Cased Aluminum Coils "Dedicated Upflow / Downflow" Convertible to horizontal with separately purchased kit

Upflow models: 4PXCAU24BS3HAA 4PXCBU24BS3HAA 4PXCBU30BS3HAA 4PXCCU30BS3HAA 4PXCBU36BS3HAA 4PXCCU36BS3HAA 4PXCCU42BS3HAA 4PXCCU42BS3HAA

4PXCBU48BS3HAA 4PXCCU48BS3HAA 4PXCDU48BS3HAA 4PXCCU60BS3HAA 4PXCCU60BS3HAA Downflow models: 4PXCAD24BS3HDA 4PXCBD24BS3HDA 4PXCBD30BS3HDA 4PXCCD30BS3HDA 4PXCCD36BS3HDA 4PXCCD36BS3HDA 4PXCCD42BS3HDA 4PXCCD42BS3HDA

4PXCBD48BS3HDA 4PXCCD48BS3HDA 4PXCDD48BS3HDA 4PXCCD60BS3HDA 4PXCDD60BS3HDA

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 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.

A. GENERAL

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

The 4PXC 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 damage. Notify the transportation company immediately if the coil is damaged.

B. APPLICATION INFORMATION

1. FURNACE AND COIL

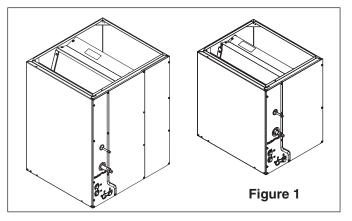
The coil MUST BE installed downstream (in the outlet air) of the furnace.

2. INDOOR UNIT AIRFLOW

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

Table of Contents

General	. 1
Application Information	
Recommendation	. 2
Furnace in Upflow Position	. 2
Furnace in Downflow Position	. 3
Maximum Airflow Setting, CFM	. 3
Installing / Brazing Refrigerant Lines	. 3
Leak Check	. 4
Condensate Drain Piping	. 4
Cleaning the Coil	. 4
Outline Drawings	
Troubleshooting Indoor TXV / Cooling Mode	



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, outdoor sections, and thermostat for physically installing those components.

IMPORTANT:

- Upflow furnaces must be matched with dedicated upflow coils.
- Downflow furnaces must be matched with dedicated downflow coils.
- Horizontal Left furnaces must be matched with dedicated upflow coils and conversion kit.
- Horizontal Right furnaces must be matched with dedicated downflow coils and conversion kit.

IMPORTANT:

If installing the coil in the horizontal position, you <u>MUST</u> use the horizontal kit listed below for this coil model number and follow the instructions in the installation guide provided with the conversion kit.

Model Number	Horizontal Kit No.		
4PXCAU24BS3HAA			
4PXCBU24BS3HAA			
4PXCBU30BS3HAA	BAYCONV18A		
4PXCCU30BS3HAA			
4PXCAD24BS3HDA			
4PXCBD24BS3HDA			
4PXCBD30BS3HDA			
4PXCCD30BS3HDA			
4PXCBU36BS3HAA			
4PXCCU36BS3HAA	BAYCONV23A		
4PXCBD36BS3HDA			
4PXCCD36BS3HDA			
4PXCBU42BS3HAA			
4PXCCU42BS3HAA			
4PXCBU48BS3HAA			
4PXCCU48BS3HAA			
4PXCDU48BS3HAA	BAYCONV27A		
4PXCBD42BS3HDA			
4PXCCD42BS3HDA			
4PXCBD48BS3HDA			
4PXCCD48BS3HDA			
4PXCDD48BS3HDA			
4PXCCU60BS3HAA			
4PXCDU60BS3HAA	BAYCONV30A		
4PXCCD60BS3HDA	BAYCONV30A		
4PXCDD60BS3HDA			

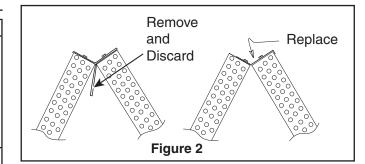
D. FURNACE IN UPFLOW POSITION -APPLICATION USES UPFLOW COIL MODEL ONLY

A CAUTION

Caution: This coil is pressurized with 8-12 psig 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.

