

INSTALLATION INSTRUCTIONS FOR DOWNFLOW KIT (83M57)

**RETAIN THESE INSTRUCTIONS
FOR FUTURE REFERENCE**

⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause personal injury, loss of life, or damage to property.

Installation and service must be performed by a licensed professional installer (or equivalent) or a service agency.

Shipping and Packing List

Check parts for shipping damage; if any damage is found, immediately contact the last shipping carrier.

Package 1 of 1 contains the following:

- 3 — Pairs of coil support rails (left and right)
- 2 — Rear filter support racks
- 5 — Pairs of downflow drip shields
- 1 — Narrow top cap (for -048, -060, -148 and -160 size units only)
- 1 — Bag assembly containing the following items:
 - 8 — 4-3/4" X 2" lengths of foam tape
 - 2 — 20" X 1" lengths of foam tape

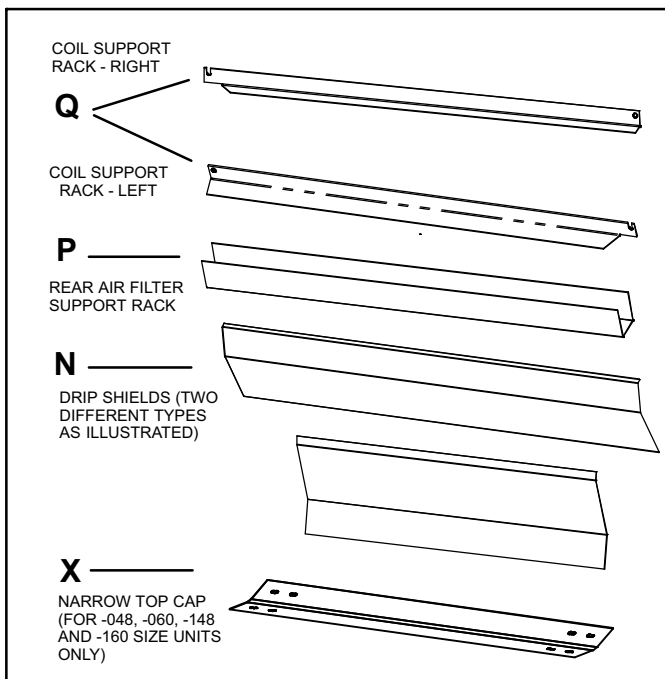


Figure 1. Included Kit Parts

Application

Downflow installation kit (83M57) is used with air handlers when installed in a downflow application. Figure 2 illustrates how the unit is shipped from the factory in an upflow configuration and the second illustration is how it would appear in a downflow configuration.

