

# INSTALLATION INSTRUCTIONS FOR EXPANSION VALVE KIT FOR RCBA INDOOR COILS

This Expansion Valve Kit is for installation on RCBA indoor coils in cooling and heat pump applications as shown in the table below. Improper installations or installations not made in accordance with these instructions can result in unsatisfactory operation and are not covered by the unit warranty.

## **RCGA- APPLICATIONS**

	<b><u>PISTON SIZE</u></b>
Use RXCT- BCA to convert RCBA- 24XX? to RCGA- 24A1	0.099
Use RXCT- BCB to convert RCBA- 24XX? to RCGA- 24A2	0.120
Use RXCT- BCC to convert RCBA- 36XX? to RCGA- 36A1	0.140
Use RXCT- BCD to convert RCBA- 36XX? to RCGA- 36A2	0.157
Use RXCT- BCE to convert RCBA- 48XX? to RCGA- 48A1	0.157
Use RXCT- BCF to convert RCBA- 60XX? to RCGA- 60A1	0.172

## **RCGJ- APPLICATIONS**

	<b><u>PISTON SIZE</u></b>
Use RXCT- BCA to convert RCBA- 36XX? to RCGJ- 24A1	0.099
Use RXCT- BCB to convert RCBA- 36XX? to RCGJ- 24A2	0.120
Use RXCT- BCG to convert RCBA- 48XX? to RCGJ- 36A1	0.120
Use RXCT- BCH to convert RCBA- 48XX? to RCGJ- 36A2	0.140
Use RXCT- BCJ to convert RCBA- 60XX? to RCGJ- 48A1	0.140
Use RXCT- BCK to convert RCBA- 60XX? to RCGJ- 60A1	0.157
Use RXCT- BCF to convert RCBA- 60XX? to RCGJ- 60A2	0.172
60XXA	0.140 Coil #1
Use RXCT- BCZ to convert RCBA- and RCGJ- 61A1A 60XXA	0.120 Coil #2

## **RCHA- & RCHJ- APPLICATIONS**

	<b><u>PISTON SIZE</u></b>
Use RXCT- CHA to convert RCBA- 24XX? to RCHA- 24A1	0.099
Use RXCT- CHB to convert RCBA- 24XX? to RCHA- 24A2	0.120
Use RXCT- CHC to convert RCBA- 36XX? to RCHA- 36A1	0.140
Use RXCT- CHK to convert RCBA- 36XX? to RCHA- 36A2	0.140
Use RXCT- CHL to convert RCBA- 48XX? to RCHA- 48A1	0.140
Use RXCT- CHM to convert RCBA- 60XX? to RCHA- 60A1	0.157
Use RXCT- CHA to convert RCBA- 36XX? to RCHJ- 24A1	0.099
Use RXCT- CHB to convert RCBA- 36XX? to RCHJ- 24A2	0.120
Use RXCT- CHC to convert RCBA- 48XX? to RCHJ- 36A1	0.140
Use RXCT- CHD to convert RCBA- 48XX? to RCHJ- 36A2	0.140
Use RXCT- CHE to convert RCBA- 60XX? to RCHJ- 48A1	0.140
Use RXCT- CHH to convert RCBA- 60XX? to RCHJ- 48A2	0.157
Use RXCT- CHJ to convert RCBA- 60XX? to RCHJ- 60A1	0.172
60XXA	0.120 Coil #1
Use RXCT- CHF to convert RCBA- and to RCHJ- 51A1A 60XXA	0.086 Coil #2
60XXA	0.140 Coil #1
Use RXCT- CHG to convert RCBA- and to RCHJ-61A1A 60XXA	0.086 Coil #2

All kits may be used for conversion of side or front connection coils except the RXCT-BCZ, RXCT-CHF and RXCT-CHG which applies to side connection only.

