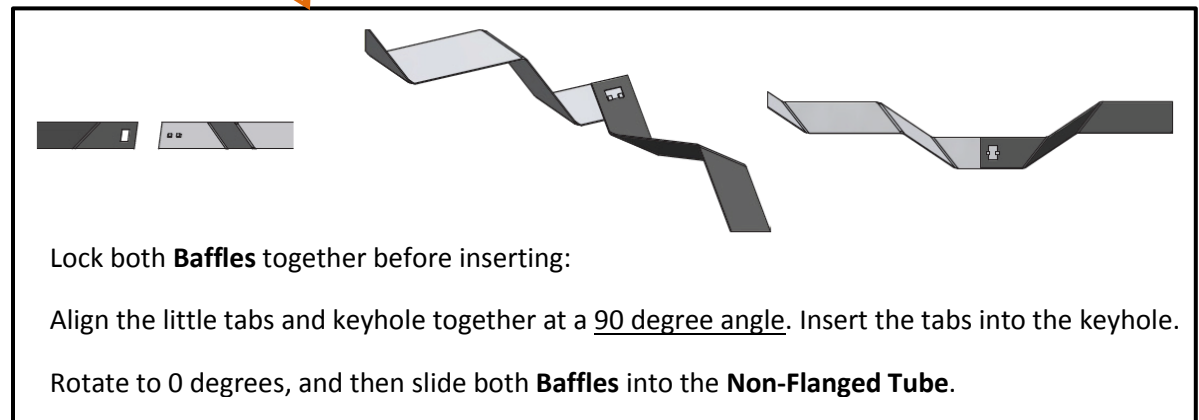
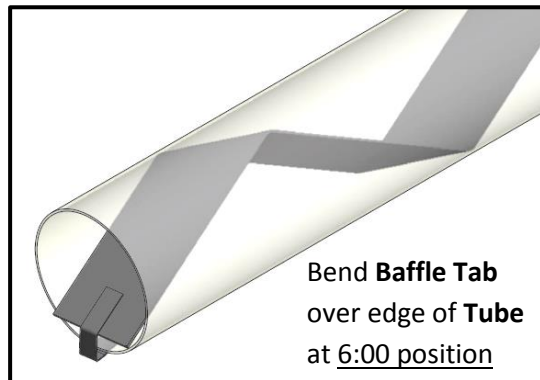
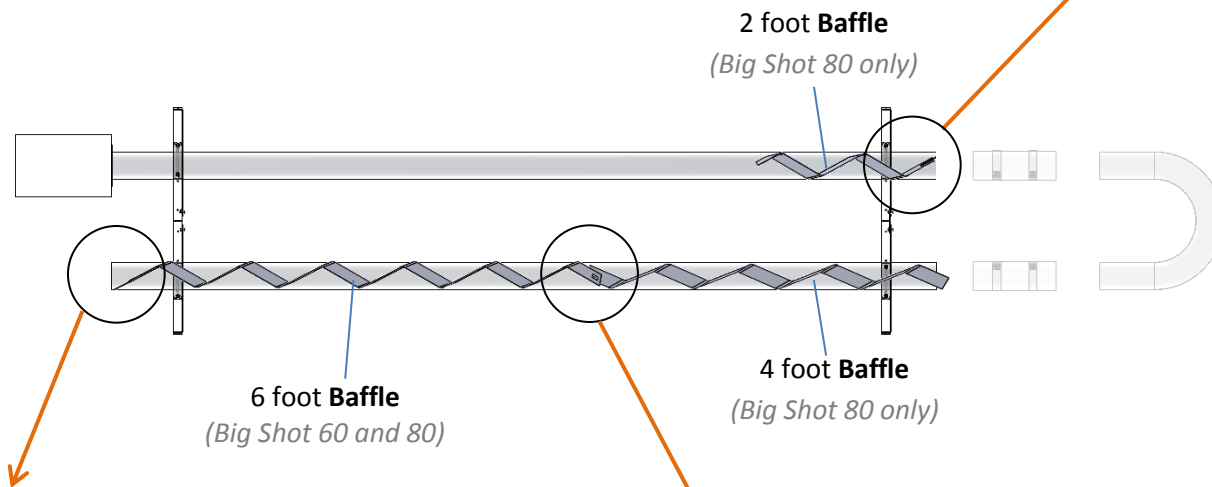
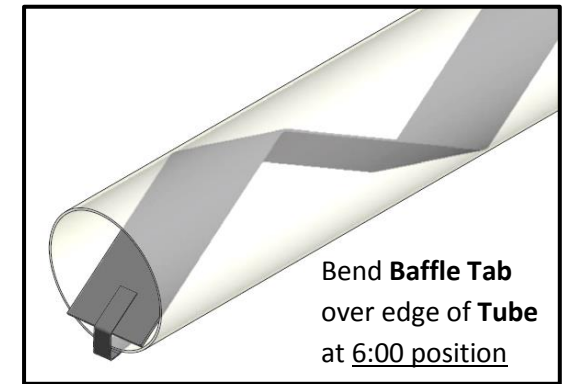
Fasten the remaining 8 nuts onto the **U-Bolts** – leave these loose until the end!



## Step 5:

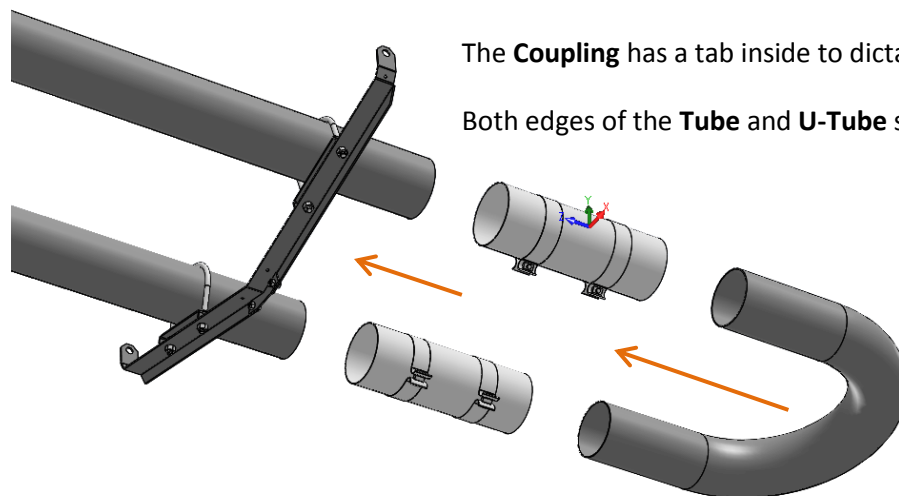
Install the Baffles: Pictured below is a bottom view of the heater.