1. UPFLOW COIL CONVERSION (Models: 4PXCBU36BS3HAA, 4PXCCU36BS3HAA, 4PXCBU42BS3HAA, 4PXCCU42BS3HAA, 4PXCBU48BS3HAA, 4PXCCU48BS3HAA, 4PXCDU48BS3HAA, 4PXCCU60BS3HAA, 4PXCDU60BS3HAA only) a. For maximum efficiency, remove the factory installed

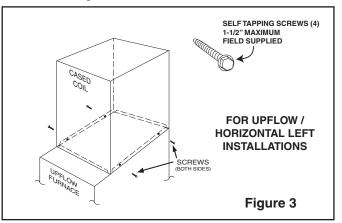
two-piece baffle assembly from the apex of the coil by removing the 5/16" hex head screws. See Figure 2. b. Replace only the top baffle using the same screws previously removed.



2. UPFLOW GAS FURNACE

a. Apply gasket material (duct seal field supplied) to ALL mating surfaces between the furnace and the coil case.

b. Set the coil case on top of the furnace. Connect the ductwork to the coil case using field supplied screws.c. Secure the coil case to the furnace and seal for air leaks as required.



E. FURNACE IN DOWNFLOW POSITION-APPLICATION USES DOWNFLOW COIL MODEL ONLY

CAUTION

Caution: This coil is pressurized with 8-12 psig 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.

1. DOWNFLOW GAS FURNACE

When a coil is used with a downflow furnace, a subbase is not required between the coil case and combustible flooring.

a. Place the coil case on the furnace supply air plenum.

b. Secure the coil case to the plenum.

c. Set the furnace on top of the coil case, making sure that the back side of the discharge opening is snug up against the duct flange at the top rear of the coil case.

d. Secure the coil case to the furnace and seal for air leaks as required. $% \left({{{\mathbf{F}}_{\mathbf{r}}}_{\mathbf{r}}} \right)$

F. MAXIMUM AIRFLOW SETTING, CFM

NOTE:

Water blow-off could occur in certain installation positions if the airflow setting exceeds the maximum values listed.

Maximum airflow setting, CFM				
Coil	Upflow	Horizontal Left		
4PX*U24BS3HAA	900	800		
4PX*U30BS3HAA	1125	1000		
4PX*U36BS3HAA	1350	1200		
4PX*U42BS3HAA	1575	1400		
4PX*U48BS3HAA	1800	1600		
4PX*U60BS3HAA	2250	2000		
* May be "A", "B", "C", or "D"				

Maximum airflow setting, CFM				
Coil	Downflow	Horizontal Right		
4PX*D24BS3HDA	750	900		
4PX*D30BS3HDA	925	1125		
4PX*D36BS3HDA	1100	1350		
4PX*D42BS3HDA	1300	1575		
4PX*D48BS3HDA	1475	1800		
4PX*D60BS3HDA	1850	2250		
* May be "A", "B", "C", or "D"				

NOTE:

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

G. INSTALLING / BRAZING REFRIGERANT LINES

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.

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 DURING 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.

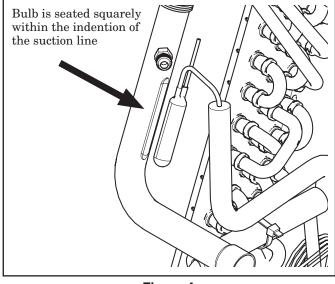


Figure 4

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.

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 $\,\rm PSIG$ 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

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. 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).

J. CLEANING THE COIL

The two piece door (3-piece on 24.5" wide models) allows removal of the outer casing doors without interference from refrigerant or condensate lines. Once the outer doors are removed the split inner coil panels can be easily removed. The inside and outside of the coil can be easily cleaned with a brush and vacuum with the panels removed. See Figure 5.

The foil covered insulation on 4PXC coils should be wiped down and residual dirt and dust should be vacuumed up to maintain good air quality. See Figure 6.

