

# Instruction Sheet

## Installation of Farnam Element

27007-BK

### Required Tools

- Phillips Screwdriver
- Flathead Screwdriver
- Side Dyke cutters
- Needle Nose Pliers
- 1/4" Socket Wrench
- 1/4" Socket extension (6")
- 11/32" Socket
- 1/4" Nut Driver
- 5/16" Nut Driver
- Cordless drill or Right angle drill

### Unit Removal from Counter

- Step 1** Unit could be hot. Wear appropriate PPE for handling.
- Step 2** Disconnect power to unit.
- Step 3** Remove thumbscrews on front panel, if necessary, to lift unit out through top cutout
- Step 4** Carefully remove unit.
- Step 5** Place unit on adequate work surface for repair.

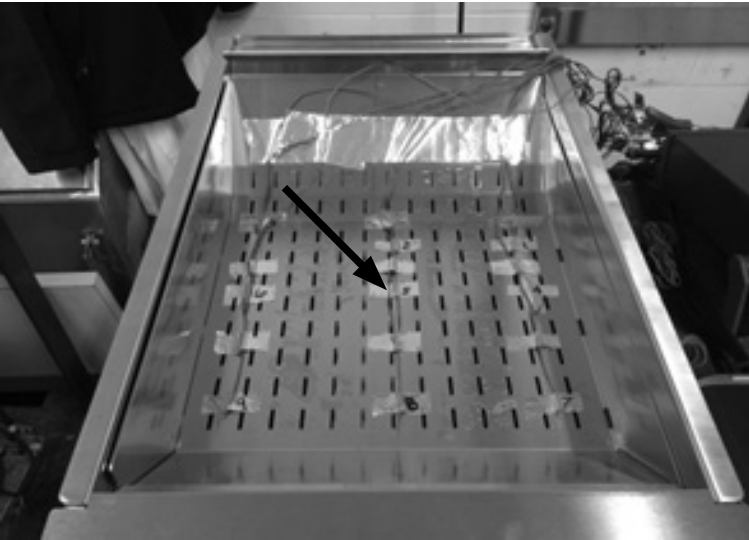
### Disassembly of Unit

NOTE: The following pictures were taken of a FFHS16 used for testing. Please disregard the brown thermocouple wires and aluminum tape in the photos.

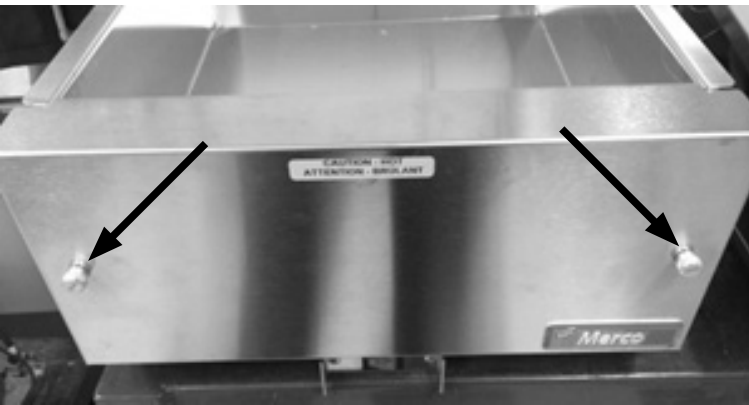
NOTE: If the unit is already equipped with a Farnam element, steps 18, 19 & 22 may be disregarded.



