



INSTALLATION & OPERATION MANUAL

HumidiHeat™ HOLDING & TRANSPORT CABINETS

MODELS

VHMD 5
VHMD 13
VHMD 15



For additional information on VULCAN-HART or to locate an authorized parts and service provider in your area, visit our website at www.vulcanhart.com

IMPORTANT FOR YOUR SAFETY

THIS MANUAL HAS BEEN PREPARED FOR PERSONNEL QUALIFIED TO INSTALL ELECTRICAL EQUIPMENT, WHO SHOULD PERFORM THE INITIAL FIELD START-UP AND ADJUSTMENTS OF THE EQUIPMENT COVERED BY THIS MANUAL.

FOR YOUR SAFETY

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

⚠ WARNING Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the **INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS** thoroughly before installing or servicing this equipment.

**IN THE EVENT OF A POWER FAILURE,
DO NOT ATTEMPT TO OPERATE THIS DEVICE.**

INSTALLATION

Before installing, verify that the electrical service agrees with the specifications on the data plate located on the lower rear of the cabinet (Figure 1). If the electrical service does not agree with the data plate, do not proceed with installation. Contact your dealer or local Authorized Vulcan-Hart Servicer immediately.

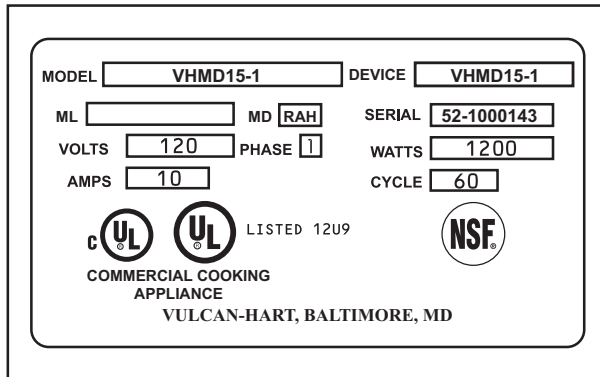


Figure 1: Data Plate

UNPACKING

This unit was inspected before leaving the factory. The transportation company assumes full responsibility for safe delivery upon acceptance of the shipment. Immediately after unpacking, check for possible shipping damage. If the unit is damaged, save packing material and contact the carrier within 15 days of delivery. Check the delivery documentation for damage reporting contacts and time limits.

Carefully unpack and place in a work-accessible area as near the installation position as possible.

1. Open the door and carefully remove any packaging materials and the retaining straps that hold the tray slides and tray slide upright side supports (VBP/VHP).
2. Remove all scratch-protective film from the cabinet.

3. Remove cardboard element cover protector from cabinet bottom.
4. Remove adjustable tray slides from box.
5. Remove the tray slide supports and install them in the cabinet.
6. Hook the openings in the flat flange of the support over two vertical carriage bolts on the interior of the cabinet.
7. Make sure all flanges on the four supports face the door opening.
8. Install tray slides in the cabinet.
9. Ensure that the hook on the end of the tray slide is up.

LOCATION

For efficient cabinet operation, choose a location that will provide easy access for loading and unloading without interfering with the final assembly of food orders.



Figure 2: Allow Adequate Clearances

The installation location must allow adequate clearances for servicing and proper operation (Figure 2).

INSTALLATION CODES AND STANDARDS

This unit must be installed in accordance with:

In the United States of America:

1. State and local codes.
2. National Electrical Code, ANSI/NFPA-70 (latest edition). Copies may be obtained from The National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

In Canada:

1. Local codes.
2. Canadian Electrical Code, CSA C22.1 (latest edition). Copies may be obtained from The Canadian Standard Association, 178 Rexdale Blvd., Etobicoke, Ontario, Canada M9W 1R3.

ELECTRICAL CONNECTIONS

⚠ WARNING Electrical and grounding connections must comply with the applicable portions of the National Electrical code and/or other local electrical codes.

⚠ WARNING This cabinet is equipped with a flexible electric supply cord provided with a three-prong grounding plug. It is imperative that this plug be connected into a properly grounded three-prong receptacle. If the receptacle is not the proper grounding type, contact an electrician. **DO NOT** remove the grounding prong from this plug.



⚠ WARNING Disconnect electrical power to the machine and follow Lockout/Tagout procedures before cleaning.

⚠ WARNING Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

All cabinets are equipped with a durable, suitable, 8-ft. (2.4 m) cord and NEMA 5-15 plug as standard equipment. The cord and plug come with a proper strain relief to prevent unit from moving away from electrical connection.

