



**RETAIN THESE INSTRUCTIONS  
 FOR FUTURE REFERENCE**

**⚠ IMPORTANT**

The Clean Air Act of 1990 bans the intentional venting of refrigerant (CFCs and 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 noncompliance.

**⚠ WARNING**

Product contains fiberglass wool.  
 Disturbing the insulation in this product during installation, maintenance, or repair will expose you to fiberglass wool. 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

**⚠ 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 nearby these areas during installation or while servicing this equipment.

# INSTALLATION INSTRUCTIONS

## CB26UH & CBX26UH Series Units

AIR HANDLERS  
 505,059M  
 11/05  
 Supersedes 10/05  
 (065937100)

**TP** Technical  
 Publications  
 Litho U.S.A.

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**CB26UH & CBX26UH Series Units**

The CB26UH and CBX26UH series air handlers are designed for installation with optional field-installed electric heat and a matched remote outdoor unit. These units are for indoor installation only.

The CB26UH (R-22) and CBX26UH (R-410A) units are completely assembled, including a factory installed check/expansion valve. As shipped, the units are ready for installation in either upflow or horizontal left-hand air discharge applications.

**⚠ WARNING**

**Excessive Weight Hazard - Use two or more people when moving and installing the unit. Failure to do so can result in back or other type of injury.**

**Shipping and Packing List**

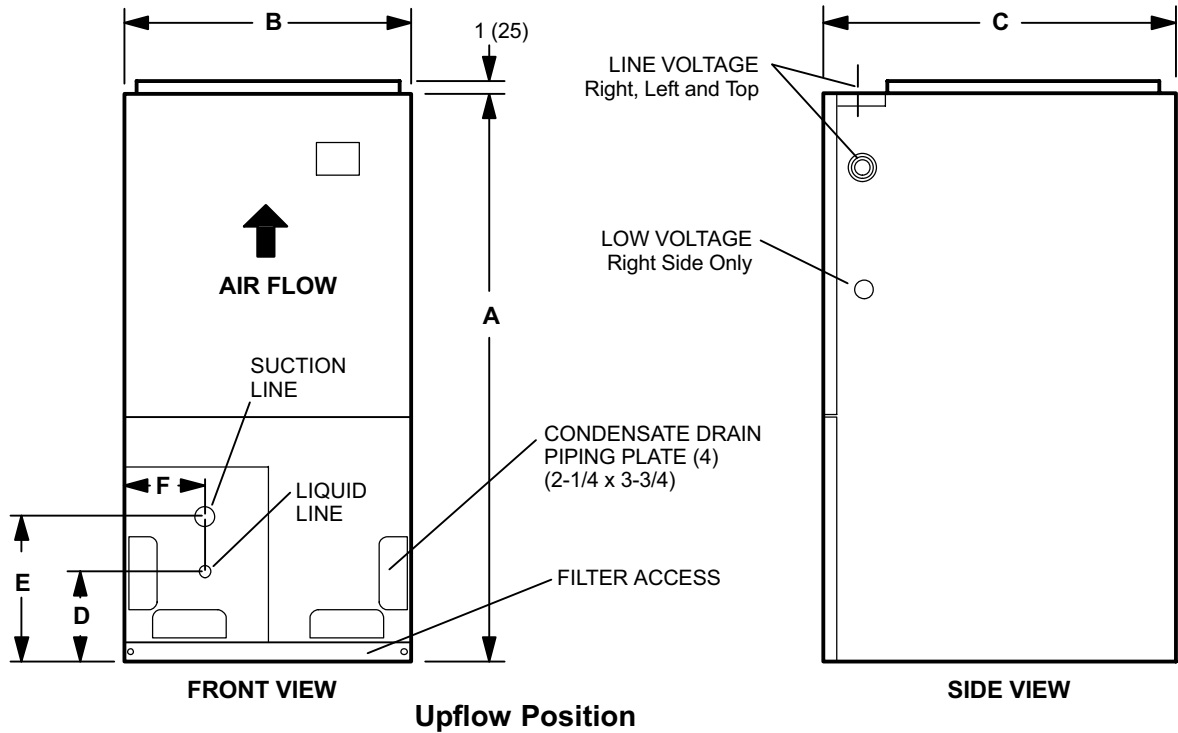
Package 1 of 1 contains the following:

- 1 - Assembled air handler unit for upflow or horizontal air discharge application (includes upflow and horizontal drain pans)

*NOTE - For downflow application, order kit #0659386-00.*



## CB26UH & CBX26UH Unit Dimensions - inches (mm)



**CB26UH & CBX26UH Dimensions (for Upflow and LH/RH Horizontal Air Discharge Applications)**

Dimension	-018, -024		-030, -036		-042, -048		-060		
	inches	mm	inches	mm	inches	mm	inches	mm	
<b>A</b>	46-3/4	1188	51	1295	54	1372	60	1524	
<b>B</b>	18-1/2	470	21-1/4	540	21-1/4	540	21-1/4	540	
<b>C</b>	22	559	22	559	26	660	26	660	
<b>D</b>	11	279	12-1/2	318	12	305	11-3/4	298	
<b>E</b>	16	406	18-1/2	470	16-3/4	425	17	432	
<b>F</b>	5-1/2	140	6	152	4	102	4	102	
<b>Supply Air Opening</b>	Depth	17	432	17	432	24-1/4	616	24-1/4	616
	Width	16-1/2	419	19-1/4	489	19-1/4	489	19-1/4	489
<b>Return Air Opening</b>	Depth	20-1/4	514	20-1/4	514	24-1/4	616	24-1/4	616
	Width	16	406	20-1/4	514	18-3/4	476	18-3/4	476

### General

These instructions are intended as a general guide and do not supersede local or national codes in any way. Consult authorities having jurisdiction before installation.

