Mounting Kits for CXH-EP Forced Air Heaters

**IMPORTANT**

**CAUTION:** In order to prevent equipment damage the wall or ceiling mounting structure and the anchoring components must be of sufficient strength to support the combined weight of the heater and mounting brackets. (Refer to Table A in Service Reference PF490 for weight of heater.)

Adequate stiffness should be provided to ensure that unwanted vibrations or movements of the complete system do not occur.

Such vibrations or movement could be induced by electric motor start-up, or be transmitted to the heater from the structure to which it is mounted, as in mobile installations. Where heaters are installed in applications that are of a relocatable or transportable nature (such as drilling rigs) design the mounting structure to withstand all probable load conditions. Such load conditions should recognize accidental situations such as truck off-loading impacts.

For complete installation, operation and maintenance instructions refer to Chromalox Service Reference Bulletin PF490.

**INSTALLATION**

**CAUTION:** In order to prevent nuisance tripping of the overtemperature cutout or heater damage mount only in upright position and observe name-plate mounting clearances.

Heater Location Instructions:

Arrange units so their discharge air streams:
- A. are subjected to a minimum of interference from columns, machinery and partitions.
- B. wipe exposed walls without blowing directly at them.
- C. are directed away from room occupants in comfort heating.
- D. are directed along the windward side when installed in a building exposed to a prevailing wind.

Locate thermostat on interior partition walls or posts away from cold drafts, internal heat sources and away from heater discharge air streams.

Small rooms can be heated by one unit heater. Where two walls are exposed, the heater should be mounted as shown in Figure 1. Large rooms require multi-unit installations. Number and capacity of units will be determined by volume of building and square feet of floor area to be heated. Arrange units to provide perimeter air circulation where each unit supports the air stream from another.

The CXH hazardous location heaters are designed for use only in a permanently mounted upright position. We recommend the use of a mounting kit (ceiling, wall or pole) available from Chromalox.

The ceiling or wall mounting surface and the anchoring provision must be sufficient to support the combined weights of the unit and mounting hardware.

If using mounting hardware or a supporting structure not supplied by Chromalox, the unit should be suspended from the supporting structure thru the two mounting points on top of the unit with 5/8 NC bolts and lockwashers. If single point mounting is desired, order the correct size Chromalox adapter bracket (P/N 027-302361-001 for 12” fan units, P/N 027-302361-002 for 16” fan units and P/N 027-302361-003 for 20” fan units Figure 2). This bracket is designed to hold the unit over its center of gravity with a 1” Dia. bolt. The maximum tilt angles, as shown in Figure 3, must not be exceeded in either direction during operation and installation. Failure to comply will cause high limit shut down.
INSTALLATION

The heaters may be mounted at any convenient height above floor. The minimum spacings, shown in Figure 4, should be maintained to adjacent walls and ceiling. If floor heat is desired, do not mount higher than 8’ to 10’ above floor.

Controlling thermostats to individual heaters should be mounted at shoulder height on inside walls or columns and clear of the discharge air stream of the unit. Allow at least 4’ in front of heater for air stream to discharge freely. Do not mount mercury type thermostat directly on units, vibration could cause malfunction.

Heater may be mounted on a shelf or stand from the bottom. Be sure the mounting clearances are maintained and that bottom of unit has at least 1’ clearance underneath it. This is necessary for good air circulation and servicing of heat exchanger. All mounting methods must allow for removal of front cover.

The mounting and anchoring provisions must take into account the unit vibration and cantilevered loading when wall or pole mounted. One of the Chromalox mounting kits, shown in Figure 5, 6 and 7, must be used whenever possible.
MOUNTING KITS

Wall Mount Kit
Model WMB-12, 12" Fan (3-10 kW)
Model WMB-16, 16" Fan (15-20 kW)
Model WMB-20, 20" Fan (25-35 kW)

1/2 ø Hardware Not Supplied
Adapter Bracket Supplied
1" ø Bolt Single Point Swivel Mount
5-1/2" - 12" Fan
5-18" - 16" Fan
6-3/8" - 20" Fan

3 through 10 kW P=10"
15 through 20 kW P=14-1/2"
25 through 35 kW P=14-1/2"

