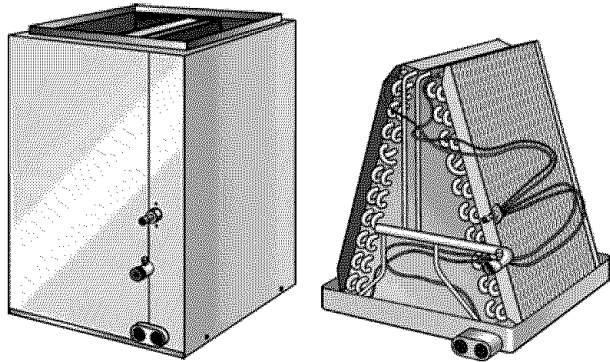




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Dallas, Texas, USA



**RETAIN THESE INSTRUCTIONS
FOR FUTURE REFERENCE**

⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or death.

Installation and service must be performed by a qualified installer or service agency.

⚠ WARNING

Risk of explosion or fire.

Can cause injury or death.

Recover all refrigerant to relieve pressure before opening the system.

⚠ CAUTION

Physical contact with metal edges and corners while applying excessive force or rapid motion can result in personal injury. Be aware of, and use caution when working near these areas during installation or while servicing this equipment.

⚠ IMPORTANT

The Clean Air Act of 1990 bans the intentional venting of refrigerant (CFCs, HCFCs and HFCs) as of July 1, 1992. Approved methods of recovery, recycling or reclaiming must be followed. Fines and/or incarceration may be levied for non-compliance.

INSTALLATION INSTRUCTIONS

C33/CX34 Series Coils

EVAPORATOR COILS
505,060M (65594205)
10/07
Supersedes 06/07

TP Technical
Publications
Litho U.S.A.

Table of Contents

| | |
|--|---|
| C33 and CX34 Series Coils | 1 |
| General | 1 |
| Shipping and Packing List | 1 |
| Releasing Air Charge | 2 |
| Unit Installation | 2 |
| Refrigerant Line Set | 3 |
| Replacement Parts | 4 |
| Connections | 4 |
| Refrigerant Metering Device | 5 |
| Leaking Testing, Evacuating and Charging | 7 |
| Sealing Ducts | 7 |
| Condensate Drain Connection | 7 |
| Blower Speed Connection | 8 |
| Maintenance | 9 |

C33 and CX34 Series Coils

C33 and CX34 upflow evaporator coils are designed to be used with air conditioner or heat pump units. C33 coils include a factory-installed fixed orifice metering device and are available cased or uncased. CX34 coils include a factory-installed, HFC-410A check (CTXV - heat pumps) or thermostatic (TXV - air conditioner units) expansion valve (externally equalized) and are only available cased. Refer to the Lennox Engineering Handbook for the proper use of these coils with Lennox furnaces, air conditioner units, heat pumps, and line sets.

General

These instructions are intended as a general guide and do not supersede local or national codes in any way. Authorities who have jurisdiction should be consulted before installation.

Shipping and Packing List

Package 1 of 1 contains the following:

C33

- 1 — Evaporator coil
- 1 — Patch plate with nameplate label (uncased coils only)
- 1 — Metering device label (uncased coils only)

OR

CX34

- 1 — Evaporator coil

Check the components for shipping damage. If you find any damage, immediately contact the last carrier.



Table 1. Orifice Size Shipped with C33 Units

| Model C33 (Case/ and Uncase) | Orifice Size |
|------------------------------|--------------|
| C33-18A-2/(2-F) | 0.053 |
| C33-19A-2/(2-F) | 0.053 |
| C33-24A-2/(2-F) | 0.062 |
| C33-24B-2/(2-F) | 0.062 |
| C33-24C-2/(2-F) | 0.062 |
| C33-25A-2/(2-F) | 0.062 |
| C33-25B-2/(2-F) | 0.062 |
| C33-30A-2/(2-F) | 0.071 |
| C33-30B-2/(2-F) | 0.071 |
| C33-30C-2/(2-F) | 0.071 |
| C33-31A-2/(2-F) | 0.071 |
| C33-31B-2/(2-F) | 0.071 |
| C33-36A-2/(2-F) | 0.076 |
| C33-36B-2/(2-F) | 0.076 |
| C33-36C-2/(2-F) | 0.076 |
| C33-38A-2/(2-F) | 0.076 |
| C33-38B-2/(2-F) | 0.076 |
| C33-42B-2/(2-F) | 0.082 |
| C33-43B-2/(2-F) | 0.082 |
| C33-43C-2/(2-F) | 0.082 |
| C33-44C-2/(2-F) | 0.082 |
| C33-48B-2/(2-F) | 0.091 |
| C33-48C-2/(2-F) | 0.091 |
| C33-49C-2/(2-F) | 0.091 |
| C33-50/60C-2/(2-F) | 0.091 |
| C33-60D-2/(2-F) | 0.099 |
| C33-62C-2/(2-F) | 0.099 |
| C33-62D-2/(2-F) | 0.099 |

Releasing Air Charge

CAUTION
 The coil is shipped from the factory pressurized with dry air. Pierce a hole in the coil's rubber plug vapor line seal to relieve the pressure before removing the seals.

The C33 and CX34 coils are shipped with a 15 ± 3 psi dry air holding charge. Ensure that the coil is void of pressure by performing the following procedure:

1. Remove valve stem cap.
2. Press the liquid line valve stem.

NOTE - If there is no pressure when the valve core is pressed, check the coil for leaks before continuing with the installation.