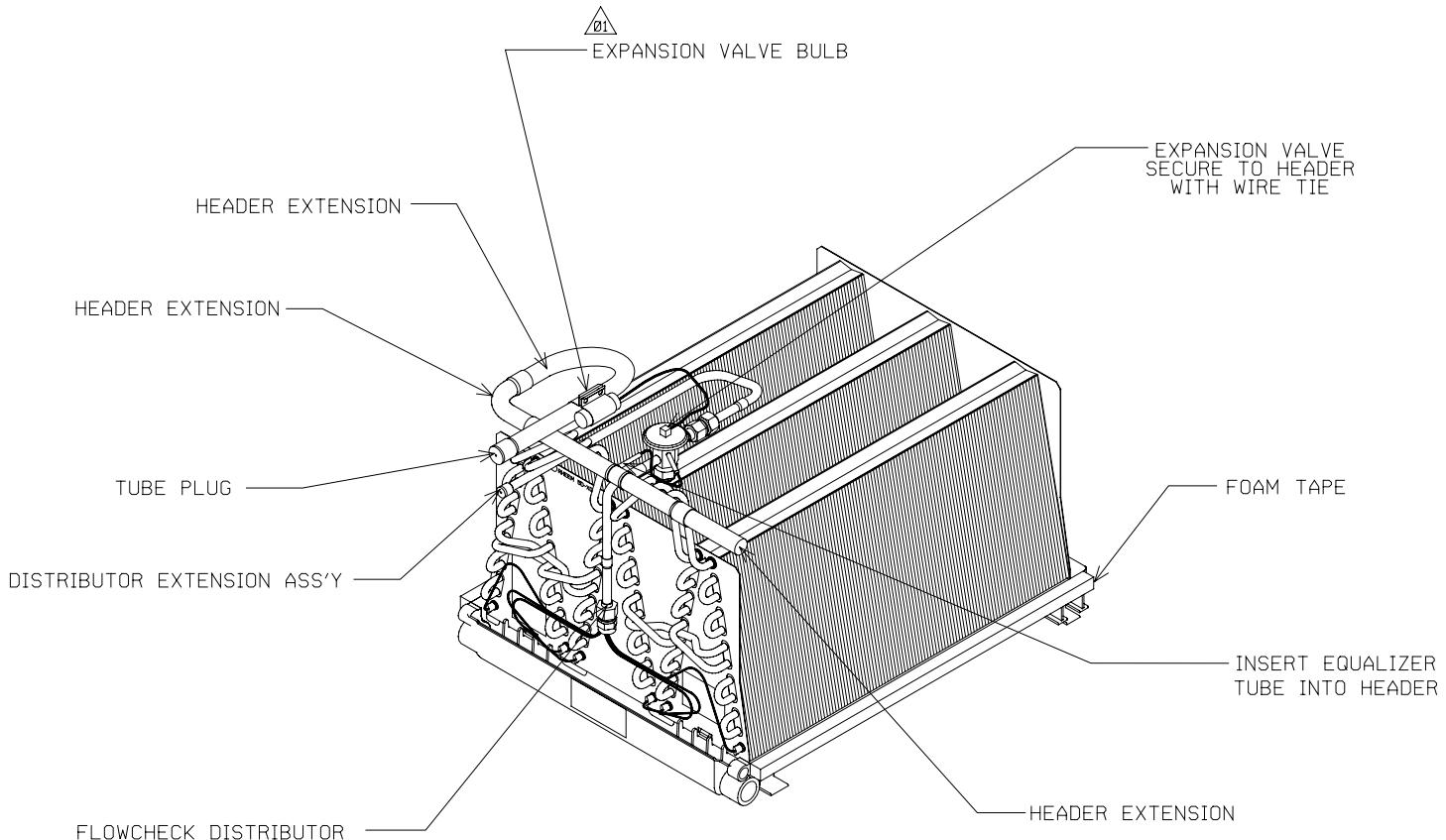
\*Reference Figure 3 to identify proper location of Coil #1 and Coil #2.

