



# **INSTALLATION & OPERATION MANUAL HEAVY DUTY GAS GRIDDLES**



948RX

## **MODELS**

924RX  
936RX  
948RX  
960RX  
972RX



MSA48

MSA24	ASA24
MSA36	ASA36
MSA48	ASA48
MSA60	ASA60
MSA72	ASA72



AGM48

AGM24  
AGM36  
AGM48  
AGM60  
AGM72

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)

## 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.**

### **⚠ 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

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 Rating
924RX/MSA24/ASA24/AGM24	2	54,000
936RX/MSA36/ASA36/AGM36	3	81,000
948RX/MSA48/ASA48/AGM48	4	108,000
960RX/MSA60/ASA60/AGM60	5	135,000
972RX/MSA72/ASA72/AGM72	6	162,000

## 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. A pressure regulator designed to operate with the griddle has been supplied and must be installed before the griddle is placed into service (Refer to GAS PRESSURE REGULATOR INSTALLATION in this manual).

**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 25” high stand.

**INSTALLATION CLEARANCES**

	COMBUSTIBLE CONSTRUCTION	NON-COMBUSTIBLE CONSTRUCTION
Back:	6”	0”
Right	6”	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.
2. 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.

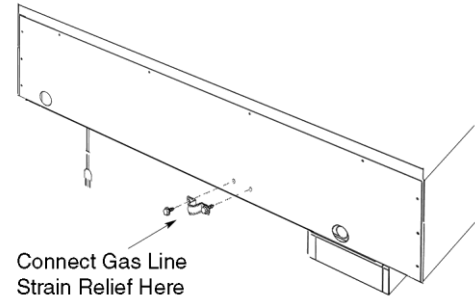
3. NFPA Standard # 96 *Vapor Removal from Cooking Equipment*, latest edition, available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

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 in Fig. 1.



**Fig. 1**

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.

Castors 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 24" high by 30" deep stainless steel stand with casters. The two front casters lock. The stand includes a top shelf with marine edges style lip and a lower shelf.

## GAS CONNECTIONS

**NOTICE** 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.

**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.

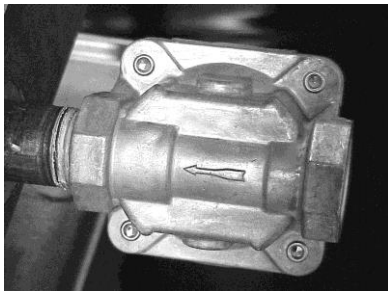
## TESTING THE GAS SUPPLY SYSTEM

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 REGULATOR INSTALLATION

A gas pressure regulator is supplied with the griddle and must be installed. Install the regulator as close to the griddle on the gas supply line as possible. Make sure that the arrow on the underside of the regulator is oriented in the direction of gas flow to the griddle (Fig. 2) and the regulator is positioned with the vent plug and adjustment screw upright (Fig. 3). Check and set the gas pressure after the regulator is installed. The pressure should be set for 4" water column (W.C.) for natural gas and 10" W.C. for propane gas while all burners are on. It is recommended that a trained gas service technician with the necessary tools, instruments and skills perform the installation of the griddle and gas pressure regulator.



**Fig. 2**



**Fig. 3**

The supply pressure (upstream of the regulator) should be 7-9" W.C. for natural gas and 11-12" W.C. for propane gas. At no time should the griddle be connected to supply pressure greater than ½ psig (3.45 kPa) or 14" W.C.

