

# INSTALLATION & OPERATION MANUAL

# **VCD SERIES CHIP WARMERS**

**MODELS:** 

VCD22\* ML-138037 VCD44 ML-138069

\*Formerly VCD5





For additional information on Vulcan-Hart or to locate an authorized parts and service provider in your area, visit our website at <a href="www.vulcanhart.com">www.vulcanhart.com</a>

## 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 VICINITYOF THIS OR ANY OTHER APPLIANCE.



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.

# **TABLE OF CONTENTS**

IMPORTANT FOR YOUR SAFETY	1
GENERAL	3
INTRODUCTION	3
INSTALLATION	3
UNPACKING	3
ACCESS PANEL POSITIONING	4
LEGS INSTALLATION	4
SCOOP HOLDER INSTALLATION	4
LOCATION	4
ELECTRICAL REQUIREMENTS	5
ELECTRICAL CODES & STANDARDS	5
ELECTRICAL CONNECTIONS	
<b>OPERATION</b>	6
BEFORE FIRST USE	6
TESTING THE CHIP WARMER	6
OPERATION INSTRUCTIONS	
SHUTDOWN	7
EXTENDED SHUTDOWN	7
SPECIFICATIONS	
MAINTENANCE	
CLEANING	8
STAINLESS STEEL CARE	8
LOCKOUT / TAGOUT PROCEDURE	9
TROUBLESHOOTING 1	0
SERVICE & PARTS INFORMATION	
WIRING DIAGRAMS1	
WARRANTY	

## **GENERAL**

## INTRODUCTION

Vulcan-Hart Chip Warmers are produced with quality workmanship and material. Proper installation, usage, and maintenance of your warmer 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.

As with any piece of food service equipment, this Chip Warmer requires a minimum of care and maintenance. Recommended procedures are contained in this manual and should become a regular part of the operation of the unit.

## **INSTALLATION**

Before installing, verify that the electrical service agrees with the specifications on the rating plate located on the lower back corner of the warmer. 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. 4)

## **UNPACKING:**

The Warmer 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 warmer.

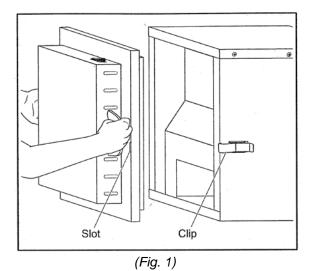
If the warmer is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

Carefully unpack warmer and place in a work accessible area.

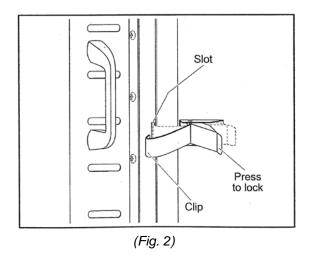
- 1. Remove banding holding the carton to the pallet.
- 2. Carefully remove warmer from carton and place on floor or table.
- 3. Remove any and all packaging materials inside unit.
- 4. Peel off all vinyl protection film.
- 5. Thoroughly clean the warmer as described in the cleaning instructions in this manual.

## **ACCESS PANEL POSITIONING:**

- 1. Ensure that top Baffle notches are over carriage bolts.
- 2. Insert Access Panel onto the back of the Chip Warmer. (Fig. 1)



3. On both sides of Access Panel, place clips into slots, then lock. (Fig. 3)



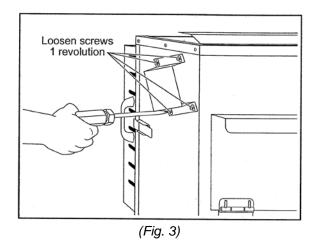
## **LEGS INSTALLATION:**

1. To install legs, carefully tip Chip Warmer onto its side. Screw legs into pre-drilled holes. Return warmer to the upright position.

### **SCOOP HOLDER INSTALLATION:**

The Chip Scoop Holder will secure up to a 6" wide scoop.

- 1. On either the left or right side of the Chip Warmer, loosen four side screws one revolution.
- 2. Position the Chip Scoop Holder. (Fig. 3)



3. Tighten four side screws.

#### **CLEANING:**

The warmer should be thoroughly cleaned prior to putting into service. Please refer to cleaning instructions on page 6.

## LOCATION:

For efficient warmer 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.

## **ELECTRICAL REQUIREMENTS**

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

The warmer must be installed in accordance with:

#### In the United States of America:

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

#### In Canada:

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

#### **ELECTRICAL CONNECTIONS:**

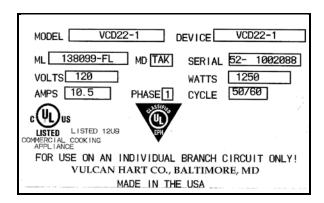
The warmer is factory wired for 110/120 volt single phase operation. All 110/120 volt warmers are equipped with a 8 foot cord and NEMA 5-15 plug as standard equipment. Refer to wiring diagram in the back of this manual.

