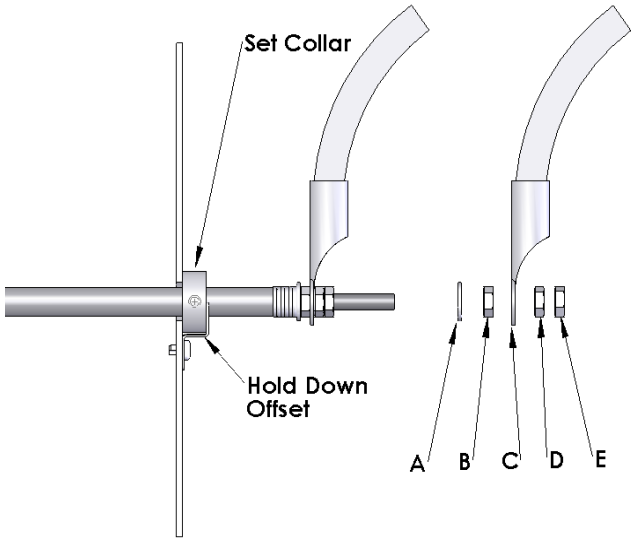
Installation of Replacement Sheathed Heating Elements

Correct sequence of tightening terminals must be followed to create a tight electrical connection and avoid twisting the heater terminal and damaging the heater.



Position one stainless steel washer "A" against insulating washers on heater terminal. Screw stainless steel nut "B" onto stainless steel washer to slightly compress insulating washers. Slide wire ring lug "C" onto terminal and hold in place with stainless steel nut "D".

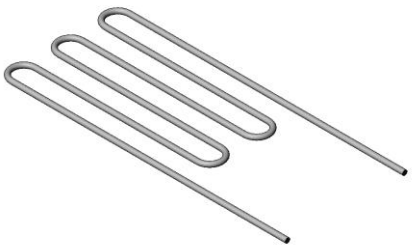
Hold nut "B" with end wrench and tighten nut "D" against lug "C" with a second end wrench. Do not apply torque to terminal as it may twist off.

Once nut "D" is tight against lug "C", install stainless nut "E" and tighten against nut "D" to lock nut "D" in place.

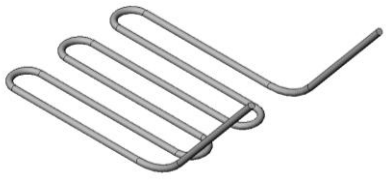
Make sure that the electrical connections to the threaded heater terminal do not come closer than 1” to any conductive surface.

Set collars must be set tight on the heater sheath. The set collars must be held against the outer wall of the oven by an offset strip or offset incorporated into the side of the heater terminal box to prevent the heater from shifting outward and touching the heater terminal box cover.

Due to the overall heating element length, it is sometimes necessary to bend the heating element to get the terminal through the oven wall. This is the procedure used for installing these heating elements in new ovens. A large radius bend in the terminal to “hook” the heating element through the wall will not harm the heating element. Bend the terminal end across your thigh near the end of the loops; position it through the oven wall and then straighten it out once it is in the oven.

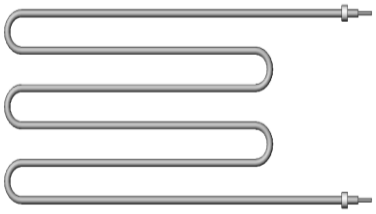


Heater as Received

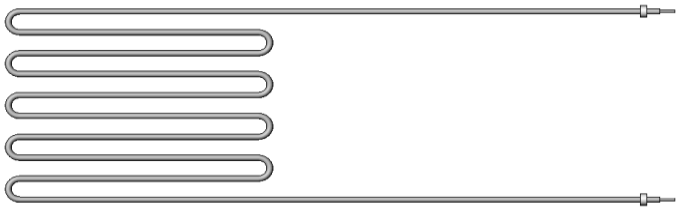


Heater Bent for Installation

Over the years, the design of sheathed heating elements has changed to accommodate thicker insulated walls and lower watts density. For this reason, the replacement heating elements you receive may have longer terminals or additional loops when compared to the existing heating elements you are replacing.



Older Heater



Replacement Heater

The additional terminal length can be pushed into the oven heat chamber or allowed to extend both into the oven and the heater terminal box.

In some cases the loops may pass in the opposite direction than the original heater. In these cases it may be necessary to reposition the heating element support racks. The purpose of the racks is to support the element loops and prevent the loops from touching each other.

It is likely that the replacement heating element will have a different heating element part number than the existing heater. This new heating element part number will show on the packing list and should be used for future heating element purchases. The part number is also stamped on the heater sheath near the terminal. If the heating element wattage and voltage are the same as your existing heater, the heat input from the new heater will be the same even though the shape is different.

In cases of very old ovens, the existing heating element may have pipe bushings on the terminals rather than set collars. In these cases the holes through the insulated wall will be too large in diameter for the new heating elements. To solve this, fabricate a “washer” to go between the oven wall and the set collar at both the inside and outside of the oven. Before installing the heating element through the oven wall, fill the hole in the oven with insulation. Make a hole for the heater terminal through the insulation with a rod of approximately the same diameter as the heating element terminal. Position one set collar along the terminal of the replacement heater in approximately the same location as the end of the original pipe bushing. Slip one of the "washers" over the heater terminal. Insert the heater through the oven wall and install a second "washer" and set collar at the outside of the oven. Pull out on the heater terminal and push in on the set collar, as the set collar is set onto the heater sheath. This will hold the washers against the oven wall.