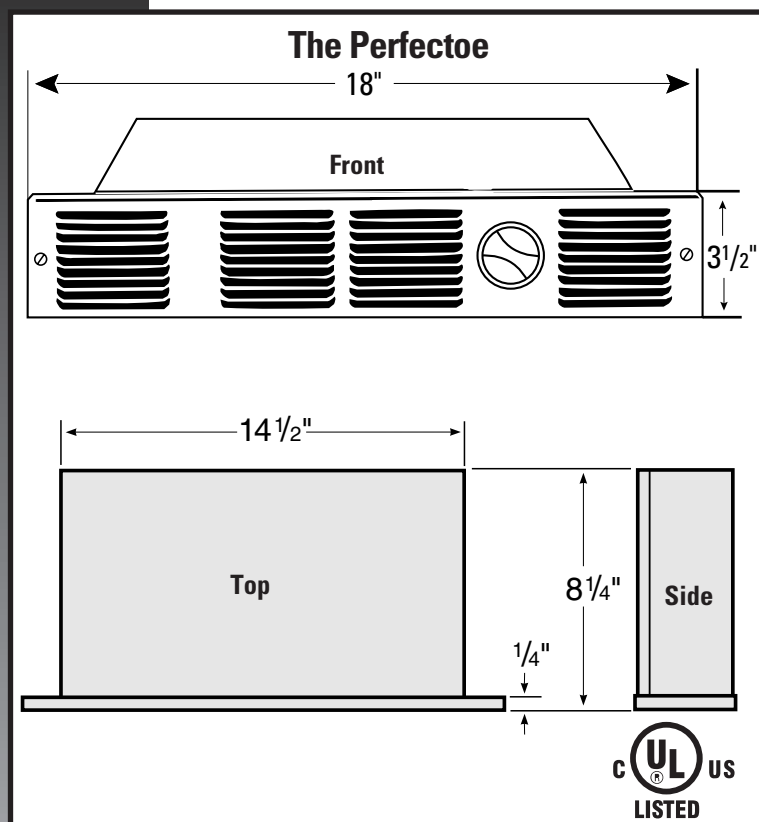




OWNER'S GUIDE

The Perfectoe

CADET
2000
S E R I E S

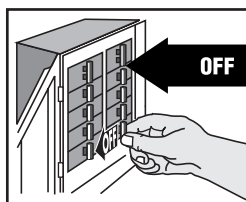


Models: The Perfectoe
UC072
UC102
UC101

Features and Benefits

- Two forms of thermal protection for safety and assurance: a high temperature manual reset limit and a back-up over temperature safeguard.
- Oversized high temperature limit switch with 25 amp rating at 240 Volt.
- Rugged steel-finned element.
- Ideal for bathrooms and kitchens.
- Low profile for rooms with limited space.
- Two-year extended warranty.
- Single pole or double pole field mount thermostat kit available.
- Black or white powder coat paint for a durable finish.

General Safety Information



WARNING!
Take extreme caution when working with electricity. Turn off all power at the circuit panel or fuse box before doing any electrical wiring. Lock, tape, or tag the circuit panel door so power cannot be turned on during

installation. Failure to do so could result in serious injury or possible fatality!

1. Read all information labels. **Verify that the electrical supply wires are the same voltage as the heater.**
2. All electrical work and materials must comply with the National Electric Code (NEC), the Occupational Safety and Health Act (OSHA), and all state and local codes.
3. The heater must be grounded to the grounding pigtail (copper wire) provided in the wall can.

4. If you need to install a new circuit or need additional wiring information, consult a qualified electrician.
5. Protect electrical supply from kinks, sharp objects, oil, grease, hot surfaces or chemicals.
6. **DO NOT** install the heater in a floor, behind doors, towel racks, drapes, furniture or coat racks, or anywhere the air discharge may be blocked in any manner.
7. **DO NOT** install heater in any area where combustible vapors, gases, liquids, or excessive lint or dust are present.
8. **Maintenance instructions must be followed.** Clean heater at least every six months or more as needed.

