



# **V SERIES HOLDING AND TRANSPORTATION CABINETS AND CARTS**

## **Customer Maintenance Manual**

**SPECIFICATION SHEETS**

**INSTALLATION / OPERATION MANUALS**

**ADDITIONAL RESOURCES**

**SERVICE MANUALS**

**HOBART SERVICE PARTS STORE**

**CATALOG OF REPLACEMENT PARTS**

**HOLDING & TRANSPORT****VULCAN****VHA18  
18 PAN AMBIENT CABINET**

Model VHA18

**STANDARD FEATURES**

- Eighteen level holding and transport cabinet accepts eighteen 18" x 26" pans or thirty-six 12" x 20" pans, pans may be up to 2<sup>3</sup>/<sub>4</sub>" tall
- Heavy duty 20 gauge polished stainless steel cabinet
- Set of 5" casters, two swivel with brakes and two rigid
- Full size polycarbonate door with field reversible heavy duty hinges, door latch mechanism, and gaskets
- Fixed interior pan supports are designed to accommodate pan covers for transporting, and are removable for easy cleaning
- One year limited parts and labor warranty

**SPECIFICATIONS**

Eighteen level holding and transport cabinet, Vulcan Hart Model No. VHA18. Heavy duty 20 gauge polished stainless steel cabinet. Four 5" casters, 2 swivel with brakes, 2 rigid. Polycarbonate door with heavy duty hinges, door latch mechanism, and gaskets. Interior pan supports are designed to accommodate pan covers for transporting, and are removable for easy cleaning. Accepts eighteen 18" x 26" pans or thirty-six 12" x 20" x 2<sup>3</sup>/<sub>4</sub>" pans.

**Exterior Dimensions:** 25<sup>1</sup>/<sub>4</sub>" W x 30<sup>3</sup>/<sub>4</sub>" D x 71" H

UL listed, UL listed to Canadian safety standards

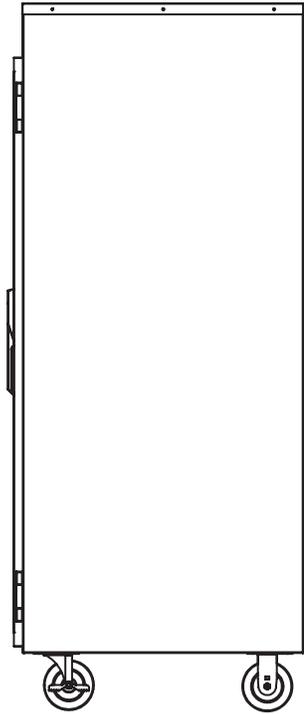
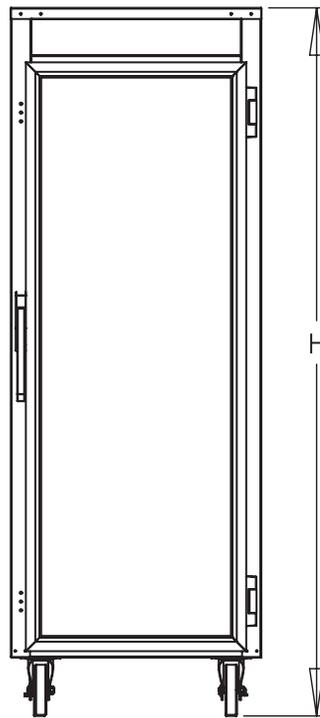
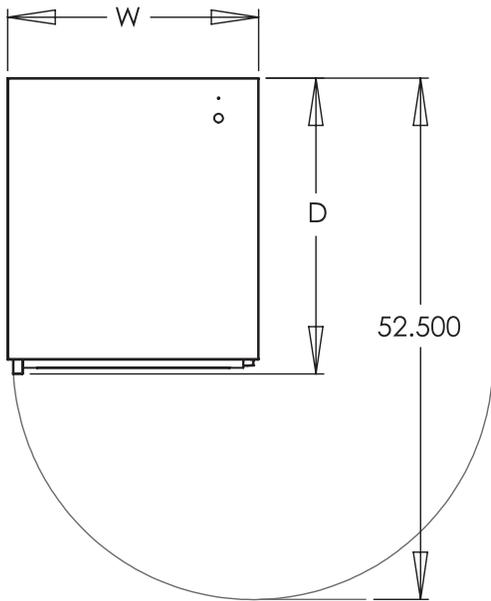
**VULCAN**

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**VHA18**  
18 PAN AMBIENT CABINET



Model Number	Pan Capacity		Exterior Dimensions			Shipping Weight lbs / kg
	18" x 26"	12" x 20"	Width	Depth	Height	
VHA18	18	36	25 <sup>1</sup> / <sub>4</sub> "	30 <sup>3</sup> / <sub>4</sub> "	71"	215 / 98



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**HOLDING & TRANSPORT****VULCAN****VHA9  
9 PAN AMBIENT CABINET**

Model VHA9

**STANDARD FEATURES**

- Nine level holding and transport cabinet accepts eighteen 18" x 26" pans or thirty-six 12" x 20" pans, pans may be up to 2¾" tall
- Heavy duty 20 gauge polished stainless steel cabinet
- Set of 5" casters, two swivel with brakes and two rigid
- Full size polycarbonate door with field reversible heavy duty hinges, door latch mechanism, and gaskets
- Fixed interior pan supports are designed to accommodate pan covers for transporting, and are removable for easy cleaning
- One year limited parts and labor warranty

**SPECIFICATIONS**

Nine level holding and transport cabinet, Vulcan Hart Model No. VHA9. Heavy duty 20 gauge polished stainless steel cabinet. Four 5" casters, 2 swivel with brakes, 2 rigid. Polycarbonate door with heavy duty hinges, door latch mechanism, and gaskets. Interior pan supports are designed to accommodate pan covers for transporting, and are removable for easy cleaning. Accepts nine 18" x 26" pans or eighteen 12" x 20" x 2¾" pans.

**Exterior Dimensions:** 25¼" W x 30¾" D x 43½" H

UL listed, UL listed to Canadian safety standards

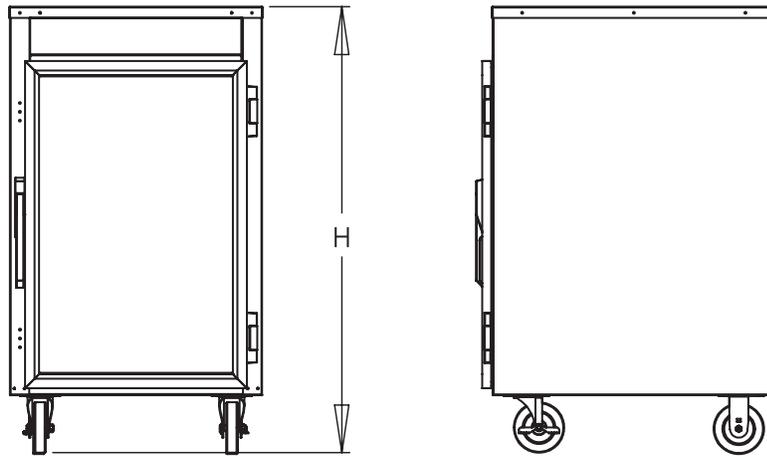
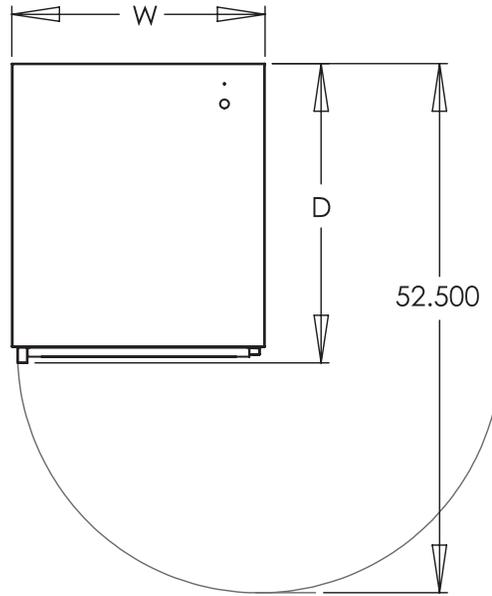
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**VHA9**  
9 PAN AMBIENT CABINET



Model Number	Pan Capacity		Exterior Dimensions			Shipping Weight lbs / kg
	18" x 26"	12" x 20"	Width	Depth	Height	
VHA9	9	18	25 <sup>1</sup> / <sub>4</sub> "	30 <sup>3</sup> / <sub>4</sub> "	43 <sup>1</sup> / <sub>2</sub> "	165 / 75



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**HOLDING & TRANSPORT****VULCAN****VB90  
BANQUET CABINET**

Model VB90

**SPECIFICATIONS**

Vulcan Hart Model No. VB90 heated banquet cabinet complete with heavy duty 5" casters (2 swivel with brakes, 2 rigid) and full perimeter bumper. Recessed control panel containing dual indicator light (red when connected to power and amber when heating elements are in operation), thermometer, and full range thermostat for temperatures up to 190°F (88°C). Cabinet capacity is 90 each 10¼" covered plates. Complete with 5 each full width wire shelves. Cabinet exterior is 20 gauge and interior is 22 gauge, non-corrosive stainless steel. The interior and exterior of doors are 18 gauge, non-corrosive stainless steel. Recessed push handle on each side of cabinet. Fully insulated, 1" in side walls and 2" in top. Complete with cord and plug (NEMA 5-20). 208/240 volt cabinets are supplied with NEMA 16-15 plug. Lifetime warranty on heating elements.

**Exterior Dimensions:** 40<sup>5</sup>/<sub>8</sub>" W x 32<sup>3</sup>/<sub>4</sub>" D x 18" H

UL listed, UL listed to Canadian safety standards

**STANDARD FEATURES**

- Heavy duty heated banquet cabinet with a capacity of 90 each covered 10¼" plates
- Complete with heavy duty 5" casters (2 swivel with brakes, 2 rigid) and full perimeter bumper
- Dutch style doors with magnetic action latches
- Recessed control panel containing dual indicator light (red when connected to power and amber when heating elements are in operation), thermometer, and full range thermostat for temperatures up to 190°F (88°C)
- Fully insulated 1" side walls and 2" in top
- Heavy duty polished non-corrosive stainless steel construction; 20 gauge exterior, 22 gauge interior
- The interior and the exterior of doors are 18 gauge, non-corrosive stainless steel
- Recessed push handle on each side of cabinet
- Full 1" welded tubular steel frame to provide maximum strength and rigidity
- Complete with 5 full width wire shelves
- 120 volt, 2,000 watts, 16.6 amps
- Complete with 6 foot heavy duty power cord and NEMA 5-20 plug
- Lifetime warranty on the heating elements
- One year limited parts and labor warranty

**OPTIONS**

- 208 / 240 volt (no charge)
- 4" & 6" heavy duty casters
- Card holder

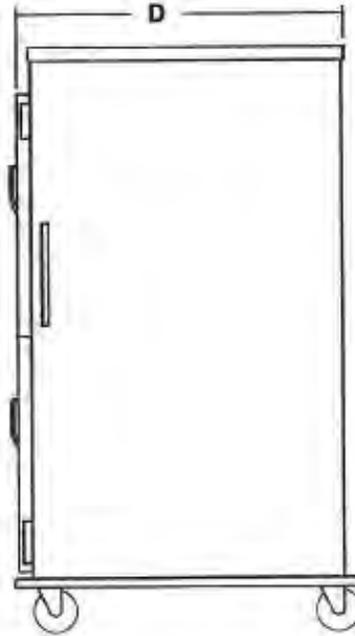
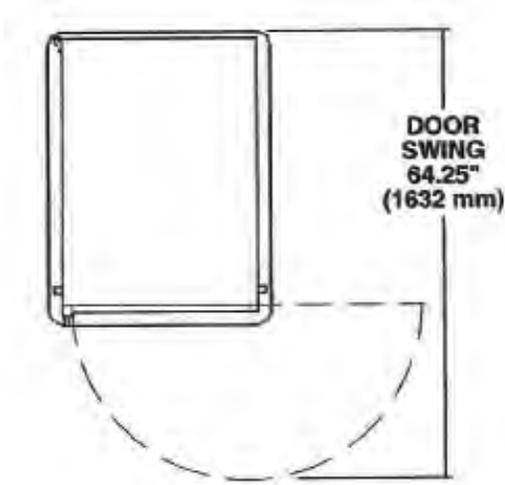
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**VB90**  
BANQUET CABINET



Model Number	Plate Capacity	Exterior Dimensions			Electrical Specifications			Shipping Weight lbs / kg
	10 $\frac{1}{4}$ "	Width	Depth	Height	Volts	Watts	Amps	
<b>VB90</b>	90	31 $\frac{3}{4}$ "	42 $\frac{3}{4}$ "	71 $\frac{3}{4}$ "	120	2,000	16.6	242 / 110



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**HOLDING & TRANSPORT****VULCAN****VHD8  
HEAVY DUTY TRANSPORT CABINET**

Model VHD8



UL listed to Canadian safety standards.  
Classified by UL to NSF Std. #4


 **VHD8** Heavy Duty Transport Cabinet
**STANDARD FEATURES**

- Holding and Transport Capacity:
  - 7 each – 18" x 26" sheet pans
  - 14 each – 12" x 20" x 2½" pans or a combination of both on 1½" centers
- Blower motor for gentle and even temperature distribution
- Heliarc welded, fully insulated, 20 gauge stainless steel double pan construction
- Support channels welded at base, integral dual layer fully welded corner posts (all four corners)
- Full perimeter bumper
- 5" super duty polyurethane casters (2 swivel with brakes and 2 rigid)
- 12 gauge hinges are welded to the cabinet frame and door
- Welded push/pull handles
- Recessed control panel
- Dual indicator lights
- Thermometer
- Full range thermostat for temperatures up to 190°F (88°C)
- 4 pairs of universal tray slides adjustable on 1½" centers
- Lifetime warranty on heating elements
- Top mounted cord and cord wrap
- Complete with cord and NEMA 5-15 plug
- 120 volts, 1,000 watts, 8.33 amps

**OPTIONS**

- Left hand hinged door
- Additional universal tray slides
- Humidity pan
- Correctional Package with tamper-resistant fasteners, welded racking, secured controls and lockable transport latch

**SPECIFICATIONS**

Heavy duty transport cabinets designed for the toughest transportation operations. Units are designed to hold 7 each 18" x 26" sheet pans, 14 each 12" x 20" x 2½" steam table pans, or a combination of both on 1½" centers. Blower motor for gentle and even temperature distribution. Heliarc welded, fully insulated, 20 gauge stainless steel double pan construction with support channels welded at base, with integral dual layer fully welded corner posts (all four corners). Full perimeter bumper and 5" super duty polyurethane casters (2 swivel with brakes and 2 rigid). 12 gauge hinges are welded to both the cabinet frame and door and 12 gauge lockable transport latches, magnetic closures, and welded push/pull handles. The recessed control panel features dual indicator lights, a thermometer, and a full range thermostat for temperatures up to 190°F (88°C). Provided with 4 pairs of universal tray slides adjustable on 1½" centers, a top mounted cord, and cord wrap. Lifetime warranty on heating elements. Complete with cord and NEMA 5-15 plug - 120 volts.

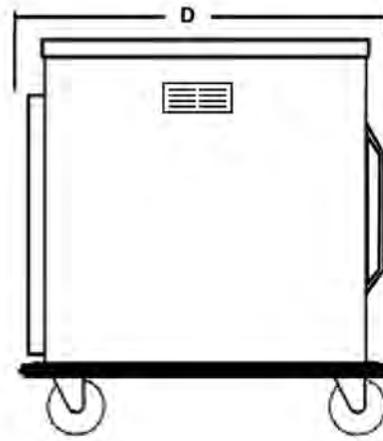
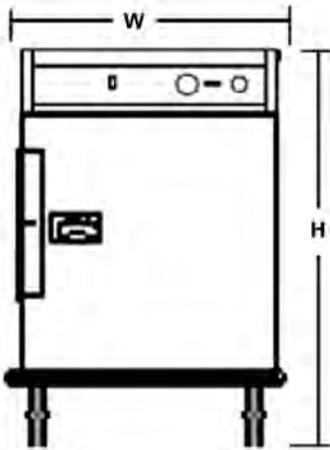
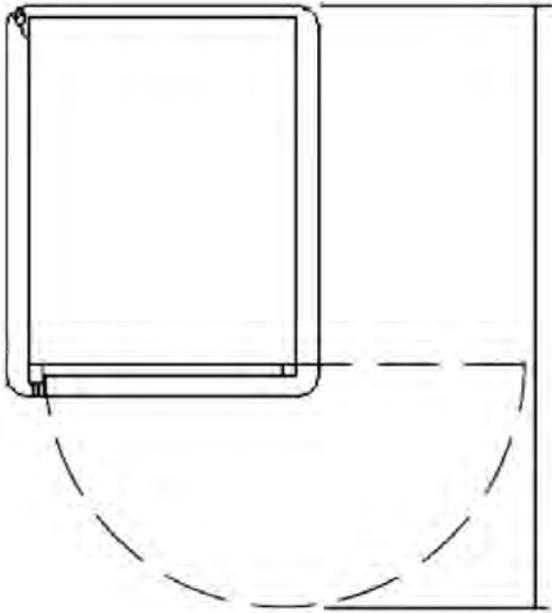
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**VHD8**  
HEAVY DUTY TRANSPORT CABINET



MODEL	CAPACITY 12" x 20" x 2½"	CAPACITY 18" x 26"	HIGH	DEEP	WIDE	SHIPPING WEIGHT	VOLTS	WATTS	AMPS
VHD8	14	7	45.5" (1156 mm)	34" (864 mm)	29" (737 mm)	400 lbs. (181 kg)	120	1000	8.33



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**NOTE:** In line with its policy to continually improve its products, Vulcan reserves the right to change materials and specifications without notice.

**HOLDING & TRANSPORT****VULCAN****VHD15  
HEAVY DUTY TRANSPORT CABINET**

Model VHD15



UL Listed to Canadian safety standards.  
Classified by UL to NSF Std. #4


 **VHD15** Heavy Duty Transport Cabinet
**STANDARD FEATURES**

- Holding and Transport Capacity:
  - 14 each – 18" x 26" sheet pans
  - 28 each – 12" x 20" x 2½" pans or a combination of both on 1½" centers
- Blower motor for gentle and even temperature distribution
- Heliarc welded, fully insulated, 20 gauge stainless steel double pan construction
- Support channels welded at base, integral dual layer fully welded corner posts (all four corners)
- Full perimeter bumper
- 5" super duty polyurethane casters (2 swivel with brakes and 2 rigid)
- 12 gauge hinges are welded to the cabinet frame and door
- Welded push/pull handles
- Recessed control panel
- Dual indicator lights
- Thermometer
- Full range thermostat for temperatures up to 190°F (88°C)
- 12 pairs of universal tray slides adjustable on 1½" centers
- Lifetime warranty on heating elements
- Top mounted cord and cord wrap
- Complete with cord and NEMA 5-15 plug
- 120 volts, 1,000 watts, 8.33 amps

**SPECIFICATIONS**

Heavy duty transport cabinets designed for the toughest transportation operations. Units are designed to hold 14 each 18" x 26" sheet pans, 28 each 12" x 20" x 2½" steam table pans, or a combination of both on 1½" centers. Blower motor for gentle and even temperature distribution. Heliarc welded, fully insulated, 20 gauge stainless steel double pan construction with support channels welded at base, with integral dual layer fully welded corner posts (all four corners). Full perimeter bumper and 5" super duty polyurethane casters (2 swivel with brakes and 2 rigid). 12 gauge hinges are welded to both the cabinet frame and door and 12 gauge lockable transport latches, magnetic closures, and welded push/pull handles. The recessed control panel features dual indicator lights, a thermometer, and a full range thermostat for temperatures up to 190°F (88°C). Provided with 12 pairs of universal tray slides adjustable on 1½" centers, a top mounted cord, and cord wrap. Lifetime warranty on heating elements. Complete with cord and NEMA 5-15 plug - 120 volts.

**OPTIONS**

- Left hand hinged door
- Additional universal tray slides
- Humidity pan
- Correctional Package with tamper-resistant fasteners, welded racking, secured controls and lockable transport latch

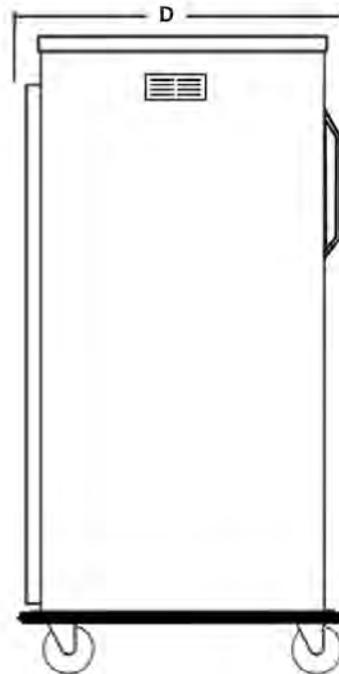
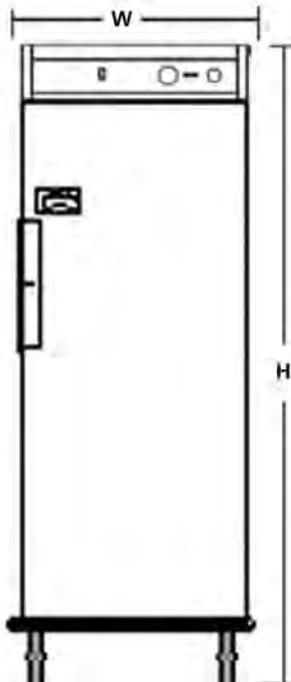
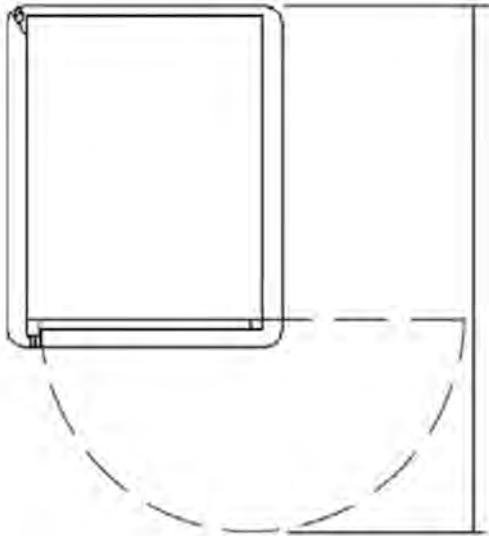
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**VHD15**  
HEAVY DUTY TRANSPORT CABINET



MODEL	CAPACITY 12" x 20" x 2½"	CAPACITY 18" x 26"	HIGH	DEEP	WIDE	SHIPPING WEIGHT	VOLTS	WATTS	AMPS
VHD15	28	14	65" 1651 mm	34" 864 mm	29" 737 mm	575 lbs. 261 kg	120	1000	8.33



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**NOTE:** In line with its policy to continually improve its products, Vulcan reserves the right to change materials and specifications without notice.

**HEATED HOLDING****VULCAN****VBP SERIES  
HOLDING & TRANSPORT CABINETS****Model VBP15**

UL Listed. UL Listed to Canadian safety standards.  
Classified by UL to NSF Standard #4.

**SPECIFICATIONS**

Vulcan Model No. VBP heated holding and transport cabinets. Blower motor for gentle and even temperature distribution. Complete with 5" heavy duty casters (2 swivel with brakes and 2 rigid) (VBP5 has 3" casters). Simple knob actuated electronic control with digital display for holding at temperatures up to 190°F. Adjustable racking will hold 18" x 26" or 12" x 20" pans or a combination of both on 1½" centers. Lip-load racking will hold 18" x 26" pans on 1½" centers. Shelving will hold a variety of pan sizes. Complete with universal tray slides adjustable on 1½" centers. Cabinet interior and exterior are both constructed out of 20 gauge stainless steel. Recessed side-mounted handles, magnetic action door latch, and full insulation; 1½" in side walls and 2" in top. Integrated steel frame for maximum strength. Field reversible doors. Complete with rear mounted cord and plug: NEMA 5-15 for 120 volts and NEMA 6-15 for 208-240 volts. One year limited parts and labor warranty. After the first year, 10-year parts warranty on the heating elements.

Units with adjustable racking:

- VBP5** (see reverse for capacities)
- VBP7** (see reverse for capacities)
- VBP13** (see reverse for capacities)
- VBP15** (see reverse for capacities)
- VBP18** (see reverse for capacities)

Units with lip-load racking:

- VBP7LL** (Fifteen 18" x 26" x 1" sheet pans)
- VBP15LL** (Thirty 18" x 26" x 1" sheet pans)

Units with shelves:

- VBP7SL** (Three Shelves)
- VBP15SL** (Six Shelves)

**STANDARD FEATURES**

- Holding Capacity:
  - 18" x 26" sheet pans.
  - 12" x 20" pans, or a combination of both on 1½" centers.
  - Other pan sizes on shelves.
- Simple knob actuated electronic control with digital display for holding at temperatures of up to 190°F.
- Blower motor for gentle and even temperature distribution.
- Dutch doors (VBP15 and VBP18).
- 5" heavy duty casters (2 swivel with brakes and 2 rigid) (3" on VBP5).
- Recessed side mounted handles.
- Universal tray slides adjustable on 1½" centers. VBP15 & VBP13 ship with 10 pairs of tray slides. VBP7 & VBP5 ships with 5 pairs, VBP18 ships with 15 pairs.
- Interior and the exterior are both constructed out of 20 gauge stainless steel.
- Fully insulated with 1½" in side walls and 2" in top.
- Integrated steel frame for maximum strength.
- Magnetic action door latch.
- Field reversible doors.
- Rear mounted cord.
- Complete with cord and plug: NEMA 5-15 for 120 volts and NEMA 6-15 for 208-240 volts.
- One year limited parts and labor warranty. After the first year, 10-year parts warranty on the heating elements.

**OPTIONS**

- 208/240 volt
- Humidity pan
- Full perimeter bumper
- Glass Dutch doors (VBP7 and VBP15 only)
- Wire shelves to sit on tray slides
- Additional tray slides
- Mechanical control

**VULCAN**

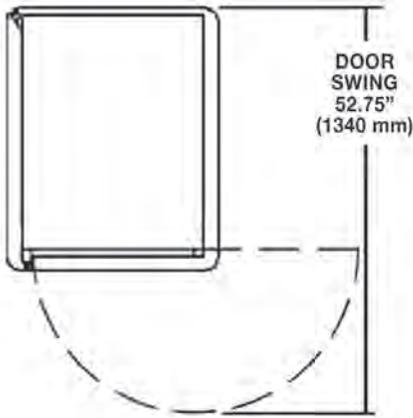
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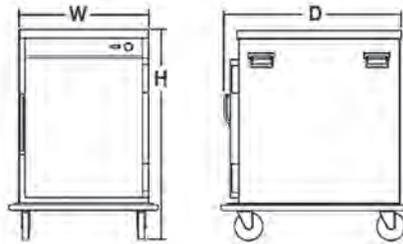


**VBP SERIES**  
HOLDING & TRANSPORT CABINETS

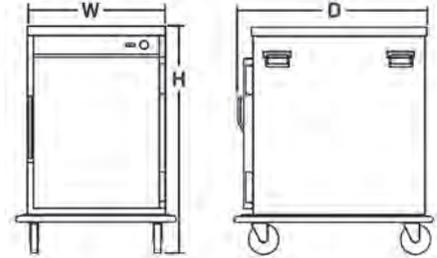
Drawings shown with optional bumper



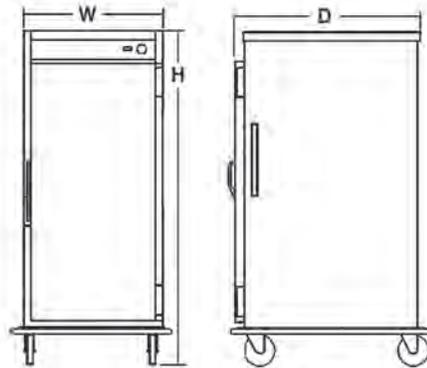
All Models Top View



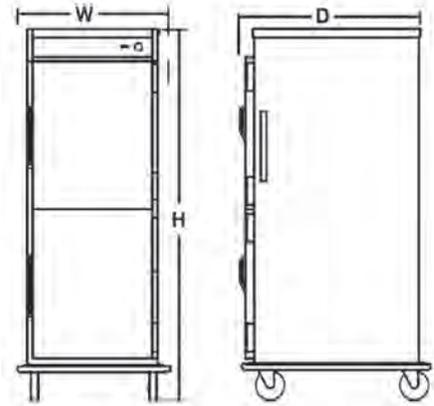
VBP5 Front & Side Views



VBP7 Front & Side Views



VBP13 Front & Side Views



VBP15 & VBP18 Front & Side Views

MODEL	DIMENSIONS	CAPACITY		ELECTRICAL			SHIPPING WEIGHTS	
	EXTERIOR	12" x 20" x 2 1/2" PANS	18" x 26" SHEET PANS	VOLTS	WATTS	AMPS	LBS	KG
VBP5	27 1/4" W x 33" D x 30 1/2" H	10	5	120	1,500	12.5	173	79
VBP7	27 1/4" W x 33" D x 39" H	14	7	120	1,500	12.5	198	90
VBP7LL	27 1/4" W x 33" D x 39" H	NA	15	120	1,500	12.5	198	90
VBP7SL	27 1/4" W x 33" D x 39" H	Unit comes with 3 shelves		120	1,500	12.5	198	90
VBP13	27 1/4" W x 33" D x 59 3/4" H	26	13	120	1,500	12.5	270	123
VBP15	27 1/4" W x 33" D x 65 1/4" H	30	15	120	1,500	12.5	297	135
VBP15LL	27 1/4" W x 33" D x 65 1/4" H	NA	30	120	1,500	12.5	297	135
VBP15SL	27 1/4" W x 33" D x 65 1/4" H	Unit comes with 6 shelves		120	1,500	12.5	297	135
VBP18	27 1/4" W x 33" D x 73 1/2" H	36	18	120	1,500	12.5	337	153

\*per compartment

Optional bumper adds 3/4" to the width and 1 5/8" to the depth.



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**HEATED HOLDING****VULCAN****VHU SERIES  
INSULATED HUMIDIFIED CABINETS**

Model VHU18 Shown



UL Listed. UL Listed to Canadian safety standards.  
Classified by UL to NSF Standard #4.

**SPECIFICATIONS**

Vulcan Model No. VHU insulated heated cabinets automatically set the humidity when you set the temperature. Blower motor for even temperature distribution. Simple knob actuated electronic control with top mounted digital display for holding at temperatures up to 190°F. Field reversible glass door standard. Adjustable racking (universal tray slides) will hold 18" x 26" or 12" x 20" pans or a combination of both on 1½" centers. Cabinet interior and exterior are constructed out of 20 gauge stainless steel. Recessed side-mounted handles, magnetic action door latch, and full insulation; 2" in side walls, bottom and top. 1500 watts, 120 volt, 12.5 amps element with rear mounted cord and NEMA 5-15 plug. Complete with 5" heavy duty casters (2 swivel with brakes and 2 rigid). One year limited parts and labor warranty. After the first year, lifetime parts warranty on the heating elements.

- VHU7** (see reverse for capacities)
- VHU18** (see reverse for capacities)
- VHU77** (see reverse for capacities)

**STANDARD FEATURES**

- Holding Capability:
  - 18" x 26" sheet pans.
  - 12" x 20" pans.
  - Other pans and containers on shelves.
- Set the temperature and the humidity level automatically adjusts for you.
- Simple knob actuated electronic control with top mounted digital display for holding at temperatures of up to 190°F.
- Blower motor for even temperature distribution.
- Full sized glass door.
- 5" heavy duty casters (2 swivel with brakes and 2 rigid).
- Recessed side mounted handles.
- Universal tray slides adjustable on 1½" centers.
- Interior and the exterior are both constructed out of 20 gauge stainless steel.
- Fully insulated with 2" in side walls, bottom and top.
- Integrated steel frame for maximum strength.
- Magnetic action door latch.
- Field reversible doors.
- Rear mounted cord.
- 1500 watt, 120 volts element with NEMA 5-15 cord and plug.
- One year limited parts and labor warranty. After the first year, lifetime parts warranty on the heating elements.

**OPTIONS**

- 2000 watts, 120 volts, 16.7 amps element with NEMA 5-20 plug
- Solid door
- Additional tray slides
- Travel latch
- 3" high casters
- Stacking kit

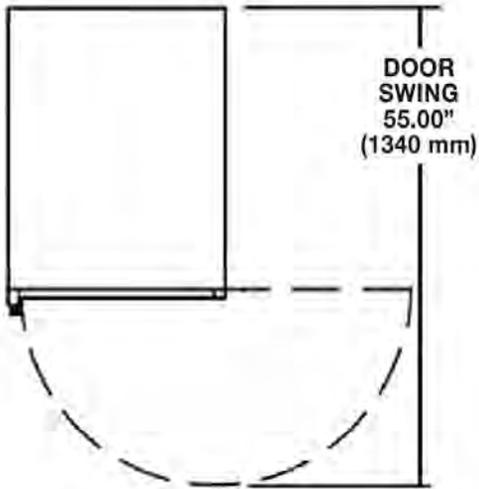
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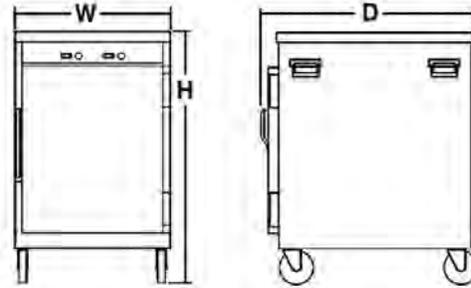
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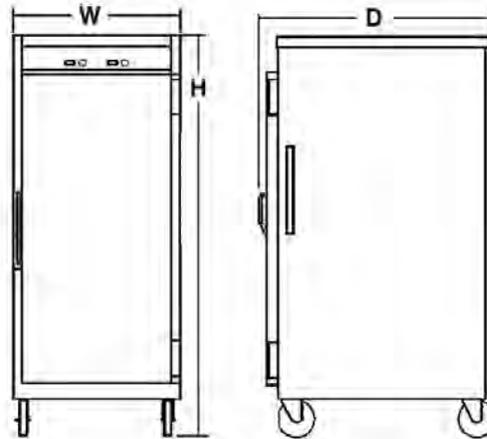
**VHU SERIES**  
INSULATED HUMIDIFIED CABINETS



All Models Top View



VHU7 Front & Side Views



VHU18 Front & Side Views

MODEL	DIMENSIONS	CAPACITY***		ELECTRICAL			SHIPPING WEIGHTS	
	EXTERIOR	12" x 20" x 2½" PANS	18" x 26" SHEET PANS	VOLTS	WATTS	AMPS	LBS	KG
VHU7	26¾" W x 31¼" D x 39¾" H	14	7	120	1,500	12.5	200	90
VHU18	26¾" W x 31¼" D x 74½" H	36	18	120	1,500	12.5	300	136
VHU77**	26¾" W x 31¼" D x 73½" H	14 x 2	7 x 2	120	1,500	12.5	300	136

Different capacities, heights, and heating element powers available upon request.