**Step 6** Remove the salt tray from the unit.



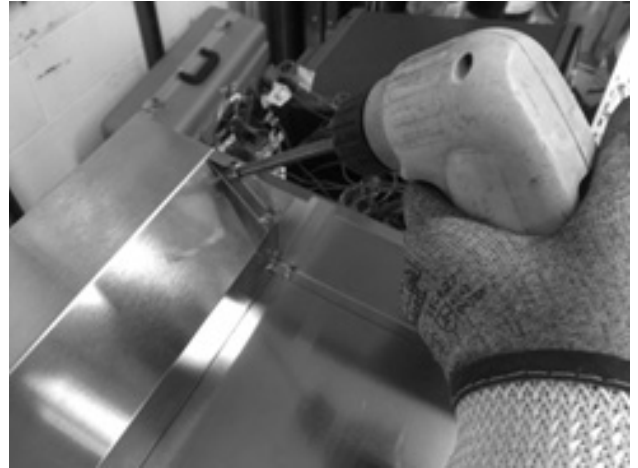
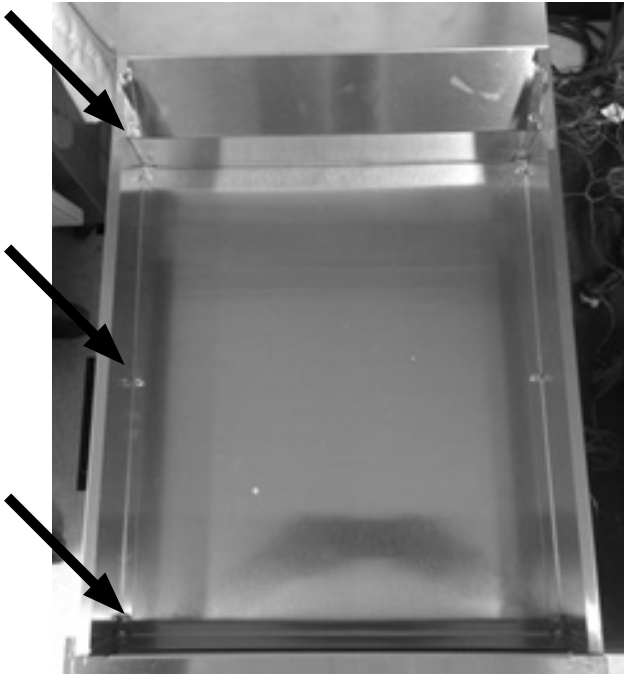
**Step 7** Remove the front panel by loosening the two thumbscrews.



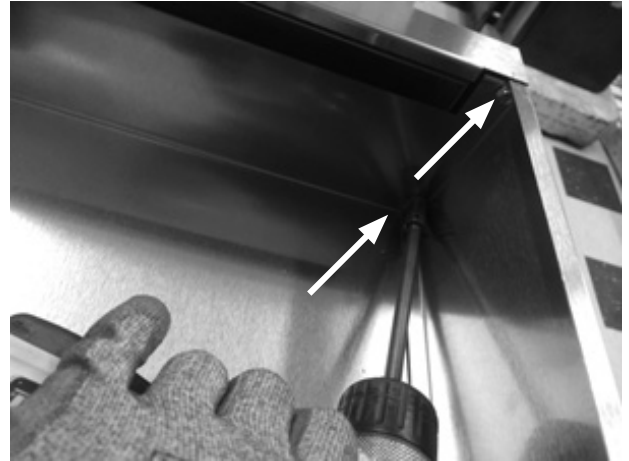
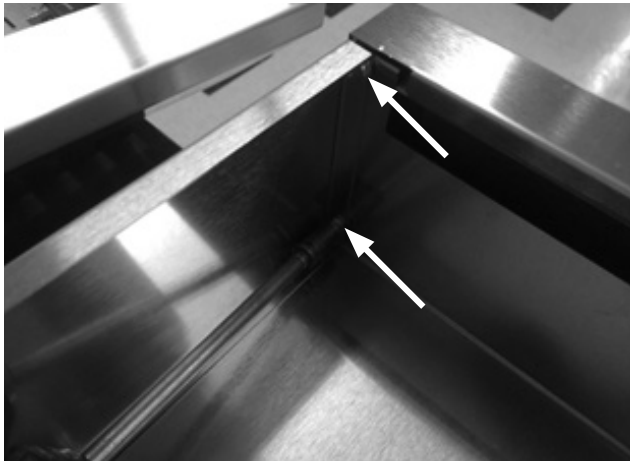
**Step 8** Remove the grease pan.



