



## Foreman Ductable Indirect- Fired Oil Heater

**CI230** 230,000 Btuh / 67.4 kW  
#1 / #2 Fuel Oil

View this manual online at [www.lbwhite.com](http://www.lbwhite.com)

### Attention

This heater has been tested and evaluated by OMNI Test Laboratories in accordance with the requirements of CSA B140.8-1967(R2015) and UL 733-2019 and is listed and approved as a ductable indirect oil-fired forced-air construction heater with application for the temporary heating of buildings under construction, alteration, or repair. CHECK WITH YOUR LOCAL FIRE SAFETY AUTHORITY, YOUR FUEL GAS SUPPLIER, OR THE L.B. WHITE COMPANY IF YOU HAVE QUESTIONS REGARDING APPLICATIONS OR INSTALLATION.  
**[www.lbwhite.com](http://www.lbwhite.com)**



Report No: 0545HH002S



This is not a full Manual. Please visit [www.lbwhite.com](http://www.lbwhite.com) for complete manual

### NOTICE

The herein installation instructions are the L.B. White Co. LLC suggested recommendations and guidelines for temporary or permanent installation of the L.B. White Co. LLC heaters. Local, state, and electrical and safety code requirements supersede these guidelines.



### SCAN THIS

with your smartphone or visit <http://goo.gl/nvneR> to view maintenance videos for L.B. White heaters.\*


\* Requires an app like QR Droid for Android or for iPhone

## Start-Up Instructions

For initial start-up after heater installation, follow steps 1-5. For normal start-up, set the thermostat above room temperature or set thermostat selector switch to the manual position.

1. Follow all ventilation and safety information.
2. Fill tank with fuel.
3. This heater is wired with a ground connection for your protection against electrical shock hazard. The heater must be connected directly to a properly wired and grounded electrical supply. Minimum breaker size: C1230-15 amp, C1500/C1750-20 amp.
4. Set thermostat to desired room temperature or set thermostat selector switch to the manual position.
5. This heater has a rocker style selector switch located on the side of the heater. This switch allows for either heat mode or ventilate mode (no heat).



6. When the switch is set to heat , three status lights will be activated in sequence as specific circuits are checked by the heater controller. If the heater does not light, and a status light is off, refer to the trouble shooting section of this manual.
7. Do not exceed input rating stamped on nameplate or manufacturer's recommended pump pressure for nozzle used. Make certain that the primary air supply to main burner is open and free of dust, dirt and debris for complete, proper combustion.

## A. Heating Mode Operation

When the selector switch is positioned to heat and the thermostat is calling for heat, a set of green lights will illuminate (power ON and thermostat ON). The burner fan motor will pre purge for 45 seconds. After the burner fan has pre purged, the igniter will spark and ignition will occur. The main blower has a time delay of 30 seconds before operation. The thermostat will cycle the heater ON or OFF based upon temperature setting. The high limit LED will flash during pre/post purge cycle.

**Note:** When the thermostat cycles the heater off or selector switch is switched to OFF, the main fan motor will continue to run for an additional 3 minutes to cool down the heat exchanger.

## B. Vent Mode Operation

When the selector switch is positioned to vent, only the fan motor light will illuminate. The fan motor will start, but the burner motor will not, nor will ignition occur. This feature is used typically when heat is not needed, but air circulation is required. The heater will not cycle on its thermostat setting. To discontinue the ventilation feature, position the switch to midpoint O or heat. If you desire to use the ventilation feature, the fuel source is not needed.

## C. Off O

Position the switch to midpoint O

## Safety Lock-Out

This heater is equipped with the Beckett GeniSys Advanced Burner Control. The GeniSys is used with a suitable cad cell flame sensor to control the oil burner motor, igniter, and oil solenoid valve.

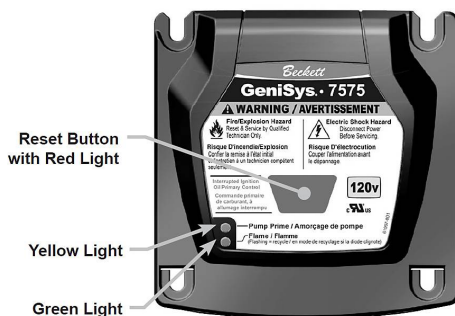
- The GeniSys Burner controller has one ignition trial. If ignition is not achieved, the GeniSys burner control will enter a "soft lock-out" mode.

