

***INSTALLATION & OPERATION MANUAL***  
***RRE Heavy Duty Electric Griddles***

**ITW Food Equipment Group**

**VULCAN**

**MODEL**

RRE24

RRE36

RRE48

RRE60

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



**RRE36**

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RETAIN THIS MANUAL FOR FUTURE USE

FORM F-36982 (12-08)

INSTALLATION, OPERATION AND CARE OF  
**HEAVY DUTY ELECTRIC GRIDDLES**

## **GENERAL**

Heavy Duty Electric Griddles are produced with quality workmanship and materials. Proper installation, usage and maintenance of your griddle will result in many years of satisfactory performance.

Thoroughly read this entire manual and carefully follow all of the instructions provided

## **INSTALLATION**

Before installing, check the electrical service to make sure it agrees with the specifications on the rating plate located in the upper right-hand corner of the control panel. If the supply and equipment voltages do not agree, do not proceed with the installation. Contact your dealer or Vulcan-Hart immediately.

### **INSTALLATION CODES AND STANDARDS**

Your Vulcan griddle 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) available from The National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269.
3. NFPA Standard #96 Vapor Removal from Cooking Equipment, (latest edition) available From the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

In Canada:

1. Local code
2. Canadian Electrical Code C22.1 Part 1 (latest edition) available from the Canadian Standard Association, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada, L4W 5N6.

## **UNPACKING**

This griddle was inspected before leaving the factory. The transportation company assumes full responsibility for safe delivery upon acceptance of shipment. Check for possible shipping damage immediately after unpacking. If the griddle is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

## **LEG ASSEMBLY**

Attach the legs to the body by threading the exposed leg stud into the threaded holes located on the underside of the unit.

Tighten each leg so that the top face of the leg is pressed firmly against the body bottom.

Do not operate griddle without legs or integrated stand as damage will occur.

## **LEVELING**

Position the griddle in the desired location. Level the griddle by using a wrench to turn the adjustable feet. You must hold the leg while turning the foot so that it's attachment to the griddle is not loosened.

## **LOCATION**

The installation location must be kept free and clear of combustibles. Do not permit air to blow directly at the griddle. Avoid open windows next to the griddle wherever possible. Avoid wall-type fans which create air cross-currents within the room.

This griddle is Design Certified for installation on a non-combustible counter with 4" legs, or combustible floor with 25" high stand.

## **INSTALLATION CLEARANCES**

	COMBUSTIBLE CONSTRUCTION	NON-COMBUSTIBLE CONSTRUCTION
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Back:	1"	0"
Right	1"	0"
Left Side	1"	0"

## **ELECTRICAL CONNECTIONS**

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

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

### Standard Electrical Connections

1. Remove the small cover plate on the back of the unit. This exposes the built-in junction box and griddle line leads.
2. Select a suitable knockout on the rear or bottom of the junction box.
3. Connect the griddle's line leads to the supply wires with factory supplied wire connectors as shown in the applicable wiring diagrams.
4. Push the excess wire into the junction box and replace the cover plate. Never operate griddle without cover in place.

## Close Backwall, Rigid Conduit Electrical Connections

1. Lift the front of the griddle top only as far as necessary to gain access to the terminal box on the body's inside rear.
2. Prop the griddle top up securely to prevent it from failing.

**NOTICE** Do not lift the griddle top too high, as thermostat and unit terminals may be damaged beyond repair.

3. Remove the fastener near the bottom of the terminal box and slide the enclosure up to expose knockouts.
4. Connect griddle's line leads to the supply wires as shown in the applicable wiring diagram. Do not disturb the griddle wiring.
5. Slide enclosure down and secure with fastener.
6. Lower the griddle top, making sure that it is securely in place.

Since the griddle is not fused, you must connect it to a fused circuit equipped with a suitable disconnecting means as required by local authorities.