Check equipment for shipping damage. If found, immediately report damage to the last carrier. Check the unit rating plate to confirm that delivered unit matches order.

### Requirements

These instructions are intended as a general guide only

and do not supersede any national or local codes in any way. Compliance with all local, state, or national codes pertaining to this type of equipment should be determined prior to installation. Read this instruction manual, as well as the instructions supplied in separate equipment, before starting the installation.

In addition to conforming to manufacturer's installation instructions and local municipal building codes, installation of Lennox air handler units (with or without optional electric heat), MUST conform with National Fire Protection Association (NFPA) standards: "Standard for Installation of Air Conditioning and Ventilation Systems" (NFPA No. 90A) and "Standard for Installation of Residence Type Warm Air Heating and Air Conditioning Systems" (NFPA No. 90B).

## **⚠ IMPORTANT**

The CB26UH AND CBX26UH units are designed to match, and must be used with, outdoor units as rated. The indoor sections are manufactured with a check/expansion valve (TXV) to provide optimum refrigerant control and system performance with a variety of different capacities of outdoor units. In some cases, the rating of the outdoor unit may require that the coil assembly installed TXV be changed to obtain rated performance.

All models are designed for indoor installation only. The installation of the air handler, field wiring, duct system, etc. must conform to the requirements of the National Electrical Code, ANSI/NFPA No. 70 (latest edition) in the United States, and any state laws, and local ordinances (including plumbing or wastewater codes). Local authorities having jurisdiction should be consulted before installation is made. Such applicable regulations or requirements take precedence over the general instructions in this manual.

Install the conditioned air plenum, ducts and air filters (not provided) in accordance with NFPA 90B Standard for the Installation of Warm Air Heating and Air-Conditioning Systems (latest edition).

The air handler is shipped from the factory completely assembled. The unit is provided with flanges for the connection of the duct system.

Do not remove the cabinet knockouts until it has been determined which knockouts will need to be removed for the installation.

Select the final air discharge position which best suits the site conditions. Consider required clearances, space, routing requirements for refrigerant line, condensate disposal, filters, duct system, wiring, and accessibility for service. Refer to the air handler rating plate on the air handler for specific information.

## **⚠ WARNING**



**Danger of explosion. Keep flammable materials and vapors, such as gasoline, away from air handler. Place air handler so that heating elements are at least 18 inches (46 cm) above the floor for a garage installation. Failure to follow these instructions can result in death, explosion, or fire.**

### NOTES -

*During cooling operation, excessive sweating may occur if the air handler is installed in a very humid space.*

*If installed in an unconditioned space, sealant should be applied around the electrical wires, refrigerant tubing, and condensate lines where they enter the cabinet.*

*Electrical wires should be sealed on the inside where they exit the conduit opening. Sealant is required to prevent air leakage into, and condensate from forming inside of, the air handler, the control box, and on the electrical controls.*

*This unit is approved for installation clearance to combustible material as stated on the unit rating plate. Accessibility and service clearances must take precedence over combustible material clearances.*

*The air handler must be installed so that free access is allowed to the coil/filter compartment and blower/control compartment.*

*Horizontal applications of the air handler must be installed sloped (up to 1/4 inch) toward the drain pan openings to ensure proper condensate drainage.*

## **Installation Clearances**

### **Non-Ducted Return Closet Installation**

The air handler can be installed in a closet with a false bottom to form a return air plenum. It may also be installed with a return air plenum under the air handler.

Louvers or return air grilles are field-supplied. Local codes may limit application of systems without a ducted return to single story buildings.

When a CB26UH or CBX26UH unit is installed in a closet with a louvered return opening, the minimum open area for the louvers will be:

- 320 square inches for -018 and -024 models;
- 360 square inches for -030 and -036 models;
- 450 square inches for -042, -048 and -060 models.

If the free area is not known, assume a 25% free area for wood or a 75% free area for metal louvers or grilles. Using the louver dimensions and the 25% or 75% assumption, determine if the open area meets the minimum open area listed above.

If a return air plenum is used, the return air grille should be immediately in front of the opening in the plenum to allow for the free flow of return air. When not installed in front of the opening, there must be adequate clearance around the air handler to allow for the free flow of return air.

## **Installation**

### **General Information**

## **⚠ WARNING**

**Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer or service agency.**

CB26UH and CBX26UH units are factory-assembled and configured for installation in upflow or horizontal left-hand air discharge applications.

Each unit consists of a blower assembly, refrigerant coil, and controls, in an insulated galvanized steel factory finished enclosure. Knockouts are provided for electrical wiring entrance.

For ease in installation, it is best to make any necessary coil configuration changes before setting air handler in place.

If a filter is to be installed at the air handler, a filter rack must be formed using factory-supplied flanges. Lay the unit on its back and pry out the filter rack tabs as shown in figure 1. Repeat procedure on opposite side.

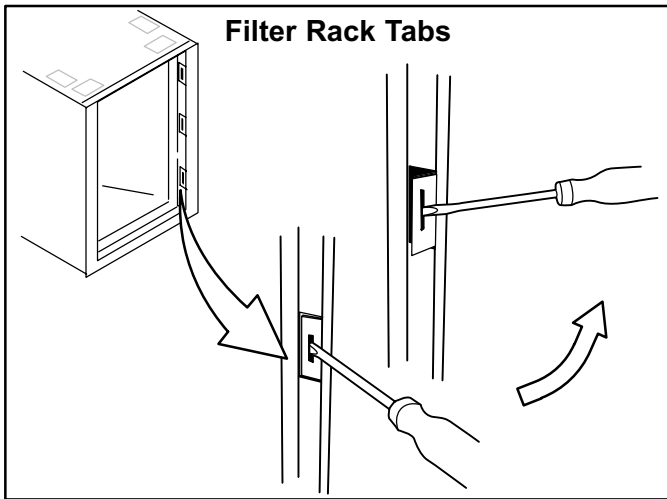


Figure 1

### Upflow Application

1. The air handler must be supported on the bottom only and set on solid floor or field-supplied support frame. Securely attach the air handler to the floor or support frame.
2. If installing a unit in an upflow application, remove the horizontal drain pan; it is not required in upflow air discharge installations.
3. Place the unit in desired location. Set unit so that it is level. Connect return and supply air plenums as required using sheet metal screws.
4. Install units that have no return air plenum on a stand that is at least 14" from the floor. This will allow proper air return.