## ELECTRICAL CONNECTIONS – 900RX MODELS

**⚠ 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.

**⚠ 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, 1 amp, 50/60 Hertz, 1 phase.

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

# OPERATION

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

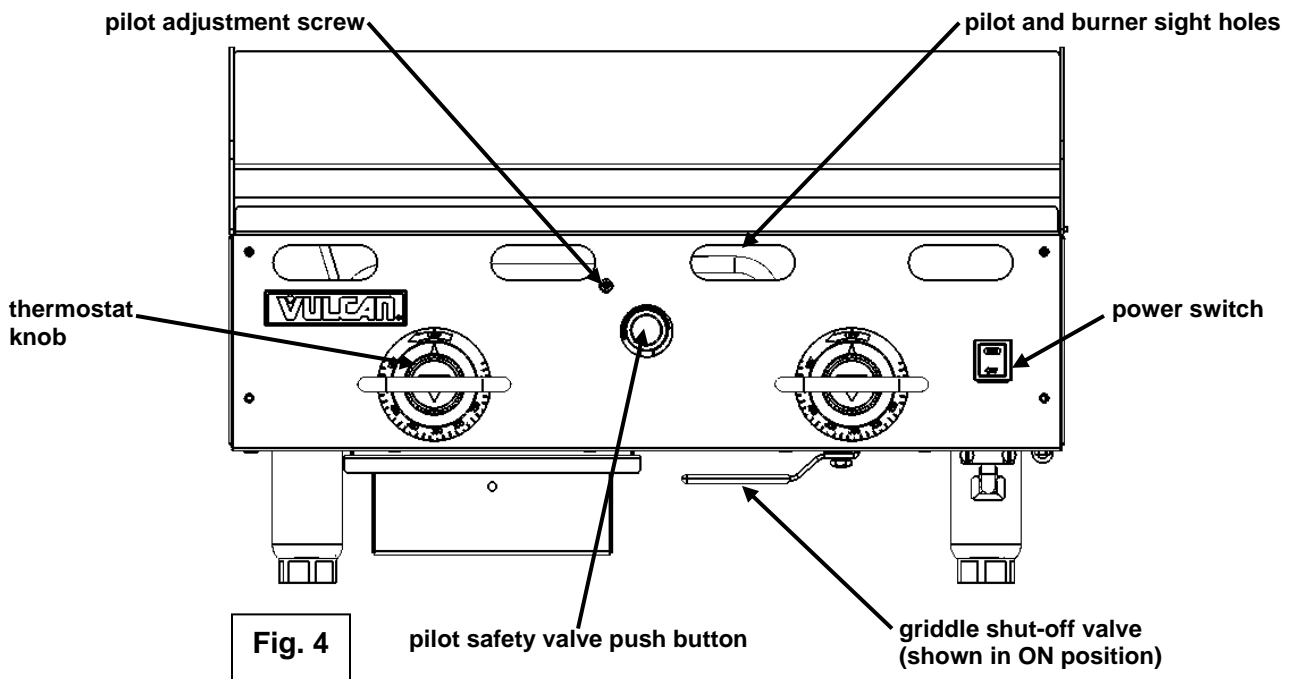
## BEFORE FIRST USE

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 – 900RX MODELS





This model features an electric ignition system that is controlled by a momentary power switch. The power switch turns the electric ignition system off and on only and will only supply power to the igniters when held down in the ON position. The burners and pilots will continue to work with power switch in the OFF position until the gas supply to the unit is cut off or the griddle gas shut-off valve is turned to the OFF position (Fig. 6). In the event of a failure of the electronic ignition system, it is possible to ignite the pilots with an outside source (such as a lit taper, etc). See pilot lighting procedure.

There is one pilot and one safety valve for every two burners except on the 36" and 60" models. The 36" and 60" models have an odd number of main burners, therefore one of the sets of pilots and safety valves in these models will control only one main burner. The pilot burners are aligned with the pilot safety valve bush buttons. The pilot burners are inset 12" from the front panel. The pilots are monitored by thermocouples and pilot safety valves. If the pilot goes out, the safety valve will shut-off the gas supply to the pilot and main burners.

Each 12" section of the griddle is independently controlled by a mechanical snap-action thermostatic valve. The thermostats have an operating range of 200 to 550 degrees. Once pilots are lit, turning the thermostats to the desired setting is all that is required to put the unit into service.

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 turning the griddle shut-off valve to the OFF position (Fig. 6). This will turn off the gas supply to the pilots and thermostats for all sections. Turning the griddle shut-off valve to the ON position (Fig. 5) and relighting the pilots at the beginning of the next cooking shift will be required to put the unit back in service. See pilot lighting procedure.