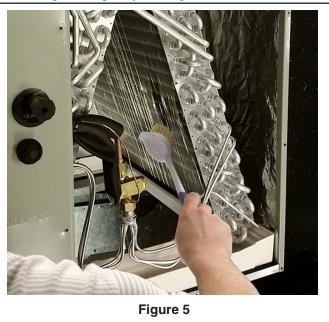
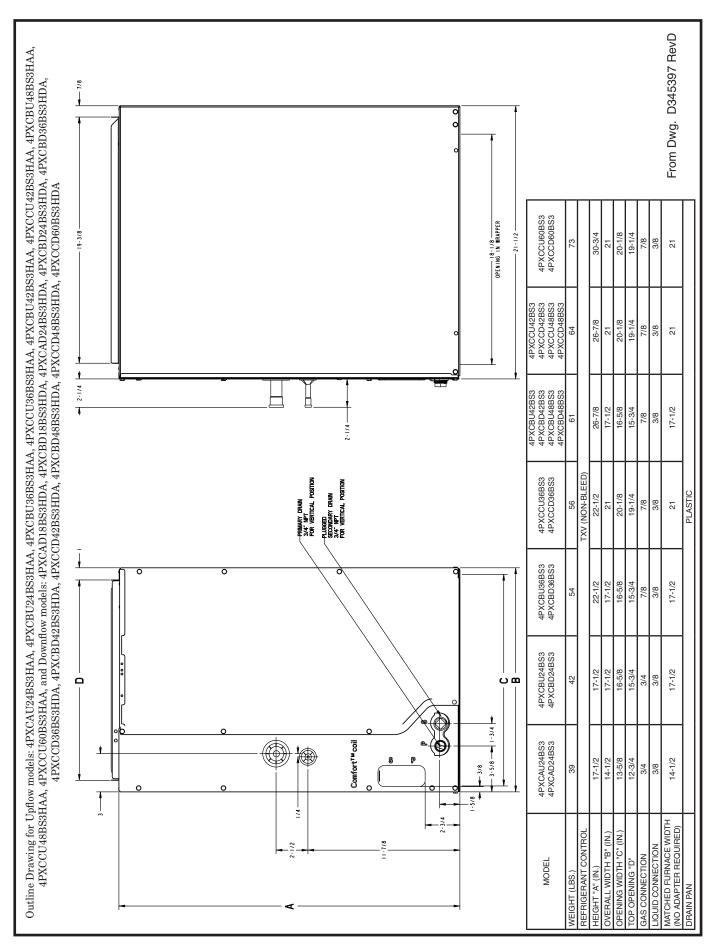
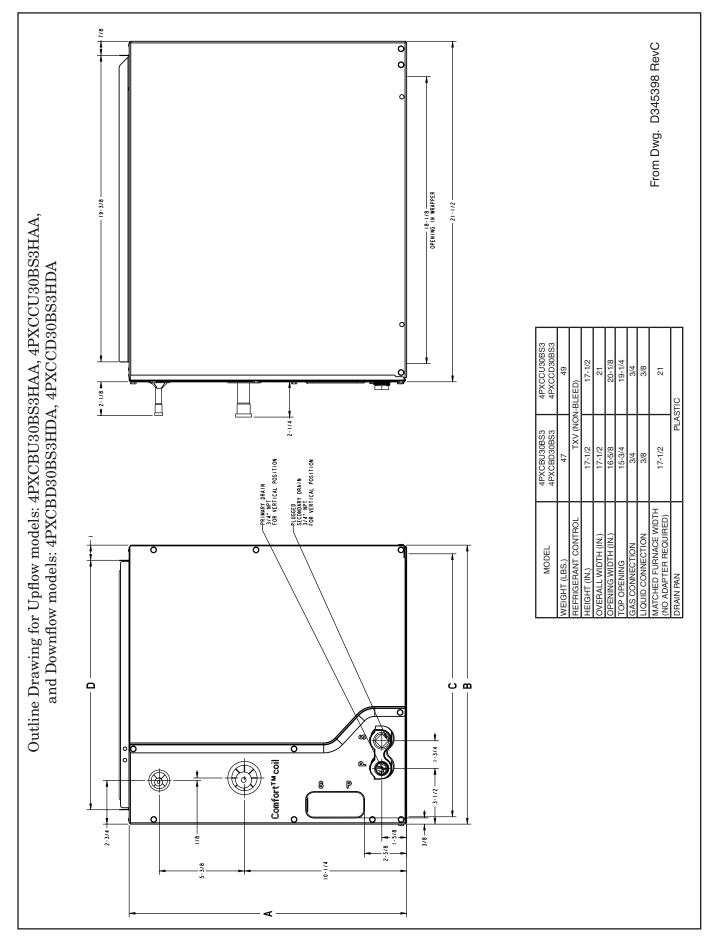
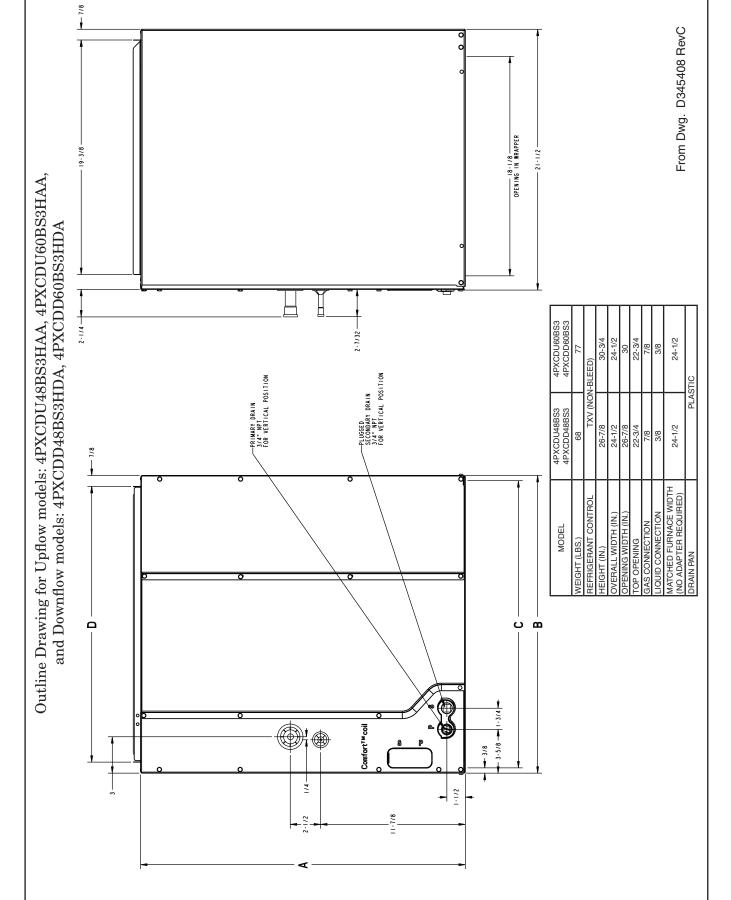