- 2 foot **Baffle** is isolated in the **Flanged Tube (Combustion Tube)**
- 6 foot and 4 foot **Baffle** are linked together in the **Non-Flanged Tube (Return Tube)**



## Step 6:

Attach **Couplings** and **U-Tube** together.



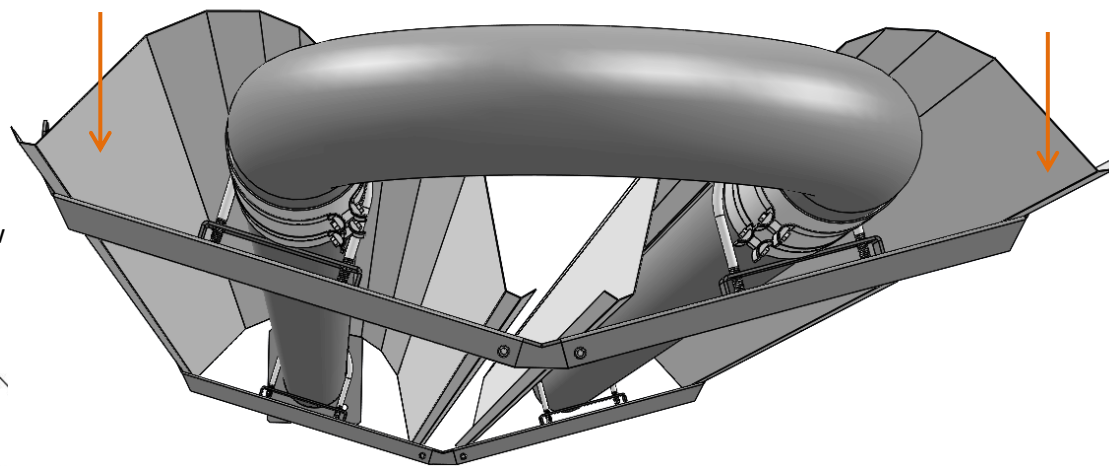
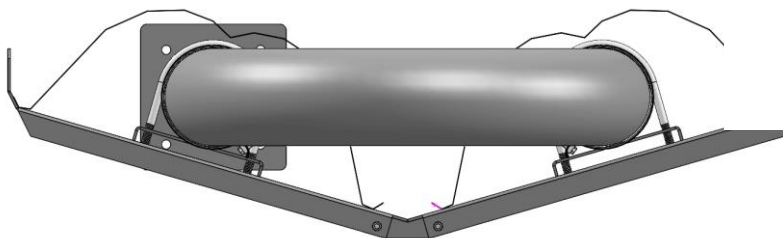
The **Coupling** has a tab inside to dictate the depth of the **Tubes** and **U-Tubes**.

Both edges of the **Tube** and **U-Tube** should be touching.

## Step 7:

Place **Reflectors** onto heater.

They'll be loose for now, but these two pictures depict how the **Reflectors** will be oriented once they are fastened:



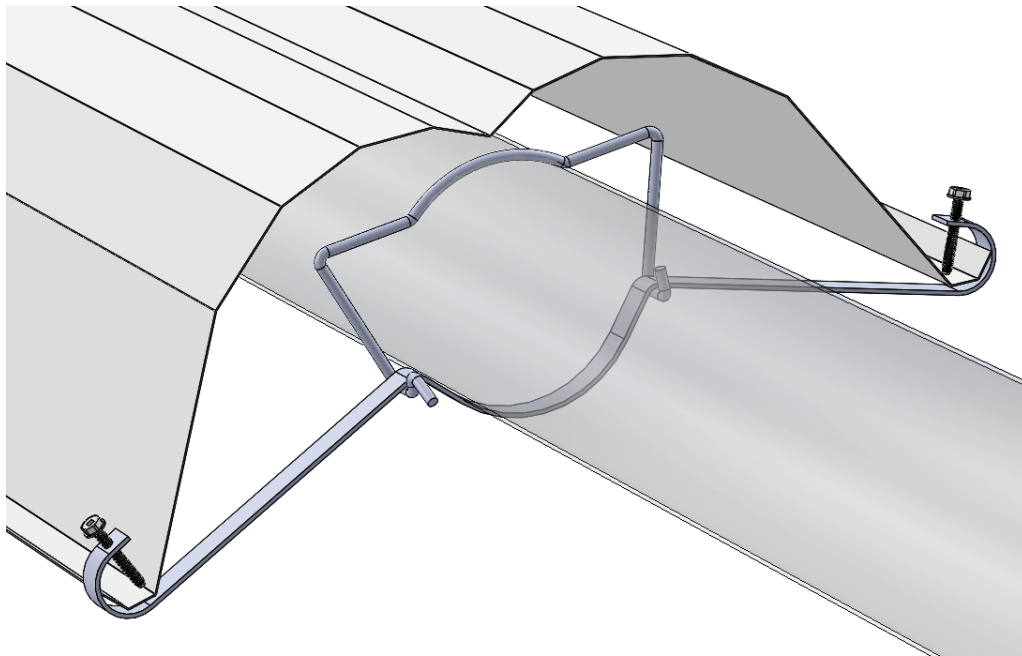
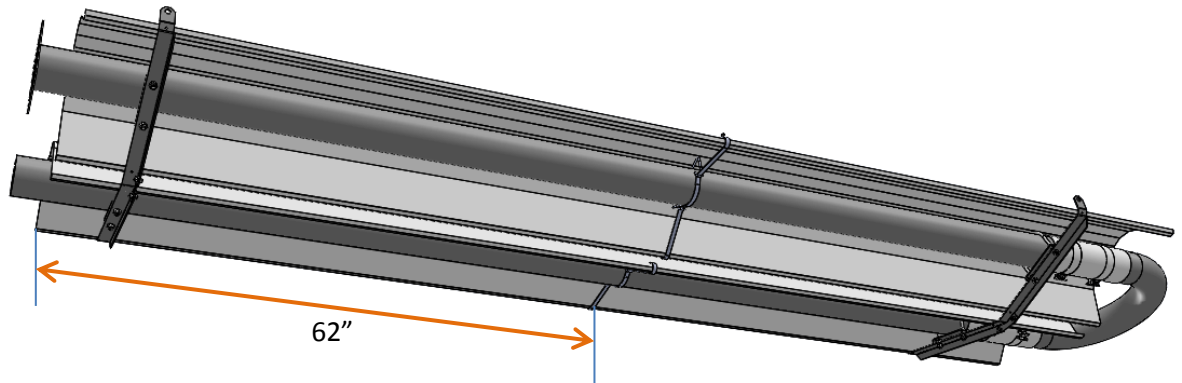
### Step 8-A:

Install the following components, 62" (middle)  
from the edge of the **Reflector**:

Qty 2 - **CR004** Reflector Brackets

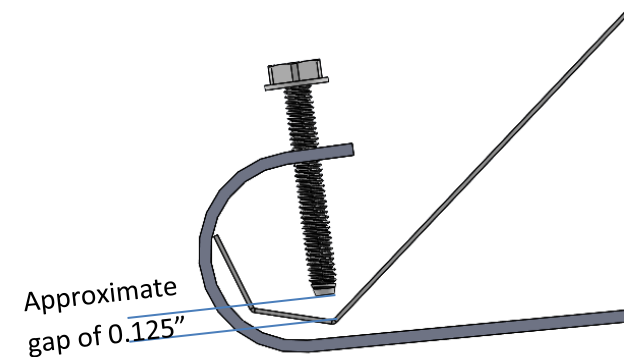
Qty 2 - **CR009** Spring Clip

Qty 4 - **CH044** Screw, 8-32 x 1-1/4  
Hex Head, Roberston #2



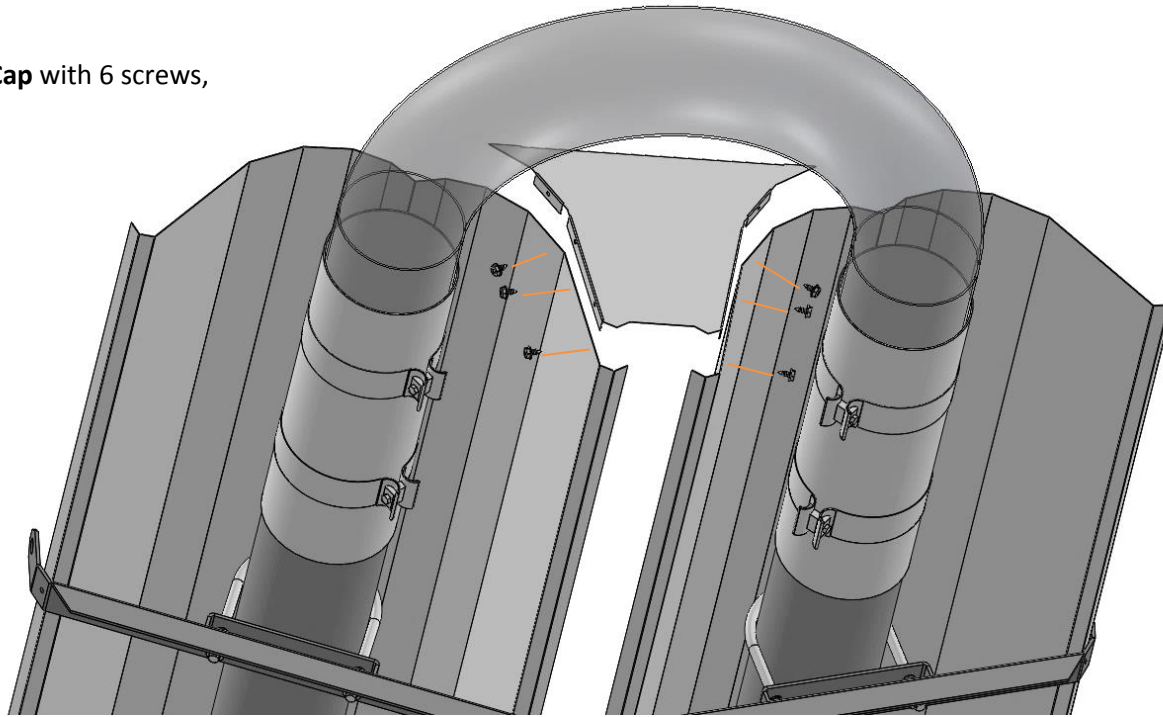
### Step 8-B:

Set the screws to leave a gap of no more than 0.125"

