

INSTALLATION & OPERATION MANUAL HEAVY DUTY GAS GRIDDLES



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©ITW Food Equipment Group, LLC 3600 North Point Blvd. Baltimore, MD 21222 RETAIN THIS MANUAL FOR FUTURE USE

FORM F-45402 (rev. 5-21)

IMPORTANT FOR YOUR SAFETY

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

POST IN A PROMINENT LOCATION THE INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE SMELL OF GAS IS DETECTED. THIS INFORMATION CAN BE OBTAINED FROM THE LOCAL GAS SUPPLIER.

IMPORTANT

IN THE EVENT A GAS ODOR IS DETECTED, SHUT DOWN UNITS AT MAIN SHUTOFF VALVE AND CONTACT THE LOCAL GAS COMPANY OR GAS SUPPLIER FOR SERVICE.

FOR YOUR SAFETY

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

A WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury, or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

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

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INSTALLATION, OPERATION AND CARE OF HEAVY DUTY GAS GRIDDLES GENERAL

VCCG Heavy Duty Gas 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.

Model	Number of Burners	BTU/hr Input Standard Infrared Burner		BTU/hr Input Optional
		Natural Gas	Propane Gas	U-Shaped Burner
VCCG24	2	48,000	44,000	60,000
VCCG36	3	72,000	66,000	90,000
VCCG48	4	96,000	88,000	120,000
VCCG60	5	120,000	110,000	150,000
VCCG72	6	144,000	132,000	180,000

INSTALLATION

Before installing, verify that the type of gas supply (natural gas or propane) agrees with the specifications on the rating plate located on the outside right of the unit. If the supply and equipment requirements do not agree, do not proceed with the installation. Contact your dealer immediately. It is recommended that a trained gas service technician with the necessary tools, instruments and skills perform the installation of the griddle.

UNPACKING

This griddle was inspected before leaving the factory. The carrier assumes full responsibility for the safe delivery upon acceptance of the shipment. Check for possible shipping damage immediately after receipt.

If the griddle is found to be damaged, complete the following steps:

- 1. Carrier must be notified within 5 business days of receipt.
- 2. Carrier's local terminal must be notified immediately upon discovery (note time, date, and who was spoken to), and follow up and confirm with written or electronic communication.
- 3. All original packing materials must be kept for inspection purposes.
- 4. The griddle cannot have been moved, installed, or modified.
- 5. Notify Vulcan Customer Service immediately at 800-814-2028.

Carefully unpack your griddle and make sure that no parts are discarded with packaging material.

LOCATION

The installation location must be kept free and clear of combustibles. When installing, never enclose the bottom of the griddle with a raised curb or other constructions that would obstruct flow of air into or out of the griddle. Adequate clearance for air openings into the combustion chamber must be provided. Make sure there is an adequate supply of air in the room to replace air taken out by the ventilation system.

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 a stand.

INSTALLATION CLEARANCES

	COMBUSTIBLE CONSTRUCTION	NON-COMBUSTIBLE CONSTRUCTION
Back: Right	6" 6"	0" 0"
Left Side	6"	0"

INSTALLATION CODES AND STANDARDS

The griddle must be installed in accordance with:

In the United States of America:

- 1. State and local codes.
- National Fuel Gas Code, ANSI-Z223.1/NFPA #54 (latest edition). This shall include but not be limited to: NFPA #54 Section 10.3.5.2 for Venting. Copies may be obtained from The American Gas Association Accredited Standards Committee Z223, @ 400 N. Capital St. NW, Washington, DC 20001 or the Secretary Standards Council, NFPA, 1 Batterymarch Park Quincy, MA 02169-7471

NOTE: In the Commonwealth of Massachusetts

All gas appliances vented through a ventilation hood or exhaust system equipped with a damper or with a power means of exhaust shall comply with 248 CMR.

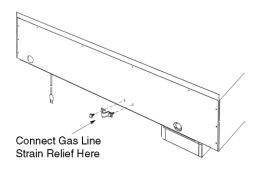
3. NFPA Standard # 96 *Vapor Removal from Cooking Equipment*, latest edition, available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

In Canada:

- 1. Local codes.
- 2. CAN/CSA-B149.1 Natural Gas Installation (latest edition)
- 3. CAN/CSA-B149.2 Propane Installation Code (latest edition), available from the Canadian Gas Association, 178 Rexdale Blvd., Etobicoke, Ontario, Canada M9W 1R3

GRIDDLES MOUNTED ON STANDS WITH CASTERS

Griddles mounted on stands with casters must use a flexible connector (not supplied) that complies with the Standard for Connectors for Movable Gas Appliances ANSI Z21.69•CSA6.16, and a quick-disconnect device that complies with Gas Fuel, ANSI Z21.3•CSA6.9. In addition, adequate means must be provided to limit movement of the appliance without depending on the connector and the quick-disconnect device (or its associated piping) to limit appliance movement. Attach the restraining device at the rear of the griddle as shown.



If disconnection of the restraint is necessary, turn off the gas supply before disconnecting. Reconnect the restraint prior to turning the gas supply on and returning the griddle to its installation position.

Casters are only supplied on a griddle stand. If the griddle is moved for any reason the griddle should be re-leveled (see LEVELING in this manual).

FLUE CONNECTIONS

Do not obstruct the flow of flue gases from the flue, located at the rear of the griddle. It is recommended that flue gases be ventilated to the outside of the building through a ventilation system installed by qualified personnel.

From the termination of the flue to the filters of the hood venting system, a minimum clearance of 18" must be maintained.

Information on the construction and installation of ventilating hoods may be obtained from the standard for "Vapor Removal from Cooking Equipment", NFPA No. 96 (latest edition), available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

STANDS

The griddle has an optional stainless steel stand with locking casters.

GAS CONNECTIONS

AWARNING Gas supply connections and any pipe joint compound must be resistant to the action of propane gases.

Use a ³/₄" NPT gas supply line for the griddle inlet, located at the rear of the griddle. All flexible and semi-rigid gas supply lines must comply with the applicable ANSI standard. To ensure maximum operating efficiency this appliance must be connected with a gas supply line of solid pipe or a commercial type Flexible Connector with the net inside diameter (I.D.) as large as or larger than the gas pipe inlet on this appliance. Codes require that a gas shutoff valve must be installed in the gas line upstream of the griddle.

A WARNING Prior to lighting, check all joints in the gas supply line for leaks. Use soap and water solution. Do not use an open flame.

After checking for leaks all lines receiving gas should be fully purged to remove air.

TESTING THE GAS SUPPLY SYSTEM

When the gas supply pressure exceeds ½ psig (3.45 kPa), the griddle and its individual shutoff valve must be disconnected from the gas supply piping system.

When the gas supply pressure is ½ psig (3.45 kPa) or less, the griddle should be isolated from the gas supply system by closing its individual manual shutoff valve.

GAS PRESSURE REGULATION

The VCCG griddle is constructed with internal gas regulators on each burner valve. The valves are pre set to 4" W.C. on natural gas units or 10" W.C. on propane gas units. An external gas regulator is not required as long as the gas pressure supplied to the unit is not greater than ½ psig (3.45 kPa) or 14" W.C. The recommended supply pressure (upstream of the griddle) should be 7-9" W.C. for natural gas and 11-12" W.C. for propane gas.

NOTICE At no time should the griddle be connected to supply pressure greater than ½ psig (3.45 kPa) or 14" W.C.

ELECTRICAL CONNECTIONS

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

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

A 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 this plug.

Power supply for electric ignition is 120 volts, 2 amp, 50/60 Hertz, 1 phase.

Do not connect the griddle to electrical supply until after gas connections are made.