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98668-1675

Keep for future reference

READ ALL INSTRUCTIONS AND SAFETY INFORMATION

Warning!

Vinyl floor manufacturers warn that some vinyl may discolor from temperatures in excess of 110° F. See your vinyl floor manufacturer for temperature specifications for your vinyl floor covering.

IMPORTANT!

It is extremely important that you verify that the electrical supply wires are the same voltage as the heater (i.e. 120 volt heater to 120 volt power supply and 240 volt heater to 240 volt power supply). If replacing an existing heater, check the labels of the old heater and replace using the same voltage.

Hooking a 240 volt heater to a 120 volt power supply will drastically reduce the heater's output.
Hooking a 120 volt heater to a 240 volt power supply will destroy the heater.

Connecting your heater to an incompatible power supply will void the warranty.

Installation Instructions

Part One

PLACEMENT: Do not install the UC heater in the floor. Heater must be installed horizontally. It is not necessary to install header or bracing of any kind to install this unit. Note: For the best results, install at least 6" from the inside corner and/or vertical adjacent surfaces.

Step 1 Mount The Perfectoe

UL requires a minimum distance of 6" from adjacent surfaces. Cut rough opening 14 1/2" wide x 3 1/2" high. Opening must be 8 1/2" deep and 6" (minimum) from adjacent wall.

Provide the appropriate AC two wire with ground service to the right rear corner of rough opening, **allowing enough wire to extend at least 12" out the opening.**

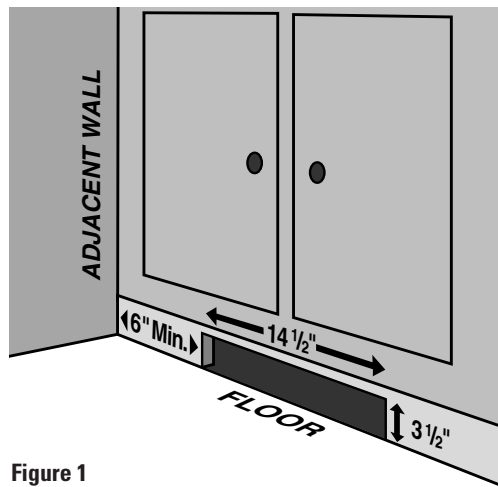


Figure 1

STEP 2 Connect supply wires

Remove heater lid and a knockout for the supply wire and attach with an approved clamp. Leave six-inch long leads in the wall can to connect the heater assembly. Connect the grounding lead to grounding "pigtail" (green insulated copper wire) provided in the junction box. Attach supply conductors to heater lead wires inside junction box. Re-install heater lid using four screws provided. Slide heater into rough opening. Fasten heater to opening with screws, then install grill to heater.

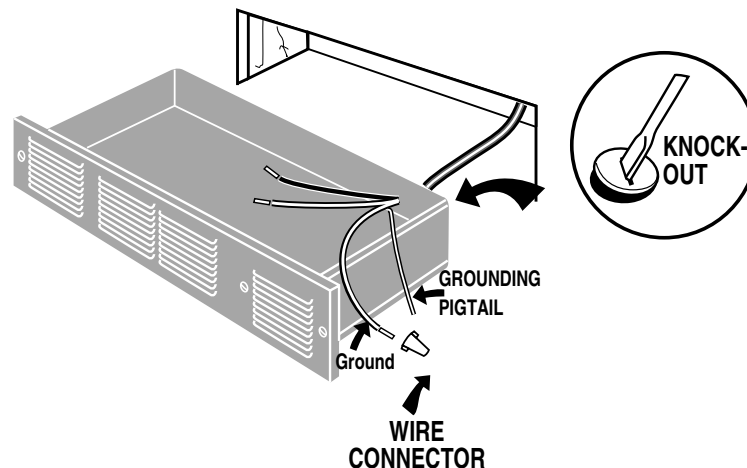


Figure 2

Operation & Maintenance

Part Two

How to operate your heaters

1. Once installation is complete and power has been restored, turn the thermostat knob fully clockwise.
2. When the room reaches your comfort level, turn the thermostat knob counterclockwise until the heater turns off. The heater will automatically cycle around this preset temperature.
3. To reduce the temperature, turn the knob counterclockwise. To increase the temperature, turn the knob clockwise.