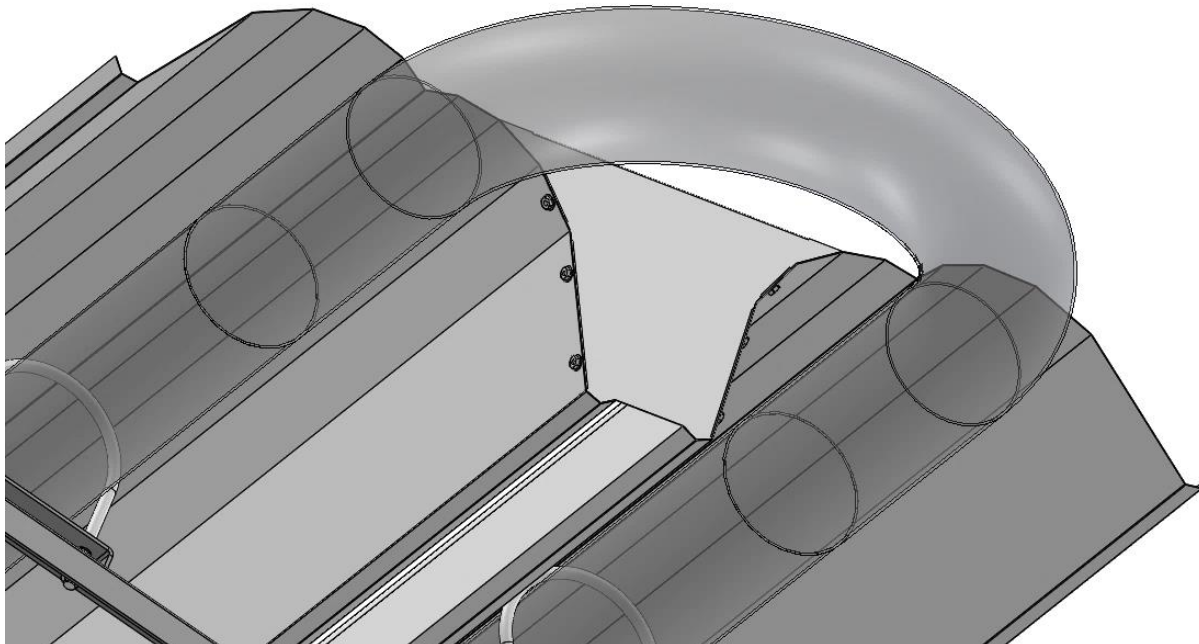


**Step 9:**

Install the **Inner End Cap** with 6 screws,  
as pictured here:



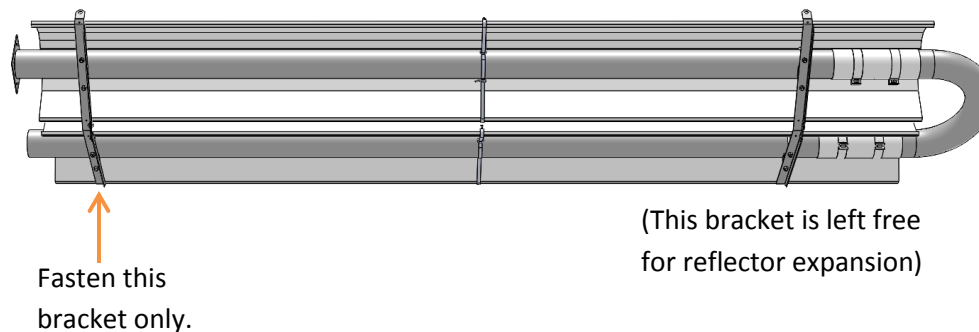
**End Cap** with flanges on the inside (hidden).





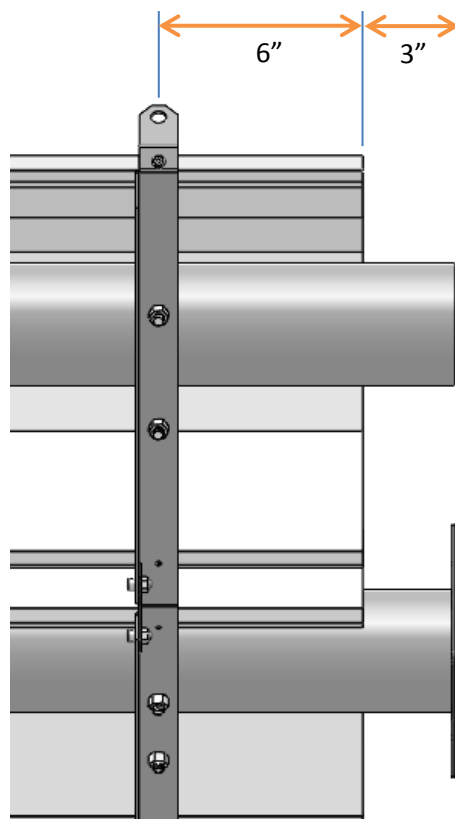
### Step 10:

Fasten one **Hanger** to the **Reflector**, using the standard screws.



### Step 10-A:

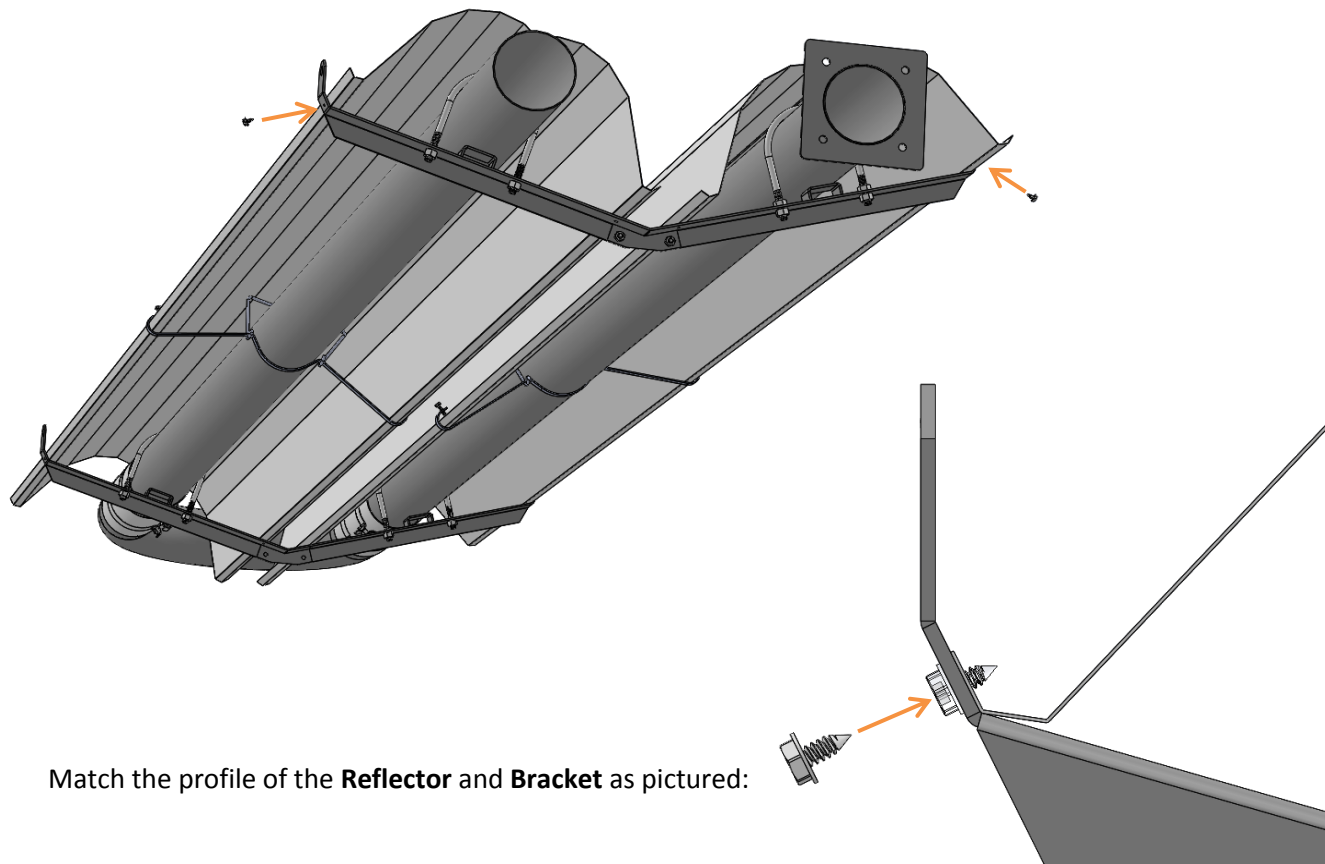
Firstly, ensure the **Hanger Bracket** is perpendicular to the **Reflector**, and then follow these dimensions:



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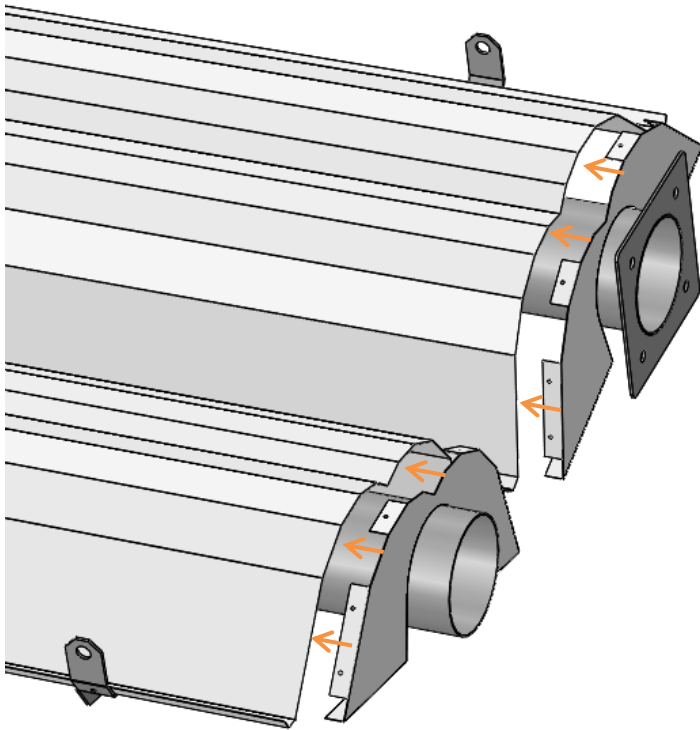
### Step 10-B:

Secondly, hold the **Reflector** tight to the bracket while fastening. Screw the bracket to the reflector.



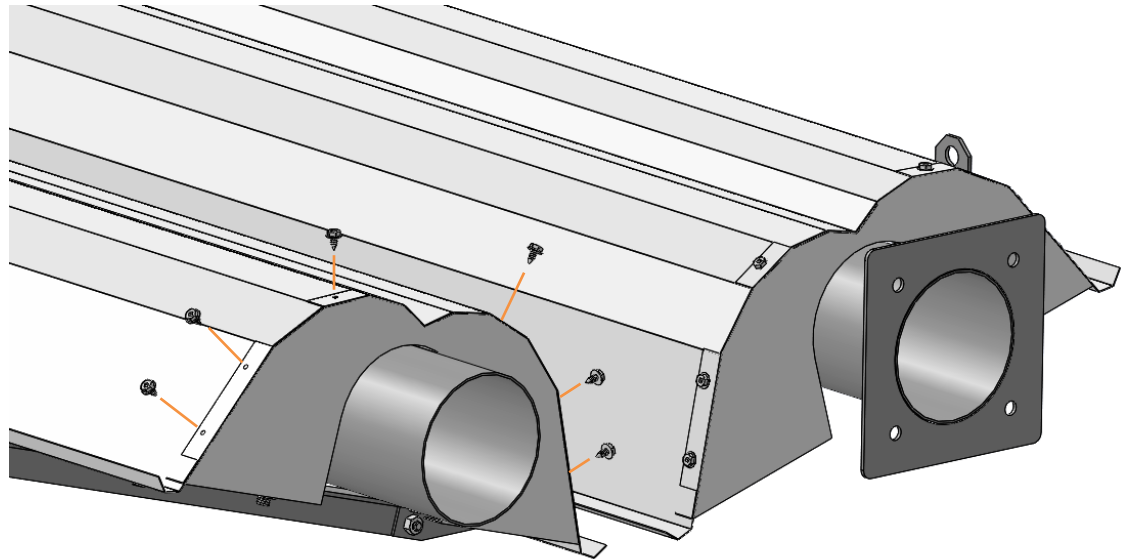
**Step 11-A:**

Orient the **End Caps** onto the **Reflector**.



**Step 11-B:**

Fasten the **End Caps** with a total of 12 standard screws.

