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VLHV
VENTLESS HOOD FOR
HYDROVECTION MODELS HV-100E & HVH-100E
INSTALLATION - OPERATION - MAINTENANCE



BLODGETT OVEN COMPANY

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Utility Connections - Standards and Codes

THE INSTALLATION INSTRUCTIONS CONTAINED HEREIN ARE FOR THE USE OF QUALIFIED INSTALLATION AND SERVICE PERSONNEL ONLY. INSTALLATION OR SERVICE BY OTHER THAN QUALIFIED PERSONNEL MAY RESULT IN DAMAGE TO THE BLODGETT EQUIPMENT AND/OR INJURY TO THE OPERATOR.

Qualified installation personnel are individuals, a firm, a corporation, or a company which either in person or through a representative are engaged in, and responsible for:

- the installation of electrical wiring from the electric meter, main control box or service outlet to the electric appliance.

Qualified installation personnel must be experienced in such work, familiar with all precautions required, and have complied with all requirements of state or local authorities having jurisdiction.

EPA 202 Test Method

Using EPA test method 202, emissions of grease laden vapors were measured at 3.62 mg/m³ for bone-in, skin on, quartered chickens. Results are less than the established 5 mg/m³ standard.

U.S. and Canadian installations

Installation must conform with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70-Latest Edition and/or Canadian National Electric Code C22.1 as applicable.

Australia and general export installations

Installation must conform with Local and National installation standards. Local installation codes and/or requirements may vary. If you have any questions regarding the proper installation and/or operation of your Blodgett equipment, please contact your local distributor. If you do not have a local distributor, please call the Blodgett Oven Company at 0011-802-658-6600.





Installation

Delivery & Inspection

DESCRIPTION AND SPECIFICATIONS

The VLHV ventless hood provides all of the cooking capabilities of the Blodgett Hydrovection oven with-out the need for a kitchen ventilation hood. Please refer to the owner's manual of your Blodgett Hydrovection oven for detailed instruction on the operation of the oven.

DELIVERY AND LOCATION

All Blodgett equipment is shipped in containers to prevent damage. Upon delivery of your new equipment:

- Inspect the shipping container for external damage. Any evidence of damage should be noted on the delivery receipt which must be signed by the driver.
- Uncrate the equipment and check for internal damage. Carriers will accept claims for concealed damage if notified within fifteen days of delivery and the shipping container is retained for inspection.

The Blodgett Oven Company cannot assume responsibility for loss or damage suffered in transit. The carrier assumed full responsibility for delivery in good order when the shipment was accepted. We are, however, prepared to assist you if filing a claim is necessary.

Ducting Installation

SINGLE OVENS

Single Hydrovection oven with a VLHV hood ships from the factory with all required ducting installed.

DOUBLE STACK OVENS

The top oven ships from the factory with all required ducting installed.

To install ducting for the bottom oven:

1. Stack the ovens as described in the Hydrovection oven owner's manual.
2. Remove the 2 screws from the bodyback closing plate around the top oven's return duct. Leave the drain hose and grommet assembled and move the closing plate up and out of the way by sliding the grommet up the tube.
3. Remove the screw of the cushion clamp holding the unconnected VLHV drain in place.
4. Loosen the 7 screws holding the bodyback panel.
5. Remove the bodyback panel.
6. Install the bottom oven riser (p/n 101173) and the bottom oven recirculation pipe (p/n 101181) with the hose clamps and two 4" silicone hose provided. Position 101173 between the two sides of the airflow baffle as shown.



Figure 1

7. Reinstall the bodyback panel.
8. Install the block off plates at the top and bottom of the bodyback duct penetrations.
9. Reinstall the closing plate moved in STEP 2.
10. Reinstall the cushion clamp and drain.
11. Use the provided elbows and 8" silicone hose to connect the duct pipes to the ports in the back of the VLHV.