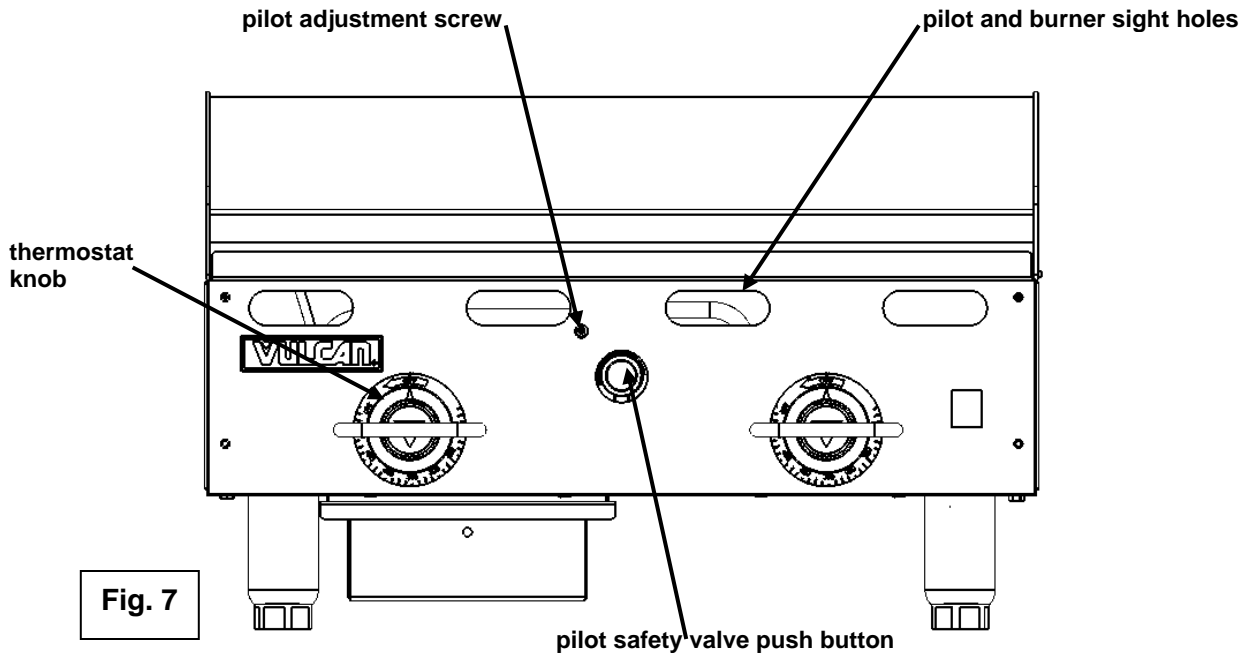


Fig. 5



Fig. 6

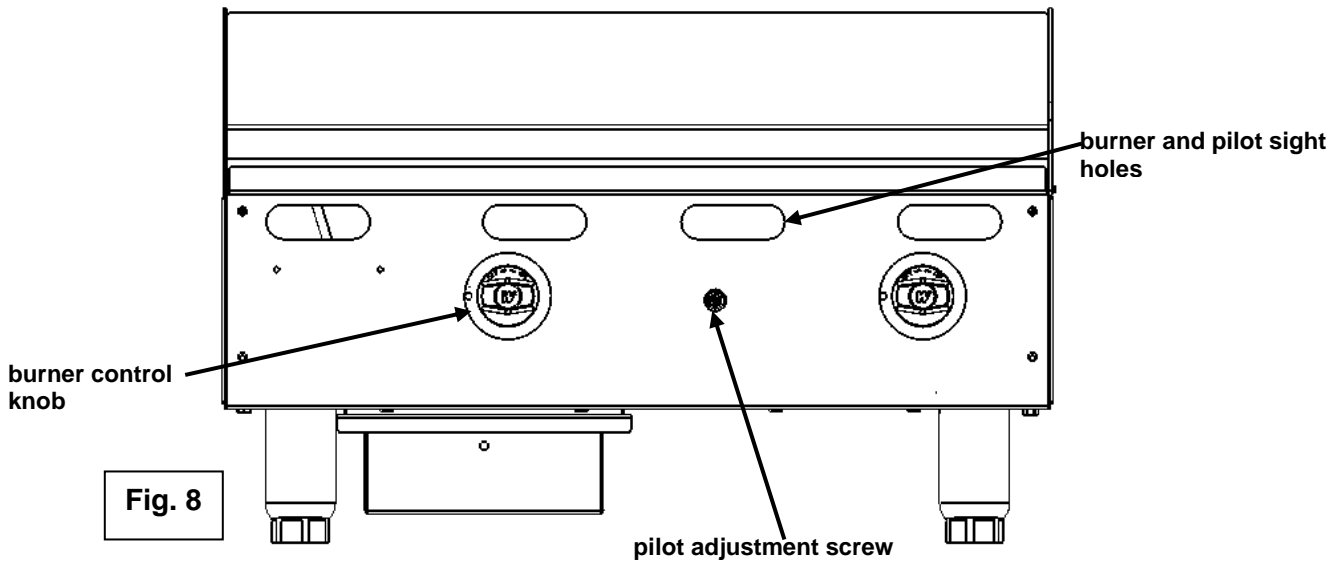
## CONTROLS – MSA AND ASA MODELS



This model features a standing pilot that must be manually lit with an outside ignition source (such as a lit taper, etc). The pilot is monitored by a thermocouple and pilot safety valve. If the pilot goes out, the safety valve will shut-off the gas supply to the pilot and main burners. There is one pilot and one safety valve for every two burners except on the 36" and 60" models. The 36" and 60" models have an odd number of main burners, therefore one of the sets of pilots and safety valves in these models will control only one main burner. The pilot burners are aligned with the safety valve bush buttons. The pilot burners are inset 12" from the front panel. See pilot lighting procedure.

Each 12" section of the griddle is independently controlled by a mechanical snap-action thermostatic valve. The thermostats have an operating range of 200 to 550 degrees. If the pilots are lit, turning the thermostats to the desired setting is all that is required to put the unit into service.

**CONTROLS – AGM MODELS**



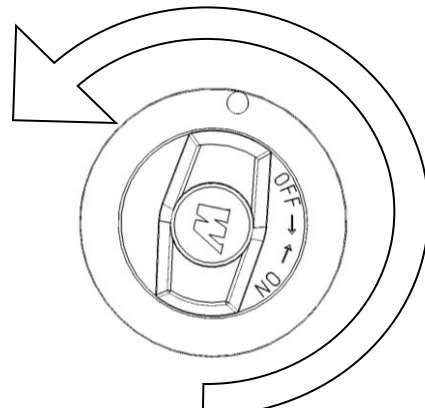
The model is equipped with standing pilots. Gas will flow from the pilots as soon as the main gas supply to the unit is turned on. The pilots are lit with the use of an outside ignition source (such as a lit taper, etc). There is one pilot for every two burners except on the 36" and 60" models. The 36" and 60" models have an odd number of main burners; therefore one of the sets of pilots in these models will control only one main burner. The pilots are inset 12" from the front panel. See pilot lighting procedure.

Each 12" section of the griddle is independently controlled by an infinite heat control valve. Once the pilots are lit, turning the burner control knob to the full ON position will light each burner. The burners will be in the full ON position when the knobs are turned all the way to the left (Fig. 10). The burners will be in the full OFF position when the knobs are turned all the way to the right (Fig. 9). The height of the burner flame and cooking plate temperature can be adjusted by turning the burner control knobs while viewing burners through the burner sight holes.



**Fig. 9**

Burner control knob in the OFF position. Turned all the way to the right.

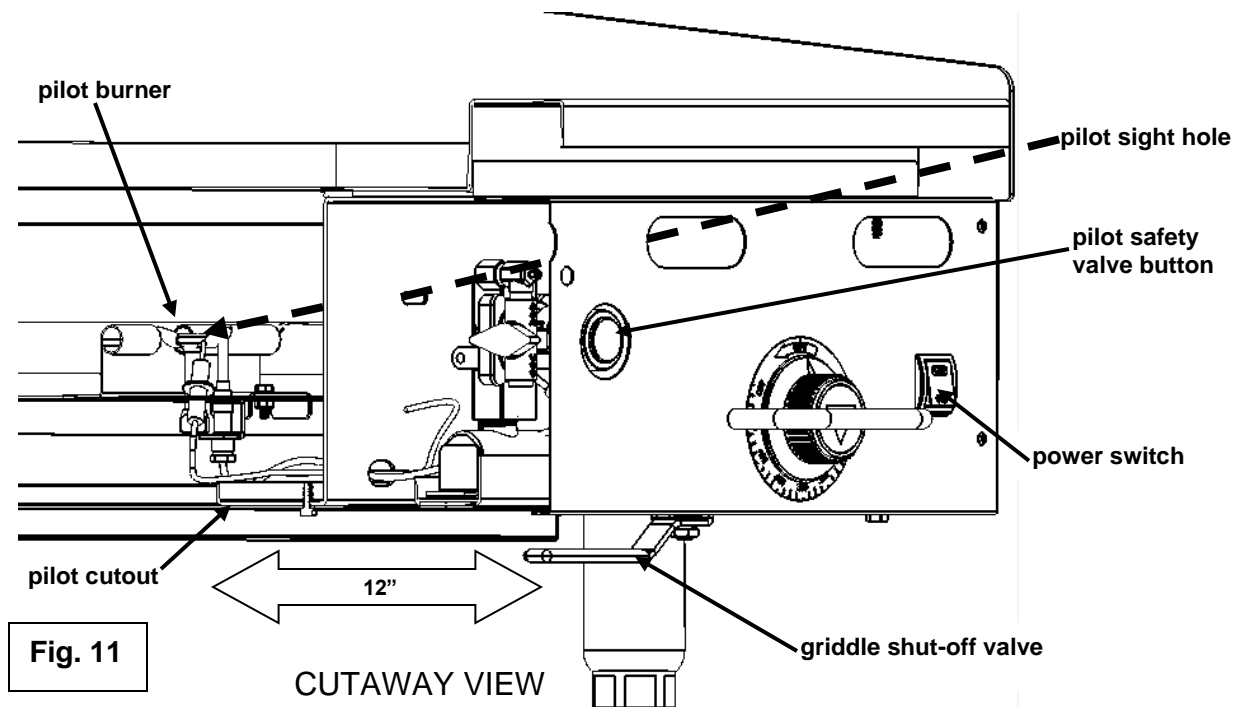


**Fig. 10**

Burner control knob in the full ON position. Turned all the way to the left - 225 degrees from the OFF position.

## PILOT LIGHTING PROCEDURE – 900RX MODELS

1. Turn the griddle shut-off valve to the OFF position (See Fig.6 on page 9). Wait 5 minutes to allow any gas that may have accumulated in the burner compartment to escape.
2. Turn the griddle shut-off valve to the ON position (See Fig. 5 on page 9).
3. Push and hold the power switch in the ON position. The switch will illuminate and you will hear a “clicking” sound.
4. While continuing to hold the power switch in the ON position, depress and hold the red button on the pilot safety valve while the electric igniters light the corresponding pilots. You will have to monitor the pilot burners through the pilot sight holes. The pilot burners are aligned with the red buttons on the pilot safety valves . The pilot burners are inset 12” from the front of the unit.



5. Watch for the pilot burners to ignite. When the gas at the pilot has been burning for about 45 seconds, release the corresponding red button on the pilot safety valve. If the pilot does not remain lit, repeat the procedure allowing more time before releasing the button. The amount of time necessary to hold the safety valve button will increase at the initial installation of the unit and if the main gas supply has been turned off for a long period of time. It may be necessary to adjust the pilot valve to increase gas to the pilot.
6. Repeat steps until all pilots are lit.
7. The pilot burners can be lit manually in the event of a failure of the electronic ignition system. If this happens, repeat steps 1-5 without holding the power switch in the ON position. You will have to reach under the front of the unit and through the pilot cutout to ignite the pilots with an outside ignition source(such as a lit taper, etc.) while again depressing the corresponding red button.
8. If after completing steps 1 – 7 and the pilot does not light, turn the griddle shut-off valve to the OFF position (See Fig. 6 on page 9) and contact an authorized service contractor.

## PILOT LIGHTING PROCEDURE- MSA AND ASA MODELS

1. Turn the main gas shut-off valve to the OFF position. Wait 5 minutes to allow any gas that may have accumulated in the burner compartment to escape.
2. Turn the main gas shut-off valve ON.
3. Depress and hold the safety valve button while lighting the corresponding pilot. You will have to reach under the front of the unit to light with an outside ignition source (such as a lit taper, etc.) while viewing thru the pilot sight hole.
4. When the gas at the pilot has been burning for about 45 seconds, release the safety valve button. If the pilot does not remain lit, repeat the operation allowing more time before releasing the button. The amount of time necessary to hold the safety valve button will increase at the initial installation of the unit and if the main gas supply has been turned off for a long period of time. It may be necessary to adjust the pilot valve to increase gas to the pilot.
5. Repeat steps until all pilots are lit.
6. If after completing steps 1-5 pilot does not light, turn off the main gas shut-off valve and contact an authorized service contractor.

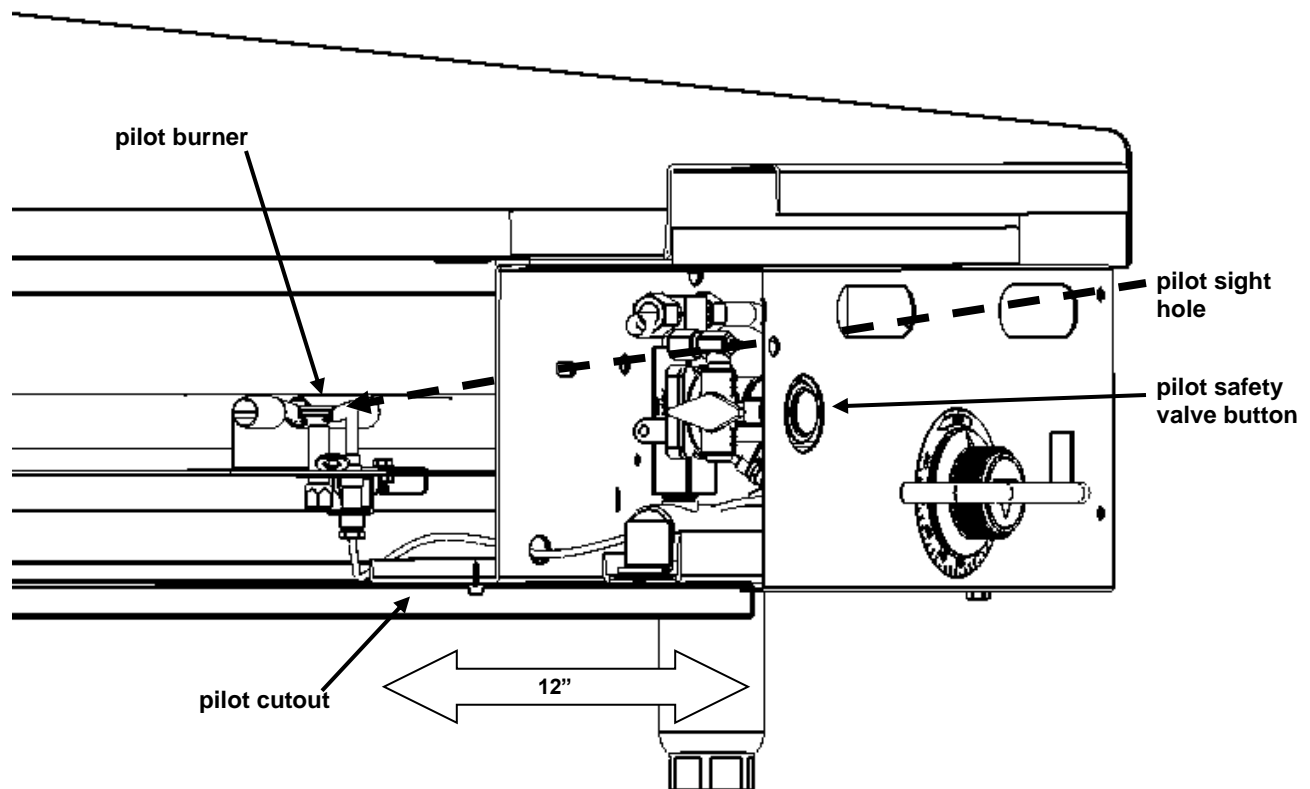


Fig. 12

CUTAWAY VIEW

## PILOT LIGHTING PROCEDURE – AGM MODELS

1. Turn the main gas shut-off valve and all burner control knobs to the OFF position. Wait 5 minutes to allow any gas that may have accumulated in the burner compartment to escape.
2. Turn the main gas shut-off valve ON.
3. While viewing through the pilot sight hole, you will have to reach under the front of the unit and through the pilot cutout to ignite the pilots with an outside ignition source (such as a lit taper, etc.). It may be necessary to adjust the pilot valve to increase gas to the pilot.
4. Repeat steps until all pilots are lit
5. To light main burners, turn individual burner control knobs to the full ON position.
6. If after completing steps 1-5 main burners do not light, turn off the main gas shut-off valve and contact an authorized service contractor.

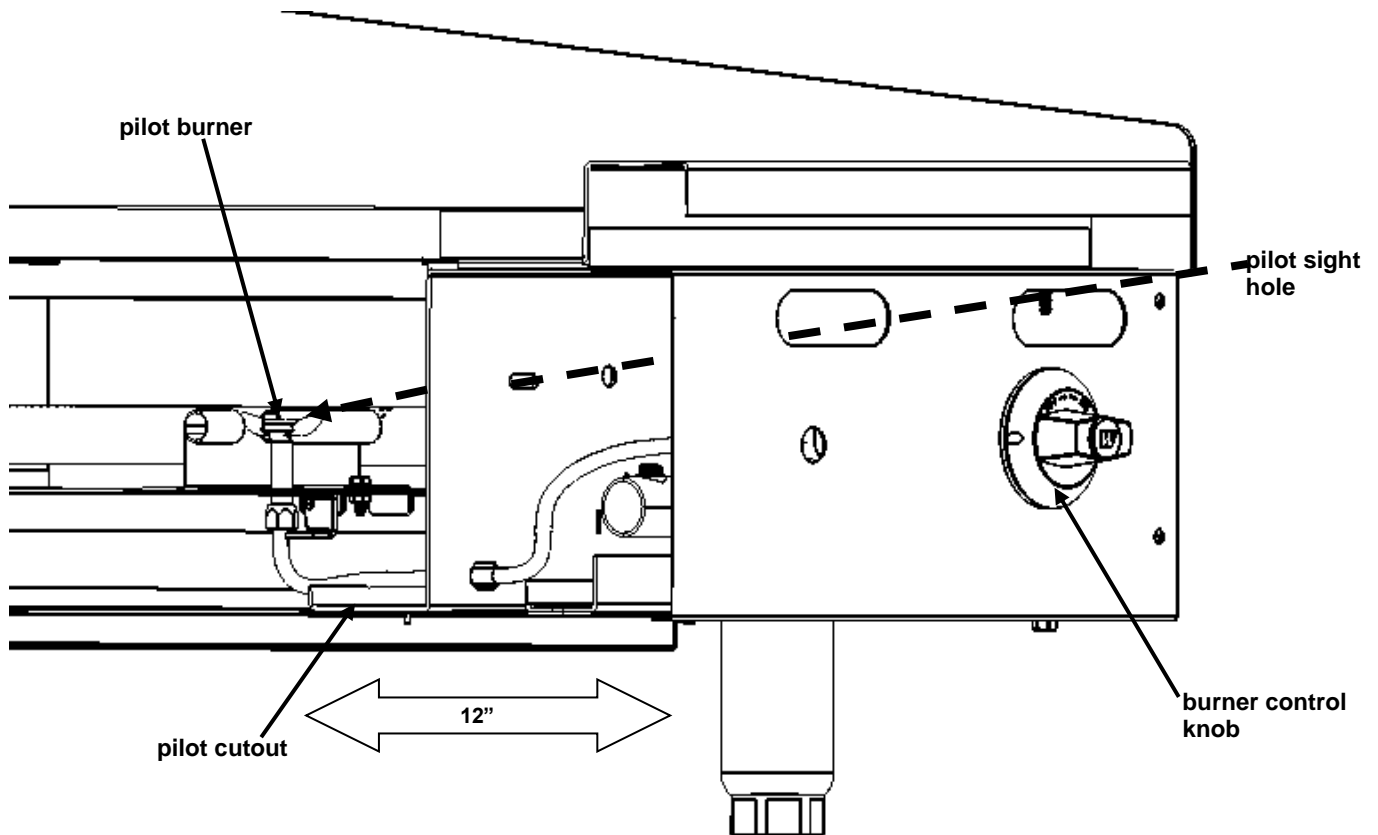


Fig. 13

CUTAWAY VIEW

## USING THE GRIDDLE

To preheat, turn the burners on about 20-25 minutes before cooking.