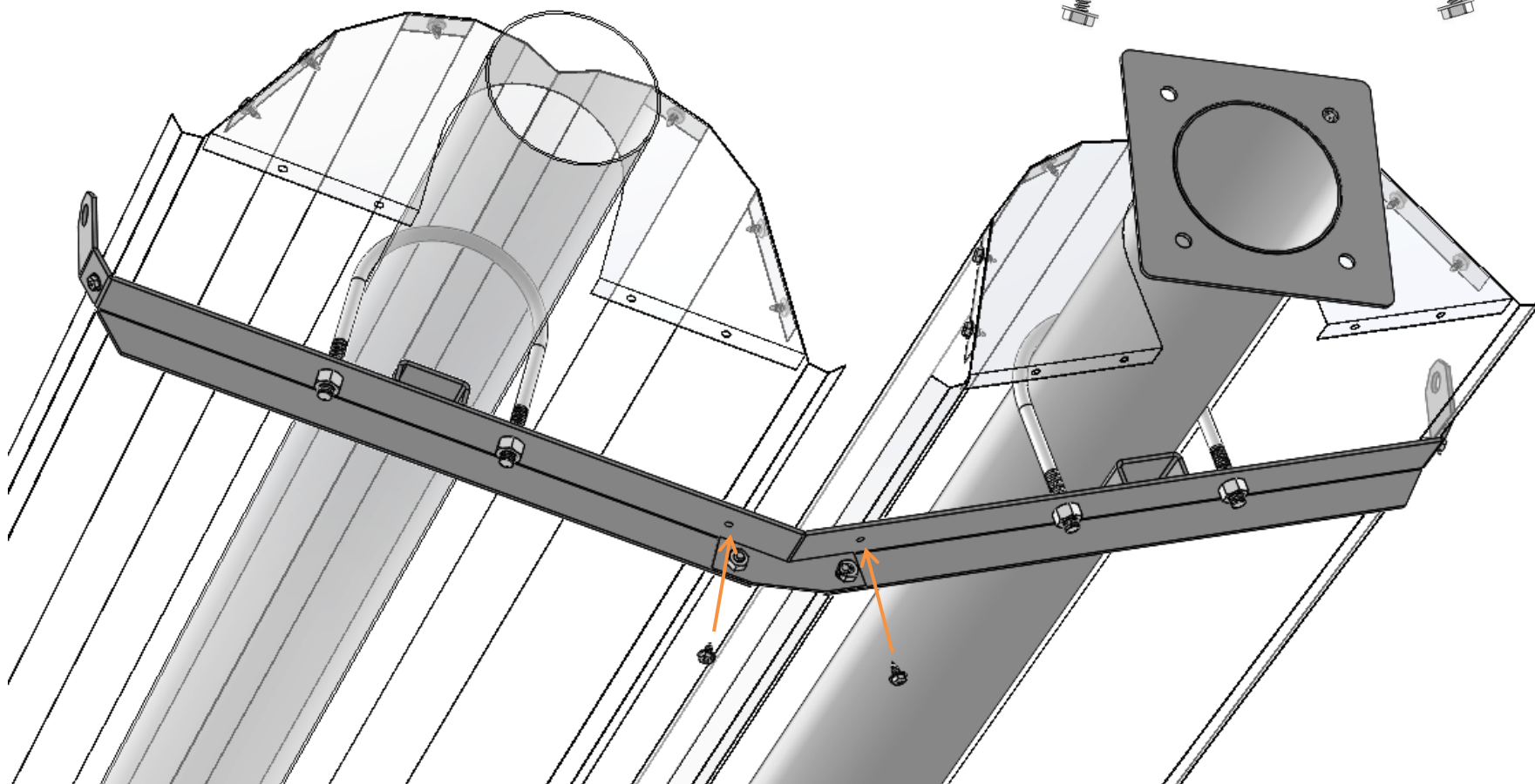


**End Cap** with flanges on the outside

### **Step 12:**

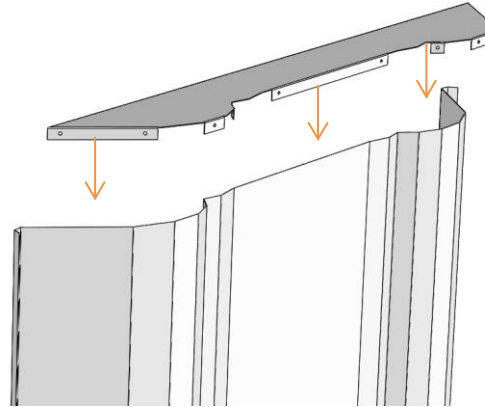
Fasten the **Hanger** to the **Reflector**, using the standard screws.

\*While fastening, hold the **Reflector** tight to the bracket.

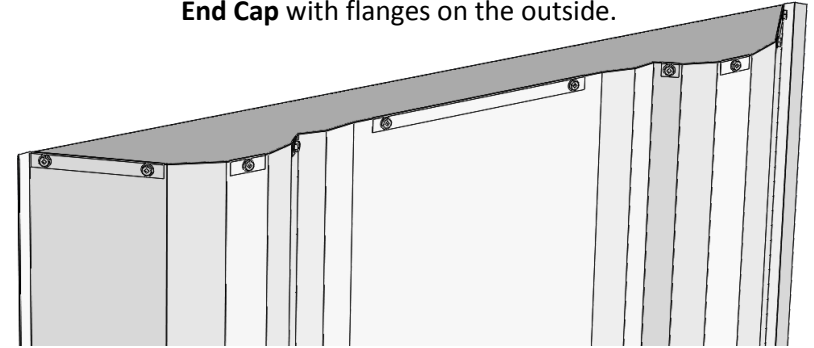


### **Step 13-A:**

Attach the **U-Tube End Cap** to the **U-Tube Reflector** with 10 screws, as pictured here:

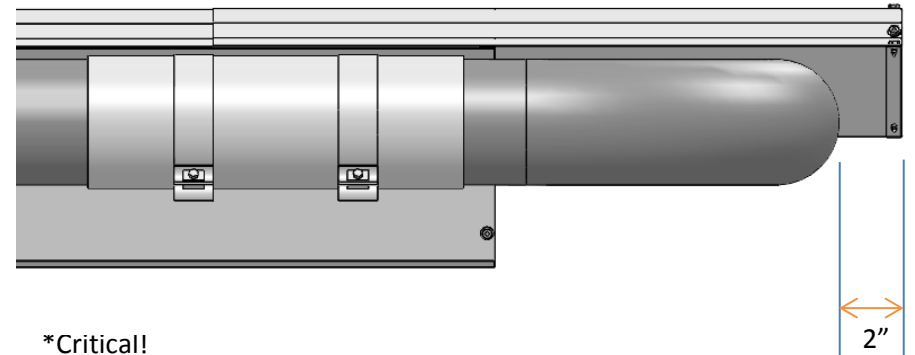
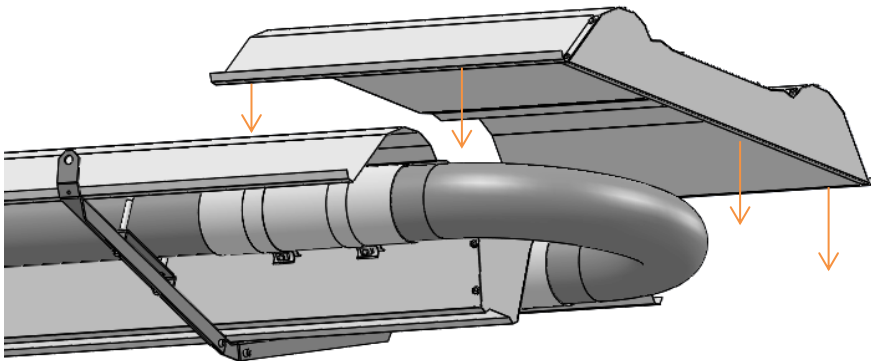


