# Installer's Guide

**18–AD34D1–3B–EN**

## Uncased Vertical Aluminum Upflow Coils

**4PXAAU24BS3HAA**
**4PXABU24BS3HAA**
**4PXABU30BS3HAA**
**4PXACU30BS3HAA**
**4PXABU36BS3HAA**
**4PXACU36BS3HAA**
**4PXABU42BS3HAA**
**4PXACU42BS3HAA**
**4PXABU48BS3HAA**
**4PXACU48BS3HAA**
**4PXADU48BS3HAA**
**4PXACU60BS3HAA**
**4PXADU60BS3HAA**

**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.

### ⚠ WARNING

**WARNING (Medium/high pressure)**
**Contains Refrigerant!**

**System contains oil and refrigerant under high pressure. Recover refrigerant to relieve pressure before opening the system. See unit nameplate for refrigerant type. Do not use non–approved refrigerants, refrigerant substitutes, or refrigerant additives.**

**Failure to follow proper procedures or the use of non–approved refrigerants, substitutes, or refrigerant additives could result in death, serious injury, or equipment damage.**

### ⚠ WARNING

**This product can expose you to chemicals including lead, which are known to the State of California to case cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov**

### A. GENERAL

These coils are designed for use in combination with a heat pump or cooling outdoor section using ***R-410A REFRIGERANT***. 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.

The 4PXA 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 less.

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

### ⚠ CAUTION

***Caution: This coil is pressurized with 8-12 psi of dry air. Do not stand directly in front of the coil connections when removing sealing plugs. If no pressure is released, check for leaks.***

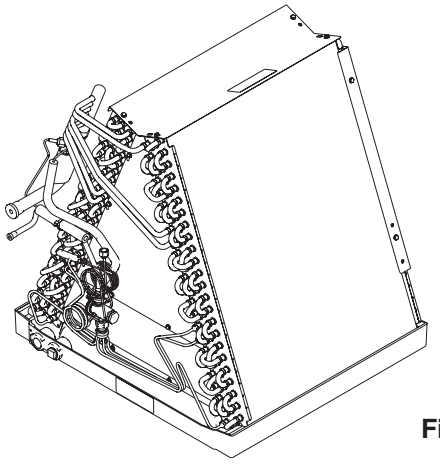


**Figure 1**

### B. APPLICATION INFORMATION

1. FURNACE AND COIL

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

These coils fit the 14½", 17½", 21, and 24½" width furnaces in vertical upflow applications.

2. INDOOR UNIT AIRFLOW

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

***IMPORTANT: Review your installation requirements. Check the table on the outline drawings and note all dimensions for your coil before beginning the installation.***

### C. RECOMMENDATION

If a coil is part of the total system installation, use the Installer's Guide packaged with the furnaces, and outdoor sections, and thermostat for physically installing those components.

**D. INSTALLING / BRAZING REFRIGERANT LINES**

## ⚠ CAUTION

***Do NOT 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.***

1. 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.

c. Route the tubing making all required bends and properly secure the tubing before making final connections.

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

***IMPORTANT:***
***Do not unseal refrigerant tubing until ready to 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 MUST 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 rubber plugs from the indoor coil.

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.

**PAINTED AREAS OF THE UNIT MUST BE SHIELDED DUR–ING BRAZING.**

4. Flow a small amount of nitrogen through the tubing while brazing.

5. Use good brazing technique to make leakproof joints.

6. Minimize the use of sharp 90 degree bends.

7. Insulate the suction line and its fittings.

8. Do NOT allow un-insulated lines to come into contact with each other.

***NOTE:***
***The TXV setting on this unit may run high superheat (15-25°F) by design when measured at the outdoor unit.***