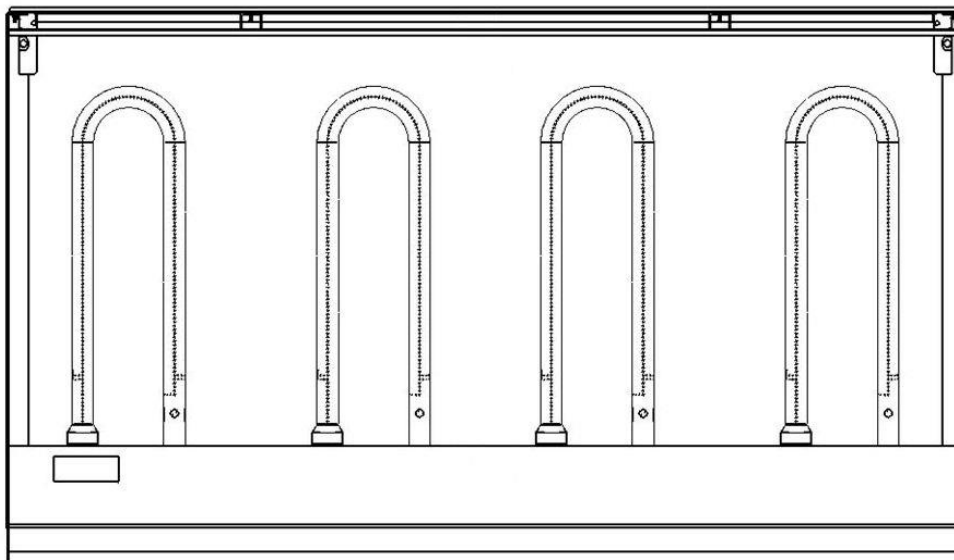
A uniform and systematic approach to loading the griddle will produce the most consistent product results.

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.

## ZONE COOKING

This griddle features a tubular U-shaped burner in 12" sections, each controlled by independent thermostats (900RX, MSA and ASA models) or manual valves (AGM models). 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.



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

## **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 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 wire brush, flexible spatula.

#### **ONCE PER DAY**

Thoroughly clean the griddle back splash, sides and front. Remove, empty and wash the grease drawer in the same manner as an ordinary cooking utensil.

#### **ONCE PER WEEK**

Clean the griddle surface thoroughly. Use a griddle stone, 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 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.

### **CLEANING A CHROME GRIDDLE PLATE**

#### **AFTER EACH USE**

Clean the griddle with a palmetto brush or flexible spatula. NEVER USE AN ABRASIVE SCOURING PAD OR GRIDDLE STONE ON A CHROME PLATE SURFACE.

#### **ONCE PER DAY**

Thoroughly clean backsplash, 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.



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

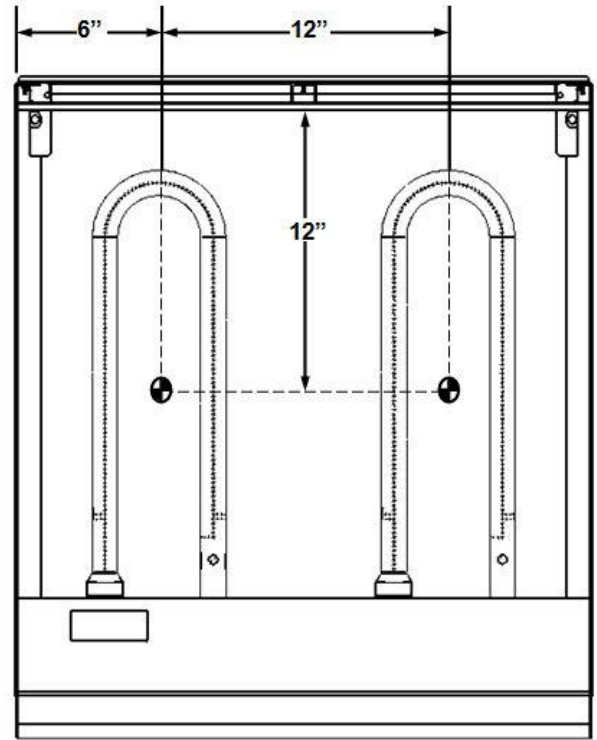
# ADJUSTMENTS

## CALIBRATION-900RX AND MSA MODELS

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.

2. Set thermostats to 350°F and allow to stabilize, allowing the burner to cycle ON and OFF at least two times.
3. Watch for burner to cycle OFF, then measure the temperature for that zone. The temperature should be 350°F ±15°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 that 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.

**IMPORTANT: NEVER ADJUST THE SCREW IN THE CENTER OF THE THERMOSTAT SHAFT.** This will ruin the factory calibration; the thermostat will no longer operate properly and will need to be replaced.

5. Once calibration is achieved, tighten the temperature dial screws and knob set screws.



**Step 4a.** Set knob & check Temperature.  
Remove knob



**Step 4b.** – Adjust temperature dial & verify temperature setting



**Step 5** –Replace knob & tighten screws

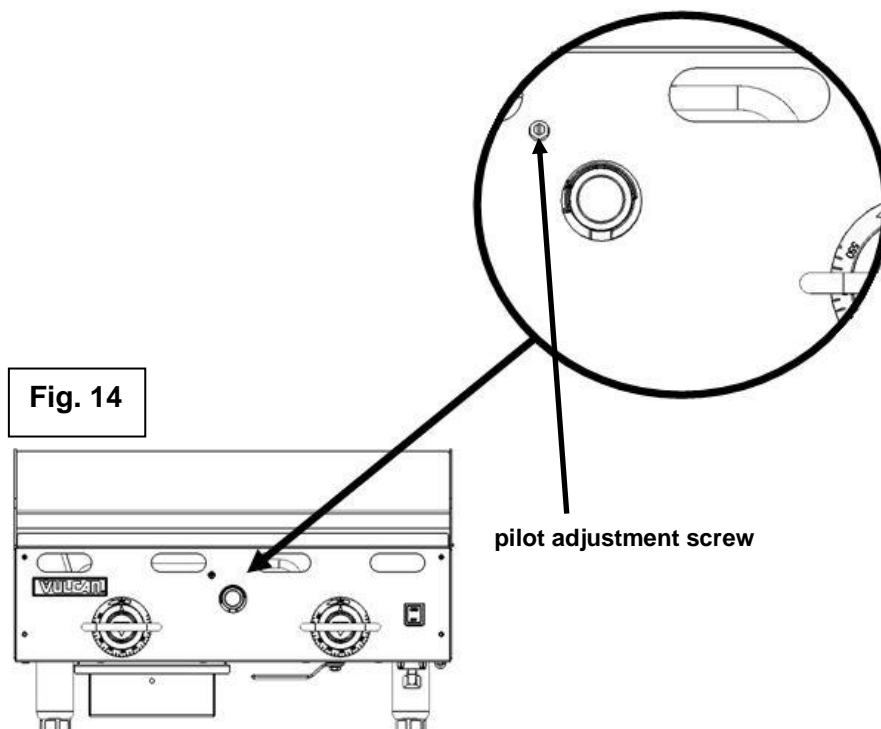
## LEVELING

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- $\frac{3}{4}$ ".