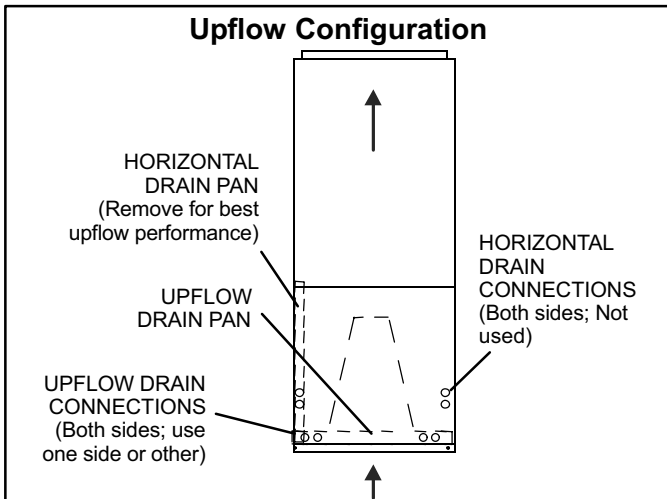


Figure 2

### Horizontal Applications

*NOTE - When the unit is installed in horizontal applications, a secondary drain pan is recommended. Refer to local codes.*

This unit may be installed in left-hand or right-hand air discharge horizontal applications. Adequate support must be provided to ensure cabinet integrity. Ensure that there is adequate room to remove service and access panels if installing in the horizontal position.

1. Determine whether left-hand or right-hand air discharge is required. If right-hand is required, perform *Right-Hand Discharge Modification* on Page 5.
2. Determine knockouts required for drain line connections.
3. With access door removed, knock out drain line opening for installing drain lines.
4. Set unit so that it is sloped (up to 1/4 inch) toward the drain pan end of the unit.
5. The horizontal configuration is shown in figure 3.

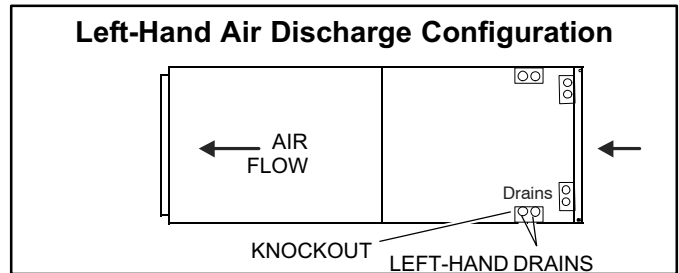


Figure 3

6. If the unit is suspended, the entire length of the cabinet must be supported. If you use a chain or strap, use a piece of angle iron or sheet metal attached to the unit (either above or below) to support the length of the cabinet. Use securing screws no longer than 1/2 inch to avoid damaging the coil or filter. See figure 4. Use sheet metal screws to connect the return and supply air plenums as required.

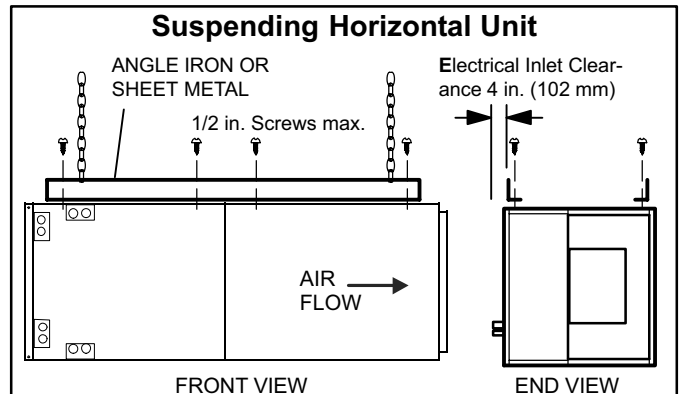


Figure 4

## ⚠ IMPORTANT

**When removing the coil, there is possible danger of equipment damage and personal injury. Be careful when removing the coil assembly from a unit installed in right- or left-hand applications. The coil may tip into the drain pan once it is clear of the cabinet. Support the coil when removing it.**

## Right-Hand Air Discharge Modification

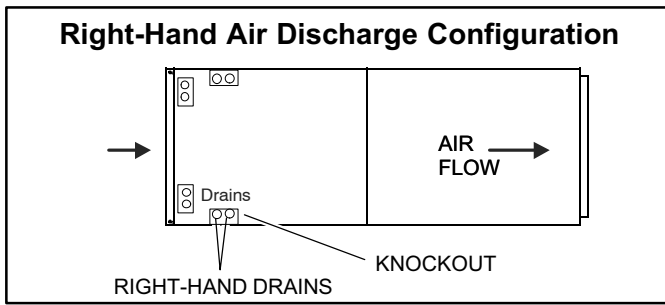


Figure 5

For horizontal right-hand air discharge, the following field modifications are required.