Refer to wiring diagram in this manual for proper connection.

Do not store flammables near unit (Figure 3).



Figure 3: Do Not Store Flammables Near Unit

SPECIFICATIONS

Model	Voltage	Amp	Phase	Hz	NEMA Plug
VHMD 5	110/120	10	1	60	5-15
VHMD 13	110/120	10	1	60	5-15
VHMD 15	110/120	10	1	60	5-15

OPERATION

⚠ WARNING The cabinet and its parts are hot. Be very careful when operating, cleaning or servicing the cabinet.

Controls

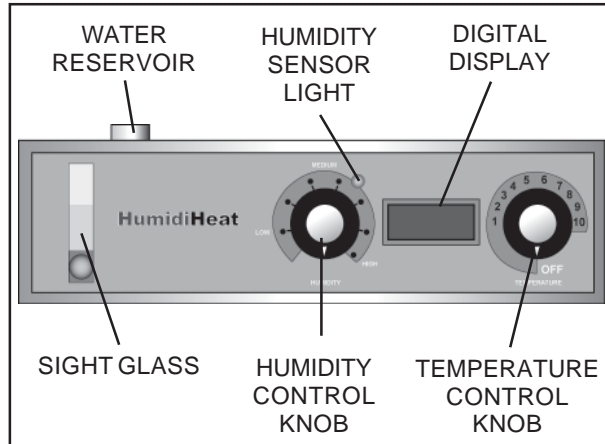


Figure 4: Holding Compartment Controls

POWER INDICATOR LIGHT

Lit when power is supplied to cabinet.

HEAT INDICATOR LIGHT

Lit when heat is supplied to cabinet.

FULL RANGE THERMOSTAT

Allows operator to dial desired temperature setting (1-10).

THERMOMETER

Indicates interior temperature.

Lockout/Tagout Procedures

Lockout/Tagout procedures are used to protect personnel working on an electrical appliance. Perform the following steps when performing any type of maintenance or service on an electrically operated appliance.

1. In electrical box, place unit's circuit breaker into OFF position.
2. Place a lock or other device on electrical box cover to prevent someone from placing circuit breaker ON.
3. Place a tag on electrical box cover to indicate that unit has been disconnected for service and power should not be restored until tag is removed by maintenance personnel.
4. Disconnect unit power cord from electrical outlet.
5. Place a tag on cord to indicate that oven has been disconnected for service and power should not be restored until tag is removed by maintenance personnel.

Before First Use



⚠ WARNING Disconnect electrical power to the machine and follow Lockout/Tagout procedures before cleaning.

1. Disconnect unit and follow Lockout/Tagout procedure.
2. Thoroughly wash, rinse and dry unit and all accessories with a mild soap solution, clean water and soft, clean cloths.
3. Connect unit to proper electrical power source and operate on highest temperature setting for a period of 30-45 minutes. (OPERATING INSTRUCTIONS).

