# INSTALLATION INSTRUCTIONS LOW AMBIENT CONTROL 7½, 8½, 10, 12½, 15 AND 20 TON ROOFTOP AND PACKAGED A/C



Recognize this symbol as an indication of Important Safety Information!

# **A WARNING**

THESE INSTRUCTIONS ARE INTENDED AS AN AID TO QUALIFIED SERVICE PERSONNEL FOR PROPER INSTALLATION, ADJUST-MENT, AND OPERATION OF THIS KIT. READ THESE INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING INSTALLATION, ADJUSTMENT, OR OPERATION. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN IMPROPER INSTALLATION, ADJUSTMENT, SERVICE OR MAINTENANCE, POSSIBLY RESULTING IN FIRE, ELECTRICAL SHOCK, PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH.

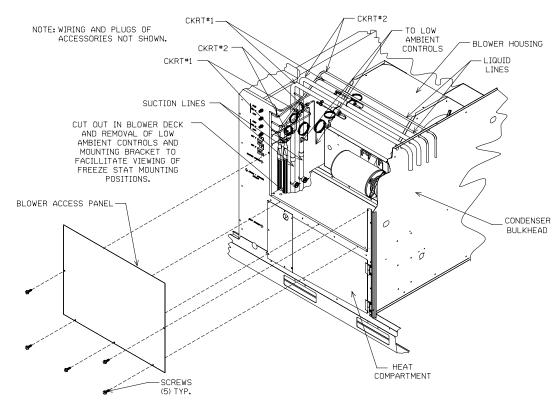
# **WARNING**

BEFORE BEGINNING ANY MODIFICATION, BE SURE MAIN DISCONNECT SWITCH IS IN THE "OFF" POSITION. FAIL-URE TO DO SO CAN CAUSE ELECTRICAL SHOCK RESULTING IN PROPERTY DAMAGE, PERSONAL INJURY OR DEATH. TAG DISCONNECT WITH A SUITABLE WARNING LABEL.

#### 1. INSTALLATION PROCEDURE

IMPORTANT: When making flare connections, use a backup wrench to avoid breaking the adapter tee or splitting the flare. Tighten the connection with a quarter turn torque.

- Remove blower access panel and place it aside for working space.
- B. Refer to Figures 1A and 1B for location of the Low Ambient Controls for the 7.5 through 12.5 ton units. For the 15 and 20 ton units, refer to Figure 1C. (The two Low Ambient Control's 1 & 2 are installed onto the bracket secured by a strap and fastened with three screws provided by the factory.)
  - Loosen the two screws (two full turns counter-clockwise) located to the left of the blower deck (as shown on Figure 1B and 1C).



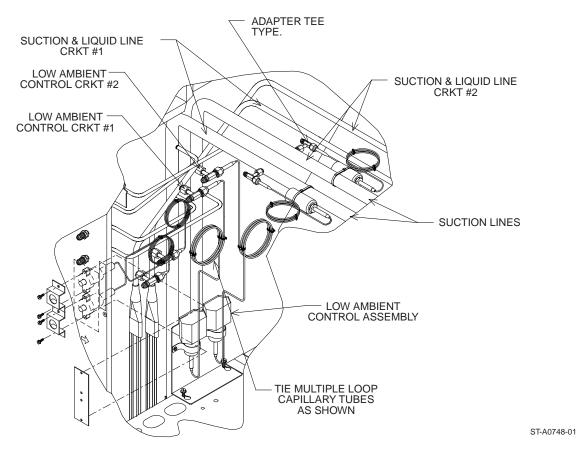


FIGURE 1B. CONTROL LOCATION 7%, 8%, 10, 12% TON

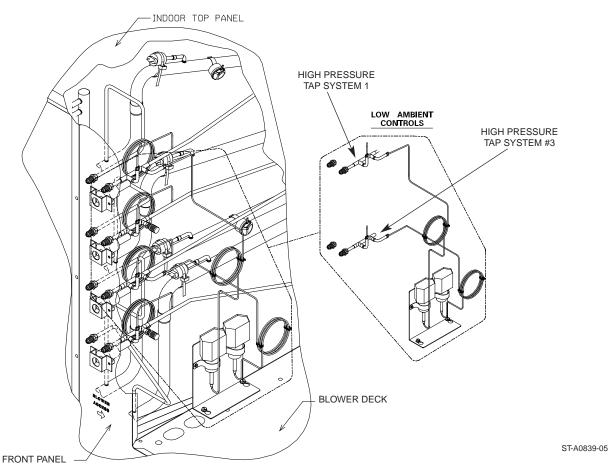


FIGURE 1C & 1D. CONTROL LOCATION 15 AND 20 TON

- Locate the two key slide holes on the bracket, and place them over the two screws. Tighten the screws after sliding the bracket away from the edge of the blower deck.
- Connect the Low Ambient Control 1/4" flare nut, mounted on the capillary tube, to the side of the tee that does not have the valve core installed.
- Remove the cap, from the service port, located on the liquid line.
- Mount the adapter tee, with the side of the flare nut, onto the liquid line service port. For 15 and 20 ton units, connect the adapter tees to systems #1 and #3.
- Check for leaks, with bubble solution or electronic leak detector (pressure-test if the system is not chargd with refrigerant), before turning on the system.
- 7. Secure the capillary tube-loop, with two wire ties (as shown in Figure 1B). Ensure that the tube-loop is prevented from rubbing against other copper surfaces. This will prevent refrigerant leaks, due to vibration, created by the operation of the system.
- Let the system run for approximately five minutes.
   After the high and low sides have balanced to an adequate pressure, then check all connections for refrigerant leaks and repair as necessary.
- Let the system run for approximately 15 minutes to ensure that the system is operating in an adequate condition.

