INSTRUCTIONS FOR CHANGING CAP TUBE ASSEMBLY ON THE TRI-CHANNEL UNITS.

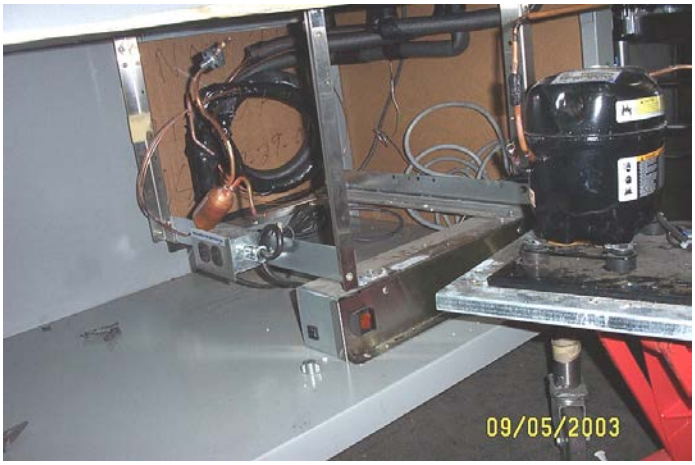
1. Disconnect power to the unit.
2. Install line tap valve on high side process tube. Recover refrigerant.

3. Removal of the lower shelf is necessary to pull the condensing unit out from under the unit.

4. Remove the insulation from the suction line at the compressor. Care should given to the accumulator insulation as it will be reused.

5. Un-braze the drier from condenser outlet. ***NOTE THE POSITION OF THE DRIER, THE NEW DRIER MUST BE INSTALLED IN THE SAME POSITION****

6. Un-Braze the suction line from the compressor.

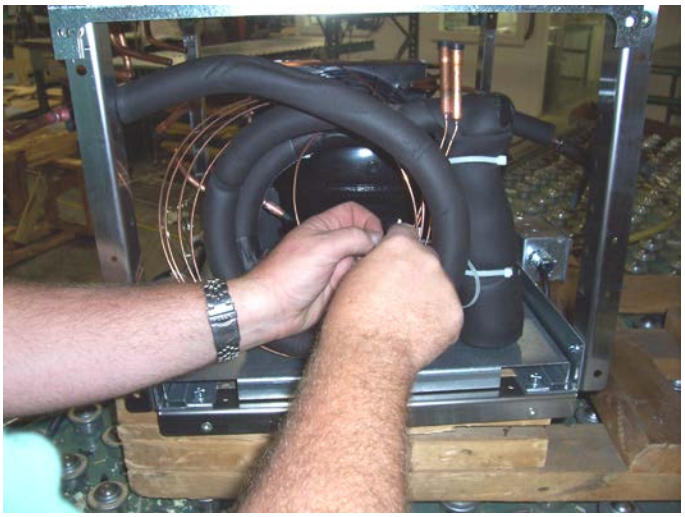


7. Slide the condensing unit out of the cage as far as possible. Care should given to support the condensing unit once out of the cage.

8. Remove insulation from each of the evaporator inlets and the suction line at the manifold.

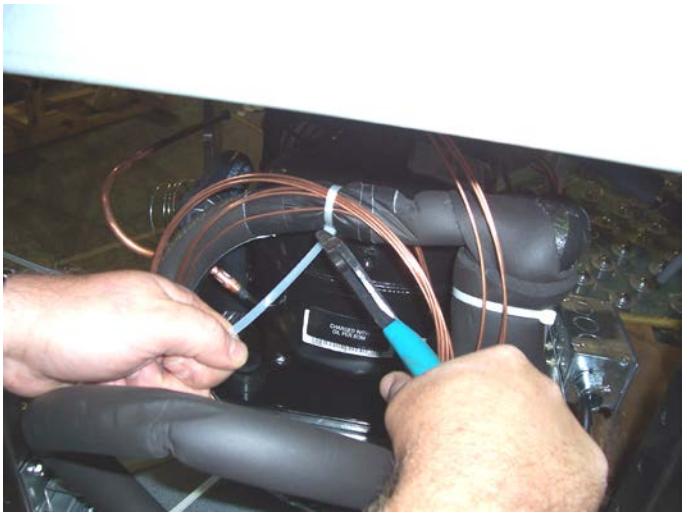
9. Cut each evaporator inlet tube 1" from the end of the cap tube. Cut the suction line 4" from the manifold.

10. Install the new assembly in the reverse order.
****** CARE SHOULD BE TAKEN WHEN BRAZING THE SUCTION LINE CONNECTION AT THE MANIFOLD. A HEAT SINK (WET CLOTH, ETC.) MUST BE USED TO ENSURE THAT THE THERMO-STAT BULB DOES NOT OVER HEAT.*******
11. Reinstall the condensing unit; braze the suction line connection to the compressor, and the drier connection to the condenser outlet.
12. Leak check system.
13. Re-insulate evaporator inlets, suction line and accumulator.
14. Evacuate system to 500 microns or below.
15. Weigh in refrigerant charge *(14 ozs. R-404A for a SUB-CP-TC74 or SUB-CP-TC86. 12 ozs. R-404A for a SUB-CP-TC48 or SUB-CP-TC60.)*
16. Pinch off process tubes and braze shut.