1. Remove and set aside blower and coil access covers.
2. Remove the coil support bracket (see detail A, figure 6).

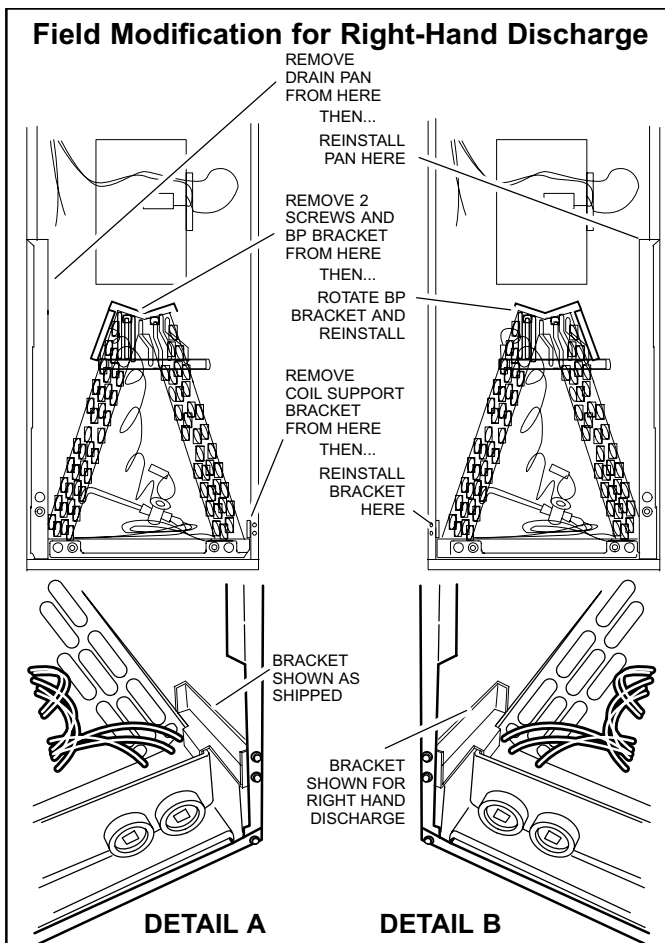


Figure 6

3. Remove coil assembly, bottom drain pan and horizontal drain pan as one assembly from the air handler.
4. Remove two screws and blowoff prevention bracket ("BP BRACKET" in figure 6). Rotate the bracket 180° and reinstall using the same screws.
5. Move the horizontal drain pan to the opposite side of the coil. Be sure drain holes toward the back of the unit are plugged (see figure 7). Remove the plugs from the front drain pan ports.

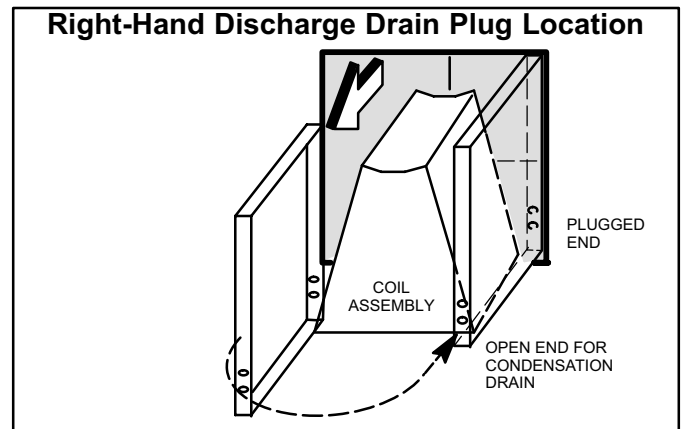


Figure 7

6. Re-install modified coil/drain pan assembly in air handler in the same orientation as before.
7. Install the coil support bracket on the opposite side of the air handler (detail B, figure 6)..

## Condensate Drain

The air handler is provided with 3/4" NPT condensate drain connections.

## ! IMPORTANT

A field-fabricated secondary drain pan, with a drain pipe to the outside of the building, is required in all installations over a finished living space or in any area that may be damaged by overflow from the main drain pan. In some localities, local codes may require an secondary drain pan for any horizontal installation.

## Sloping The Drain

Make sure the unit is sloped (similar to the slope shown in figure 8) so that the drain pan will empty completely without water standing in the pan.

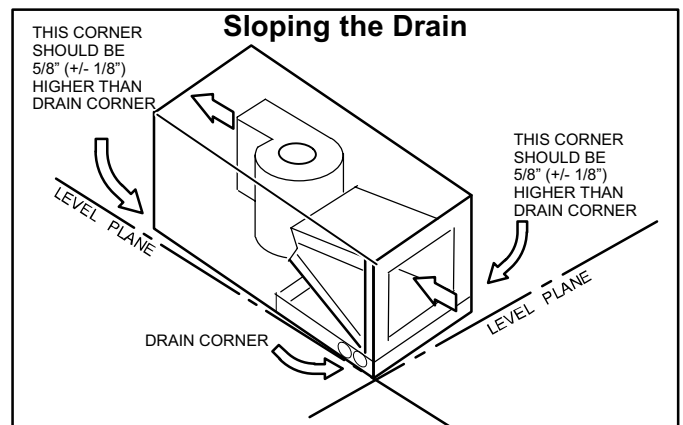


Figure 8

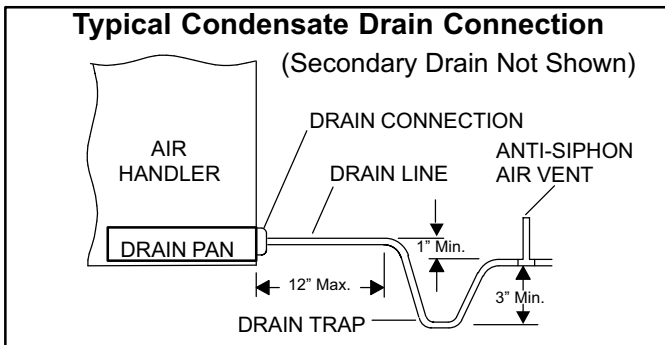
## Install Condensate Drain

1. Remove the appropriate drain knockouts. If necessary, remove the indoor coil assembly from the cabinet.
2. Connect primary drain line connection to the primary drain pan connection. The primary drain connection is flush with the bottom of the inside of the pan. Second-

secondary connection is raised above the bottom of the inside of the pan.