Operating Instructions

1. Connect to proper electrical supply as indicated on data plate.

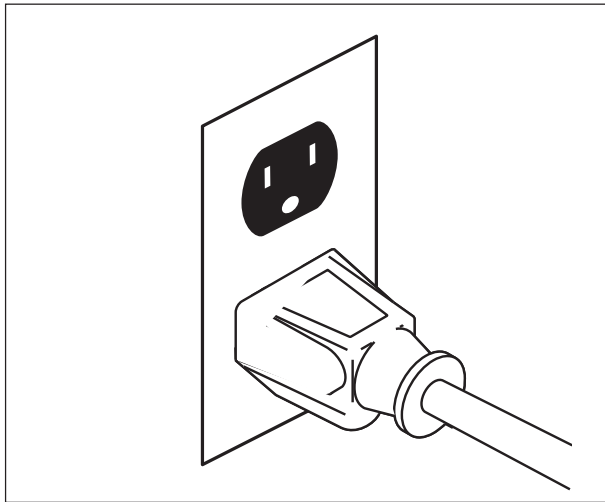


Figure 5: Connect To Proper Electrical Supply

2. Fill water reservoir and observe water level thru site glass.

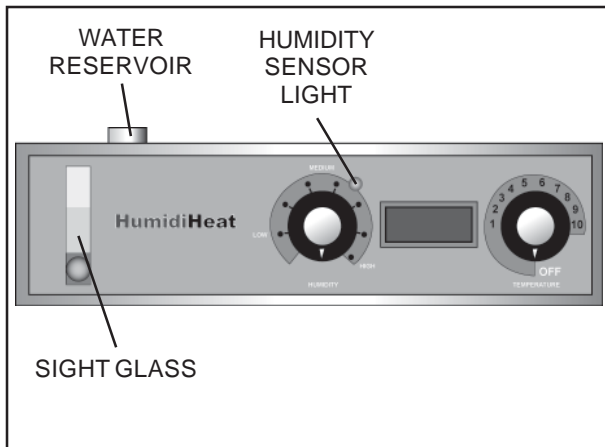


Figure 6: Water Reservoir, Sight Glass & Humidity Sensor Light

To avoid lime build-up, use only distilled or softened water. To remove lime build-up, remove the spray nozzle, soak it in white vinegar until clean and rinse with fresh water.

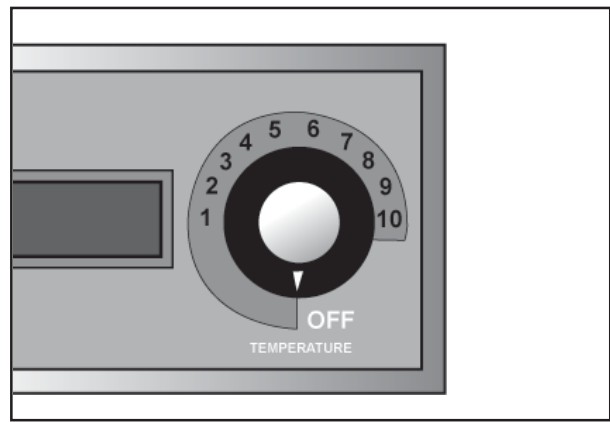


Figure 7: Temperature Control Knob

3. Turn temperature control knob to desired setting.

The higher the number that is selected on the temperature control knob, the higher the internal temperature will be. And the lower the number that is selected on the temperature control knob, the lower the internal temperature will be.

The LCD will display the selected temperature for 3 seconds and then change to display the actual internal cabinet temperature.

The unit will continue heating until the selected temperature has been reached and then cycle off and on to maintain the selected temperature. Meanwhile the LCD will display the fluctuating temperatures.

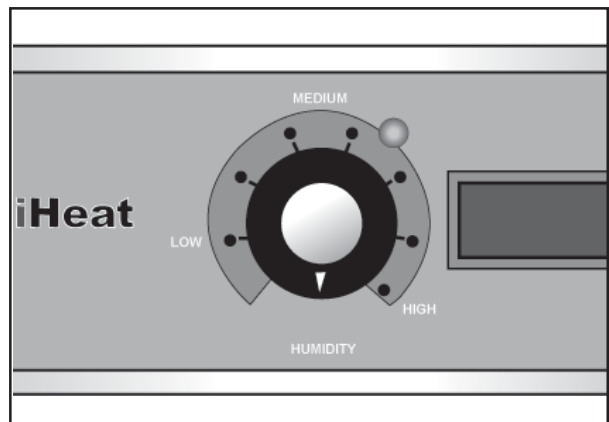


Figure 8: Humidity Control Knob

4. Turn humidity control knob to desired setting.

As humidity is building, the HUMIDITY CONTROL SENSOR LIGHT (Figure 7) will be lit red. When the desired humidity has been reached, the light will change to green.

5. Monitor food product to ensure proper temperatures.
6. Monitor water level and refill water reservoir whenever LCD displays H2O.

Shutdown

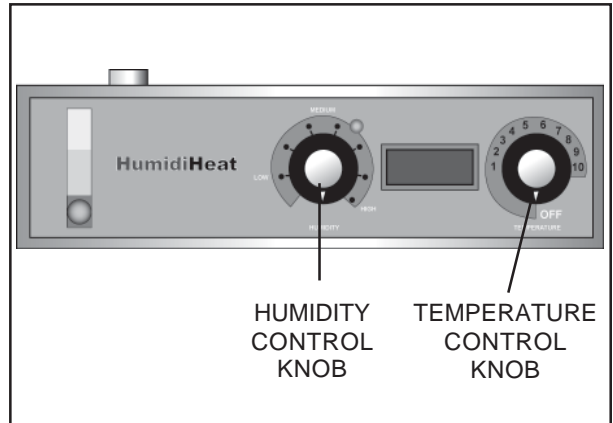


Figure 9: Shut Down

1. Turn temperature control knob and humidity control knob counterclockwise to OFF (Figure 9).
2. Unplug electrical power supply. Power indicator light will go off (Figure 10).