17. Supplied with the Capillary Service Kit are 4 nylon zip ties. It is imperative that the capillary tubing be secured to avoid abrading and possible future leaks.

18. Secure the capillary tubing to the vapor tubing closest to the accumulator as possible. This is necessary to allow the courtesy loop to extend out for future service without binding the tubing.



19. Beginning with the twelve o'clock position, secure the capillary tubing, and dress off the excess tie.

20. Proceed to the nine o'clock position and re-peat as above, then on to six o'clock and three o'clock.

21. In the three o'clock position, take care not to secure the capillary to the last coil of the courtesy loop to avoid binding when sliding the compressor out for service.

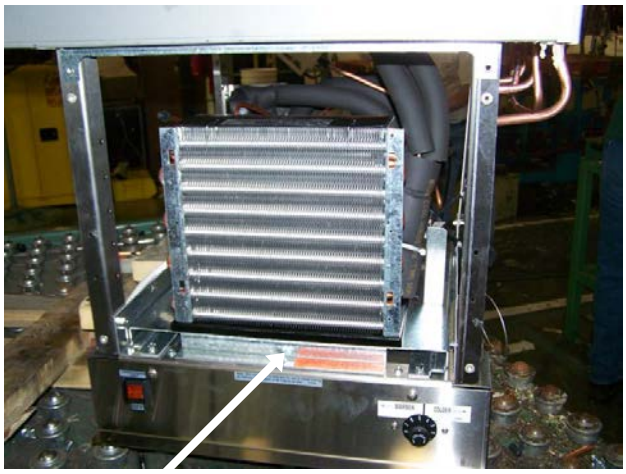
22. Dress any remaining ties and ensure the courtesy loop is recoiled correctly as shown in the figure.

IT IS IMPERATIVE TO ENSURE ALL CAPILLARY TUBING, FROM THE LAST ZIP TIE TO EACH CIRCUIT; IS NOT TOUCHING TO AVOID ABRADING BEFORE COMPLETING THE SERVICE CALL.

INSTRUCTIONS FOR AEV CONDENSING UNIT KIT ON THE TRI-CHANNEL UNITS.

1. Disconnect power to the unit.
2. Install line tap valve on high side process tube. Recover refrigerant.

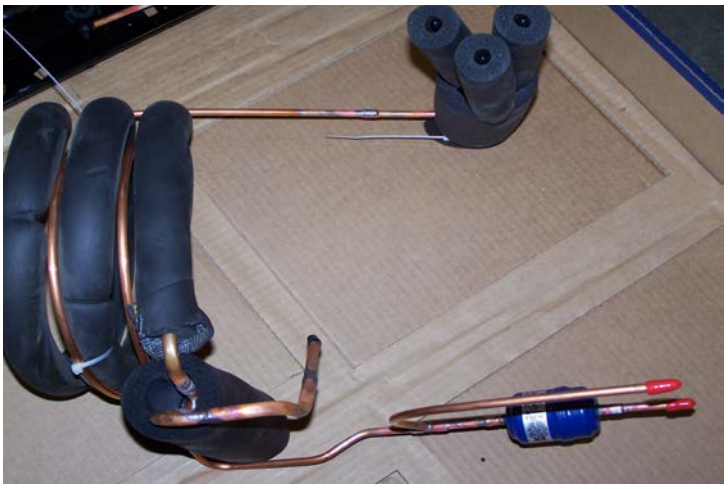
3. Removal of the lower shelf is necessary to pull the condensing unit out from under the unit. Remove front louver as well (4 screws or lift off).



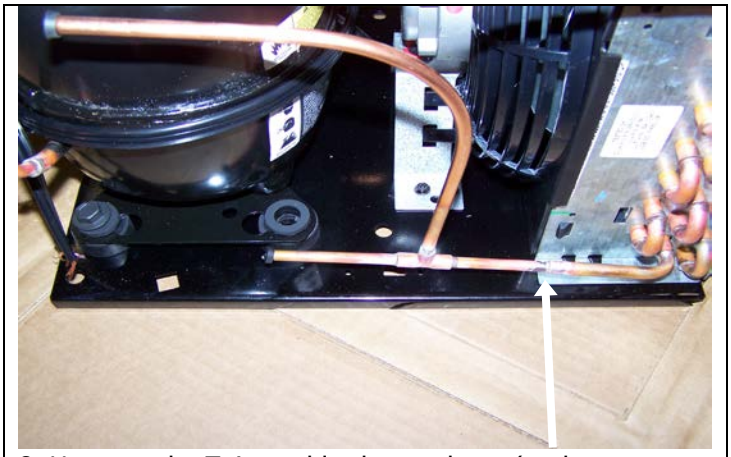
4. Unscrew (1) bolt at front of tray behind louver. Slide the condensing unit forward to allow access to the capillary inlets to the evaporator.

5. Cut the capillary tubing out just above each inlet reducer. Once this is complete, remove the condensing unit.

6. Unpack the condensing unit and inspect for damage.



7. The new liquid line assembly has an Automatic Expansion Valve (under the insulation), a Filter Drier, and an Accumulator (under the insulation).



