Installer's Guide



Uncased Vertical Aluminum Upflow/Downflow Coils 2/4TXAC049BC3HUA

2/4TXAA018BC3HUA 2/4TXAA024BC3HUA 2/4TXAB025BC3HUA 2/4TXAB031BC3HUA 4TXAB032BC3HUA

2/4TXAB036BC3HUA

2/4TXAC037BC3HUA 4TXAC044BC3HUA

2/4TXAB042BC3HUA 2/4TXAD050BC3HUA 2/4TXAC060BC3HUA 2/4TXAC043BC3HUA 2/4TXAD061BC3HUA 2/4TXAB048BC3HUA 2/4TXAD064BC3HUA

ALL phases of this installation must comply with NATIONAL, STATE AND LOCAL CODES

IMPORTANT — This Document is **customer property** and is to remain with this unit. Please return to service information pack upon completion of work.

A. GENERAL

These aluminum coils are designed for use in combination with a heat pump or cooling outdoor section using R-22(2TXA) or R-410A (4TXA) REFRIGERANT.

These coils are designed for vertical installation with either up or down airflow used in combination with a heat pump or cooling outdoor section. They may be combined with a Gas, Oil, or Electric Furnace (indoor unit) for a complete system that will provide maximum comfort and energy efficiency during the entire year.

This equipment has been evaluated in accordance with the Code of Federal Regulations, Chapter XX, Part 3280 or the equivalent. "Suitable for Mobile Home use" The height of the Furnace, Coil and discharge duct work must be 7 ft or

Inspect the coil for shipping damage. Notify the transportation company immediately if the coil is damaged.

B. APPLICATION INFORMATION

1. FURNACE AND COIL

Coil MUST BE installed downstream (in outlet air) of the furnace.

These coils fit the 40 inch tall furnaces without any adapters required.

2. INDOOR UNIT AIRFLOW

Indoor unit must provide the required airflow for the heat pump or cooling combinations approved for these coils.

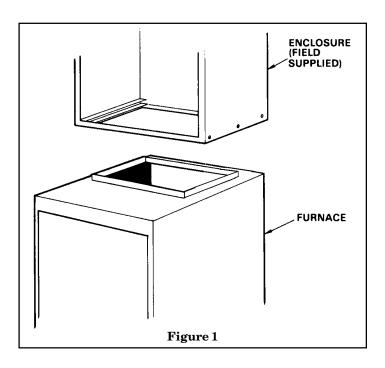
IMPORTANT: Check the outline drawings and note all dimensions before beginning the installation.

C. RECOMMENDATION

If these coils are part of the total system installation, then use the Installer's Guide packaged with the furnaces, and outdoor sections, and thermostat for physically installing those components.

D. INSTALLING THE TXA COILS

- 1. Be sure the furnace is turned off and the flue pipe is removed if it is in the way.
- 2. Slide the coil into the field fabricated enclosure (if used).
- 3. Position the tube plate over the refrigerant fittings and against the tube bracket of the coil and secure to the enclosure.
- 4. Reinstall the front panel.
- 5. Reinstall the flue pipe (if removed).



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F. INSTALLING REFRIGERANT LINES

The following steps are to be considered when installing the refrigerant lines:

- a. Determine the most practical way to run the lines.
- b. Consider types of bends to be made and space limitations.

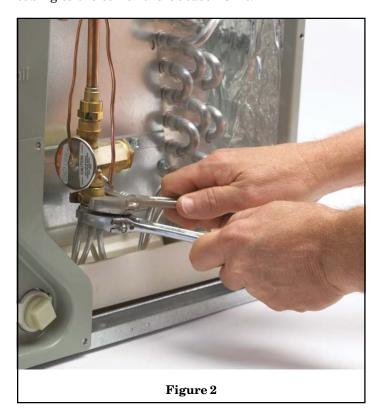
NOTE: Large diameter tubing sizes will be difficult to rebend once it has been shaped.

- c. Determine the best starting point for routing the refrigerant tubing --INSIDE OR OUTSIDE THE STRUCTURE.
- d. Provide a pull through hole of sufficient size to allow both liquid and gas lines to clear. The location of this hole (if practical) should be just above the wall plate which is resting on the foundation.
- e. Be sure the roll of tubing is of sufficient length.
- f. Uncoil the tubing do not kink or dent. If the line set is prefabricated with fittings, the Quick-Attach fittings with the pressure tap always connects to the outdoor unit and the indoor fittings must be removed.
- g. Route the tubing making all required bends. Properly secure the tubing before making final connections.

NOTE: These lines must be isolated from the structure and the holes must be sealed weather tight after installation

G. FIELD FABRICATED INTERCONNECTING LINES

a. The following procedure should be used for connecting tubing to the coil or the Outdoor Unit.



NOTE: Torque specification for TXV equals 1/6 turn passed finger tight. Back wrench as shown in figure 2.

BRAZING TO EVAPORATOR

IMPORTANT: Do not unseal refrigerant tubing until ready to cut and fit refrigerant lines.

There is only a holding charge of dry air in the indoor coil, therefore no loss of operating refrigerant charge occurs when the sealing plugs are removed.

NOTE: TXV bulb <u>MUST</u> be protected (wrapped with wet rag) or removed while brazing the tubing. Overheating of the sensing bulb will affect the functional characteristics and performance of the comfort coil.

- 1. Remove both seals from the indoor coil. The braze caps are soft soldered.
- 2. Field supplied tubing should be cut square, round and free of burrs at the connecting end. Clean the tubing to prevent contaminants from entering the system.
- 3. Run the refrigerant tubing into the stub tube sockets of the indoor unit coil.