OPERATION

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

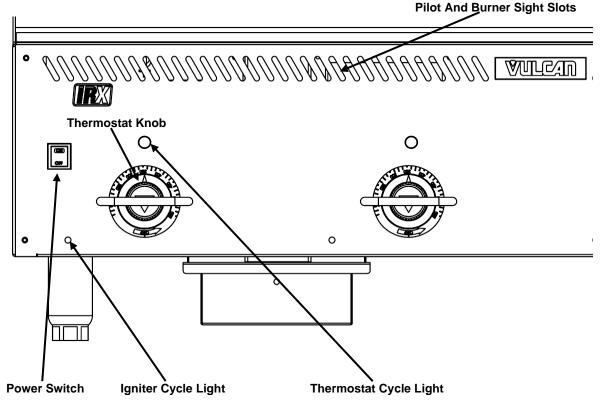
BEFORE FIRST USE

Remove all packing material and protective plastic from the surfaces of the unit. Before leaving the factory the griddle is coated with vegetable oil as a rust inhibitor. Remove this film when the griddle plate is being cleaned prior to its first cooking use. Heat the griddle to 200-300°F to loosen and melt the coating, then clean the surface by adding water or a non-corrosive, grease dissolving commercial cleaner, following the manufacturer's directions. Scrape the oil residue from the plate with a griddle scraper. Rinse thoroughly and wipe dry with a soft clean cloth. Clean all accessories.

SEASONING THE GRIDDLE

Season the griddle to avoid possible surface corrosion before first use, and after every cleaning. This will also help reduce the sticking of cooked food product. Heat griddle to a low temperature (300-350°F) and apply a small amount of cooking oil – about one ounce per square foot of surface. Use a soft lint-free cloth to spread the oil over the entire griddle surface to create a thin film. Wipe off any excess oil with a cloth. Repeat the procedure until the griddle has a slick, mirror-like finish.

CONTROLS



POWER SWITCH

The VCCG turns off and on by a single power switch. Pushing the power switch to the ON position is all that is required to put the unit into production once the thermostats have been set.

IGNITER CYCLE LIGHT

The igniter cycle light is a clear hole where the user can view the diagnostic LED on the ignition module. In order to view the light, user must have a straight line of sight through the hole to be able to see the green or red light.

The igniter cycle lights are located at the 8 o'clock position to each corresponding thermostat knob. There is one pilot and one igniter cycle light for each burner (12" section of griddle). Once the power switch has been pushed to the ON position, the igniters will begin to ignite the pilots. The igniter cycle light will flash the color green while attempting

to ignite the pilot. Once the pilot is lit and recognized by the igniter safety, the light will illuminate a steady green color. The pilot must be ignited (burning) and the igniter cycle light must be emitting a steady green color before the griddle burner will be allowed to ignite.

If the pilot fails to ignite after approximately 90 seconds, the igniter cycle light will illuminate a flashing red color that indicates the pilot did not ignite. Pushing the power switch to the OFF position and then back to the ON position will restart the pilot ignition cycle and the pilots will attempt to ignite again.

THERMOSTAT KNOB

Each 12" section of the griddle is independently controlled by a solid state thermostat control. The thermostats have an operating range of 150 to 550 degrees for standard steel and chrome plate surfaces (150 to 450 degrees for Rapid Recovery[™] composite plate option). The thermostat knobs will need to be turned to a temperature setting for the burners to ignite. Each 12" griddle section may be turned off independently by setting the corresponding thermostat to the OFF position. You may also leave all thermostats set at the desired settings and turn all sections off at once by pushing the power switch to the OFF position.

THERMOSTAT CYCLE LIGHT

The thermostat cycle lights are located at the 12 o'clock position to each corresponding thermostat knob. The light will illuminate when the surface cooking temperature drops below the thermostat knob set point. The illumination of this light indicates that the burner for that zone is lit.

STARTUP OF GRIDDLE

- 1. Set all thermostats to the desired temperature set points.
- 2. Push the power switch to the ON position. The red light behind the ON should illuminate indicating that electrical power is being supplied to the unit.
- 3. If the thermostat cycle lights do not illuminate a steady red color within approximately 90 seconds, push the power switch to OFF and back to ON again, this will restart the pilot ignition cycle. This process may need to be repeated several times on the initial installation of the griddle or if the griddle has been disconnected from the gas supply.
- 4. Check that all thermostat cycle lights are illuminating a steady red color to verify that all burners are lit and functioning properly.

SHUTDOWN OF GRIDDLE

Push the power switch to the OFF position, all lights should go off indicating that the griddle is no longer heating.

EXTENDED SHUTDOWN OF GRIDDLE

- 1. Push the power switch to the OFF position
- 1. Shut the main gas supply valve to the OFF position.
- 2. Unplug the griddle electrical supply cord.
- 3. Apply a coat of vegetable oil over the griddle plate to inhibit rust.

USING THE GRIDDLE

To preheat, turn the burners on about 20 minutes before cooking.

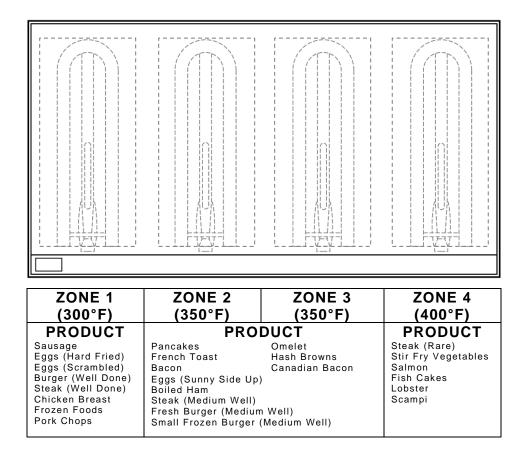
A uniform and systematic approach to loading the griddle will produce the most consistent product results.

The griddle plate is steel, but the surface is relatively soft 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. Use spatulas with rounded edges. Do not use tempered steel utensils. Do not chop on the griddle cooking surface.

ZONE COOKING

This griddle features infrared box burners in 12" sections (U-shaped burners optional), each controlled by independent thermostat controllers. Each 12" section is a separate cooking zone, and allows for cooking a variety of products over a single griddle plate.

The chart 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. Typically, the temperature differential between the center of one cooking zone to the center of another zone that is directly adjacent cannot be varied by more than 50 degrees. Some heat transfer from one area to the next is to be expected. 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.



NOTICE

It is recommended to avoid using ice to rapidly cool the griddle surface temperature. Doing so could result in thermal shock and damage to the cooking surface.

CLEANING

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

NOTICE Do not use a water jet stream to clean 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 cooking surface accordingly to the type of surface on your model. See the specific cleaning instructions by cooking surface finish. Empty the grease drawer throughout the day as needed.

ONCE PER DAY

Thoroughly clean the griddle back splash, sides and front. Do not hit the backsplash with a spatula or any other tool. This may create a gap between the splash and griddle plate that is hard to clean. Remove, empty and wash the grease drawer in the same manner as an ordinary cooking utensil.

ONCE PER WEEK

Clean the griddle surface thoroughly per the instructions for the surface finish of your particular model. After cleaning 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.

CLEANING THE STANDARD STEEL GRIDDLE PLATE COOKING SURFACE

AFTER EACH USE

Clean the griddle cooking surface regularly with a griddle scraper during the work shift.

ONCE PER DAY

Turn the griddle off and allow it to cool down between 275°F-300°F, apply room temperature water and clean it with a griddle scraper.

ONCE PER WEEK

Clean the griddle surface thoroughly. Use a griddle brick, screen, or Scotch Bright[™] pad on the surface as necessary. Rub with the grain of the metal while the griddle is still warm (not hot). 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 cleaning, reseason the cooking surface according to the instructions in this manual. If the griddle usage is very high, consider conducting this weekly cleaning procedure more than once per week.

CLEANING THE OPTIONAL CHROME GRIDDLE PLATE COOKING SURFACE

AFTER EACH USE

Clean the griddle cooking surface regularly with a palmetto brush and a bladed griddle scraper during the work shift. Never use an abrasive scouring pad or griddle brick on a chrome plate surface. The chrome surface can be damaged by careless use of a spatula or scraper.

ONCE PER DAY

Clean chrome surfaces with a damp cloth and polish with a soft dry cloth.

ONCE PER WEEK

If the chrome plate has become carbonized or blackened, use a non-abrasive, nonsilicated cleaner such as Bon Ami®. Be sure the cleaning agent is thoroughly removed by flushing with clear water. Wipe with a damp cloth and polish with a soft dry cloth. After cleaning, reseason the cooking surface according to the instructions in this manual.