8. Unsweat the T-Assembly shown above (at the arrow location) and discard.

9. Begin reassembly.

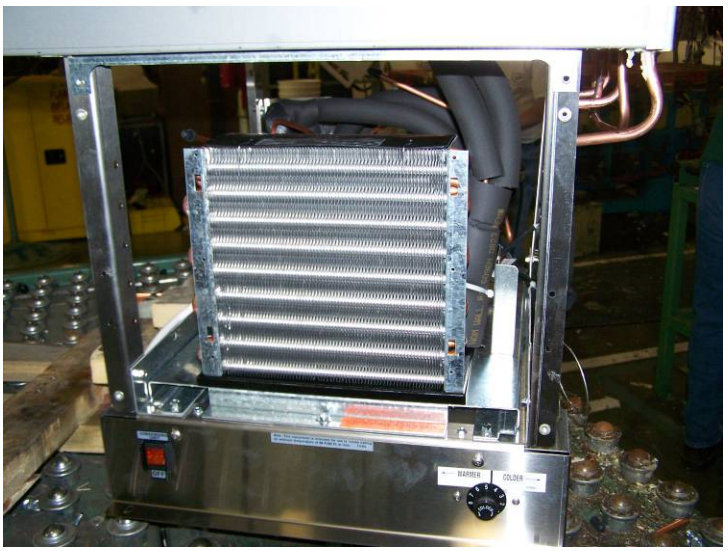
10. Insert the liquid line into the condenser outlet and braze joint.

NOTE: It is very important to flow a slight amount of nitrogen through the system while brazing to prevent internal oxidation of the copper.

11. Finished Assembly should look like this.

12. Slide the condensing unit back into place and bolt back down to cage.

13. Prepare to braze the distributor tubes in place by first cleaning the evaporator inlets.

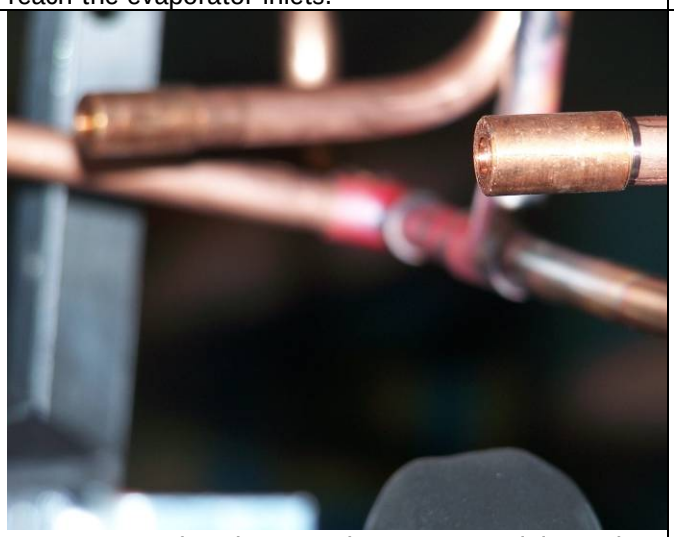


14. Slide the condensing unit into place after bolting to the

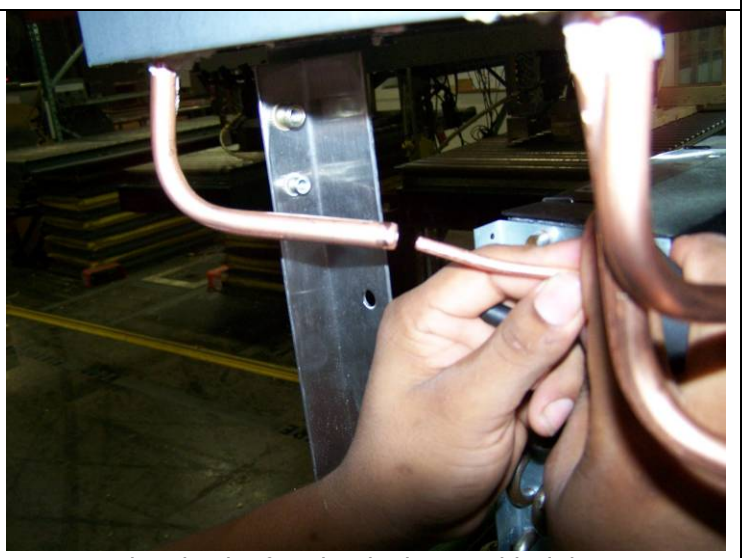
galvanized compressor plate from the old condensing unit.

15. Situate the AEV in a vertical position and bend the distributor tubes straight up as much as possible. Route the distributor tubes to allow each circuit to reach the evaporator inlets.

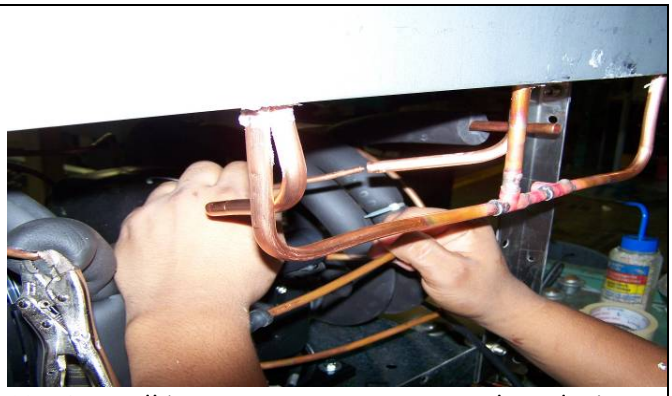
16. You will receive three 3/8” to 3/16” reducers in this kit.