Unit Installation

WARNING
 This product and/or the indoor unit it is matched with may contain fiberglass wool. Disturbing the insulation during installation, maintenance, or repair will expose you to fiberglass wool dust. Breathing this may cause lung cancer. (Fiberglass wool is known to the State of California to cause cancer.)
 Fiberglass wool may also cause respiratory, skin, and eye irritation.
 To reduce exposure to this substance or for further information, consult material safety data sheets available from address shown below, or contact your supervisor.
Lennox Industries Inc.
P.O. Box 799900
Dallas, TX 75379-9900

Install the furnace or air handler according to the installation instructions provided with the unit.

Cased C33 or CX34 Coils - Position the cased coil on top of the furnace or air handler cabinet and secure it using field-provided screws.

NOTE - Cased coils have six screw clearance holes which should be aligned with the furnace engagement holes. Secure the coil casing to the furnace using six field-provided #8 X 1" screws.

NOTE - An optional adapter base (ordered separately) is available for use with uncased coils. Order Lennox part no. 81J46 for a single adapter as illustrated in figure 1, and 11L09 for a package of 10 adapters.

NOTE - Figure 2 illustrates how to place the uncased coil into the air duct.

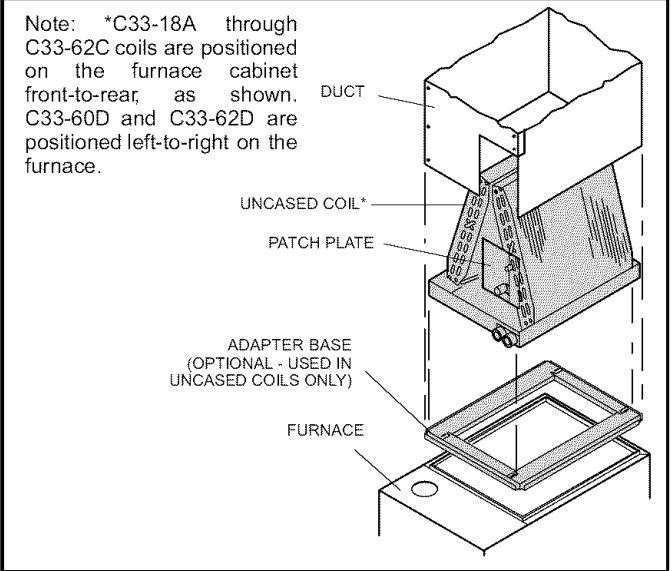


Figure 1. Adapter Base

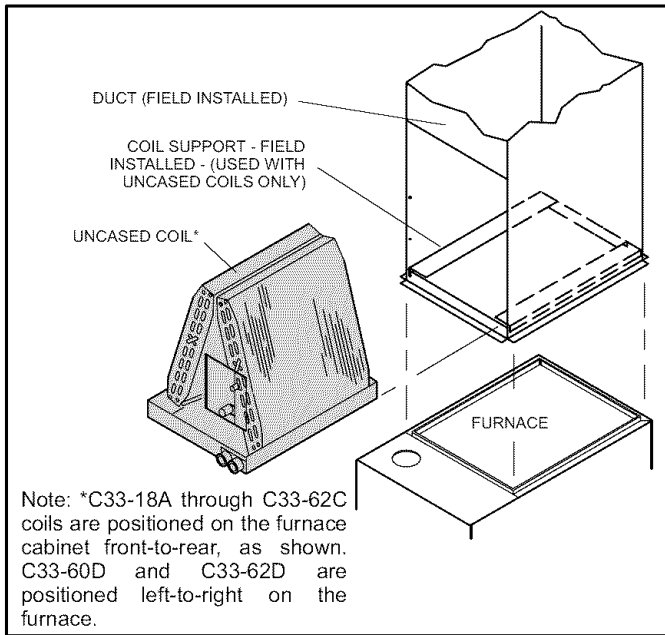


Figure 2. Field-Installed Coil Support

Installing Patch Plate (Uncased Coils Only - C33) - A two-piece patch plate and metering device label are provided (taped to the top of the coil). To install the plate:
NOTE - Either models (C33 or CX34) could be configured as illustrated in either figure 10 or 11.

1. Carefully pull the orifice housing forward through the patch plate opening in the plenum. **Do not twist, kink or damage the distributor tubes.** Use wire ties to secure tubes to prevent movement that could cause the refrigerant tubing to fail. Adjust the tubes if necessary as illustrated in figures 3 and 4.

⚠ IMPORTANT

During installation and after servicing or maintenance, ensure that the distributor lines are not rubbing together or kinked. All tubes must have enough clearance from other metal parts. Secure tubes with wire ties to prevent movement.

Wires should never touch or be secured to refrigerant lines that will contain hot gas in certain system modes.