*NOTE - When making drain fitting connections to the drain pan, hand tighten the fitting and use a sealant. Overtightening the fittings can split connections on the drain pan.*

- Secondary drain connections, if used, should be connected to a separate drainage system. Run the secondary drain line to a place where the occupant would be sure to notice any drainage from the drain.
- Install a 3" trap in both the primary and secondary drain lines as close to the unit as practical (see figure 9). Make sure the top of the trap is below the connection to the drain pan to allow complete drainage of the pan.



**Figure 9**

*NOTE - Horizontal runs must have an antisiphon air vent (standpipe) installed ahead of the horizontal run (See figure 9). An extremely long horizontal run may require an oversized drain line to eliminate air trapping.*

*NOTE - Do not operate air handler without a drain trap. The condensate drain is on the negative pressure side of the blower; therefore, air being pulled through the condensate line will prevent positive drainage without a proper trap.*

- Route the drain line to the outside or to an appropriate drain. Drain lines must be installed so they do not block service access to the front of the air handler. A 24" clearance is required for filter, coil, or blower removal and service access.

*NOTE - Check local codes before connecting the drain line to an existing drainage system.*

- Insulate the drain lines where sweating could cause water damage.

### Test Condensate Drain

Test the drain pan and drain line after installation:

- Pour several quarts of water into drain pan, enough to fill drain trap and line.
- Check to make sure the drain pan is draining completely, no leaks are found in drain line fittings, and water is draining from the end of the primary drain line.
- Correct any leaks found.

## Duct System and Filters

### Duct System

The air handler is provided with flanges for the connection of the plenum and ducts. The air handler is equipped with flanges that can form a filter rack for the installation of the air filter, or the filter may be installed as part of the return air duct system.

Supply and return duct system must be adequately sized to meet the system's air requirements and static pressure capabilities. The duct system should be insulated with a minimum of 1" thick insulation with a vapor barrier in conditioned areas or 2" minimum in unconditioned areas.

**Table 1**

Unit Air Filter Size Chart	
CB26UH/CBX26UH Model	Filter Size
-018 / -024	16" x 20"
-030 / -036	18" x 20"
-042 / -048 / -060	18" x 25"

Supply plenum should be the same size as the flanged opening provided around the blower outlet and should extend at least 3 ft. from the air handler before turning or branching off plenum into duct runs. The plenum forms an extension of the blower housing and minimizes air expansion losses from the blower.

### Installing Duct System

Install the conditioned air plenum, ducts and air filters (not provided) in accordance with NFPA 90B Standard for the Installation of Warm Air Heating and Air-Conditioning Systems (latest edition).

Connect supply air duct to the flange on top of the air handler. If an isolation connector is used, it must be nonflammable.

A return air duct system is recommended. If the unit is installed in a confined space or closet, a return connection must be run, full size, to a location outside the closet.

## Connecting Refrigerant Lines

Refrigerant lines must be connected by a qualified technician in accordance with established procedures.

### **⚠ IMPORTANT**

**Refrigerant lines must be clean, dehydrated, refrigerant-grade copper lines. Air handler coils should be installed only with specified line sizes for approved system combinations.**

**Handle the refrigerant lines gently during the installation process. Sharp bends or possible kinking in the lines will cause a restriction.**

**Do not remove the caps from the lines or system connection points until connections are ready to be completed.**

- Route the suction and liquid lines from the fittings on the indoor coil to the fittings on the outdoor unit. Run the lines in as direct a path as possible avoiding unnecessary turns and bends.

2. Make sure that the suction line is insulated over the entire exposed length and that neither suction nor liquid lines are in direct contact with floors, walls, duct system, floor joists, or other piping.
3. Connect the suction and liquid lines to the evaporator coil.
4. To avoid damaging the rubber grommets in the cabinet while brazing, slide the rubber grommets over the refrigerant lines until they are away from the heat source.
5. Braze using an alloy of silver or copper and phosphorus with a melting point above 1,100°F.

*NOTE - Do not use soft solder.*

6. Reinstall the rubber grommets after brazing is finished.
7. Make sure outdoor unit has been put in place according to the Installation Instructions and is connected to the refrigerant lines.

### Sealing the Unit

Seal the unit so that warm air is not allowed into the cabinet. Warm air introduces moisture, which results in water blow-off problems. This is especially important when the unit is installed in an unconditioned area.

## ⚠ IMPORTANT

**When sealing the cabinet, be sure to seal closed any space around the holes where the drain lines exit the cabinet using duct tape and/or Permagum. Warm air must not be allowed to enter through any gaps or holes in the cabinet.**

Make sure the liquid line and suction line entry points are sealed with either Armaflex material or with Permagum. Permagum may also be used to seal around the main and auxiliary drains and around open areas of electrical inlets.

### Electrical Connections

## ⚠ WARNING



**Electric shock hazard! - Disconnect all power supplies before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.**

- All field wiring must be done in accordance with National Electrical Code, applicable requirements of UL and local codes, where applicable.
- Electrical wiring, disconnect means and over-current protection are to be supplied by the installer. Refer to the air handler rating plate for maximum over-current protection, minimum circuit ampacity, as well as operating voltage.
- The power supply must be sized and protected according to the specifications supplied on the product.

- This air handler is factory-configured for 240 volt, single phase, 60 cycles. For 208-volt applications, see "208 Volt Conversion" later in this section.
- For optional field-installed electric heat applications, refer to the instructions provided with the accessory for proper installation.

1. Disconnect all power supplies.
2. Remove the air handler access panel.
3. Route the field supply wires to the air handler electrical connection box.