\*\*For stacked units, each compartment will have its own cord and plug. Electrical rating is for each compartment.

\*\*\*Capacity based on 3" spacing between each pan.



a division of ITW Food Equipment Group LLC

P.O. Box 696 ■ Louisville, KY 40201 ■ Toll-free: 1-800-814-2028 ■ Local: 502-778-2791 ■ Quote & Order Fax: 1-800-444-0602

**NOTE:** In line with its policy to continually improve its products, Vulcan reserves the right to change materials and specifications without notice.



# ***INSTALLATION & OPERATION MANUAL***

## **V SERIES FOOD HOLDING & TRANSPORTATION CABINETS**

### **MODELS:**

VB90	ML-126548
VB96	ML-126550
VB150	ML-126552
VBP5I	ML-138030
VBP7I	ML-126358
VBP13I	ML-126359
VBP15I	ML-126360
VBP33	ML-138075
VBP77I	ML-126361
VBS15	ML-138033
VHA9	ML-138072
VHA18	ML-138073
VHDP5	ML-138035
VHFA9	ML-138070
VHFA18	ML-138071
VHP3	ML-126343
VHP7	ML-126344
VHP8	ML-126345
VHP15	ML-126346
VHP20	ML-126347



## **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 equipment.**

**IN THE EVENT OF A POWER FAILURE,**

**DO NOT ATTEMPT TO OPERATE THIS DEVICE**

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## GENERAL

### INTRODUCTION

Vulcan-Hart Holding & Transport Cabinets and Banquet Carts are produced with quality workmanship and material. Proper installation, usage, and maintenance of your cabinet will result in many years of satisfactory performance.

It is suggested that you thoroughly read this entire manual and carefully follow all of the instructions provided.

The V Series Holding & Transport Cabinets and Banquet Carts provide an efficient means of transporting and holding bulk prepared foods at proper serving temperatures.

### INSTALLATION

Before installing, verify that the electrical service agrees with the specifications on the rating plate located on the lower back corner of the cabinet. If the supply and equipment requirements do not agree, do not proceed with unpacking and installation. Contact your Vulcan-Hart Customer Service Department immediately.

#### **UNPACKING:**

The Cabinet 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 to the cabinet.

***If the cabinet is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.***

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.
2. Peel off vinyl protection film.
3. **VBP77I ONLY:** This cabinet is simply two (2) VBP7I cabinets stacked on top of each other. One (1) cabinet will come with casters and a stacking assembly on top. The other cabinet is without casters. This cabinet requires two people to lift and should be placed inside the stacking kit that was shipped with the bottom cabinet. Stacking kits fit only one way between the cabinets. *If for any reason either one or both cabinets do not fit within the stacking kit provided, please contact the service department at 414-434-4716.*
4. Remove cardboard element cover protector from cabinet bottom. Remove adjustable tray slides from box. Remove the tray slide supports and install them in the cabinet.
  - a. Hook the openings in the flat flange of the support over two vertical carriage

- bolts on the interior of the cabinet.
- b. Make sure all flanges on the four supports face the door opening.
5. Install tray slides in the cabinet. Make sure the hook on the end of the tray slide is up. (Fig. 1)



Fig. 1

**CLEANING:**

The cabinet should be thoroughly cleaned prior to putting into service.

Use a mild soap and water solution to clean the interior of the unit. Never use harsh chemicals or abrasive pads to clean the unit.

**LOCATION:**

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

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

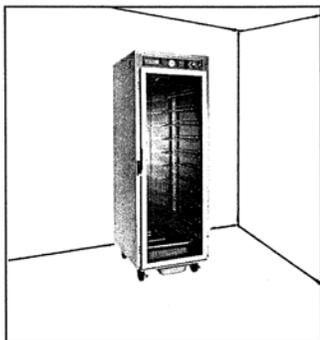


Fig. 2

**ELECTRICAL REQUIREMENTS****ELECTRICAL CODES & STANDARDS:**

The cabinet 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, 1 Batterymarch Park, Quincy, MA 02269.  
1-617-770-3000 [www.nfpa.org](http://www.nfpa.org)

**In Canada:**

1. Local Codes.
2. Canadian Electrical Code, CSA C22.1 (latest edition.) Copies may be obtained from: The Canadian Standard Association.  
[www.csa.ca](http://www.csa.ca)

**ELECTRICAL CONNECTIONS:**

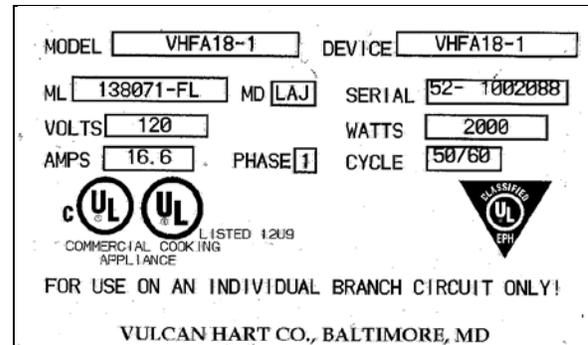
The cabinet is factory wired for either 110/120 volt or 208/240 volt, single phase operation. All 110/120 volt cabinets are equipped with an 8 foot cord and NEMA 5-15 plug as standard equipment. All 208/240 volt cabinets are equipped with a 8 foot cord and NEMA 6-15 plug. Refer to wiring diagrams in the back of this manual.

The cord and plug supplied is a suitable durable cord with a molded three-prong plug, and is provided with a proper strain relief.

**⚠ WARNING** All cabinets are equipped with a three-prong plug. It is imperative that this plug must 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.

Verify that the power source matches the Serial Data Plate located on the lower back corner of the cabinet and the plug configuration before the connection is made. (Fig. 3)

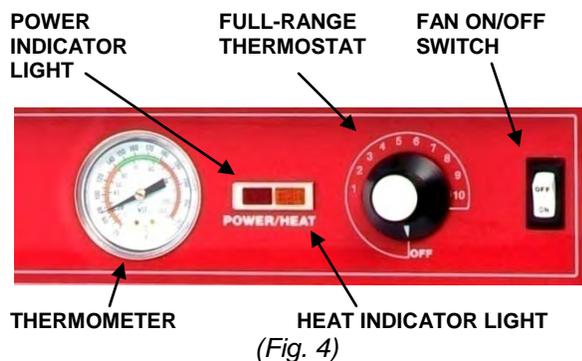


(Fig. 3)

## OPERATION

### CONTROLS

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



(Fig. 4)

#### Power Indicator Light:

The Red Power Indicator Light indicates power is supplied to the cabinet. The red light will stay lit as long as the cabinet is plugged in.

#### Heat Indicator Light:

The Amber Heat Indicator Light indicates the heating element(s) are heating. The amber light will stay lit as long as the heating element(s) are engaged. Once the predetermined temperature is achieved, the heating element(s) will begin to cycle. During this period, the amber light will turn on and off.

#### Fan On/Off Switch:

The Fan On/Off Switch turns the fan on only. The use of the fan is optional. Turn on fan if forced air holding is desired.

#### Thermometer:

The Thermometer indicates the interior temperature of the cabinet.

#### Thermostat:

The Thermostat turns power on to the heating element(s). The thermostat setting is from 1 to 10. The greater the thermostat setting number, the higher the temperature. (Fig. 5)

Thermostat Setting	Approximate Temperature
1	100°F (37°C)
2	110°F (43°C)
3	120°F (49°C)
4	130°F (54°C)
5	140°F (60°C)
6	150°F (66°C)
7	160°F (71°C)
8	170°F (77°C)
9	180°F (82°C)
10	190°F (88°C)

(Fig. 5)

***It is recommended that prior to placing the cabinet in operation, that it be preheated at the highest temperature setting for a period of 30 to 45 minutes.***

## HOLDING OPERATING INSTRUCTIONS

Once the cabinet has been connected to the appropriate power source, the cabinet is ready for operation.

1. Begin by turning the thermostat dial to the number **5**. This will cause the heating element(s) to start heating. Once the red light is lit, the thermostat dial can be turned to the desired setting.

2. Switch the Fan switch to On if forced air holding is desired. The use of the fan is optional. Use of the fan keeps the temperature even throughout the cabinet.
3. Wait approximately 25 minutes for the cabinet to preheat.
4. Load Hot food pans with hot, cooked food into cabinet.

***This cabinet is not intended to reheat or cook food. Food must be cooked and at a safe serving temperature prior to being placed in the cabinet***

**The operator should always monitor the food product to insure that it remains at a proper temperature.**

---

## HOLDING SHUTDOWN

When the use of the holding cabinet is completed:

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

1. Turn the thermostat to the Off position.
2. Keep the fan switch in the On position. This helps remove the excess humidity from the food product.

3. Allow cabinet to cool down completely.
4. Unplug power cord.
5. Clean cabinet according to instructions in this manual.

## CLEANING

**▲ WARNING**      **Always unplug electrical power supply before cleaning.**

### **DAILY:**

1. Unplug electrical power supply.
2. Allow warmer to cool before cleaning.
3. Clean the interior of the cabinet with a mild soap and water. *Never use harsh chemicals or abrasive pads to clean the cabinet.*
4. Rinse and dry with a soft dry cloth.
5. Clean the exterior of the cabinet with a clean damp cloth.

### **HEAVY-DUTY CLEANING:**

For heavy-duty cleaning, use warm water, a degreaser, and a plastic, stainless steel, or Scotch-Brite pad. Never rub in a circular motion -- rub gently in the direction of the steel grain. Always rinse thoroughly.

## STAINLESS STEEL CARE

### **CLEANING:**

Stainless Steel contains 70 – 80% iron, which will rust if not properly maintained. Stainless Steel also contains 12 – 30% chromium, which forms an invisible passive, protective film that shields against corrosion.

If the protective film remains intact, the stainless steel will remain intact. However, if the film is damaged, the stainless steel can break down and rust.

### **PREVENTIVE CARE:**

**To prevent stainless steel break-down, follow these steps:**

1. **Never use any metal tools, scrapers, files, wire brushes, or scouring pads** (*except for stainless steel scouring pads,*) which will mar the surface.
2. **Never use steel wool** – which will leave behind particles that will rust.
3. **Never use acid-based or chloride containing cleaning solutions** – which will break down the protective film.
4. **Never rub in a circular motion.** Always rub gently in the direction of the steel grain.
5. **Never leave any food products or salt on the surface.** Many foods are acidic. Salt contains chloride.

### **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. Excessive heat causes the protective film to thicken. This 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.

## MAINTENANCE

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

**Always unplug electrical power supply before servicing the cabinet.**

For Service, contact the Vulcan-Hart offices listed in this manual.

## TROUBLESHOOTING

SYMPTOMS	POSSIBLE CAUSES	REMEDY
Cabinet not operating	Cabinet not connected to power source.	Connect cabinet to power source.
	No power.	Check circuit breaker Check GFCI
GFCI or Ground Fault Circuit Indicator tripped	Moisture problem.	Dry moisture problem.
	Shorted element	Contact Authorized Service Provider.
	Pinched/damaged wire.	Contact Authorized Service Provider.
	Damaged power cord.	Contact Authorized Service Provider.
Cabinet is connected to power source, switch is ON, circuit breaker is ON, but cabinet is not heating.	Defective: element, thermometer, thermostat, etc.	Contact Authorized Service Provider.
Power/Heat Indicator Light not lit.	Light faulty	Contact Authorized Service Provider.
Cabinet does not heat properly	Door not shut properly or needs adjustment	Check door seal and Contact Authorized Service Provider.
	Defective: element, thermometer, thermostat, thermostat requires adjustment	Contact Authorized Service Provider.
Fan not operating	ON/OFF switch not ON	Turn ON/OFF switch ON
	Defective fan.	Contact Authorized Service Provider.

### SERVICE & PARTS INFORMATION

To obtain Service and Parts information concerning this model, contact the Vulcan Service Department at the address listed on the front cover of this manual or refer to our website: [www.vulcanequipment.com](http://www.vulcanequipment.com) for a complete listing of Authorized Service and Parts depots.

<b>Customer Service</b>	<b>800-814-2028</b>
<b>Technical Service</b>	<b>866-688-5226</b>
<b>Service Parts</b>	<b>866-688-5226</b>

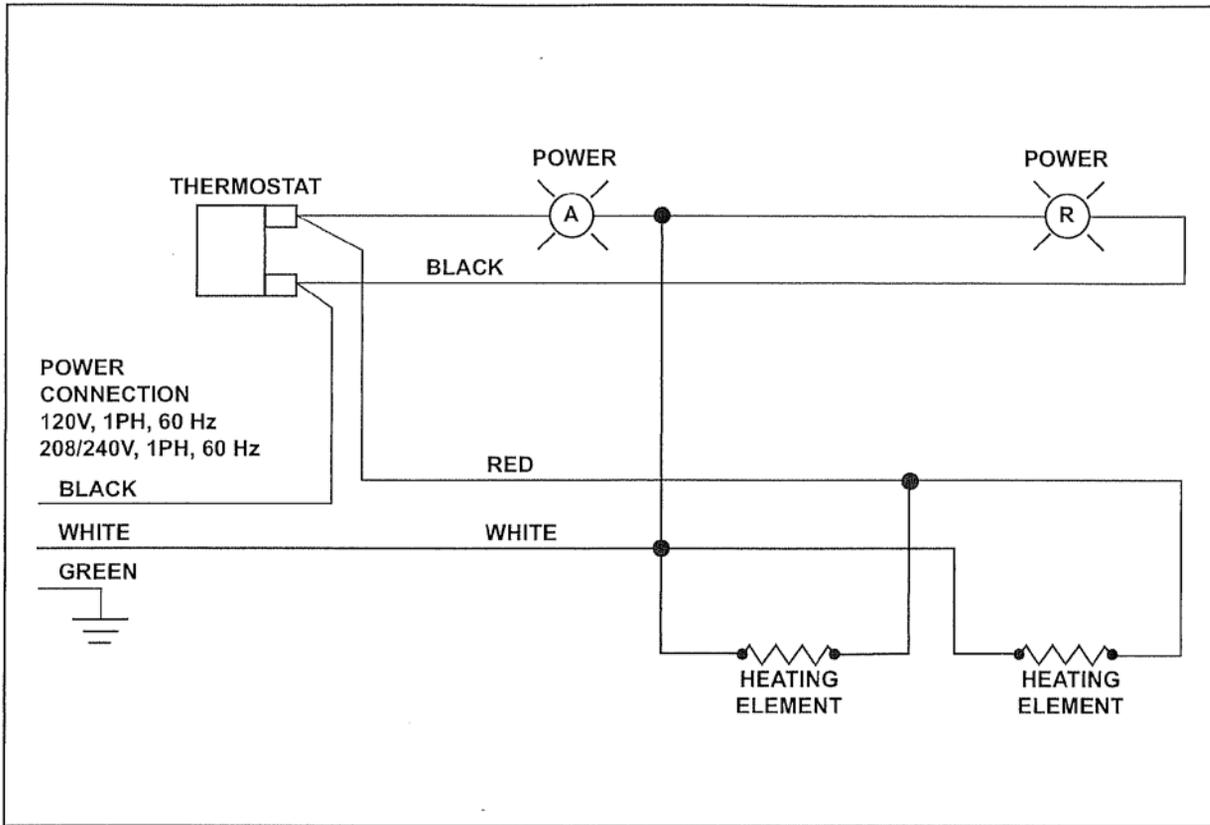
**When calling for service, have the model number and serial number available.**

<b>SPECIFICATIONS</b>							
<b>MODEL NO.</b>	<b>HEIGHT IN * (mm)</b>	<b>WIDTH IN (mm)</b>	<b>DEPTH IN (mm)</b>	<b>SHIPPING WT. Lb. (kg)</b>	<b>VOLTS</b>	<b>WATTS</b>	<b>AMPS</b>
VB90	71.75" (1822)	31.75" (806)	42.75" (1086)	242# (110 kg)	120	2000	16.6
VB96	62" (1575)	51.5" (1308)	29" (737)	435# (197 kg)	120	2000	16.6
VB150	73" (1854)	61.25" (1556)	29" (737)	590# (268 kg)	120	2000	16.6
VBP5I	33.25" (845)	26.5" (673)	33.75" (857)	173# (79 kg)	120	1000	8.3
VBP7I	39.75" (1010)	26.5" (673)	33.75" (857)	198# (90 kg)	120	1000	8.3
VBP13I	60.25" (1531)	26.5" (673)	33.75" (857)	270# (123 kg)	120	1200	10
VBP15I	66" (1677)	26.5" (673)	33.75" (857)	297# (135 kg)	120	1200	10
VBP33	43.5" (1105)	25.25" (643)	30.75" (782)		120	1200	10
VBP77I	72.5" (1842)	24.5" (622)	31.75" (806)	400# (182 kg)	120	2000	16.6
VBS7	37.625" (956)	23.75" (584)	30.25" (781)	195# (90 kg)	120	1200	10
VBS15	66" (1676)	23.75" (584)	30.25" (781)	315# (144 kg)	120	1200	10
VHA9	43.5" (1105)	25.25" (643)	30.75" (782)		NA	NA	NA
VHA18	71" (1804)	25.25" (643)	30.75" (782)		NA	NA	NA
VHDP5	62.25" (1582)	24.75" (629)	38" (966)	370# (169 kg)	120	2000	16.7
VHFA9	43.5" (1105)	25.25" (643)	30.75" (782)	163# (74 kg)	120	1200	10
VHFA18	70.75" (1797)	25.25" (643)	30.75" (782)	220# (100 kg)	120	2000	16.7
VHP3	23.5" (597)	18" (457)	23.75" (604)	80# (36.6 kg)	120	600	5
VHP7	36.75" (934)	21" (534)	26.75" (680)	140# (64 kg)	120	600	5
VHP8	31.5" (800)	18.25" (464)	25" (635)	90# (40.9 kg)	120	600	5
VHP15	60.5" (1537)	21" (534)	26.75" (680)	200# (91 kg)	120	1200	10
VHP20	61" (1549)	39.5" (1003)	29" (737)	264# (120 kg)	120	1200	10

\*HEIGHT MEASUREMENT INCLUDES 5" CASTERS

3-2011

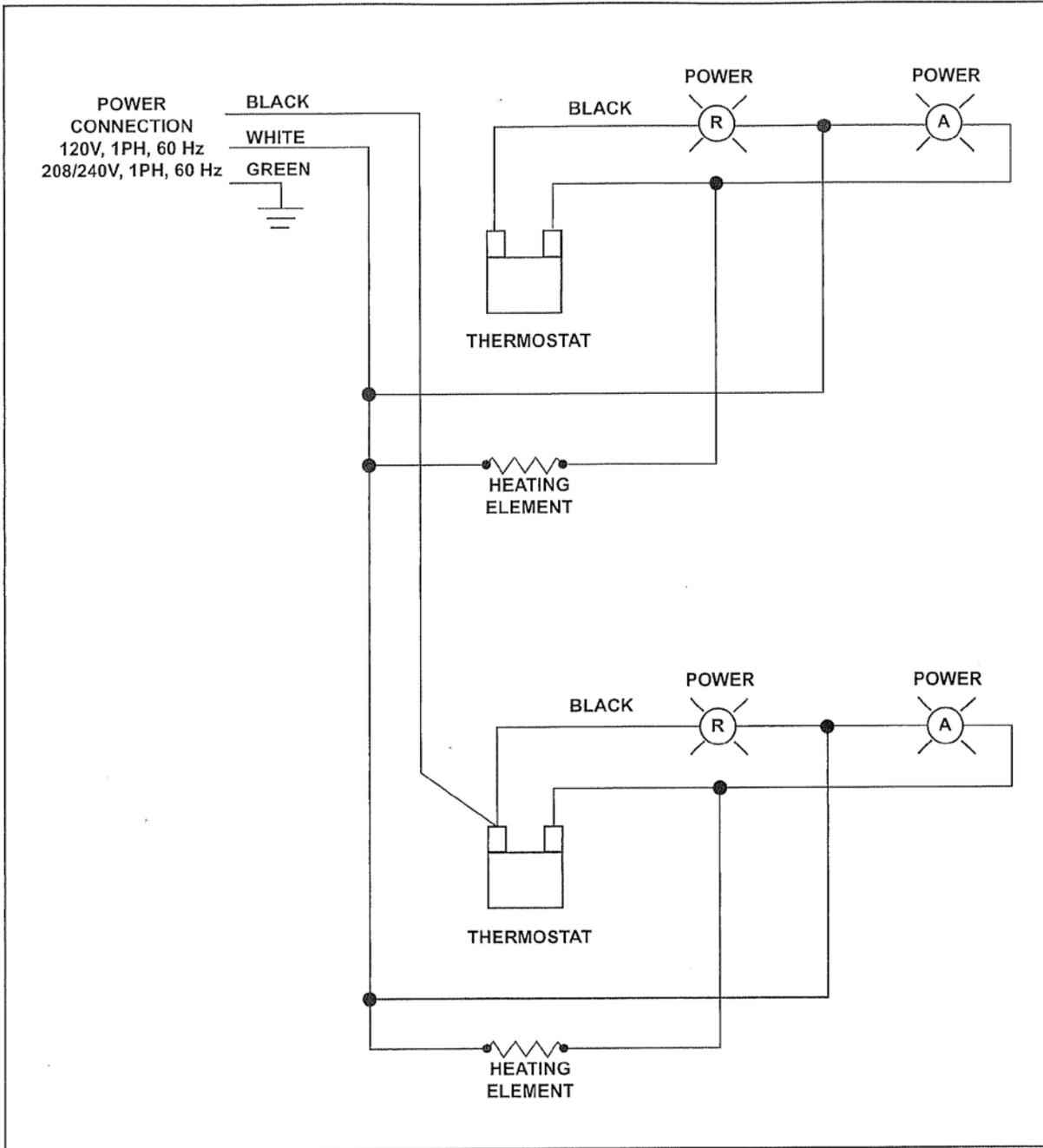
## WIRING DIAGRAMS



VB90, VB96, VB150, VBP5I, VBP7I, VBP13I, VBP15I, VHP15, VHP20, VBS7, VBS15  
VBP33  
Wiring Diagram

**MODELS MANUFACTURED BEFORE 01/01/2010**

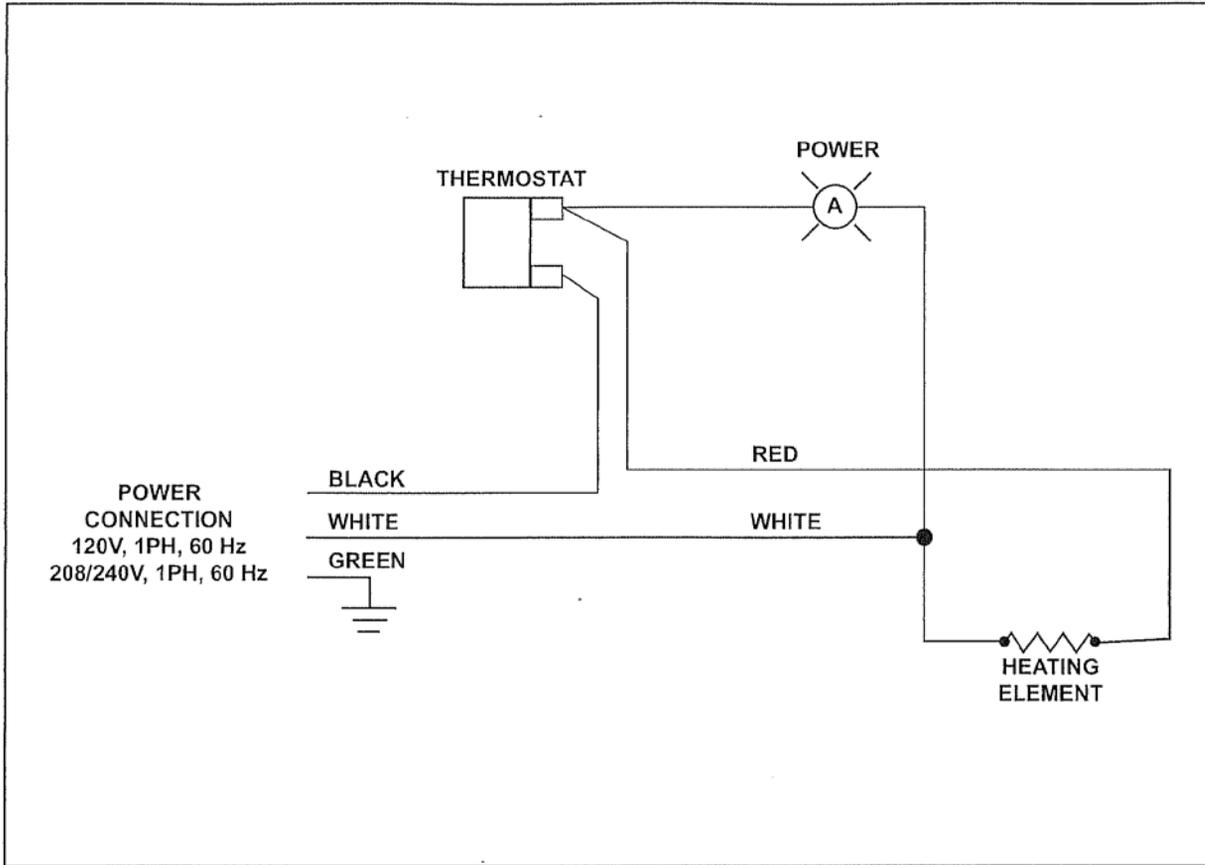
**VB90, VB96, VB150, VBP5I, VBP7I, VBP13I, VBP15I, VHP15, VHP20, VBS7, VBS15, VBP33**



VBP771 Wiring Diagram

**MODEL MANUFACTURED BEFORE 01/01/2010**

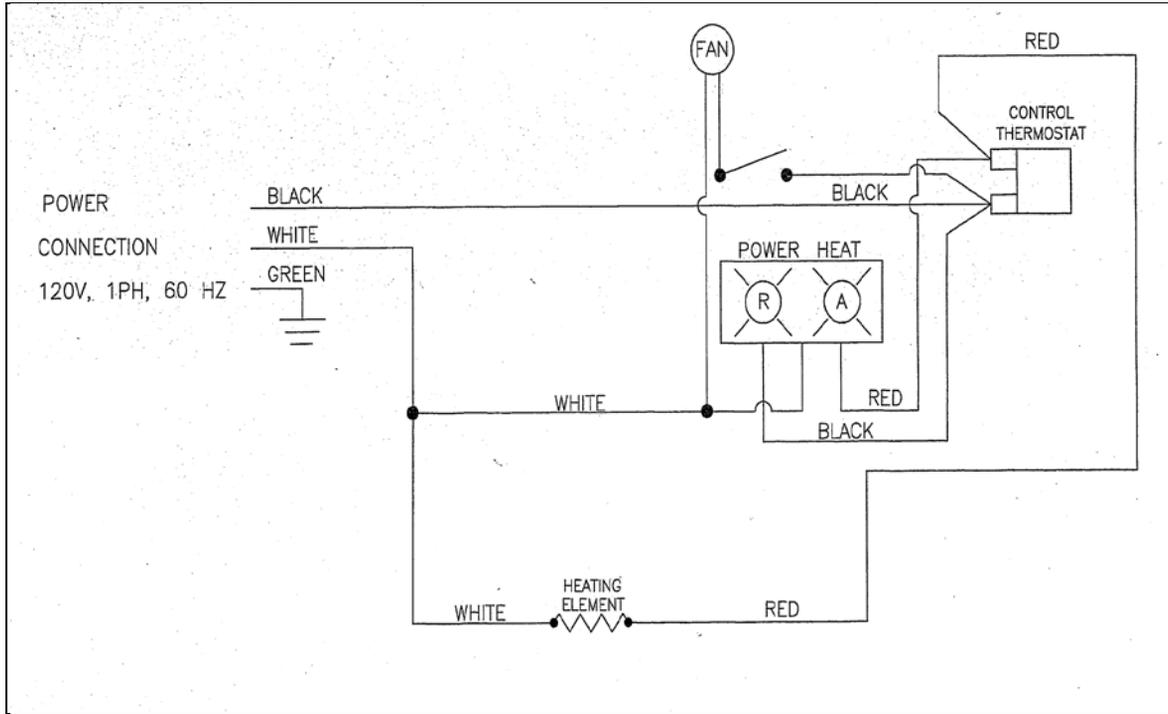
**VBP771**



VHP3, VHP7, VHP8 Wiring Diagram

**MODELS MANUFACTURED BEFORE 01/01/2010**

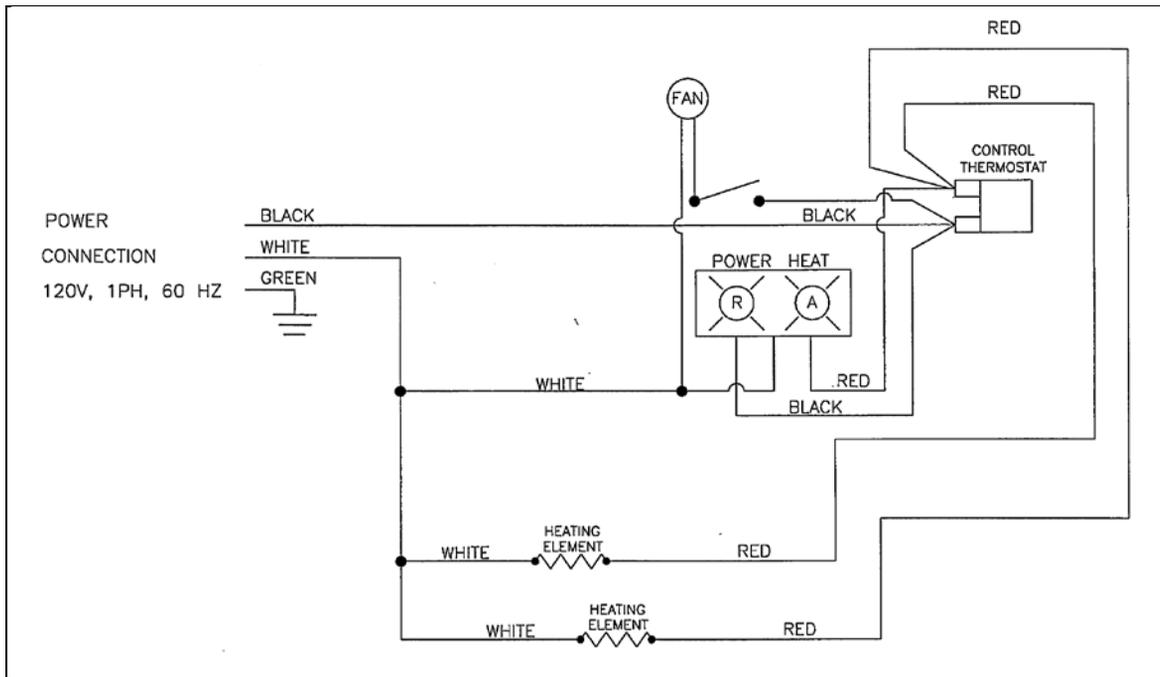
**VHP3, VHP7, VHP8**



**MODELS MANUFACTURED AFTER 01/01/2010**

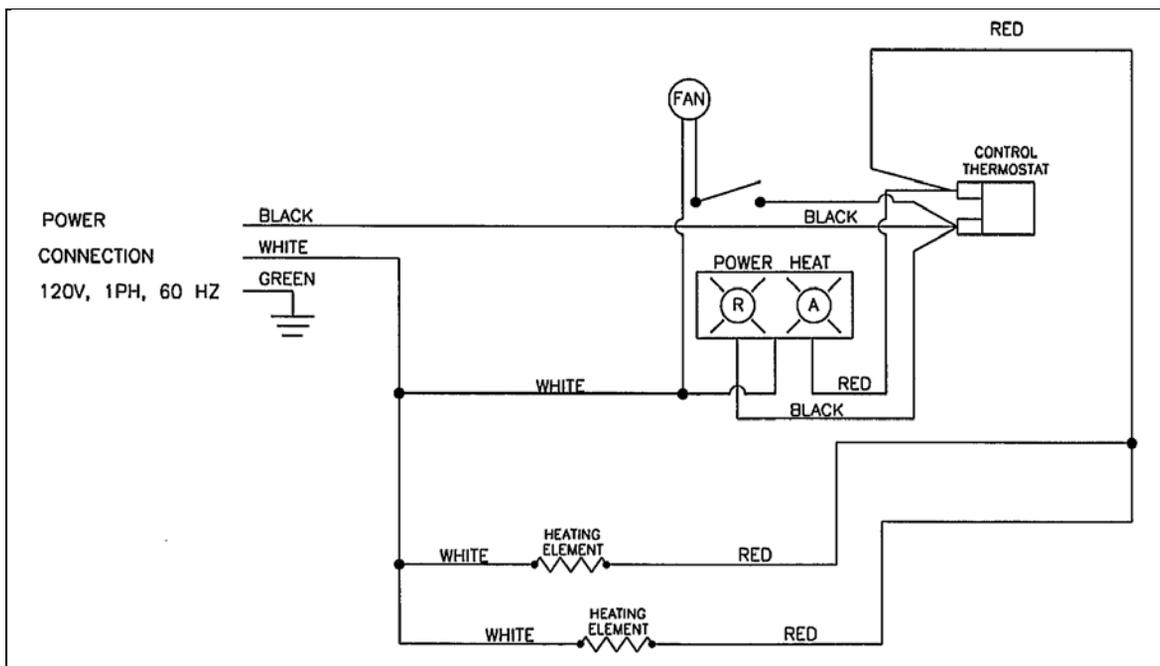
**VBP5I, VBP7I, VBP13I, VBP15I, VHP7, VHP15, VBS7, VBS15**





**MODELS MANUFACTURED AFTER 5/16/11**

**VHFA9, VHFA18**



**MODELS MANUFACTURED THROUGH 5/15/11**

**VHFA9, VHFA18**



**LIMITED ORIGINAL COMMERCIAL EQUIPMENT WARRANTY**

Vulcan (Vulcan) warrants its new product(s) to be free from defects in material and workmanship for a period of one (1) year from the date of original installation.

Wolf Range is affiliated with Vulcan and thus Wolf products carry the same warranty as Vulcan products.