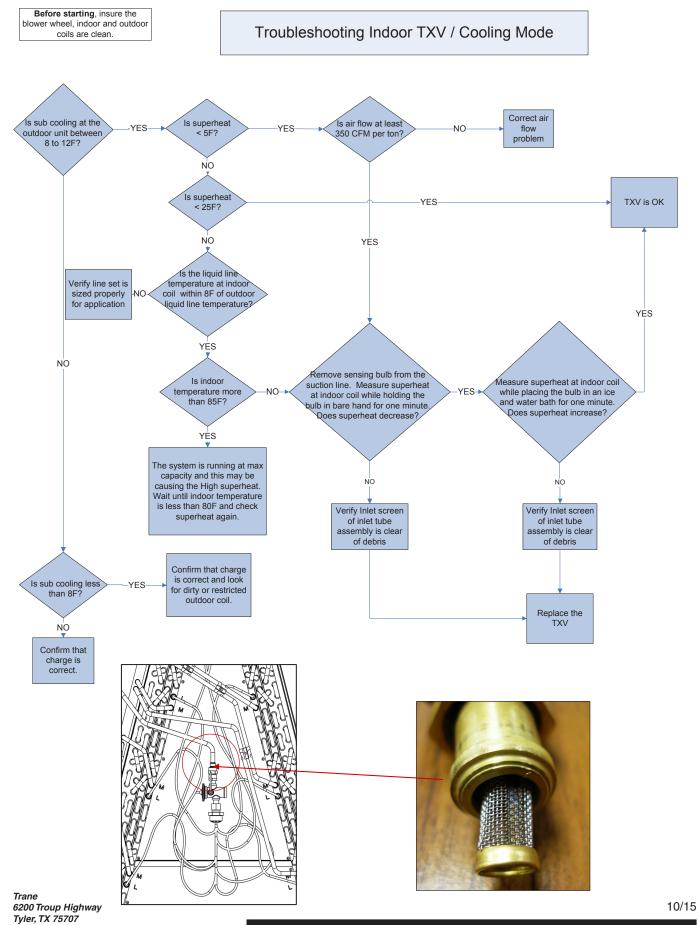


Figure 6









For more information contact your local dealer (distributor)