



## Installation and Operation Instructions for the BlueStar Infra-Red Salamander Broiler

THIS PRODUCT WAS DESIGNED FOR EASE OF INSTALLATION AND OPERATION. HOWEVER, WE RECOMMEND THAT YOU READ ALL SECTIONS OF THIS MANUAL BEFORE BEGINNING INSTALLATION AND THAT YOUR BROILER IS INSTALLED BY AN APPROVED GAS INSTALLATION TECHNICIAN IN ACCORDANCE WITH THE LOCAL CODES, OR IN THE COMMONWEALTH OF MASSACHUSETTS A LICENCED PLUMBER OR LICENCED GAS FITTER, CAPABLE OF REVIEWING AND PREFORMING THE MANUFACTURES INSTALLATION CHECKLIST INCLUDED IN YOUR INFORMATION PACKET.

PLEASE DO NOT REMOVE PERMANENTLY AFFIXED LABELS, WARNINGS, OR DATAPLATES FROM THE UNIT, AS THIS MAY VOID THE MANUFACTURER'S WARRANTY AND/OR HINDER EFFECTIVE SERVICING AND MAINTAINCE

**WARNING: IF THE INFORMATION IN THIS MANUAL IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.**

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

- **WHAT TO DO IF YOU SMELL GAS**

- Do not try to light any appliance.
  - Do not touch any electrical switch.
  - Do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- A qualified installer, service agency or the gas supplier, must perform installation and service.



**THIS APPLIANCE MUST BE MOUNTED UNDER AN APPROVED VENTILATION HOOD. CONTACT A LICENSED GAS CONTRACTOR IN ACCORDANCE WITH THE LOCAL CODES (OR IN THE ABSENCE OF LOCAL CODES, WITH THE NATIONAL FUEL GAS CODE, ANSI Z223.1/NFPA 54) FOR INSTALLATION.**

**This appliance is not intended to be installed underneath a cabinet.**

**This appliance must be electrically grounded in accordance with the local codes or, in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70*.**

**The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ psi (3.5 kPa).**

**The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psi (3.5 kPa).**

**The appliance must not be used for space heating purposes.**

**The cooking area or the exterior top areas are not for storage purposes.**

**The appliance must be disconnected from the electrical supply before servicing.**

**This appliance comes set for the type of gas as specified on the rating plate and tag on the unit. If a different type of gas is required, please contact your local authorized gas technician.**

**Leak Testing of the appliance shall be conducted according to the manufacturer's instructions.**

## **WARNING**

### **Electrical Grounding Instructions**

**This appliance is equipped with a three-prong grounding plug for your protection against shock hazard and should be plugged directly into a properly grounded receptacle. Do not cut or remove the grounding prong from this plug.**

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**KEEP APPLIANCE AREA FREE AND  
CLEAR FROM -COMBUSTIBLES-**

## GENERAL INFORMATION

The Infra-Red Salamander Broiler is designed to be a High Speed Cooking Appliance.

It is ideal for preparing a variety of meats, fish, melted cheese dishes, casseroles, au gratin dishes, soufflé's, French onion soup, and other ethnic foods.

### I. R. BROILER PERFORMANCE and CONSTRUCTION

Two Hi-Low gas valves provide individual control of the (2) atmospheric- type 10,500 BTU gas Infra-Red burners for the salamander. The "LO" position is adjustable for most field gas pressure situations. The high-efficiency, Infra-Red burners provide fast pre-heat and uniform production. Unique atmospheric burner design eliminates the need for fans or filters to assist in the operation of the appliance. Heat is directed downward to the large heavy duty broiling rack. The rack is easily removed from the spring balanced lower rack assembly. The inner rack assembly rolls out for ease of loading and unloading. Rack assembly raises and lowers with positive locking in four positions. A full- width grease deflector attached to the underside of the rack assembly channels hot drippings to a large capacity drain pan even when the rack assembly is rolled out. **(Drain pan must always be attached during use)**. The rack assembly and drain pan are easily removed for cleaning. When mounted the I.R. Broiler is supported by heavy-formed Stainless Steel brackets. The Broiler construction consists of an all Stainless Steel interior and exterior, which provides unmatched quality and durability for many, many years.