This Warranty is subject to the following conditions and limitations:

1. This warranty is limited to product(s) sold by Vulcan to the original user in the continental United States and Canada.
2. Original installation must occur within 3 years of date of manufacture, and proof of the installation date must be provided to Vulcan. Equipment must be located at the original installation location regardless if same owner.
3. The liability of Vulcan is limited to the repair or replacement of any part found to be defective.
4. Vulcan will bear normal labor charges incurred in the repair or replacement of a warranted piece of equipment within 50 miles (80 kilometers) of an authorized service agency. Time and travel charges in excess of 50 miles (80 kilometers) will be the responsibility of the person or firm requesting the service.
5. This warranty does not apply to any product(s) which have not been installed in accordance with the directions published in the appropriate installation and operation manuals.
6. Vulcan will bear no responsibility or liability for any product(s) which have been mishandled, abused, misapplied, misused, subjected to harsh chemical action or poor water quality, field modified by unauthorized personnel, damaged by flood, fire or other acts of nature, or which have altered or missing serial numbers.
7. Vulcan does not recommend or authorize the use of any product(s) in a non-commercial application, including but not limited to residential use. The use or installation of product(s) in non-commercial applications renders all warranties, express or implied, including the warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE, null and void, including any responsibility for damage, costs and legal actions resulting from the use or installation of product(s) in any non-commercial setting.
8. Adjustments such as calibrations, leveling, tightening of fasteners or utility connections normally associated with original installation are the responsibility of the installer and not that of Vulcan.
9. Exceptions to the one year part warranty period are as listed:
10. Fryer equipment is supplied with limited fry tank warranty based on model. (see separate warranty statement) Refrigeration appliance compressors - 5 years limited. Steam equipment supplied with ScaleBlocker® water filtration system. (see separate warranty statement) Pressure steam boilers - 5 years prorated. (boilers not properly maintained will not be considered for prorated warranty) Rubber seals, light bulbs and gaskets - 90 days from installation. Heating elements on drawer warmers, cook & hold ovens, and holding & transport cabinets have a lifetime warranty. Drawer slides in drawer warmers have a lifetime warranty. Labor, travel and mileage will be covered during the first year only.
11. Original purchased replacement parts manufactured by Vulcan will be warranted for 90 days from the parts invoice date. Exceptions are stainless steel fry tanks, refrigeration appliance compressors and pressure steam boilers which will be warranted as stated in item 9. This warranty is for parts cost only, and does not include freight or labor charges.
12. This states the exclusive remedy against Vulcan relating to the product(s), whether in contract or in tort or under any other legal theory, and whether arising out of warranties, representations, instructions, installations or defects from any cause. Vulcan shall not be liable, under any legal theory, for loss of use, revenue or profit, or for substitute use or performance, or for incidental, indirect, or special or consequential damages or for any other loss of cost of similar type.
13. THIS WARRANTY AND THE LIABILITIES SET FORTH HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OF THEIR LIABILITIES AND WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE AND CONSTITUTES THE ONLY WARRANTY OF VULCAN WITH RESPECT TO THE PRODUCT(S).

**TERMS:** Vulcan payment terms are 1% 10 days, net 30 days from date of INVOICE. A cash discount will not apply to shipping charges, C.O.D. payment or sight draft billing. All orders are subject to approval by Vulcan.

**PRICES:** All prices in: EASTERN ZONE – F.O.B. Baltimore, MD, Covington, KY, Kansas City, MO

WESTERN ZONE – F.O.B. Albuquerque, NM, Salt Lake City, UT

(Call Vulcan for geographic boundaries.)

Prices do not include any municipal, state or sales tax. Options in this list are available only at time of shipment. Accessory items can be ordered at any time from current published equipment price lists, or from any Vulcan Parts Depot. Accessory exceptions are flue risers and convection oven stands. Order as you would standard equipment.

**CHECK THAT ORDERS ARE COMPLETE – DO THEY INCLUDE:**

1. Type of gas and/or specific electric characteristics (voltage, phase and hertz).
2. Name and address of end-user installation (if known).

3. Position of units that are to be battered together (left to right facing equipment).

A sketch is preferable.

4. Optional equipment and/or accessories.

5. Type of finish.

6. Specify shipping date (month, day & year).

**SHIPMENTS:** Upon acceptance of the merchandise by the carrier, title passes to the purchaser and the Vulcan equipment travels at the risk of the purchaser.

**RETURN POLICY:** Vulcan products cannot be returned without prior written factory authorization. The restocking charge is 20% plus any costs to recondition the equipment. No returns accepted after 90 days from date of invoice. Returns for credit must be freight prepaid. Orders cancelled or changed after production has started are subject to a charge of up to 20%. Any special merchandise built to a buyer's specifications will be subject to a 50% minimum cancellation charge.

**PRICES SUBJECT TO CHANGE WITHOUT NOTICE.**





# ***INSTALLATION & OPERATION MANUAL***

## **VHMD SERIES**

**HumidiHeat™**

**HOLDING & TRANSPORT CABINETS**

**MODELS:**

<b>VHMD5</b>	<b>ML-138046</b>
<b>VHMD13</b>	<b>ML-138045</b>
<b>VHMD15</b>	<b>ML-138044</b>



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](http://www.vulcanhart.com)

## **IMPORTANT FOR YOUR SAFETY**

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### **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 EQUIPMENT.**

**IN THE EVENT OF A POWER FAILURE,**

**DO NOT ATTEMPT TO OPERATE THIS DEVICE**

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# GENERAL

## INTRODUCTION

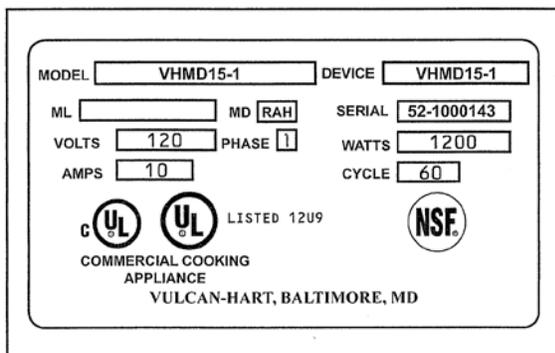
Vulcan-Hart HumidiHeat™ Holding & Transport Cabinets are produced with quality workmanship and material. Proper installation, usage, and maintenance of your cabinet will result in many years of satisfactory performance.

It is suggested that you thoroughly read this entire manual and carefully follow all of the instructions provided.

The VHMD Series Holding & Transport Cabinets provide an efficient means of transporting and holding bulk prepared foods at proper serving temperatures.

## INSTALLATION

Before installing, verify that the electrical service agrees with the specifications on the rating plate located on the lower back corner of the cabinet. If the supply and equipment requirements do not agree, do not proceed with unpacking and installation. Contact your Vulcan-Hart Customer Service Department immediately. (Fig. 1)



(Fig. 1)

### UNPACKING:

The Cabinet 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 to the cabinet.

***If the cabinet is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.***

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.
2. Peel off vinyl protection film.
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.

**CLEANING:**

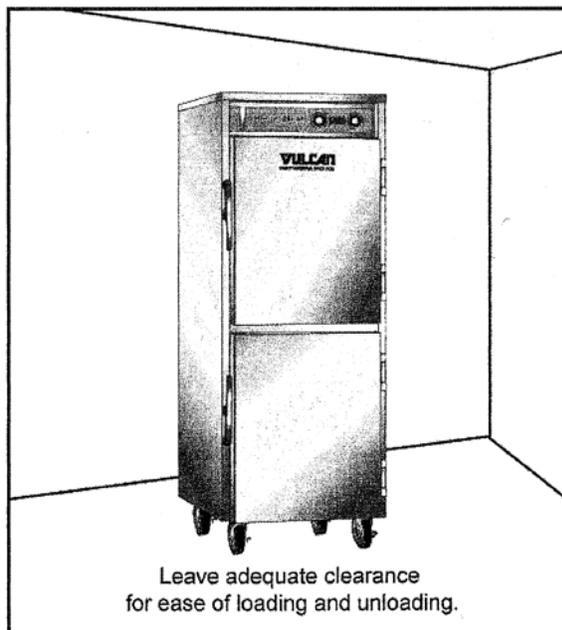
**The cabinet should be thoroughly cleaned prior to putting into service.**

Use a mild soap and water solution to clean the interior of the unit. Never use harsh chemicals or abrasive pads to clean the unit.

**LOCATION:**

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

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



(Fig. 2)

**ELECTRICAL REQUIREMENTS**

**ELECTRICAL CODES & STANDARDS:**

The cabinet 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, 1 Batterymarch Park, Quincy, MA 02269. 1-617-770-3000 [www.nfpa.org](http://www.nfpa.org)

**In Canada:**

1. Local Codes.
2. Canadian Electrical Code, CSA C22.1 (latest edition.) Copies may be obtained from: The Canadian Standard Association. [www.csa.ca](http://www.csa.ca)

**ELECTRICAL CONNECTIONS:**

The cabinet is factory wired for either 110/120 volt or 208/240 volt, single phase operation. All 110/120 volt cabinets are equipped with a 8 foot cord and NEMA 5-15 plug as standard equipment. All 208/240 volt cabinets are equipped with a 8 foot cord and NEMA 6-15 plug. Refer to wiring diagrams in the back of this manual.

The cord and plug supplied is a suitable durable cord with a molded three-prong plug, and is provided with a proper strain relief.

**⚠ WARNING** All cabinets are equipped with a three-prong plug. It is imperative that this plug must 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** Verify that the power source matches the Serial Data Plate located on the lower back corner of the cabinet and the plug configuration before the connection is made. (Fig.1)

**⚠ WARNING** Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance. (Fig.3)



(Fig. 3)

**PLEASE NOTE:**  
*It is recommended that prior to placing the cabinet in operation that it be preheated at the highest temperature setting for a period of 30 to 45 minutes.*

**LOCKOUT / TAGOUT PROCEDURE**



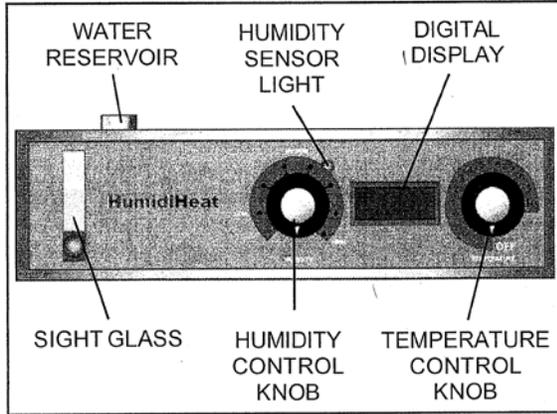
**⚠ WARNING** Always perform the LOCKOUT / TAGOUT PROCEDURE before removing any sheet metal panels or attempting to service this equipment. **FAILURE TO COMPLY WITH THIS PROCEDURE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH.**

The Lockout / Tagout Procedure is used to protect personnel working on an electrical appliance. Before performing any type of maintenance or service on an electrically operated appliance, follow these steps:

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 unit has been disconnected for service and power should not be restored until tag is removed by maintenance personnel.

# OPERATION

## CONTROLS



(Fig. 4)

### WATER RESERVOIR

Located on top of cabinet.

### HUMIDITY SENSOR LIGHT

The Humidity Sensor Light will be lit RED until desired humidity has been reached. It will change to GREEN when desired humidity has been reached.

### DIGITAL DISPLAY

Displays selected temperature, internal cabinet temperature,

### SIGHT GLASS

Visual display of the amount of water in the Water Reservoir.

### HUMIDITY CONTROL KNOB

Monitors and controls the amount of humidity inside the cabinet.

### TEMPERATURE CONTROL KNOB

The Temperature Control Knob is a full-range thermostat. It turns power on to the heating elements. The thermostat setting is from 1 to 10. The greater the thermostat setting number, the higher

the temperature. Holding temperature range is from 80°F. to 200°F.

## OPERATING INSTRUCTIONS

1. **Connect to proper electrical supply** as indicated on data plate.
2. **Fill water into Water Reservoir.** (Reservoir holds approx. 1 gallon or 3.78 liters of water.) The water level can be observed through the sight glass.

*To avoid lime build-up, it is recommended that you use only distilled or softened water.*

3. **Turn the Temperature Control Knob to the desired setting, 1 to 10.** The higher the number that is selected, the higher the internal temperature will be.

***The LED Digital Display will display the selected temperature for 3 seconds.***

The Display will then change to display the actual internal cabinet temperature.

The unit will continue heating until the selected temperature has been reached. It will then cycle off and on to maintain the selected temperature. The LED Digital Display will display the fluctuating temperatures.

4. **Turn the Humidity Control Knob to the desired humidity setting.**

*As humidity is increasing to the desired setting, the Humidity Control Sensor Light will be lit RED. When the desired humidity has been reached, the light will change to GREEN.*

**NOTE:**

*The temperature in any heated cabinet will fluctuate as the heating element(s) cycles on and off. The thermostat setting will provide an average temperature in the cabinet. However, the operator should always monitor the food product to insure that it remains at a proper temperature.*

5. Monitor the water level by observing the Sight Glass. **The LED Digital Display will also display H2O when the water is low.**

**SHUT DOWN**

1. Turn the Temperature Control Knob counterclockwise to the OFF position.
2. Turn the Humidity Control Knob counterclockwise to the OFF position.
3. Unplug unit from the electrical power supply.

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

**CLEANING**

**⚠ WARNING** Always **UNPLUG ELECTRICAL POWER SUPPLY** before cleaning.

**DAILY:**

1. Unplug electrical power supply.
2. Allow warmer to cool before cleaning.
3. Clean the interior of the cabinet with a mild soap and water. *Never use harsh chemicals or abrasive pads to clean the cabinet.*
4. Rinse and dry with a soft dry cloth.
5. Clean the exterior of the cabinet with a clean damp cloth.

**LIME BUILD-UP:**

To remove lime build-up, unscrew the spray nozzle located at the bottom of the cabinet and soak it in white vinegar until clean. Rinse nozzle with fresh water and reattach. (Fig. 4)



(Fig. 4)  
SPRAY NOZZLE (UNSCREW HERE)

A pliers or 9/16" wrench can be used to unscrew and reattach the spray nozzle. Make sure the spray nozzle does not leak after reattachment.

**Do not over tighten.**

**HEAVY-DUTY CLEANING:**

For heavy-duty cleaning, use warm water, a degreaser, and a plastic, stainless steel, or Scotch-Brite pad. Never rub in a circular motion -- rub gently in the direction of the steel grain. Always rinse thoroughly.

## STAINLESS STEEL CARE

**CLEANING:**

Stainless Steel contains 70 – 80% iron, which will rust if not properly maintained. Stainless Steel also contains 12 – 30% chromium, which forms an invisible passive, protective film that shields against corrosion.

If the protective film remains intact, the stainless steel will remain intact. However, if the film is damaged, the stainless steel can break down and rust.

**PREVENTIVE CARE:**

To prevent stainless steel breakdown, follow these steps:

1. **Never use any metal tools, scrapers, files, wire brushes, or scouring pads** (*except for stainless steel scouring pads,*) which will mar the surface.
2. **Never use steel wool** – which will leave behind particles that will rust.
3. **Never use acid-based or chloride containing cleaning solutions** – which will break down the protective film.

4. **Never rub in a circular motion.** Always rub gently in the direction of the steel grain.
5. **Never leave any food products or salt on the surface.** Many foods are acidic. Salt contains chloride.

**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. Excessive heat causes the protective film to thicken. This 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

SYMPTOMS	POSSIBLE CAUSES	REMEDY
Cabinet not operating	Cabinet not connected to power source.	Connect Cabinet to power source.
	No power.	Check circuit breaker
		Check GFCI
GFCI or Ground Fault Circuit Indicator tripped.	Damaged element, wire, power cord, etc.	Contact Authorized Service Provider.
Cabinet is connected to power source, circuit breaker is ON, GFCI is ON, but cabinet is not heating.	Damaged element, wire, power cord, etc.	Contact Authorized Service Provider.
Cabinet does not heat properly or temperature is incorrect.	Door(s) not shut properly or needs adjustment.	Check door is properly shut. Check door gasket. Contact Authorized Service Provider.
Door leaks moisture.	Damaged door gasket or door requires adjustment.	Contact Authorized Service Provider.
Humidity incorrect.	Door not properly shut.	Shut door.
	Door gasket damaged.	Contact Authorized Service Provider.
	Heating elements are off.	Turn Temperature Control Knob to desired temperature.
	Water reservoir is low or empty.	Check water level through Sight Glass. Fill water in water reservoir.

### SERVICE & PARTS INFORMATION

To obtain Service and Parts information concerning this model, contact Vulcan-Hart Service Department at the address listed on the front cover of this manual or refer to our website: [www.vulcanhart.com](http://www.vulcanhart.com) for a complete listing of Authorized Service and Parts depots.

**Customer Service 1-800-814-2028**  
**Technical Service 1-800-814-2028**  
**Service Parts 1-800-814-2028**

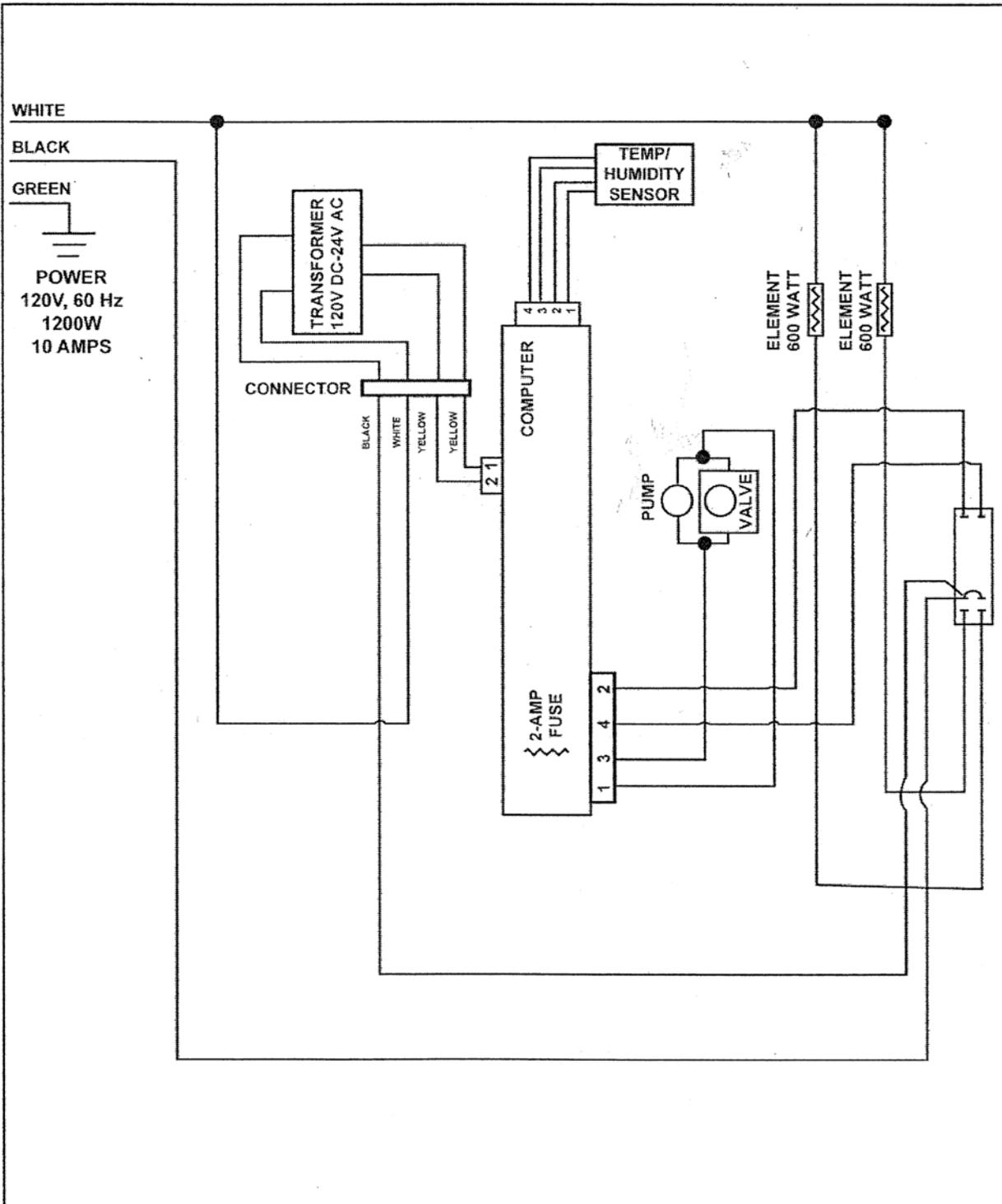
**When calling for service, have the model number and serial number available.**

**SPECIFICATIONS**

<b>MODEL No.</b>	<b>HEIGHT IN (mm)</b>	<b>DEPTH IN (mm)</b>	<b>WIDTH IN (mm)</b>	<b>SHIPPING WT. Lb. (kg)</b>	<b>VOLTS</b>	<b>WATTS</b>	<b>AMPS</b>
<b>VHMD5</b>	32.375"	34.25"	25.125	170# (77kg)	120	1200	10
<b>VHMD13</b>	59.375" (1700mm)	34.25" (857mm)	25.125" (724mm)	340# (154kg)	120	1200	10
<b>VHMD15</b>	65" (1702 mm)	34.25" (857mm)	25" (724mm)	370# (167kg)	120	1200	10

**NOTES:**

# WIRING DIAGRAM





# ***INSTALLATION & OPERATION MANUAL***

## **V SERIES FOOD HEATED HOLDING PROOFER CABINET**

**MODEL:**

**VP18      ML-138089**



For additional information on Vulcan-Hart or to locate an authorized parts and service provider in your area, visit our website at [www.vulcanequipment.com](http://www.vulcanequipment.com)

VULCAN-HART  
DIVISION OF ITW FOOD EQUIPMENT GROUP, LLC  
[www.vulcanequipment.com](http://www.vulcanequipment.com)

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BALTIMORE, MD 21222  
F-41190 (10-16)

## **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 equipment.**

**IN THE EVENT OF A POWER FAILURE,**

**DO NOT ATTEMPT TO OPERATE THIS DEVICE**

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## GENERAL

### INTRODUCTION

Vulcan-Hart Holding & Transport and Proofing Cabinets are produced with quality workmanship and material. Proper installation, usage, and maintenance of your cabinet will result in many years of satisfactory performance.

It is suggested that you thoroughly read this entire manual and carefully follow all of the instructions provided.

### INSTALLATION

Before installing, verify that the electrical service agrees with the specifications on the rating plate located on the lower back corner of the cabinet. (Fig. 4) If the supply and equipment requirements do not agree, do not proceed with unpacking and installation. Contact your Vulcan-Hart Customer Service Department immediately.

#### **UNPACKING:**

The Cabinet 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 to the cabinet.

***If the cabinet is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.***

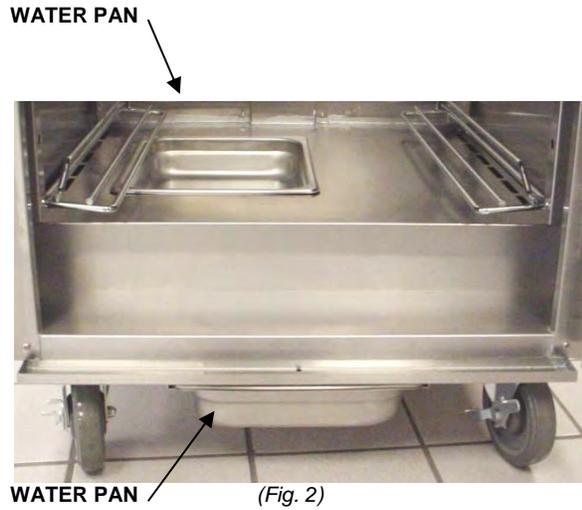
Carefully unpack and place in a work accessible area as near the installation position as possible.

1. Open the door and carefully remove any packaging materials. Remove 20 Tray Slides and 2 Water Pans. (10"x12"x2½")
2. Peel off all vinyl protection film.
3. Install desired number of Tray Slides. Make sure the hook on the end of the tray slide is up.  
(Fig. 1)



(Fig. 1)

4. Insert one (1) Water Pan in opening at the bottom of the cabinet and insert one (1) Water Pan through slides underneath the cabinet. (Fig. 2)



(Fig. 2)

**CLEANING:**

**The cabinet should be thoroughly cleaned prior to putting into service.**

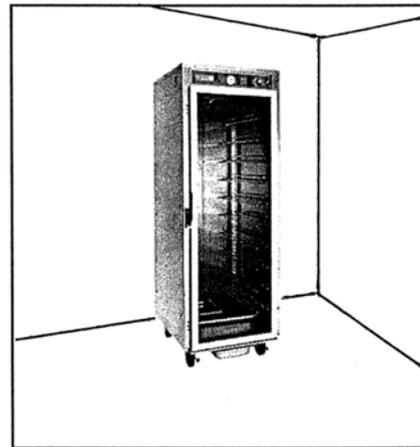
Use a mild soap and water solution to clean the interior of the unit. Never use harsh chemicals or abrasive pads to clean the unit. See cleaning instructions in this manual.

**LOCATION:**

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

**The installation location must be level and allow adequate clearances for servicing and proper operation.**

(Fig. 3)



(Fig. 3)

*When cabinet is in position, secure the brakes on the front two wheels. These brakes should always be locked when the cabinet is in use.*

## ELECTRICAL REQUIREMENTS

### **ELECTRICAL CODES & STANDARDS:**

The cabinet 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, 1 Batterymarch Park, Quincy, MA 02269. 1-617-770-3000 [www.nfpa.org](http://www.nfpa.org)

#### **In Canada:**

1. Local Codes.
2. Canadian Electrical Code, CSA C22.1 (latest edition.) Copies may be obtained from: The Canadian Standard Association. [www.csa.ca](http://www.csa.ca)

The cord and plug supplied is a suitable durable cord with a molded three-prong plug, and is provided with a proper strain relief.

**⚠ WARNING** All cabinets are equipped with a three-prong plug. It is imperative that this plug must 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.*

Verify that the power source matches the Serial Data Plate located on the lower back corner of the cabinet and the plug configuration before the connection is made. (Fig. 4)

### **ELECTRICAL CONNECTIONS:**

The cabinet is factory wired for either 110/120 volt or 208/240 volt, single phase operation. All 110/120 volt cabinets are equipped with a 8 foot cord and NEMA 5-20 plug as standard equipment. All 208/240 volt cabinets are equipped with an 8 foot cord and NEMA 6-15 plug. Refer to wiring diagram in the back of this manual.



(Fig. 4)

## OPERATION

### CONTROLS

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

#### THERMOMETER

#### PROOF/HOLD SWITCH

#### THERMOSTAT

#### ON/OFF SWITCH



(Fig. 5)

#### ON/OFF Switch:

The ON/OFF Switch provides power to the unit. When depressed to the bottom position the unit is OFF. When flipped to the top position the unit is ON. The indicator light in the switch should glow red when the unit is plugged in and has power.

#### Thermometer:

The Thermometer indicates the interior temperature of the cabinet.

#### Proof/Hold Switch:

Flip the switch upward for Proofing mode or flip the switch downward for Holding mode.

#### Thermostat:

The Thermostat turns power on to the heating elements. The thermostat setting is from 1 to 10. The greater the thermostat setting number, the higher the temperature. If "Proofing mode" is desired, it is recommended the thermostat be set at 1 through 4. If "Holding mode" is desired, it is recommended that the thermostat be set at 5 through 10. (Fig. 5)

## PROOFING OPERATING INSTRUCTIONS

**⚠ WARNING** Always disconnect power cord prior to adding water to the water pan inside the cabinet. Do not over fill water pan with water.

1. Fill Water Pan at the bottom of cabinet with a maximum of approx. 2 liters, or one-half full, of clean warm water. **Never fill water pan more than one-half full.** *If proofing for a long period of time, check the water pan occasionally and refill if needed.*
2. Plug in power cord to appropriate power source.
3. Switch the unit ON. The red light on the switch will light up, indicating you have power. The thermostat dial can be turned to the desired setting.
4. Turn the Thermostat to the desired setting. It is recommended the thermostat be set at 1 through 4 while proofing.
5. Preheat approximately 30 to 45 minutes to reach desired temperature and humidity.

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

At the proper setting, your proofer door will have a light haze of moisture on it. If water beads up and runs down the door, the setting or amount of water in the water pan is too high. You may need to adjust according to atmospheric conditions.

6. Place pans with prepared dough inside cabinet. It is recommended that dough is completely thawed and at room temperature before placing in the proofer.
7. Close cabinet door and monitor until dough is ready.

**Note:** *Proofing time will vary depending on the different dough products. Always monitor your products for desired results. The door should not be opened unnecessarily to conserve the heat and humidity inside the cabinet.*

***A Water Pan is located underneath the cabinet to collect excess condensation. Make sure to periodically check and empty this pan. (Refer to Fig. 2.)***

## DOUGH PREPARATION

### If Dough is Frozen:

1. Grease pan. Place frozen dough on pan and brush tops of dough with oil, cover dough lightly with a film wrap, and refrigerate until dough thaws and reaches 40°F

It is important during thawing that the tops of the dough product must not “crust” or dry out. This can be prevented by oiling the tops and lightly covering the dough with a film wrap. This film wrap must not be tucked in at the sides – it should merely lie on top of the greased dough. **Note: Always remove this film wrap before proofing.**

2. Remove dough from refrigerator and allow the dough to reach room temperature.

**Hint:** You may want to place the dough on a greased room temperature pan. This helps shorten the proofing time. Placing cold pans in the proofer brings the temperature down inside the cabinet and lengthens the proofing time.



## PROOFING SHUTDOWN

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

When the use of the proofing cycle is completed:

1. Turn the switch to the OFF position. The thermostat dial may be left at the desired setting.
2. Open the door slightly to let out the humidity and to prevent mold.

3. Allow cabinet to cool down completely.

### *To clean:*

4. Unplug power cord.
5. Empty and clean both water pans.
6. Clean cabinet according to instructions in this manual.

## HOLDING OPERATING INSTRUCTIONS

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

Once the cabinet has been connected to the appropriate power source, the cabinet is ready for operation.

1. Switch the unit ON. The red light on the switch will light up, indicating you have power. The thermostat dial can be turned to the desired setting.
2. Switch Proof/Hold Switch downward to the Hold position.
3. Turn the Thermostat to desired setting between 5 and 10. See Fig. 5.
4. Wait approximately 25 minutes for the cabinet to preheat.
5. Load hot food pans with hot, cooked food into cabinet.
6. When removing items, start at the bottom and work up. This will keep food hotter and eliminate spillage onto lower items.

***This cabinet is not intended to reheat food. Food must be cooked and at a safe serving temperature prior to being placed in the cabinet.***

**The operator should always monitor the food product to insure that it remains at a proper temperature.**

## HOLDING SHUTDOWN

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

When the use of the holding cycle is completed:

1. Turn the switch to the OFF position. The thermostat dial may be left at the desired setting.
2. Keep the fan switch in the On position. This helps remove the excess humidity from the food product.
3. Allow cabinet to cool down completely.
4. *To clean:*  
Unplug power cord.
5. Clean cabinet according to instructions in this manual.

## CLEANING

**⚠ WARNING** Always *unplug electrical power supply* before cleaning.

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

### DAILY CLEANING:

1. Unplug electrical power supply.

2. Allow warmer to cool before cleaning.
3. Clean the interior of the cabinet with a mild soap and water. *Never use harsh chemicals or abrasive pads to clean the cabinet.*
4. Rinse and dry with a soft dry cloth.
5. Clean the exterior of the cabinet with a clean damp cloth.

### HEAT TINT:

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

## LOCKOUT / TAGOUT PROCEDURE



**⚠ WARNING** Always perform the Lockout / Tagout Procedure before removing any sheet metal panels or attempting to service this equipment.

The Lockout / Tagout Procedure is used to protect personnel working on an electrical appliance. Before performing any type of maintenance or service on an electrically operated appliance, follow these steps:

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 unit has been disconnected for service and power should not be restored until tag is removed by maintenance personnel.

## TROUBLESHOOTING

SYMPTOMS	POSSIBLE CAUSES	REMEDY
Cabinet not operating	Cabinet not connected to power source.	Connect cabinet to power source.
	No power.	Check circuit breaker
		Check GFCI
GFCI or Ground Fault Circuit Indicator tripped	Moisture problem.	Dry moisture problem.
	Shorted element	Contact Authorized Service Provider.
	Pinched/damaged wire.	Contact Authorized Service Provider.
	Damaged power cord.	Contact Authorized Service Provider.
Cabinet is connected to power source, switch is ON, circuit breaker is ON, but cabinet is not heating.	Defective: element, thermometer, thermostat, etc.	Contact Authorized Service Provider.
Proof/Hold Indicator Light not lit.	Light faulty	Contact Authorized Service Provider.
Cabinet does not heat properly	Door not shut properly or needs adjustment	Check door seal and Contact Authorized Service Provider.
	Defective: element, thermometer, thermostat, thermostat requires adjustment	Contact Authorized Service Provider.
Fan not operating	ON/OFF switch not ON	Turn ON/OFF switch ON
	Defective fan.	Contact Authorized Service Provider.
Excessive Humidity	Too much water in Water Pan	Adjust Water
	Drain hole clogged for Drip Pan underneath Cabinet	Clean drainage hole and check Drip Pan

### SERVICE & PARTS INFORMATION

To obtain Service and Parts information concerning this model, contact Vulcan-Hart Service Department at the address listed on the front cover of this manual, or refer to our website: [www.vulcanequipment.com](http://www.vulcanequipment.com) for a complete listing of Authorized Service and Parts depots.

<b>Customer Service</b>	<b>1-800-814-2028</b>
<b>Technical Service</b>	<b>1-800-814-2028</b>
<b>Service Parts</b>	<b>1-800-814-2028</b>

**When calling for service, have the model number and serial number available.**



# ***INSTALLATION & OPERATION MANUAL***

## **VHU18 INSULATED HUMIDIFIED HOLDING & PROOFING CABINET**



VULCAN  
DIVISION OF ITW FOOD EQUIPMENT GROUP, LLC

3600 NORTH POINT BLVD.  
BALTIMORE, MD 21222  
800-814-2028

[www.vulcanequipment.com](http://www.vulcanequipment.com)

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F-47668 (02-18)

## **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 equipment.**

**IN THE EVENT OF A POWER FAILURE,**

**DO NOT ATTEMPT TO OPERATE THIS DEVICE**

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## INTRODUCTION

The VHU18 Insulated Humidified Holding and Proofing Cabinet provides an efficient means of holding bulk prepared foods at proper serving temperatures while maintaining food quality. Advanced sensing technology maintains an ideal combination of temperature and humidity, without complicated controls.

Vulcan Heated Holding Cabinets are produced with quality workmanship and material. Proper installation, usage, and maintenance of your cabinet will result in many years of satisfactory performance. It is suggested that you thoroughly read this entire manual and carefully follow all provided instructions.

## INSTALLATION

Before installing, verify that the electrical service agrees with the specifications on the Serial Data plate (*Fig. 3*) located on the back or side of cabinet. If the supply and equipment requirements do not agree, do not proceed with unpacking and installation. Contact your Vulcan-Hart Customer Service Department immediately.

### **UNPACKING:**

The Cabinet 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 to the cabinet.

***If the cabinet is found to be damaged, take photos of the damage (including box), save the packaging material, and contact the carrier within 5 days of delivery.***

Carefully unpack and place in a work accessible area near the installation location.