Figure 5

Pole or Wall Mount Kit
Model PMB-12, 12" Fan (3-10 kW)
Model PMB-16, 16" Fan (15-20 kW)
Model PMB-20, 20" Fan (25-35 kW)

ø 3/8 Hardware, Cust. Supplied
ø 1/2 x 4" U-Bolts & Hardware, Cust. Supplied
3-1/2 SCH 40 Pipe or 4" O.D. x .25 Wall Tube Cust. Supplied Length to Suit

3 through 10 kW P=10"
15 through 20 kW P=14-1/2"
25 through 35 kW P=14-1/2"

Figure 6

Ceiling Mounting Kit
Model HMK-00

Cust. Supplied ø 1/2 Mounting Hardware, Bracket Spacing suitable for use with 4" U-Bolts

Figure 7
## RENEWAL PARTS IDENTIFICATION

### Parts Common to Wall and Pole Mounting Kits

<table>
<thead>
<tr>
<th>Parts Description</th>
<th>WMB-12, PMB-12 — 12” Fan (3-10 kW)</th>
<th>WMB-16, PMB-16 — 16” Fan (15-20 kW)</th>
<th>WMB-20, PMB-20 — 20” Fan (25-35 kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting Bracket</td>
<td>027-302359-004</td>
<td>027-302359-005</td>
<td>027-302359-006</td>
</tr>
<tr>
<td>Adapter Bracket</td>
<td>027-302361-001</td>
<td>027-302361-002</td>
<td>027-302361-003</td>
</tr>
<tr>
<td>1” Swivel Mount Bolt</td>
<td>345-075604-326</td>
<td>345-075604-326</td>
<td>345-075604-326</td>
</tr>
<tr>
<td>1” Swivel Mount Nut</td>
<td>200-075473-146</td>
<td>200-075473-146</td>
<td>200-075473-146</td>
</tr>
<tr>
<td>1” Swivel Mount Flat Washer</td>
<td>328-024326-045</td>
<td>328-024326-045</td>
<td>328-024326-045</td>
</tr>
<tr>
<td>5/8” Adapter Bolt</td>
<td>345-075604-045 (2)</td>
<td>345-075604-045 (2)</td>
<td>345-075604-045 (2)</td>
</tr>
<tr>
<td>5/8” Adapter Lock Washer</td>
<td>328-075571-019 (2)</td>
<td>328-075571-019 (2)</td>
<td>328-075571-019 (2)</td>
</tr>
<tr>
<td>1” Swivel Mount Lock Washer</td>
<td>328-075571-023</td>
<td>328-075571-023</td>
<td>328-075571-023</td>
</tr>
</tbody>
</table>

### Parts Common to PMB Mounting Kits Only

<table>
<thead>
<tr>
<th>Parts Description</th>
<th>PMB-12, 12” Fan (3-10 kW)</th>
<th>PMB-16, 16” Fan (15-20 kW)</th>
<th>PMB-20, 20” Fan (25-35 kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pole Support Bracket</td>
<td>027-302362-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pole Support Base</td>
<td>015-302363-001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Parts Common to Ceiling Mounting Kit

<table>
<thead>
<tr>
<th>Parts Description</th>
<th>HMK-00 12”, 16”, and 20” Fan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hanger Bracket</td>
<td>027-302360-001 (4)</td>
</tr>
<tr>
<td>Hanger Turnbuckle</td>
<td>140-302379-001 (2)</td>
</tr>
<tr>
<td>Cross Bolt 1/2”</td>
<td>345-075603-335 (2)</td>
</tr>
<tr>
<td>Cross Bolt Nut 1/2”</td>
<td>200-075473-056 (2)</td>
</tr>
<tr>
<td>Cross Bolt Lock Washer</td>
<td>328-075571-013 (2)</td>
</tr>
<tr>
<td>1/2” Lock Nut</td>
<td>328-075571-019 (4)</td>
</tr>
<tr>
<td>1/2” Hex Nut</td>
<td>200-075473-129 (4)</td>
</tr>
</tbody>
</table>

### Limited Warranty: