Installation Instructions

NOTE: Read and become familiar with these instructions before beginning installation.

SAFETY CONSIDERATIONS

Installing and servicing air-conditioning equipment can be hazardous due to system pressures and electrical components. Only trained and qualified personnel should install or service air-conditioning equipment. When working on air-conditioning equipment, observe the precautions provided in literature, tags, and labels attached to the unit.

Follow all safety codes. Wear safety glasses, protective clothing, and work gloves. Use quenching cloth for brazing operations. Have fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions included in literature and attached to the unit. Consult local building codes and current editions of the National Electrical Code (NEC) NFPA 70. In Canada, refer to current editions of the Canadian electrical code CSA 22.1.

Recognize safety information. This is the safety-alert symbol △. When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury.

Understand these signal words: DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which will result in severe personal injury or death. WARNING signifies hazards which could result in personal injury or death. CAUTION is used to identify unsafe practices which may result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which will result in enhanced installation, reliability, or operation.

![WARNING](image)

**ELECTRICAL SHOCK HAZARD AND/OR UNIT OPERATION AND DAMAGE HAZARD**

Failure to follow this warning could result in personal injury or death and/or unit operation and damage.

- Follow the National Electrical Code (NEC), ANSI/NFPA 70, Canadian Electrical Code CSA C22.1 and local codes and ordinances for special requirements.
- For personal safety, this unit MUST BE properly grounded.
- Protective devices (fuses or circuit breakers) acceptable for unit installations are specified on the nameplate of each unit.
- DO NOT use an extension cord with this unit.
- Aluminum building wiring may present special problems. Consult a qualified electrician for assistance.

When unit is in STOP position, there is still voltage to electrical controls.

**INTRODUCTION**

These instructions cover the installation of the Accessory Vent-Power Kit (see Fig. 1). When installed, the Vent Power kit will provide fresh air to indoor space.

On standard units the Vent Power kit will operate with the compressor or electric heater; and will automatically open or close the vent door, depending on whether the compressor or electric heater is energized or not. The Vent Power kit will not operate in fan only mode on standard models.

On Remote Control models, the Vent Power kit will operate with the fan. When the unit fan is running the door will open and the Vent Power kit will provide fresh air. When the unit fan is off, the Vent Power door will close and the fresh air fan will stop.
1. **Remove front panel.** See Fig. 2.

   ![Fig. 2 - Removing Front Panel](image1.png)

   Pull out at the bottom to release it from the tabs (1). Then lift up (2).

2. **Remove junction box.** See Fig. 3
   
   a. Remove junction box cover by removing three screws from front (save these for later).
   
   b. Remove junction box by taking out top, rear and side screws (save these for later).

   ![Fig. 3 - Junction Box Location](image2.png)

3. **Disconnect power cord connector from unit connector.** See Fig. 4.

   ![Fig. 4 - Power Connection](image3.png)

4. **Remove unit from wall sleeve**
   
   a. Remove the four mounting screws that secure the PTAC (packaged terminal air conditioner) unit to the wall sleeve (2 screws per side).
   
   b. Grasp the sides of the unit and slide it from the sleeve.

5. **Remove existing vent door assembly (see Fig. 5).**
   
   a. Remove the cable clamp and discard.
   
   b. Cut vent cable at vent door hinge.
   
   c. Remove vent door control knob by removing 4 screws. Pull vent cable sleeve out and discard.
   
   d. Remove the vent filter and door by first removing the 1 screw holding the door to the partition. Then remove the 4 screws securing the vent filter to the partition. Discard both the door and the filter.

   ![Fig. 5 - Remove Existing Vent Assembly](image4.png)

6. **Cut and remove insulation area above vent opening.**
   
   a. Use a utility knife to cut insulation area above vent opening.
   
   b. Remove insulation from partition wall.

   ![Fig. 6 - Cut & Remove Insulation Above Vent Opening](image5.png)
7. Mount vent assembly (See Fig. 7 & Fig. 8)
   a. Install vent assembly onto partition using three no. 10 x 3/4-in. hex head screws. See Fig. 7.
   b. Route damper and vent fan motor wires along the top of the partition towards the control and wire tie to the 2 gussets. See Fig. 8.

8. Install the spring on the vent assembly
   Install the spring on the vent assembly from the flange hole on the vent door to the hole located in the mount. For ease of installation, install mount end first with door open. See Fig. 9 for details.
   NOTE: Vent door must be open and actuator arm must be behind spring.
9. Mount transformer and relay in control box (see Fig. 10 - 14).
   a. Remove screw that holds control display panel and lay across discharge screen see Fig 10.
   b. Remove the 10 screws that hold the right side control panel see Fig 11.
   c. Remove the 11 screws that hold the top control panel see Fig 12.
   d. Locate transformer inside of control panel approximately 1/4" in from the small flange and approximately 1-1/2' from the control board to the first mounting hole of the transformer and drill a 1/4" hole. Measure 3-9/16" on center away from the first hole and towards top of the control panel see Fig. 13. Mount transformer after the holes have been drilled with the kit supplied screws.
   e. Locate relay on the inside top flange 1-1/4" from the edge of the inside top and 3/8" from side with the 1/2" flange. Mark the mounting holes and drill a 3/32" dia. holes. Mount the relay after holes have been drilled with the kit supplied screws see Fig. 14.

10. Wire power vent assembly (see Fig. 15 - 18)
   a. Connect damper motor wires to 24V load side of transformer using the 3/16" terminal adapter provided in the kit and terminal 4 of the relay using 1/4" terminal adapter. See Fig. 15.
   b. Connect vent fan motor wires and the 3/16" terminal connect to the remaining open connection on the 3/16" terminal adapter next to the damper motor connection on the 24v load side of the transformer. Take the 1/4" terminal remaining from the vent fan motor and connect to the open connection on the 1/4" terminal adapter next to the damper motor connection which is on terminal 4 of the relay. See Fig. 15.
   c. Connect yellow wire already connected to 24V transformer to terminal 2 on relay see Fig. 15.
   d. Connect black wire already connected to the relay coil terminal tab 1 to the terminal adapter supplied in the kit. Unplug one of the black wires on the control terminal block and reconnect it to the terminal adapter with the black wire from the relay and reconnect to terminal block tab see Fig. 16.
   e. Connect black wire from relay to piggy back terminal on white wire from transformer connected to C terminal on 240v transformer or terminal 1 on 265v transformer. Then remove white wire from control terminal block and connect to kit supplied terminal adapter and connect piggy back terminal to terminal adapter see Fig 17. Then reconnect wires to open tab on terminal block.
   f. Connect remaining red wire already connected to to relay tab 0 (coil tab) to the open tab on the control capacitor as seen in Fig. 18.

   IMPORTANT: The 208/230v transformer has 2 primary taps, a 208v and a 230/240v. Be sure to connect the black wire to the correct primary voltage terminal of the transformer, either 208v or 230/240v.

11. Reinstall Control Covers
   a. Fold accessory wiring diagram and place with unit schematic in the clear plastic pouch attached to unit.
   b. Reverse steps 9a, b, and c and secure with saved screws.
   c. Reverse steps 1 through 4 for completing unit reassembly.
   d. Plug unit back in to wall receptacle and turn unit back on.