1. Open door and carefully remove packaging materials and components for this unit.
2. Peel off any vinyl protection film that may be present on sheet steel.
3. Ensure all component parts for this unit are accounted for:

Qty	Part Name	Description
20	Universal Tray Slides	Wire racking to be placed in cabinet uprights at desired levels
1	VHU Interior Pan	Special Stainless Steel Pan with High temp black coating on bottom; gets placed in opening above heating element
1	VHU Exterior Pan	Standard Stainless Steel Pan located under unit for water collection

4. Remove universal tray slides from box. Install tray slides in the uprights at desired levels. Make sure the hook on the end of the tray slide is up (*Fig. 1*). To prevent tilting, tray slides should be placed in matching positions on both sides. For this unit, the bottom 2 holes (levels) closest to Interior pan are not intended for use.



*Fig. 1, Tray slide install*

5. Install both pans by placing the VHU Interior Pan (black coated underside) in the opening above the heating element, and by sliding the VHU Exterior Pan into the underneath position. (*Fig. 2*)



*Fig. 2, Pan installation*

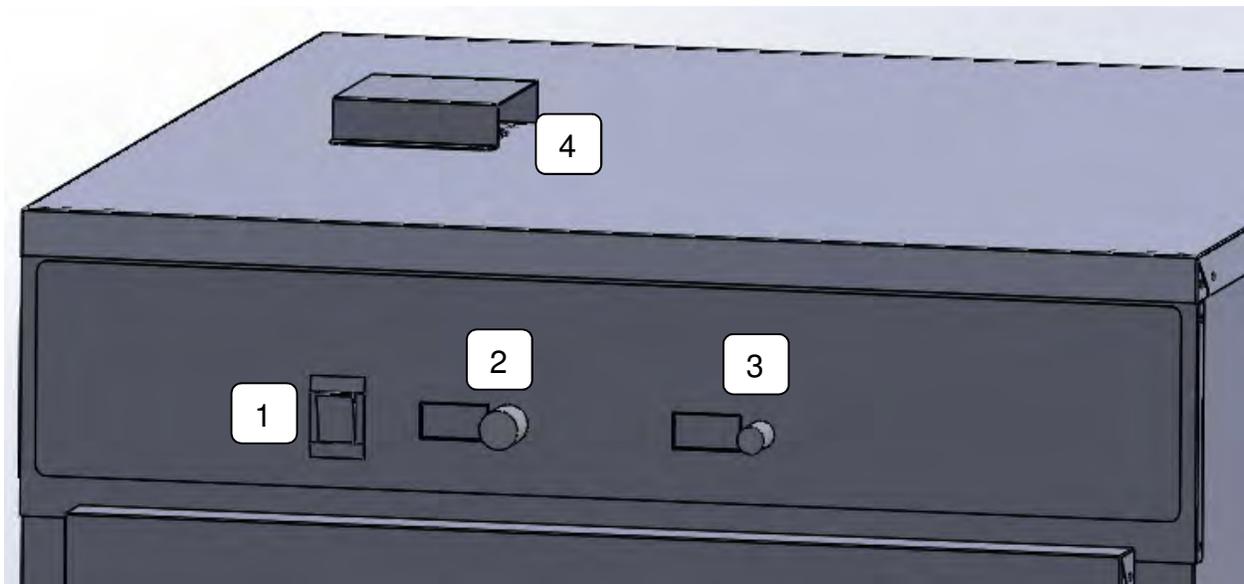
6. Ensure cabinet interior and exterior are clean prior to use. Whenever cleaning this cabinet, do so using non-corrosive food grade cleaning solutions. Never use harsh chemicals or abrasive pads.
7. Choose a cabinet location that will provide easy loading and unloading without interfering with kitchen operations. **The installation location must be level and allow adequate clearances for proper operation and servicing.**
8. The cabinet is ready for use and can be energized in accordance with the Electrical Requirements section.



## OPERATION INSTRUCTIONS

**⚠ WARNING** The Cabinet and its parts are hot. Be very careful when operating, cleaning, or servicing the cabinet. Heating elements are located at the bottom of the unit. Touching the floor of the internal cavity or water pan can result in injury.

**CONTROLS** – Must read and familiarize before operation.



### 1. ON/OFF Rocker Switch

### 2. Temperature Display and Control Knob

- Shows Temperature set point selected by operator (*See Start Up*).
- Upon pressing knob once, reading of cabinet interior temperature will display for 4 seconds, then switch back to showing set temperature.

### 3. Humidity Display and Control Knob

- Shows Relative Humidity set point, either the default for that temperature, or specific humidity set point selected by operator (*See Start Up*).
- Upon pressing knob once, reading of cabinet interior relative humidity will display for 4 seconds, then switch back to showing set humidity.

### 4. Vent Fan and Guard

- Provides air intake for maintaining dry and cool controls.
- Leave at least a 1-inch clearance on all sides to prevent premature failure of controls from humidity.
- Do not allow liquids into the vent.

## START UP

1. Fill VHU Interior pan  $\frac{1}{2}$  –  $\frac{3}{4}$  full of clean water (1 – 1.5 gallons). Use hot water to improve preheat times. The max capacity of the water pan is 2 U.S. gallons or 7.5 liters. **NOTE:** Additives such as oils, flavor enhancers, water softeners, or any products other than clean water are NOT permitted for use in this pan.
2. Turn Cabinet ON using the rocker switch. The rocker switch light will illuminate red. Unless it is the first time of use, Temperature and Relative Humidity set points will automatically set to the last operator selections prior to Shut Down.
3. Use the Temperature Control Knob to select desired temperature (cabinet temperature range is 80° – 190° F). The relative humidity setting will adjust on its own to the Automatic relative humidity setpoint based on the set temperature.
4. If an alternate humidity is desired, use the humidity knob to change the relative humidity setting. The **Minimum** relative humidity setpoint is 25% RH. The **Maximum** relative humidity setpoint is variable based on temperature setpoint. A table providing Automatic, Minimum, and Maximum Relative humidity settings can be found in the *Reference and Troubleshooting* section.

## PREHEAT

### When Proofing:

- Wait approximately 20 minutes for the cabinet to preheat from room temperature.
- Current Cabinet relative humidity may go above the set relative humidity.

### When Holding cooked food:

- Depending on the temperature set point, allow up to 45 minutes for the cabinet to preheat from room temperature. (See *Controls* section for how to check interior temperature and relative humidity readings)
- It is possible that the cabinet's relative humidity may go above the set relative humidity during the heat up phase.
- Only load pans with hot, cooked food into cabinet.

## DURING OPERATION

1. The VHU Interior water pan will be extremely hot during operation. Refilling of this pan during operation should be carried out by bringing water to the pan by using a pitcher or other pouring device. DO NOT attempt to remove the Interior water pan during cabinet operation as this could result in injury.
2. Refill the interior water pan approximately every 3 hours with 1 gallon of water, during high volume use. The VHU Interior pan should be  $\frac{1}{4}$  -  $\frac{3}{4}$  full at all times.
3. Water drips into a secondary pan (VHU Exterior Pan) underneath the unit. This pan of water should be emptied each time the internal water pan is filled. Caution, this may be hot.

**END OF OPERATION – SHUT DOWN**

1. Turn the unit OFF using rocker switch.
2. Leave the door in an open position (at least 2" gap) for at least 30 minutes to remove moisture and cool down. If accelerated drying is needed, the operator can do so using a soft cloth and with proper hand and arm protection. The bottom will be extremely hot and must be avoided until cool.
3. After cool down, wipe out any remaining moisture with a soft dry cloth.
4. Remove any food debris that accumulated on the bottom on the unit.

---

***NOTE: This cabinet is not intended to reheat or cook food. Food must be cooked and at a safe serving temperature prior to being placed in the cabinet.***

***NOTE: The operator should always monitor the food product to ensure that it remains at a proper temperature.***

---

**CLEANING**

---

**▲ WARNING** Do NOT spray or hose down the unit. Sensitive electronics can be damaged.

**▲ WARNING** Never use harsh chemicals or abrasive pads to clean the cabinet.

**PERIODICALLY AS NEEDED:**

1. When cooled to room temperature, empty VHU Interior pan.
2. Lightly clean VHU Interior pan and cabinet interior with non-corrosive food grade cleaning solution and water.
3. Dry with a soft cloth.
4. If removing the Interior Universal Tray Slides (wire racks) for cleaning, we recommend washing by hand to avoid damage to rack coating. Scratches and abrasion to any metal surfaces can lead to rusting.

**HEAT TINT:**

Darkened areas, called “heat tint,” may appear on stainless steel exposed to excessive heat. Excessive heat causes the protective film to thicken. This is unsightly but is not a sign of permanent damage. The VHU interior pan and interior floor of the Cabinet are especially susceptible. The VHU interior pan does contact the element to improve heat transfer.

**REFERENCE AND TROUBLESHOOTING**

Symptoms	Possible causes	Remedy
Cabinet not operating	Cabinet not connected to power source	Connect cabinet to power source
	No power	Check circuit breaker
		Check GFCI
GFCI or Ground Fault Circuit Indicator tripped	Moisture issue	Dry moisture problem. Find and fix root cause
	Shorted element	Contact Authorized Service Provider
	Pinched/damaged wire	Contact Authorized Service Provider
	Damaged power cord	Contact Authorized Service Provider
Cabinet is connected to power source, switch is ON, circuit breaker is ON, but cabinet is not heating	Defective: element, control, etc.	Contact Authorized Service Provider
Cabinet does not heat properly	VHU Interior Pan not installed correctly.	Use Special Stainless Steel Pan with High temp black coating on bottom. Pan must be ¼ - ¾ full during operation
	Door not shut properly or needs adjustment	Check door seal and contact Authorized Service Provider
	Defective: element, control, etc.	Contact Authorized Service Provider
Fan not operating properly	Fan connection broken	Contact Authorized Service Provider
	Defective fan	
E01 or E03 displayed	Issue with sensor	Try the following: 1. Turn Cabinet OFF then ON 2. Follow: END OF OPERATION – SHUT DOWN instructions 3. Contact Authorized Service Provider
Knobs not working	Corrosion inside the unit or mechanical damage to the encoder	Contact Authorized Service Provider

**TABLE providing AUTO/MAX/MIN Relative Humidity for each Temperature.**

Temperature (°F)	Auto-set Relative humidity (%)	MAX Relative humidity (%)	MIN Relative humidity (%)
75	90	95	25
80	90	95	25
85	90	95	25
90	90	95	25
95	90	95	25
100	90	95	25
105	90	95	25
110	90	95	25
115	85	90	25
120	80	90	25
125	75	90	25
130	70	90	25
135	65	90	25
140	60	90	25
145	60	85	25
150	55	80	25
155	55	75	25
160	50	65	25
165	45	60	25
170	40	55	25
175	35	45	25
180	30	40	25
185	30	35	25
190	30	30	25

### SERVICE & PARTS INFORMATION

To obtain Service and Parts information concerning this model, and for a complete listing of Authorized Service and Parts depots refer to our website or call Customer Service.

[www.vulcanequipment.com](http://www.vulcanequipment.com)

**Customer Service: 800-814-2028**

**When calling for service, have the model number and serial number available.**

Following you will find instructions on how to shut down your Vulcan cooking equipment for an extended period, and how to safely restart equipment after idle.

Always refer to the procedures as instructed in the Installation & Operation manual for your specific model. Manuals may be found by visiting the Vulcan website and clicking on RESOURCES at the top right of the home page.

Always remember that cooking equipment and its parts are hot. Use care when operating, cleaning or performing maintenance.

For additional product resources, please visit <https://www.vulcanequipment.com/>.

## HEATED HOLDING

### EXTENDED SHUTDOWN – ALL MODELS

1. A thorough cleaning of the oven, both interior and exterior.
  - a. Clean and clear the air intake
  - b. Check exhaust vent for blockage
  - c. Wipe down the interior and door glass with a damp rag.
    - i. Cool down oven.
    - ii. Remove oven racks.
    - iii. Lift rack guides on either side of oven off of holders. Racks and guides may be run through dishwasher while oven cavity is being cleaned.
    - iv. Clean with soap and water using non-metallic scouring pad, if necessary. If dirt and grease have accumulated, a mild ammonia solution or commercial oven cleaner such as Easy-Off or Dow may be used.
  - d. Wipe down the exterior and door glass with a damp rag.
    - i. Cool down oven.
    - ii. Wipe exposed, cleanable surface when cool with a mild detergent and hot water. Dry thoroughly with a clean cloth.
    - iii. Stubborn stains may be removed by using a non-metallic abrasive pad, rubbing in the direction of the metal's grain. If necessary, for particularly heavy deposits, you may mix a thin paste of water and scouring powder and apply it with a sponge. Be careful to apply light pressure and remember to rub only in the direction of the grain in the metal.
    - iv. The control panel surface is easily cleaned with hot water, soap and a soft cloth. Do not use hard abrasives, solvent type materials or metallic scouring pads since these will scratch or cloud the surface.
    - v. Never spray the perforated areas or control panel with steam or water, as this will allow moisture into the control cavity, which could damage electrical components.
  - e. Maintain fan area.
    - i. If aluminum foil is routinely used to wrap food or cooking vessels during oven operation, the following preventative maintenance must be performed:
      1. Remove oven racks and rack guides.
      2. Check blower wheel and air baffle for particles of aluminum foil or food deposits.
2. Remove and empty any water pans.
3. Inspect the oven for any signs of excessive wear and tear and order replacement parts (e.g. door glass assemblies, door handle, door latch).
4. Shut off electric supply.
5. Leave oven doors slightly open (this helps prevent dry rotting of door gaskets and prevents mold / mildew build up).



Model VP18

## **HEATED HOLDING** *(CONTINUED)*

### **RESTART FROM EXTENDED SHUTDOWN – ALL MODELS**

1. Schedule a qualified gas service technician to be onsite upon restart if kitchen has been down for more than 30 days.
  - a. Check all gas equipment in kitchen for gas leaks.
2. Check the entire kitchen and all gas equipment for gas leaks prior to starting any equipment.
3. Clean the unit.
4. Inspect the unit: look for rusted tubes, frayed wires, check door latches
5. Follow the Hobart Start-Up guide.



## V Series Heated Holding Insulated Cabinets

VBP5	ML-138030
VBP7	ML-126358
VBP13	ML-126359
VBP15	ML-126360
VBP18	
VHP7	ML-126344
VHP15	ML-126346
VPT7	
VPT13	
VPT15	
VPT18	

### - NOTICE -

This Manual is prepared for the use of trained Vulcan Service Technicians and should not be used by those not properly qualified.

This manual is not intended to be all encompassing. If you have not attended a Vulcan Service School for this product, you should read, in its entirety, the repair procedure you wish to perform to determine if you have the necessary tools, instruments and skills required to perform the procedure. Procedures for which you do not have the necessary tools, instruments and skills should be performed by a trained Vulcan Service Technician.

The reproduction, transfer, sale or other use of this Manual, without the express written consent of Vulcan, is prohibited.

This manual has been provided to you by ITW Food Equipment Group LLC ("ITW FEG") without charge and remains the property of ITW FEG, and by accepting this manual you agree that you will return it to ITW FEG promptly upon its request for such return at any time in the future.

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# SERVICE UPDATES

## SERVICE UPDATES

### JANUARY 2019

- New service manual release.

## TIS DOCUMENT LIST - V SERIES HEATED HOLDING INSULATED CABINETS

SERVICE TAB	
Document Title	Document Type
V Series Heated Holding Transportation Cabinets	Service Manual

SERVICE MULTIMEDIA TAB	
Document Title	Document Type
V Series Heated Holding Transportation Cabinets Installation & Operation	Operators Manual
V Series Heated Holding Transportation Cabinets Specifications	Specification

PARTS TAB	
Document Title	Document Type
V Series Heated Holding Transportation Cabinets	Parts Catalog

# GENERAL

## INTRODUCTION

This manual is applicable only to models listed on the cover page. Procedures in this manual will apply to all models unless specified. Pictures and illustrations can be of any model unless they need to be model specific.

## INSTALLATION, OPERATION AND CLEANING

For detailed installation, operation and cleaning instructions, refer to the Installation & Operation Manual sent with each unit. The manual is also available online at [www.vulcanequipment.com](http://www.vulcanequipment.com).

## TOOLS

### Standard

- Standard set of hand tools.
- VOM with minimum of NFPA-70E CATIII 600V, UL/CSA/TUV listed. Sensitivity of at least 20,000 ohms per volt and the ability to measure DC micro amps. Meter leads must also be rated at CAT III 600V.
- Clamp on type amp meter with minimum of NFPA-70E CAT III 600V,UL/CSA/TUV listed.
- Temperature tester (thermocouple type).
- ESD (Electrostatic discharge) Protection Kit.

### Special

- Handheld, digital temperature and humidity sensor Grainger No. 3LYH7 or equivalent.

## SPECIFICATIONS

MODELS	VOLTS	WATTS	AMPS
VBP and VPT	120V	1,500	12.5
	240V	1,500	6.25

## DATA PLATE LOCATIONS



DATA PLATE LOCATED ON BACK PANEL



INSIDE DATA PLATE

# REMOVAL AND REPLACEMENT OF PARTS

## TOP COVER



### **WARNING**

Disconnect the electrical power to the machine and follow lockout / tagout procedures.

**NOTE:** Remove top cover to access power cord, cooling fan, and control board.

1. Remove screws from top and side of top cover.

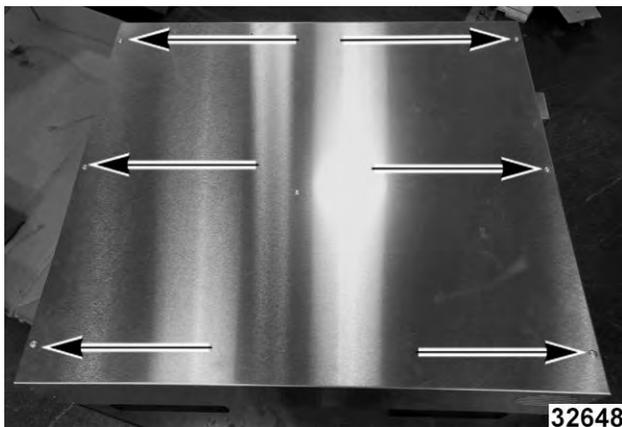


Fig. 3

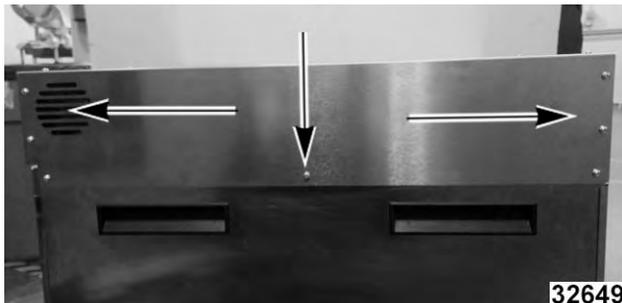


Fig. 4

2. Lift cover off cabinet.
3. Reverse procedure to install.

## FOOD COMPARTMENT FAN



### **WARNING**

Disconnect the electrical power to the machine and follow lockout / tagout procedures.

1. Remove TOP COVER.

2. Remove insulation (1, Fig. 5).

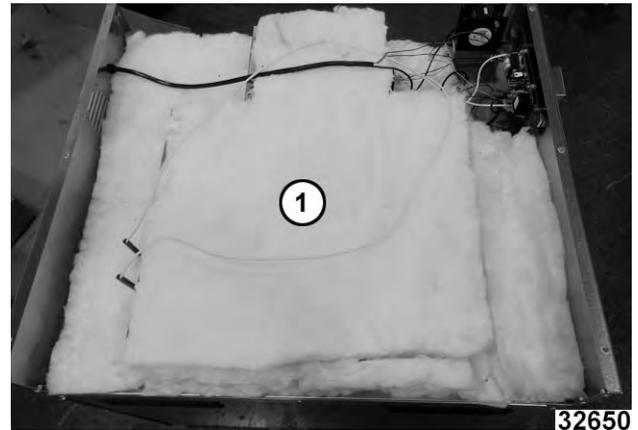


Fig. 5

3. Note and disconnect wiring from terminal block and control board.
4. Remove inside access cover (1, Fig. 6).

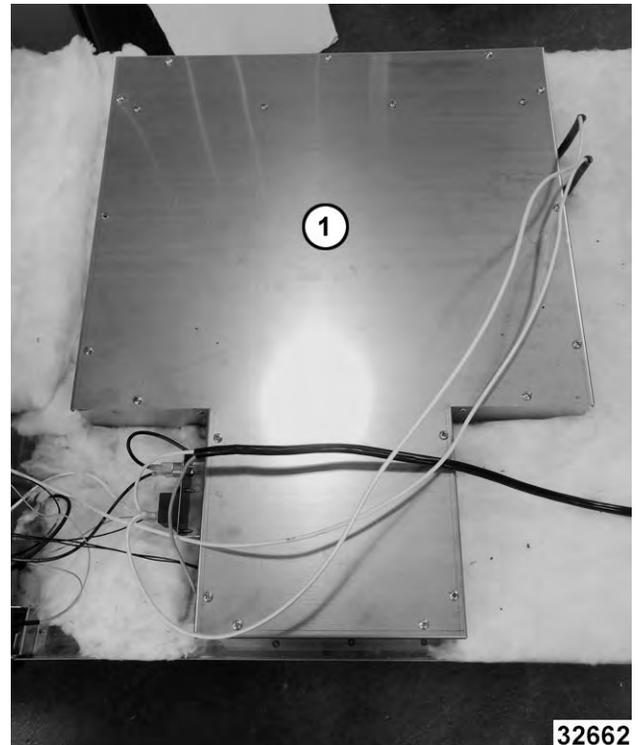


Fig. 6

5. Remove fan mounting bracket.
6. Remove screws from fan.
7. Install fan with label (1, Fig. 7) up.

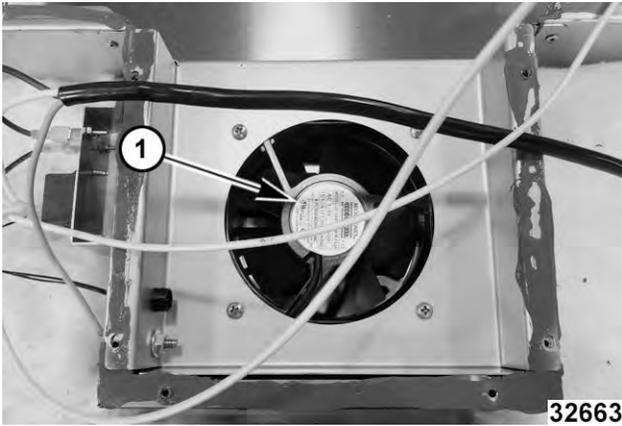
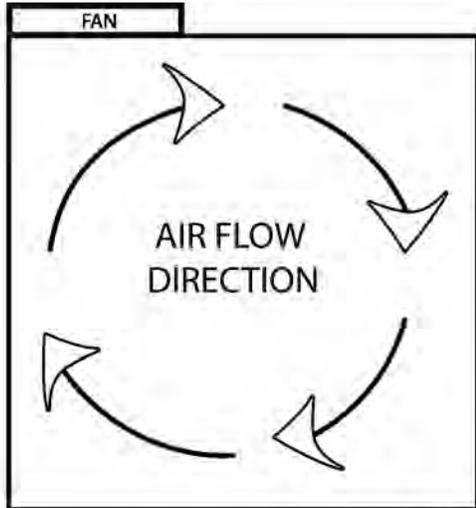


Fig. 7

8. Reverse procedure to install.

**NOTICE**

Verify air flow direction in cavity.



AI4918

Fig. 8

**NOTICE**

When installing inside access cover, verify edge inserts into slot without catching.

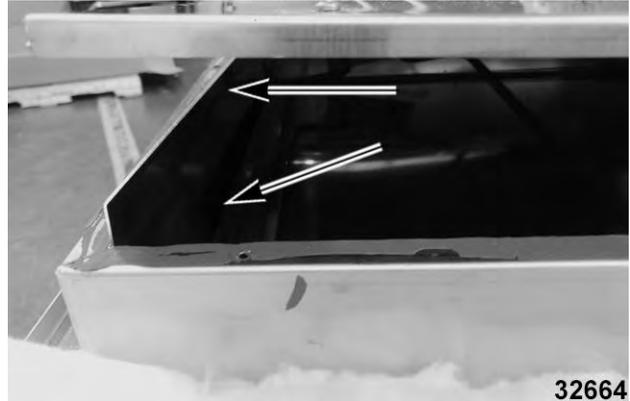


Fig. 9

**HEATING ELEMENTS**



**WARNING**

Disconnect the electrical power to the machine and follow lockout / tagout procedures.

1. Remove TOP COVER .
2. Remove insulation (1, Fig. 10).

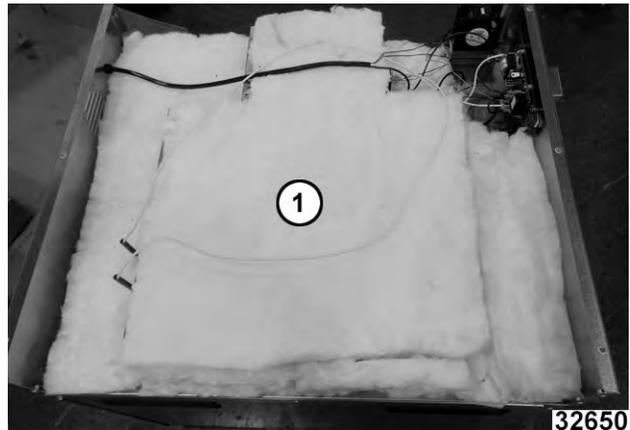


Fig. 10

3. Note and disconnect wires from terminal block and control board.
4. Remove inside access cover (1, Fig. 11).

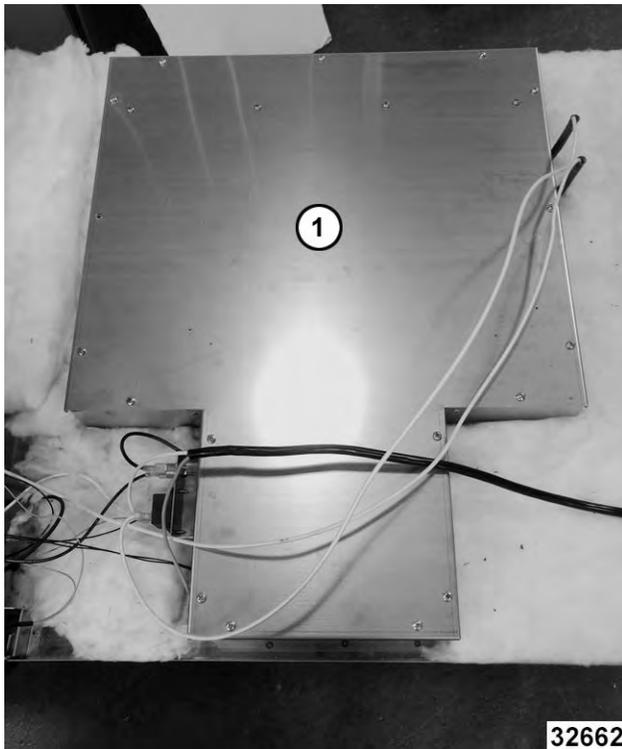


Fig. 11

- Remove heating element mounting screws.

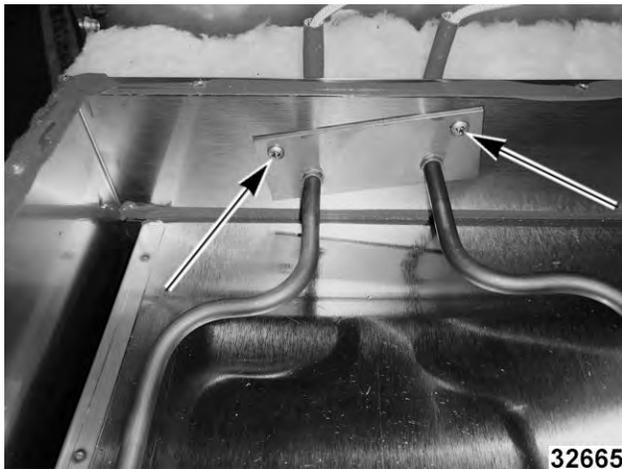


Fig. 12

- Reverse procedure to install.

**NOTICE**

When installing inside access cover, verify edge inserts into slot without catching.

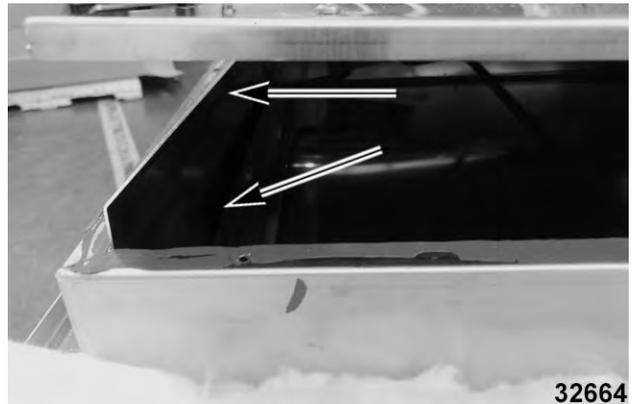


Fig. 13

**POWER CORD**



**WARNING**

Disconnect the electrical power to the machine and follow lockout / tagout procedures.

- Remove TOP COVER.
- Note and disconnect wiring from terminal block and high limit.
- Squeeze cord grip to remove from panel.



Fig. 14

- Reverse procedure to install.

## HIGH LIMIT SWITCH



### **WARNING**

Disconnect the electrical power to the machine and follow lockout / tagout procedures.

1. Remove TOP COVER.
2. Note and disconnect wiring.
3. Remove mounting screws for high limit switch (1, Fig. 15).

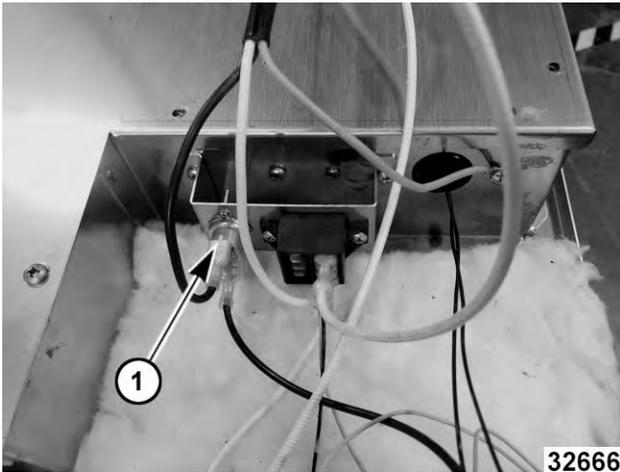


Fig. 15

4. Reverse procedure to install.

## TERMINAL BLOCK



### **WARNING**

Disconnect the electrical power to the machine and follow lockout / tagout procedures.

1. Remove TOP COVER.
2. Note and disconnect wiring.
3. Remove terminal block (1, Fig. 16) mounting screws.

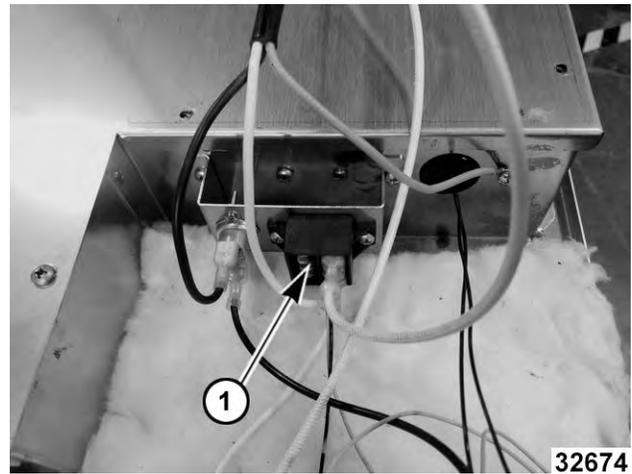


Fig. 16

4. Reverse procedure to install.

## TEMPERATURE PROBE



### **WARNING**

Disconnect the electrical power to the machine and follow lockout / tagout procedures.

1. Remove TOP COVER.
2. Disconnect temperature probe at control board connection.
3. Open door.
4. Pull temperature probe out from holder on cavity ceiling.

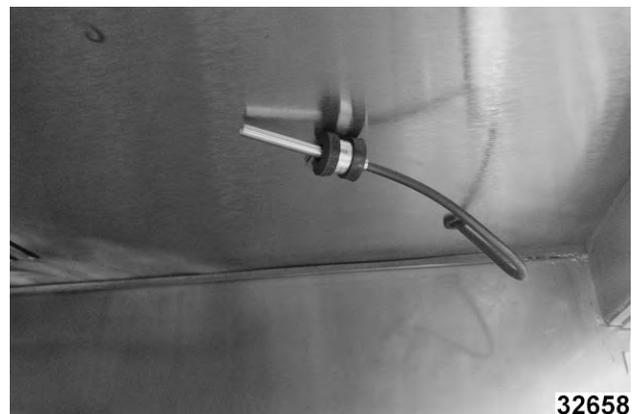


Fig. 17

5. Pull probe (1, Fig. 18) up through grommet in top of cabinet.

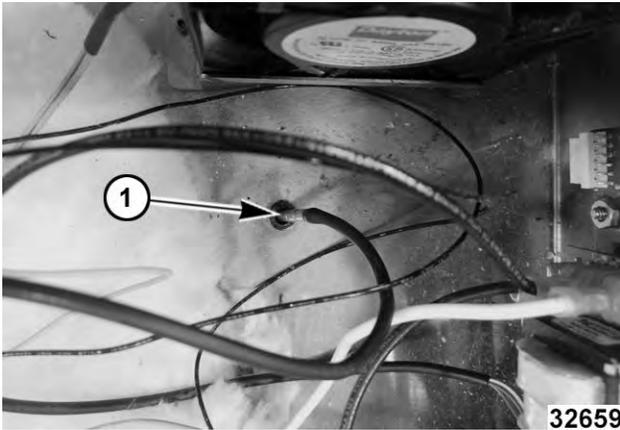


Fig. 18

- Reverse procedure to install.

## COMPONENT COOLING FAN



### WARNING

Disconnect the electrical power to the machine and follow lockout / tagout procedures.

- Remove TOP COVER.
- Note and disconnect fan wiring to terminal block and control board.
- Remove fan mounting screws.