# SPECIFICATIONS

## SALAMANDER

WIDTH.....25”

DEPTH.....19 1/2”

HEIGHT.....16 1/2”

### GAS SPECIFICATIONS:

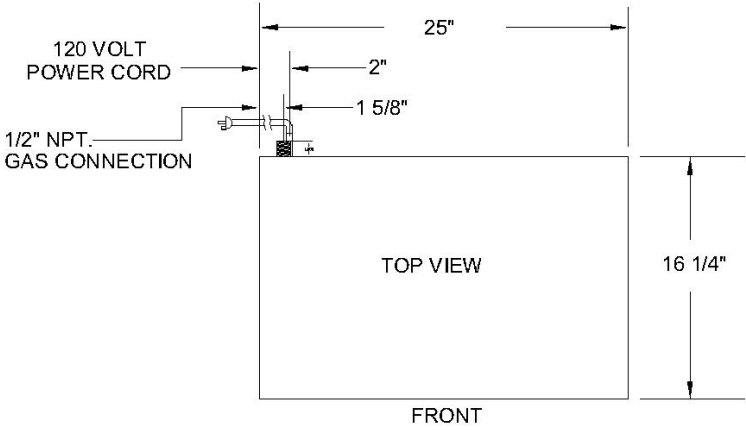
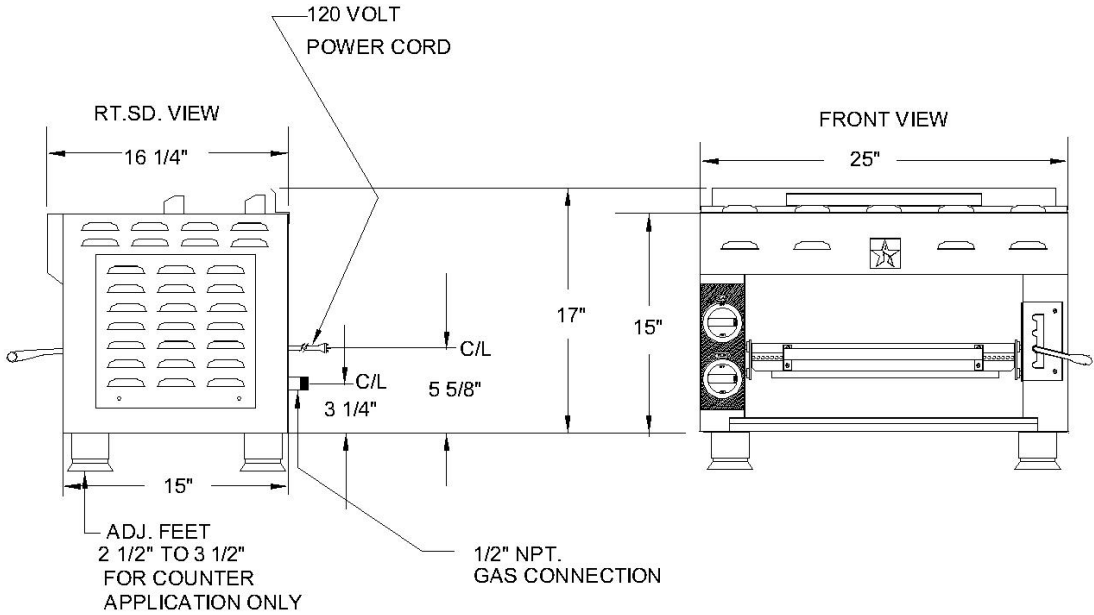
ALL MODELS (2) Burners @ 10,500 BTU/HR each. TOTAL 21,000 BTU/HR  
NATURAL GAS-----@ 5.0” Water Column,.....Orifice Size = 54  
PROPANE GAS-----@10.0 Water Column,.....Orifice Size = 64