NOTE: A Reducer fitting is included with the R410A coils for the gas line.

PAINTED AREAS OF THE UNIT MUST BE SHIELDED DURING BRAZING.

- 4. Braze and evacuate according to indoor and outdoor installation instructions.
- 5. Flow a small amount of nitrogen through the tubing while brazing.
- 6. Use good brazing technique to make leakproof joints.
- 7. Minimize the use of sharp 90° bends.
- 8. Insulate the suction line and its fittings.
- 9. Do NOT allow un-insulated lines to come into contact with each other.

A CAUTION

Do <u>NOT</u> open refrigerant valve at the outdoor unit until the refrigerant lines and coil have been brazed, evacuated, and leak checked. This would cause contamination of the refrigerant or possible discharge of refrigerant to the atmosphere.

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H. LEAK CHECK

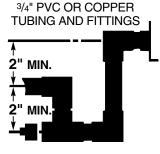
- 1. Using a manifold gauge, connect an external supply of dry nitrogen to the gauge port on the liquid line.
- 2. Pressurize the connecting lines and indoor coil to 150 PSIG maximum.
- 3. Leak check brazed line connections using soap bubbles. Repair leaks (if any) after relieving pressure.
- 4. Evacuate and charge the system per the instructions packaged with the outdoor unit.

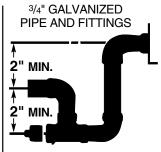
I. CONDENSATE DRAIN PIPING (Figure 3)

Condensate drain connections are located in the drain pan at the bottom of the coil/enclosure assembly. The female threaded fitting protrudes outside of the enclosure for external connection.

- 1. The drain hole in the drain pan must be cleared of all insulation.
- 2. Insulate the drain line to prevent sweating and dripping. Use armaflex or similar material.

CONDENSATE DRAIN PIPING





| QTY. | MATERIALS |
|------|--------------------------------------|
| 1 | TEE |
| 3 | 90° ELL |
| 1 | PLUG |
| 1 | 4" NIPPLE |
| 2 | 2" NIPPLE |
| 1 | 3/4" NPT TO PVC OR COPPER ADAPTER |

 QTY.
 MATERIALS

 1
 TEE

 1
 PLUG

 3
 STREET ELL

 1
 3" NIPPLE

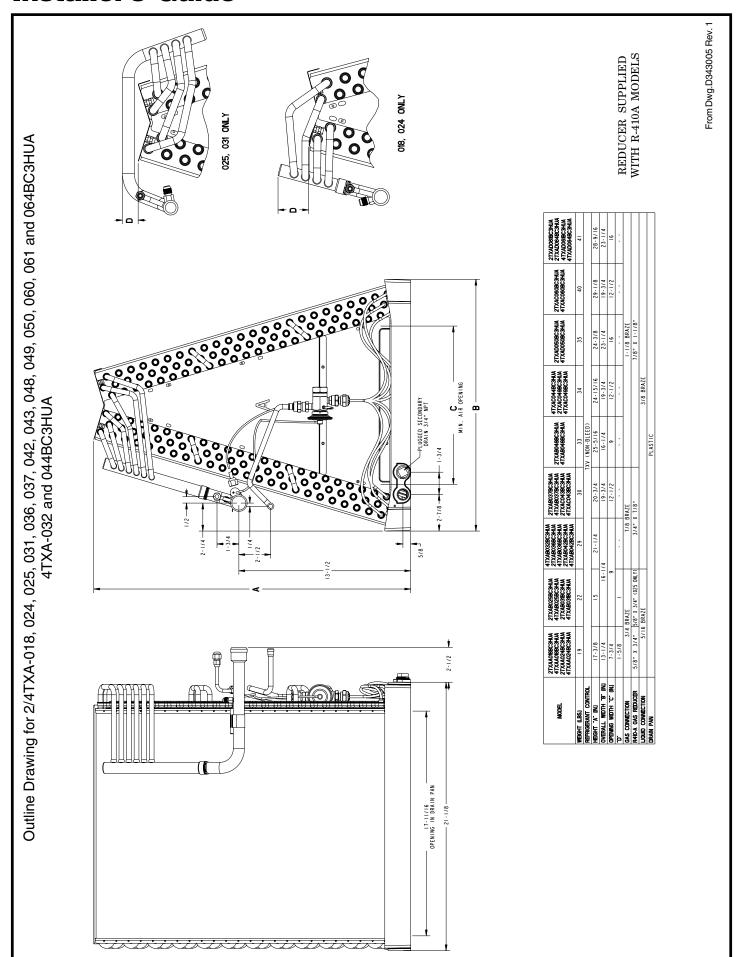
DO NOT USE REDUCING FITTINGS IN THE DRAIN LINES. THE CONDENSATE DRAIN LINE MUST BE:

- 1. MADE OF 3/4" PIPE SIZE.
- 2. PITCHED 1/4" PER FOOT RECOMMENDED TO PROVIDE FREE DRAINAGE TO CONVENIENT DRAIN SYSTEM.
- 3. TRAPPED A PIPE TEE AND CLEAN OUT PLUG SHOULD BE INSTALLED.
- 4. MUST NOT BE CONNECTED TO CLOSED DRAIN SYSTEM.

Figure 3

FROM DWG. 21C128186 FIG 1, R1

Trane Inc. 6200 Troup Highway Tyler, TX 75707



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