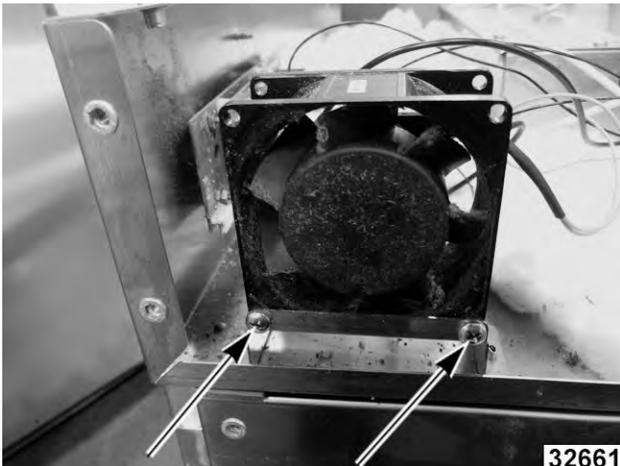


Fig. 19

### NOTICE

Note air flow direction on fan when replacing fan. (1, Rotation Fig. 20) (2, Air Flow Fig. 20)

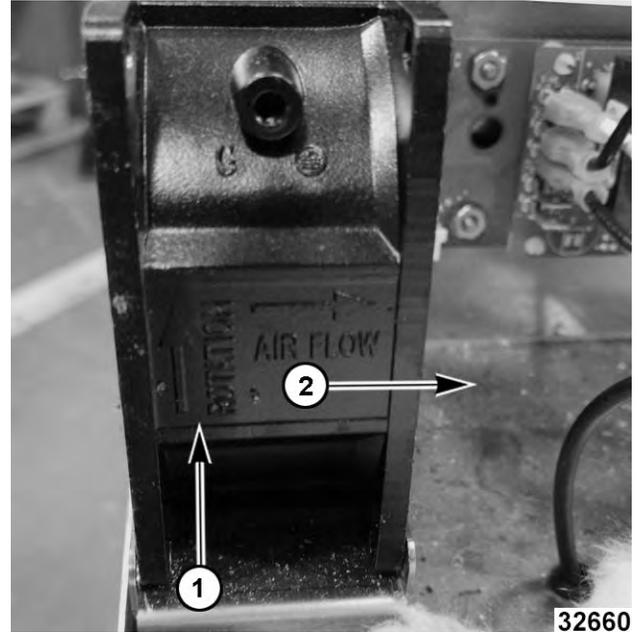


Fig. 20

- Reverse procedure to install.

## CONTROL BOARD



### WARNING

Disconnect the electrical power to the machine and follow lockout / tagout procedures.

### NOTICE

Certain components in this system are subject to damage by electrostatic discharge (ESD) during field repairs. An ESD kit is required to prevent damage. The ESD kit must be used anytime the circuit board is handled.

- Remove TOP COVER.
- Note and disconnect board connectors and wires.

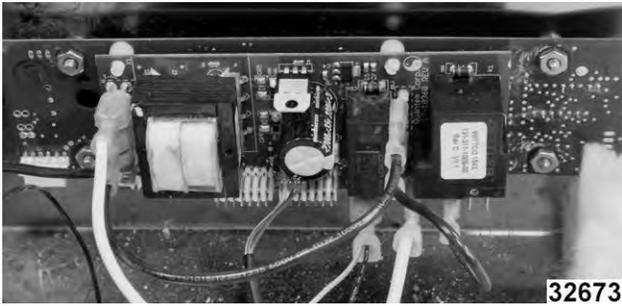


Fig. 21

3. Remove "optional" knob cover if applicable (VBP5 and VBP7).

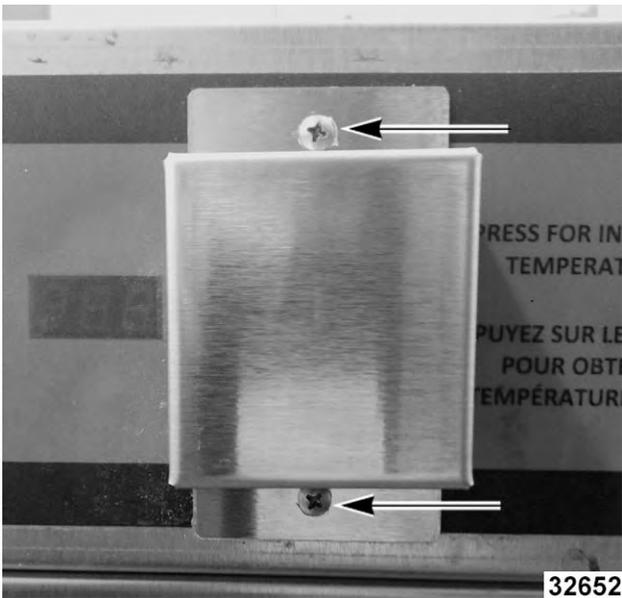


Fig. 22

4. Remove retaining screw in knob.



Fig. 23

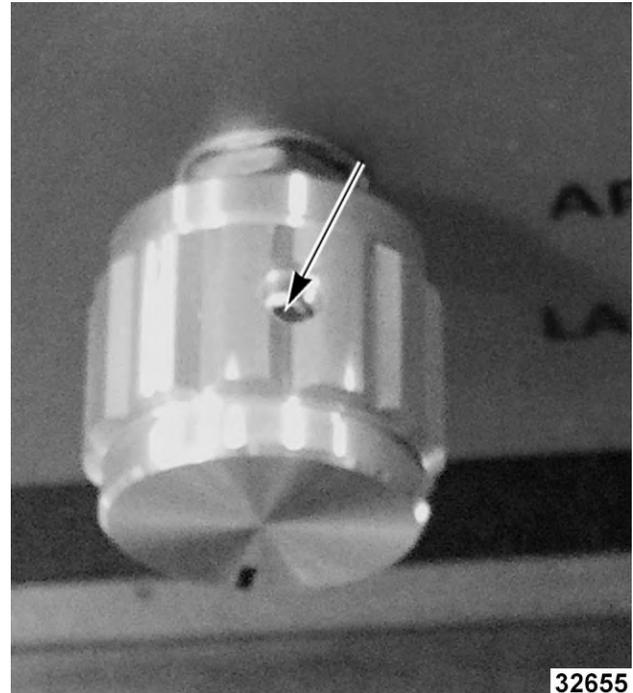


Fig. 24

5. Remove potentiometer retaining nut.

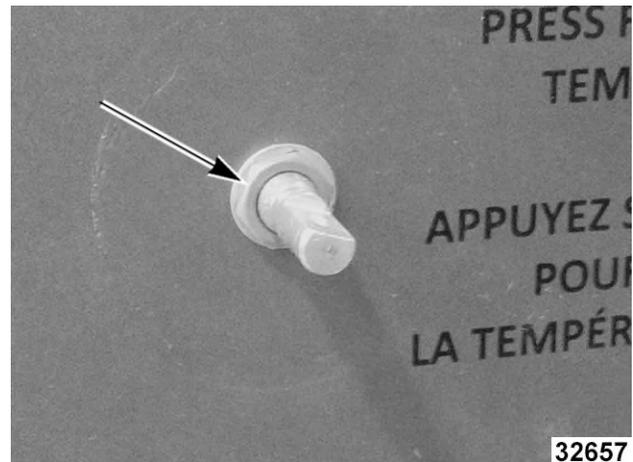


Fig. 25

6. Remove control board mounting nuts.

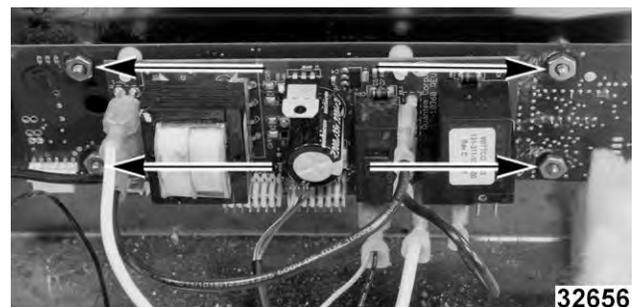


Fig. 26

7. Remove board.
8. Reverse procedure to install.

## DOOR GASKET

**NOTE:** Measure gasket before ordering replacement. Gasket is a separate component from retainer and should be ordered separately from retainer.

1. Open door.
2. Unscrew gasket retainers.



Fig. 27

3. Remove gasket (1, Fig. 28) from retainer (2, Fig. 28).

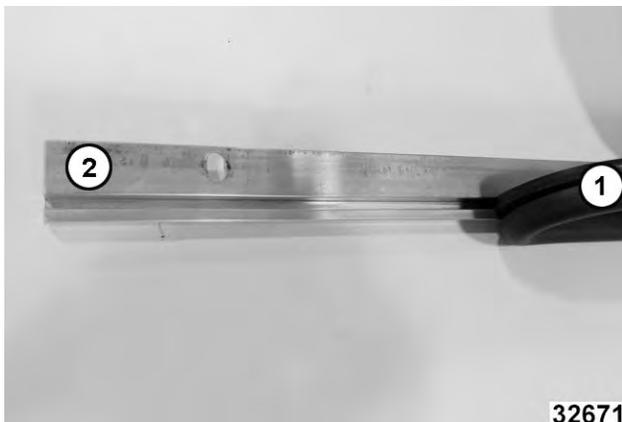


Fig. 28

4. Press gasket on retainer while aligning channel.

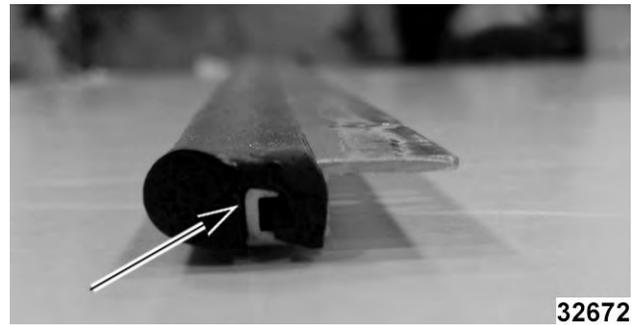


Fig. 29

5. Install retainer with flat side against cavity wall and channel toward inside of cabinet.

## DOOR ASSEMBLY

1. Remove door hinge covers (1, Fig. 30) from lower and upper door hinge.

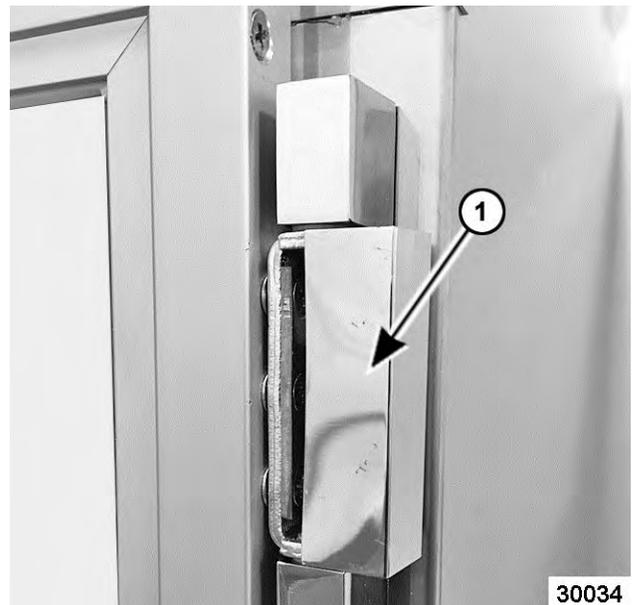


Fig. 30

### **⚠ WARNING**

**Remain in control of door when removing hinges.**

2. Remove door hinge inside mounting screws from **lower door hinge first**.



Fig. 31

3. Remove door hinge inside mounting screws from **upper door hinge** while supporting door weight.
4. Lift door assembly from cabinet.
5. Reverse procedure to install.
6. Check for proper operation.

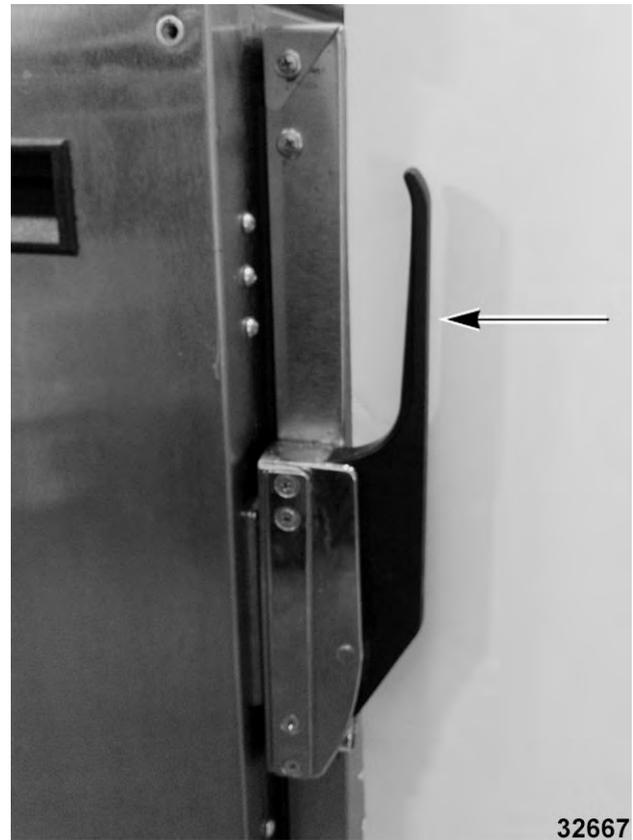
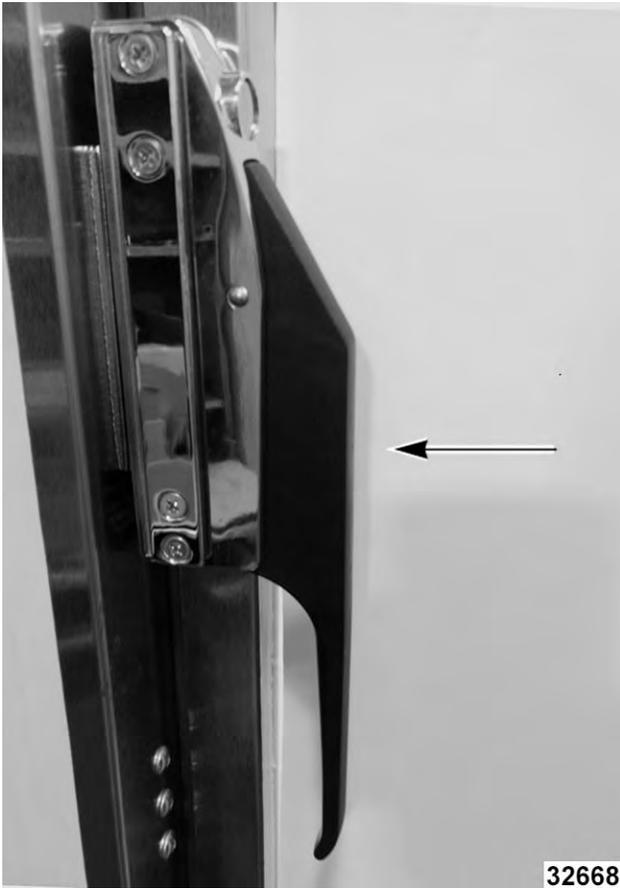


Fig. 32

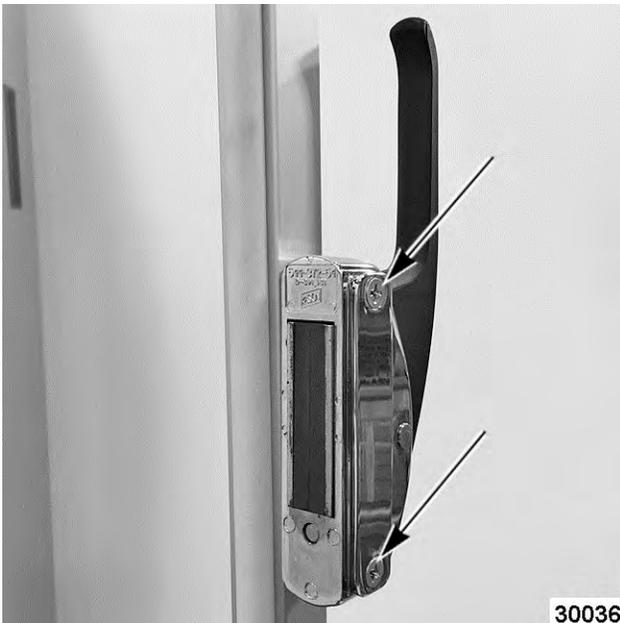
## DOOR LATCH (MAGNETIC)

**NOTE:** Note orientation of door handle before removal.



**Fig. 33**

1. Open door.
2. Remove screws securing door latch to door assembly.



**Fig. 34**

3. Reverse procedure to install.

**NOTICE**

Install handle in the same orientation it was removed.

4. Check for proper operation.

# SERVICE PROCEDURES AND ADJUSTMENTS

## TEMPERATURE VERIFICATION

### **⚠ WARNING**

The warmer and its parts are hot. Use care when operating, cleaning or servicing the oven.

**NOTE:** Units prior to 1/1/15 can be calibrated, counter clockwise to increase and clockwise to decrease. Screw is located inside stem on the mechanical thermostat. quarter turn is five degrees. Units after 1/1/15 can not be calibrated.

1. Check room temperature.
2. Place temperature probe at the center of the cabinet.
3. Set unit temperature to 145°F.
4. Wait 45 minutes.
5. The temperature setting should be between 138 - 152F°.

### **VERIFY**

- When using cabinet, frequently opening the door will affect average internal temperature. Modify set temperature as necessary to ensure product is held above appropriate food safe temperature.

Heating Elements			
Model	Wattage	Voltage	Resistance
all VBP	1500	240	38.4 +/- 10 %

**NOTE:** If numbers do not match, replace HEATER ELEMENTS.

## HEATER ELEMENT TEST



### **⚠ WARNING**

Certain procedures in this section require electrical test or measurements while power is applied to the machine. Exercise extreme caution at all times and follow Arc Flash procedures. If test points are not easily accessible, disconnect power and follow Lockout/Tagout procedures, attach test equipment and reapply power to test.

1. Access the heater element being tested. Refer to: HEATER ELEMENTS.
2. Check resistance.

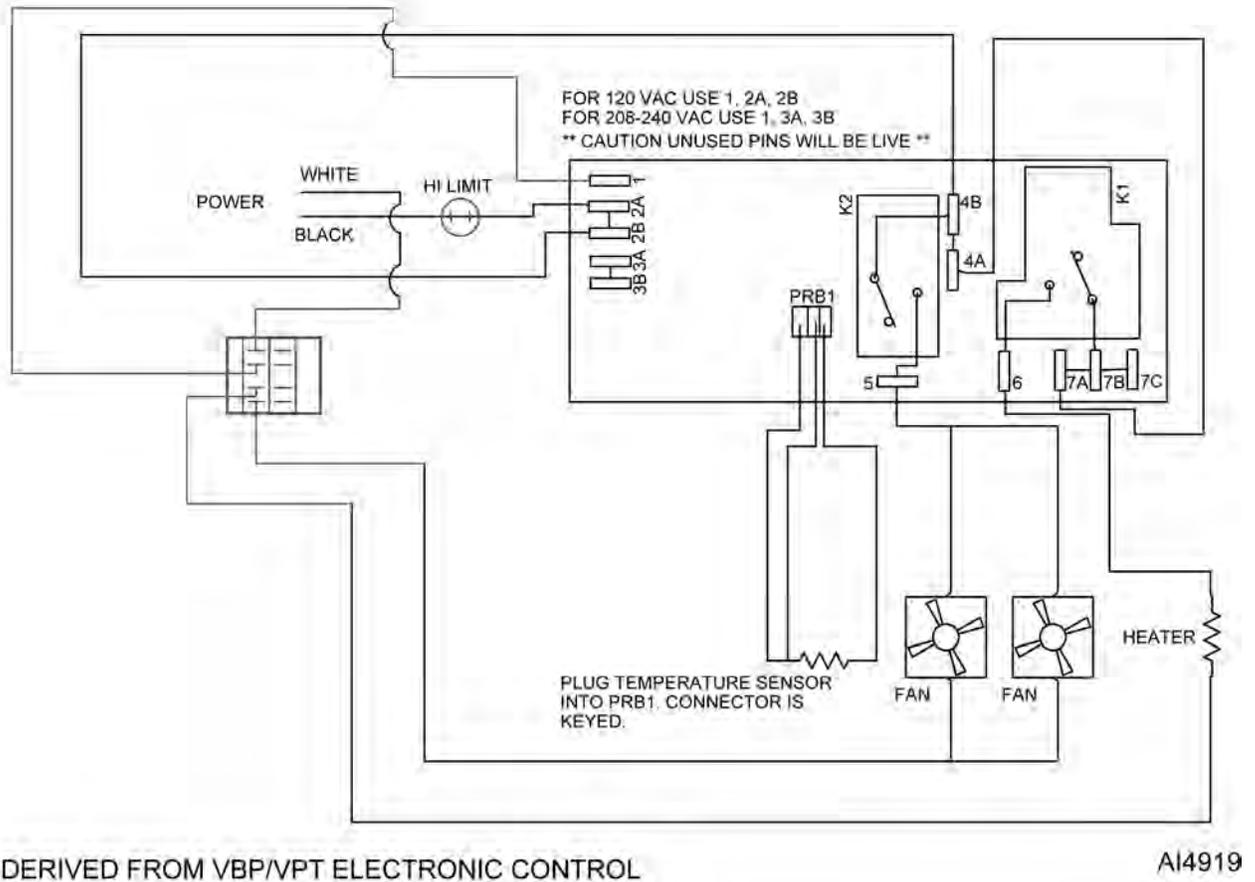
Heating Elements			
Model	Wattage	Voltage	Resistance
all VPT	1500	120	9.6 +/- 10 %

# ELECTRICAL OPERATION

## COMPONENT DESCRIPTIONS

ITEM	DESCRIPTION
Food Compartment Fan	Circulates air inside the cabinet. Moisture resistant with metal fan blades.
Controller Board	Controls the temperature, humidity and fan inside the cabinet.
Heating Element - Dry	Heats the air to keep prepared food at the proper serving temperatures.
Component Cooling Fan	Circulates air in the electrical component area.
High Limit	High Limit opens at 375°F.

## WIRING DIAGRAM



**Fig. 35**

### SEQUENCE OF OPERATION

1. Conditions.
  - A. Unit connected to correct voltage and is properly grounded.
  - B. Power switch is off.
2. Power switch turned on.
  - A. Relays K1 and K2 are de-energized (contacts N.O.).
  - B. Controller board performs diagnostic test and verifies temperature input signal is present.
3. Fan relay K2 is energized, K2 contacts close and power the fans.
4. Based on temperature and humidity settings, the board determines whether K1 relay will be energized to power element.
5. Adjust temperature to desired level.
6. Turning power switch off stops heating cycle.

## TROUBLESHOOTING

Symptom	Possible Cause
Cabinet not operating.	<ol style="list-style-type: none"> <li>1. Cabinet not connected to power source or circuit breaker tripped.</li> <li>2. Cabinet lighted power switch not ON or malfunctioning.</li> </ol>
Ground Fault Circuit Indicator (GFCI) tripped.	<ol style="list-style-type: none"> <li>1. Shorted heating element.</li> <li>2. Pinched/damaged wiring (heating elements or fan).</li> <li>3. Damaged power cord.</li> </ol>
Cabinet connected to power, switch is ON, circuit breaker is ON but cabinet not heating.	<ol style="list-style-type: none"> <li>1. Heating element malfunction.</li> <li>2. Temperature probe malfunction.</li> </ol>
Cabinet not heating properly.	<ol style="list-style-type: none"> <li>1. Element wires disconnected from element. Replace wire assembly and element.</li> <li>2. <u>FOOD COMPARTMENT FAN</u> not circulating air or malfunction.</li> <li>3. Door not sealing properly.</li> <li>4. Temperature probe malfunction.</li> </ol>
Fan not operating.	<ol style="list-style-type: none"> <li>1. Power not being supplied to fan (malfunction).</li> <li>2. Fan wiring not connected or malfunction.</li> <li>3. Fan not circulating air or malfunction.</li> </ol>
Moisture present at the top of the cabinet near the control board.	<ol style="list-style-type: none"> <li>1. <u>COMPONENT COOLING FAN</u> malfunction.</li> </ol>
Corrosion present inside cabinet.	<ol style="list-style-type: none"> <li>1. Periodic cleaning needed. Refer to Operations manual.</li> <li>2. Hardware has rusted. Replace rusted hardware with 18-8 stainless steel components and replace <u>FOOD COMPARTMENT FAN</u>.</li> </ol>



## ***SERVICE MANUAL***

### **V SERIES FOOD HOLDING & TRANSPORTATION CABINETS AND BANQUET CARTS**

**MODELS:**

VB90	ML-126548
VB96	ML-126550
VB150	ML-126552
VBP5I	ML-138030
VBP7I	ML-126358
VBP13I	ML-126359
VBP15I	ML-126360
VBP33	ML-138075
VBP77I	ML-126361
VBS15	ML-138033
VHA9	ML-138072
VHA18	ML-138073
VHDP5	ML-138035
VHFA9	ML-138070
VHFA18	ML-138071
VHP3	ML-126343
VHP7	ML-126344
VHP8	ML-126345
VHP15	ML-126346
VHP20	ML-126347



**This manual is prepared for the use of trained Vulcan Service Technicians and should not be used by those not properly qualified.**

**This manual is not intended to be all encompassing. You should read, in its entirety, the repair procedure you wish to perform to determine if you have the necessary tools, instruments, and skills required to perform the procedure.**

**Reproduction or other use of this Manual, without the express written consent of Vulcan, is prohibited.**

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](http://www.vulcanhart.com)

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## 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.**

**READ THIS MANUAL THOROUGHLY BEFORE OPERATING, INSTALLING OR PERFORMING MAINTENANCE ON THE EQUIPMENT.**

- △ WARNING** Failure to follow instructions in this manual can cause property damage, injury, or death.
- △ WARNING** Always Perform the Lockout/Tagout procedure before removing any sheet metal panels or attempting to service this equipment. Failure to comply with this procedure can cause property damage, injury, or death.
- △ WARNING** Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death.
- △ WARNING** Do NOT operate this equipment without properly placing and securing all covers and access panels.
- △ WARNING** In the event of a power failure, do not attempt to operate this device.
- △ WARNING** Electrical and grounding connections must comply with the applicable portions of the National Electric Code and/or all local electric codes.
- △ WARNING** Appliances equipped with a flexible electric supply cord, are 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 the plug.

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## GENERAL

### INTRODUCTION

Vulcan-Hart Food Holding and Transportation Cabinets and Banquet Carts are produced with quality workmanship and material. Proper installation, usage and maintenance will result in many years of satisfactory performance.

Before performing maintenance on the cabinet/cart, thoroughly read this manual and carefully follow all instructions in the order given.

This manual is applicable only to models listed on the cover page. Procedures in this manual will apply to all models unless specified. Illustrations can be of any model unless the illustration needs to be model-specific.

### INSTALLATION

Refer to the Installation and Operation Manual for detailed installation instructions.

### OPERATION

Refer to the Installation and Operation Manual for detailed operating instructions.

### CLEANING

Refer to the Installation and Operation Manual for detailed cleaning instructions.

### ELECTRICAL REQUIREMENTS

All Vulcan-Hart 110/120 volt cabinets are equipped with an 8 ft. (2.4m) cord and NEMA 5-15 or 5-20 plug as standard equipment.

All Vulcan-Hart 208/240 volt cabinets are equipped with an 8 ft. (2.4m) cord and

NEMA 6-15 or 6-20 plug as standard equipment.

### SERIAL NUMBER LOCATION

The Serial Number and Model Number for the unit are located on the Serial Data Plate, which is located by the electrical connection. (Fig. 1)

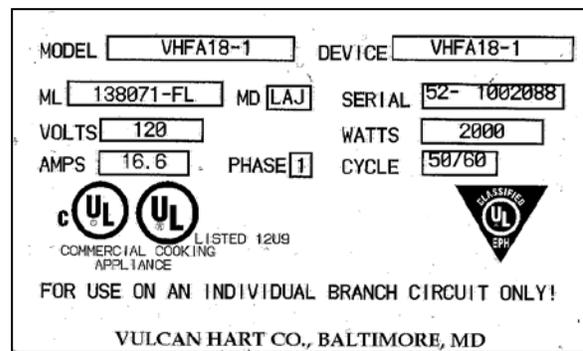


Fig. 1 - Serial Data Plate

### TOOLS

#### Standard

- Standard set of hand tools.
- Volt-Ohm-Meter (VOM) with AC current tester with sensitivity of at least 20,000 Ohms per volt.
- Standard Thermometer
- Pop Rivet Gun and 3/16" closed end rivets for Models VHFA9 and VHFA18.

#### Special

- CLR Treatment Kit to remove Calcium/Lime/Rust from cabinet. (Contact Authorized Vulcan-Hart Servicer.)

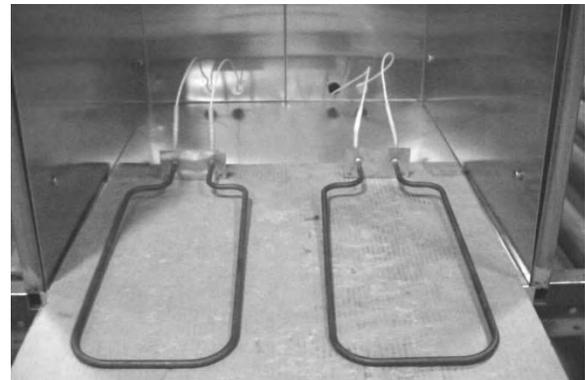
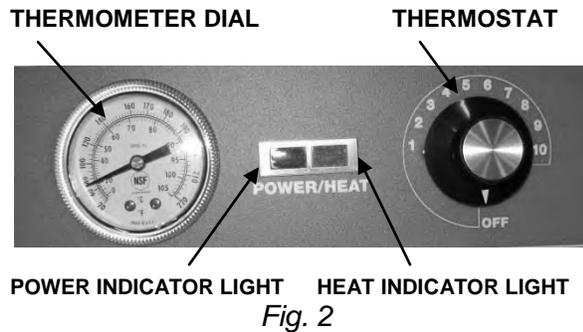
<b>SPECIFICATIONS</b>							
<b>MODEL NO.</b>	<b>HEIGHT IN (mm)</b>	<b>DEPTH IN (mm)</b>	<b>WIDTH IN (mm)</b>	<b>SHIPPING WT. Lb. (kg)</b>	<b>VOLTS</b>	<b>WATTS</b>	<b>AMPS</b>
VB90	71.75" (1822)	42.75" (1086)	31.75" (806)	242# (110 kg)	120	2000	16.6
VB96	62" (1575)	29" (737)	51.5" (1308)	435# (197 kg)	120	2000	16.6
VB150	73" (1854)	29" (737)	61.25" (1556)	590# (268 kg)	120	2000	16.6
VBP5I	31.5" (800)	33.75" (857)	28.25" (718)	170# (77 kg)	120	1200	10
VBP7I	37.75" (959)	33.75" (857)	28.25" (718)	230# (104 kg)	120	1200	10
VBP13I	57.25" (1454)	33.75" (857)	28.25" (718)	340# (154 kg)	120	1200	10
VBP15I	67" (1702)	33.75" (857)	28.25" (718)	360# (163 kg)	120	1200	10
VBP33	43.5" (1105)	30.75" (782)	25.25" (643)		120	1200	10
VBP77I	72.5" (1842)	31.75" (806)	24.5" (622)	400# (182 kg)	120	2400	20
VBS7	37.625" (956)	30.25" (781)	23.75" (584)	195# (90 kg)	120	1200	10
VBS15	66" (1676)	30.25" (781)	23.75" (584)	315# (144 kg)	120	1200	10
VHA9	43.5" (1105)	30.75" (782)	25.25" (643)		NA	NA	NA
VHA18	71" (1804)	30.75" (782)	25.25" (643)		NA	NA	NA
VHDP5	62.25" (1582)	38" (966)	24.75" (629)	370# (169 kg)	120	2000	16.7
VHFA9	43.5" (1105)	30.75" (782)	25.25" (643)	190# (87 kg)	120	1200	10
VHFA18	71" (1804)	30.75" (782)	25.25" (643)	225# (102 kg)	120	2000	16.7
VHP3	23.5" (597)	23.75" (604)	18" (457)	80# (36.6 kg)	120	600	5
VHP7	28.5" (724)	25" (635)	18.25" (464)	80# (36.3 kg)	120	600	5
VHP8	31.5" (800)	25" (635)	18.25" (464)	90# (40.9 kg)	120	600	5
VHP15	61.25" (1556)	26.75" (680)	21.25" (540)	196# (89 kg)	120	1200	10
VHP20	61" (1549)	29" (737)	39.5" (1003)	264# (120 kg)	120	1200	10

## COMPONENT LOCATION

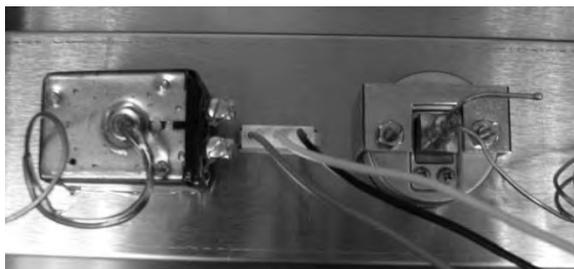
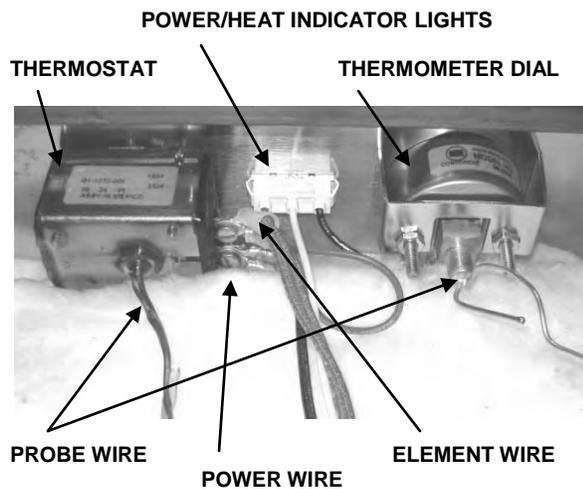
**MODELS:** VHP3, VHP7, VHP8, VHP15, VHP20, VBP5I, VBP7I, VBP13I, VBP15I, VBP77I, VBS7, VBS15, VHDP5, VB90, VB96, VB150, VBP33

### CONTROLS

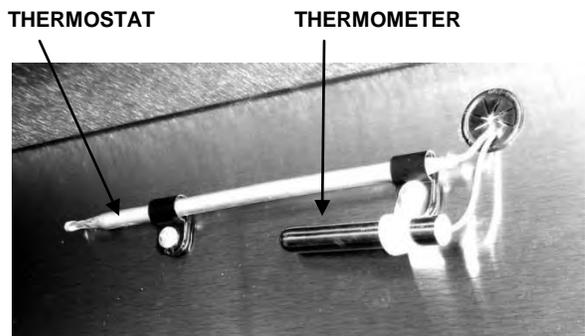
#### CONTROL - FRONT VIEW



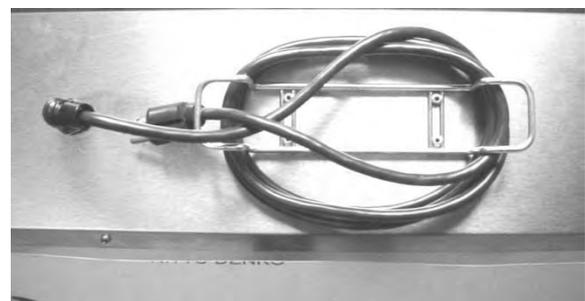
#### CONTROL - INSIDE VIEWS



### PROBE



### POWER CORD

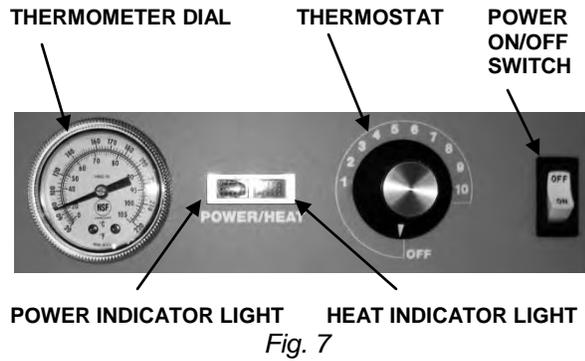


### ELEMENTS

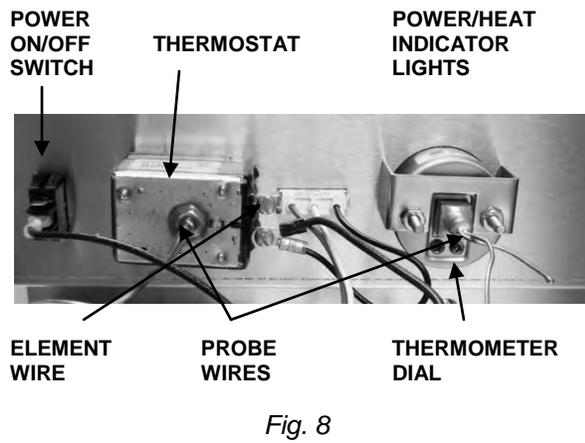
**MODELS: VHFA9, VHFA18**

**CONTROLS**

**CONTROL - FRONT VIEW**



**CONTROL - INSIDE VIEW**

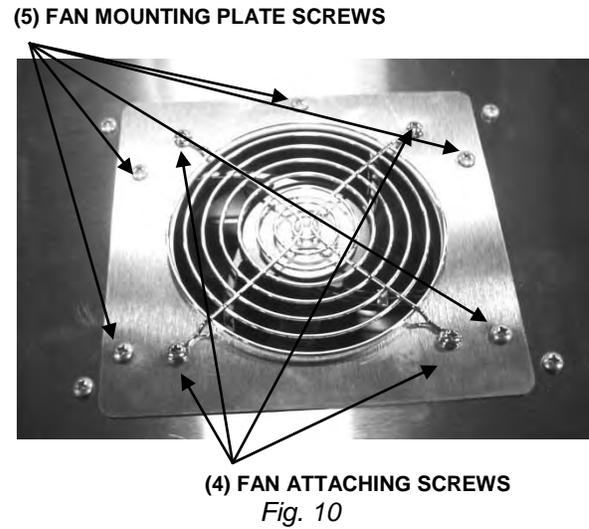


**POWER CORD WRAP**

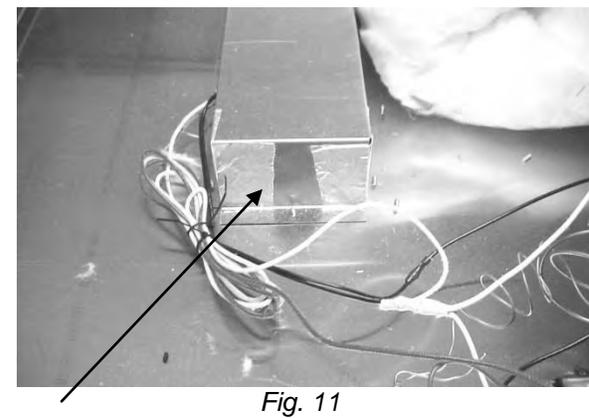


**FAN**

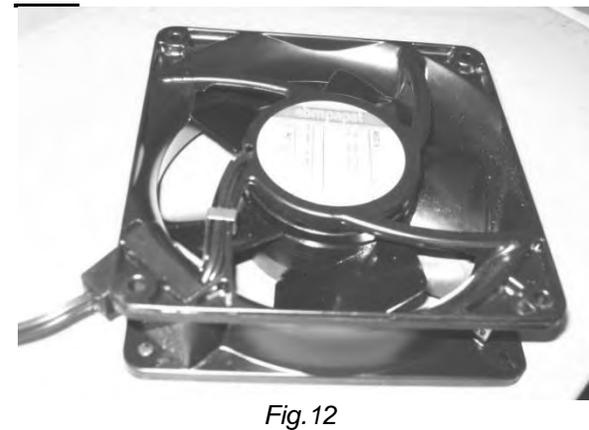
**FAN - FRONT VIEW**



**FAN - INSIDE VIEW (HOUSING)**



**FAN**



## COMPONENT FUNCTION

**MODELS:** VHP3, VHP7, VHP8, VHP15, VHP20, VBP5I, VBP7I, VBP13I, VBP15I, VBP77I, VBS7, VBS15, VHDP5, VB90, VB96, VB150, VBP33

### CONTROLS

**THERMOMETER:** Indicates interior temperature. (Fig. 2)

**THERMOSTAT:** Turns power on to heating element. Thermostat setting is from 1 to 10. The greater the thermostat setting number, the higher the temperature.