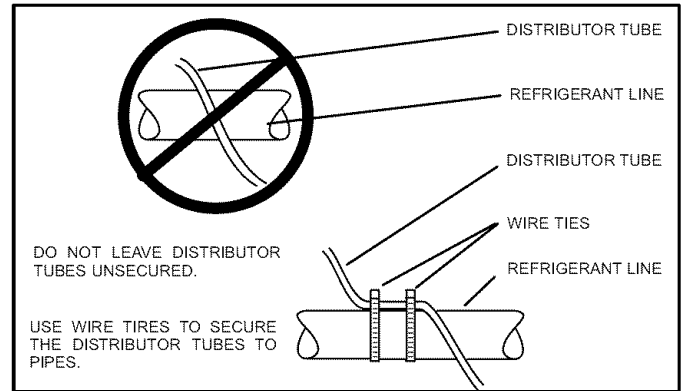


Figure 3. Secure Distributor Tubes to Pipes

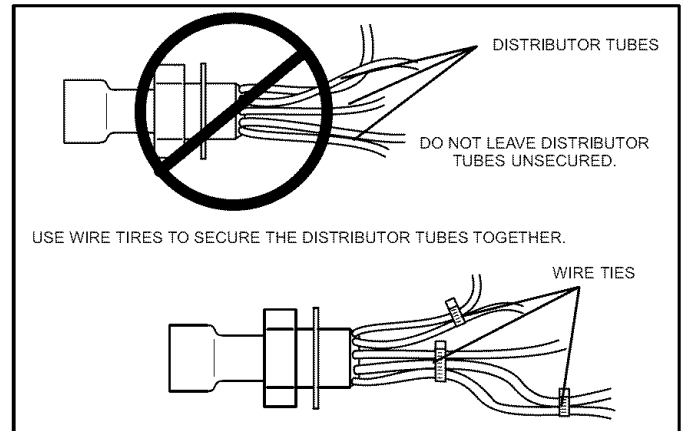


Figure 4. Secure Distributor Tubes Together

2. Position the orifice housing with the patch plate as illustrated in either figure 10 or 11. Carefully install two #8 X 1/2" sheet metal screws through the patch plate into the orifice housing mounting base. The distributor lines must not be twisted or kinked.
3. Install the patch plate onto the plenum.
4. Affix metering device label to front of plenum.

Refrigerant Line Set

The refrigerant line sets should be sized according to the recommendations given in the air conditioner unit installation instructions. Use either table 2 or 3 to determine correct braze connection sizes. A field-provided adapter may be required to match line set connections.

Table 2. Refrigerant Line Connections - Model C33

| Model Number | Suction | Liquid |
|--|---|--|
| 18-2(F) 19-2(F) 24-2(F), -24C-2, -24C-2(F) 25-2(F) 30-2(F), -30C-2, -30C-2(F) 31-2(F) 36-2(F) 38-2(F) | Line Sweat Size - 3/4 Inch (19mm) | Line Sweat Size - 3/8 Inch (9.5mm) |
| 42-2(F) 43-2(F) 44-2(F) 48-2(F) 49-2(F) 60/60-2(F) 60-2(F) 62C-2(F) 62-2(F) | Line Sweat Size - 7/8 Inch (22mm) | |

Table 3. Refrigerant Line Connections - Model CX34

| Model Number | Suction | Liquid |
|---|---|--|
| 18/24-6F 19-6(F) 24-6(F), -24C-6(F) 25-6(F) 30-6F, -30C-6(F) 31-6(F) 36-6(F) 38-6(F) | Line Sweat Size - 3/4 Inch (19mm) | Line Sweat Size - 3/8 Inch (9.5mm) |
| 42-6(F) 43-6(F) 44/48-6(F) 49-6(F) 50/60-6(F) 60-6(F) 62-6(F), -62C-6(F) | Line Sweat Size - 7/8 Inch (22mm) | |

Replacement Parts

If replacement parts are necessary, order kit 69J46. The kit includes:

- 10 — Brass nuts for liquid line assemblies
- 20 — Teflon rings
- 10 — Liquid line orifice housings
- 10 — Liquid line assemblies

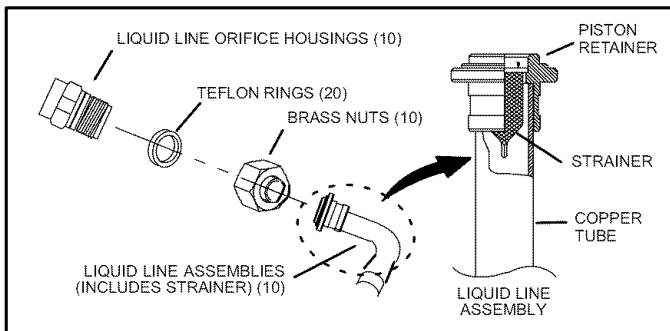


Figure 5. 69J46 Kit Components

Connections

Use a silver alloy brazing rod (5 or 6 percent silver alloy for copper-to-copper connections or 45 percent silver alloy for copper-to-brass or copper-to-steel connections).

C33/CX34 — BRAZE SUCTION/VAPOR LINE

Use the following procedure to connect the vapor line to the indoor coil unit:

1. Remove rubber plug.
2. Place a field-provided heat shield, such as a wet rag, against the piping plate and around the piping stubs, and sweat in the suction line. The heat shield must be in place to protect the paint from heat damage.
3. Braze connection.
4. Remove the heat shield after brazing and allow the connections to cool.

C33 — CONNECT LIQUID LINE

Use the following procedure to connect the liquid line to the indoor coil unit:

1. Slide the liquid line compression nut onto the provided liquid line fitting (the liquid line fitting comes attached to the front of the delta plate of the uncased coils).
2. Insert the field-supplied liquid line into the liquid line stub for brazing.

CX34 — CONNECT LIQUID LINE

Use the following procedure to connect the liquid line to the indoor coil unit. Connect the field-provided liquid line to the liquid line of the cased coil as illustrated in figure 6 using one of the following procedures:

1. Place a field-provided heat shield, such as a wet rag, against the piping plate and around the piping stubs, and braze in the liquid line. The heat shield must be in place to protect the metering device from heat damage.
2. Braze the brass seal assembly out of the swaged copper liquid line on the coil; braze field-provided liquid line into the swaged connection.

OR

3. Cut the copper liquid line on a vertical or horizontal section. Use a field-provided coupling to join the field liquid line and coil liquid line connections.
4. Remove the heat shield after brazing and allow the connections to cool.

