Service & Warranty

Servicing / Chassis Quick Changeouts

The chasis is designed for quick disconnect and change out. For minor electrical service, the control box cover lifts straight up after the screws & disconnect head are removed. For major electrical, refrigeration and fan service the chassis may be removed from utility closet.

⚠WARNING

Electrical Shock Hazard

Pull out electrical disconnect on front of the chassis and turn off all power to unit before servicing.

Failure to do so can result in property damage, personal injury and/or death.

Routine Maintenance

Performing Routine Maintenance

With the proper maintenance and care, your system will operate ecomomically and dependably. Maintenance can be accomplished easily by referring to the following directions. However, before performing any maintenance, see above stated WARNING.

⚠CAUTION

Cut/Sever Hazard

Some edges may be sharp, use gloves or other hand protection when handling unit.

Failure to do so can result in minor to moderate personal injury.

Replace Air Filter

A dirty air filter reduces the efficiency of your Vert-I-Pak and allows lint and dirt to accumulate on the indoor-air coil. Lint and dirt on the indoor-air coil can damage your unit.
The air filter should be replaced as it becomes dirty.
To replace the filter (chassis mounted return air filter):

1. Slide the filter clear of the filter rails.
2. Remove the filter.
3. Install new disposable filter.

NOTE: DO NOT OPERATE YOUR SYSTEM WITHOUT A FILTER IN PLACE OR BLOCK THE FRONT OF THE UNIT RETURN AIR OPENING.

To Remove the Chassis from the Closet:

A. Switch the wall thermostat off.
B. Pull the Power Disconnect located in the front of the chassis.
C. Disconnect the power coming into the unit from the main breaker panel or the closet mounted disconnect.
D. Disconnect the electrical connection.
E. Disconnect the duct work.
F. Slide the chassis out of the wall plenum.
G. Lift the chassis out of the utility closet.

Inspect and Clean Indoor-air Coil

Eventually, minor amounts of lint and dirt may pass through the filter and collect on the indoor-air. These minor accumulations can be carefully vacuumed away with a brush attachment on a vacuum claner. Care must be taken to avoid bending the aluminum finns on the coil. Bent fins should be straightened using a special fin tool avalable from most HVAC supply depots.

Inspect Outdoor-Air (OA) Intake and Exhaust

The unit's outdoor-air intake and outdoor-air exhaust paths must remain clear. Check the OA exhaust frequently. Keep it free of all debris, snow, or ice. The OA intake should also be kept free of obstructions. Blocking the OA exhaust or OA intake opening will reduce the efficiency of your unit and could damage it.

Inspect and Clean Condensate Drain

The condensate drain must be routed to a suitable drainage area. Check the unit condensate drain periodically. Keep it free of anything that may block or impede the flow of condensate water. If there is any accumulation of foreign matter in the drain pipe, it should be removed and cleaned. The entire drain line must be protected from freezing.

Warranty

All warranty service work must be done by an authorized servicer. See Product Warranty, and consult your dealer or contractor for details.

Electronic Control Error Code Diagnostics and Test Mode

Error Code Diagnostics

The VPAK electronic control continuously monitors the Vert-I-Pak unit operation and will store error codes if certain conditions are witnessed. In some cases the unit may take action an shut the unit off until conditions are corrected.

To access the error code menu press the **'ENTER'** button. If error codes are present they will be displayed. If multiple codes exist you can toggle between error codes using the **'SCROLL'** button. To clear all codes press the **'ENTER'** and **'SCROLL'** buttons for three seconds while in the error code mode.

Error Codes and Alarm Status

Unit Control Panel

The display shown below has four digits. The left two digits indicate the error code (1 to 24), The On/Off icons above these two digits indicate the currents state of the error code. The right two digits show the history count (up to 99) of the associated error code. The display contains a maintenance icon (wrench) that will illuminate to indicate when the unit needs maintenance.

Check Error Codes

1. Press the Enter key to activate the display.
2. Each press of the scroll key display the next error code.

Clear History Counters

1. Press & hold the Enter key and the Scroll Key for ~ 6 seconds

The chart below lists the possible error codes and their description:

Error Code	Problem	Action
1	Front Panel Button Stuck For More Than 20 Seconds	Continue to monitor for "OPEN" (Unstuck) switch. Do not process switch input.
2	Input Voltage Out of Specification (103 - 127 / 187 - 253)	Unit stops, open all relays until voltage is back within specs then resume operation.
3	Indoor Temperature Sensor is Open or Shorted	Unit defaults to 75°F in COOLING or 68°F in HEATING and will continue to operate.
4	Indoor Coil Temperature Sensor is Open or Shorted	The unit's control board defaults 40°F. It will override the sensor and the unit will continue to operate.
5	Outdoor Coil Temperature Sensor is Open or Shorted	The unit defaults to 20°F, overriding the sensor. The unit will continue to operate. Using Elec Heat if available for HEATING. If not available, it will use HEAT PUMP if the outdoor temperature allows.
6	Outdoor Coil > (grater than) 175 F	The unit will shut down for 5 minutes. resume operation for 3 minutes. If test fails 3 times, the severity is increased and the unit operation is locked out.
7	Indoor Coil < (less than) 30 F for 2 consecutive minutes	The compressor will turn off and the High Fan speed will run. When coil temp reachs 45°F the unit will resume operation after lockout time.
8	Unit Cycles > (greater than) 9 Times per hour	The unit will continue to operate and be monitored.
9	Unit Cycles < (less than) 3 Times per Hour	The unit will continue to operate and be monitored.
10	Room Freeze Protection	Only use if Electric Heat is available. Run High Speed and Electric Heat until room temp reaches 46°F. The unit will display "FRZ" during operation. Logged Only
11	WallStat Problem or Connection Issue	The unit will not operate.
12	Not Applicable	Not Applicable
13	High Pressure Limit Switch is Open	If unit is cooling or heat pump is on, shut down compressor. Run high fan until switch closes, then resume operation. The third occurance in 1 hour locks unit out. Applicable to 24K unit only.
14	Not Applicable	Not Applicable
15	Heat Pump Error	If indoor coil temperature is less than ambient temperature for 3 minutes the unit will use electric heat to satisfy the heating demand.
16	Temperature Beyond Operating Limits	Occurs if the ambient temperature range falls below 0°F or greater than 130°F. The error code will remain on until the temperature reaches the operating range and then the unit will return to normal operation.
17	Equipment Doesn't Meet Minimum Configuration	The compressor must be enabled and have at least 2 fan speeds
18	Not Applicable	Not Applicable
19	Not Applicable	Not Applicable
20	Not Applicable	Not Applicable
21	Not Applicable	Not Applicable
22	Outdoor Coil Temperature < 30 F for 2 consecutive Minutes	Unit will use electric heat to satisfy heating demands until the temperature equals or exceeds 45°F. Applicable for Heat Pump models only.
23	Frost Protection	Unit will run active defrost for a minimum of 6 minutes when Heat Pump run time is greater than 60 minutes and outdoor coil temperature is 26 F or less.
24	Not Applicable	Not Applicable