Thermostat Setting	Approximate Temperature
1	100°F (37°C)
2	110°F (43°C)
3	120°F (49°C)
4	130°F (54°C)
5	140°F (60°C)
6	150°F (66°C)
7	160°F (71°C)
8	170°F (77°C)
9	180°F (82°C)
10	190°F (88°C)

**POWER INDICATOR LIGHT:** Indicates unit is plugged in. As long as the cabinet is plugged in, the *red light* will stay on.

**HEAT INDICATOR LIGHT:** Indicates element is heating. Light will stay on as long as the heating elements are engaged. Once the predetermined temperature is achieved, the heating elements will begin to cycle. During this period the *amber light* will turn on and off.

### ELEMENTS

**ELEMENTS:** Heat element/elements located at the bottom of cabinet.

### PROBE

**THERMOSTAT:** Controls the output temperature of the heating element. Once the output temperature of the heating element reaches the set temperature, the thermostat sensor removes power from the heating element.

**THERMOMETER:** Senses the temperature in the cabinet.

**MODELS:** VHFA9, VHFA18

### CONTROLS

**THERMOMETER:** Indicates interior temperature. (Fig. 7)

**THERMOSTAT:** Turns power on to heating element. Thermostat setting number, the higher the temperature.

**POWER INDICATOR LIGHT:** Indicates unit is plugged in and **ON/OFF SWITCH** is in the ON position. The *red light* will stay on until the ON/OFF Switch is in the OFF position.

**HEAT INDICATOR LIGHT:** Indicates element is heating. Light will stay on as long as the heating elements are engaged. Once the predetermined temperature is achieved, the heating elements will begin to cycle. During this period, the *amber light* will turn on and off.

**POWER ON/OFF SWITCH:** Supplies electrical power to the cabinet and turns on the fan. The cabinet will not have power unless switch is in the ON position.

**MODELS: VHFA9, VHFA18 (continued)****FAN**

The fan is located on top of the unit. The fan and air tunnel provide even heat distribution. The fan is turned on and off with the POWER ON/OFF SWITCH.

**ELEMENTS**

There are 2 heating elements located at the bottom of the cabinet.

**PROBE**

**THERMOSTAT:** Monitors/sensors the output temperature of the heating elements. Once the output temperature of the heating element reaches the set temperature, the thermostat sensor removes power from the heating element.

**THERMOMETER:** Senses the temperature in the cabinet.

**LOCKOUT / TAGOUT PROCEDURE**

**△WARNING** Always perform the **LOCKOUT / TAGOUT PROCEDURE** before removing any sheet metal panels or attempting to service this equipment.

**FAILURE TO COMPLY WITH THIS PROCEDURE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH.**

The Lockout / Tagout Procedure is used to protect personnel working on an electrical appliance. Before performing any type of maintenance or service on an electrically operated appliance, follow these steps:

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.

## COMPONENT REMOVAL AND REPLACEMENT

### COVER REMOVAL

The Cover must be removed to access the Thermostat, Thermometer, Lights, and Wiring.



**WARNING** Disconnect the electrical power to the unit and follow LOCKOUT/TAGOUT PROCEDURES.

1. Locate and remove the two (2) screws holding the top cover to the left side.
2. Locate and remove the two (2) screws holding the top cover to the right side.
3. Locate and remove the two (2) screws holding the top cover to the back.
4. Remove the cover.

(Reverse the above steps to install.)

### THERMOMETER



**WARNING** Disconnect the electrical power to the unit and follow LOCKOUT/TAGOUT PROCEDURES.

1. Remove the Cover.
2. Identify and remove the screw that holds the thermometer sensing bulb on the inside of the cabinet. *It will be mounted to the top of the cabinet.* (Fig. 13)

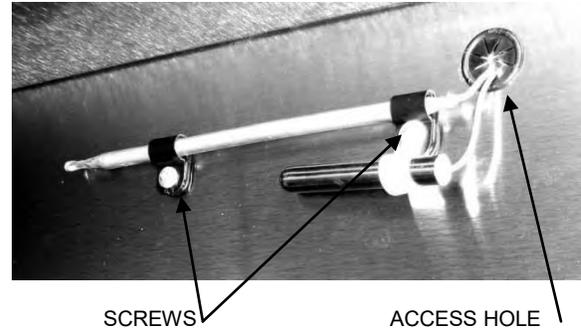


Fig. 13

4. Pull the thermometer bulb through the access hole located in the top of the cabinet.
5. Remove the retaining nuts that hold the thermometer to the housing located on the back of the control panel. (Fig. 14)



Fig. 14

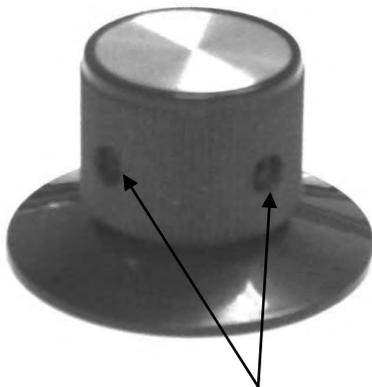
6. Remove the thermometer by pushing it from the rear through the control panel.
7. Install the replacement thermometer by reversing the above steps.
8. Reconnect the cabinet to its power source and test.

## THERMOSTAT



**⚠ WARNING** Disconnect the electrical power to the unit and follow **LOCKOUT/TAGOUT PROCEDURES**.

1. Remove the Cover.
2. Identify and remove the two (2) screws that hold the thermostat sensing bulb on the inside of the cabinet. *It will be mounted to the top of the cabinet.* Push/pull the thermostat bulb through the access hole located in the top of the cabinet
3. Turn the black Thermostat Knob to the “**OFF**” position.
4. Remove the black thermostat knob from the control panel by using an allen wrench to loosen the two (2) set screws that hold it to the thermostat stem. (Fig. 15)



THERMOSTAT KNOB SET SCREWS

Fig. 15

5. Refer to the wiring diagram to identify the electrical leads that connect to the thermostat.
6. Disconnect the wire leads connected to the thermostat.

7. Remove the two (2) screws on the front of the control panel that hold the thermostat in place and remove the thermostat.
8. Install the replacement thermostat temperature sensing probe by reversing the steps above.
9. Reconnect the cabinet to its power source and test.

## THERMOSTAT CALIBRATION



**⚠ WARNING** Disconnect the electrical power to the unit and follow **LOCKOUT/TAGOUT PROCEDURES**.

1. Turn thermostat knob to **Off** position.
2. Loosen set screws and remove knob.
3. Using a small screw driver, turn the screw in the center of the thermostat stem: “**clockwise to Decrease**” temperature or “**counter-clockwise to Increase**” temperature. (Fig. 16)

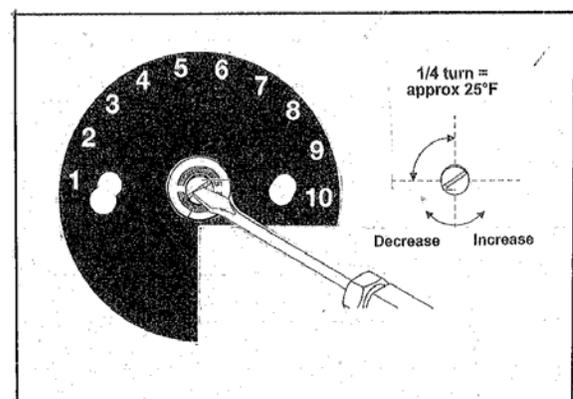


Fig. 16

5. Replace knob and tighten set screws.
6. Reconnect the cabinet to its power source and test.

### DUAL LIGHT INDICATOR



**⚠ WARNING** Disconnect the electrical power to the unit and follow **LOCKOUT/TAGOUT PROCEDURES**.

1. Remove the cover.
2. Refer to the wiring diagram to identify the electrical leads that connect to the indicator light.
3. Disconnect the wire leads to the indicator light.
4. Depress the side mounted retaining clips on the indicator light housing and remove the light from the front of the control panel.
5. Install the replacement indicator light by pushing it into the control panel opening and the retaining clips snap into place.
6. Complete the installation by reversing the above steps.
7. Reconnect the cabinet to its power source and test.

### FAN

#### VHFA9, VHFA18



**⚠ WARNING** Disconnect the electrical power to the unit and follow **LOCKOUT/TAGOUT PROCEDURES**.

1. Remove the five (5) screws from the fan mounting plate. (Fig. 10)
2. Unplug the fan power cord. (Fig. 17)

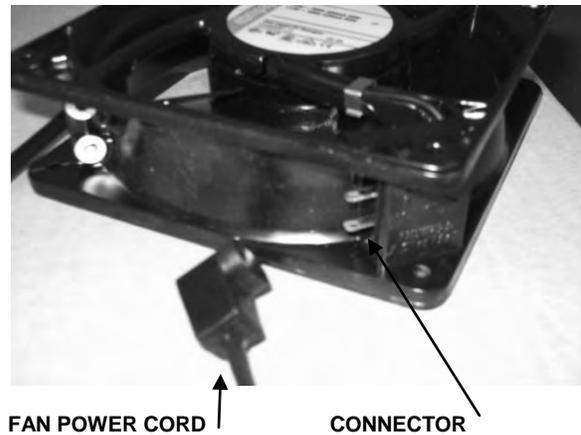


Fig. 17

3. Remove the four (4) fan attaching screws and remove fan. (Fig. 10)
4. Install the replacement fan and complete the installation by reversing the above steps.
5. Reconnect the cabinet to its power source and test.

## ON / OFF SWITCH

### VHFA9, VHFA18



**⚠ WARNING** Disconnect the electrical power to the unit and follow LOCKOUT/TAGOUT PROCEDURES.

1. Remove the cover.
2. Refer to the wiring diagram to identify the electrical leads that connect to the switch.
3. Disconnect the wire leads to the switch.
4. Depress the top/bottom mounted retaining clips on the switch housing and remove it from the front of the control panel.

*NOTE: To expedite removal – cutting the retaining clips off with a knife or snips will make removal of the switch easier. (The switch will not be reusable if this is done.)*

5. Install the replacement switch by pushing it into the control panel opening and the retaining clips snap into place.
6. Complete the installation by reversing the above steps.
7. Reconnect the cabinet to its power source and test.

## ELEMENT

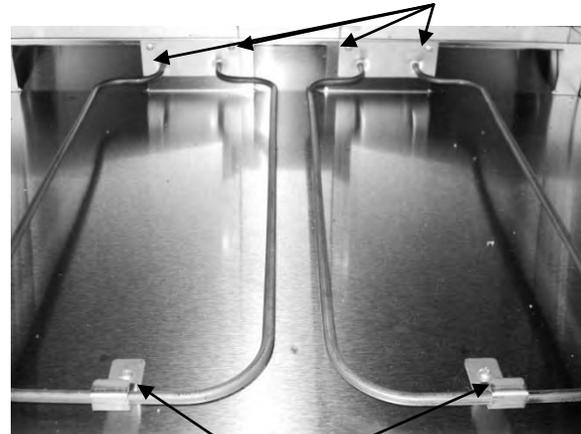


**⚠ WARNING** Disconnect the electrical power to the unit and follow LOCKOUT/TAGOUT PROCEDURES.

1. Open the door to the cabinet.

2. Remove the bottom mounted element cover.
3. Remove the two (2) retaining screws that hold each element to the mounting plate and the one (1) screw for the element clip. (Fig. 18)

MOUNTING PLATE RETAINING SCREWS



ELEMENT CLIP SCREWS

Fig. 18

4. Gently pull the element away from the inner liner of the cabinet until the electrical lead wires are exposed. (Fig. 19 & 20)



Fig. 19

5. Disconnect the element wires at the electrical lead connectors.

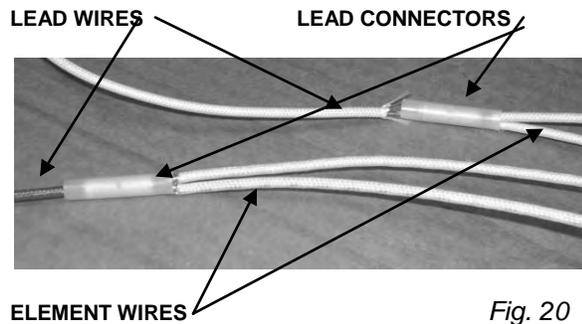


Fig. 20

6. Reconnect the replacement element to the lead wires with **New** wire connectors.
7. Gently tuck the residual wire back through the wire housing hole until the backing plate is lined up with the mounting holes, and is flush against the inner liner of the cabinet.
8. Complete the installation by reversing the above steps.
9. Reconnect the cabinet to its power source and test.

### POWER CORD



**⚠ WARNING** Disconnect the electrical power to the unit and follow **LOCKOUT/TAGOUT PROCEDURES**.

1. Remove the cover.
2. Refer to the wiring diagram to identify the electrical leads that connect to the power cord.
3. Disconnect the wire leads to the power cord.
4. Unscrew the retaining nut that holds the power cord strain relief to the cover.
5. Remove the power cord.

6. Install the replacement cord by inserting the cord and threaded portion of the strain relief through the opening in the cover.
7. Complete the installation by reversing the above steps.
8. Reconnect the cabinet to its power source and test.

### DOOR INSTALLATION



**⚠ WARNING** Disconnect the electrical power to the unit and follow **LOCKOUT/TAGOUT PROCEDURES**.

1. Using a flat head screwdriver, pry the hinge cover away from the hinge until it snaps out.

**Caution:** Use care not to scratch the hinge cover. Look for the small indentation on the inner portion of the hinge cover, as the location to pry the cover.

2. Remove the three (3) phillips head screws that attach the hinge to the door. Remove six (6) phillips head screws to replace hinge. (Fig. 21)

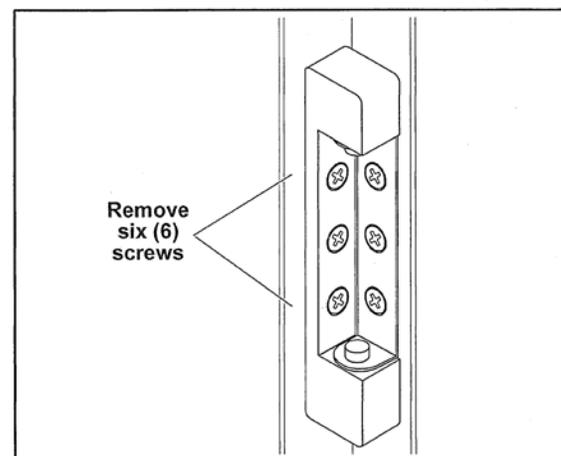


Fig. 21

3. Remove the old door. *You may need to open the latch.*
  4. Remove the phillips head screws that attach the latch to the door.  
**Note:** *There may be anywhere from two (2) to four (4) screws on the latch.*
  5. If necessary, drill the new holes using a #19 drill bit (or 11/16" bit.)  
**Note:** *When drilling holes into the cabinet frame, use a long drill bit (2") as you need to drill through both sides of the 1" frame tubing.*
  6. Apply a thread locker material to any screw/screws you are re-installing.
  7. Using a screw gun, attach the door to the hinge and latch to the door.
  8. Close the door and check for gaps between the door and gasket. Adjust as necessary. Adjust the latch, if necessary.
1. Remove the old gasket by pulling it out of the aluminum J-channel. Verify that all gasket and adhesive has been completely removed before proceeding to step 3.
  2. Install the new gasket by starting at one end and pressing the gasket into the J-channel. A slotted screw driver may be needed to fully seat the gasket. You can also use "Pam Cooking Spray."  
**Note:** *Be careful not to puncture the gasket with the screw driver.*
  3. Repeat until all gaskets have been replaced.
  4. Using a "food grade" sealant / adhesive, seal the corners to eliminate any gaps, and to prevent the gasket from sliding in the J-channel.
  5. Wipe away any excess sealant.  
**Note:** *Allow 30 minutes for the sealant / adhesive to cure.*
  6. When the sealant/adhesive has cured, close the door and check for gaps between the door and gasket. Adjust the gasket extension, if necessary.

### DOOR GASKET

*Before removing the old gasket, verify that the replacement gasket(s) are the correct size and length.*



**⚠ WARNING** Disconnect the electrical power to the unit and follow LOCKOUT/TAGOUT PROCEDURES.

### SERVICE & PARTS INFORMATION

To obtain Service and Parts information concerning this model, contact Vulcan-Hart Service Department at the address listed on the front cover of this manual or refer to our website: [www.vulcanhart.com](http://www.vulcanhart.com) for a complete listing of Authorized Service and Parts depots.

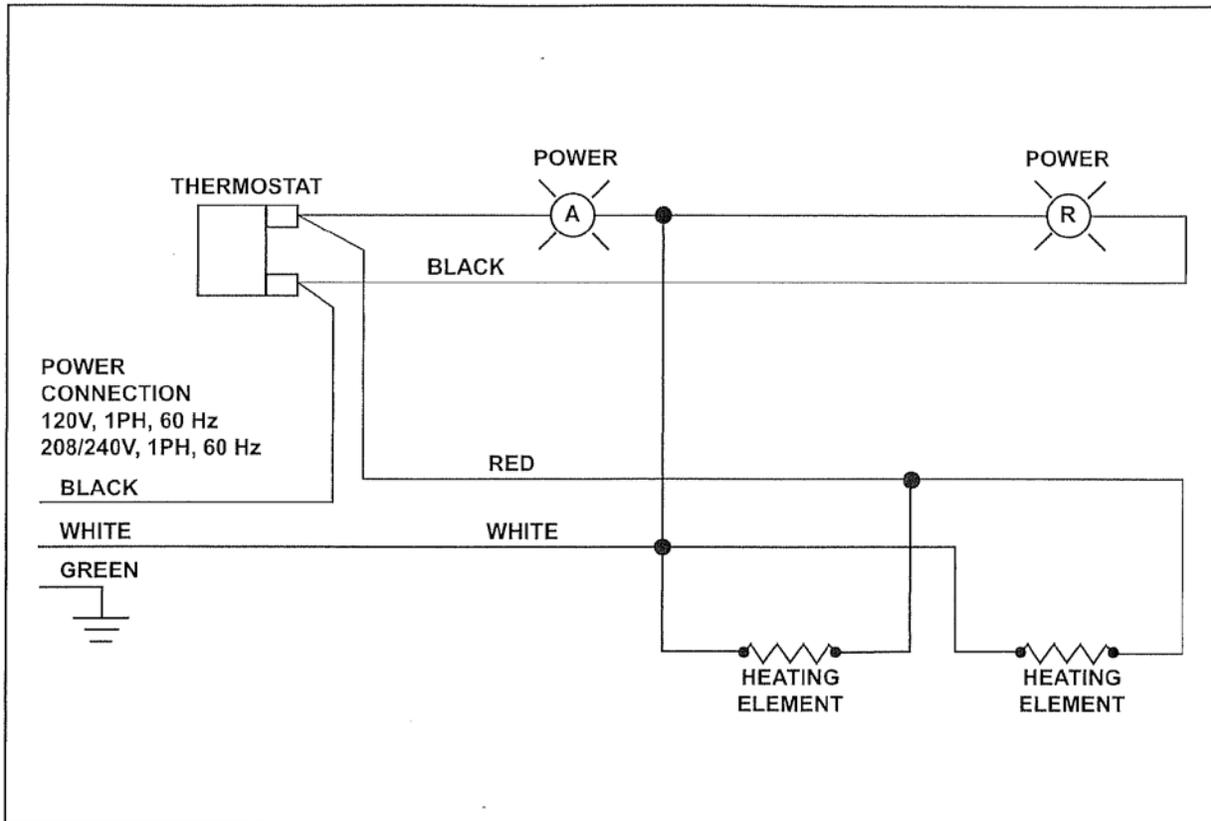
Customer Service	1-800-814-2028
Technical Service	1-800-814-2028
Service Parts	1-800-814-2028

**When calling for service, have the model number and serial number available**

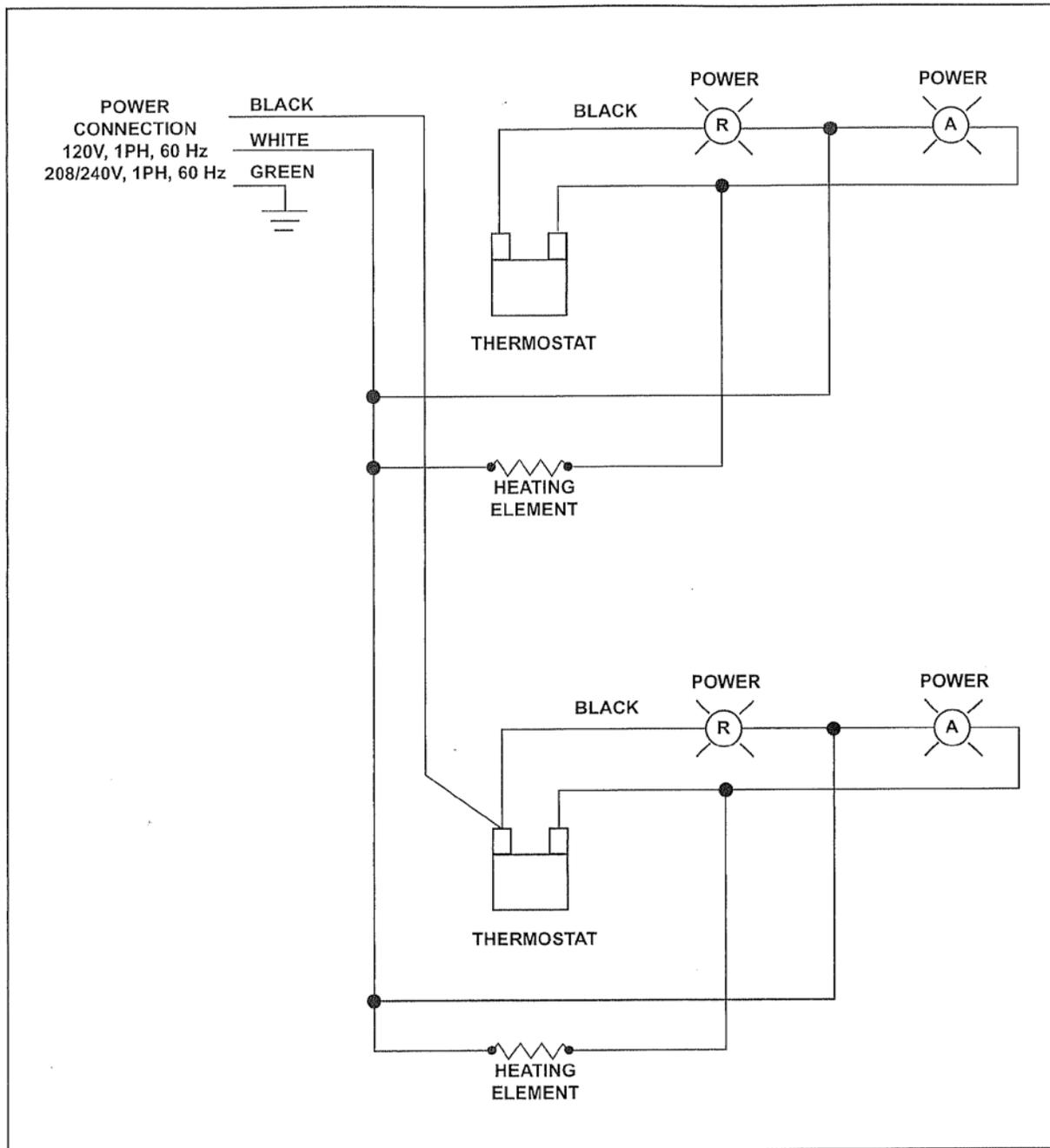
## TROUBLESHOOTING

SYMPTOMS	POSSIBLE CAUSES	REMEDY
Cabinet not operating.	Cabinet not connected to power source.	Connect cabinet to power source.
	Cabinet lighted power switch not turned ON.	Turn lighted power switch ON.
	No power.	Check circuit breaker. Check GFCI.
GFCI or Ground Fault Circuit Indicator tripped	Moisture problem. Shorted element. Pinched/damaged wire. Damaged power cord.	Dry moisture problem. Check/replace element. Check/replace wire. Check/replace power cord.
Cabinet is connected to power source, switch is ON, circuit breaker is ON but cabinet is not heating.	Heating element is faulty.	Check/replace heating element.
	Thermometer is faulty.	Check/replace thermometer.
	Thermostat is faulty.	Check/replace thermostat.
Lighted power switch ON but not lit.	Power switch faulty.	Check/replace power switch.
	Dual light indicator faulty.	Check/replace Dual Light Indicator.
Cabinet does not heat properly.	Defective: element, thermometer, thermostat, switch.	Check/replace: element, thermometer, thermostat, power switch.
	Thermostat requires adjustment.	Perform thermostat calibration.
	Door not properly sealed.	Check/adjust door and hinge. Check/replace door gasket.
Fan not operating. (VHFA9, VHFA18 only)	Power switch not ON.	Turn power switch on.
	Fan faulty.	Check/replace fan.

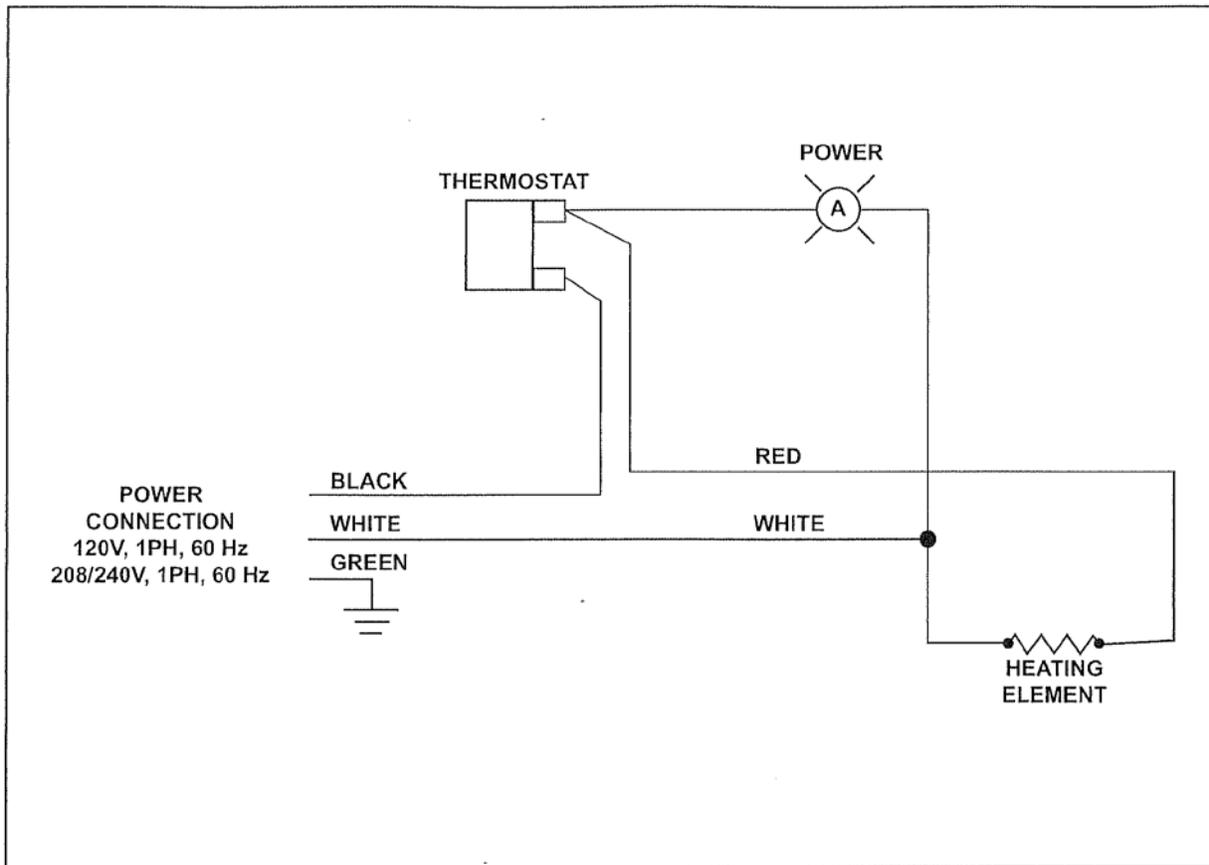
## WIRING DIAGRAMS



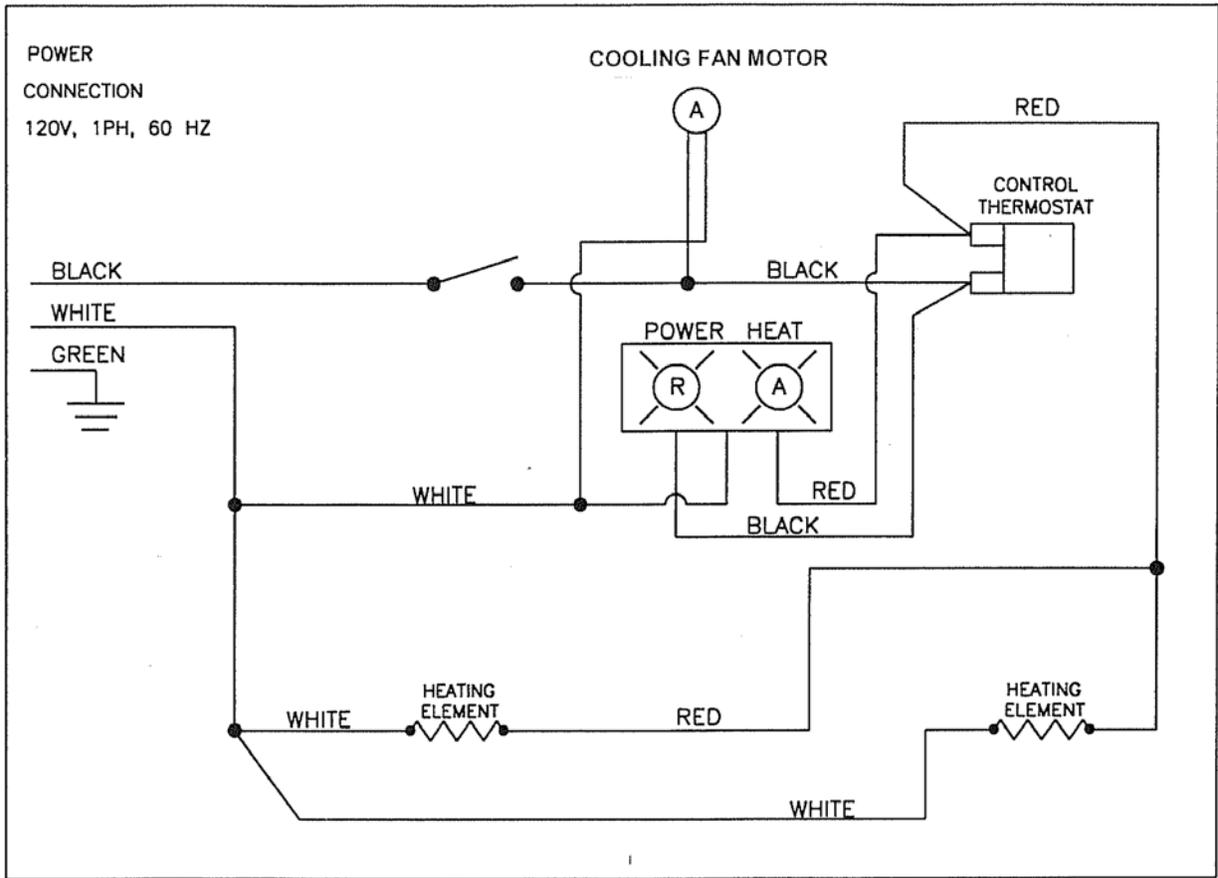
**VB90, VB96, VB150, VBP5I, VBP7I, VBP13I, VBP15I, VHP15, VHP20, VBS7, VBS15  
VBP33  
Wiring Diagram**



VBP771 Wiring Diagram



VHP3, VHP7, VHP8 Wiring Diagram



VHFA9, VHFA18 Wiring Diagram



30043

## INSULATED HUMIDIFIED HOLDING & PROOFING CABINET

VHU18

### - NOTICE -

This Manual is prepared for the use of trained Vulcan Service Technicians and should not be used by those not properly qualified.