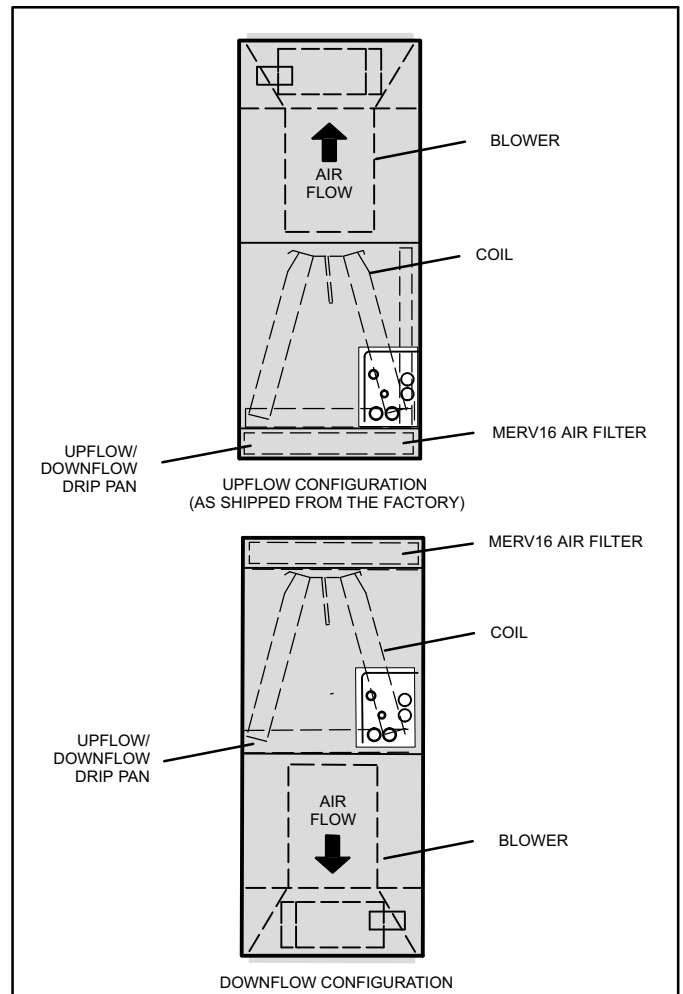


Figure 2. Air Handler Configurations

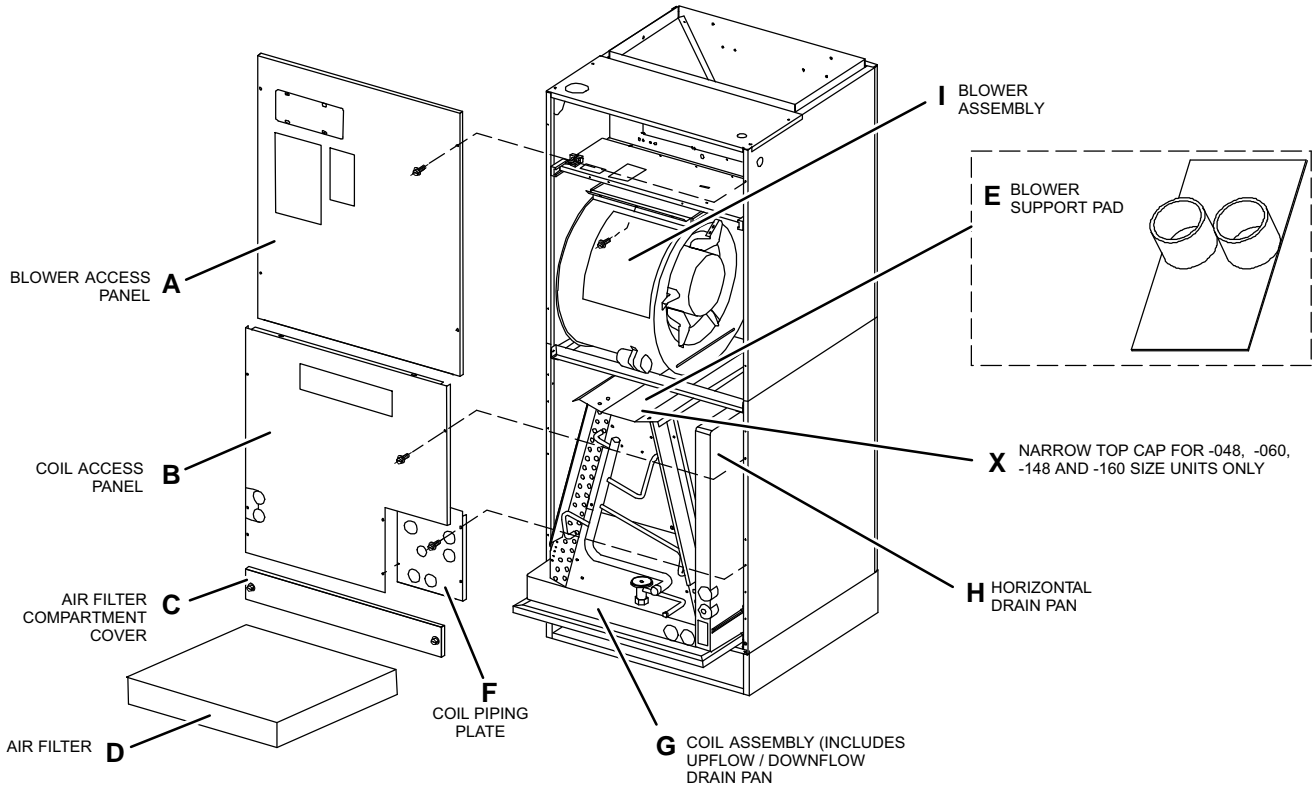
⚠ CAUTION

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.