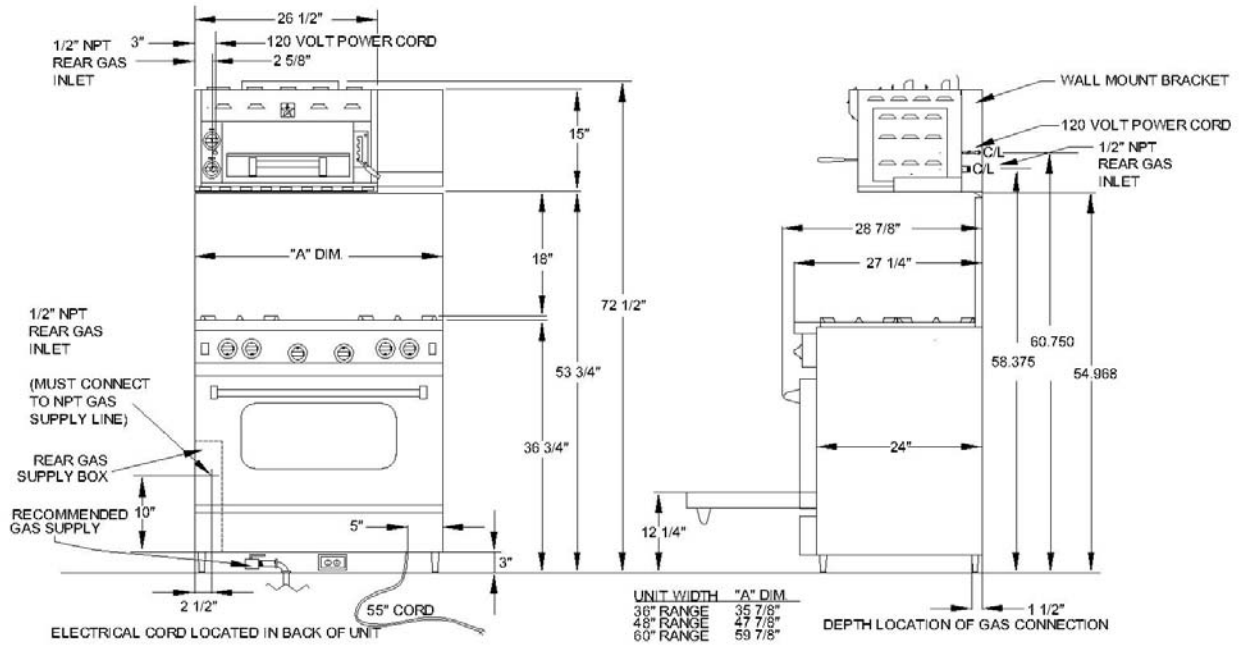
<b>Minimum Clearances:</b>	<b>Sides</b>	<b>Rear</b>	<b>Top</b>
PRZSAL24:			
Combustible Construction	6”	6”	N/A
Non-Combustible Construction	0”	0”	N/A
All other models do not require any clearances for combustible or non-combustible construction.			
The Top Clearance is noted as N/A as all models are intended for installation underneath a suitable ventilation hood only.			

### MODEL # DESCRIPTION

PRZSAL24 -24” COUNTER TOP SALAMANDER W/LEGS  
PRZSAL24WM -24” SALAMANDER W/WALL MOUNT SYSTEM  
PRZSAL36WM -36”SALAMANDER W/WALL MOUNT SYSTEM AND SHELF  
PRZSAL48WM -48”SALAMANDER W/WALL MOUNT SYSTEM AND SHELF  
PRZSAL60WM -60” SALAMANDER W/WALL MOUNT SYSTEM AND SHELF  
BG3617 -SALAMANDER 36” WIDE BY 17” INTERGRATED BACKGUARD  
BG4817 -SALAMANDER 48” WIDE BY 17” INTERGRATED BACKGUARD  
BG6017 -SALAMANDER 60” WIDE BY 17” INTERGRATED BACKGUARD