This manual is not intended to be all encompassing. If you have not attended a Vulcan Service School for this product, you should read, in its entirety, the repair procedure you wish to perform to determine if you have the necessary tools, instruments and skills required to perform the procedure. Procedures for which you do not have the necessary tools, instruments and skills should be performed by a trained Vulcan Service Technician.

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# SERVICE UPDATES

## SERVICE UPDATES

### April 2018

- Updated SPECIFICATIONS chart.
- Updated FOOD COMPARTMENT FAN.
- Updated order and added symptom in TROUBLESHOOTING.

# GENERAL

## INTRODUCTION

This manual is applicable only to models listed on the cover page. Procedures in this manual will apply to all models unless specified. Pictures and illustrations can be of any model unless they need to be model specific.

## INSTALLATION, OPERATION AND CLEANING

For detailed installation, operation and cleaning instructions, refer to the Installation & Operation Manual sent with each unit. The manual is also available online at [www.vulcanequipment.com](http://www.vulcanequipment.com).

## TOOLS

### Standard

1. Standard set of hand tools.
2. VOM with minimum of NFPA-70E CATIII 600V, UL/CSA/TUV listed. Sensitivity of at least 20,000 ohms per volt. Meter leads must also be rated at CAT III 600V.
3. Clamp on type amp meter with minimum of NFPA-70E CAT III 600V,UL/CSA/TUV listed.
4. Temperature tester (thermocouple type).
5. ESD (Electrostatic discharge) Protection Kit.

### Special

- Handheld, digital temperature and humidity sensor Grainger No. 3LYH7 or equivalent.

## SPECIFICATIONS

Electrical			
Model	Volts	Wattage	Amperage
VHU18	120	1,500	12.5

Heating Elements			
Model	Wattage	Voltage	Resistance
VHU18	1500 (Standard)	120	8.80-10.27

Pan Capacity		
Model	Capacity *	
	12" X 20" X 2 ½"	18" X 26" SHEET PANS
VHU18	36	18

(\* Capacity based on 3" spacing between pans.

# SERVICE PROCEDURES AND ADJUSTMENTS

## TEMPERATURE AND HUMIDITY CALIBRATION

### ⚠ WARNING

The warmer and its parts are hot. Use care when operating, cleaning or servicing the oven.

1. Check room temperature.
2. Place temperature and humidity probe at the center of the cabinet.
3. Set unit temperature to 145°F.
4. Set relative humidity to 65%RH.
5. Wait 45 minutes.
6. The temperature setting should be between 138 - 152°F and relative humidity between 45%RH - 85%RH.

If temperature setting numbers do not match, check the following...

- A. Check continuity to both Humidity and Air heating elements.
- B. Make sure VHU Interior Pan has black coating on the bottom.

### VERIFY

- When using cabinet, frequently opening the door will affect average internal temperature. Modify set temperature and humidity as necessary to ensure product is held above appropriate food safe temperature.

## RESET SENSOR CODES

### ⚠ WARNING

The warmer and its parts are hot. Use care when operating, cleaning or servicing the oven.

1. Reset unit (turn it off, then on).
2. Turn unit off and remove sensor cover.

**NOTE:** Sensor board is located within the food cavity, behind the control board, under a sheet metal cover.

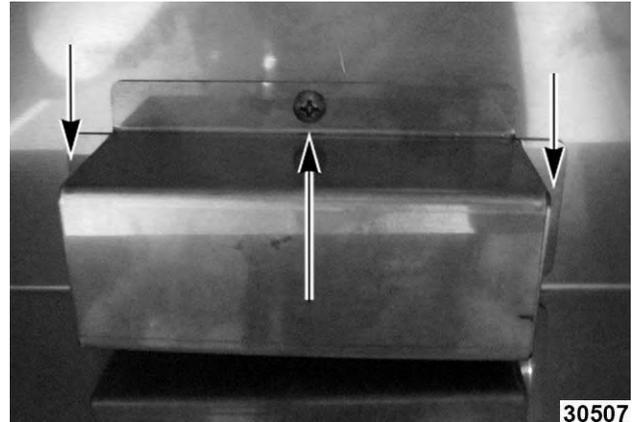


Fig. 1

3. Dry off sensor and wires.

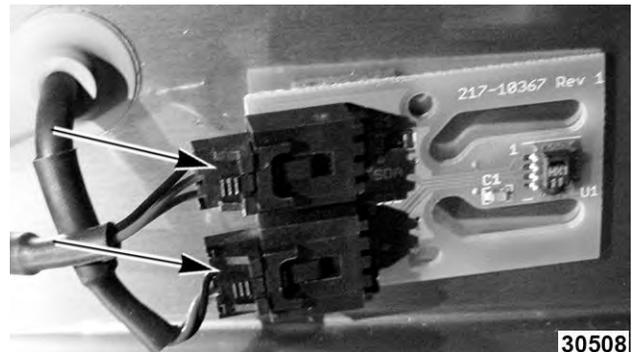


Fig. 2

4. Disconnect sensor wire harness plugs and dry out any moisture in connectors.
5. Plug sensor wire connectors into board.
6. Turn unit on to verify error code has cleared.
7. If error codes are not clear, replace both SENSOR BOARD AND WIRE HARNESS.
8. Install sensor board cover.
9. Verify operation.

## HEATER ELEMENT TEST



**⚠ WARNING**

Certain procedures in this section require electrical test or measurements while power is applied to the machine. Exercise extreme caution at all times and follow Arc Flash procedures. If test points are not easily accessible, disconnect power and follow Lockout/Tagout procedures, attach test equipment and reapply power to test.

1. Access the heater element being tested.
  - HUMIDITY ELEMENT (VHU INTERIOR PAN)
  - AIR ELEMENT
2. Check resistance using HEATING ELEMENT table.

<b>Heating Elements</b>			
<b>Model</b>	<b>Wattage</b>	<b>Voltage</b>	<b>Resistance</b>
VHU18	1500	120	8.80-10.27

**NOTE:** If numbers do not match, replace HEATING ELEMENT.

# REMOVAL AND REPLACEMENT OF PARTS

## TOP COVER



**WARNING**

Disconnect the electrical power to the machine and follow lockout / tagout procedures.

1. Remove eight screws securing top cover to cabinet.

**NOTE:** Fig. 3 Shown without top vent fan (First Generation Production). Fig. 4 Shown with top cooling fan (Second Generation Production).



Fig. 3

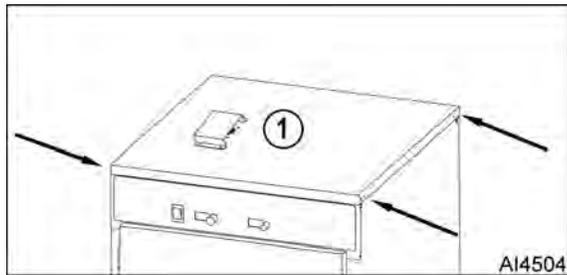


Fig. 4

2. Unplug fan cord, if applicable.
3. Lift top cover off cabinet.
4. Reverse procedure to install.

## FOOD COMPARTMENT FAN



**WARNING**

Disconnect the electrical power to the machine and follow lockout / tagout procedures.

1. Remove upper pans and pan supports for clearance to access food compartment fan.
2. Loosen fan mounting screws.

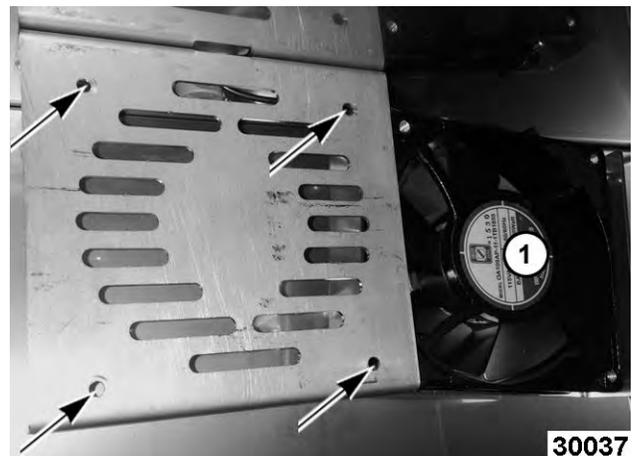


Fig. 5

3. Slide fan (1, Fig. 5) to access power connector.
4. Disconnect power connector.
5. Reverse procedure to install and check for proper operation.

## HEATING ELEMENT



**WARNING**

Disconnect the electrical power to the machine and follow lockout / tagout procedures.

### Humidity Element (VHU Interior Pan)

1. Remove pans and universal tray slides.
2. Remove VHU interior pan.
3. Remove screw securing heating element mounting clip to bottom of cabinet.

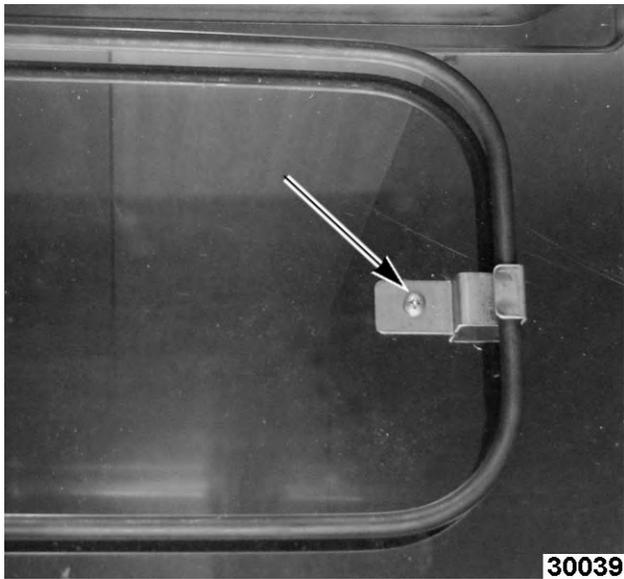


Fig. 6

4. Remove two screws securing element.



Fig. 7

5. Pull element out.
6. Disconnect heating element wires.

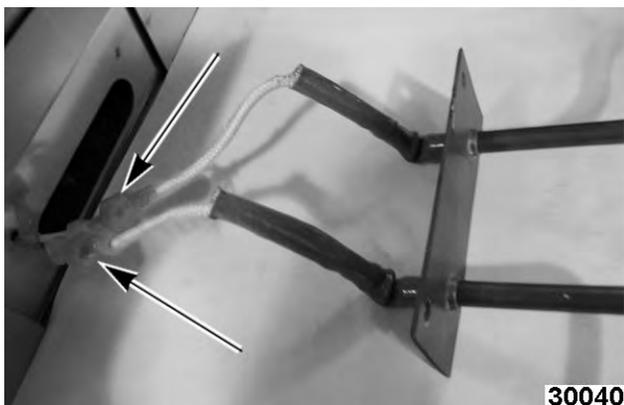


Fig. 8

7. Reverse procedure to install and check for proper operation.

#### Air Element

1. Remove pans and universal tray slides.
2. Loosen rail guide support screws.
3. Remove rail guides.



Fig. 9

4. Remove bottom screws from side panel.



Fig. 10

- Remove bottom cover screws.



Fig. 11

- Carefully clear element while lifting cover from right side.



Fig. 12

- Remove two screws securing element.



Fig. 13

- Pull element out.
- Disconnect heating element wires.

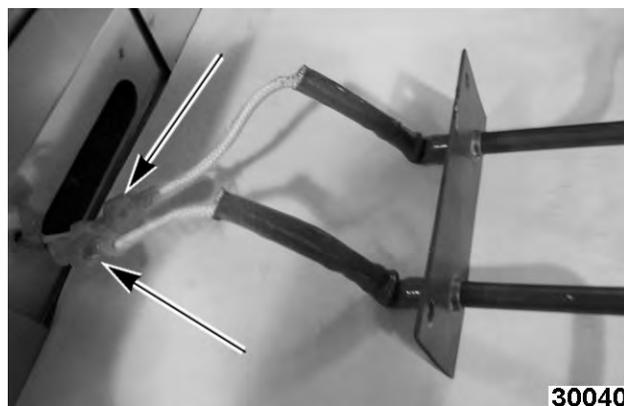


Fig. 14

- Reverse procedure to install and check for proper operation.

## CONTROLLER BOARD - TEMPERATURE & HUMIDITY



### ⚠ WARNING

**Disconnect the electrical power to the machine and follow lockout / tagout procedures.**

- Remove temperature and humidity control knobs.
- Remove two nuts on front of board.
- Remove TOP COVER.
- Lift insulation and fold back toward rear of cabinet.
- Remove controller board mounting nuts.

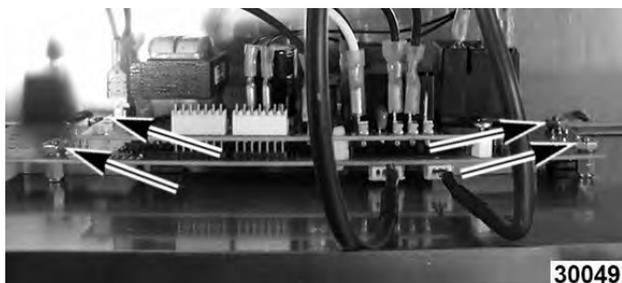


Fig. 15

6. Lift controller board to access wire connections.
7. Note wire locations and disconnect from controller board.
8. Reverse procedure to install and check for proper operation.

## SENSOR BOARD - TEMPERATURE & HUMIDITY



**⚠ WARNING**

**Disconnect the electrical power to the machine and follow lockout / tagout procedures.**

**NOTE:** Sensor board is located within the food cavity, behind the control board, under a sheet metal cover.

### Sensor Board

1. Disconnect power supply.
2. Remove sensor board cover.

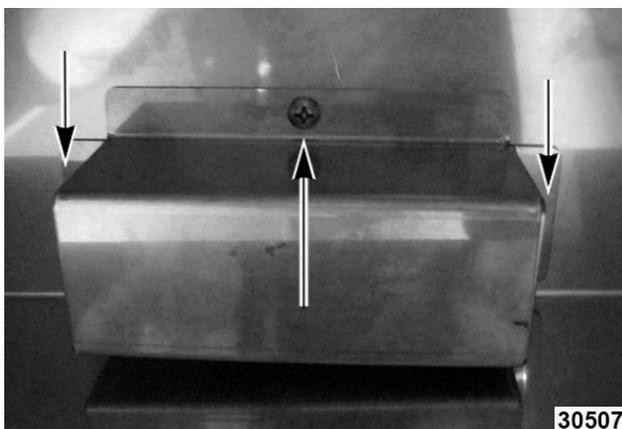


Fig. 16

3. Disconnect sensor wire plugs.

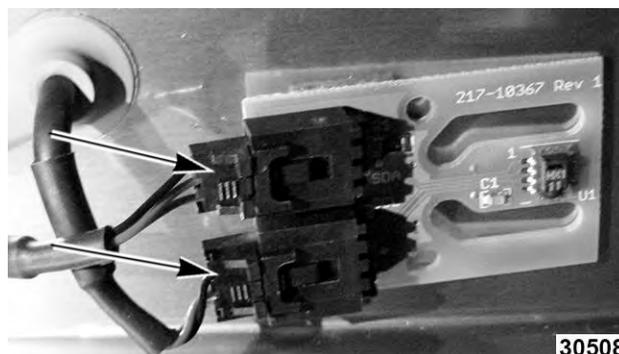


Fig. 17

4. Remove double-sided tape from cabinet surface.
5. Clean cabinet surface.
6. Apply double-sided tape to sensor and mount.
7. Plug sensor wire connectors into board.
8. Verify proper operation.

### Sensor Board Wire Harness

1. Remove sensor board cover.

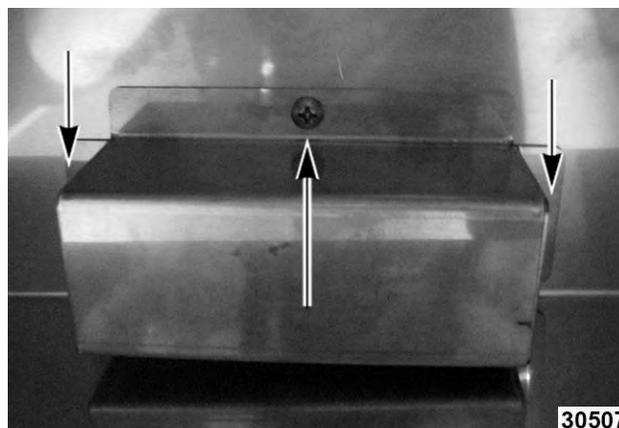


Fig. 18

2. Disconnect sensor wire plugs.

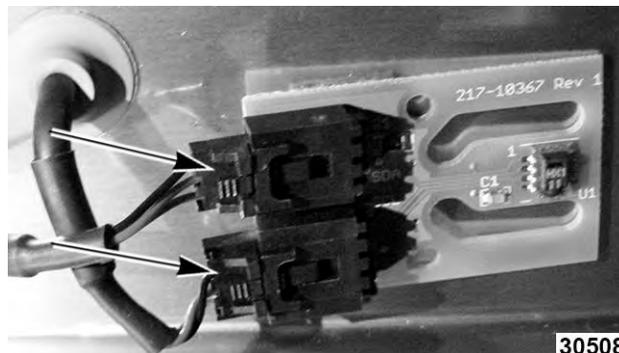


Fig. 19

3. Remove TOP COVER.
4. Disconnect wire harness plugs from board.

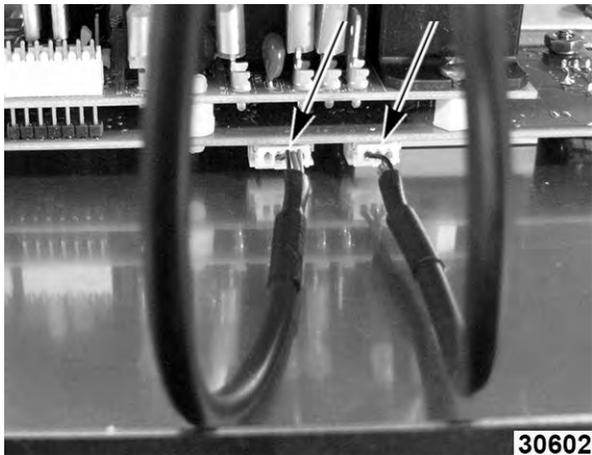


Fig. 20

5. Release grommets from top panel.

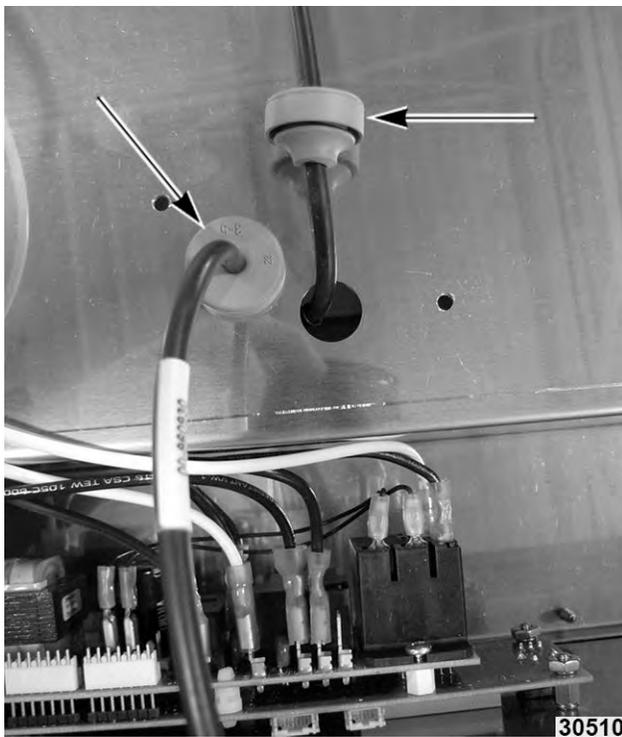


Fig. 21

6. Pull wire harness out.
7. Reverse steps to install.

**NOTICE**

Position grommets correctly during installation so they retain moisture from escaping.

8. Verify proper operation.

**DOOR ASSEMBLY**

1. Remove door hinge covers (1, Fig. 22) from lower and upper door hinge.

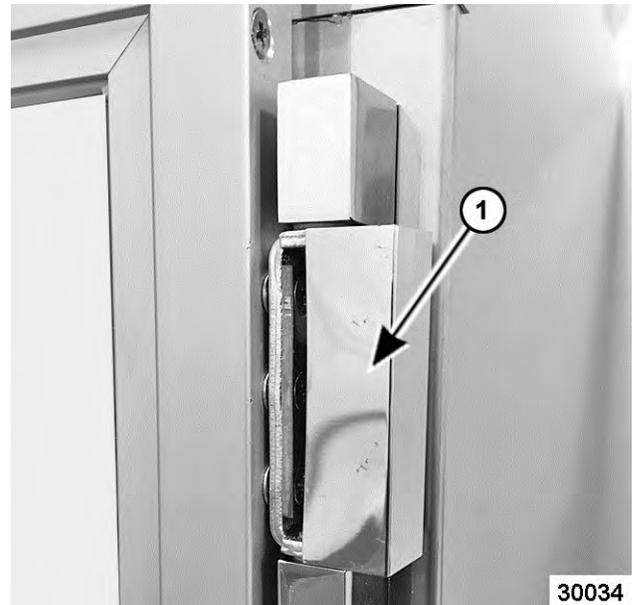


Fig. 22

**WARNING**

Remain in control of door when removing hinges.

2. Remove door hinge inside mounting screws from **lower door hinge first**.



Fig. 23

3. Remove door hinge inside mounting screws from **upper door hinge** while supporting door weight.
4. Lift door assembly from cabinet.
5. Reverse procedure to install.
6. Check for proper operation.

## DOOR GASKET

1. Open door to access gasket.
2. Remove door gasket by pulling it out from retaining channel in door assembly.

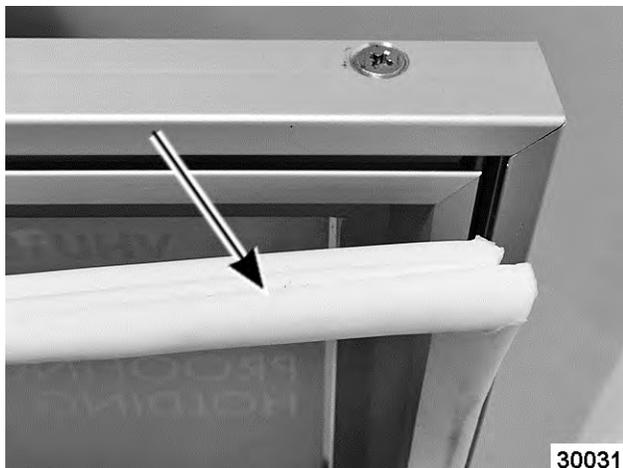


Fig. 24

3. Install gasket in each corner on door assembly.
  - A. Press gasket retaining lip into channel on door assembly.
  - B. Work gasket into channel about four inches away from corner, in each direction.

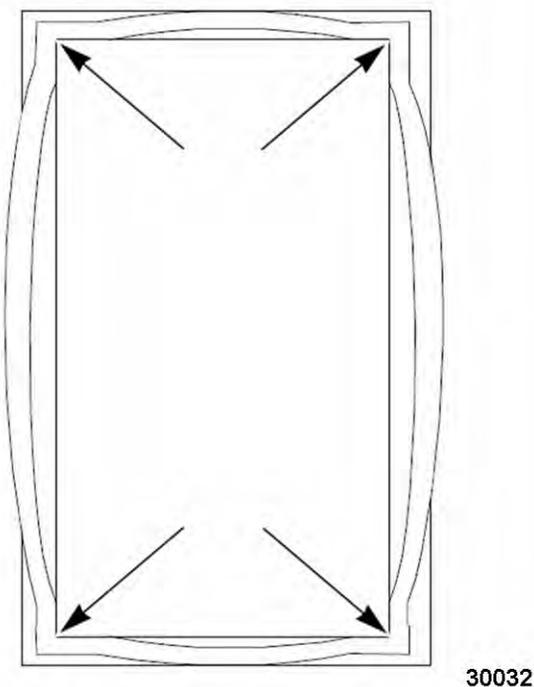


Fig. 25

4. Starting at the top, press gasket retaining lip into channel on door assembly while moving toward **middle**.

5. Repeat each side to complete gasket installation.
6. Check door for proper operation.

## DOOR LATCH (MAGNETIC)

1. Open door.
2. Remove screws securing door latch to door assembly.

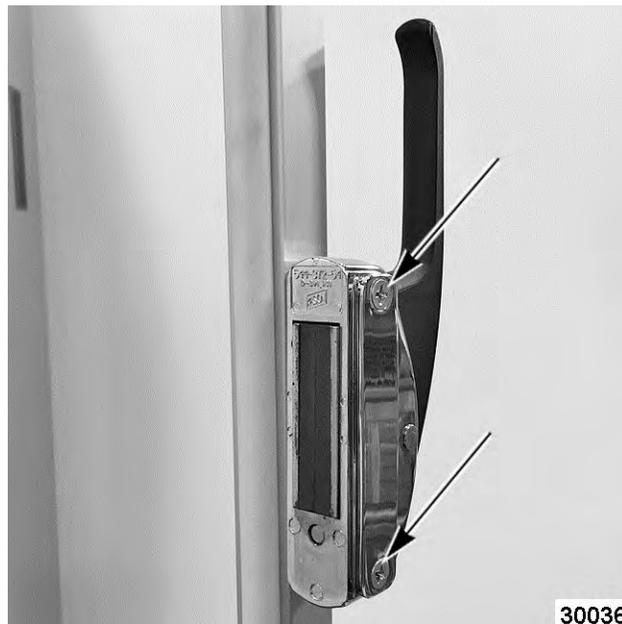


Fig. 26

3. Reverse procedure to install.
4. Check for proper operation.

## FUSE



### **WARNING**

**Disconnect the electrical power to the machine and follow lockout / tagout procedures.**

1. Unscrew fuse cover from back panel.

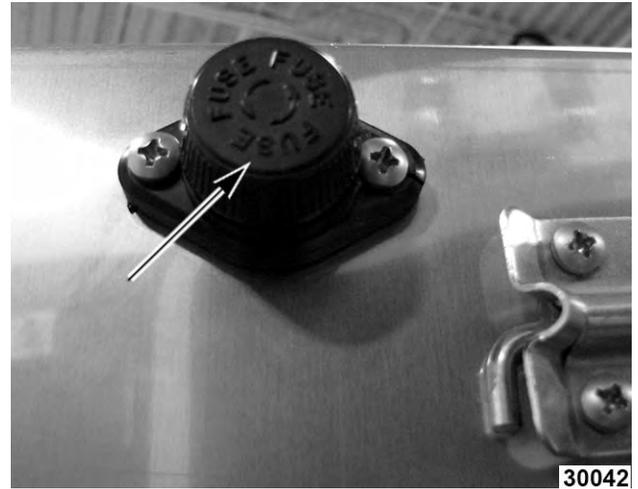
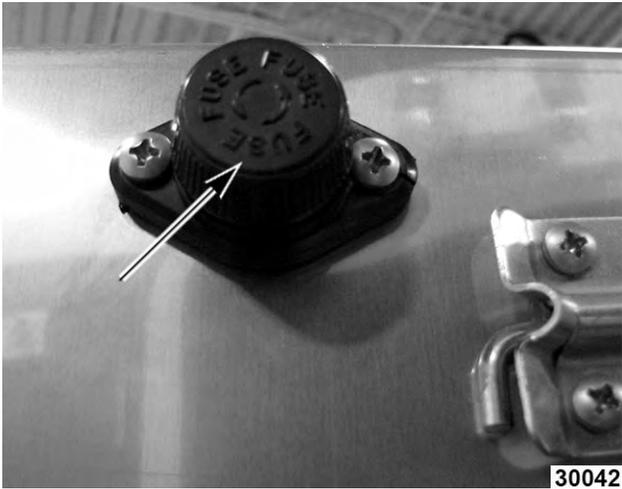


Fig. 29

2. Replace with same size and type of fuse.
3. Install cover.

4. Reverse procedure to install and verify proper operation.

## FUSE HOLDER



### **WARNING**

Disconnect the electrical power to the machine and follow lockout / tagout procedures.

1. Remove TOP COVER.
2. Note fuse wiring and disconnect.

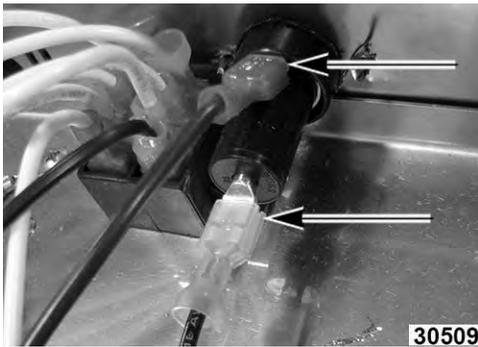
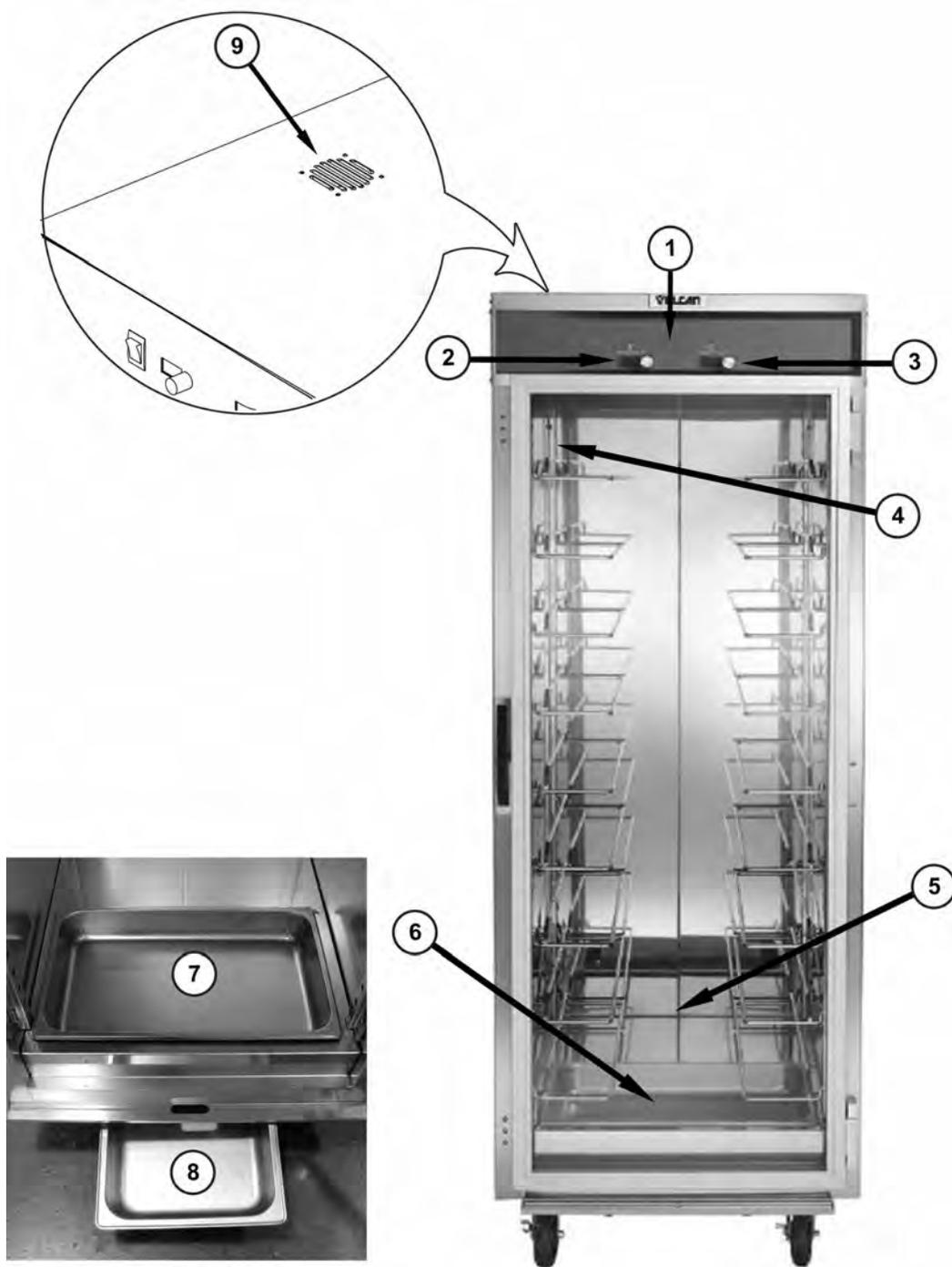


Fig. 28

3. Remove fuse holder mounting screws on back panel.

# ELECTRICAL OPERATION

## COMPONENT LOCATIONS



30030

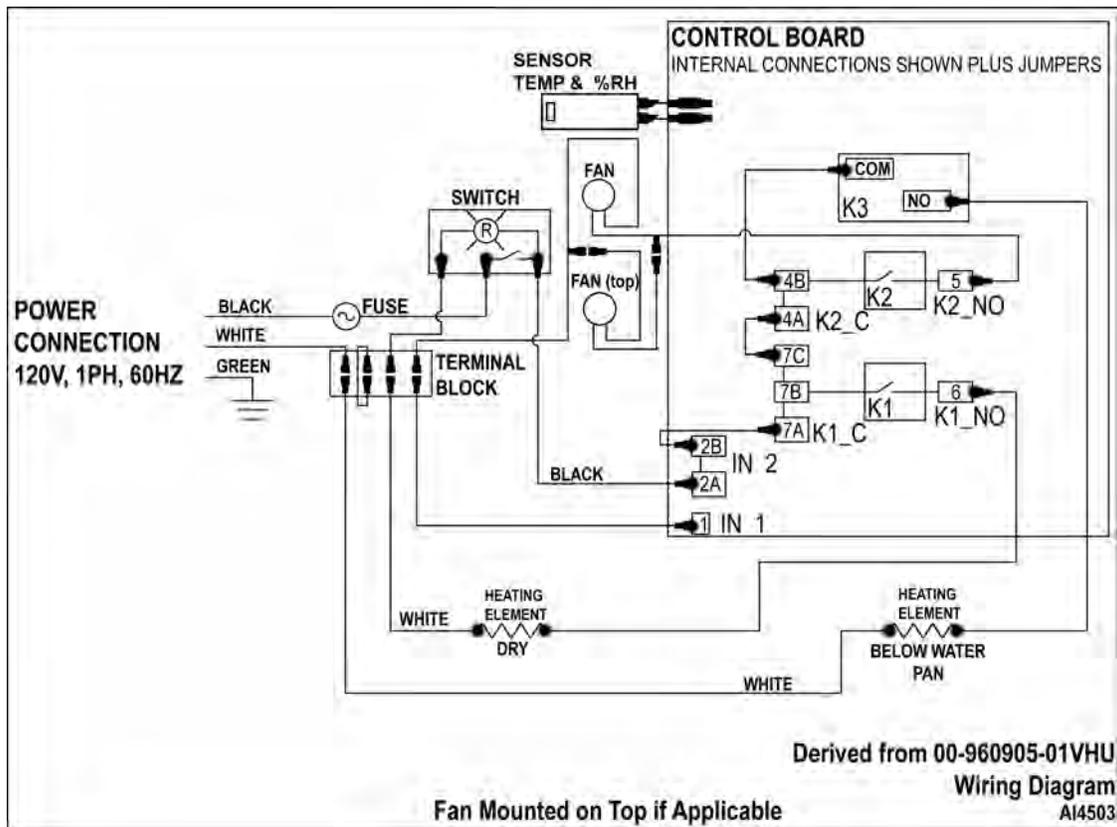
Fig. 30

Item	Description
1	Temperature & humidity Controller (behind control panel)
2	Temperature Display and Control Knob
3	Humidity Display and Control Knob
4	Food Compartment Fan
5	Heating element air (below bottom cover)
6	Heating element humidity (VHU interior pan)
7	VHU Interior Pan: Special Stainless Steel Pan with High temp black coating on bottom; gets placed in opening above heating element
8	VHU Exterior Pan: Standard Stainless Steel Pan located under unit for water collection
9	Cooling Fan

**COMPONENT DESCRIPTIONS**

ITEM	DESCRIPTION
Fuse	Protects controller board and electrical components.
Power Switch	Provides power to the control circuit. Internal red light indicates ON (SPST).
Food Compartment Fan	Circulates air inside the cabinet. Moisture resistant with metal fan blades.
Sensor Board	Senses temperature and humidity inside the cabinet and transmits signal to controller board.
Controller Board	Controls the temperature, humidity and fan inside the cabinet.
Heating Element - VHU Interior Pan	Heats the water to provide humidity.
Heating Element - Dry	Heats the air to keep prepared food at the proper serving temperatures.
Vent Fan	Circulates air in the electrical component area.