17. Insert each reducer on the evaporator inlet and prepare for insertion of 3/16” distributor tubing.



18. Insertion depth of each tube is not critical, however, please ensure that a minimum of 1” is inserted.



19. Once all braze operations are complete, leak check with a liquid leak detector and 200 psig of nitrogen.

20. Insulate the refrigeration tubing as it was before servicing. This optimizes unit operation and prevents excessive condensation. **The Automatic expansion valve is preset at the factory (26 psig +/-2) and should not require any adjustment.**

21. Evacuate the system to at least 500 microns. **Charge the system with either 14oz (48" & 60") or 16oz/17oz (74" & 86") of R404A refrigerant depending on unit model number. Place the RETROFIT LABEL provided next to the existing DATA LABEL on the unit for future Service work reference.** Leak check the system with a good quality electronic leak detector. Insulate the distributor tubes with the insulation provided. Insulate the suction line with cork tape provided. Reconnect to power source and test run the system.

22. Reinstall the louver and the lower auxiliary shelving. Contact the service department with any questions at **1-800-735-3853.**

INSTRUCTIONS FOR AXV KIT ON THE TRI-CHANNEL UNITS.

1. Disconnect power to the unit.
2. Install line tap valve on high side process tube. Recover refrigerant.

3. Removal of the lower shelf is necessary to pull the condensing unit out from under the unit. Remove front louver as well (4 screws or lift off).

4. Unscrew (1) bolt at front of tray behind louver. Slide the condensing unit forward to allow access to the capillary inlets to the evaporator.

5. Cut the capillary tubing out just above each inlet reducer. Once this is complete, remove the condensing unit.

6. Set the unit out where it will be easy to work with.

7. Cut the capillary tubing off where it exits the insulation from both sides of the courtesy loop heat exchanger.

8. Unsweat the liquid line assembly at the condenser outlet.

9. Discard existing capillary tubing and drier.

10. Unpack and inspect the kit for damage.
11. The kit should consist of the following:
    - Liquid line assembly
    - Wire zip ties
    - Rubatex insulation
    - Cork Tape
    - 3/8” Copper Coupling
    - 3/8” to 3/16” reducers

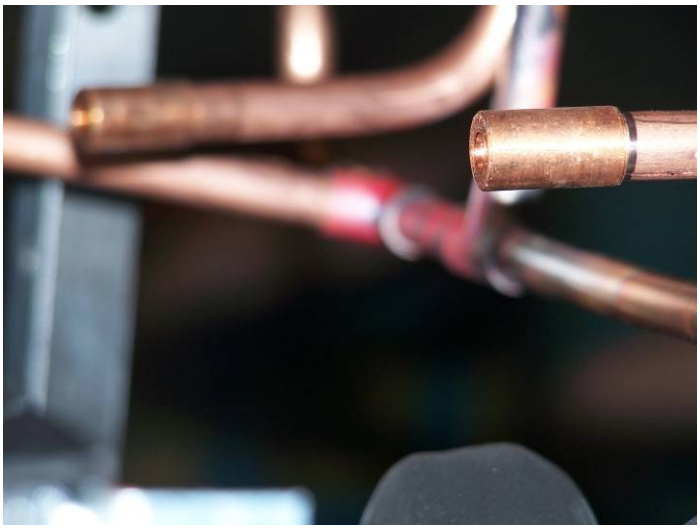
12. The new liquid line assembly has a 3 circuit Automatic Expansion Valve and an Accumulator (under the insulation). It also contains a Filter Drier. (uninsulated)

13. Begin reassembly by placing the liquid line courtesy loop in between the suction line and the accumulator as shown.

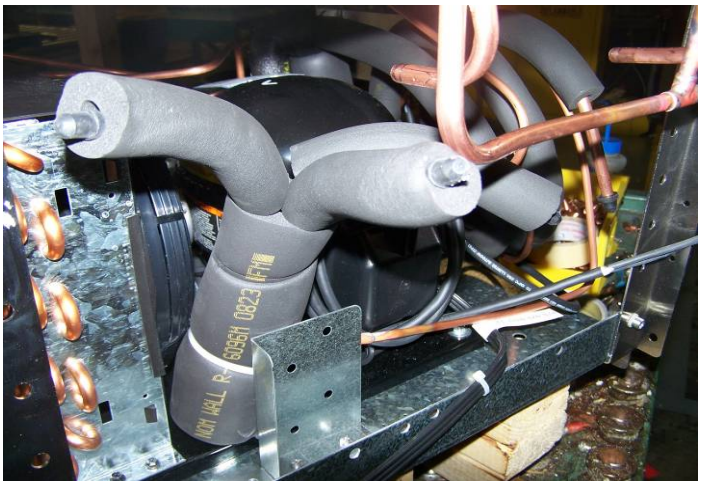
14. Insert the liquid line into the condenser outlet and braze joint.
NOTE: It is very important to flow a slight amount of nitrogen through the system while brazing to prevent internal oxidation of the copper.