COUNTER MOUNT SALAMANDER

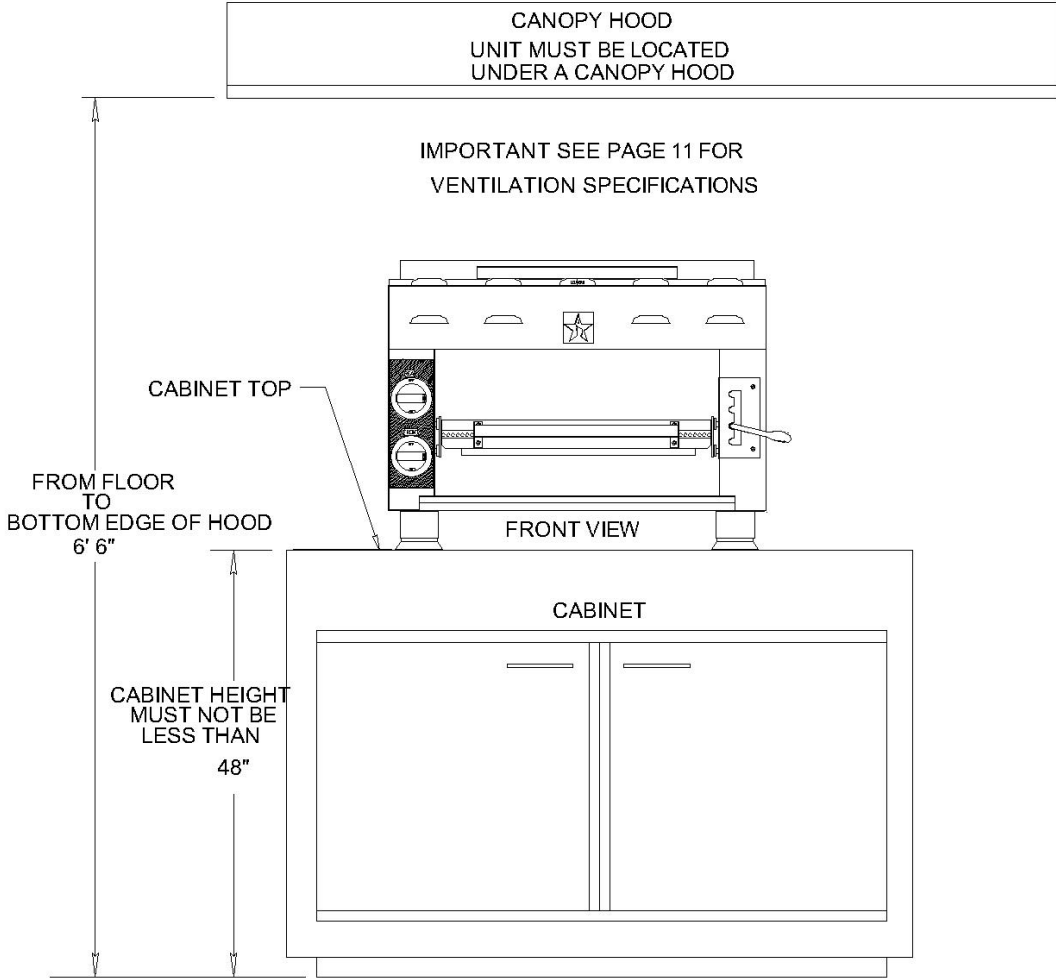




ELECTRICAL CORD LOCATED IN BACK OF UNIT

LOCATION OF ELECTRICAL OUTLET MUST NOT BE HIGHER THAN 3" FROM FLOOR IF LOCATED BEHIND THE UNIT OR CAN BE LOCATED IN AN ADJOINING CABINET.

COUNTER MOUNT  
APPLICATION



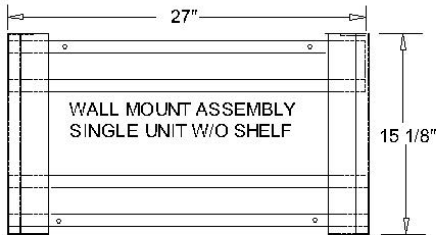
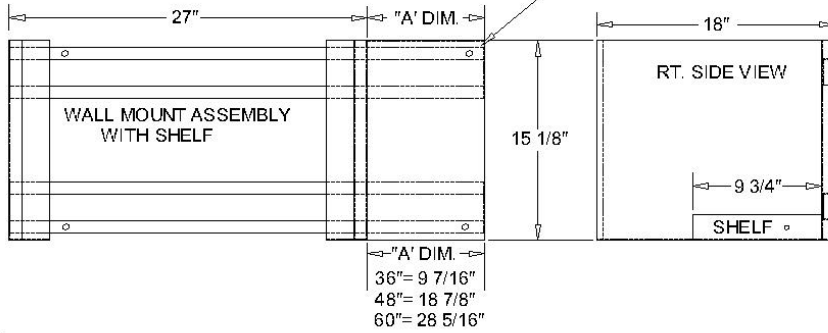
NOTE!!!  
FOR SALAMANDER DIMENSIONS  
REVIEW PAGES 4 & 5



WALL MOUNT ASSEMBLY

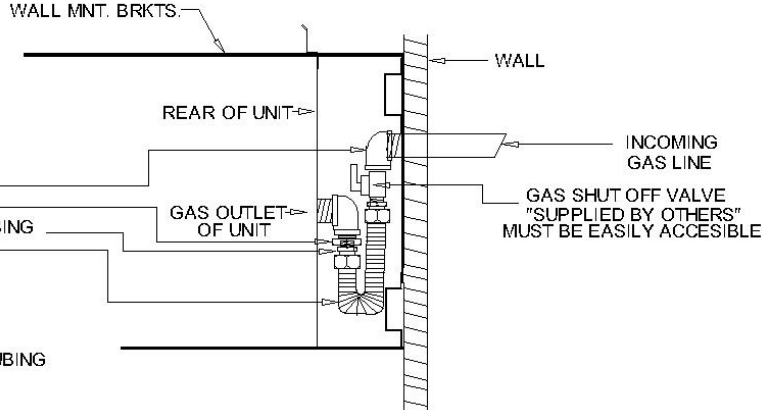
NOTE!!!

ALL DRILLED MOUNTING HOLES SUPPLIED BY OTHERS  
ALL ATTACHMENT HARDWARE SUPPLIED BY OTHERS



REF. ONLY

SKETCH OF GAS CONNECTIONS



ITEMS SUPPLIED FROM FACTORY

- 2 EA. — 90 1/2" NPT. ELBOW
  - 2 EA. — REDUCER BUSHING 1/2" TO 1/8" NPT
  - 2 EA. — STRAIGHT CONNECTOR 1/8" NPT TO 3/8" TUBING
  - 1 EA. — 3/8" FLEX S/S TUBING SUPPLIED
- 
- 90 1/2" NPT. ELBOW
  - REDUCER BUSHING 1/2" TO 1/8" NPT
  - STRAIGHT CONNECTOR 1/8" NPT TO 3/8" TUBING

# INSTALLATION

The importance of the proper installation of the Gas Cooking Equipment cannot be over stressed. Proper performance of the equipment is dependent, in great part, on the compliance of the installation with the manufacture's specifications.

Installation must conform to local codes or, in the absence of local codes, with the National Fuel Code,

ANSI Z223.1 National Gas Installation Code,

CAN/CGA-B149.1, or the Propane Installation Code,

CAN/CGA-B149.2, as applicable.

Before assembly and connection, check gas supply.

- A. The type of gas for which the unit is equipped is stamped on the data plate located behind the right access panel of the unit. Connect a unit stamped "NAT" only to natural gas supply: connect those stamped L.P. only to the propane gas supply.
- B. If it is a new installation, have gas authorities check meter size and piping to assure that the unit is supplied with sufficient amount of gas pressure required to operate the unit.
- C. If it is additional equipment or replacement have a qualified gas technician check the gas pressure to make certain that existing gas facilities (meter, piping, etc.) will deliver the BTU'S of gas required at the unit with no more than 1/2" water column pressure drop. When checking pressure be certain that other equipment on the same gas line is on and at full rate. A pressure regulator is supplied with the unit pre-set at the factory for the type of gas that was specified. The pressure regulator is located behind the left access panel of the unit
- D. The appliance and its individual shut off valve (supplied by others) must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of 1/2" psi (3,45 kPa).
- E. Gas supply connection is made in back lower left hand corner of the unit. A Readily accessible approved type gas hand valve (supplied by others) should be installed on each supply line. TEST FOR LEAKS; DO NOT USE AN OPEN FLAME.

**NOTE!!! THE PRESSURE REGULATOR IS LOCATED INSIDE THE UNIT. TO GAIN ACCESS TO IT, REMOVE THE LEFT SIDE ACCESS PANEL OF THE UNIT.**

Make certain that the new piping, joints and connections have been made in a clean manner and have been purged, so that the piping chips, compound, etc. will not clog the valves and/or controls. Use pipe joint sealant that is resistant to liquefied petroleum gas

## **Warning:**

Check gas connections for leaks. Use a soap solution or similar means  
**DO NOT USE AN OPEN FLAME!**

# INSTALLATION

## WALL MOUNTED SALAMANDER AND SHELF ASSY FOR 36", 48" AND 60" WIDE UNITS

1. Each gas appliance shall be located with respect to building construction and Other Equipment so as to permit access to the appliance. Such access and Clearance is necessary for service and cleaning.
2. A welded wall mounted Salamander and shelf assembly, which includes two (2) hi-hat supports, one (1) lower support angle, one (1) upper support angle, one (1) rear shelf panel, one (1) shelf, and one Salamander bottom panel. Also hardware required for attachment of components.
3. Review pages 4 & 5 as a reference for mounting the wall mount kit. Drilled Holes are required in both the upper and lower Lt. to Rt. Supports (**ADDED BY OTHERS**), before any mounting can take place. **NOTE!!!! Installer is Responsible for mounting hardware as well as insuring that the wall mount assembly once positioned in place can support a minimum of 200 lbs.**
4. After the wall mount unit has been installed, remove the second screw back from the front top piece (1) from the left side (1) from the right side. Slide the Salamander in between the flanges of the wall mount assembly. By keeping the front flush with the Wall mount brackets, the bottom mounting holes should line up. With the (4) ¼ -20 x 1" bolts supplied from the factory, secure the Salamander to the Bottom flanges of the wall mount assembly.
5. Attach the upper shelf angle to the top rear support with (2) sheet metal screws provided. Attach the lower shelf angle to the bottom rear support with (2) sheet Metal screws provided.
6. Next position and attach the shelf back panel to the (2) angles added in step (6).
7. Attach the shelf with (3) 10-24 machine screws provided. Make adjustments as necessary.
8. Attach the bottom panel and use the (4) plug buttons to seal the ½" holes
9. Replace the (2) screws removed in step (5) assembly is complete.

# INSTALLATION

## Salamander mount w/out shelf

1. Each gas appliance shall be located with respect to building construction and other Equipment so as to permit access to the appliance. Such access and clearance may be necessary for service and cleaning.
2. A welded wall mount bracket assembly provided, which includes two (2) hi-hat supports and a left and right wall, mount bracket.
3. One bottom panel, (4) sheet metal screws and (4) plug buttons
4. Holes required for mounting and hardware for mounting **required by others**
5. Once the wall mount bracket assembly is in place it is **required to support a minimum of 200 lbs.**
6. Before sliding the Salamander in place remove the second screw back from the front top piece from both the left and right side of the Salamander. Connect the gas supply and check for gas leaks. **DO NOT USE AN OPEN FLAME.**
8. Plug in electrical cord.
9. Slide Salamander to the rear of the assembly until the front of the unit is flush The wall mounts brackets. Re-install the (2) screws removed from step (7).
10. With the (4) ¼ - 20 bolt provided secure the Salamander to the bottom . flanges of the Lt./Rt. Wall mount brackets.
11. Secure the bottom panel with (4) sheet metal screws provided an plug the ½” dia. Holes with the (4) plug buttons. Assembly is complete.



WARNING NEVER use this appliance as a space heater to heat or warm the room. Doing so may result in carbon monoxide poisoning and overheating of the oven.

## **Ventilation and Air Supply**

**ALL VENTILATION HOODS MUST COMPLY WITH THE U.L. STANDARD- U.L. 507 HOOD SPECIFICATIONS.**

**NOTE!!!! ALL SALAMANDER BROILERS MUST BE MOUNTED UNDER AN APPROVED VENTILATION HOOD**

Adequate ventilation is very important for proper operation. The ideal method of ventilation for a Salamander Broiler is the use of a properly designed canopy hood which should extend three inches (3") beyond all sides of the appliance and Six (6) feet six (6") inches from the floor. All gas burners need sufficient air to operate and large objects should not be placed in front or on top of the broiler, which would obstruct the airflow through the front of the broiler.

**FOR YOUR SAFETY NEVER PLACE ANY TYPE OF OBJECT ON TOP OF THE SALAMANDER BROILER AS THE TOP OF THE BROILER CAN CAUSE SEVERE BURNS OR FIRE AND OBSTRUCT VENTILATION.**

# **OPERATION**

## **MAIN BURNER OPERATION:**

1. Push and turn the lower valve dial to the left so that the HIGH position on the dial is at 12:00. Immediately you will hear the spark igniter snapping and the top front burner will ignite.
2. Note: Until the burner has an adequate amount of gas it will not ignite
3. Repeat the same procedure for the upper valve dial, which will ignite the top rear burner.
4. When ignition has been accomplished a blue flame will be visible across the Entire face of the Infra-Red burner. After approx. 2 ½ to 3 minutes the entire Burner surface will glow a bright orange red color.