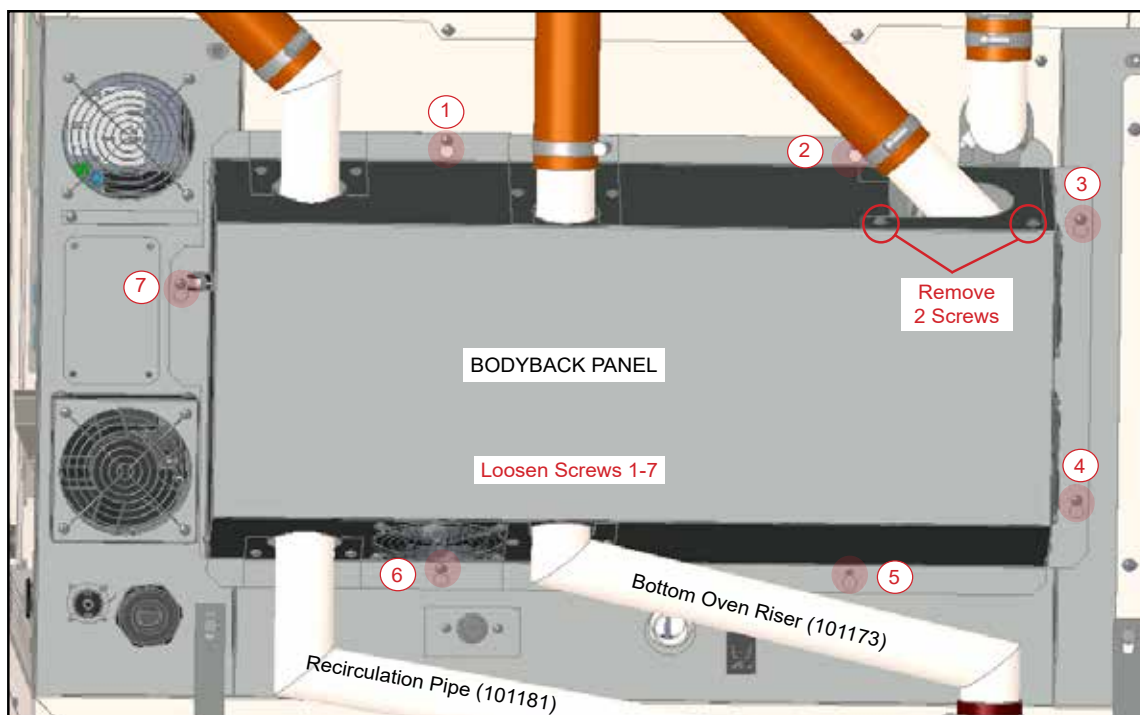


Figure 2



Installation

Connection to Hydrovection Oven

WIRING THE VLHV HOOD

The VLHV ventless hood is pre-wired. All electrical connections are made to the 4 or 9 conductor cables coming out of the ventless hood.

- The hood draws power from a single oven or the top oven of a double stack and uses the connected cable.
- The bottom oven of a double stack uses a second connected cable.
- All electrical connections are made by connecting the cable(s) to the oven(s).

SINGLE OVENS

Single Hydrovection oven with a VLHV hood ship from the factory already connected

DOUBLE STACK OVENS

The 9 pin for the top oven ships from the factory already connected.

To connect the 4 pin for bottom oven:

1. Connect the 4 pin connector running from the bottom strain relief of the VLHV to the quick connect socket located next to the oven's power cable on the bottom oven.

Drain & Water Connection

DRAIN CONNECTION

Single units ship with the VLHV drain pre-plumbed.

Double stack ovens

The top oven ship with the VLHV drain pre-plumbed. The bottom oven of a double stack is shipped with the required drain tubing connected to the oven. The tubing is routed through the port in the body back.

1. Connect the tube up to the straight connector already installed in the drain tube coming from the rear of the VLHV hood.