## ⚠ WARNING



**Electrically ground air handler. Connect ground wire to ground terminal marked "GND". Failure to do so can result in death or electrical shock.**

4. Use UL-listed wire nuts to connect the field supply conductors to the unit black and yellow leads, and the ground wire to ground terminal marked "GND."
5. Replace the air handler access panel.

### Making Electrical Connections

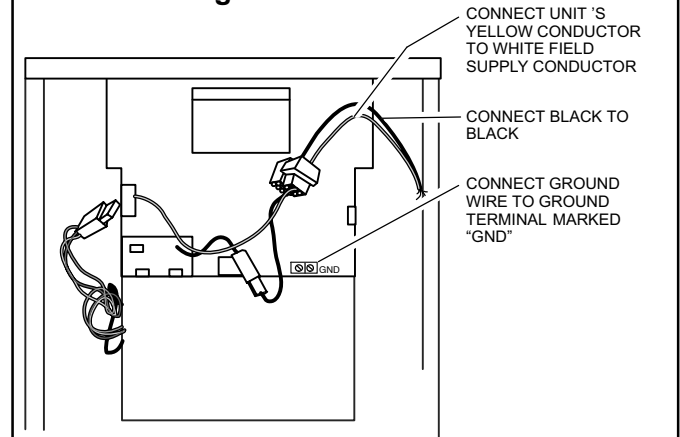


Figure 10

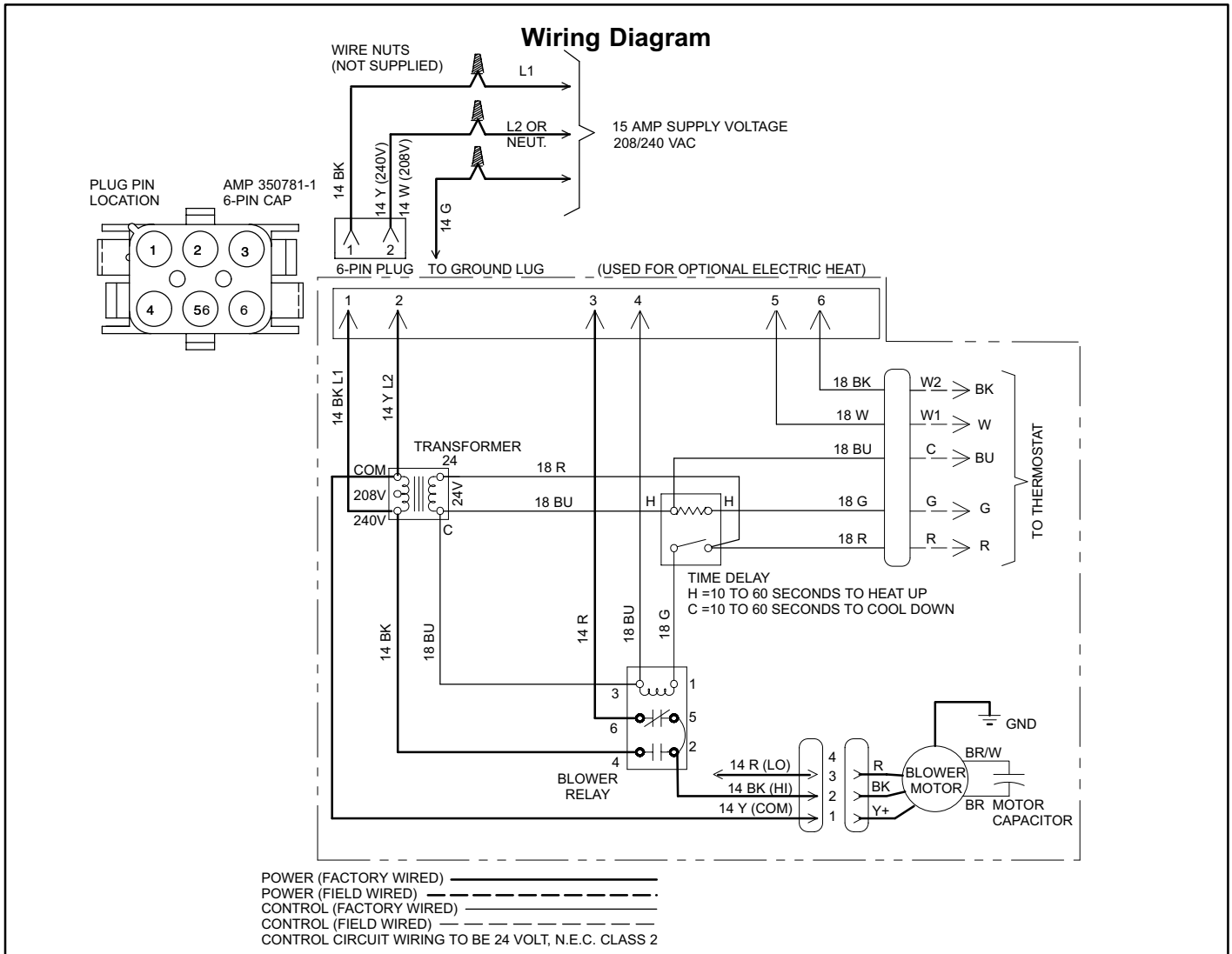
### 208 Volt Conversion

## ⚠ WARNING



**Electric shock hazard! - Disconnect all power supplies before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.**

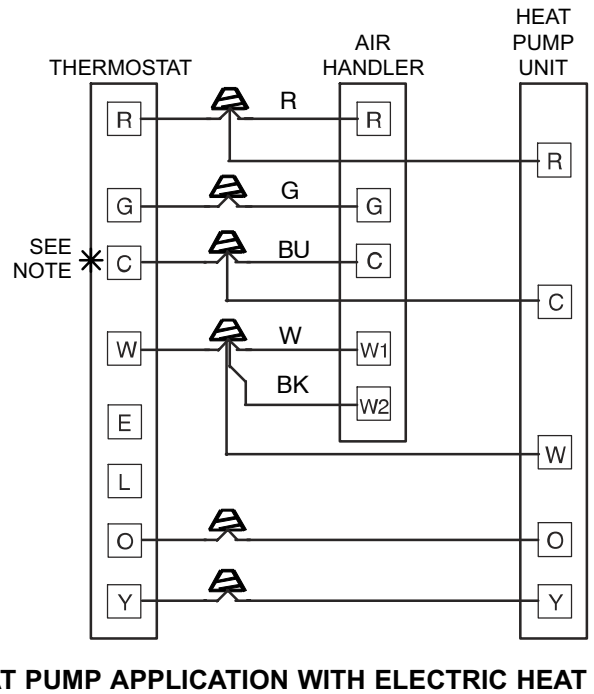
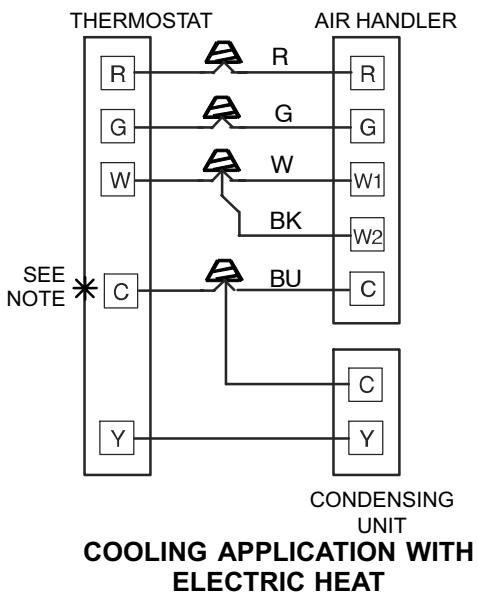
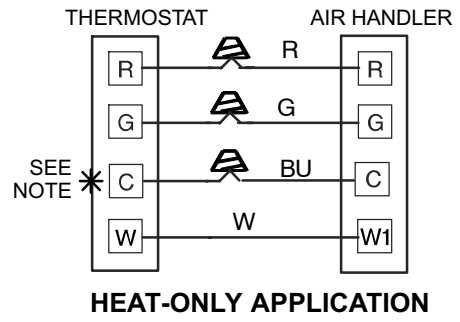
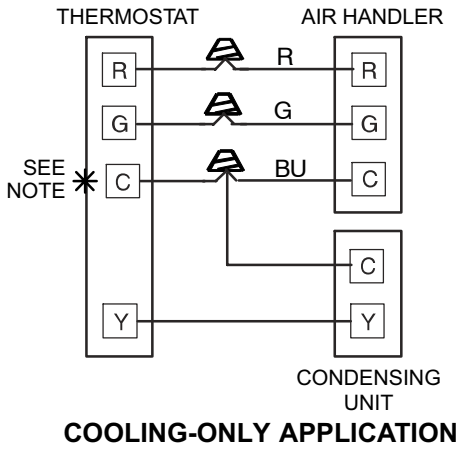
1. Disconnect all power supplies.
2. Remove the air handler access panel.
3. Using the wiring diagram in figure 11 as a reference, Move the 2 connected black transformer leads from the 240 volt terminal on the transformer to the 208 volt terminal on the transformer.



**Figure 11**



## Low Voltage Connections



\*NOTE - Connect common wire only if required (Refer to the appropriate thermostat installation instructions)

**Figure 12**

## Airflow—Cooling Blower Speed

The cooling blower speed is factory configured to provide correct airflow for an outdoor unit that matches the maximum cooling capacity rating of the air handler.

If the outdoor unit is smaller than the maximum cooling capacity rating for the air handler, the cooling blower speed may need to be changed. Refer to Blower Performance Chart, table 2.

### Change Blower Speed

*NOTE - Refer to wiring diagram (figure 11) and blower performance (table 2).*

	<p><b>⚠ WARNING</b></p> <p><b>Electric shock hazard! - Disconnect all power supplies before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</b></p>
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1. Disconnect all power supplies.
