

# DEFROST HEATER REPLACEMENT

**(FOR ELECTRIC DEFROST EVAPORATORS MANUFACTURED SINCE APPROX. 1990)**

Electric defrost coil heaters are all inserted into "dropped tube" holes which are simply empty holes within the coil fins (no refrigerant carrying tubes) located within the coil assembly itself. Low profile and medium silhouette model units have these dropped tube holes interspersed within the coil assembly itself while the largest warehouse model units have (2) complete rows of heater holes; one located on the entering air face of the coil and the other on the leaving air face of the coil. Please note that not every tube hole contains a defrost heater on the largest model units as they are specifically located to ensure complete, even defrosting of the entire coil surface.

These instructions do not cover replacement of the unit drain pan heater(s).

## **To replace a defective coil heater proceed as follows;**

- 1.) Using a pair of diagonal wire cutters or lineman's pliers, cut the rubber boots from the ends of the original, defective heater and pull the heater out from one end of the coil (opposite the electrical connection end on U-shaped heaters).
- 2.) Use a small diameter steel rod or fish tape to insert a solid core, light gauge pulling wire through the empty heater tube hole(s) and secure the ends of the heater wire(s) to the pulling wire(s).
- 3.) With one person pulling gently on the ends of the pulling wire(s) and another guiding the end of the replacement heater through the heater tube hole(s), slowly pull the replacement heater through the coil until approx. (6") of the replacement heater sheath extends beyond the tube sheet into the electrical end compartment of the unit.
- 4.) Gently bend the end(s) of the heater over approx. 45 degrees to help "lock" the heater into position. Check to make sure the heater is not touching any refrigerant carrying portion of the coil assembly such as coil tubes, u-bends and distributor leads. Also make sure that it is not in contact with or in too close a proximity to any defrost controls or electrical wiring. Adjust the position of the heater or wire lead(s) as necessary to eliminate all areas of contact.
- 5.) Re-connect the heater electrical connections (as per the applicable unit wiring diagram) making sure to secure all excess heater wire leads to prevent contact with any portion of the heated surface of the heater(s).

Note: For any heaters which are shorted out, burned or otherwise melted internally in the coil assembly it may be necessary to abandon the original heater and adjust the physical location of the replacement heater either up or down to the next closest dropped tube hole(s).

## **Installation Tips:**

- To ease installation of the replacement heater, lubricate the rubber boot end(s) of the heater with electricians wire pulling grease.
- For longer fin-length heaters it may be necessary to pull the replacement heater through the coil assembly using a come-a-long (or other similar device).