Installation

ORIGINAL UPFLOW VIEW



DOWNFLOW VIEW

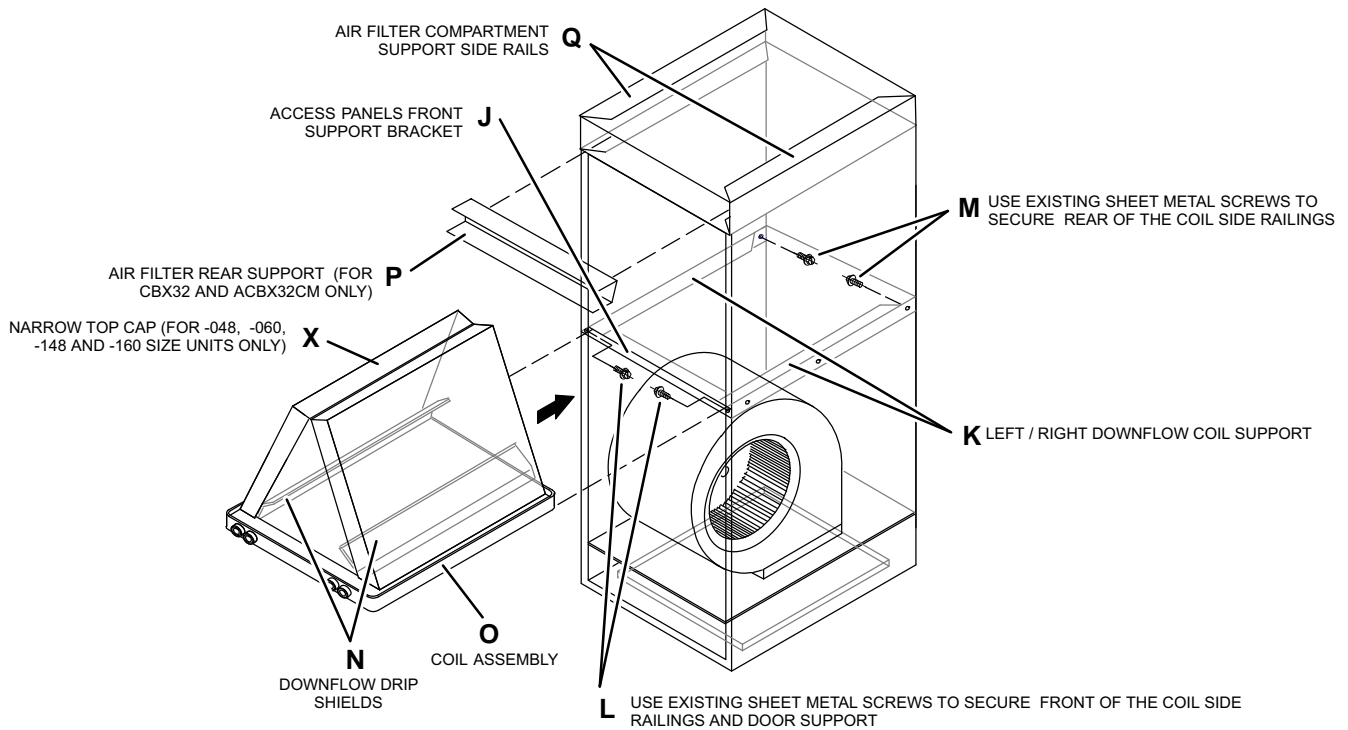


Figure 3. Assembly View

Installation

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Use figure 3 to locate specific components of the air handler assembly.

1. Remove the **A**, **B** and **C** access panels.
 2. Remove air filter **D**.
 3. Remove and discard the corrugated blower support pad **E** which is located between the blower **I** and coil **G** assemblies.
 4. Remove coil piping plate **F**.
 5. Remove the coil assembly **G** from unit.
 6. Remove the horizontal drain pan **H** from the blower coil assembly.
 7. Remove wide top cap from the coil assembly if it is -048 or -060, -148 and -160 size units.
 8. Install narrow top cap **X** if unit is a -048, -060, -148 and -160 size units.
 9. Rotate cabinet 180° from the upright position.
- NOTE — It may be necessary to remove the blower assembly to lighten the cabinet for lifting.*
10. Remove the front access panels support bracket **J** from the unit and set aside for re-installation later.
 11. Three pairs (left and right) of coil support rails **K** 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 must be installed level with the door support which was removed..

Table 1. Coil Side Support Rails — Inches (mm)

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 (519)
ACBX32CM-136 CB27UH-030, -036 CBX27UH-030, -036 CB29M-51, -65 CB30M-41, -46 CBX32M-036, -042 CBX40UHV-024, -030, -036	22-7/16 (570)
ACBX32CM-148, -160 CB27UH-042, -048, -060 CBX27UH-042, -048, -060 CB30M-51, -65 CBX32M-048, -060	24-7/16 (621)

12. Loosen the existing screw **M** on each side of the rear end of the cabinet. Slide the rear of the coil side

support rail slot over the screw and tighten the screw securely.