Soft lockout – the control has shut down for one of the following safety reasons:

- The trial for ignition fail.
- The cad cell did not detect flame.
- Flame is lost during ignition trial.
- Burner control will retry ignition in 60 seconds.

## TO RESET THE CONTROL BOX

Push the reset button on the GeniSys controller for 1-second and verify the red light in the reset button shut off.




## DIAGNOSTICS MODE

Status lights

Light Color	Solid	Flashing
Red	Hard lockout (1)	Soft lockout (2)
Green	Normal operation	Recycle (3)
Yellow	Pump prime mode (4) or reset button held for 15+ seconds	N/A

- (1) Recurrence of a soft lockout- to reset, push and hold the reset button for 15 seconds until the yellow light turns on.
- (2) Ignition failure, cad cell did not detect flame, or flame lost- to reset, push and release the reset button.
- (3) Control has entered a 60 second delay, and will repeat the ignition sequence.
- (4) Purging air out of the fuel line.

The controller will only provide the diagnostics when the selector switch is set to HEAT 

- It is normal for air to be trapped in the fuel line on new installations. The heater may require several trials for ignition before air is finally purged from line and ignition takes place.

## Shut Down Instructions

If the heater is to be shut down for cleaning, maintenance, or repair, follow steps 1-3. Otherwise, simply adjust thermostat to "Off" or "No Heat" or put the HEAT/VENT switch to the OFF position.

1. Turn thermostat dial to lowest temperature setting.
2. Allow heater to perform its post purge cool down mode.
3. Unplug cord from outlet.

**DO NOT DISCONNECT THE ELECTRICAL SUPPLY UNTIL THE MAIN FAN MOTOR HAS CYCLED OFF FROM COOLING THE HEAT EXCHANGER**

**Note:** During normal operation, if either the thermostat cycles the heater off or the selector switch is put in the OFF position, the main fan motor will continue to operate. This is the cool down post purge of the heat exchanger. The high limit LED will flash during this process. After 3 minutes of post purge, the heater will shut-off.

## Cleaning Instructions

### **WARNING**

#### **Fire, Burn, and Explosion Hazard**

- This heater contains electrical and mechanical components in the gas management, and safety systems.
- Such components may become inoperative or fail due to dust, dirt, wear and aging.
- Periodic cleaning and inspection as well as proper maintenance are essential to avoid serious injury or property damage.

1. Before cleaning, disconnect electrical supply.
2. The heater should have dirt or dust removed periodically:
- a. Before each use give the heater a general cleaning using compressed air or a soft brush or dry rag on its case and internal components. At this time, dust off the motor case to prevent the motor from overheating.

- b. At least once a year, give the heater a thorough cleaning. At this time, remove the fan wheel assembly and brush or blow off and dust that may have accumulated on the fin. Additionally, make sure the burner air inlet is free of dust accumulation.



### **WARNING**

#### **Fire, Burn, and Explosion Hazard**

- Do not use a pressure washer, water, or liquid cleaning solution on any gas controls. Use of a pressure washer, water or liquid cleaning solution on the control board components can cause severe personal injury or property damage due to water and or liquids.
- In electrical components and wires causing electrical shock or equipment failure.

Clean all components of the heater with pressurized air, a dry brush, or a dry cloth.

## Maintenance Instructions

### **BEFORE EACH USE:**

- Check the area surrounding the heater to ensure it is clear and free of combustible materials, gasoline, and other flammable vapors and liquids.
- At the installation, ensure the flow of combustion and ventilation air is not obstructed.
- Check all wiring associated terminals and electrical components within the heater for corrosion, frayed or cut insulation, tight connections, etc. Repair or replace as necessary.
- Review all heater markings (i.e. wiring diagram, warnings, start-up, shut-down, troubleshooting, etc.) at the time of maintenance for legibility. Make sure none are cut, torn, or otherwise damaged. Any damaged markings must be replaced immediately by contacting the L.B. White Co., LLC Data plate, startup and shut-down instructions and warnings are available at no cost. A nominal charge will be applied for wiring diagrams.
- Check the main fan drive belt. Make sure the belt is not cracked. If so, replace it. Additionally, ensure the belt is not slipping, and pulleys are properly aligned and not worn.
- Check air gate adjustment.
- Inspect all fuel supply lines for cracks, abrasions, or ruptures. Replace if needed.
- Clean and check the igniter and cad cell annually.