## **PARTS LIST**

<b><u>ITEM NO.</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>QUANTITY</u></b>
1	VALVE ASSEMBLY	1
2A	INLET TUBE (FRONT CONNECTION)	1
2B	INLET TUBE (SIDE CONNECTION)	1
3	BULB STRAP WITH BOLTS AND MATING NUTS	1 per TXV
4	FLOWCHECK PISTON KIT	1
5	INSULATION TAPE	1
6	INSTALLATION LABEL	1

## INSTALLATION PROCEDURE

1. Remove rubber plug(s) from vapor header.
2. Remove distributor extension assembly.
3. Replace piston with piston furnished in kit. **NOTICE: This is necessary for proper operation of the expansion valve.**
4. Replace teflon seal on distributor assembly.
5. Attach expansion valve assembly to distributor assembly. Be sure to use a back-up wrench.
6. Select proper inlet tube for application. Position inlet tube and braze to expansion valve assembly.



**FIGURE 1. FRONT CONNECTION COIL**

### NOTES

1. DRAWING SHOWS 6 ROW COIL ASSEMBLY;  
HOWEVER, ALL COIL ASSEMBLIES TYPICAL.

### 7. EQUALIZER TUBE INSTALLATION

- A. A 3/16" diameter short tube is provided in the center of short header for installation of the 1/8" equalizer tube from the TX valve. See Figure 1.
- B. With a file, notch both sides of the 3/16" diameter tube back 1/2" from the pinched and soldered end. With pliers, hold end of tube and gently bend back and forth until tube breaks off clean.
- C. Insert 1/8" equalizer tube from the TX valve into 3/16" tube in center of header. Insert 1/4" to 1/2" and solder leak tight. Be sure that the equalizer tube is not plugged with braze material during this process.

### 8. CLOSING UNUSED END OF HEADER

Install the header extension in the unused end of the header for side connections coils. Front connection coils have the header extension installed from the factory.