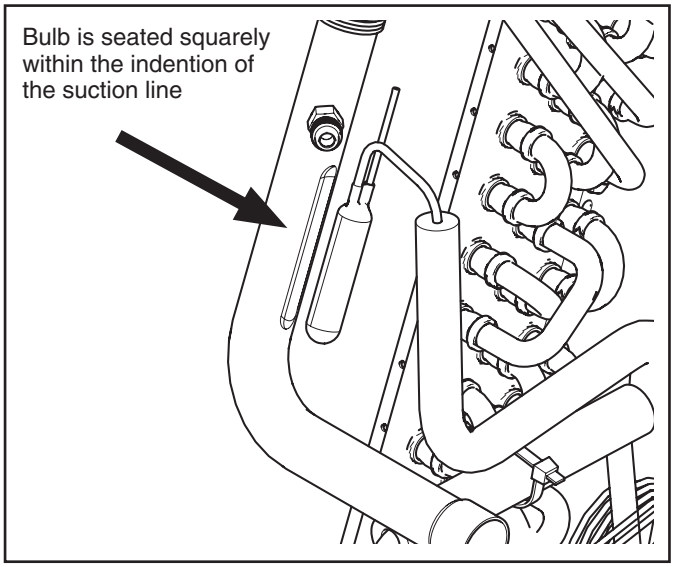



**Figure 4**

***When replacing the bulb and hose clamp, the clamp should be "snug" but not "tight" - spec is to torque the hose clamp to 20+/-5in-lb.***

**E. 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.

**F. CONDENSATE DRAIN PIPING**

Condensate drain connections are located in the drain pan at the bottom of the coil assembly. The female threaded fitting protrudes outside of the assembly for external connection. A field fabricated trap is not required for proper drainage due to the positive pressure of the furnace; however, it is recommended to prevent efficiency loss of conditioned air.

1. The drain hole in the drain pan must be cleared of all insulation.

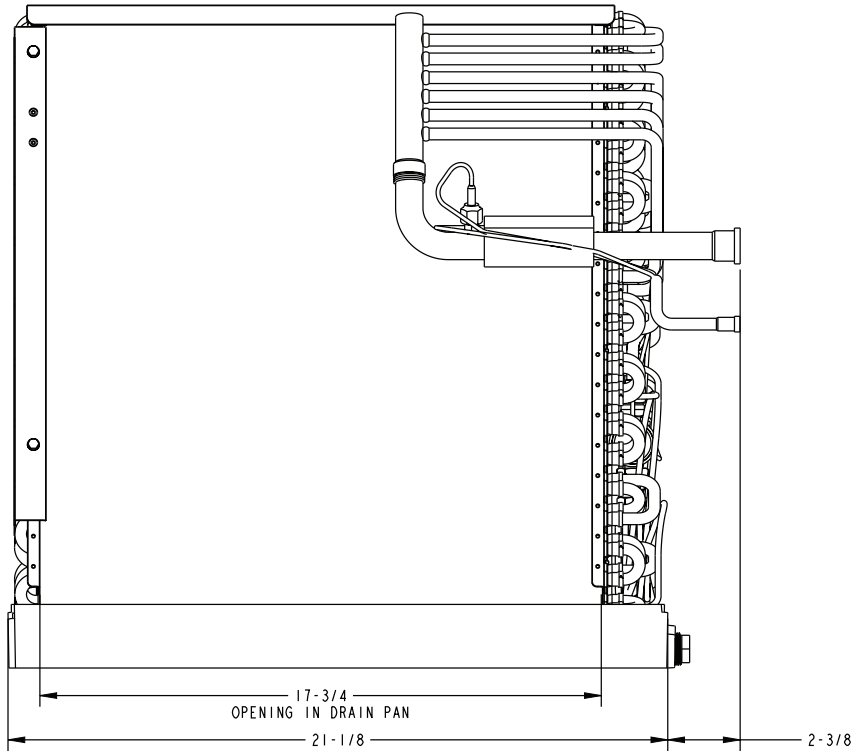
2. Insulate the primary drain line to prevent sweating where dew point temperatures may be met. (Optional depending on climate and application needs)