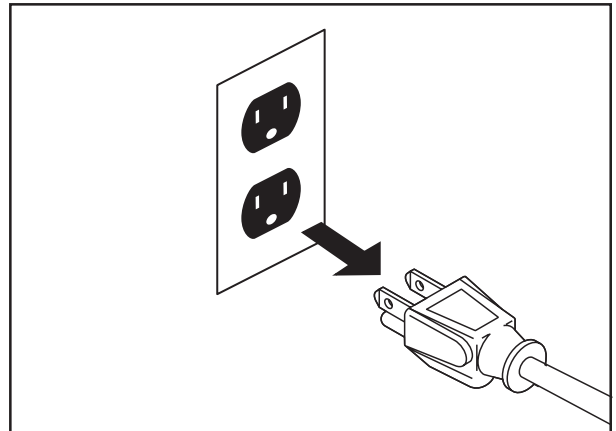


Figure 10: Extended Shut Down

MAINTENANCE

Cleaning



⚠ WARNING Disconnect electrical power to the machine and follow Lockout/Tagout procedures before cleaning.

⚠ WARNING The cabinet and its parts are hot. Allow it to cool before cleaning or servicing the unit.

Daily

1. Disconnect electrical power and follow Lockout/Tagout procedures.
2. Allow unit to cool before cleaning.
3. Remove tray slides or plate racks, and with a soft cloth, wash and rinse in a sink as you would any utensil.
4. With a mild soap solution, soft cloths and fresh water, wash, rinse and dry the interior of the cabinet.
5. Place tray slides or plate racks in the cabinet.
6. To clean and maintain stainless steel surfaces, see STAINLESS STEEL CARE .

STAINLESS STEEL CARE

Cleaning

Stainless steel contains 70-80% iron, which will rust if not properly maintained. It also contains 12-30% chromium, which forms an invisible passive, protective film that shields against corrosion. If the film remains intact, the stainless steel will remain intact. However, if the film is damaged, the stainless steel can break down and rust. To prevent stainless steel breakdown, follow these steps:

CAUTION: Never use any metal tools, scrapers, files, wire brushes or scouring pads (except for stainless steel scouring pads), which will mar the surface!

CAUTION: Never use steel wool, which will leave behind particles that rust!

CAUTION: Never use acid-based or chloride-containing cleaning solutions, which will break down the protective film!

CAUTION: Never rub in a circular motion!

CAUTION: Never leave any food products or salt on the surface. Many foods are acidic. Salt contains chloride!

For routine cleaning, use warm water, mild soap or detergent and a sponge or soft cloth.

For heavy-duty cleaning, use warm water, a degreaser and a plastic, stainless steel or Scotch-Brite pad.

Always rinse thoroughly. Always rub gently in the direction of the steel grain.

Preserving & Restoring

Special stainless steel polishing cleaners can preserve and restore the protective film.

Preserve the life of stainless steel with a regular application of a high quality stainless steel polishing cleaner as a final step to daily cleaning.

If signs of breakdown appear, restore the stainless steel surface. First, thoroughly clean, rinse and dry the surface. Then, on a daily basis, apply a high-quality stainless steel polish according to manufacturer's instructions.

Heat Tint

Darkened areas, called "heat tint," may appear on stainless steel exposed to excessive heat, which causes the protective film to thicken. It is unsightly but is not a sign of permanent damage.

To remove heat tint, follow the routine cleaning procedure. Stubborn heat tint will require heavy-duty cleaning.