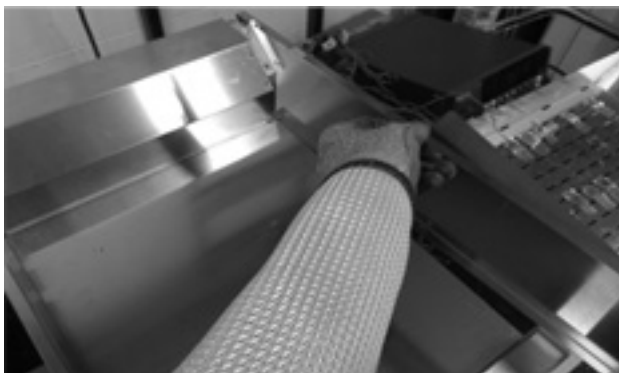
**Step 9** Using a 1/4" nut driver, remove the 10 screws holding the sides to the bottom and back. There are 5 screws per side.



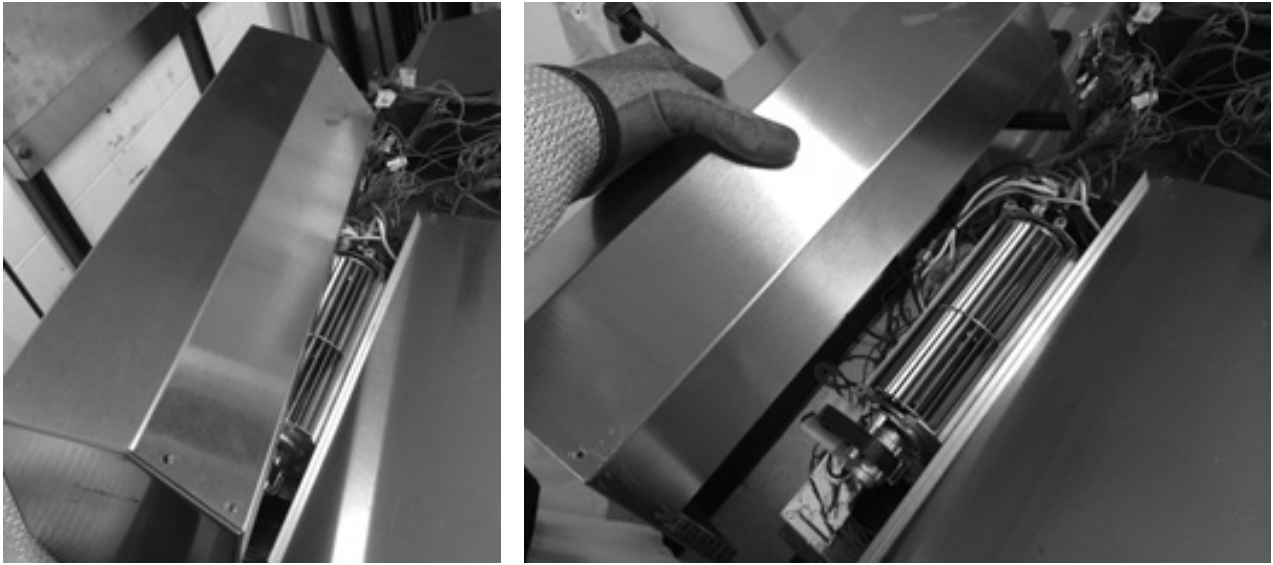
**Step 10** Using a 5/16" nut driver, remove the 4 screws holding the sides to the front.



