

BLOWER COIL KITS AND ACCESSORIES



504,947M 10/06 Supersedes 04/05

DOWNFLOW INSTALLATION KIT

INSTALLATION INSTRUCTIONS FOR DOWNFLOW KIT (83M57) USED WITH CB27UH, CBX27UH, CB29M, CB30M, & CBX32M UNITS

Shipping & Packing List

Package 1 of 1 contains the following:

- 3 Pairs of coil support rails (left and right)
- 2 Filter support racks
- 5 Pairs of downflow drip shields
- 1 Bag assembly which contains:
 - 8 4-3/4" X 2" lengths of foam tape
 - 2 20" X 1" lengths of foam tape

Application

Downflow installation kit (83M57) is used when CB27UH, CBX27UH, CB29M, CB30M, or CBX32M blower coil is installed in a downflow application. See figure 1 for kit components.

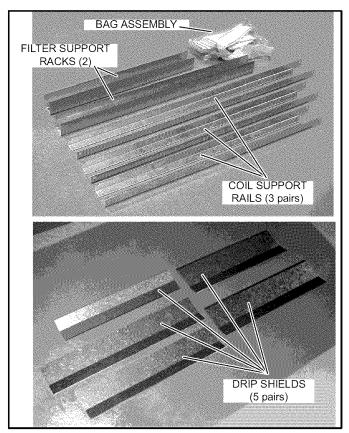


Figure 1. Kit Components

Installation

▲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.

A 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.

- 1. Remove the access panels. Remove the corrugated padding between the blower and coil assemblies.
- 2. Remove the coil assembly from the unit.
- 3. Remove the horizontal drain pan from the blower coil unit (see figure 2).
- 4. Rotate cabinet 180° from the upright position (see figure 2). It may be necessary to remove the blower assembly to lighten the cabinet for lifting.

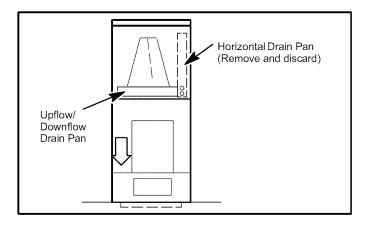


Figure 2. Downflow Discharge Position





- 5. Remove the door support from the unit and set aside for re-installation (see figure 3).
- 6. Three pairs (left and right) of coil support rails are provided. Use the information given in table 1 to select the proper rails for the application. Position and install a coil support rail on each side of the cabinet. The rail should be installed level with the door support which was removed (see figure 3).

Table 1. Coil Support Rail Usage

Unit Model Number	Rail Length
CB27UH-018, -024 CBX27UH-018, -024 CB29M-21/26, -31, -41, -46 CB30M-21/26, -31 CBX32M-018/024, -030	20-7/16"
CB27UH-030, -036 CBX27UH-030, -036 CB29M-51, -65 CB30M-41, -46 CBX32M-036, -042	22-7/16"
CB27UH-042, -048, -060 CBX27UH-042, -048, -060 CB30M-51, -65 CBX32M-048, -060	24-7/16"

- 7. Loosen the existing screw on each side of the back of the cabinet. Slide the rear coil support rail slot over the screw and tighten the screw securely (see figure 4).
- 8. Use the existing screws to secure the front of the coil support rails and the existing door support (see figure 5).
- Use tables 2 and 3 to select the properly sized drip shields for the unit. Drip shields divert condensate to drain pan when blower coil is installed in the downflow position.

NOTE - Downflow drip shields are not required for use with CB29M-21/26, CB30M-21/26, and CBX32M-018/024 units.