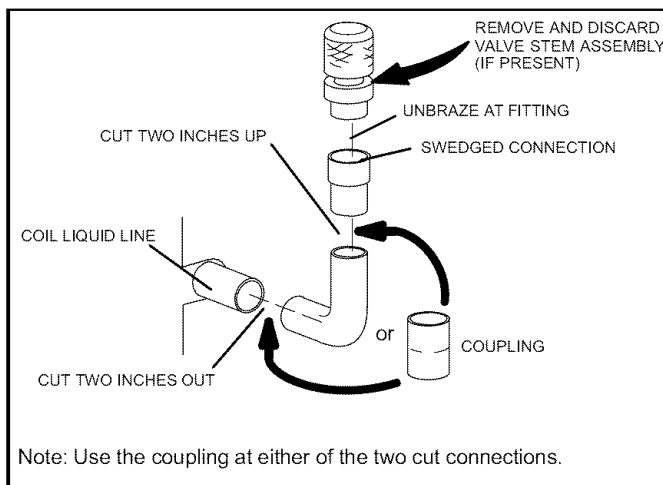


Figure 6. Liquid Line Connections

Refrigerant Metering Device

Below are the factory-installed metering devices and optional metering devices if applicable to both types of coils.

- The C33 coils are shipped with a factory-installed fixed orifice. C33 cased and uncased coils are compatible with either HFC-410A fixed orifice or TXV/CTXV metering devices.
- CX34 cased coils have factory-installed HFC-410A TXV/CTXV metering devices.

The previously reference TXV/CTXV metering devices will be referred to in this instruction as TXV.

DETERMINING CORRECT FIXED ORIFICE

A properly sized fixed orifice may be provided with the outdoor unit. Refer to the outdoor unit instruction to ensure proper sizing of the refrigerant flow control orifice. An improperly sized RFC orifice can lead to diminished capacities and/or efficiencies, as well as potential damage to the unit. RFCs shipped with the coils are identified in table 1.

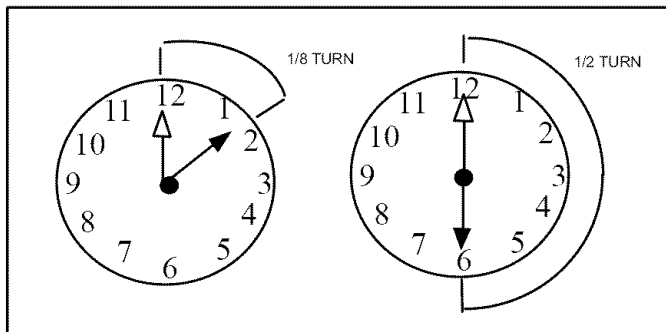


Figure 7. Tightening Distance

C33 - TYPICAL FIXED ORIFICE REMOVAL PROCEDURE

1. On fully cased coils, remove the coil access and plumbing panels.
2. Remove any shipping clamps holding the liquid line and distributor assembly.
3. Using two wrenches, disconnect liquid line from distributor. Take care not to twist or damage distributor tubes during this process.
4. Remove and discard orifice, valve stem assembly if present and Teflon ring as illustrated in figure 8.
5. Retain brass nut to be using later with the liquid line assembly.

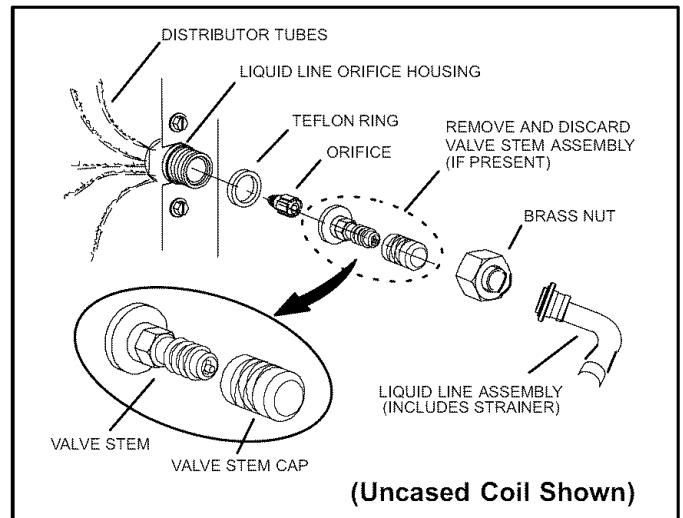


Figure 8. Typical Fixed Orifice Removal

C33 - TYPICAL FIXED ORIFICE INSTALLATION PROCEDURE

1. Ensure that the orifice is installed with the nylon seat pointing toward the liquid line orifice housing.
2. Insert the Teflon ring securely into the liquid line orifice housing. Lightly lubricate the threads of the liquid line orifice housing and the expose surface of the Teflon ring.
3. Connect the liquid line assembly with the brass nut to the liquid line orifice housing. Finger tighten and use an appropriately sized wrench to turn an additional 1/2 turn clockwise as illustrated in figure 7, or 20 ft-lb.
4. Place the supplied fixed orifice sticker on the indoor cabinet after installation.

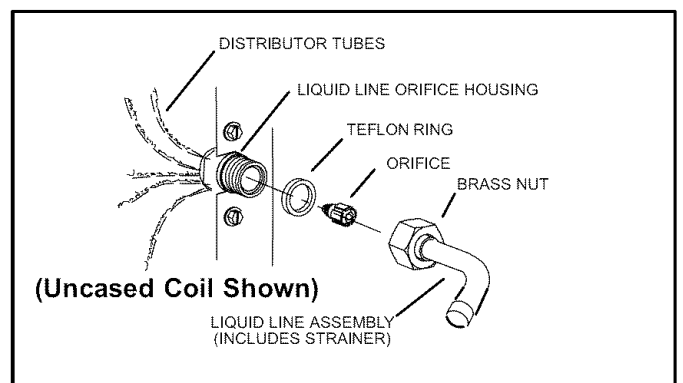


Figure 9. Typical Fixed Orifice Installation

C33 - TYPICAL TXV INSTALLATION PROCEDURE

The TXV unit can be installed internal or external to the indoor coil. In applications where an uncased coil is being installed in a field-provided plenum, install the TXV in a manner that will provide access for field servicing of the TXV. Refer to figures 10 or 11 for reference during installation of TXV unit.

