POWER EXHAUST VENTILATOR

MODELS:
CPVE5-A-X
CPVE5-A-4
CPVE5-C-X
CPVE5-C-4
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INSTALLATION INSTRUCTIONS FOR POWER EXHAUST VENTILATOR

1. Remove and discard filter access door.

2. Remove and discard the condenser partition blank off plate.

3. Remove left side condenser grille. Set aside to be reattached later. Pull drain hose out of base pan and lay aside.

4. Under the condenser partition there is foil-faced insulation. Remove the 3 inch piece across the back. Cut away the insulation 1 inch on three sides around the exhaust opening. \textit{NOTE: Some units may have this insulation cleared.}

5. From inside of the unit, enlarge holes in condenser partition. Drill out holes 1, 2, 3 and 4 to 1/4 inch diameter. (See Figure 1.)

6. From inside, install the air baffle support base plate on top of the condenser partition with the insulated side towards the return opening. Line up the holes and install screws in holes 5 and 6 (screws provided). (See Figure 2.)

7. From the left side of the unit through the opening where the condenser grille was removed, position the exhaust ventilator with the flat side towards the back of the unit and slide on unit base until it is positioned under the opening. Lift up the far side and place the flange through the opening and up on top of the condenser partition. Lift up the end near to you and secure with two long screws up through the air baffle support. Do not tighten at this point. On some units it may be necessary to adjust the discharge line away from the back of the unit to allow clearance for the exhaust ventilator.

8. From the inside, line up holes through the air baffle support base to power exhaust assembly and secure with 3/4 inch screws that are provided. Tighten all screws at this time making sure of a good seal to the condenser partition. For screws 7 and 8 drill through condenser partition with 1/4 inch diameter drill. (See Figure 2.)

9. Pull the blower motor leads out of the power exhaust and lay them aside. Install the fresh air shield with the insulation side towards the return opening and secure with four screws provided. (See Figure 2.)

10. Install the MFAD from the outside of the unit. For attachment details see Figure 3. From the room side, plug the four wire connector from the power exhaust into the back of the MFAD control box. On the 460 volt models, there is a two wire connector also to be plugged into the MFAD control box.

11. Remove the electrical service access door and install the 3 wire pigtail provided. Snap the plastic connector into the hole in the control panel. Connect the red and black wires to the terminal block just below the circuit breaker making sure the green wire is grounded. (See Figure 4.)

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
Power Exhaust Ventilator Model & Voltage & Use With These Units \\
\hline
CPVE5-A-X & 208/230 Volts & WH381-A, WH381-B \\
& & WH431-A, WH431-B \\
& & WH491-A, WH491-B \\
CPVE5-A-4 & 208/230 Volts & WH381-A, WH381-B \\
& & WH431-A, WH431-B \\
& & WH491-A, WH491-B \\
CPVE5-C-X & 460 Volts & WH381-C \\
& & WH431-C \\
& & WH491-C \\
CPVE5-C-4 & 460 Volts & WH381-C \\
& & WH431-C \\
& & WH491-C \\
\hline
\end{tabular}
\end{table}

\begin{center}
$\text{WARNING}$
\end{center}

\begin{center}
Turn off all electrical power to unit before installation of power exhaust ventilator to unit.
\end{center}
12. Plug the high voltage connector from the MFAD into the connector installed in the control panel. Route the low voltage wires (black and orange) through the 7/8 inch bushing in the control panel into the low voltage box. Connect the orange lead to the “01” terminal and the black lead to the “C” terminal.

13. Attach rain hood to the new filter access door and attach this assembly to the unit. Make sure you reattach the safety cable. (See Figure 5.)

14. Reinsert the drain tube through the base.

15. Reattach the condenser side grille.

16. The installation of the Power Exhaust Ventilator is complete.

The system will provide exhaust air volume equal to the fresh air volume.

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**WARNING**

Disconnect power to the unit before resetting speed of fan.

The Power Exhaust Ventilator assembly is shipped from the factory with the exhaust blower motor wired on high speed. If a different speed is desirable the speed may be changed by removing the filter access door. Then remove the control box cover of the MFAD. Refer to the wiring diagram attached to the backside of the control panel cover. Reposition the blower leads to produce the desired blower speed. Reattach control box cover and filter access door.

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**TABLE 1**

**PERFORMANCE DATA FOR THE POWER EXHAUST VENTILATOR**

<table>
<thead>
<tr>
<th>Indoor Blower Speed</th>
<th>Power Exhaust Speed</th>
<th>CFM of Fresh Air</th>
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<tr>
<td>Low</td>
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</tr>
<tr>
<td>Medium</td>
<td>Medium</td>
<td>385</td>
</tr>
<tr>
<td>High</td>
<td>High</td>
<td>485</td>
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<td>Medium</td>
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<td>305</td>
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<tr>
<td>High</td>
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<td>390</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>High</td>
<td>480</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>335</td>
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FIGURE 1
CONDENSER PARTITION
SCREW HOLE ENLARGEMENT
FIGURE 2
ASSEMBLY OF EXHAUST VENTILATOR
AND AIR BAFFLE SUPPORT

FRESH AIR SHIELD

EXHAUST VENTILATOR ASSEMBLY

AIR BAFFLE SUPPORT

CONDENSER PARTITION
FIGURE 3
ATTACHMENT OF MFAD TO UNIT

ROUTE THE MFAD WIRES THROUGH HOLE AND IN TO CONTROL PANEL.

WHEN INSTALLING MFAD POSITION SO THAT HOLE IN FRONT LIP IS CENTERED OVER HOLE IN CONDENSER GRILLE TO INSERT A SELF DRILLING SCREW.

CAUTION: HOLE IN MFAD MUST BE USED TO INSURE CLEARANCE FROM CONDENSER COIL TUBING.

SIDE SECTION

SERVICE DOOR

LIP OF MFAD IS TO BE BETWEEN THE CONDENSER GRILLE AND SERVICE DOOR

CONDENSER PARTITION

MOTORIZED FRESH AIR DAMPER

FRONT GRILL
FIGURE 4
ATTACHMENT OF WIRE ASSEMBLY TO UNIT CONTROL BOX
FIGURE 5
ATTACHMENT OF RAIN HOOD
TO FILTER ACCESS DOOR
**CABINET COMPONENTS PARTS LIST**

Exterior cabinet parts are manufactured with various paint color options. To insure that you receive the proper paint color, you must include the complete model and serial number of the unit for which cabinet parts are being ordered.

<table>
<thead>
<tr>
<th>Drawing No.</th>
<th>Part No.</th>
<th>Description</th>
<th>CPVE5-A-X</th>
<th>CPVE5-A-4</th>
<th>CPVE5-C-X</th>
<th>CPVE5-C-4</th>
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<td>Control Panel Components</td>
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*Exterior cabinet parts are manufactured with various paint color options. To insure that you receive the proper paint color, you must include the complete model and serial number of the unit for which cabinet parts are being ordered.*
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<th>CPVE5-A-X</th>
<th>CPVE5-A-4</th>
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## CONTROL PANEL PARTS LIST

### Drawing

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<th>Part No.</th>
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