CLEANING THE OPTIONAL RAPID RECOVERY™ COMPOSITE GRIDDLE PLATE COOKING SURFACE

The Rapid Recovery^M 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.

AFTER EACH USE

Clean the griddle cooking surface regularly with Nemco Easy Grill Scraper™ or similar type of griddle scraper during the work shift.

ONCE PER DAY

Turn the griddle off and allow it to cool down between 275°F-300°F, apply room temperature water and clean it with a griddle scraper.

ONCE PER WEEK

Clean the griddle surface thoroughly with water, Scotch-Brite[™] Quick Clean Griddle System or Ecolab Grease Express [™] High-Temp Grill Cleaner. Be sure the cleaning agent is thoroughly removed by flushing with clear water. After cleaning, reseason the cooking surface according to the instructions in this manual.

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 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.

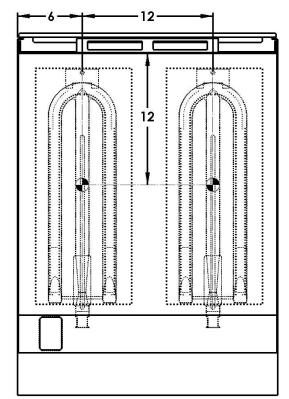
ADJUSTMENTS

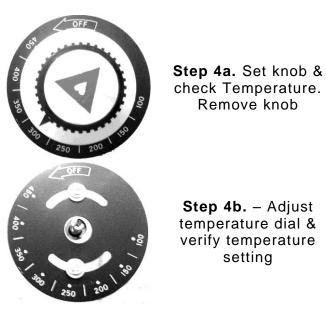
CALIBRATION

1. Each thermostat controls a 12" zone of the griddle. Using a Surface Probe temperature measurement device, observe the temperatures at the center points of the cooking zones. These points are located by starting 6" from the side splash (left or right) and every 12" across the width of the griddle, with all points located 12" back from the front edge of the griddle plate.

NOTE: Use of infrared thermometers is not recommended. These devices are highly sensitive to surface color (clean or dirty), angle of reading and distance from the unit.

- Set thermostats to 350°F and allow to stabilize, allowing the burner to cycle ON and OFF at least two times.
- Watch for the thermostat cycle light to go OFF, then measure the temperature for that zone. The temperature should be 350°F ±10°F. If not, continue to Step 4.
- 4.
- a. Carefully loosen the knob set screw. DO NOT allow the knob to turn. Carefully remove the knob from the thermostat shaft, exposing the temperature dial.
- b. Loosen screws on the temperature dial and adjust so the temperature indicated by the knob arrow matches the griddle plate temperature reading. Knob will have to be placed back on the shaft to verify adjustment.
- 5. Once calibration is achieved, tighten the





temperature dial screws and knob set screws.



Step 5 – Replace knob & tighten screws

LEVELING

The griddle must be level (side-to-side and front-to-back) during operation to ensure proper performance. Improper leveling can result in uneven temperature distribution, cold spots, and possibly damage electrical components.

- 1. Place a level on the griddle.
- 2. Adjust legs by turning the bullet feet at the bottom of each leg. Using pliers or a crescent wrench, turn the feet counter-clockwise to increase height, and clockwise to decrease height until leveling is achieved. Do not extend the legs more than 1-³/₄".

MAINTENANCE

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

GENERAL

The griddle should be checked yearly by a qualified gas service technician for proper calibration, proper gas pressure and grease or gas leaks.

VENT

Daily, when the griddle is cool, check the flue vent (at rear of unit) and clear any obstructions.

SERVICE AND PARTS INFORMATION

Contact the Service Contractor in your area to obtain service and parts information. For a complete listing of Service and Parts depots refer to **www.vulcanequipment.com**.

When calling for service the following information should be available from the appliance serial plate: Model Number, Serial Number and Gas Type. The appliance serial plate is located on the right side panel.