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

**A WARNING** All warmers equipped with a three-prong plug. It is imperative that this plug must be connected into a properly grounded three-prong receptacle. lf 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 warmer and the plug configuration before the connection is made. (Fig. 4)

#### **SERIAL DATA PLATE**



(Fig. 4.)

A separate disconnect switch or circuit breaker is recommended to be placed at a convenient location between the Chip Warmer and the electric power source.

To avoid damage to the power supply cord, cord retainer bushing, or electrical outlets, always check to be certain that the power cord is unplugged from the power source before moving the unit.

## **OPERATION**

## **BEFORE FIRST USE**

The Chip Warmer should be thoroughly cleaned before initial use.

A WARNING Always disconnect electrical power to the Chip Warmer before cleaning or servicing.

- 1. Remove Access Panel by unlocking clips.
- 2. Place Access Panel away from Chip Warmer.
- 3. Remove Top Door.
- 4. Remove all internal Baffles through back opening.
- 5. Using a soft, clean cloth, clean Top Door and Baffles with a solution of mild detergent and warm water. Rinse with a soft cloth and warm water. Wipe dry with a soft dry cloth.

## Never spray the unit with a hose.

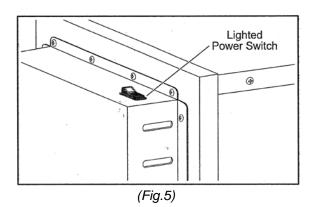
- 6. Using a soft, clean cloth, clean the inside of the unit with a solution of mild detergent and warm water. Rinse with a soft cloth and warm water. Wipe dry with a soft dry cloth.
- 7. Replace Top Door and all internal Baffles.
- 8. Reattach Access Panel.

## **TESTING THE CHIP WARMER**

AWARNING The Warmer and its parts are hot. Be very careful when operating, cleaning, or servicing the warmer.

Before using the Chip Warmer for the first time, verify that it operates properly.

- Verify that the Chip Warmer is connected to the correct power source.
- 2. The Lighted Power Switch is located on the top rear of the Chip Warmer. Switch power switch to ON position. Verify that the switch illuminates. (Fig. 5)



3. Check the interior rear of warmer to ensure that it is heating. The internal thermostat is factory preset to 180° F. The blower fan circulates heated air through the perforated removable chip tray located at the bottom of the interior of the cabinet (under the chips.)

## **OPERATION INSTRUCTIONS**

A WARNING The Warmer and its parts are hot. Be very careful when operating, cleaning, or servicing the warmer.

- Switch Power Switch to ON position. Verify that switch illuminates.
- 2. Open Top Door.
- 3. Pour chips into Baffle.

Do not overfill. The Top Door must be able to fully close.

VCD22 holds approx. 22 gallons and VCD44 holds approx. 44 gallons of chips.

- 4. Close Top Door.
- 5. After approx. 30 to 40 minutes, open Front Door to access warmed chips.
- 6. Use the Chip Scoop to remove desired amount of chips.
- 7. Close Front Door.

## **SHUTDOWN**

A WARNING The Warmer and its parts are hot. Be very careful when operating, cleaning, or servicing the warmer.

At the end of the day, switch Power Switch to OFF position. Follow cleaning instructions in this manual, if necessary.

## **EXTENDED SHUTDOWN**

A WARNING The Warmer and its parts are hot. Be very careful when operating, cleaning, or servicing the warmer.

Perform the following procedure to shut down the Chip Warmer for an extended shutdown.

- 1. Switch Power Switch to OFF position.
- 2. Unplug Chip Warmer.
- 3. Wait until Warmer cools down.
- 4. Thoroughly clean Warmer. Refer to "General Cleaning" instructions in the MAINTENANCE section of this manual.
- 5. Leave all doors slightly open to allow for ventilation.

SPECIFICATIONS								
				SHIPPING				
MODEL	HEIGHT	DEPTH	WIDTH	WEIGHT	<b>VOLTS</b>	WATTS	AMPS.	
	20.75 "	27.75 "	24.25 "	115#				
VCD22	527 mm	705 mm	616 mm	52 kg.	120	1250	10.5	
	38.5 "	27.75 "	24.25 "	160 #				
VCD44	978 mm	705 mm	616 mm	73 kg.	120	1250	10.5	

## **MAINTENANCE**

## **CLEANING**

AWARNING The Warmer and its parts are hot. Be very careful when operating, cleaning, or servicing the warmer.

A WARNING Always unplug electrical power supply before cleaning.

### **INTERIOR:**

The inside of the Chip Warmer must be cleaned each day.

- 1. Unplug electrical power supply.
- 2. Allow warmer to cool before cleaning.
- 3. Remove Access Panel by unlocking the clips.
- 4. Place Access Panel away from Chip Warmer.
- 5. Remove Top Door.
- 6. Remove all internal Baffles through back opening.
- 7. Using a soft, clean cloth, clean inside of warmer with a solution of mild detergent and warm water. Rinse with warm water, and wipe dry.
- 8. Replace Top Door and all internal Baffles.
- Reattach Access Panel.

#### **EXTERIOR:**

Refer to "STAINLESS STEEL CARE."