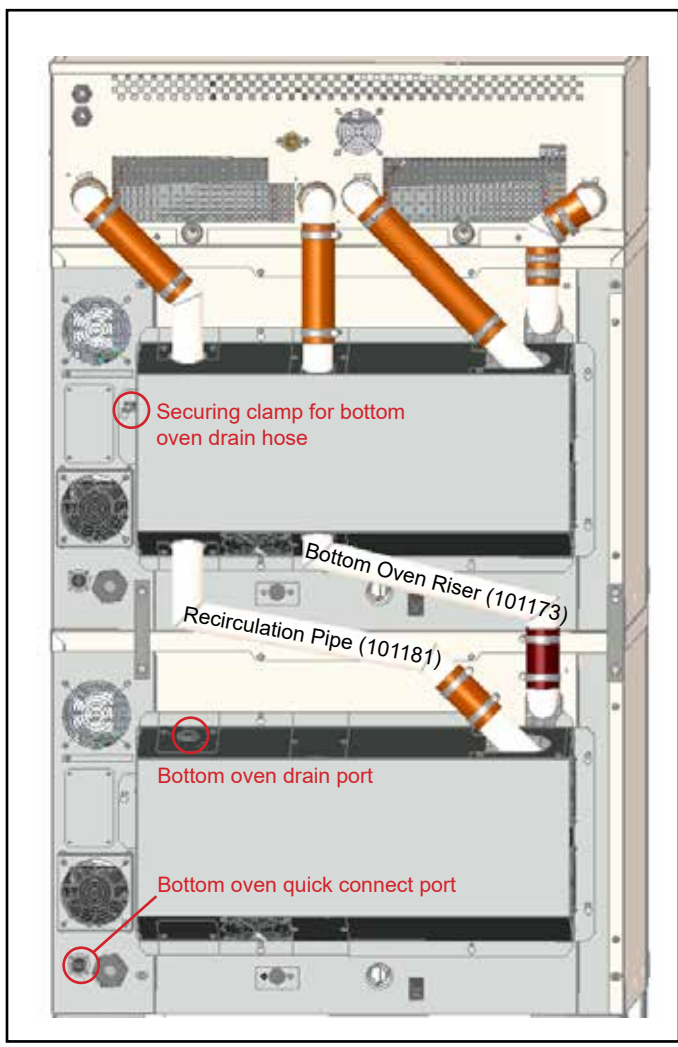


Figure 3

WATER CONNECTION

1. Connect an unfiltered cold water supply to the 3/4" GHT connection on the back of the VLHV hood.

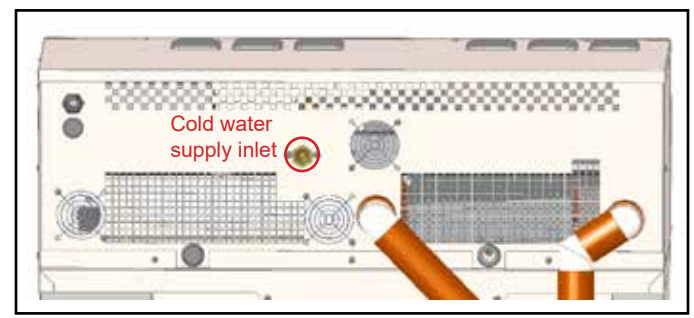


Figure 4



Operation

Ventless Hood Control Panel

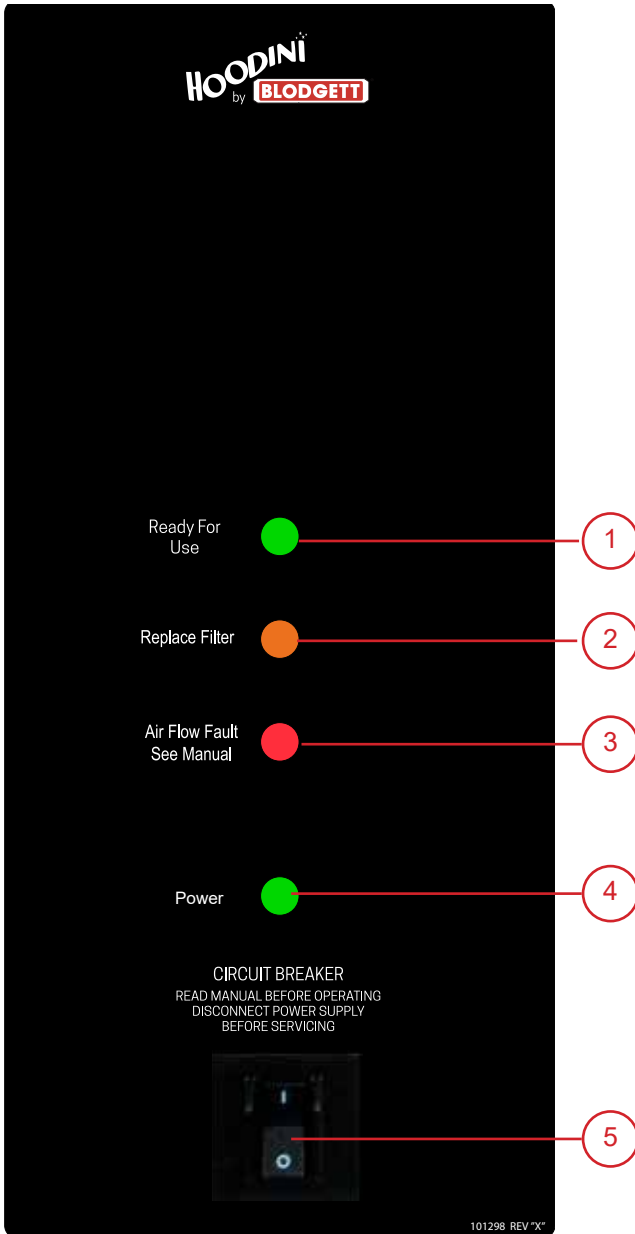


Figure 5

CONTROL DESCRIPTION

NOTE: Single oven control shown. Double oven controls have two signal lights for items 1-3, one for each oven.

1. Hood is on and operating properly.
2. Filter is becoming clogged. **Replace the filter as soon as possible.** The oven will continue to run for a short period before becoming completely clogged. It is critical to replace the filter shortly after the "Replace Filter" light comes on; otherwise the filter will become completely clogged. Once the filter is completely clogged the oven will no longer heat until a new filter is installed. To prevent interruptions to operation of the oven keep a replacement filter on hand and change it once the "Replace Filter" light comes on.
3. Unit is experiencing an air flow fault. The filter is completely clogged. Replace your filter. If air flow fault continues contact your service agent to address the issue.
4. Power indicates the VLHV has power coming from the oven.
5. CIRCUIT BREAKER - Must be in the ON position for hood to run.



WARNING!!

If the red indicator light on the hood is illuminated the oven/ovens will not heat. All functions of the oven will continue to work except for heat. The hood filter must be replaced to turn off the red indicator light.



Sequence of Operation

1. The ventless unit receives power from the field wiring block of a single, or top of a double stack, ventless ready oven. This received power runs to the front panel circuit breaker of the ventless unit and must be in the ON position in order for the ventless unit to operate.
2. The ventless unit has an interlock switch that engages when the ventless unit's filter is properly installed. The filter interlock switch also must be engaged in order for the ventless unit to operate.
3. Provided 1 and 2 above are satisfied, turning on either the top or bottom ventless ready oven of a double stack or the single ventless ready oven will start the oven's convection blower motor, causing air to circulate through the system.