STANDARD VOLTAGES-208 VOLTS OR 240 VOLTS 50/60 Hz.-SINGLE OR THREE PHASE 480 VOLTS 50/60 Hz.-THREE PHASE ONLY																
MODEL NO.	TOTAL CONN. KW	TOTAL KW PER CONN.	3 PHASE LOADING			NOMINAL AMPS PER LINE WIRE CONN.*										
			KW PER PHASE			3 PHASE									1 PHASE	
			PER CONN.*			208 VOLT			240 VOLT			480 VOLT			208	240
X-Y	Y-Z	X-Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	VOLT	VOLT
RRE24	10.8	10.8	5.4	0.0	5.4	45.0	26.0	26.0	39.0	22.5	22.5	19.5	11.3	11.3	51.9	45.0
RRE36	16.2	16.2	5.4	5.4	5.4	45.0	45.0	45.0	39.0	39.0	39.0	19.5	19.5	19.5	77.9	67.5
RRE48	21.6	21.6	10.8	5.4	5.4	68.7	68.7	45.2	59.5	59.5	39.0	29.8	29.8	19.5	103.9	90.0
RRE60**	27.0	16.2	5.4	5.4	5.4	45.0	45.0	45.0	39.0	39.0	39.0	19.5	19.5	19.5	77.9	67.5
		10.8	5.4	0.0	5.4	45.0	26.0	26.0	39.0	22.5	22.5	19.5	11.3	11.3	51.9	45.0
RRE72*	32.4	16.2	5.4	5.4	5.4	45.0	45.0	45.0	39.0	39.0	39.0	19.5	19.5	19.5	77.9	67.5
		16.2	5.4	5.4	5.4	45.0	45.0	45.0	39.0	39.0	39.0	19.5	19.5	19.5	77.9	67.5

\*NOTE: Two separate conduit connections must be made: each connection carries one-half of the rated load.

\*\*NOTE: Two separate conduit connections must be made: one connection carries 16.2 KW, the other connection carries 10.8 KW.

# OPERATION

**⚠️ WARNING** The griddle and its parts are hot. Use care when operating, cleaning or servicing the griddle.

**⚠️ WARNING** Disconnect power supply and follow lockout / tagout procedures before cleaning and servicing the appliance.

## BEFORE FIRST USE

It is recommended that you clean your Vulcan RRE griddle thoroughly with a mild soap and water. Rinse the griddle surface thoroughly with water and wipe dry with a soft clean cloth.

## SEASONING THE GRIDDLE

Before turning the unit ON, apply a high temp. cooking oil— about one ounce per square foot of surface. Do not use plain vegetable oil as it is not stabilized for high heat and may cause food stick and result in improperly cooked food. Turn the griddle ON and with a regular wipe cloth; work the oil into the whole griddle surface for two minutes.

After cleaning your griddle with chemicals, you should repeat the seasoning procedure for proper cooking.

## CONTROLS

Each thermostat independently controls a 12" wide griddle section. When each thermostat is turned ON, the corresponding red indicator light will illuminate to indicate that the elements are on for that section. When the griddle plate reaches the desired temperature set point, the elements will be turned off for that section and the indicator light will go off. At the end of each day, you must turn all the thermostats to the OFF position to turn off the unit.

## USING THE GRIDDLE

To preheat, set the thermostats for the desired temperatures 10-12 minutes before cooking.

A uniform and systematic approach to loading the griddle will produce the most consistent product results.