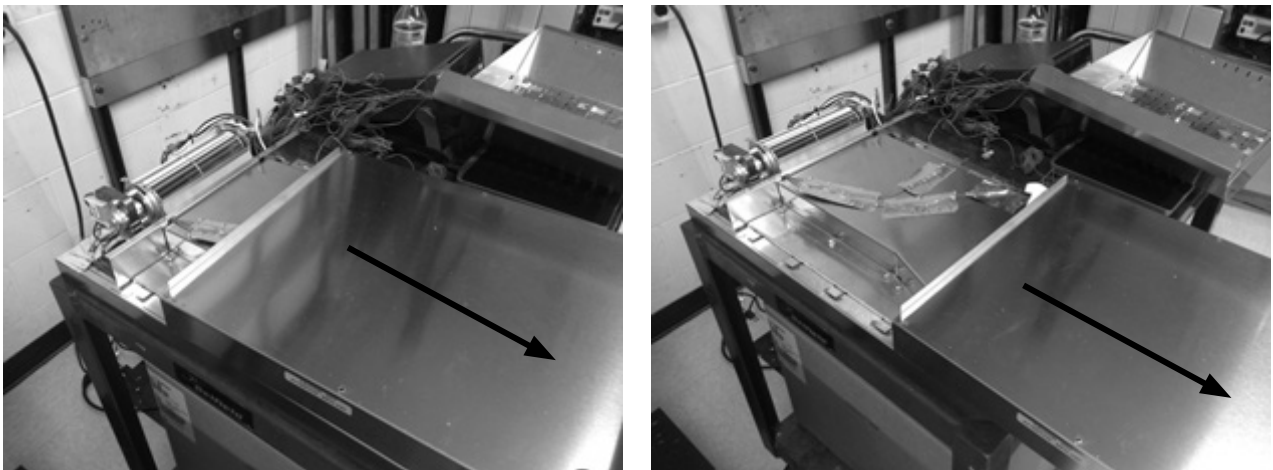
**Step 11** With all the screws removed, remove the sides and the front.



**Step 12** Remove the back electrical housing, exposing the components.



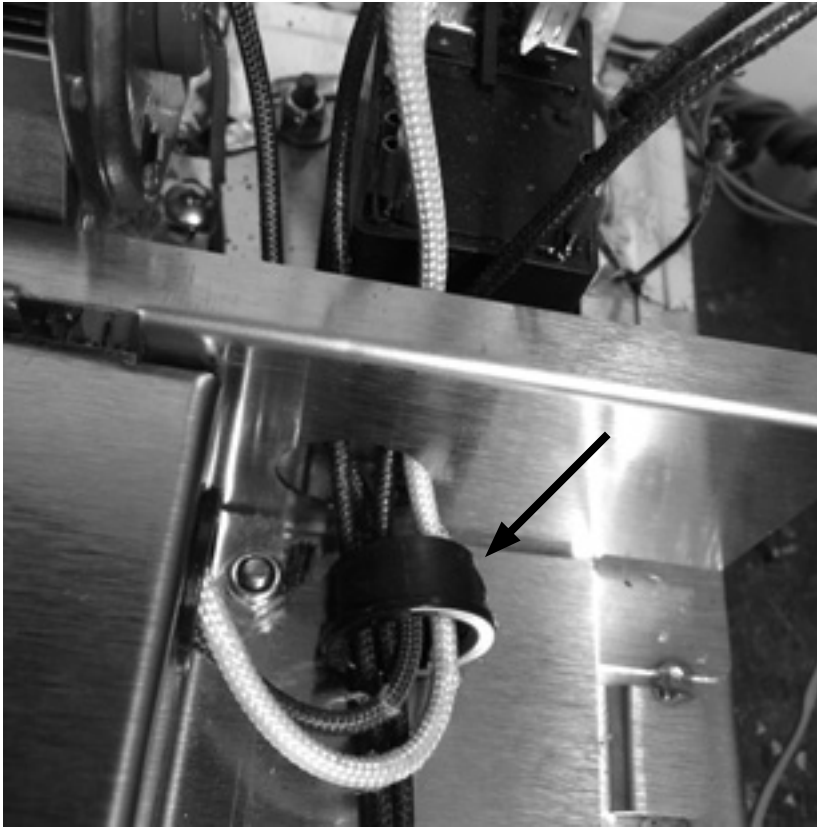
**Step 13** Slide the heat chute cover forward and remove out the front of the unit. This will expose the internal heat chute.