## WIRING DIAGRAM



**Fig. 31**

### SEQUENCE OF OPERATION

1. Conditions.
  - A. Unit connected to correct voltage and is properly grounded.
  - B. Power switch is off.
2. Power switch turned on.
  - A. Relays K1, K2 and K3 are de-energized (contacts N.O.).
  - B. Controller board performs diagnostic test and verifies temperature and humidity input signals are present.
  - C. If no errors codes display, the temperature and humidity settings flash in each display window.
3. Fan relay K2 is energized, K2 contacts close and power the fans.
4. Based on temperature and humidity settings, the board determines whether K1 relay will be energized to power element 1 (dry air); or K3 relay will be energized to power element 2 (humid air).

**NOTE:** When temperature or humidity settings are changed, after a brief pause, both element relays (K1 & K3) will be de-energized and return to N.O. position. Heating and humidity generation stop. The relay numbers will flash in each display window. Based on temperature and humidity level in cabinet vs. setting, the controller board determines which relay to energize. The number of the energized relay will flash in display window.

5. Adjust temperature and humidity to desired levels.
6. Turn power switch off stops heating cycle.

# TROUBLESHOOTING

## TROUBLESHOOTING

Symptom	Possible Cause
Cabinet not operating.	<ol style="list-style-type: none"> <li>1. Cabinet not connected to power source or circuit breaker tripped.</li> <li>2. Cabinet lighted power switch not ON or malfunctioning.</li> </ol>
Ground Fault Circuit Indicator (GFCI) tripped.	<ol style="list-style-type: none"> <li>1. Shorted heating element.</li> <li>2. Pinched/damaged wiring (heating elements or fan).</li> <li>3. Damaged power cord.</li> </ol>
Cabinet connected to power, switch is ON, circuit breaker is ON but cabinet not heating.	<ol style="list-style-type: none"> <li>1. Heating element malfunction.</li> <li>2. Temperature controller malfunction.</li> </ol>
Cabinet not heating properly.	<ol style="list-style-type: none"> <li>1. Black coated water pan should be used inside unit.</li> <li>2. Element wires disconnected from element. Replace wire assembly and element.</li> <li>3. Fan not circulating air or malfunction.</li> <li>4. Door not sealing properly.</li> <li>5. Temperature controller needs calibrating or malfunction.</li> </ol>
Fan not operating	<ol style="list-style-type: none"> <li>1. Temperature controller not supplying power to fan (malfunction).</li> <li>2. Fan wiring not connected or malfunction.</li> <li>3. Fan not circulating air or malfunction.</li> </ol>
Error codes, E01, E02, or E03.	<ol style="list-style-type: none"> <li>1. Refer to: <u>RESET SENSOR CODES</u>.</li> </ol>
Moisture present at the top of the cabinet near the control board.	<ol style="list-style-type: none"> <li>1. Fan mounted to top cover blocked off.</li> <li>2. Fan mounted to top cover not functioning.</li> <li>3. Fan mounted to top cover missing.</li> </ol>
Corrosion present inside cabinet.	<ol style="list-style-type: none"> <li>1. Periodic cleaning needed. Refer to Operations manual.</li> <li>2. Hardware has rusted. Replace rusted hardware with 18-8 stainless steel components and replace food cavity fan.</li> </ol>

## ERROR CODES

Code	Description	Correction
E01	Displays when controller detects and open temperature sensor	Refer to: <u>RESET SENSOR CODES</u>
E02	Displays when controller detects a shorted temperature sensor.	
E03	RH Display is ON and there is a short 10 RH error.	

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# **VULCAN**

## **CATALOG OF REPLACEMENT PARTS**

### ***V SERIES HEATED HOLDING INSULATED CABINETS***

#### **MODELS**

**VBP5  
VBP7  
VBP13  
VBP15  
VBP18  
VHP7  
VHP15  
VPT7  
VPT13  
VPT15  
VPT18**



**For additional information on Vulcan or to locate an authorized parts  
and service provider in your area, visit our website at [www.vulcanequipment.com](http://www.vulcanequipment.com)**

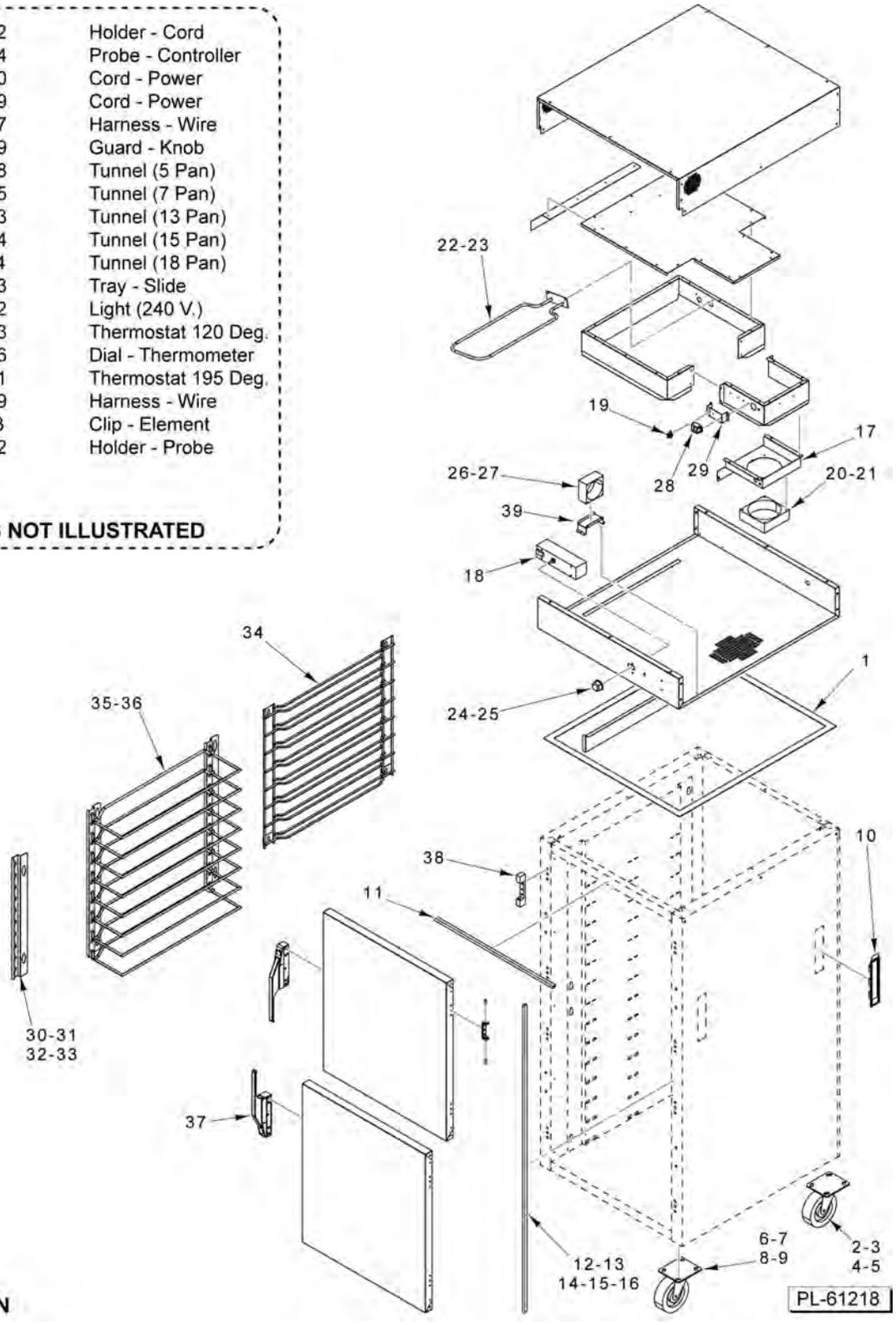


**Table of Contents**

5 CABINET (VBP/VHP/VPT)

40	00-960532	Holder - Cord
41	00-960904	Probe - Controller
42	00-961640	Cord - Power
43	00-960539	Cord - Power
44	00-960797	Harness - Wire
45	00-961459	Guard - Knob
46	00-960938	Tunnel (5 Pan)
47	00-961205	Tunnel (7 Pan)
48	00-961083	Tunnel (13 Pan)
49	00-960944	Tunnel (15 Pan)
50	00-961174	Tunnel (18 Pan)
51	00-960753	Tray - Slide
52	00-960672	Light (240 V.)
53	00-960743	Thermostat 120 Deg.
54	00-960736	Dial - Thermometer
55	00-960741	Thermostat 195 Deg.
56	00-960799	Harness - Wire
57	00-961113	Clip - Element
58	00-961372	Holder - Probe

**PARTS NOT ILLUSTRATED**



**VBP15 SHOWN**

**CABINET (VBP/VHP/VPT)**

**CABINET (VBP/VHP/VPT)**

ILLUS.	PART NO.	NAME OF PART	AMT.
PL-61218			
1	00-961263	Gasket - Top Gasket - Top.....	AR
2	00-497001-00003	Caster W/O Brake, Rigid (5 In.) (7/13/15/18 Pan) (Starting 2019).....	2
3	00-960519	Caster W/O Brake, Rigid (5 In.) (7/13/15/18 Pan) (Before 2019).....	2
4	00-961974	Caster 3 In. Caster W/O Brake, Rigid (3 In.) (5 Pan) (Starting 2019).....	2
5	00-960514	Caster W/O Brake, Rigid (3 In.) (5 Pan) (Before 2019).....	2
6	00-497001-00002	Caster W/ Brake, Swivel (5 In.) (7/13/15/18 Pan) (Starting 2019).....	2
7	00-960520	Caster W/ Brake, Swivel (5 In.) (7/13/15/18 Pan) (Before 2019).....	2
8	00-961975	Caster 3 In. Caster W/ Brake, Swivel (3 In.) (5 Pan) (Starting 2019).....	2
9	00-960516	Caster W/ Brake, Swivel (3 In.) (5 Pan) (Before 2019).....	2
10	00-960606	Handle - Recessed (Black).....	4
11	00-960579	Gasket - Door (Top).....	AR
12	00-960577	Gasket - Door (Side) (5 Pan).....	AR
13	00-960571	Gasket - Door (Side) (7 Pan).....	AR
14	00-961153	Gasket - Door (Side) (13 Pan).....	AR
15	00-961154	Gasket - Door (Side) (15 Pan).....	AR
16	00-961155	Gasket - Door (Side) (18 Pan).....	AR
17	00-961062	Holder - Fan.....	1
18	00-960903	Controller.....	1
19	00-960748	Thermostat.....	1
20	00-961086	Fan 4-3/4 In. (120 V.).....	1
21	00-961230	Fan 4-3/4 In. (240 V.).....	1
22	00-960564	Element - Heating (1500 Watt) (120 V.).....	1
23	00-960568	Element - Heating (1500 Watt) (240 V.).....	1
24	00-960644	Knob (13/15/18 Pan).....	1
25	00-961170	Knob (5/7 Pan).....	1
26	00-960833	Fan - Vent, 3-1/8 In. (120 V.).....	1
27	00-960834	Fan 3-1/2 In. (240 V.) Fan 3-1/2 In. (240 V.).....	1
28	00-960507	Terminal - Block.....	1
29	00-961643	Bracket - Standoff.....	1
30	00-961059	Support - Rack (5 Pan).....	4
31	00-960761	Support - Rack (7/15 Pan).....	AR
32	00-961085	Support - Rack (13 Pan).....	4
33	00-961058	Support - Rack (18 Pan).....	4
34	00-960705	Rack Rack - Lip Load (LL Models).....	AR
35	00-960706	Rack - Pan - Side Load (SL Models).....	AR
36	00-960707	Rack - Shelf (SL Models).....	AR
37	00-960663	Latch - Door.....	AR
38	00-960616	Hinge Assy.....	AR
39	00-961138	Bracket - Fan.....	AR
40	00-960532	Holder - Cord.....	1
41	00-960904	Probe - Controller.....	1
42	00-961640	Cord - Power (120 V.).....	1
43	00-960539	Cord - Power (240 V.).....	1
44	00-960797	Harness - Wire.....	1
45	00-961459	Guard - Knob (5/7 Pan).....	1
46	00-960938	Tunnel (5 Pan).....	1
47	00-961205	Tunnel (7 Pan).....	1
48	00-961083	Tunnel (13 Pan).....	1
49	00-960944	Tunnel (15 Pan).....	1
50	00-961174	Tunnel (18 Pan).....	1
51	00-960753	Tray - Slide.....	1
52	00-960672	Light - Indicator (240 V.) (VHP7/VHP15).....	1
53	00-960743	Thermostat 120 Deg. (VHP7/VHP15).....	1
54	00-960736	Dial - Thermometer (VHP7/VHP15).....	1
55	00-960741	Thermostat 195 Deg. (VHP7/VHP15).....	1
56	00-960799	Harness - Wire (VHP7/VHP15).....	1
57	00-961113	Clip - Element (VHP7/VHP15).....	1
58	00-961372	Holder - Probe (VHP7/VHP15).....	1





## CATALOG OF REPLACEMENT PARTS

### V SERIES HOLDING & TRANSPORTATION CABINETS AND BANQUET CARTS

#### MODELS

VHP3	ML-126343
VHP7	ML-126344
VHP8	ML-126345
VHP15	ML-126346
VHP20	ML-126347
VBP51	ML-138030
VBP71	ML-126358
VBP131	ML-126359
VBP151	ML-126360
VBP771	ML-126361
VBS7	ML-138032
VBS15	ML-138033
VHDP5	ML-138035
VDW3	ML-138036
VB90	ML-126548
VB96	ML-126550
VB150	ML-126552
VB200	ML-138034



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REPLACEMENT PARTS

PART NO.	NAME OF PART	AMT.					
		VB48	VB72	VB90	VB96	VB150	VB200
1	00-851800-00026 Bolt, Retaining Rack (Pack of 4)	AR	AR	AR	AR	AR	AR
2	00-851800-00023 Cap, Chrome Inspection	1	1	1	1	1	1
3	00-851800-00014 Clip, Element	2	2	2	2	2	2
4	00-851800-00148 Cord, Power (12/3 120V 20-amp)	1	1	1	1	1	1
5	00-851800-00213 Cord, Power (12/3 208/240V 15-amp)	1	1	1	1	1	1
6	00-851800-00151 Element (120V 1000W)	2	2	2	2	2	2
7	00-851800-00152 Element (208/240V 1000W)	2	2	2	2	2	2
8	00-851800-00018 Gasket, Door	12'	22'	21'	23'	27'	AR
9	00-851800-00606 Handle, Push/Pull (SS) (All Except VB90)	2		2	2	2	2
10	00-851800-00375 Handle, Push/Pull (SS) (VB90 Only)			2			
11	00-851800-00017 Hinge, Door	2	6	6	6	6	AR
12	00-851800-00132 Handle, Push/Pull		AR	AR	AR	AR	AR
13	00-851800-00029 Holder, Probe Thermometer	1	1	1	1	1	1
14	00-851800-00032 Holder, Probe Thermostat	2	2	2	2	2	2
15	00-851800-00031 Knob, Thermostat	1	1	1	1	1	1
16	00-851800-00008 Latch, Door (Mechanical)	1	2	2	2	2	2
17	00-851800-00626 Latch, Door (Magnetic)	AR	AR	AR	AR	AR	AR
18	00-851800-00021 Light, Indicator (Dual) (125V)	1	1	1	1	1	1
19	00-851800-00022 Light, Indicator (Dual) (240V)	1	1	1	1	1	1
20	00-851800-00317 Plate, Carrier, Wire (Covered)		9		12	15	
21	00-851800-00318 Plate, Carrier, Wire (Uncovered)		9		12	15	
22	00-851800-00404 Rack, Wire Shelf (VB48)	3					
23	00-851800-00405 Rack, Wire Shelf (VB72)		3				
24	00-851800-00406 Rack, Wire Shelf (VB90)			5			
25	00-851800-00407 Rack, Wire Shelf (VB96)				3		
26	00-851800-00408 Rack, Wire Shelf (VB150)					3	
27	00-851800-00229 Strain Relief, 12/3 Power Cord	1	1	1	1	1	1
28	00-851800-00028 Thermometer, Dial	1	1	1	1	1	1
29	00-851800-00030 Thermostat	1	1	1	1	1	1
30	00-851800-00410 Shelf Clips		24	36	24	24	AR
31	00-851800-00449 Controller, Electronic	1	1	1	1	1	1
32	00-851800-00135 Pan, Humidity (W/Sponge)	AR	AR	AR	AR	AR	AR
33	00-851800-00482 Probe, Electronic Air	1	1	1	1	1	1
34	00-851800-00319 Relay, Power (Electronic Control Only)	1	1	1	1	1	1
35	00-851800-00020 Sponge, Humidity	AR	AR	AR	AR	AR	AR
36	00-851800-00272 Switch, Rocker (Electronic Control Only)	1	1	1	1	1	1

**REPLACEMENT PARTS**

PART NO.	NAME OF PART	AMT.				
		VBP51	VBP71	VBP131	VBP151	VBP771
1	00-851800-00026 Bolt, Retaining Rack (Pack of 4) .....	AR	AR	AR	AR	AR
2	00-851800-00023 Cap, Chrome Inspection .....	1	1	1	1	1
3	00-851800-00014 Clip, Element .....	2	2	2	2	2
4	00-851800-00148 Cord, Power (12/3 120V 20-amp) .....	1	1	1	1	1
5	00-851800-00006 Cord, Power (16/3 120V) .....	1	1	1	1	1
	NA					
6	00-851800-00011 Element (120V 600W) .....	2	2	2	2	2
7	00-851800-00013 Element (208/240V 600W) .....	2	2	2	2	2
8	00-851800-00151 Element (120V 1000W) .....	2	2	2	2	2
9	00-851800-00152 Element (208/240V 1000W) .....	2	2	2	2	2
10	00-851800-00017 Gasket, Door(Per Foot) .....	7'	8'	12'	14'	16'
11	00-851800-00134 Handle, Side Lift .....	4	4			
12	00-851800-00132 Handle, Push/Pull .....			2	2	2
13	00-851800-00018 Hinge, Door .....	3	2	3	3	4
14	00-851800-00029 Holder, Probe Thermometer .....	1	1	1	1	1
15	00-851800-00032 Holder, Probe Thermostat .....	2	2	2	2	2
16	00-851800-00031 Knob, Thermostat .....	1	1	1	1	1
17	00-851800-00008 Latch, Door .....	1	1	1	1	2
18	00-851800-00626 Latch, Door (Magnetic) .....	1	1	1	1	2
19	00-851800-00021 Light, Indicator (Dual) (125V) .....	1	1	1	1	1
20	00-851800-00022 Light, Indicator (Dual) (240V) .....	1	1	1	1	1
21	00-851800-00310 Slides, Tray Metric (Each) .....	4	7	13	15	14
22	00-851800-00007 Strain Relief, 16/3 Power Cord .....	1	1	1	1	1
23	00-851800-00229 Strain Relief, 12/3 Power Cord .....	1	1	1	1	1
24	00-851800-00028 Thermometer, Dial .....	1	1	1	1	1
25	00-851800-00030 Thermostat .....	1	1	1	1	1
26	00-851800-00449 Controller, Electronic .....	1	1	1	1	1
27	00-851800-00135 Pan, Humidity (W/Sponge) .....	AR	AR	AR	AR	AR
28	00-851800-00482 Probe, Electronic Air .....	1	1	1	1	1
29	00-851800-00319 Relay, Power (Electronic Control Only) .....	1	1	1	1	1
30	00-851800-00020 Sponge, Humidity .....	AR	AR	AR	AR	AR
31	00-851800-00272 Switch, Rocker (Electronic Control Only) .....	1	1	1	1	1

**REPLACEMENT PARTS**

PART NO.	NAME OF PART	AMT.				
		VHP3	VHP7	VHP8	VHP15	VHP20
1	00-851800-00026 Bolt, Retaining Rack (Pack of 4) .....	AR	AR	AR	AR	AR
2	00-851800-00023 Cap, Chrome Inspection .....	1	1	1	1	1
3	00-851800-00014 Clip, Element .....	1	1	1	2	AR
4	00-851800-00006 Cord, Power (16/3 120V) .....	1	1	1	1	1
5	00-851800-00011 Element (120V 600W) .....	1	1	1	2	AR
6	00-851800-00013 Element (208/240V 600W) .....	1	1	1	2	AR
7	00-851800-00017 Gasket, Door(Per Foot) .....	7'	8'	8'	12'	AR
8	00-851800-00134 Handle, Side Lift .....	4	4	4		
9	00-851800-00132 Handle, Push/Pull .....				2	AR
10	00-851800-00018 Hinge, Door .....	2	2	2	3	AR
11	00-851800-00029 Holder, Probe Thermometer .....	1	1	1	1	1
12	00-851800-00032 Holder, Probe Thermostat .....	2	2	2	2	2
13	00-851800-00031 Knob, Thermostat .....	1	1	1	1	1
14	00-851800-00008 Latch, Door (Mechanical) .....	1	1	1	2	2
15	00-851800-00626 Latch, Door (Magnetic) .....	1	1	1	2	2
16	00-851800-00021 Light, Indicator (Dual) (125V) .....	1	1	1	1	1
17	00-851800-00022 Light, Indicator (Dual) (240V) .....	1	1	1	1	1
18	00-851800-00007 Strain Relief, 16/3 Power Cord .....	1	1	1	1	1
19	00-851800-00028 Thermometer, Dial .....	1	1	1	1	1
20	00-851800-00030 Thermostat .....	1	1	1	1	1
21	00-851800-00449 Controller, Electronic .....	1	1	1	1	1
22	00-851800-00135 Pan, Humidity (W/Sponge) .....	AR	AR	AR	AR	AR
23	00-851800-00482 Probe, Electronic Air .....	1	1	1	1	1
24	00-851800-00319 Relay, Power (Electronic Control Only) .....	1	1	1	1	1
25	00-851800-00020 Sponge, Humidity .....	AR	AR	AR	AR	AR
26	00-851800-00272 Switch, Rocker (Electronic Control Only) .....	1	1	1	1	1





# ***PARTS MANUAL***

## **V SERIES NON-INSULATED HOLDING & PROOFING CABINET**

**MODEL:  
VHFA9**

**VHFA18**

**VP18**



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Vulcan-Hart Food Holding and Transportation Cabinets are produced with quality workmanship and material. Proper installation, usage and maintenance will result in many years of satisfactory performance.

Before performing maintenance on the cabinet, thoroughly read the Service Manual and carefully follow all instructions in the order given. Refer to the Installation and Operation Manual for detailed operating instructions.

This manual is applicable only to models listed on the cover page.

To obtain Service and Parts information, contact Vulcan-Hart Service Department at the address listed on the front cover of this manual or refer to our website: [www.vulcanequipment.com](http://www.vulcanequipment.com).

**Technical Service                      1-800-814-2028**

**Service Parts                              1-866-628-0485**

**When calling for Technical Service or Parts, have the model number and serial number available.**

**VHFA / VP - SERIES  
(NON-INSULATED HOLDING, PROOFING)**

DESCRIPTION	VULCAN #
CASTER, 5" RIGID	497001-3
CASTER, 5" SWIVEL	497001-2
CLIP, ELEMENT	960525
CORD, POWER 16/3 120V. 15 AMP (VHFA9)	961640
CORD, POWER 12/3 120V. 20 AMP (VHFA18, VP18)	960533
CORD, POWER 10/3 120V. 30 AMP (VHFA18, VP18) - CANADA	962155
DOOR, GLASS (VHFA9)	960559
DOOR, GLASS (VHFA18)	960558
ELEMENT, 120V - 600W (VHFA9)	960563
ELEMENT, 120V - 1000W (VHFA18)	961358
FAN, BLOWER 120V 4.75" X 4.75" (VHFA)	960588
FAN, BLOWER 120V 4.75" X 4.75" (VP18)	960589
FAN, COOLING 120V 3.5" X 3.5" (VP18)	960833
GASKET, DOOR (VHFA9)	851800-835
GASKET, DOOR (VHFA18, VP18)	960599
HINGE, PIVOT	960617
HOLDER, CORD	960532
HOLDER, PROBE THERMOMETER	851800-29
HOLDER, PROBE THERMOSTAT	851800-32
KNOB, THERMOSTAT	960644
LATCH, DOOR MAGNETIC	960664
LIGHT, INDICATOR ROUND 240V (BEGIN 07-19)	960672
RACK, SIDE (VHFA)	960702
TRAY SLIDE (VP18)	960753
PAN, GN ½ (VP18)	960693
SWITCH, ROCKER (ON/OFF) (THRU 07-19)	960937
SWITCH, ROCKER (HOLD/PROOF) (VP18)	960934
THERMOMETER, DIAL	960736
THERMOSTAT	960741
SNAP-DISC THERMOSTAT, 110F (BEGIN 07-19)	962105



# CATALOG OF REPLACEMENT PARTS

## VHU18 INSULATED HUMIDIFIED HEATED HOLDING & PROOFING CABINET

VHU18



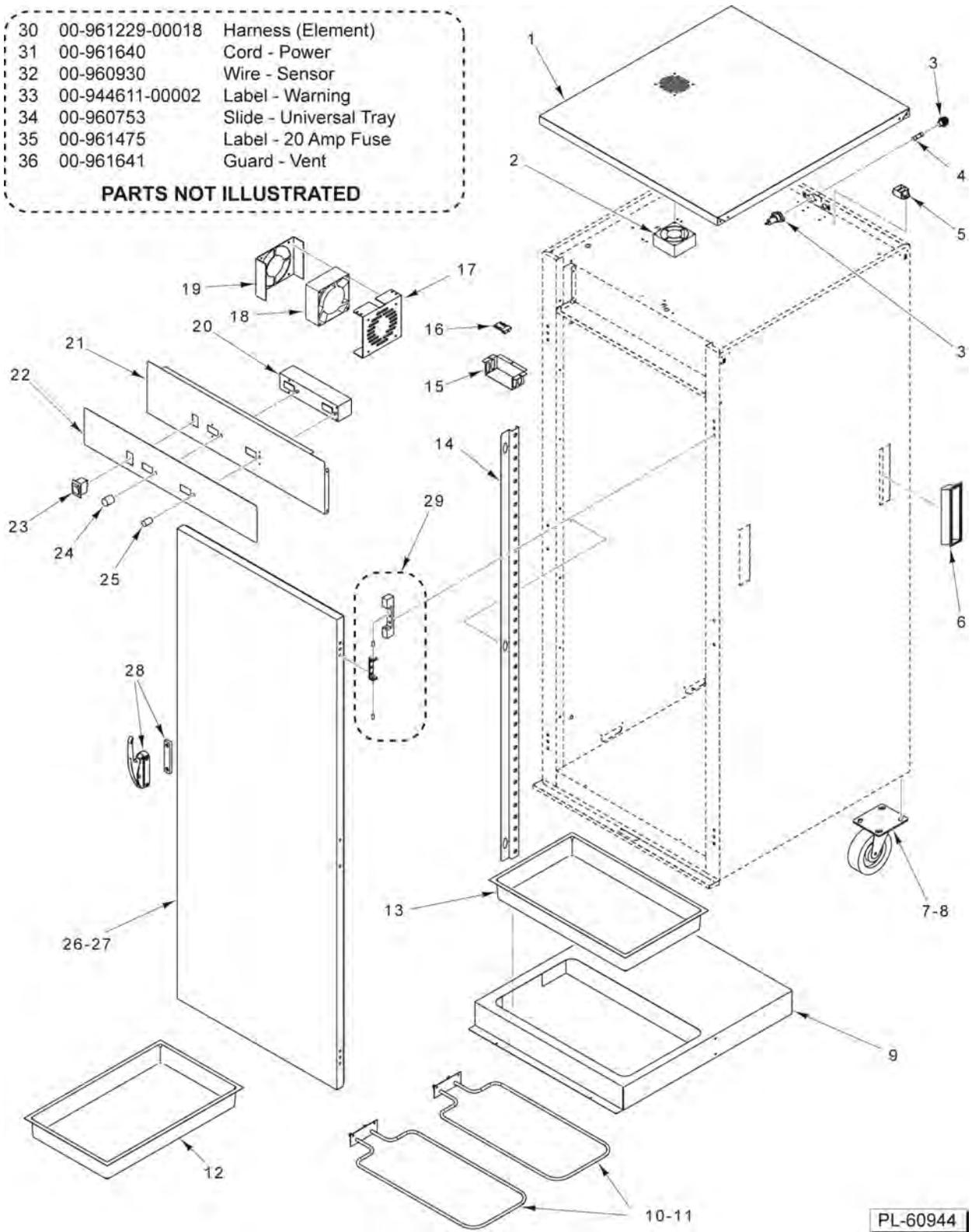
30043



**Table of Contents**

5 VHU CABINET

- |    |                 |                        |
|----|-----------------|------------------------|
| 30 | 00-961229-00018 | Harness (Element)      |
| 31 | 00-961640       | Cord - Power           |
| 32 | 00-960930       | Wire - Sensor          |
| 33 | 00-944611-00002 | Label - Warning        |
| 34 | 00-960753       | Slide - Universal Tray |
| 35 | 00-961475       | Label - 20 Amp Fuse    |
| 36 | 00-961641       | Guard - Vent           |
- PARTS NOT ILLUSTRATED**



**VHU CABINET**

**VHU CABINET**

ILLUS.	PART NO.	NAME OF PART	AMT.
PL-60944			
1	00-960912	Cover - Top.....	1
2	00-960833	Fan - Vent, 3-1/8 In. (Top Cover) (Built After 1/1/2017).....	1
3	00-961476	Holder - Fuse (Incls. Cap).....	1
4	00-961156-00G20	Fuse - 20 Amp.....	1
5	00-960507	Terminal - Block.....	1
6	00-960606	Handle - Recessed (Black).....	4
7	00-960519	Caster (Rigid).....	2
8	00-960520	Caster (Swivel).....	2
9	00-960913-01VHU	Cover - Element.....	1
10	00-961113	Clip - Element.....	2
11	00-961173-1500A	Element (1500 Watts).....	2
12	00-960933	Pan - VHU Exterior (Standard Stainless Steel Pan).....	1
13	00-961353	Pan - VHU Interior (Stainless Steel W/High Temp. Black Coating on Pan Bottom) .....	1
14	00-960906-00018	Support - Tray.....	4
15	00-960916	Cover - Sensor.....	1
16	00-960816	Sensor (Temperature/Humidity).....	1
17	00-960924	Bracket - Fan (Front).....	1
18	00-961061	Fan - Food Compartment, Moisture Rated (4.75 In. Sq.).....	1
19	00-960925-00001	Bracket - Fan (Back).....	1
20	00-960811	Controller (Temp. & Humidity).....	1
21	00-960914-01VHU	Panel - Control.....	1
22	00-960923-01VHU	Overlay.....	1
23	00-960937	Switch - Power (SPST, 120V, 20A.).....	1
24	00-961170	Knob (Large) (Temp.).....	1
25	00-961171	Knob (Small) (Humidity).....	1
26	00-960815	Glass Door Assy.....	1
27	00-851800-00937	Gasket - Door.....	1
28	00-960664	Latch - Door (Magnetic).....	1
29	00-960616	Hinge Assy.....	2
30	00-961229-00018	Harness (Element) (VHU18).....	2
31	00-961640	Cord - Power.....	1
32	00-960930	Wire - Sensor.....	1
33	00-944611-00002	Label - Warning (Hot Surface).....	1
34	00-960753	Slides - Universal Tray.....	1
35	00-961475	Label - Fuse Replacement.....	1
36	00-961641	Guard - Vent.....	1