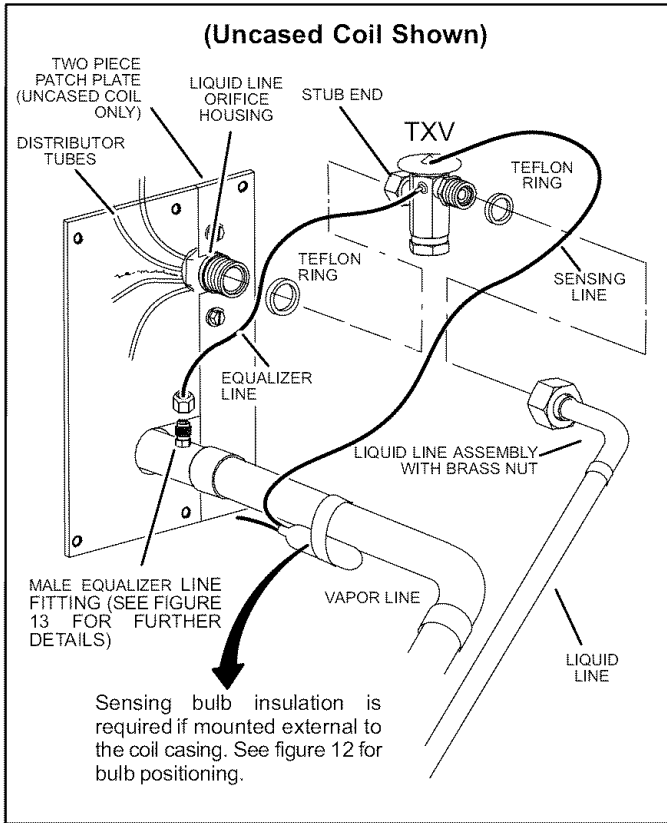


Figure 10. Patch Plate (Configuration A)

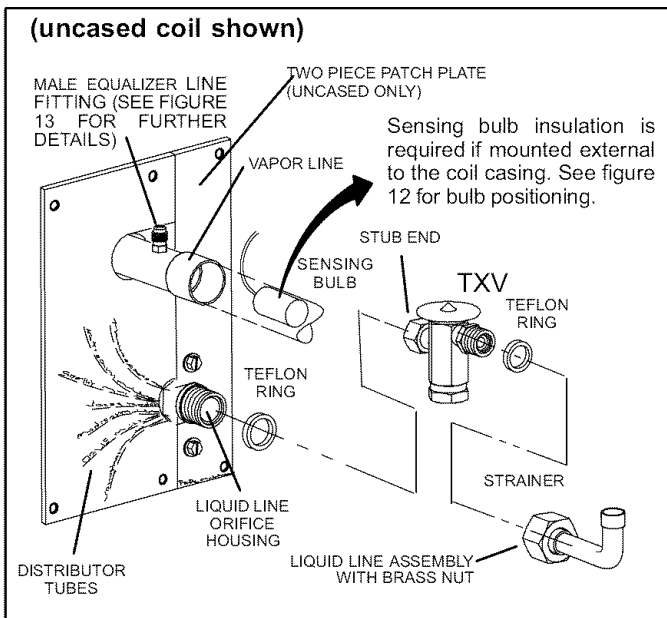


Figure 11. Patch Plate (Configuration B)

1. Insert one of the provided Teflon rings into the stubbed end of the TXV. Lightly lubricate the threads of the stubbed end of the TXV and the expose surface of the Teflon ring.
2. Attach the stubbed end of the TXV to the liquid line orifice housing. Finger tighten and use an appropriately sized wrench to turn an additional 1/2 turn clockwise as illustrated in figure 7, or 20 ft-lb.
3. Place the remaining Teflon washer around the other end of the TXV and lightly lubricate the threads of the that end of the TXV, and the expose surface of the Teflon ring.
4. Attach the liquid line assembly with brass nut to the TXV. Finger tighten and use an appropriately sized wrench to turn an additional 1/2 turn clockwise as illustrated in figure 7, or 20 ft-lb.
5. Attach the sensing bulb of the TXV in the proper orientation as illustrated in figure 12 to the suction line using the clamp and screws provided.

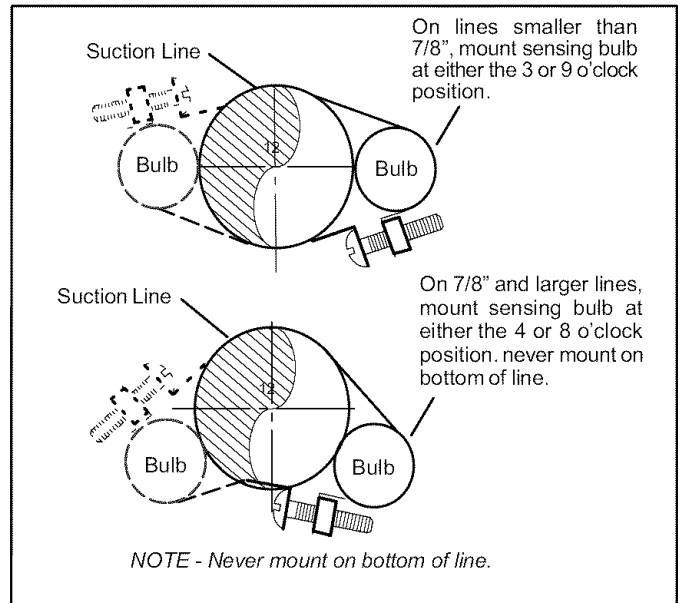


Figure 12. TXV Sensing Bulb Installation

NOTE - To prevent any possibility of water damage, properly insulate all parts of the TXV assembly that may sweat due to temperature differences between the valve and its surrounding ambient temperatures.