Maintenance

As needed or every six months minimum. Failure to do so will void warranty

1. **Warning! Risk of Electric Shock!** Turn power to heater off at circuit breaker panel or fuse box before servicing heater.
2. Remove thermostat knob, if equipped. Remove the screws at each end of the grill, remove grill and set aside.
3. Wash the grill with hot, soapy water and dry immediately.
4. If present, remove the screws securing the heater assembly to the opening, then pull heater out of opening.
5. Remove the four screws securing the lid to the top of the heater assembly, remove lid.
6. Thoroughly vacuum accumulated dust, lint or other debris from blower wheel and heater outlet. Important: Be careful not to damage the blower wheel, and do not allow the blower wheel to spin freely when vacuuming.
7. Install lid and slide heater assembly back into opening. Secure heater assembly to opening, then install grill and thermostat knob (if equipped).
8. Restore power to heater at circuit breaker panel or fuse box, then test heater operation by turning thermostat on and/or adjusting to a higher temperature.

About the heater temperature-limiting controls

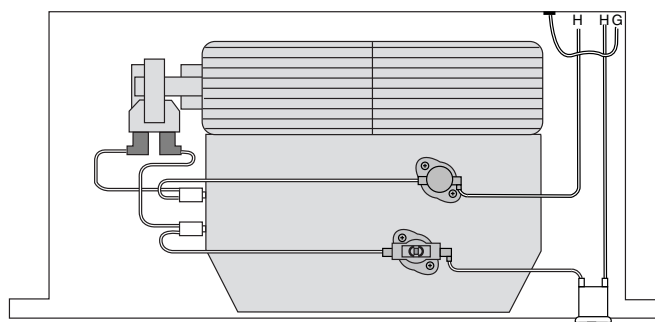
The heater is protected by two temperature limiting controls. The first is a high temperature reset switch, designed to open the heater circuit when excessive operating temperatures are detected. Further protection is provided by a backup over-temperature switch, which will permanently open the heater circuit in severe over-temperature conditions, or in the event of component failure. If this occurs, the heater must be replaced.

Resetting the Manual-Reset Limit Control

If the manual-reset limit control has opened the heater circuit due to excessive operating temperatures, the heater will not work until the limit reset button is pressed. After allowing the unit to cool for 10 minutes, clean the heater as instructed in the Maintenance section above. Use a narrow, non-conductive object to access the reset button through the upper-right section of the grill. Press GENTLY, and be sure to listen and feel for a click indicating it has been reset.

Note that resetting the manual reset limit control may not restore heater operation if a severe over-temperature condition has occurred. See the following Troubleshooting Chart for more information.

Wiring diagram



UC

With inbuilt single pole thermostat

WARNING!
Risk of Electrical Shock. Connect grounding lead to grounding wire provided. Keep all foreign objects out of heater.

WARNING!
Risk of Fire. Heater must be kept clear of all obstructions: 3 feet in front and above; 6 inches on both sides minimum.

WARNING!
Heaters must be kept clean of lint, dirt and debris.

Failure to follow warnings may cause heater to eject sparks, ignite materials, or cause electrical shock and will void warranty.

WARNING!
TURN OFF POWER AT THE CIRCUIT PANEL OR FUSE BOX BEFORE ATTEMPTING ANY MAINTENANCE.

Troubleshooting chart

WARNING: CONSULT LOCAL ELECTRICAL CODES TO DETERMINE WHAT WORK MUST BE PERFORMED BY QUALIFIED ELECTRICAL SERVICE PERSONNEL.