**End Cap** with flanges on the outside.



### **Step 13-B:**

Install the **Reflector** onto the heater by overlapping the two reflectors.



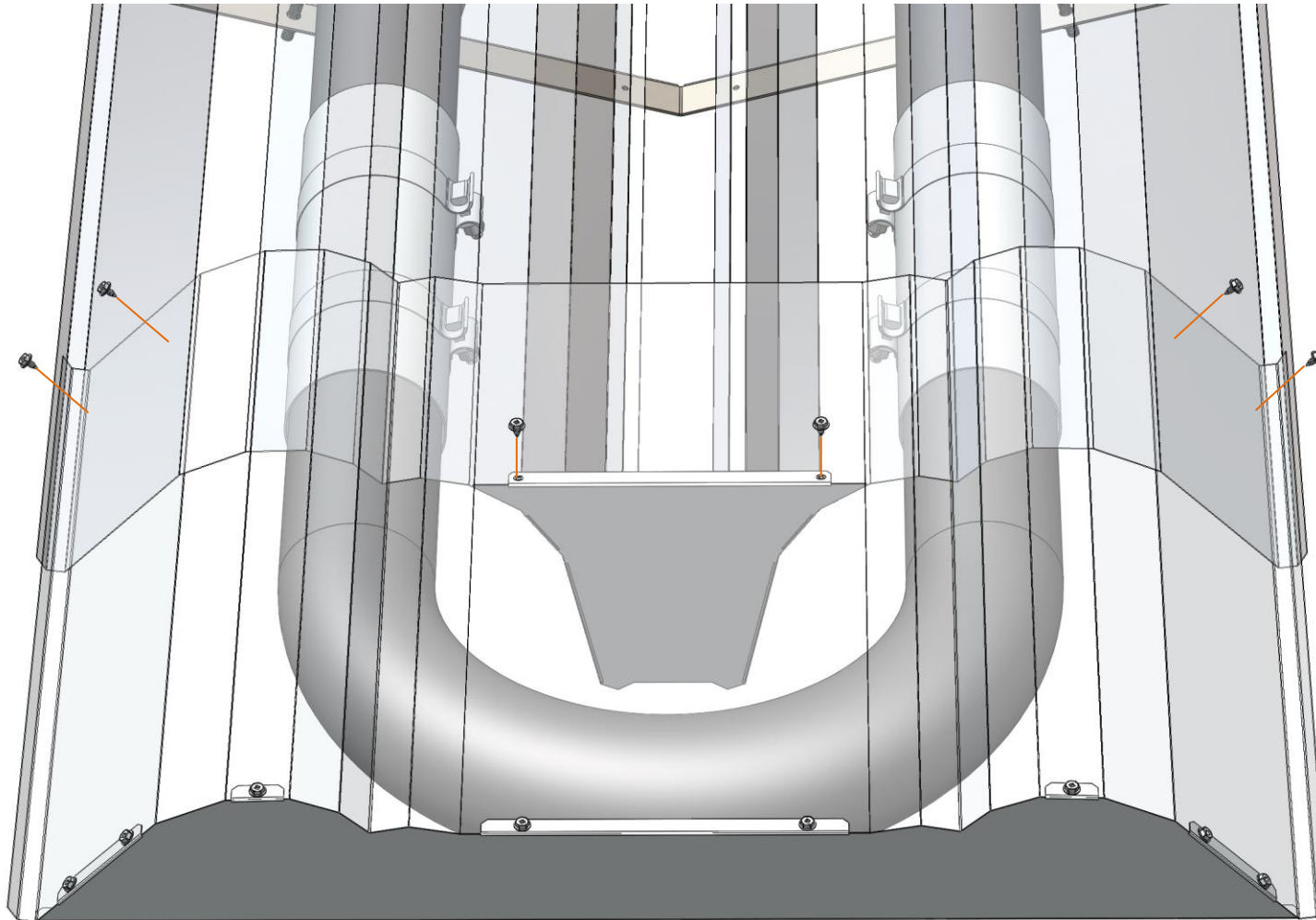
**\*Critical!**

Before fastening in the next step, ensure that there is a 2" gap between the **U-Tube** and **End Cap**.

There should an overlap of about 9", but the 2" space mentioned above is the driving dimension!