6. Connect the equalizer line from the TXV to the equalizer suction port on the suction line. Finger tighten the flare nut plus 1/8 turn (7 ft-lbs) as illustrated in figure 7.

⚠ IMPORTANT

When removing the flare nut, ensure that the copper flare seal bonnet is removed as illustrated in figure 13.

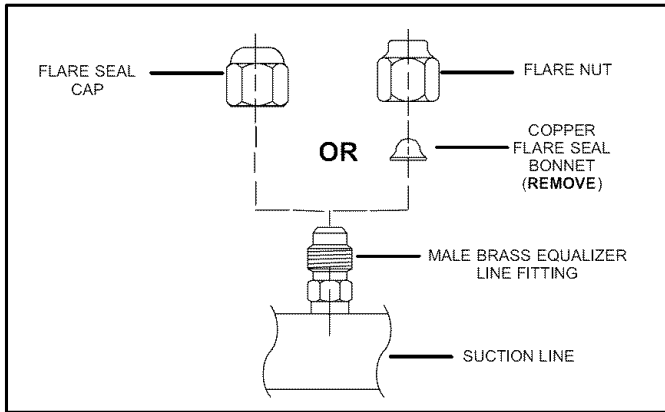


Figure 13. Copper Flare Seal Bonnet Removal

See the C33/CX34 Engineering Handbook for approved TXV match-ups and application information. Typically, the TXV kits include the following:

- 1 — TXV
- 2 — Teflon rings
- 1 — 1 1/4" wide copper mounting strap for sensing bulb
- 2 — #10 hex head bolts and nuts for securing sensing bulb

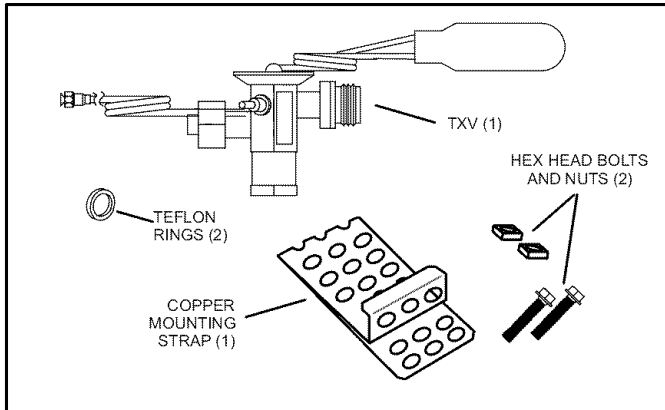


Figure 14. TXV Kit Components

Leak Testing, Evacuating and Charging

Refer to the outdoor unit instruction for leak testing, evacuating and charging procedures. Always leak check entire system before charging.

Sealing Ducts

Ensure the duct is secured and all joints are properly sealed to either the coil cabinet flanges (fully cased models) or the furnace cabinet flanges (uncased models).

Condensate Drain Connections

C33(F) and CX34(F) coils have both main and auxiliary drain connections. The auxiliary drain removes accumulated condensate if the main drain becomes plugged.

! IMPORTANT

After removal of drain plug and before connecting drain line, check the drain hole to verify that an opening exists and is free of any debris. Also during installation, be sure that the drain pan is clear of any fallen debris which may plug up the drain opening,

! IMPORTANT

AUXILIARY DRAIN LINE - When a cooling coil is located above a finished space where damage may result from condensate overflow, an additional auxiliary drain line of 3/4" (19.1 mm) minimum must be installed. This secondary drain line shall be connected to a water tight corrosion-resistant pan that is installed beneath the indoor coil, or to the secondary condensate drain outlet of the coil. (Uniform Mechanical Code - 310.2 - condensate control)

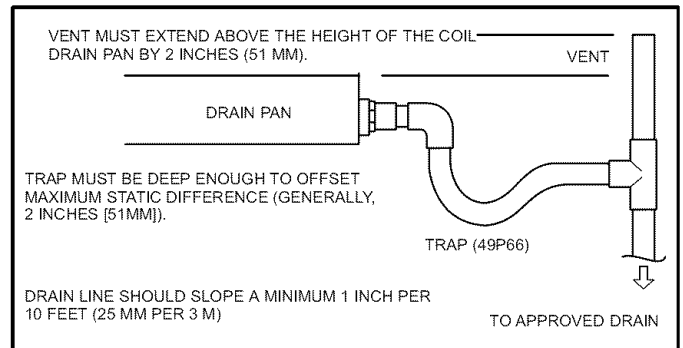


Figure 15. Typical Condensate Drain Connection

1. Install a trap in both drain lines per local codes. If a vent tee is required to reduce friction and static pressure, the trap should be installed between the unit outlet and the vent tee as illustrated in figure 15.
2. Make drain connections at the 3/4" female threaded pipe using condensate lines of the same size. Pitch the main drain line down to an open drain or sump.
3. If the auxiliary drain line is to be used, remove the plug and route the drain line so that water draining from the outlet will be easily noticed by the homeowner.
4. After removal of drain pan plugs, check the drain port to see if holes have been drilled. If not drilled, use a 19/32" bit to drill out the primary drain hole; use a 3/8" drill bit for the secondary drain hole. Remove all drill shavings.
5. Make sure drain ports and drain pan are free of all debris.
6. Plug and check any unused drain pan openings for tightness. Tighten plugs to 1/8 turn or 7 ft-lb. to prevent water leaks or seepage from the drain pan.