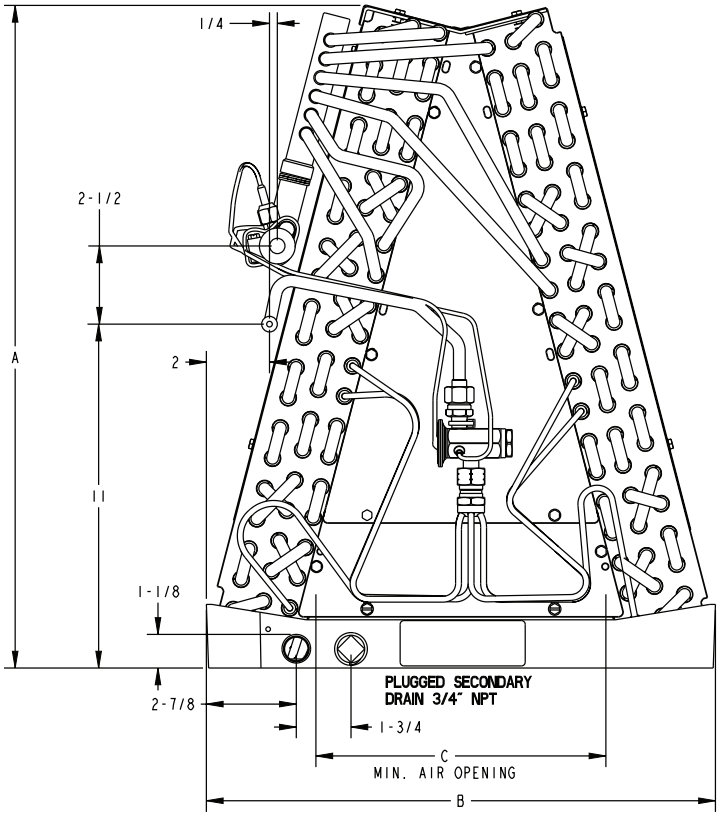
3. Connect the secondary drain line to a separate drain line (no trap is needed in this line).

**G. CLEANING THE COIL**

The inside and outside of the coil can be easily cleaned with a brush and vacuum.

# Outline Drawing for 4PXAAU24BS3HAA, 4PXABU24BS3HAA, 4PXABU36BS3HAA, 4PXACU36BS3HAA, 4PXABU42BS3HAA, 4PXACU42BS3HAA, 4PXABU48BS3HAA, 4PXACU48BS3HAA, 4PXADU48BS3HAA, 4PXACU60BS3HAA, and 4PXADU60BS3HAA. (All dimensions are in inches)