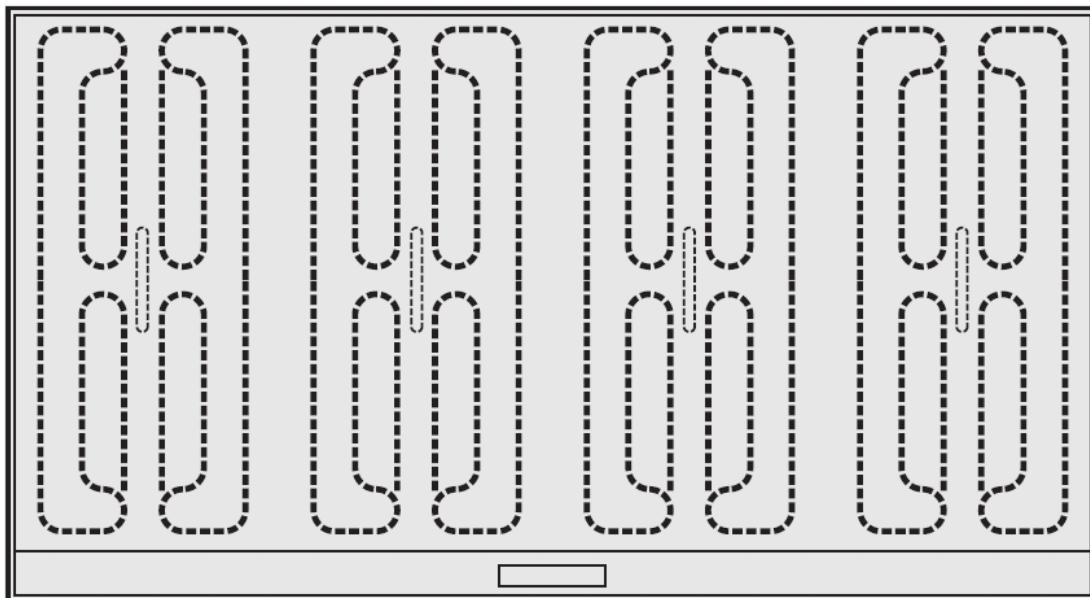
The griddle plate is a composite material which is engineered to provide a high heat transfer rate to the food. The top surface is stainless steel and can be scored or dented by careless use of a spatula or scraper. Be careful not to dent, scratch, or gouge the plate surface. Do not try to knock off loose food that may be on the spatula by tapping the corner or the edge of the spatula on the griddle surface. Do not use hardened steel spatulas. Use mild steel spatulas with rounded corners.

## **ZONE COOKING**

This griddle features two tubular heating elements in each 12" section. Each section is controlled by an independent thermostat. Each 12" section is a separate cooking zone, and allows cooking a wide variety of products over a single griddle plate. The chart below is a suggested usage of zone cooking.

When zone cooking, it is suggested that you start with your lowest temperature setting at either side of the griddle, increasing the zone temperature as you move up the zone line. These zone cooking guidelines will vary depending on product temperatures, size and shape. This guide should be adjusted to suit your product and operational cooking preference.

RRE48



<b>ZONE 1 (300°F)</b>	<b>ZONE 2 (350°F)</b>	<b>ZONE 3 (350°F)</b>	<b>ZONE 4 (400°F)</b>
<b>PRODUCT</b>	<b>PRODUCT</b>	<b>PRODUCT</b>	<b>PRODUCT</b>
Sausage Eggs (Hard Fried) Eggs (Scrambled) Burger (Well Done) Steak (Well Done) Chicken Breast Frozen Foods Pork Chops	Pancakes French Toast Bacon Eggs (Sunny Side Up) Boiled Ham Steak (Medium Well) Fresh Burger (Medium Well) Small Frozen Burger (Medium Well)	Omelet Hash Browns Canadian Bacon	Steak (Rare) Stir Fry Vegetables Salmon Fish Cakes Lobster Scampi

## CLEANING THE GRIDDLE

**⚠️ WARNING** The griddle and its parts are hot. Use care when operating, cleaning or servicing the griddle.

Empty the grease drawer as needed throughout the day and regularly clean at least once daily.

Clean the griddle regularly. A clean griddle always looks better, lasts longer and performs better. To produce evenly cooked, perfectly browned griddle products keep the griddle plate clean and free of carbonized grease. Carbonized grease on the surface hinders the transfer of heat from the griddle surface to the food, resulting in spotty browning and loss of cooking efficiency. Carbonized grease tends to cling to griddle foods, giving them a highly unsatisfactory and unappetizing appearance.