**Step 14** Disconnect the wire leads to the thermal disk, the element wires to relay, and the blower wires.



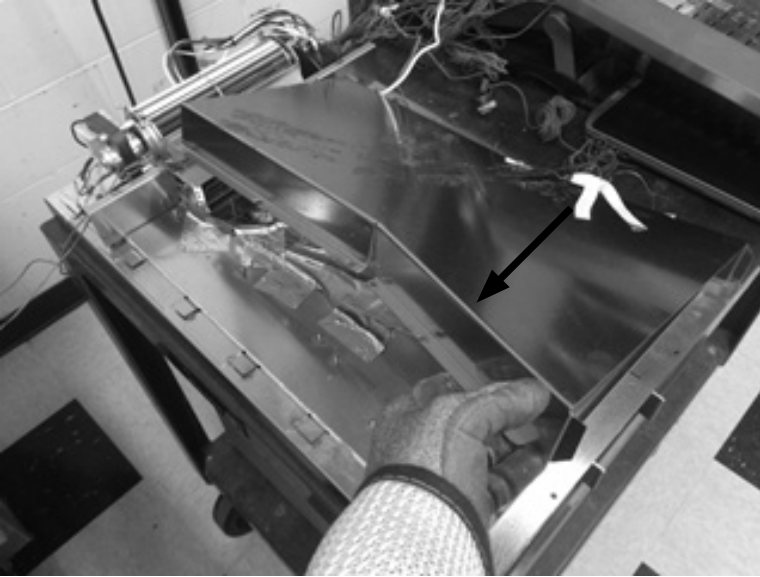
**Step 15** Remove the grommet from the hole for the element wires. This will allow the female quick disconnects on the element wires to be fed through the hole easier. It also helps with reinstalling the wires during assembly.



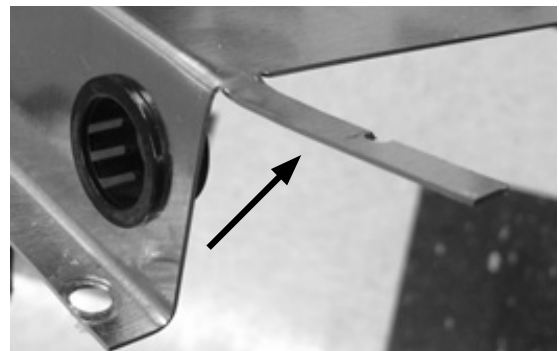
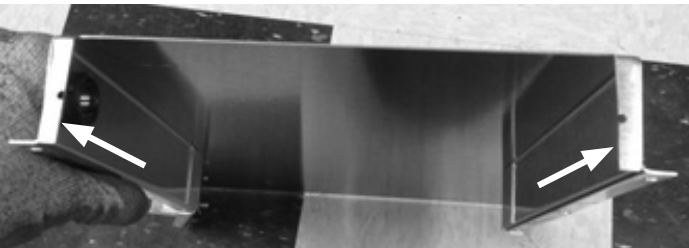
**Step 16** Using  $\frac{1}{4}$ " socket wrench, extension and  $1\frac{1}{32}$ " socket, remove the 12 nuts that attach the heat chute to the bottom. There are 6 nuts per side.



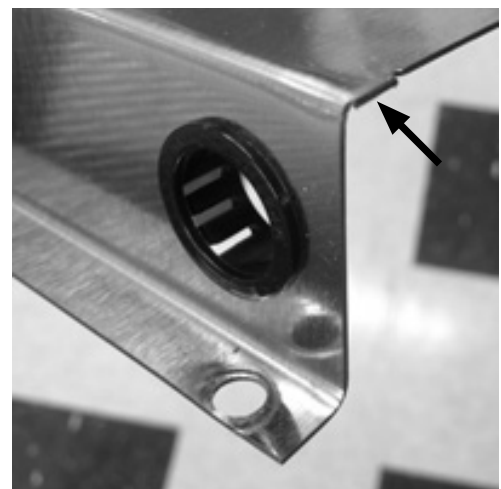
**Step 17** Carefully remove the heat chute from the bottom and feed the element wires through the side hole. This will completely expose the heating element.