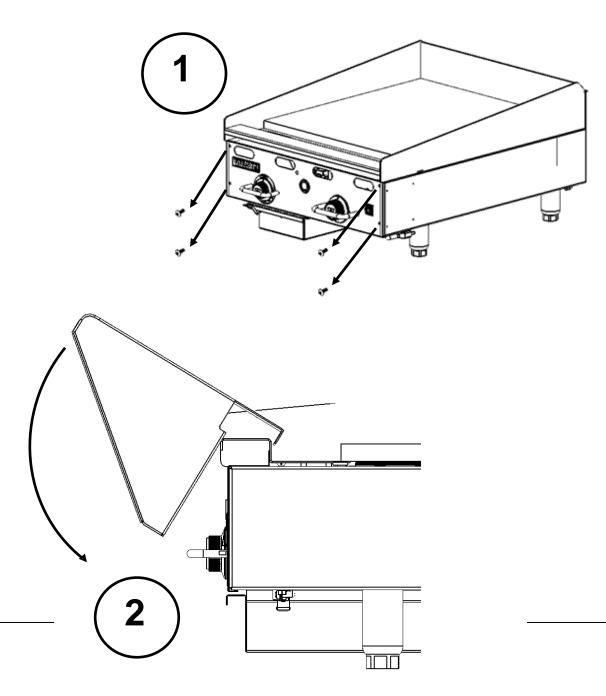
TROUBLESHOOTING

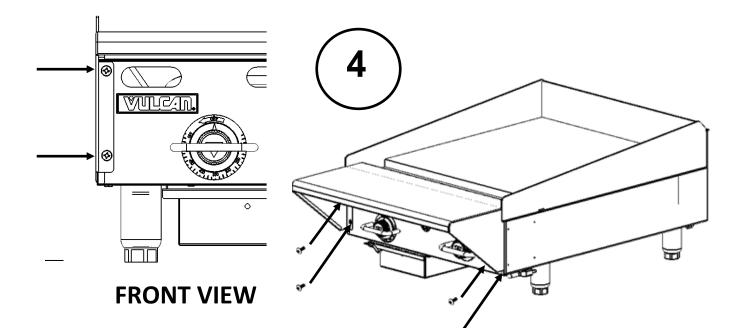
PROBLEM	POSSIBLE CAUSES
Heat does not come on when individual thermostat knob is set	 Cooking surface temp is above set point. Pilot burner not lit. Problem with burner solenoid valves. (Call for service) Problem with thermocouple. (Call for service) Low gas pressure. (Call for service)
Pilot burners will not light	 Main gas shut-off valve not in On position. Power switch not in ON position. Push power switch to OFF and back to ON to restart pilot ignition cycle. Problem with safety-ignition module. (Call for service) Obstructed pilot orifice. (Call for service) Low gas pressure. (Call for service)
Pilot burner will not stay lit	 Obstructed orifice. (Call for service) Gas supply not purged of air. Air blowing pilot out. (Call for service) Problem with pilot safety valve. (Call for service) Electrode sensor not in flame. (Call for service) Low gas pressure. (Call for service)
Fat appears to smoke excessively	 Temperature set too high. Moisture in food may be turning into steam
Food sticks to griddle or burned around edges or contains dark specs	 Temperature set too high. Griddle surface requires cleaning and/or seasoning. Surface under food not covered with enough cooking oil.
Food under-cooked inside	 Temperature set too low. Food not cooked for long enough time.
Food tastes greasy or has objectionable off-flavor	 Food itself may have off-flavor. Food stored improperly before cooking.

	 Too much griddle fat used. Temperature set too low.
Noticeable build-up of gum on griddle	 Temperature set too high. Griddle surface needs cleaning and/or seasoning. Too much griddle fat used.

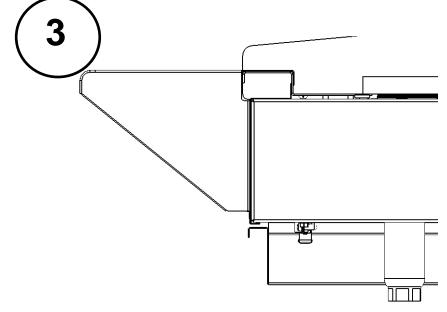
ACCESSORY INSTALLATION

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









NOTES