15. Slide the condensing unit back into place and bolt back down to cage.
16. Prepare to braze the distributor tubes in place by first cleaning the evaporator inlets.

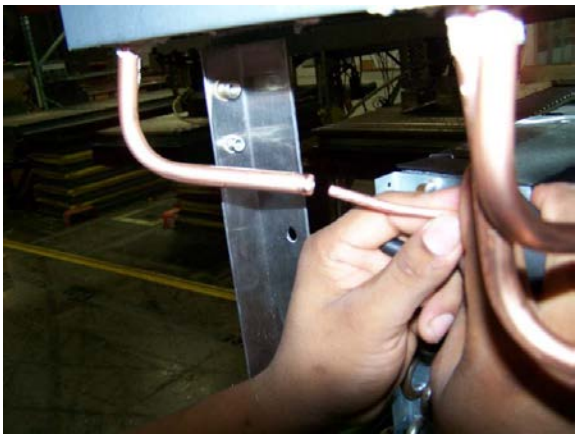
17. You will receive three 3/8” to 3/16” reducers in this Kit.



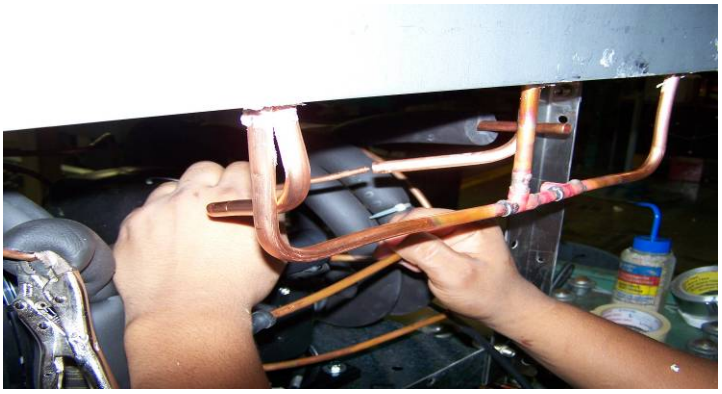
18. Insert each reducer on the evaporator inlet and prepare for insertion of 3/16” distributor tubing.



19. Situate the AXV in a vertical position and bend the Distributor tubes straight up as much as possible. Route Tubes to allow each circuit to reach the evaporator inlets.



20. Once all braze operations are complete, leak check with a liquid leak detector and 200 psig of nitrogen.



21. Insulate the refrigeration tubing as it was before servicing. This optimizes unit operation and prevents excessive condensation.

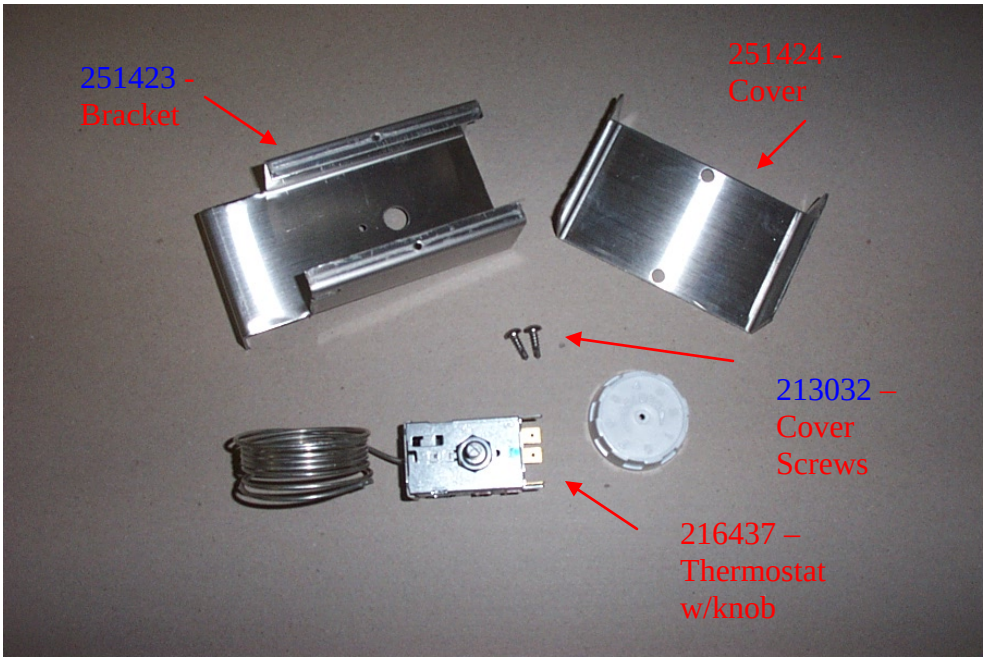
22. Evacuate the system to at least 500 microns. **Charge the system with either 14oz (48" & 60") or 16oz (74" & 86") of R404A refrigerant depending on unit model number. Place the RETROFIT LABEL provided next to the existing DATA LABEL on the unit for future Service work reference.** Leak check the system with a good quality electronic leak detector. Insulate the distributor tubes with the insulation provided. Insulate the suction line with**.** cork tape provided. Reconnect to power source and test run the system. **The Automatic expansion valve should be adjusted to 26 psig +/-2**

23. Reinstall the louver and the lower auxiliary shelving. Contact the service department with any questions at **1-800-735-3853.**

Subway Standard 7 Cold Pan Thermostat Instructions

This kit is intended for use on Subway Cold Pans built from March 1998 to June 2003.