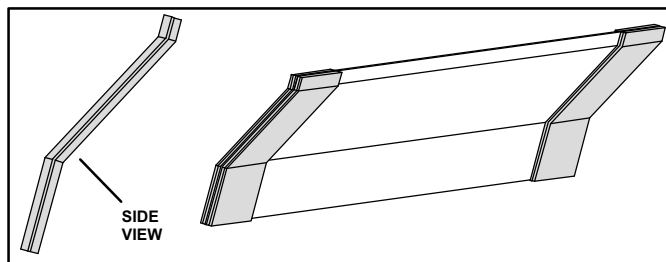
13. Use the existing screws **L** to secure the front end of the coil side support rails and the existing door support.
14. Use table 2 to select the properly sized drip shields for the unit. Drip shields divert condensate to drain pan when blower coil is installed in the downflow position.

Table 2. Downflow Drip Shields — Inches (mm)

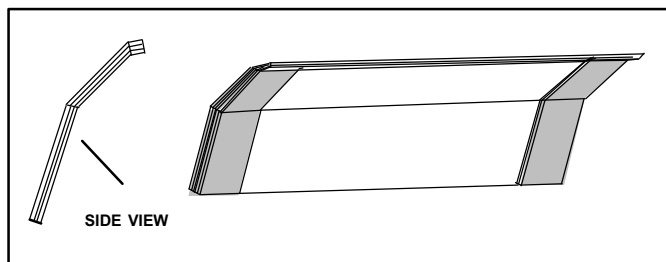
Unit	Part No.	Length
CB29M-46	LB-74274	15-7/8 (403)
CB29M-51, -65	LB-74272	17-7/8 (454)
CBX40-024, -030, -036	LB-88663	15-7/8 (403)
CB29M-31, -41	LB-88658	15-3/4 (400)
CB27UH-018, -024 CBX27UH-018, -024 CB30M-31 CBX32M-030	LB-88658	15-3/4 (400)
ACBX32CM-136 CB27UH-030, -036 CBX27UH-030, -036 CB30M-41, -46 CBX32M-036, -042	LB-88663	17-3/4 (451)
ACBX32CM-148, -160 CB27UH-042, -048, -060 CBX27UH-042, -048, -060 CB30M-51, -65 CBX32M-048, -060	LB-88664	19-3/4 (502)

NOTE — Apply pre-cut foam tape as described in steps 15 and 16. 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.

15. 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 figures 4 and 5).



**Figure 4. Tape Application
(LB-74272 and LB-74274)**



**Figure 5. Tape Application
(LB-88658, LB-88663 and LB-88664)**

16. 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 figures 6 and 7).

NOTE — Insulating tape is required along the full length of the bottom of shields used with ACBX32CM, CB27UH, CBX27UH, CB30M, CBX32M, CBX32UFO, CBX40UHV and smaller CB29M units to ensure a good seal (see figures 6 and 7).

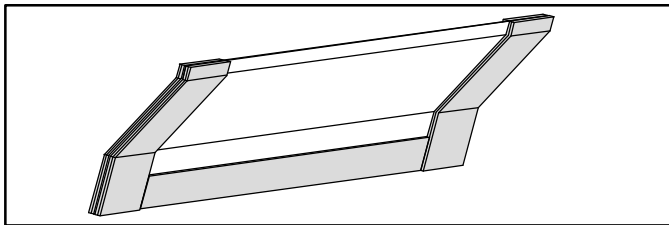


Figure 6. Tape Application
(LB-74272 and LB-74274)

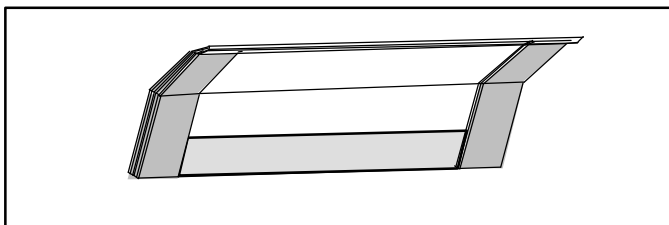


Figure 7. Tape Application
(LB-88658, LB-88663 and LB-88664)

17. From the underside of the coil, install the downflow drip shields N. 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 figures 8 and 9).