## **BURN OFF PERIOD**

Many parts used in the manufacturing of this appliance have a thin protective coating of oil. This oil should be burned off before the equipment is used for food preparation. The same goes for the Infra-Red burners. Until the binders etc. are burned off, the burners will emit a strong odor. Make sure your Range Hood is on and in the High Position during this burn off period.

## **TO CONSERVE ENERGY:**

**Do not waste energy by leaving the controls in the HIGH temperature settings during idle periods. We recommend you turn the appliance off. Very seldom will you use the low setting on the burner dial. When this setting is used, the burner will not burn the bright red orange color, but blue flames will travel across the entire face of the burner.**

## **SHUT DOWN INSTRUCTIONS:**

Turn main burner valves to the “OFF” position. If the unit is to be shut down for an extended period of time, close the manual inline service valve to the off position.

**NOTE!!** The inline service valve is not factory supplied.

**FOR YOUR SAFETY NEVER PLACE ANY TYPE OF OBJECT ON TOP OF THE SALAMANDER BROILER. THE TOP OF THE BROILER CAN CAUSE SEVERE BURNS AND/OR FIRE AND WILL ALSO OBSTRUCT VENTILATION.**

# OPERATION

## MAIN BURNER ADJUSTMENTS:

All Salamanders are provided with a fixed burner orifice to provide 10,500 BTU/HR per burner at the “MAX” setting for NATURAL gas supplied at 5.0” W/C pressure and 10,500 BTU/HR per burner at the “MAX” setting on PROPANE gas supplied at 10.0” W/C pressure.

The “**LOW**” setting is adjustable and should be set as follows:

1. Set the burner valve knob to the low setting and remove the burner knob.
2. Insert a thin bladed screwdriver into the valve stem to engage the slot inside the stem.
3. Holding the valve stem turn the setscrew clockwise to decrease the rate and counter clockwise to increase rate.
4. Proper adjustment is attained at a point where the burner flame travels back and forth across the face of the ceramics. **(If set too low a constant spark will be continuous. If this occurs increase the low setting.)**

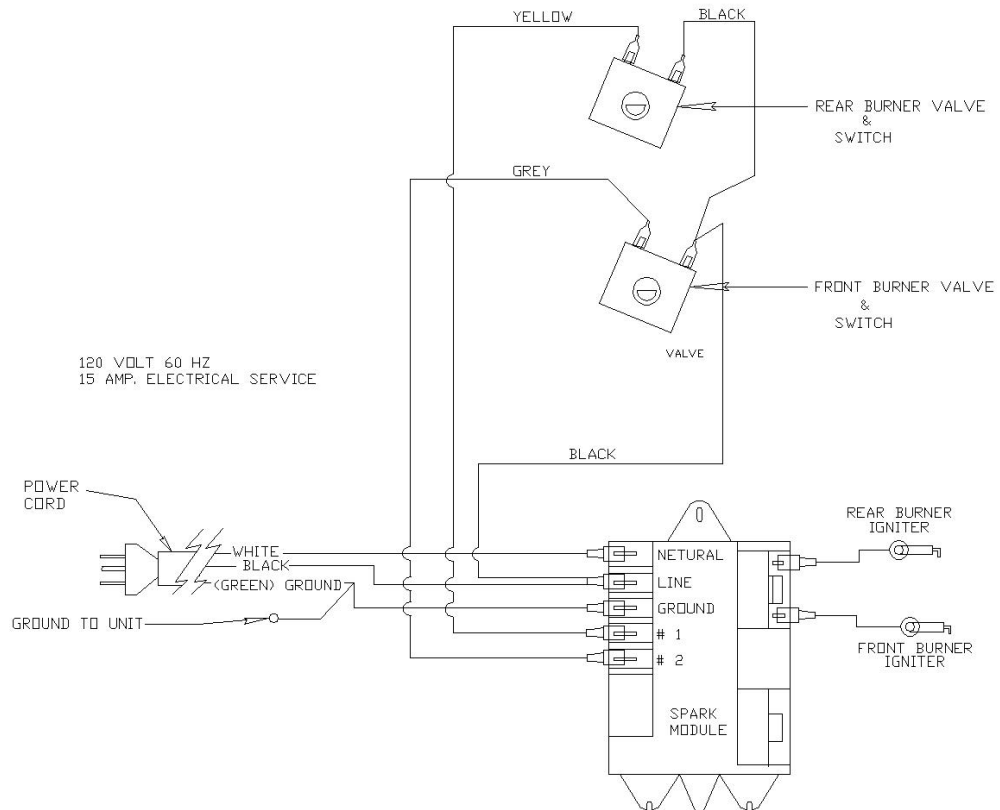
This adjustment has been factory pre-set, however, with changing pressures this adjustment may need to be re-done after installation.