The kit includes:

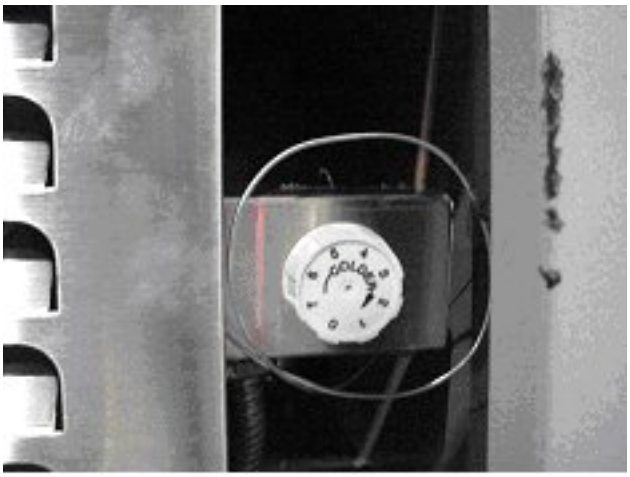


If the cold pan thermostat looks like this,

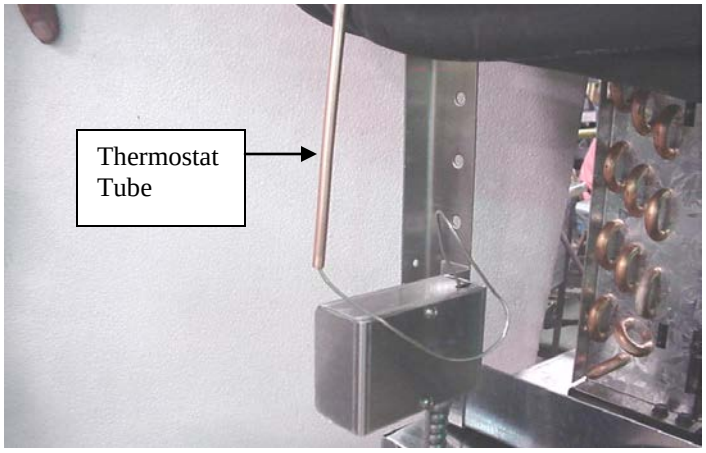
Remove the thermostat from the system and replace with the kit.

Subway Standard 7 Cold Pan Thermostat Instructions

If the cold pan thermostat looks like this,



then only change the thermostat itself.



Insert thermostat coil into thermostat tube. Measure that 28” is inside of thermostat tube.

STOP

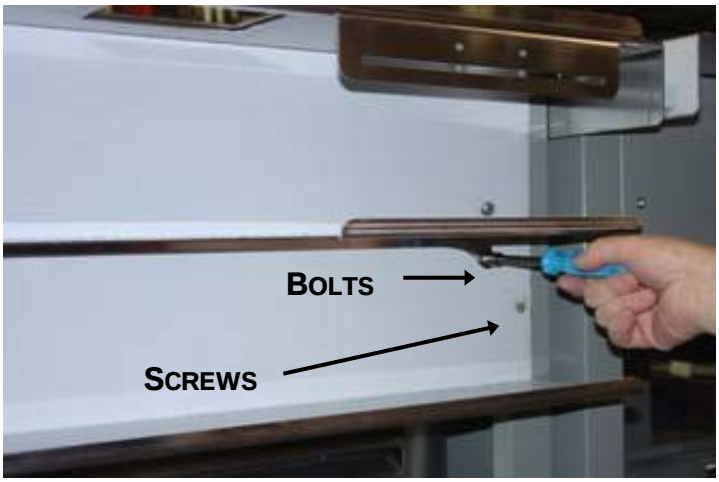
BEFORE PROCEEDING MAKE SURE UNIT IS DISCONNECTED FROM ALL POWER SOURCES.

SERVICE MAY BE PERFORMED FROM THE FRONT OR BACK OF THE UNIT; HOWEVER, THE SERVICE TECHNICIAN MAY FIND IT EASIER TO ACCESS THE COMPRESSOR COMPARTMENT THROUGH THE FRONT OF THE COUNTER (OR THE CUSTOMER'S SIDE). THIS CAN ONLY BE DONE ON UNITS WITH DUKE DÉCOR PANELS APPLIED DIRECTLY TO THE FACE OF THE CABINET. PANELS INSTALLED ON A WALL OR CERAMIC TILE MAY NOT ALLOW FOR THIS PROCEDURE.

To remove the décor panels from a unit with a fold down Day Cover, pull up on the panel and slide from under the lip of the unit.

To remove the décor panel from a unit with stationary glass, loosen the screws in the glass extrusion and pull up on the panel, slide it from the lip.

This is the operator's side of the Tri-Channel Unit.