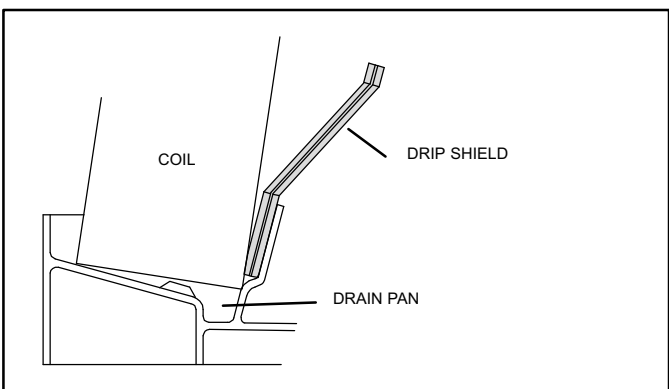


Figure 8. Downflow Drip Shields
(LB-74272 and LB-74274)

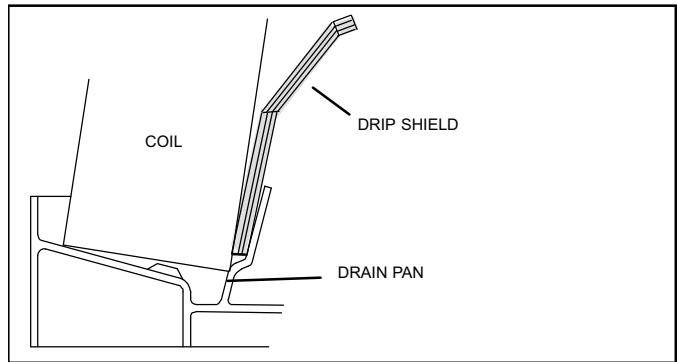


Figure 9. Downflow Drip Shields
(LB-88658, LB-88663 and LB-88664)

18. Slide the coil O, and blower I (if removed) assemblies back into the cabinet.
19. Install coil piping plate F.
20. Install the provided rear filter support rail P between the filter rails (see table 3 for applicable units). Slide the rear filter rail between the side filter rails as shown in the illustration on page 2.

Table 3. Rear Filter Support Rails — Inches (mm)

Unit	Length
CB29M-21/26, CB30M-21/26 and CBX32M-018/024	14-1/2 (368)
All other units and sizes.	19-1/2 (495)

21. Install air filter D.

NOTE — Remove air filter from plastic bag

22. Make sure that the unit is level.

23. Use sheet metal screws to connect the return and supply air plenums, as required.

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

! WARNING

If electric heat section with circuit breakers ECB29, AECB29 or ECB40 is applied to downflow, the circuit breakers must be rotated 180° to the UP position. See ECB29 or ECB40 installation instructions for more details.

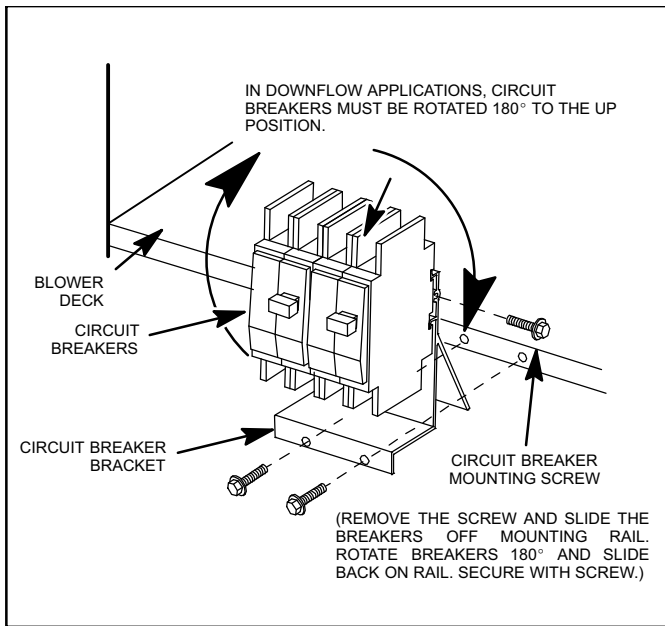


Figure 10. Electric Heat Section with Circuit Breakers

24. Install both access panels **A**, **B** and **C**.

25. Install the unit according to the air handler installation instructions.