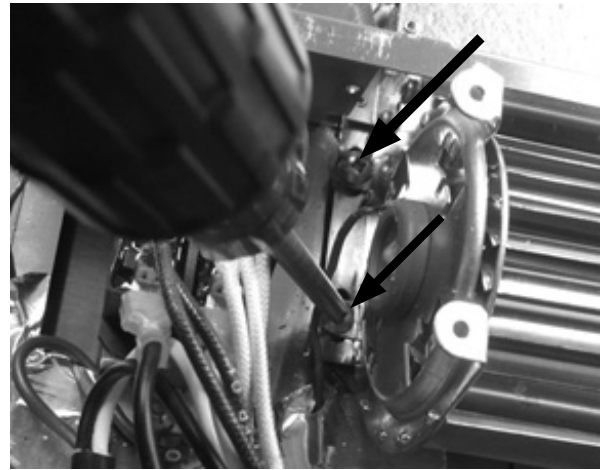
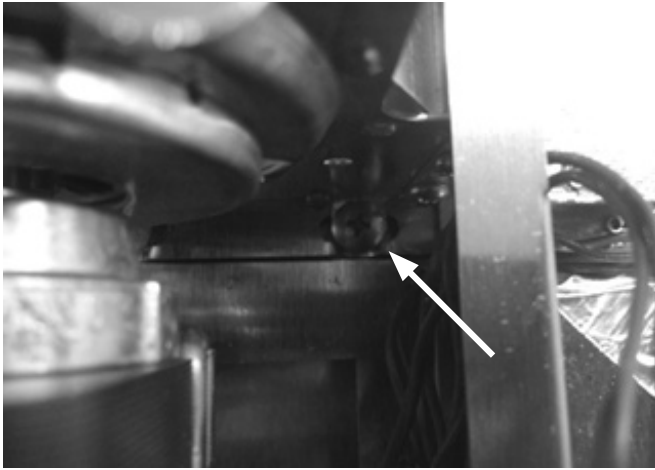
**Step 18** On the narrow end of the heat chute, element end, there will be two narrow pieces of sheet metal. Using a pair of pliers bend the tabs upwards as shown.



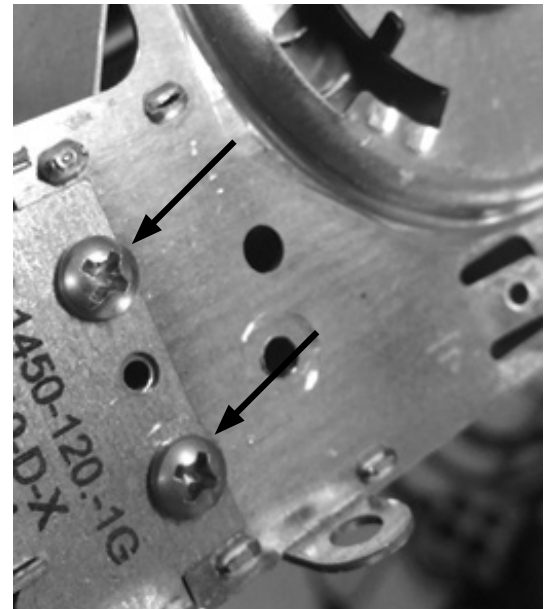
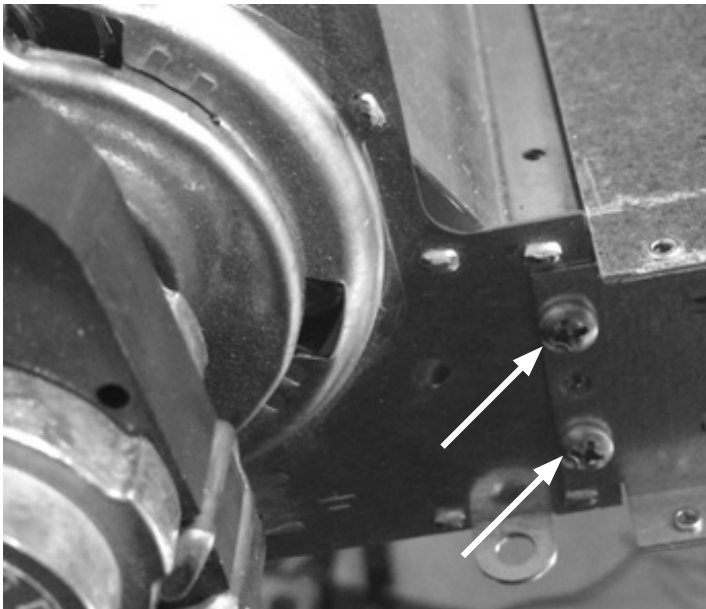
**Step 19** Using a pair of side dyke cutters, cut the tabs off from the heat chute. File any rough or sharp edges left from the removal process.