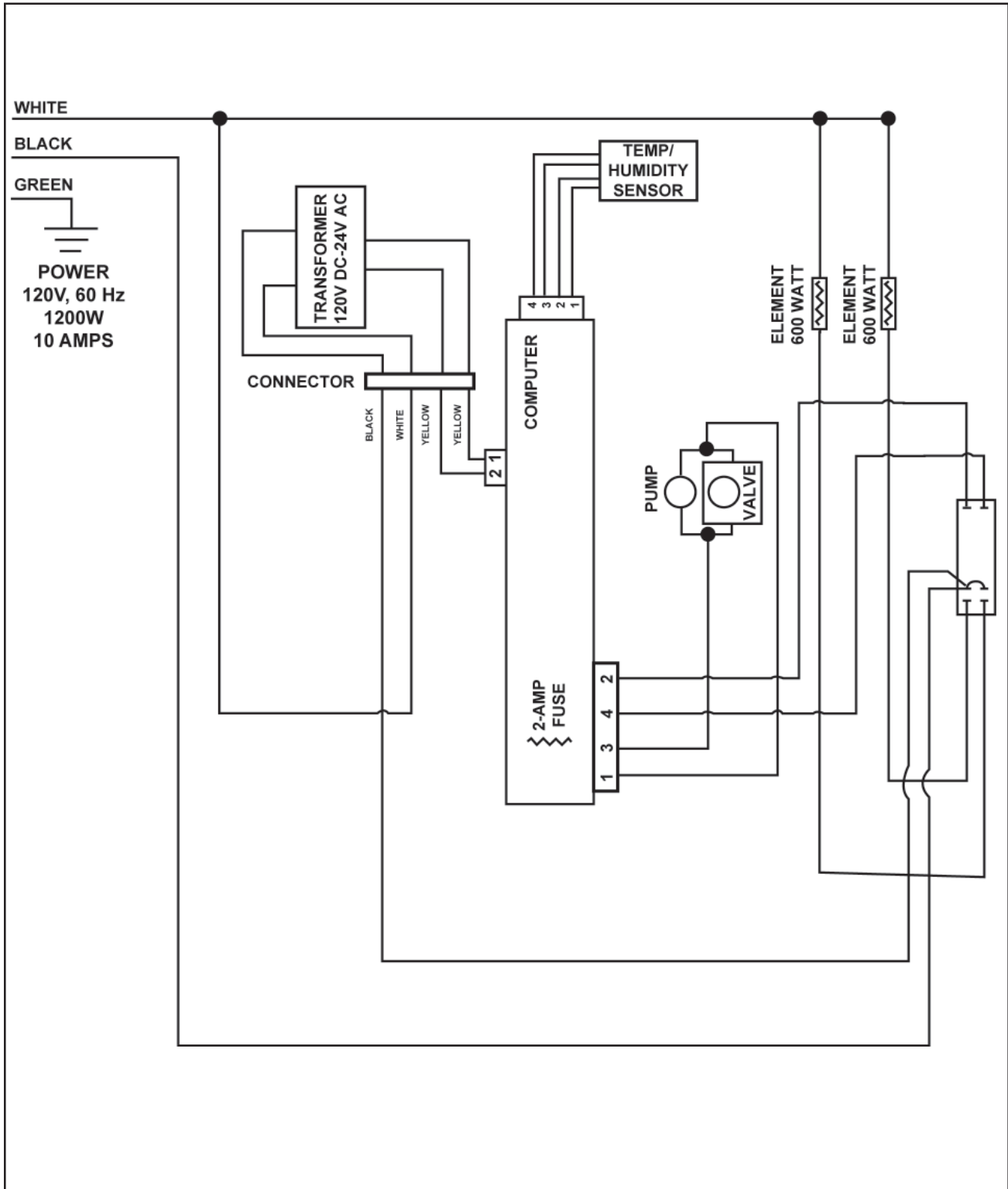
To reduce heat tint, limit the exposure of equipment to excessive heat.

TROUBLESHOOTING

GENERAL TROUBLESHOOTING

Symptoms	Possible Cause/Suggested Corrective Action
Temperature incorrect	Door open/Close door. No main power source/Check power source or circuit breaker.
Door leaks	Damaged door gasket/Contact Authorized Vulcan-Hart Servicer. Door requires adjustment/Contact Authorized Vulcan-Hart Servicer.
Compartment does not heat properly	Thermostat requires adjustment/Contact Authorized Vulcan-Hart Servicer. Defective thermostat/Contact Authorized Vulcan-Hart Servicer. Defective heating coil/Contact Authorized Vulcan-Hart Servicer.
Humidity incorrect	Door open/Close door. Heating elements OFF/Turn temperature control knob to desired temperature. No main power source/Check power source or circuit breaker. Water reservoir is empty/Fill water reservoir.

WIRING DIAGRAM



Model VHMD Humidity Electrical Wiring Diagram

NOTES

SERVICE AND PARTS INFORMATION

To obtain service and parts information concerning this model, contact the Vulcan-Hart Service Agency in your area (refer to our website, www.vulcanhart.com for a complete listing of Authorized Service and Parts depots).

When calling for service, the following information must be available: model number, serial number, manufacture date (MD) and voltage.