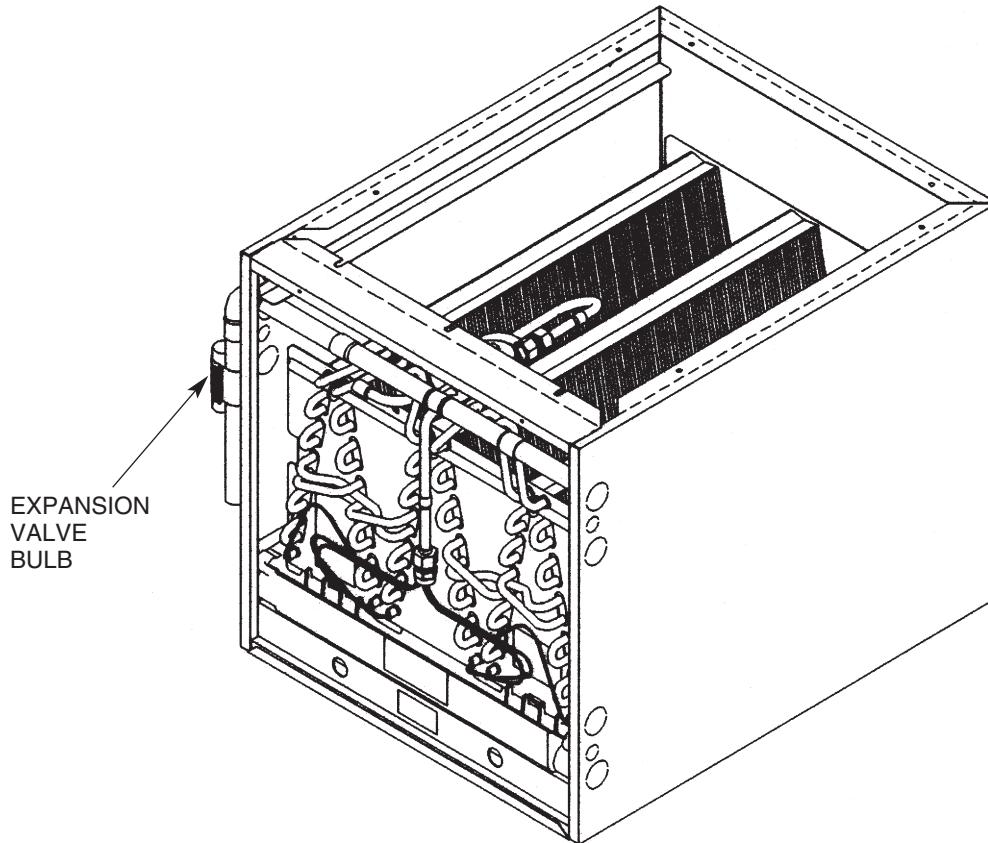
## 9. EXPANSION VALVE BULB INSTALLATION

**NOTE:** For maximum performance on side connections coils, mount the expansion valve bulb to the exterior of the cabinet as shown in Figure 2. If space does not allow the bulb to be mounted outside the cabinet, mount it securely to the copper street elbow.

1. Do Not solder street elbow with TXV bulb clamped to it.
2. Remove TXV bulb from the copper street elbow.
3. Place the expansion valve through the knockout in the cabinet.
4. Solder the street elbow in desired side of vapor header.
5. Securely clamp the TXV bulb to the vapor line.
6. Insulate the TXV bulb and vapor line with the black insulation tape provided in the parts bag.

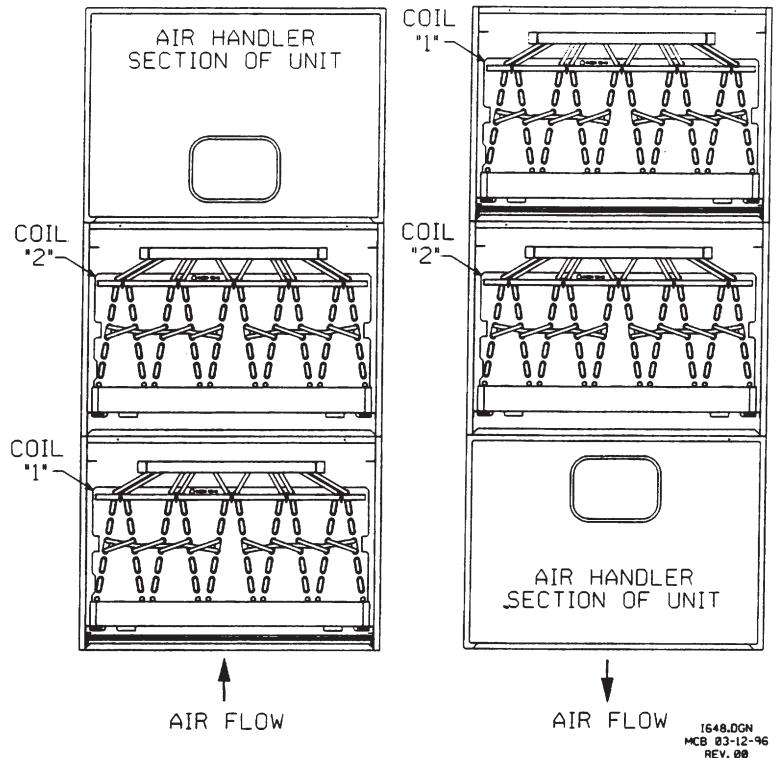
### Front Connection Coils

- A. Attach expansion valve sensing bulb, with strap provided, to header extension as shown in Figure 1. Torque to 18 inch-lbs. Wrap bulb with insulation tape.
- B. Attach inlet tube with nut to the inlet tube of the valve. Heat pump applications require installation of a teflon seal. the inlet tube exits the front of the cabinet.



**FIGURE 2.**

10. Place the Installation Label on the front door of the coil assembly and check the appropriate accessory. This label will notify the inspector that an expansion valve accessory has been installed. The coil is now ready for proper installation. Consult the installation instructions included with the indoor coil for proper installation and operating instructions.



**FIGURE 3. UNIT CONFIGURATION**