**Step 20** Return to the unit and remove the blower/heating element assembly. There are 3 Phillips head screws that attach the blower. 2 are on the non-motor side, 1 is on the motor side.



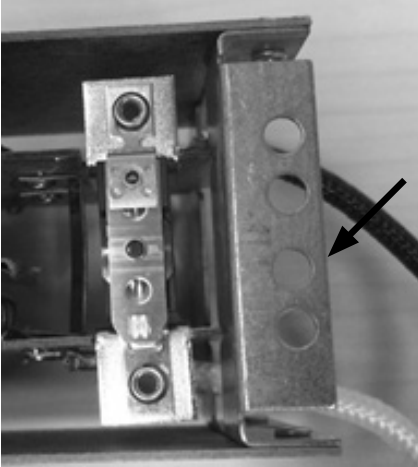
**Step 21** Remove the 4 screws that attach the Eichenauer element to the blower chassis.



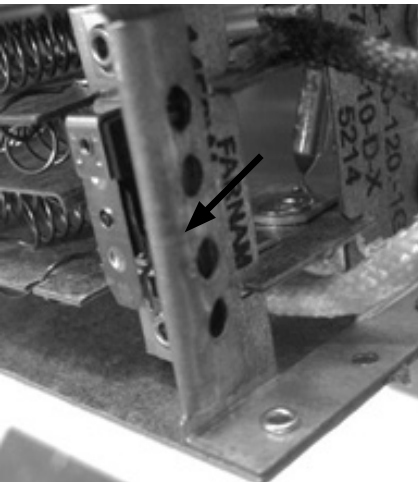
**Step 22** Before attaching the new Farnam Element to the blower chassis, a slight modification is needed.

- Using a pair of needle nose pliers on the **wire side** of the heating element carefully bend the metal part of the end bracket over as shown.
- Once bent over squeeze this bend tight.

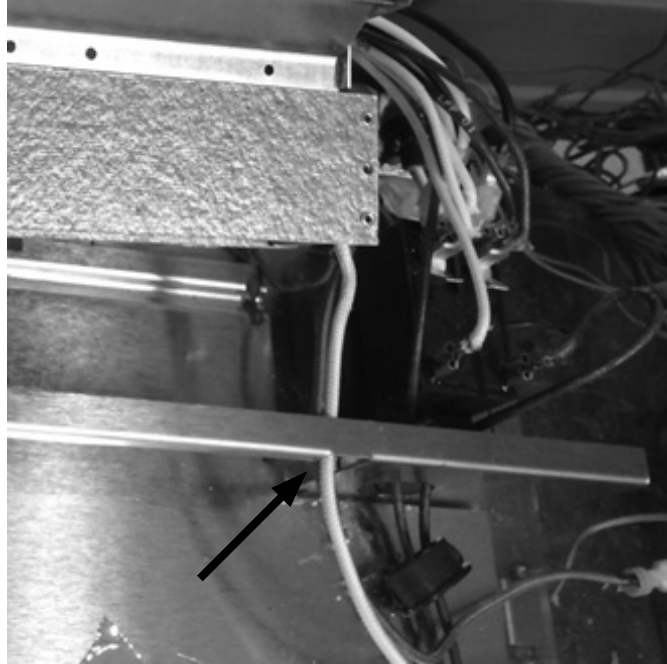
NOTE: This modification is to allow clearance of the wires past the edge of the upright support.



**Before Modification**



**After Modification**



NOTE: If the end bracket on the Farnam element is not bent over, the wire from the element will hit on the edge of this opening and not allow the element to be slid into place. This will be corrected at the design level on all future builds.

## Reassembly of Unit

**Step 23** The unit can now be reassembled in the reverse order of disassembly.

## Important

**Step 24** As a trouble-shooting and pre-check measure, it is possible to check operations as soon as all electrical connections have been re-established. This can save time of repair should something be incorrect with re-assembly. If you choose to attempt this, please use extreme caution. Otherwise, continue assembling the unit in it's entirely and then power the unit for operations check.

## Process completed