2. Remove the air handler access panel.
3. Locate pin number 2 on the blower relay. Two black wires are connected to this terminal pin. One connects to pin number 5 on the blower relay, one connects to an inline splice connecting to a red wire.
4. Remove the wire going to the 4-pin blower motor connector from the splice.
5. Connect the blower lead [Red (LO), Black (HI)] onto the splice from the 4-pin blower motor connector.

*NOTE - Reuse the factory-installed plastic cap on whichever wire is not used.*

6. Replace all panels.
7. Reconnect power.

**Table 2**

<b>CB26UH/CBX26UH Blower Performance</b>						
<b>Model</b>	<b>External Static Pressure</b>		<b>Air Volume at Specific Blower Taps</b>			
			<b>High (Black)</b>		<b>Low (Red)</b>	
	<b>in. w.g.</b>	<b>Pa</b>	<b>cfm</b>	<b>L/s</b>	<b>cfm</b>	<b>L/s</b>
<b>-018</b>	.10	25	1020	460	755	340
	.20	50	960	435	715	325
	.30	75	885	400	675	305
	.40	100	800	365	625	285
	.50	125	690	315	570	260
	.60	150	525	250	500	235
<b>-024</b>	.10	25	1040	470	1000	455
	.20	50	980	445	940	425
	.30	75	905	410	870	395
	.40	100	815	370	785	355
	.50	125	705	320	680	310
	.60	150	535	250	530	250
<b>-030</b>	.10	25	1350	610	1145	520
	.20	50	1290	585	1090	495
	.30	75	1225	555	1030	465
	.40	100	1150	520	960	435
	.50	125	1065	485	875	395
	.60	150	965	455	775	365
<b>-036</b>	.10	25	1560	705	1405	635
	.20	50	1480	670	1340	610
	.30	75	1390	630	1270	575
	.40	100	1290	585	1185	540
	.50	125	1170	530	1090	495
	.60	150	1015	480	975	460
<b>-042</b>	.10	25	1940	880	1785	810
	.20	50	1845	835	1705	775
	.30	75	1745	790	1615	730
	.40	100	1630	740	1515	685
	.50	125	1495	680	1400	635
	.60	150	1330	630	1265	595
<b>-048</b>	.10	25	1945	880	1870	850
	.20	50	1860	845	1790	810
	.30	75	1765	800	1700	770
	.40	100	1660	755	1600	725
	.50	125	1540	700	1485	675
	.60	150	1395	660	1350	635
<b>-060</b>	.10	25	2160	980	2075	940
	.20	50	2065	935	1985	900
	.30	75	1960	890	1885	855
	.40	100	1845	835	1775	805
	.50	125	1710	775	1645	745
	.60	150	1550	730	1495	705