### **Step 14:**

To fasten the **Reflector**, use standard screws as shown:



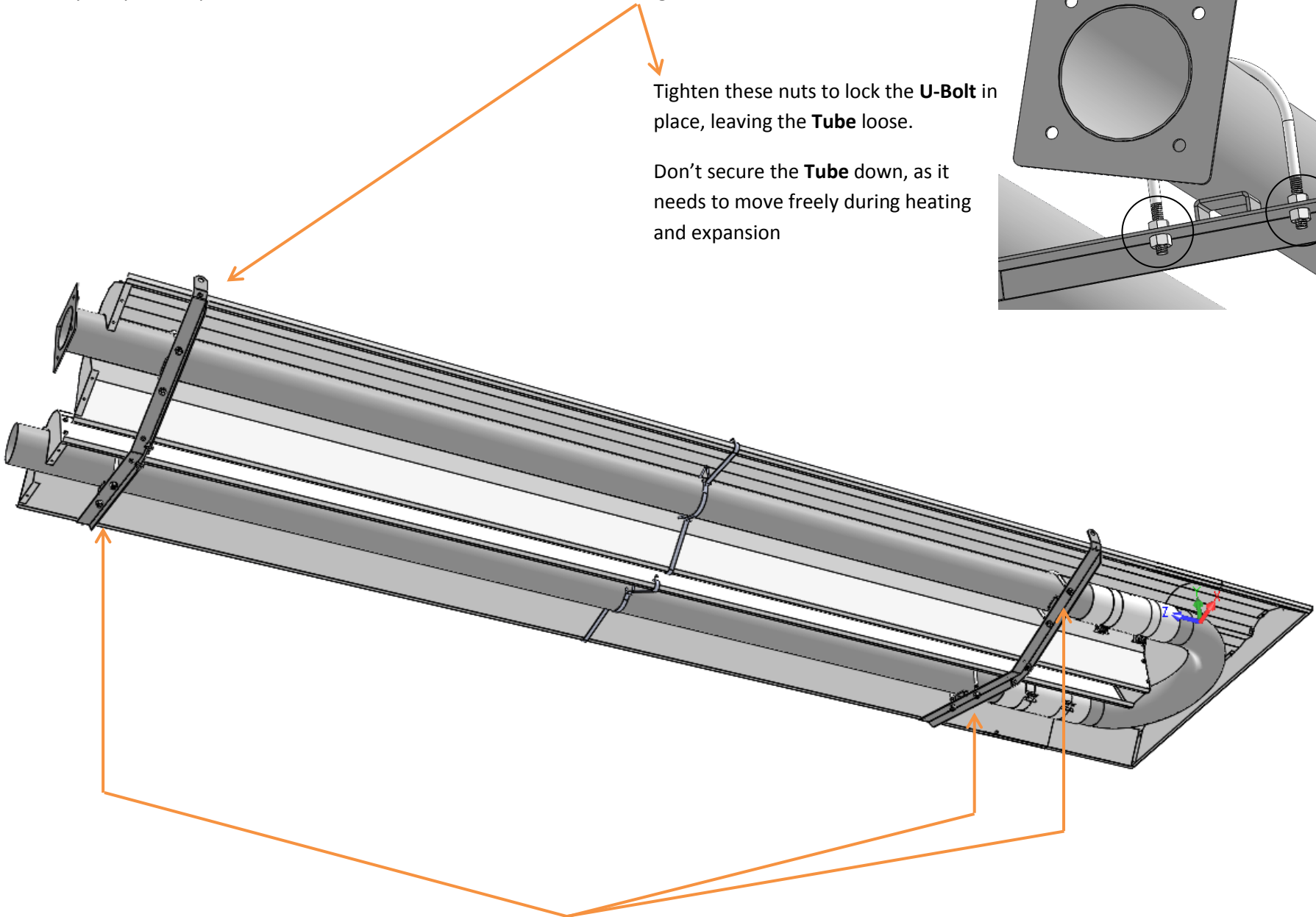
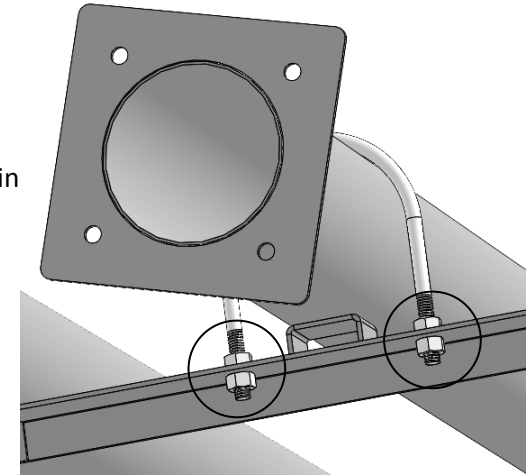
## Step 15:

To fasten the Tubes down, tighten all **U-Bolt Nuts** to be snug.

The only unique case pertains to the 4 nuts on the **U-Bolt** close to the **flange**.

Tighten these nuts to lock the **U-Bolt** in place, leaving the **Tube** loose.

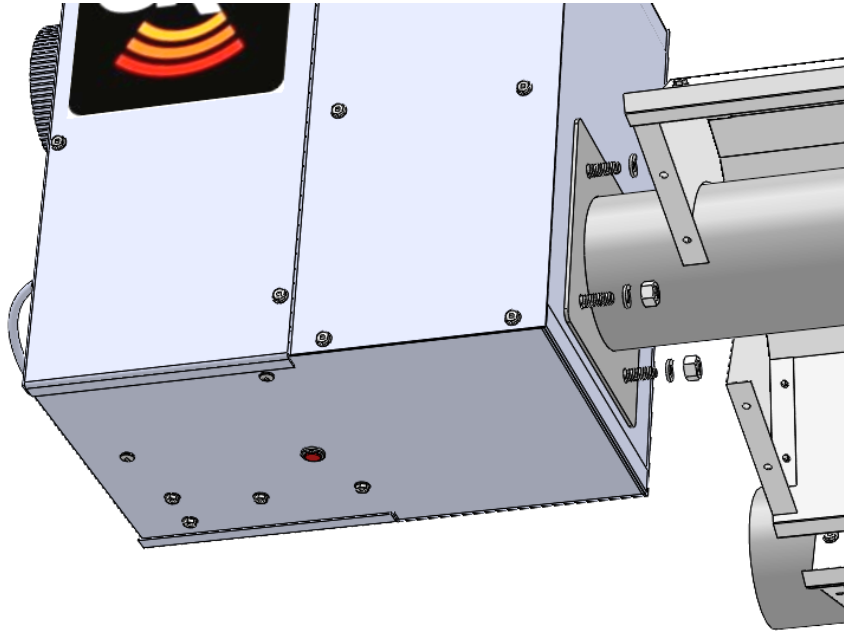
Don't secure the **Tube** down, as it needs to move freely during heating and expansion



These 6 nuts are to be snug.

### **Step 16:**

Finally, attach the **Burner Head** to the **Flange** using the 4 lock washers and nuts provided.



You should now have a fully assembled heater.