4. Two pressure switches monitor the life of the filter. When the differential pressure is below 0.10"W.C. the filter is new and the green "Ready For Use" indicator light will be on.
5. As the ventless unit's filter becomes obstructed from usage, the differential pressure across the filter will rise. When this differential pressure reaches 0.10"W.C., the orange indicator labeled "Replace Filter" will illuminate on the front panel of the ventless unit.
6. As the ventless unit's filter becomes further obstructed from usage the differential pressure will continue to rise. When this differential pressure reaches 0.15"W.C. the red indicator light labeled "Air Flow Fault See Manual" will illuminate on the front panel of the ventless unit. If the red indicator light is illuminated the indicated oven will not heat.
7. Replacing the filter will clear the fault



Maintenance

Filter Replacement

The filter on the VLHV needs to be replaced as it becomes clogged with grease and particulates given off by the cooking process. **The lifespan of a filter will vary depending on the amount and types of foods cooked in an oven.**

The indicator lights will tell you when it is time to replace your filter.

- When the ORANGE indicator light illuminates, it is time to replace the filter. Both the orange and green indicator remain lit and the oven will continue to function. Replace the filter as soon as possible.
- If the filter is not changed, eventually the RED indicator light will illuminate. This indicates that the filter is too clogged to effectively remove particulates and grease laden vapor from the cooking exhaust. **If the red indicator light is illuminated the indicated oven will not heat.**

HOW TO REPLACE THE FILTER

1. Turn off the oven/ovens and the breaker on the front of the VLHV.
2. Remove the front grille of the hood using the handle on the left side. Lift straight up until the retaining hooks are free. Next, pull the grille away from the oven.
3. Loosen the thumb screws holding the filter access panel in place. The thumb screws do not need to be removed. Remove the filter access panel by sliding it to the right, then swinging the panel up as if the top were a hinge.