Blower Speed Connection

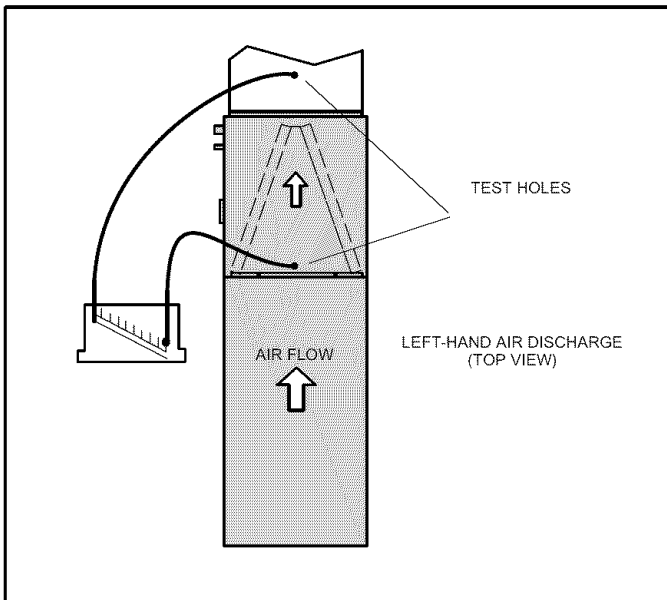


Figure 16. Static Pressure Test

⚠ CAUTION

Take care when drilling test holes into the furnace flange and the duct. Drill holes away from refrigerant piping. Test holes should be drilled where specified in order to avoid unit damage.

Proper air volume must be provided over the evaporator coil. Select a blower motor speed tap that will provide 400 ± 50 CFM per 12,000 Btuh of cooling capacity (wet coil). A static pressure reading must be taken to see if the pressure drop falls within the proper range.

To ensure accuracy, air must be read from below the coil and above the coil. See figure 16 for an example to obtain an accurate reading.

1. Drill one 5/16" (8 mm) air test hole into the delta plate between the coil slabs.
2. Drill one 5/16" (8 mm) air test hole into the duct above the top of the coil.
3. Connect the **instrument for static pressure measurement hoses** to the air entering side of coil. Insert the hoses so that 1/4" (6 mm) extends inside the duct or end seal. Seal around holes with Permagum.
4. Turn on electrical power to the furnace and set the thermostat to initiate a cooling demand.

5. Tables 4 and 5 lists the range of air volumes and equivalent static pressure readings for these units. Observe the static pressure reading. If the reading is below the required air volume, increase the blower speed; if the reading is above the required air volume, decrease the blower speed. Refer to the furnace wiring diagram for blower speed settings.

6. When the required static pressure readings are obtained, remove the test hose lines and insert snaphole plugs into test holes.

Table 4. Air Volume / Static Pressure Drop Across Coil - Model C33

| Model | Cabinet Width in. (mm) | Vol: CFM (L/s) | Drop: in. w.g. (Pa) | |
|----------------------|------------------------------|-------------------|---------------------|----------|
| | | | Dry | Wet |
| 18A-2(F) | 14-1/2 (394) | 600 (285) | .14 (35) | .17 (42) |
| 19A-2(F) | 14-1/2 (394) | 600 (285) | .08 (20) | .09 (22) |
| 24A-2(F) 24B-2(F) | 14-1/2 (394) 17-1/2 (444) | 800 (380) | .18 (45) | .25 (62) |
| 24C-2(F) | 21 (533) | 800 (380) | .16 (40) | .22 (55) |
| 25A-2(F) | 14-1/2 (394) | 800 (380) | .16 (40) | .22 (55) |
| 25B-2(F) | 17-1/2 (444) | 800 (380) | .11 (27) | .15 (37) |
| 30C-2(F) | 21 (533) | 1000 (470) | .20 (50) | .28 (70) |
| 30A-2(F) 30B-2(F) | 14-1/2 (394) 17-1/2 (444) | 1000 (470) | .22 (55) | .30 (75) |
| 31A-2(F) | 14-1/2 (394) | 1000 (470) | .18 (45) | .20 (50) |
| 31B-2(F) | 17-1/2 (444) | 1000 (470) | .13 (32) | .16 (40) |
| 36A-2(F) | 14-1/2 (394) | 1200 (565) | .27 (67) | .30 (75) |
| 36B-2(F) | 17-1/2 (444) | 1200 (565) | .17 (42) | .21 (52) |
| 38A-2(F) | 14-1/2 (394) | 1200 (565) | .27 (67) | .30 (75) |
| 38B-2(F) | 17-1/2 (444) | 1200 (565) | .17 (42) | .21 (52) |
| 36C-2(F) | 21 (533) | 1200 (565) | .17 (42) | .21 (52) |
| 42B-2(F) | 17-1/2 (444) | 1400 (660) | .22 (55) | .28 (70) |
| 43B-2(F) | 17-1/2 (444) | 1400 (660) | .23 (57) | .24 (60) |
| 43C-2(F) | 21 (533) | 1400 (660) | .13 (32) | .16 (40) |
| 44C-2(F) | 21 (533) | 1400 (660) | .18 (45) | .23 (57) |
| 48B-2(F) | 17-1/2 (444) | 1600 (755) | .17 (42) | .21 (52) |
| 48C-2(F) | 21 (533) | 1600 (755) | .23 (57) | .29 (72) |
| 49C-2(F) | 21 (533) | 1600 (755) | .17 (42) | .22 (55) |
| 50/60C-2(F) | 21 (533) | 1600 (755) | .23 (57) | .29 (72) |
| 60D-2(F) | 24-1/2 (622) | 2000 (945) | .21 (52) | .27 (67) |
| 62C-2(F) | 24-1/2 (622) | 2000 (945) | .29 (72) | .34 (85) |
| 62D-2(F) | 24-1/2 (622) | 2000 (945) | .21 (52) | .27 (67) |

