

# INSTALLATION & OPERATION MANUAL FOR *Salamander Broilers*

**ITW Food Equipment Group**

## VULCAN

<b>MODELS</b>	<b>MLS</b>
36SB	<i>ML-768183</i>
36SBI	<i>ML-768188</i>
VSB34R	<i>ML-135139</i>
VSB34IR	<i>ML-135140</i>
VSB36	<i>ML-768183</i>
VSB36R	<i>ML-768183</i>
VSB36I	<i>ML-768188</i>
VSB36IR	<i>ML-768188</i>

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



<b>MODELS</b>	<b>MLS</b>
RB34	<i>ML-135139</i>
IRB34	<i>ML-135140</i>
RB36	<i>ML-768183</i>
IRB36	<i>ML-768188</i>

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



### RB36

ITW Food Equipment Group, LLC  
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Baltimore, MD 21222

**RETAIN THIS MANUAL FOR FUTURE USE**

**FORM F-36953 (10-07)**

## **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.**

# INSTALLATION, OPERATION AND CARE OF SALAMANANDER BROILERS

## GENERAL

Salamander Broilers are produced with quality workmanship and material. Proper installation, usage, and maintenance of your broiler will result in many years of satisfactory performance.

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

## INSTALLATION

Before installing, verify that the type of gas supply (natural or propane) agrees with the specifications on the rating plate located underneath the broiler rack drip tray. If the supply and equipment requirements do not agree, do not proceed with the installation. Contact your dealer immediately.

### UNPACKING

Immediately after unpacking, check for possible shipping damage. If the broiler is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

Before installing, verify that the type of gas (natural or propane) and the clearance dimensions (see below) agree with the specifications on the rating plate which is located under the crumb tray on the right side.

### LOCATION

The equipment area must be kept free and clear of combustible substances.

<b>Minimum Clearance</b>	<b>Combustible Construction</b>	<b>Non-Combustible Construction</b>
Rear	0"	0"
Sides (Infrared) IRB34 & 36	2"	0"
Sides (Radiant) RB34 & 36	6"	0"
Bottom	10"	4"

The installation location must allow adequate clearances for servicing and proper operation. A minimum front clearance of 24" is required.

Do not obstruct the flow of combustion and ventilation air. 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 ventilating system. Do not permit fans to blow directly at the broiler. Avoid wall-type fans which create air cross currents within the room. Avoid open windows next to the broiler. Maintain an 18" (46 cm) clearance from the top of the broiler flue vent to the filters of the hood venting system.

## INSTALLATION CODES AND STANDARDS

The broiler must be installed in accordance with:

### In the United States of America:

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

## GAS CONNECTIONS

**CAUTION: All gas supply connections and any pipe joint compound used must be resistant to the action of propane gases.**

Codes require that a gas shutoff valve be installed in the gas line ahead of the broiler.

**NATURAL GAS:** Standard orifices are set at 5" W.C. (Water Column). A pressure regulator is supplied and must be installed when the broiler is connected to the gas supply.

**PROPANE GAS:** Standard orifices are set at 10" W.C. (Water Column). A pressure regulator is supplied and must be installed when the broiler is connected to the gas supply.

The gas supply line must be  $\frac{3}{4}$ " (19mm) or larger. If flexible or semi-rigid connections are used, the inside diameter must be the equivalent of  $\frac{3}{4}$ " (19mm) iron pipe or larger. All connections of the flexible and semi-rigid type must comply with all local and national requirements. Make sure gas piping is clean and free of dirt, piping compound, and obstructions.

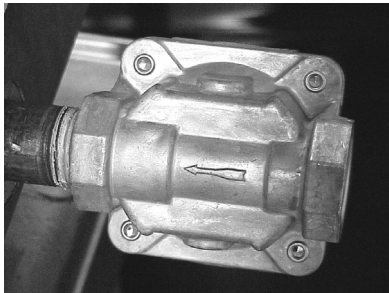
**WARNING:** PRIOR TO LIGHTING, CHECK ALL JOINTS IN THE GAS SUPPLY LINE FOR LEAKS. USE SOAP AND WATER SOLUTION. DO NOT USE AN OPEN FLAME.

After piping has been checked for leaks, all piping receiving gas should be fully purged to remove air.

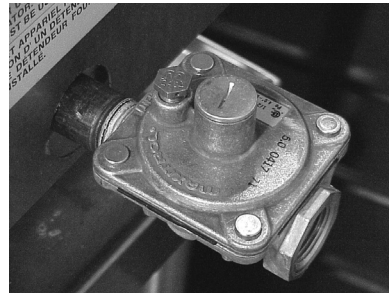
## GAS PRESSURE REGULATOR INSTALLATION

Gas regulator pressure is preset at 5" Water Column (W.C.) for natural gas, and 10" W.C. for propane gas. Minor adjustments may be required based on site specific gas pressure.

Install the regulator as close to the broiler 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 broiler (Fig. 2) and the regulator is positioned with the vent plug and adjustment screw upright (Fig. 3).



**Fig. 2**



**Fig. 3**

The minimum 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 hotplate be connected to supply pressure greater than ½ psig (3.45 kPa) or 14" W.C.

## FLUE CONNECTIONS

**DO NOT** obstruct the flow of flue gases from the flue located on the rear of the broiler. It is recommended that the flue gases be ventilated to the outside of the building through a ventilation system installed by qualified personnel.

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.

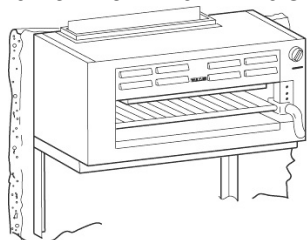
## ASSEMBLY

### **Salamander Broiler Mounted on a Wall (Fig.1).**

The separate wall mounting bracket accessory will be needed to wall mount the unit.

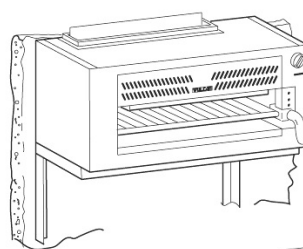
1. Secure brackets to wall by means of lag screws or bolts.
2. Make sure brackets are level and lag screws or bolts engage wall studs.
3. Place broiler in position on brackets, making sure that the broiler bottom holes are aligned with holes on the brackets.
4. Secure in position with 3/8" bolts at bottom of broiler through holes in brackets.

### Radiant with Wall Brackets

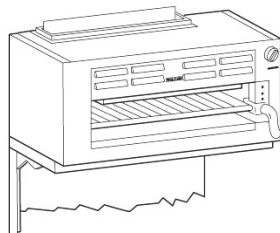


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### Infrared with Wall Brackets



### Radiant Mounted on Special High Shelf



### Infrared Mounted on Special High Shelf

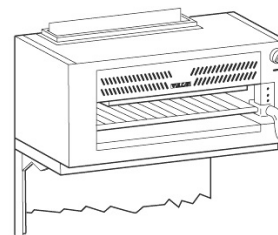


Fig. 1

### Assembly over a Heavy Duty Gas Range (Fig. 1)

If the broiler is to be mounted over a gas range, a reinforced high shelf and special mounting brackets are required. These are furnished when ordered as an elevated broiler.

1. Remove existing rear shelf and install reinforced high shelf.
2. Using the four bolts provided, install mounting brackets on both top corners of reinforced shelf.
3. Place and align broiler on top of brackets with the back of the unit flush with the rear of the shelf.
4. Using a #19-drill bit, drill from below through the four holes provided on the mounting bracket into the base of the unit.
5. Drive four #10-24 self-tapping screws (provided) into the drilled holes.
6. Attach both broiler and high shelf to common rear panel with self-tapping screws.

## OPERATION

**WARNING:** THE BROILER AND ITS PARTS ARE HOT. BE CAREFUL WHEN OPERATING, CLEANING OR SERVICING THE BROILER.

### CONTROLS

**Trigger Handle** — elevates or lowers the broiling grid to different positions. Grasp the handle and pull straight out from the broiler. This releases the mechanism and allows the lifting handle to move into the desired position.

- Burner Valve** — regulates the flow of gas to the burners. Gas flow is increased by turning the valve counterclockwise.
- Drip Tray** — Collects grease and waste which is diverted by the tilt of the drip shield. DO NOT allow the drip tray to overflow. Empty the drip tray when three-quarters full to reduce the possibility of spillage.
- Rack Handle** — glides the grid forward for easy loading and unloading. To operate, pull straight out.

### **LIGHTING, RELIGHTING AND SHUTDOWN INSTRUCTIONS**

1. Turn gas shutoff valve and burner valve to the OFF position and wait 5 minutes.
2. Turn gas shutoff valve ON. Light the pilot adjacent to the main burner. Adjust the pilot valve screw until the pilot flame has a slight yellow tip.
3. After the pilot has been established, turn the burner valve to the ON position. The burner flames may be adjusted, using the air shutters located behind the louvered panel in the front of the broiler below the burner valve.
4. If the burners fail to light, turn off all valves, wait 5 minutes and repeat steps 1-3.
5. To shut down, turn the burner valves to the OFF position.

### **RACK POSITION AND GAS SETTING**

Each operator will find the optimum rack position and gas setting for various products; however, it is recommended that gas input be reduced first when lower rack temperatures are desired. Further reduction in rack temperatures, if necessary, can then be obtained by lowering rack position. Infrared Models must use the full gas setting.

### **CLEANING**

1. Allow broiler to cool.
2. To remove broiler rack for cleaning, raise broiler to center position.
3. Position left and right hands simultaneously on edges of broiler rack and raise both rack stops.
4. Slide broiler rack and drip tray forward past rack stops, holding tray up against racks.
5. Remove broiler rack and drip tray from broiler.
6. Let back of tray drop down to vertical to allow front hooks to disengage.
7. Remove drip pan from broiler rack and clean as you would any normal utensil.
8. To replace, hook the drip tray to the broiler rack while tray is in a vertical position.
9. Replace broiler rack and drip tray in side channels while holding tray up close to rack.
10. Clean bottom pan. Slide pan out and wash with soap and water. Rinse thoroughly and wipe dry with a soft clean cloth.

11. Clean stainless steel surfaces with a mild detergent and water, using a damp cloth, or with a commercial stainless steel cleaner. Rinse thoroughly and wipe dry with a soft clean cloth.
12. Burner ports and throats should be thoroughly cleaned. Venturi must be free from grease and lint. **DO NOT** insert pick in burner port holes.

## **MAINTENANCE**

**WARNING:** THE BROILER AND ITS PARTS ARE HOT. BE CAREFUL WHEN OPERATING, CLEANING OR SERVICING THE BROILER.

### **LUBRICATION**

All moving parts must be checked for wear and lubricated.

### **PILOT LIGHTS**

Pilot lights are to be kept clean and adjusted at the proper flame height.

### **VENT**

Annually, when the broiler is cool, check the flue and clear any obstructions.

### **SERVICE AND PARTS INFORMATION**

Contact your local Service Agency to obtain service and parts information.