Clean out and check for any left-over parts or tools in the compartment before concluding the installation.

# 2. ELECTRICAL CONNECTION

- A. Refer to the wiring diagram in Figures 2A and 2B for proper connection for the 7.5 - 12.5 ton units. Refer to Figures 2A and 2C for the proper connections on the 15 and 20 ton units..
- B. Remove, then discard PL10 and PL11 polarized quick connect plugs (the wire bundle located to the left of the blower compartment) located in the blower compartment.
- C. Insert the first set of male polarized quick connect plug (LAC 1) into PL9 (CKT #1) for 7.5 - 12.5 ton units. Connect LAC1 to PL8 (CKT #1) for 15 and 20 ton units. (Refer to Figure 2C.)
- D. Insert the first set of male polarized quick connect plug (LAC 2) into PL8 (CKT #2) for 7.5 - 12.5 ton units. Connect LAC2 to PL9 (CKT #3) for 15 and 20 ton units.
- E. Ensure that all connections are securely fastened by pulling the polarized quick connect plugs after the male and female components are inserted together with a minimum torque.
- F. Secure all loose wires with wire ties.
- G. Restore power after checking all connections.

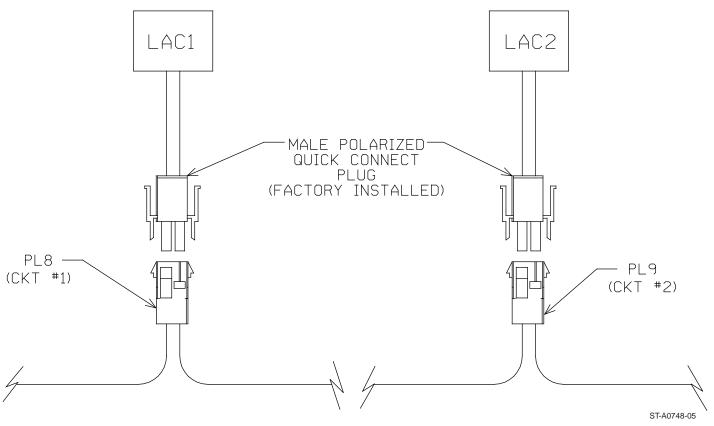
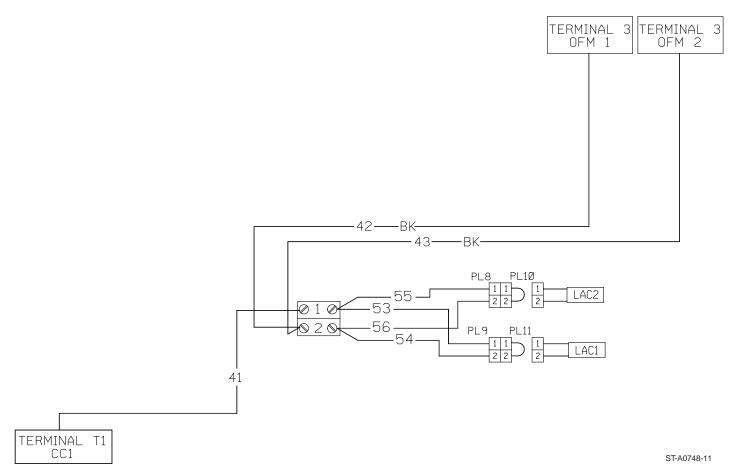


FIGURE 2A.



# **FIGURE 2B**

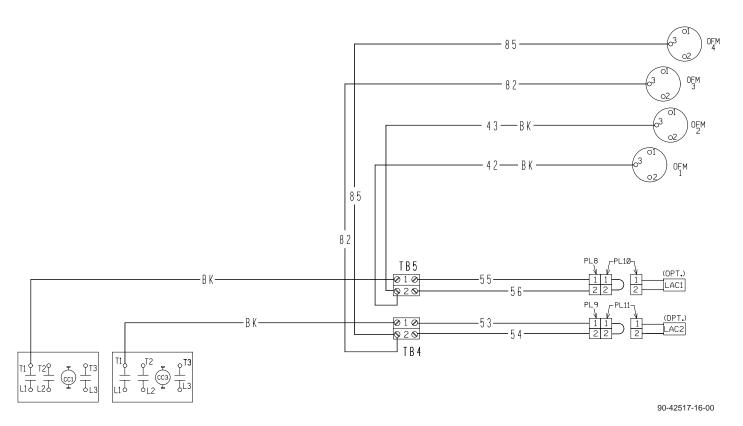


FIGURE 2C