Table 5. Air Volume / Static Pressure Drop Across Coil - Model CX34

| Cabinet | | Vol: CFM (L/s) | Drop: in. w.g. (Pa) | |
|-------------|----------------|----------------|---------------------|----------|
| Model | Width in. (mm) | | Dry | Wet |
| 18/24A-6(F) | 14-1/2 (394) | 800 (380) | .18 (45) | .25 (62) |
| 19A-6(F) | 14-1/2 (394) | 600 (285) | .08 (20) | .09 (22) |
| 24B-6(F) | 17-1/2 (444) | 800 (380) | .18 (45) | .25 (62) |
| 24C-6(F) | 21 (533) | 800 (380) | .16 (40) | .22 (55) |
| 24B-6(F) | 21 (533) | 1000 (470) | .20 (50) | .28 (70) |
| 25A-6(F) | 14-1/2 (394) | 800 (380) | .16 (40) | .22 (55) |
| 25B-6(F) | 17-1/2 (444) | 800 (380) | .11 (27) | .15 (37) |
| 30A-6(F) | 14-1/2 (394) | 1000 (470) | .22 (55) | .30 (75) |
| 30B-6(F) | 17-1/2 (444) | | | |
| 31A-6(F) | 14-1/2 (394) | 1000 (470) | .18 (45) | .20 (50) |
| 31B-6(F) | 17-1/2 (444) | 1000 (470) | .13 (32) | .16 (40) |
| 36A-6(F) | 14-1/2 (394) | 1200 (565) | .27 (67) | .30 (75) |
| 36B-6(F) | 17-1/2 (444) | 1200 (565) | .17 (42) | .21 (52) |
| 38A-6(F) | 14-1/2 (394) | 1200 (565) | .27 (67) | .30 (75) |
| 38B-6(F) | 17-1/2 (444) | 1200 (565) | .17 (42) | .21 (52) |
| 36C-6(F) | 21 (533) | 1200 (565) | .17 (42) | .21 (52) |
| 42B-6(F) | 17-1/2 (444) | 1400 (660) | .22 (55) | .28 (70) |
| 43B-6(F) | 17-1/2 (444) | 1400 (660) | .23 (57) | .24 (60) |
| 43C-6(F) | 21 (533) | 1400 (660) | .13 (32) | .16 (40) |
| 44/48C-6(F) | 21 (533) | 1400 (660) | .18 (45) | .23 (57) |
| 48B-6(F) | 17-1/2 (444) | 1600 (755) | .17 (42) | .21 (52) |
| 49C-6(F) | 21 (533) | 1600 (755) | .17 (42) | .22 (55) |
| 50/60C-6(F) | 21 (533) | 1600 (755) | .23 (57) | .29 (72) |
| 60D-6(F) | 24-1/2 (622) | 2000 (945) | .21 (52) | .27 (67) |
| 62C-6(F) | 24-1/2 (622) | 2000 (945) | .29 (72) | .34 (85) |
| 62D-6(F) | 24-1/2 (622) | 2000 (945) | .21 (52) | .27 (67) |

Maintenance

⚠ CAUTION

A damaged coil fin can affect equipment operation and performance. Do not use flame, high-pressure water, steam, or volatile cleaners on fins or tubing surfaces. If cleaning requires the use of acidic or alkaline cleaners, follow the manufacturer's instructions. Thoroughly flush cleaner from all equipment components. (Be careful to prevent damage or corrosion of the components connected to the system or areas surrounding the equipment being cleaned.)

⚠ IMPORTANT

Ensure that the distributor lines are not rubbing together or kinked. All tubes must have enough clearance from other metal parts. Use wire ties to secure tubes to prevent movement that could cause the refrigerant tubing to fail. Adjust the tubes as necessary as illustrated in figure 3 on page 3.

Wires should never touch or be secured to refrigerant lines that will contain hot gas in certain system modes.

A trained technician or service agency must perform maintenance and service on equipment. At the beginning of each heating or cooling season, indoor coils should be cleaned.

Do not use hydrofluoric acid, alkaline, or similar chemicals on coils. These chemicals are not necessary to dissolve salt, and may damage the fin coating. Acid washes are used to dissolve oils and greases, which generally are not present on most installations.

Alkaline washes are useful for dissolving oxides such as zinc oxide, aluminum oxide, and iron oxide (rust). These three oxides are more corrosion-resistant than base metals, so dissolving or removing them will cause an increase in corrosion.

CLEANING THE COIL:

1. Remove the coil from the cabinet or plenum, and take the coil to an appropriate place to clean it.
2. Vacuum or brush the coil to remove matted and surface debris from the fin. Use vacuum attachments and /or brushes that are non-destructive to fins.
3. If oil deposits are present, spray the coil with ordinary household liquid detergent. Allow detergent to soften deposits and wait 10 minutes.

NOTE - For units in coastal regions, fresh water will dissolve away any salt deposits. (Wash coils with fresh water at least every six months.)

4. Spray the coil at a vertical angle of 30 to 45 degrees with a constant stream of water at moderate pressure. A pressure washer with a fan nozzle will work best. Do not spray the coil from a horizontal direction.
5. Direct the spray so that any debris is washed out of the coil and basepan. For most residential units, hot water is not necessary.

NOTE - Attempting to back flush from the inside of the coil will require removing parts from the unit, and it may be very difficult to flush the whole coil surface. Attempting to blow water through a coil will slow the water stream and reduce the flushing action of the outer fin surface.

6. Replace the coil into the cabinet or plenum. Ensure that you have followed the proper procedure for routing and securing the refrigerant tubing.