## **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.
- Never use steel wool which will leave behind particles that will rust.
- 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.
- 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.

## LOCKOUT / TAGOUT PROCEDURE



AWARNING Always perform the LOCKOUT / TAGOUT PROCEDURE of your facility 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.
- 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**

SYMPTOM	POSSIBLE CAUSE	REMEDY			
	Chip Warmer not plugged into power source.	Plug chip warmer into correct power source as indicated on serial data plate.			
Chip Warmer not operating	Lighted power switch not in ON position.	Press power switch to ON position.			
	No power.	Check fuse and reset is necessary.			
		Check GFCI switch on outlet.			
GFCI or Ground Fault Circuit Indicator tripped.	Moisture problem.  Damaged: element, wire,	Dry moisture problem.  Contact Authorized Service			
	power cord, etc.	Provider.			
Chip Warmer is connected to power source, power is on, but not heating.	Damaged: element, wire, power cord, motor, etc.	Contact Authorized Service Provider.			
Lighted power switch is illuminated, but circulating fan is not operating	Damaged fan, etc.	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: <a href="www.vulcanequipment.com">www.vulcanequipment.com</a> for a complete listing of Authorized Service and Parts depots.

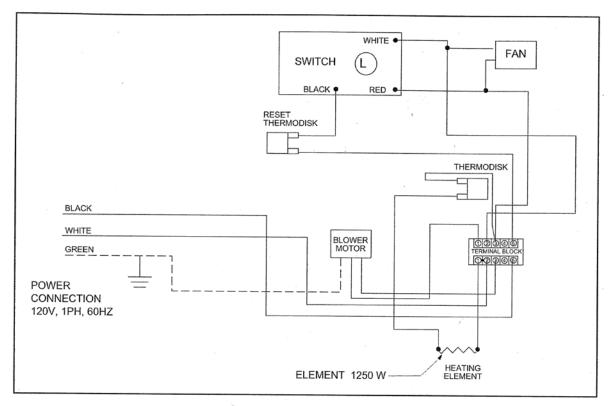
 Customer Service
 1-800-814-2028

 Technical Service
 1-800-814-2028

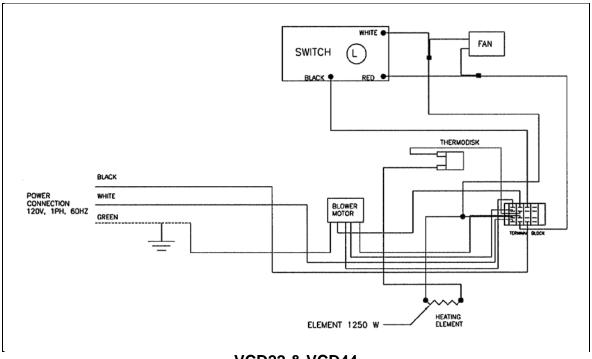
 Service Parts
 1-800-814-2028

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

## **WIRING DIAGRAMS**



**VCD22 & VCD44** 



VCD22 & VCD44 (Effective MARCH, 2013)



#### LIMITED ORIGINAL COMMERCIAL EQUIPMENT WARRANTY

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

Wolf is affiliated with Vulcan and thus Wolf products carry the same warranty as the 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.
- Original installation must occur within eighteen (18) months of the date of manufacture, and written proof of the installation date must be provided to Vulcan. The Products must be located at the original installation location.
- 3. Vulcan's sole liability shall be at Vulcan's option, for Vulcan to repair or replace any Product(s) found to be defective.
- 4. Vulcan will bear normal labor charges incurred in the repair or replacement of a warranted Product 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 Buyer requesting the service.
- 5. This warranty does not apply to any Product(s) which have not been used, maintained or installed in accordance with the directions published in the appropriate installation and operation manuals. 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, modified by unauthorized personnel, damaged by flood, fire or other acts of nature, or which have altered or missing serial numbers.
- 6. 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, expressed 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.
- 7. 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.
- 8. Exceptions to the one-year part warranty period are as listed:

Fryer equipment is supplied with limited fry tank warranty based on model. (See separate warranty statement.)

 ${\tt Steam\ equipment\ supplied\ with\ ScaleBlocker}{\tt 0water\ filtration\ system.}\ ({\tt See\ separate\ warranty\ statement.})$ 

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 rollers in drawer and chip warmers have a lifetime warranty.

Labor, travel and mileage will be covered during the first year only.

Heating elements on models 1024, 1036 and 1048-90 days from installation.

Refrigeration compressor part-5 years from the date of installation, the date of end user invoice or the date of dealer invoice, whichever is later, but in any case not to exceed 18 months from dealer invoice date.

- 9. 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 8. This warranty is for parts cost only, and does not include freight or labor charges.
- 10. 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, punitive or special or consequential damages or for any other loss of cost of similar type. In no event shall Vulcan's liability exceed the purchase price of the Products.
- 11. THIS WARRANTY AND THE LIABILITIES SET FORTH HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OF THEIR LIABILITIES AND WARRANTIES, EXPRESSED 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).