Figure 6

4. Pull the filter straight out of the filter housing located behind the filter access panel.

NOTE: If the filter is severely clogged with excessive grease buildup, it may be difficult to remove. In this case, a tool may be required to remove it.

5. Discard the used filter. **DO NOT try to clean and re-use a filter.** It will not function properly.
6. Install the new filter.
 - a. Make sure the arrows on the edge of the filter are pointing up.
 - b. Push the filter all the way in.



Figure 7



7. Reinstall the front grille by aligning the hooks on the back of the grille with the notches in the hood. Pull down to secure.

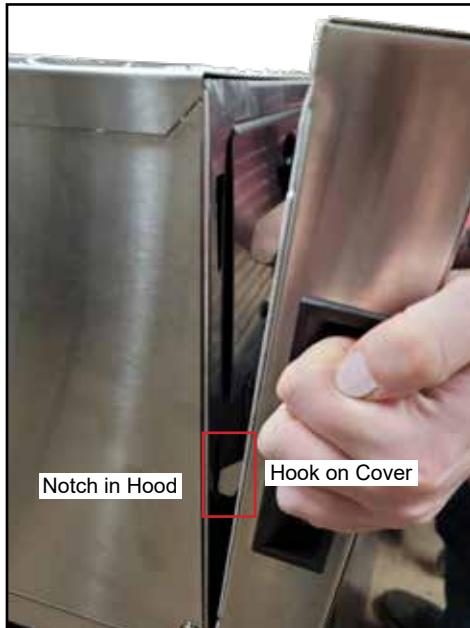


Figure 8

8. Turn on the oven(s) and the breaker on the front of the VLHV. The green indicator light(s) should illuminate indicating that the hood is back up and running.



Maintenance

Cleaning

It is critical to keep the oven cavities clean when operating with a ventless hood. The ventless hood is intended to capture grease laden vapor, not smoke. An oven cavity that is not properly cleaned, free of debris, and charred food scraps, will produce smoke. Ensure that your oven is cleaned regularly.

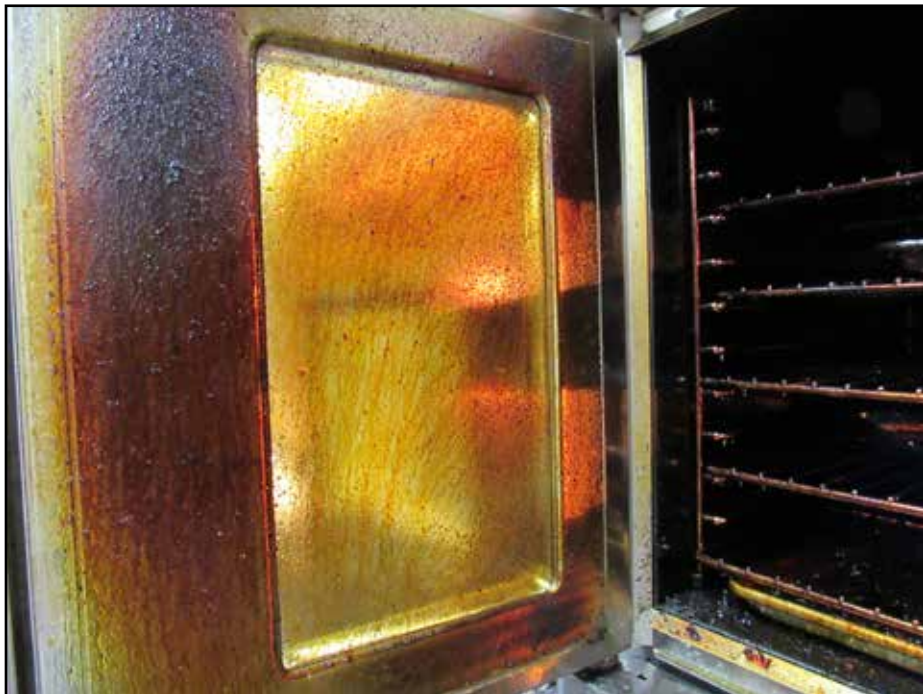


Figure 9

Insufficiently cleaned oven will produce smoke