Table 2. Downflow Drip Shields: No Tape Req'd

Unit	Part No.	Length	Width
CB29M-31, -41	LB-88658	15.75	2.9187
CB27UH-018, -024 CBX27UH-018, -024 CB30M-31 CBX32M-030	LB-88658	15.75	2.9187
CB27UH-030, -036 CBX27UH-030, -036 CB30M-41, -46 CBX32M-036, -042	LB-88663	17.75	3.9187
CB27UH-042, -048, -060 CBX27UH-042, -048, -060 CB30M-51, -65 CBX32M-048, -060	LB-88664	19.75	3.9187

Table 3. Downflow Drip Shields: Tape Required

Unit	Part No.	Length	Width
CB29M-46	LB-74274	15.875	4.6718
CB29M-51, -65	LB-74272	17.875	4.6718

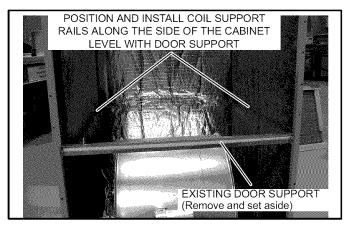


Figure 3. Coil Support Rail Location

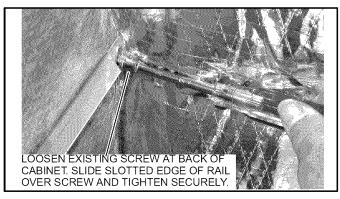


Figure 4. Secure Back of Coil Support Rail



Figure 5. Secure Front of Coil Support Rail

NOTE - WHEN REQUIRED, apply pre-cut foam tape as described in steps 10 and 11. The foam tape creates a seal between the drip shield and both the coil and the drain pan so that water will not be allowed into the air stream.

- 10. Apply two pieces of foam tape (provided) down both ends of each shield. The tape should measure 4-3/4" X 2" (120 X 25 mm). Ensure that the tape covers both sides of the shield equally (see figure 6).
- 11. Apply the longer piece of foam tape on one side between the pieces on each end. This piece of tape is 1" wide and should be trimmed to fit (see figure 7).
- 12. From the underside of the coil, install the downflow drip shield. Make sure that the shield is firmly in place. It may be necessary to apply light force to position the shields into the bottom of the drain pan (see figure 8).

NOTE - Drip shields should fit snugly against both the coil and drain pan. Insulating tape may be required along the full length of the bottom of shields used with CB27UH, CBX27UH, CB30M, CBX32M and smaller CB29M units to ensure a good seal (see figure 8).

- 13. Slide the coil assembly and the blower back into the cabinet, if they were removed. Replace the coil access panel.
- 14. Install the appropriate rear filter support rack between the filter rails (see figure 9). Use 14-1/2" support rack for 16-1/4" cabinet and 19-1/2" rack for 21-1/4" cabinet. Slide the filter between the filter rails as shown.
- 15. Make sure that the unit is level. Use sheet metal screws to connect the return and supply air plenums, as required.

AWARNING

If electric heat section with circuit breakers (ECB29) is applied to downflow CB27UH, CBX27UH, CB29M or CB30M unit, the circuit breakers must be rotated 180° to the UP position. See ECB29 installation instructions for more details.

NOTE - In downflow applications, use only metal or class I supply and return air plenums.

- 16. Replace blower access panel.
- Install the unit according to the unit installation instructions.

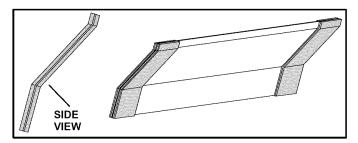


Figure 6

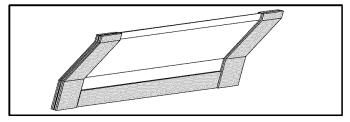


Figure 7

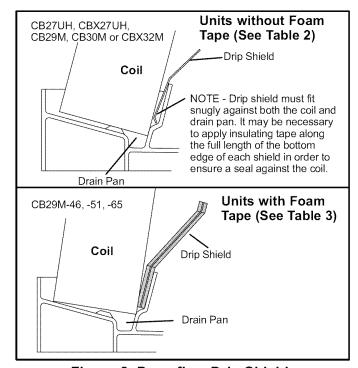


Figure 8. Downflow Drip Shields

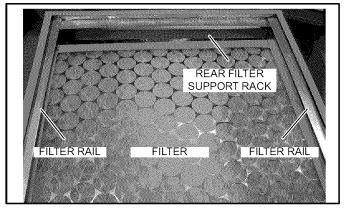


Figure 9. Filter Support Rack Installation