**THIS IS NOT CONSIDRED A MANUFACTURING DEFECT AND IS NOT WARRANTABLE**



WARNING NEVER cover any slots, holes or passages in the oven bottom or cover an entire rack with materials such as aluminum foil. Doing so blocks airflow through the oven and may cause carbon monoxide poisoning. Aluminum foil linings may also trap heat, causing a fire hazard.

# SALAMANDER WIRING DIAGRAM



NOTE!!!  
 THERE IS NO CONNECTION NECESSARY BEYOND  
 PLUGGING THE UNIT INTO A POLARIZED, GROUNDED  
 120-VOLT, 60-Hz, 15 AMP CIRCUIT.



**COOKING GUIDE  
SOME OF THE ITEMS TESTED**

<b>ITEM</b>	<b>BURNER SETTING</b>	<b>RACK POSITION</b>	<b>EST. COOK TIME</b>
STRIP (1 1/4) THICK	HI	3	4 MIN. PER SIDE (MED)
T- BONE (1") THICK	HI	3	4 MIN.PER SIDE (MED)
SAUSAGE (PRE- COOKED)	HI	2	7 MIN.TURNING)
HAMBURGER	HI	2	3 MIN. PER SIDE (MED)
CHICKEN PCS.(FULL RACK)	HI	1 OR 2	35 MIN.(TURNING)
HOT DOGS	HI	1	3 MIN.(TURNING)
FRENCH ONION SOUP (LARGE)	HI	1	7 MIN.
GARLIC BREAD	HI	1	1 MIN.

**NOTE:**

**COOK TIMES WILL VARY DUE TO THE ITEMS THICKNESS AND ITEM PREFERENCE.**

**RACK POSITIONS AS TESTED ARE (1) BEING THE LOWEST TO (4) BEING THE HIGHEST.**

**THE # 4 POSITION WAS USED TO FINISH OFF SOME OF THE STEAK ITEMS TESTED. AGAIN THIS WILL VARY DUE TO PREFERENCE.**

# **MAINTENANCE**

**A program of proper cleaning techniques will aid in continued trouble free operation of this or any Quality equipment.**

## **DAILY**

The Grid Rack should be wiped daily while still warm, using a heavy cloth or other grease absorbing material to remove grease and burnt food before they burn into the grid. Remove burnt materials, such as carbonized grease or food, with a stiff wire brush. **DO NOT USE ANY TYPE OF STEEL WOOL.**

Small particles may be left on the grid surface and get into the food products. Grid rack should be washed thoroughly using a wire brush and a hot, mild detergent or soap solution. Rinse with clear, warm water.

## **EXTERIOR AND INTERIOR CLEANING**

**Establish a regular cleaning schedule. Any spills should be wiped Up immediately.**

1. Wipe exposed, clean-able surfaces when cool with a mild detergent and hot water. Stubborn spots may be removed with a lightweight non- metallic scouring pad. Dry thoroughly with a clean cloth.
2. Stainless steel should be cleaned using a mild detergent, a soft cloth and hot water. If it is necessary to use a non- metallic scouring pad, always rub in the direction of the grain in the metal to prevent scratching. Use water based stainless steel cleaner (such as Drackett Twinkel), if you want a high shine.
3. To remove the inner rack assembly, place lift handle in the lowest position, pull the rack out as far as it will go. Remove the rack, and then remove the drip chute and set aside. Push the rack assembly back into the unit as far as it will go. Position the lift handle into the # 2 position. Carefully push down on the rack handle, which should allow the rear rollers to lift up and out of the roller guides. Now roll the rack assembly forward till you can grab it with both hands to remove it completely. Once you clean the rack assembly and are ready to re-install repeat the steps in reverse order.

**IMPORTANT - THESE INSTRUCTIONS ARE TO REMAIN WITH THE APPLIANCE AND THE CONSUMER IS TO RETAIN THEM FOR FUTURE REFERENCE**