NOTES - All air data measured external to unit with 1 inch non-pleated air filter in place.

Electric heaters have no appreciable air resistance.

All factory settings are high-speed.

All data given while air handler is operating with a dry dx coil.

## Check-out Procedures

*NOTE - Refer to outdoor unit installation instructions for system start-up instructions and refrigerant charging instructions.*

### Pre-Start-Up Checks

- Is the air handler properly and securely installed?
- If horizontally configured, is the unit sloped up to 1/4 inch toward drain lines?
- Will the unit be accessible for servicing?
- Has an auxiliary pan been provided under the unit with separate drain for units installed above a finished ceiling or in any installation where condensate overflow could cause damage?
- Have ALL unused drain pan ports been properly plugged?
- Has the condensate line been properly sized, run, trapped, pitched, and tested?
- Is the duct system correctly sized, run, sealed, and insulated?
- Have all cabinet openings and wiring been sealed?
- Is the indoor coil factory-installed TXV properly sized for the outdoor unit being used?
- Have all unused parts and packaging been disposed of?
- Is the filter clean, in place, and of adequate size?

- Is the wiring neat, correct, and in accordance with the wiring diagram?
- Is the unit properly grounded and protected (fused)?
- Is the thermostat correctly wired and in a good location?
- Are all access panels in place and secure?

### Check Blower Operation

- Set thermostat to FAN ON.
- The indoor blower should come on.

### Check Cooling Operation

- Set thermostat to force a call for cooling (approximately 5°F lower than the indoor ambient temperature).
- The outdoor unit should come on immediately and the indoor blower should start between 30 - 60 seconds later.
- Check the airflow from a register to confirm that the system is moving cooled air.
- Set the thermostat 5°F higher than the indoor temperature. The indoor blower and outdoor unit should cycle off.

### Check Electric Heater (if used)

- Set thermostat to call for auxiliary heat (approximately 5°F above ambient temperature). The indoor blower and auxiliary heat should come on together. Allow a minimum of 3 minutes for all sequencers to cycle on.
- Set the thermostat so that it does not call for heat. Allow up to 5 minutes for all sequencers to cycle off.

## Operation

### Cooling (Cooling Only Or Heat Pump)

When the thermostat calls for cooling, the circuit between R and G is completed, and the blower relay is energized. The normally open contacts close, causing the indoor blower motor to operate. The circuit between R and Y is also completed. This circuit closes the contactor in the outdoor unit starting the compressor and outdoor fan motor. Circuit R and O energizes the reversing valve, switching it to the cooling position. (The reversing valve remains energized as long as the thermostat selector switch is in the COOL position.)

### Heating (Electric Heat Only)

When the thermostat calls for heat, the circuit between R and W is completed, and the heater sequencer is energized. A time delay follows before the heating elements and the indoor blower motor come on. Units with a second heat sequencer can be connected with the first sequencer to W on the thermostat subbase, or they may also be connected to a second stage on the subbase.

### Heating (Heat Pump)

When the thermostat calls for heat, the circuits between R and Y and R and G are completed. Circuit R-Y energizes the contactor starting the outdoor fan motor and the compressor. Circuit R and G energizes the blower relay starting the indoor blower motor.

If the room temperature should continue to fall, the circuit between R and W1 is completed by the second-stage heat room thermostat. Circuit R-W1 energizes a heat sequencer. The completed circuit will energize supplemental electric heat (if applicable). Units with a second heat sequencer can be connected with the first sequencer to W1 on the thermostat. They may also be connected to a second heating stage W2 on the thermostat subbase.

### Emergency Heat (Heating Heat Pump)

If the selector switch on the thermostat is set to the emergency heat position, the heat pump will be locked out of the heating circuit, and all heating will be electric heat (if applicable). A jumper should be placed between W2 and E on the thermostat subbase so that the electric heat control will transfer to the first-stage heat on the thermostat. This will allow the indoor blower to cycle on and off with the electric heat when the fan switch is in the AUTO position.

## Maintenance

### IMPORTANT

**Do not operate system without a filter. A filter is required to protect the coil, blower, and internal parts from excessive dirt and dust. The filter is placed in the return duct by the installer.**

- Inspect air filters at least once a month and replace or clean as required. Dirty filters are the most common cause of inadequate heating or cooling performance.
- Replace disposable filters. Cleanable filters can be cleaned by soaking in mild detergent and rinsing with cold water.
- Install new/clean filters with the arrows on the side pointing in the direction of airflow. Do not replace a cleanable (high velocity) filter with a disposable (low velocity) filter unless return air system is properly sized for it.
- If water should start coming from the secondary drain line, a problem exists which should be investigated and corrected. Contact a qualified service technician.

## Accessories

Contact your Lennox dealer for the following accessories:

- Electric Heat Kit—See the accessory kit label on the front panel of the air handler for the electric heat kit options and accessories.