## PILOT ADJUSTMENT

Using a flathead screwdriver, turn the slotted hex-head pilot adjustment screw clockwise to decrease the flame, and counterclockwise to increase the flame. See Fig. 14.



## SHUTDOWN OF GRIDDLE WITH ELECTRIC IGNITION SYSTEM – 900RX MODELS

1. Turn thermostats to the OFF position to cut off burners or turn griddle shut-off valve to the OFF position.
2. Turning the griddle shut-off valve to the OFF position will turn the gas off to all thermostats and pilots. The pilots will have to be relit when restarting the griddle.
3. The pilots will remain lit and monitored by the safety valve as long as the griddle shut-off valve is left in the ON position.

### **SHUTDOWN OF GRIDDLE – MSA AND ASA MODELS**

1. Turn thermostats to the OFF position to cut off burners.
2. The pilots will remain lit and monitored by the safety valve as long as the main gas supply is on.

### **SHUTDOWN OF GRIDDLE WITH STANDING PILOT SYSTEM – AGM MODELS**

1. Turn burner control knobs to the OFF position to cut off burners.
2. The pilots will remain lit as long as the main gas supply is on.

### **EXTENDED SHUTDOWN – ALL MODELS**

1. Turn the griddle shut-off valve and/or the main gas supply valve to the OFF position.
2. Unplug the griddle electrical supply cord(if applicable).
3. 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.

## LUBRICATION

All valves must be checked and lubricated periodically. Check with your service agency for details.

## VENT

Daily, when the griddle is cool, check the flue 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](http://www.vulcanequipment.com)**.

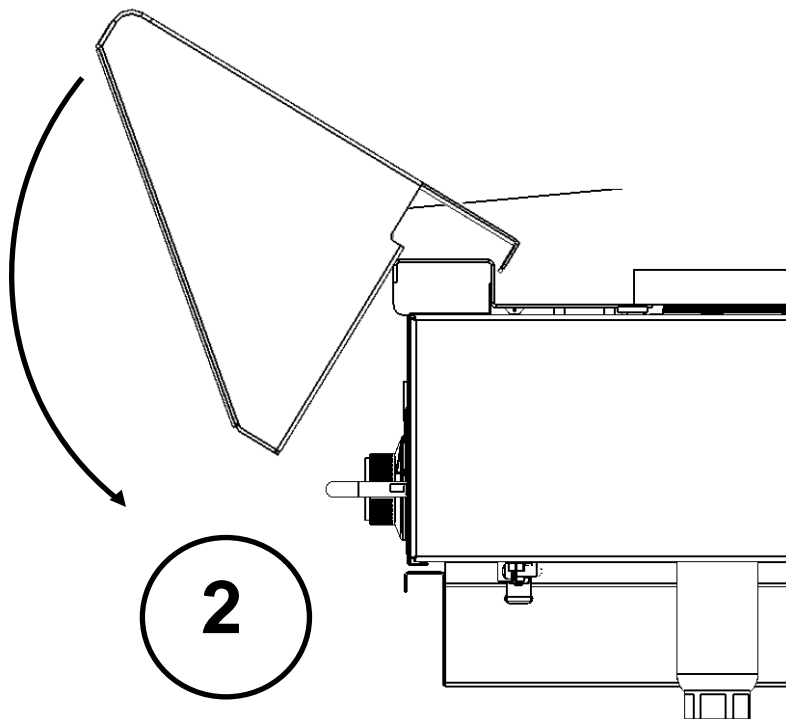
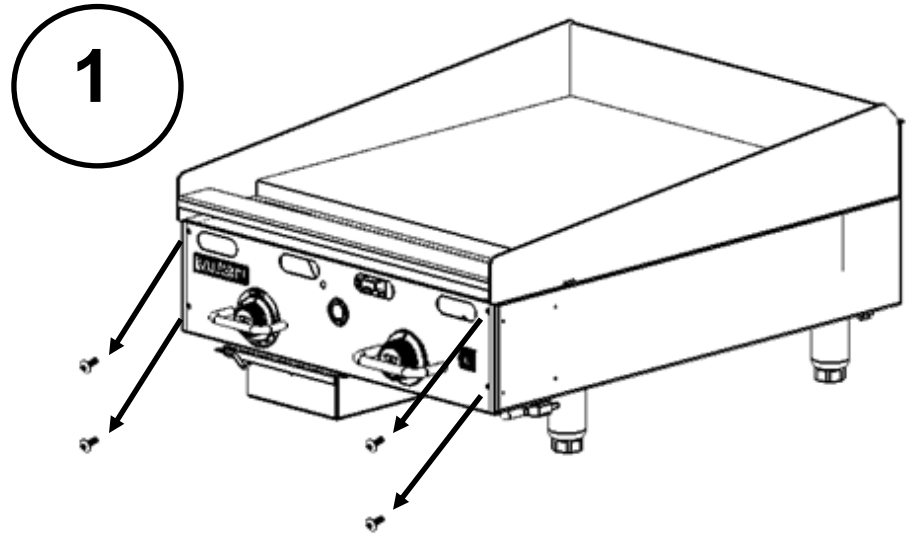
When calling for service the following information should be available from the appliance serial plate: Model Number, Serial Number and Gas Type. The appliance serial plate is located on the right side panel.