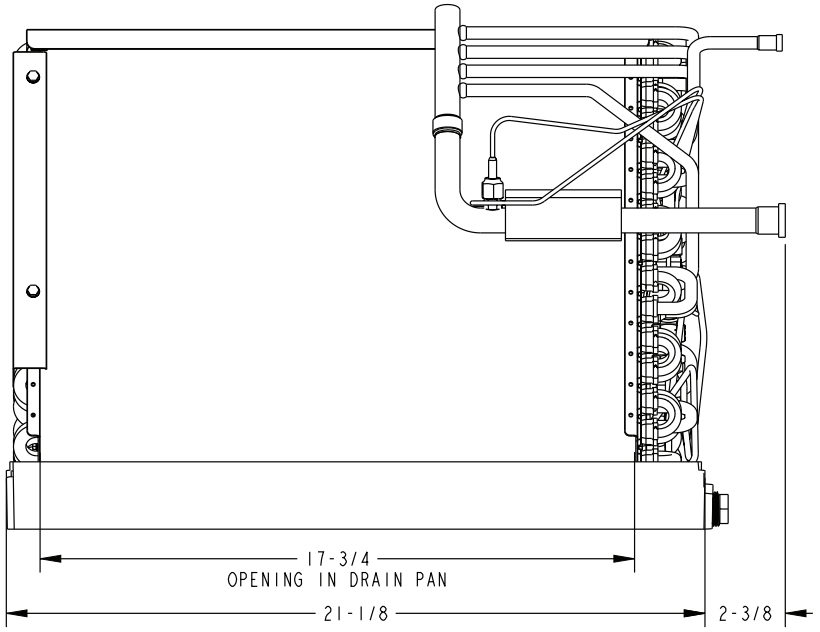


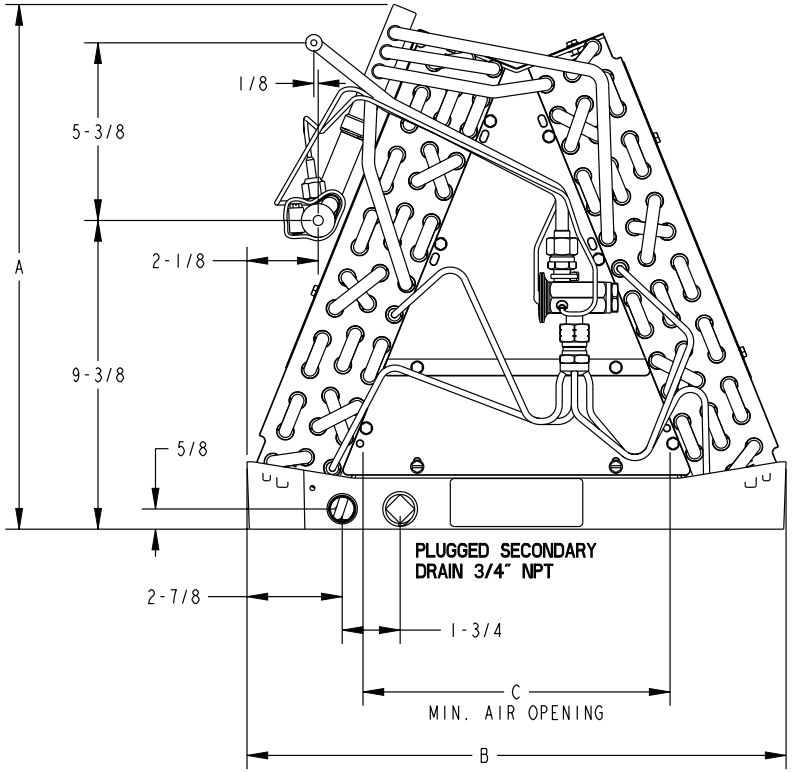




| MODEL | 4PXAAU24BS3 | 4PXABU24BS3 | 4PXABU36BS3 | 4PXACU36BS3 | 4PXABU42BS3 | 4PXACU42BS3 | 4PXABU48BS3 | 4PXACU48BS3 | 4PXADU48BS3 | 4PXACU60BS3 | 4PXADU60BS3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SHIPPING WEIGHT (LBS.) | 28 | 30 | 39 | 40 | 42 | 44 | 44 | 46 | 47 | 52 | 53 |
| REFRIGERANT CONTROL | TXV (NON-BLEED) | | | | | | | | | | |
| HEIGHT "A" (IN.) | 14-5/8 | 14-1/2 | 21-1/4 | 20-3/4 | 23-7/8 | 23-5/8 | 25-1/4 | 24-7/8 | 24-1/2 | 29-1/8 | 28-1/2 |
| OVERALL WIDTH "B" (IN.) | 13-1/4 | 16-1/4 | 16-1/4 | 19-3/4 | 16-1/4 | 19-3/4 | 16-1/4 | 19-3/4 | 23-1/4 | 19-3/4 | 23-1/4 |
| OPENING WIDTH "C" (IN.) | 7-3/4 | 9 | 9 | 12-1/2 | 9 | 12-1/2 | 9 | 12-1/2 | 16 | 12-1/2 | 16 |
| GAS CONNECTION | 3/4 | | 7/8 | | | | | | | | |
| LIQUID CONNECTION | 3/8 | | | | | | | | | | |
| DRAIN PAN | PLASTIC | | | | | | | | | | |