Symptom	Problem	Solution
Breaker trips immediately upon energizing heater	<ol style="list-style-type: none"> 1. Incorrect supply voltage. 2. Overloaded circuit. 3. A short circuit exists in the supply or heater wiring. 4. Defective circuit breaker. 	<ol style="list-style-type: none"> 1. Verify that supply voltage matches the heater rating. 2. The total amperage of all heaters on a branch circuit must not be more than 80% of the amperage rating of the circuit breaker and supply wire ratings. Use a lower wattage heater, or reduce the number of heaters in the circuit. 3. Shorted supply or heater wires may be accompanied by severe sparking. Inspect all supply and heater wiring insulation for damage. Do not reset the circuit breaker until any electrical shorts have been repaired. 4. Replace the circuit breaker.
Heater fan operating, but does not discharge warm air	<ol style="list-style-type: none"> 1. Insufficient element temperature. 2. Incorrect supply voltage. 3. Element has failed. 	<ol style="list-style-type: none"> 1. Allow a few moments for element to reach operating temperature. 2. Verify that supply voltage matches the heater rating. 3. Replace heater.
Heater will not shut off	<ol style="list-style-type: none"> 1. Heat loss from room is greater than heater capacity. 2. Defective thermostat. 3. Thermostat wired incorrectly to heater. 	<ol style="list-style-type: none"> 1. Close doors and windows. Provide additional insulation, or install a higher-wattage heater (or multiple heaters if necessary). 2. Adjust thermostat to its lowest setting. If heater continues to run (allow a few moments for the thermostat to respond to the adjustment), replace thermostat. 3. Refer to thermostat documentation and correct wiring.
Heater discharges smoke or emits a burnt odor	<ol style="list-style-type: none"> 1. Dust, lint or other matter is accumulated inside heater. 	<ol style="list-style-type: none"> 1. Clean heater (see "Operation & Maintenance" section for instructions).
Element heats for a moment without the fan turning, then immediately stops heating.	<ol style="list-style-type: none"> 1. Defective motor or internal connection. 2. Jammed fan or motor 	<ol style="list-style-type: none"> 1. Heater requires replacement. 2. Remove obstruction and press heater reset button after allowing the unit to cool. Test heater operation--if reset button has been pressed (be sure to listen and feel for a click indicating it has been reset), but heater does not run, heater requires replacement.
Heater does not run	<ol style="list-style-type: none"> 1. Thermostat set too low. 2. Heater has tripped the high-temperature reset switch. 3. Heater has tripped the over-temperature switch. 4. Power not on at the circuit breaker. 5. Broken or poorly connected wire(s) to heater. 6. Defective thermostat 	<ol style="list-style-type: none"> 1. Adjust thermostat to a higher temperature until heater operates (see Problem #6 below if the problem persists). 2. Press the heater reset button (see "Operation & Maintenance" section for instructions). 3. A severe over-temperature condition has occurred. Replace heater. 4 Turn the correct circuit breaker in the main panel on. 5. Turn off power at circuit breaker. Check supply wire continuity and proper connection to heater wires. 6. Turn off power at circuit breaker. Jumper across thermostat terminals. Turn on main circuit breaker. If heater operates, thermostat is defective and should be replaced. Remove jumper before operating heater.

Warranty

LIMITED TWO-YEAR WARRANTY: Cadet Manufacturing Co. will repair or replace, without charge to the original consumer, any Perfectoe Model UC heater found to be defective or malfunctioning during the first year after date of delivery to the original consumer.

These warranties do not apply:

1. To conditions resulting from (a) improper installation, or (b) incorrect electric current.
2. To conditions resulting from improper maintenance, misuse, abuse, accident or alteration.
3. To service calls or labor involved in replacing defective part.
4. If the date of manufacture cannot be determined.
5. To freight damaged products.

Cadet shall not be liable for commercial consequential damages such as property damage and incidental expenses resulting from breach of these written warranties or any implied warranty. These warranties give you specific legal rights, and you may also have other rights which vary from state to state. Cadet neither assumes, nor authorizes anyone to assume for it, any other obligation or liability in connection with these electric heaters or any part of such heaters. If the product warranted should become defective during the warranty period, contact Cadet Manufacturing Co. for instructions on how to have the repair or replacement processed. Products returned without authorization will be refused. To prolong the life of your heater, it is necessary to follow the maintenance guidelines included with each heater. Failure to maintain your heater will result in the warranty being voided.