# TROUBLESHOOTING

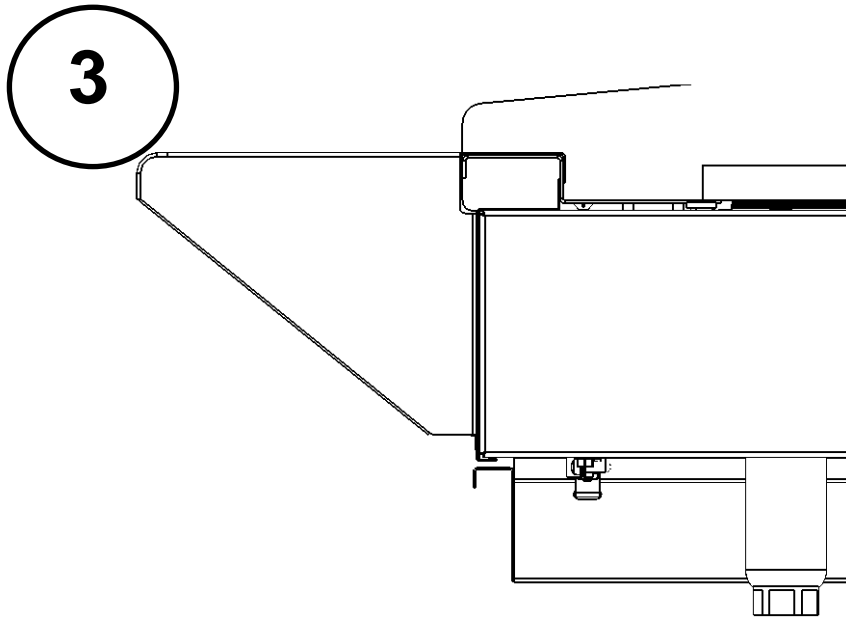
PROBLEM	POSSIBLE CAUSES
Heat does not come on when the thermostat or burner valve is turned on	<ol style="list-style-type: none"> <li>1. Problem with thermostat or burner valve. (Call for service)</li> <li>2. Pilot burner not lit.</li> <li>3. Griddle shut-off valve not in ON position.</li> <li>4. Low gas pressure. (Call for service)</li> </ol>
Pilot burner will not light	<ol style="list-style-type: none"> <li>1. Griddle shut-off valve not in On position.</li> <li>2. Obstructed pilot orifice. (Call for service)</li> <li>3. Pilot gas turned off at pilot. Adjust pilot to allow gas flow</li> <li>4. Problem with pilot safety valve. (Call for service)</li> <li>5. Problem with thermocouple. (Call for service)</li> <li>6. Low gas pressure. (Call for service)</li> </ol>
Pilot burner will not stay lit	<ol style="list-style-type: none"> <li>1. Obstructed or wrong size pilot orifice. (Call for service)</li> <li>2. Gas supply not purged of air. Depress pilot safety button until air is purged.</li> <li>3. Air blowing pilot out. (Call for service)</li> <li>4. Problem with pilot safety valve. (Call for service)</li> <li>5. Thermocouple not in flame. (Call for service)</li> <li>6. Low gas pressure. (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>

# ACCESSORY INSTALLATION

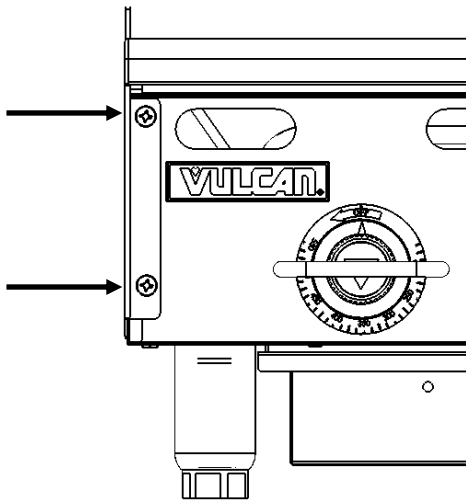
**⚠ WARNING** The griddle and its parts are hot. Use care when operating, cleaning or servicing the griddle.



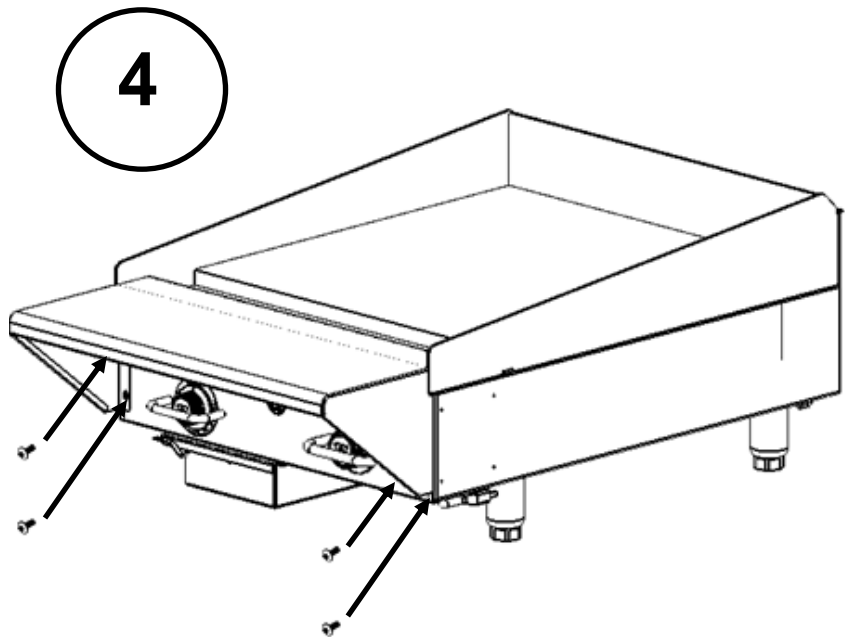
**SIDE VIEW**



**SIDE VIEW**



**FRONT VIEW**





# NOTES