From Dwg.D345419 Rev. B

## Outline Drawing for 4PXABU30BS3HAA and 4PXACU30BS3HAA. (All dimensions are in inches)



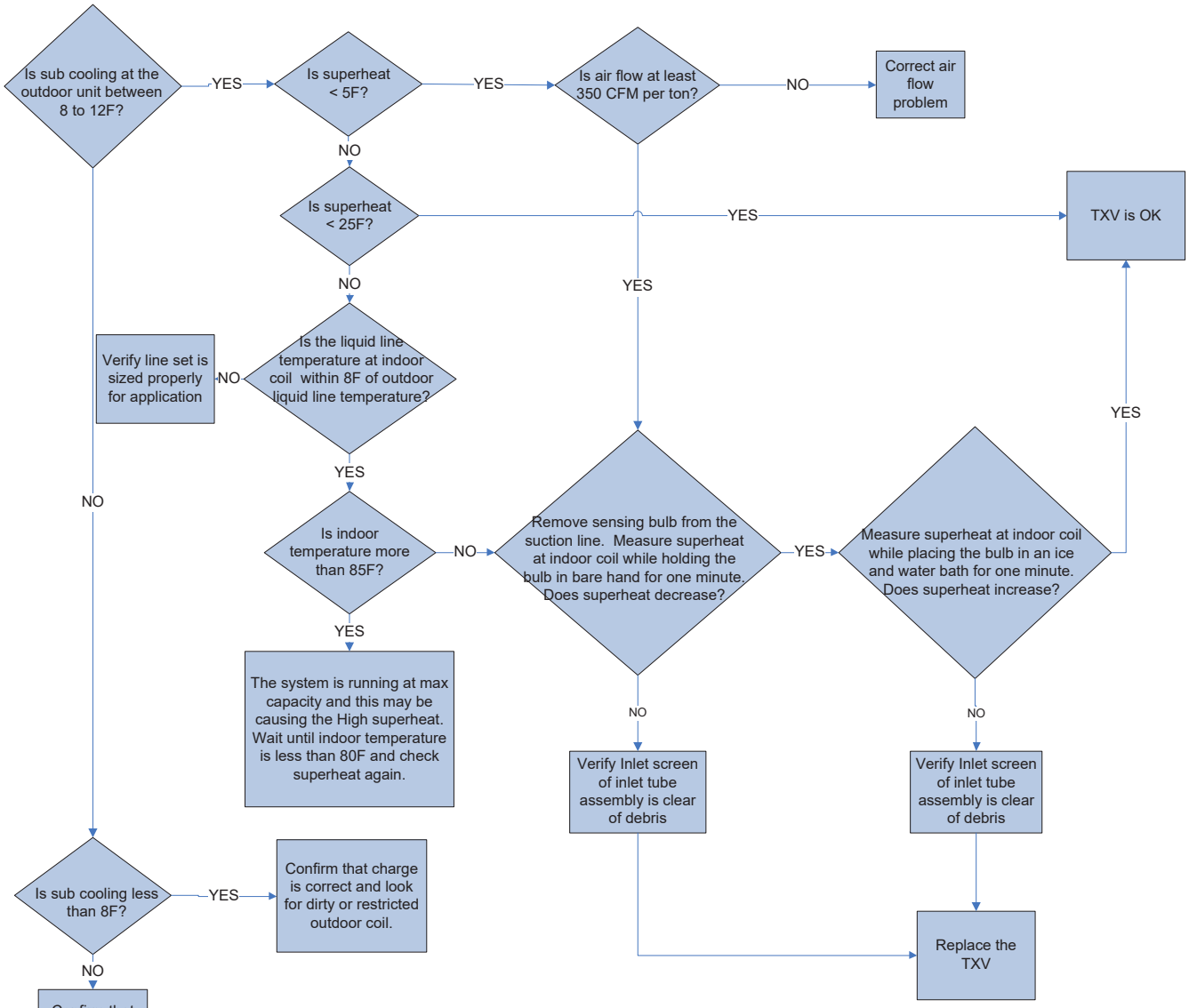



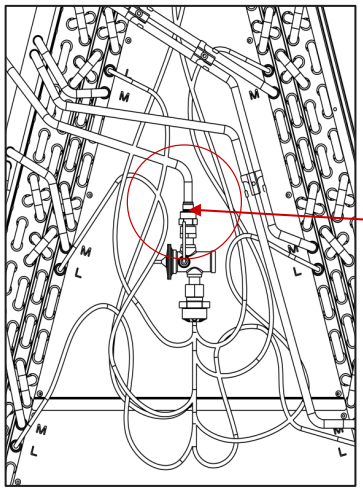

| MODEL | 4PXABU30BS3 | 4PXACU30BS3 |
|---|---|---|
| WEIGHT (LBS.) | 34 | 36 |
| REFRIGERANT CONTROL | TXV (NON-BLEED) | |
| HEIGHT "A" (IN.) | 15-7/8 | 15-7/8 |
| OVERALL WIDTH "B" (IN.) | 16-1/4 | 19-3/4 |
| OPENING WIDTH "C" (IN.) | 9 | 12-1/2 |
| GAS CONNECTION | 3/4 | |
| LIQUID CONNECTION | 3/8 | |
| DRAIN PAN | PLASTIC | |

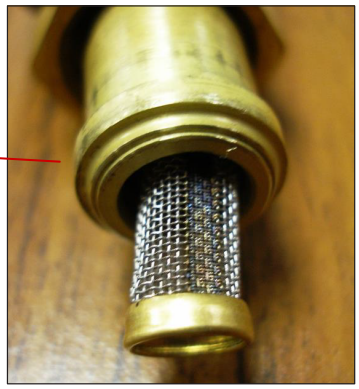
From Dwg.D345418 Rev. B

**Before starting**, insure the blower wheel, indoor and outdoor coils are clean.

## Troubleshooting Indoor TXV / Cooling Mode





About Trane and American Standard Heating and Air Conditioning

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