Remove the screws and bolts from the lower functionality shelf.

This will expose the Compressor compartment for the unit. Remove the four corner screws on the louver cover to expose the condensing unit.

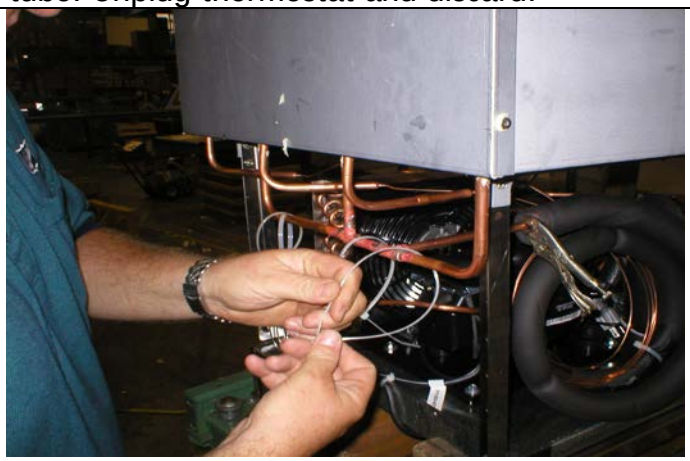
Remove bolt from condensing unit slide plate.

Slide the condensing unit forward to expose the manifold area.

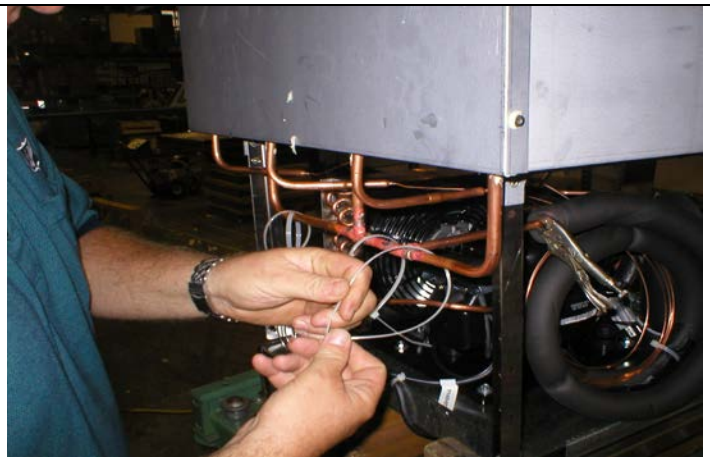
NOTE: If the unit you are servicing has a thermostat (capillary mounting ¼" copper mounted on the manifold) disregard from here forward and simply change out the thermostat.

Cut away foam insulation sleeve to expose manifold. Pull thermostat wire from copper tube. Unplug thermostat and discard.

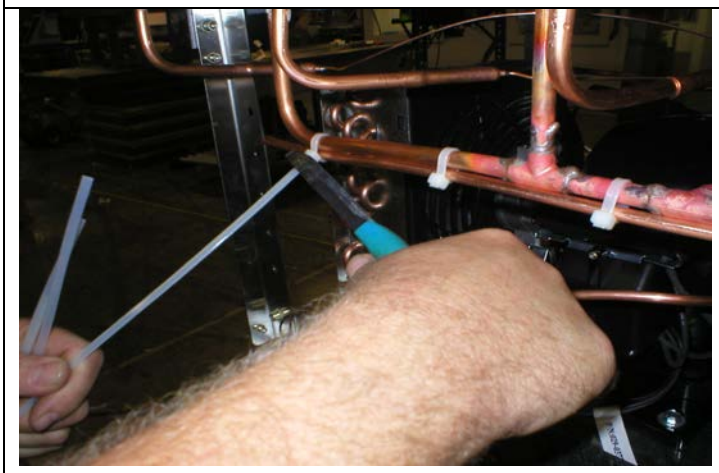
After removing the insulation, the manifold is now bare and ready for installing the capillary mounting tubing.



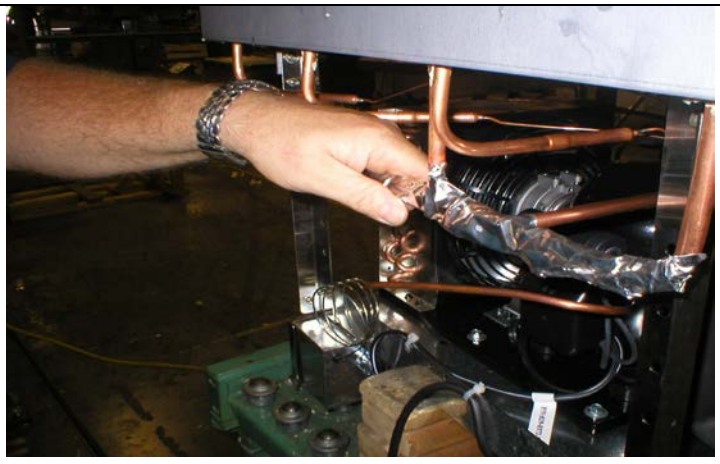
Prepare by first installing the four zip ties as shown.