To keep the griddle clean and operating at peak efficiency, follow these procedures:

### AFTER EACH USE

Clean the griddle with a griddle scraper during the work shift.

### ONCE PER DAY

Thoroughly clean the griddle back splash, sides and front. Turn the griddle off and allow it to cool down between 275°F-300°F, apply some water and clean it with a griddle scraper. Remove, empty and wash the grease drawer in the same manner as an ordinary cooking utensil.

### ONCE PER WEEK

Clean the griddle surface thoroughly. A detergent may be used on the plate surface to help clean it, but be sure the detergent is thoroughly removed by flushing with clear water.

After removal of detergent the surface of the plate the griddle should be seasoned according to the instructions in this manual.

Clean stainless steel surfaces with a damp cloth and polish with a soft dry cloth. To remove discoloration, use a griddle cleaner.

If the griddle usage is very high, consider conducting this weekly cleaning procedure more than once per week.

Do not use a brick or griddle stone for cleaning.

Do not use water-jet to clean the griddle.

Do not use chlorine sanitizer in contact with griddle. Contact can cause discoloration, corrosion and permanent damage.

Do not use cleaning agents including Sodium Hydroxide, which is common in household oven cleaners.

## **SHUTDOWN OF GRIDDLE**

1. Turn all thermostats to the OFF position. This will shut down the griddle completely.

## **EXTENDED SHUTDOWN**

1. Shut off the main electrical supply.
2. Apply a heavy coat of vegetable oil over the griddle plate to inhibit rust.

## **MAINTENANCE**

**⚠ WARNING** The griddle and its parts are hot. Use care when operating, cleaning or servicing the griddle.

**⚠ WARNING** Disconnect power supply and follow lockout / tagout procedures before cleaning and servicing the appliance.

## **LUBRICATION**

There are no parts on this unit that require lubrication.

## **SERVICE AND PARTS INFORMATION**

Contact the Service Agency in your area to obtain service and parts information. For a complete listing of Service and Parts depots refer to or [www.vulcanhart.com](http://www.vulcanhart.com).

When calling for service the following information should be available from the appliance serial plate: Model Number, Serial Number and voltage.

## TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES
Heat does not come on when the temperature controller is turned on	<ol style="list-style-type: none"><li>1. Problem with thermostats. (Call for service)</li><li>2. Problem with heating elements. (Call for service)</li><li>3. Main power supply disconnected. (Call for service)</li></ol>
Fat appears to smoke excessively	<ol style="list-style-type: none"><li>1. Temperature set too high.</li><li>2. Moisture in food may be turning into steam</li></ol>
Food sticks to griddle or burned around edges or contains dark specs	<ol style="list-style-type: none"><li>1. Temperature set too high.</li><li>2. Griddle surface requires cleaning and/or seasoning.</li><li>3. Surface under food not covered with enough cooking oil.</li></ol>
Food under-cooked inside	<ol style="list-style-type: none"><li>1. Temperature set too low.</li><li>2. Food not cooked for long enough time.</li></ol>
Food tastes greasy or has objectionable off-flavor	<ol style="list-style-type: none"><li>1. Food itself may have off-flavor.</li><li>2. Food stored improperly before cooking.</li><li>3. Too much griddle fat used.</li><li>4. Temperature set too low.</li></ol>
Noticeable build-up of gum on griddle	<ol style="list-style-type: none"><li>1. Temperature set too high.</li><li>2. Griddle surface needs cleaning and/or seasoning.</li><li>3. Too much griddle fat used.</li></ol>



**VULCAN-HART COMPANY**  
**LIMITED ORIGINAL COMMERCIAL EQUIPMENT WARRANTY**

Vulcan-Hart (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 a division of Vulcan-Hart Company 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.
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:

Stainless steel fry tanks on model GHF91 will be warranted for five years.

Stainless steel fry tanks on model series: GR, ER and GPC will be warranted for 12 years.

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.

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

10. 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.
11. 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.
12. 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).