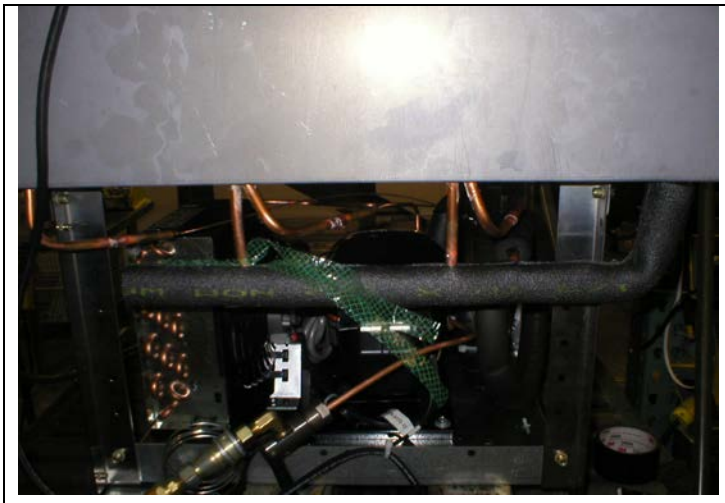
Insert ¼" tubing and secure with ties leaving about 1" out (open end) from the 90 degree bend closest to the condenser coil.



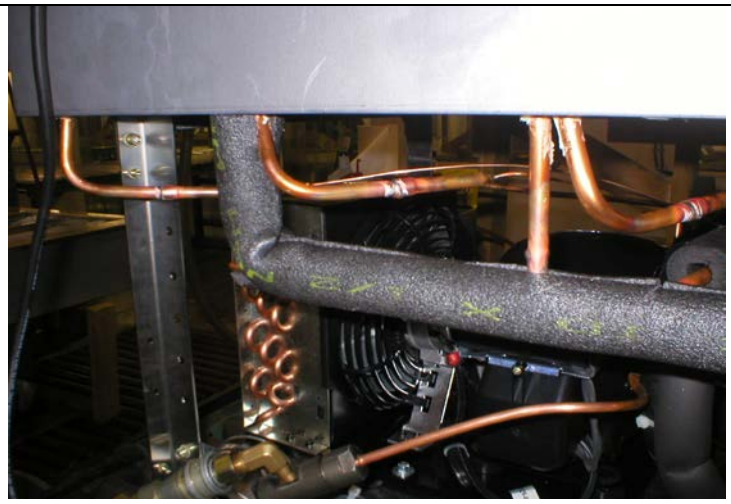
Trim ties.



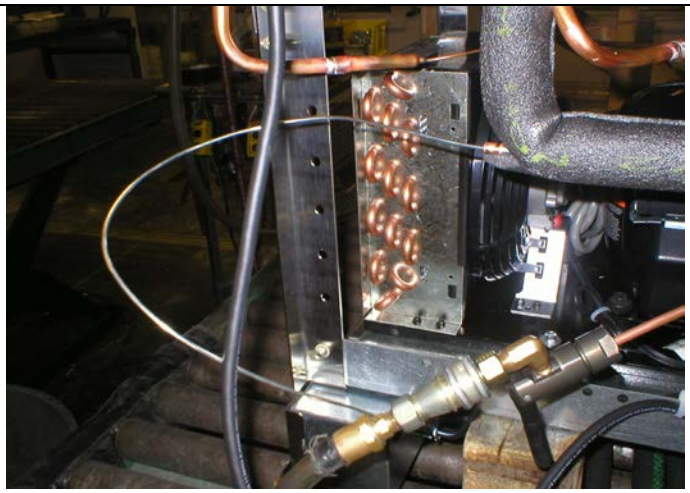
Cover completely with foil tape.



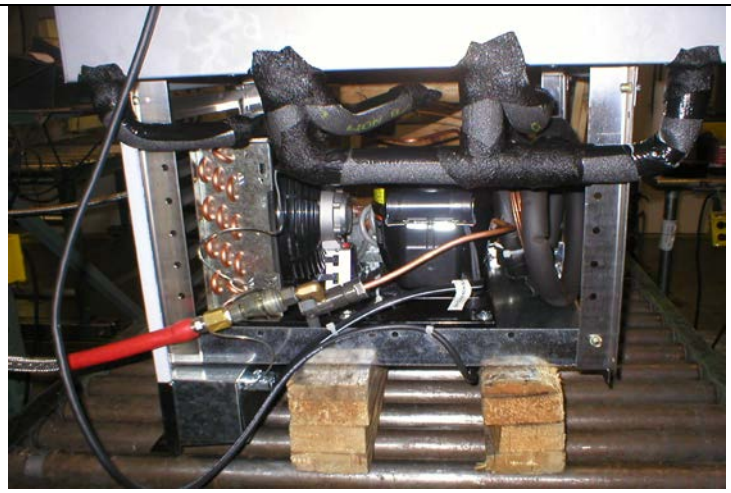
Install split insulation to manifold.



Ensure ¼" copper is exposed to allow the thermostat bulb insertion.



Thermostat capillary inserted in ¼" tubing.



Continue with insulating as shown, ensuring the bulb and all areas shown have cork tape in place. Reverse the first seven steps to complete the service work. Plug the tri rail back into its power source and test the system. **NOTE:** Technical support may ask for a checklist to be filled out at this point.