



# SENTINEL™

## GAS HOT FOOD STEAM TABLES



MODELS: SN-GBM-2NG/LP, SN-GBM-3NG/LP, SN-GBM-4NG/LP & SN-GBM-5NG/LP

## **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.**

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

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

# INTRODUCTION

Our gas steam tables are produced with quality workmanship and material. Proper installation, usage and maintenance will result in years of satisfactory performance.

Before installing the steam table, thoroughly read this manual and carefully follow all instructions.

This manual is applicable to models listed below. Procedures in this manual will apply to all models unless specified.

<b>STEAMING TABLES CAPACITY</b>					
<b>MODEL</b>	<b>Burner Qty</b>		<b>BTU / Hour</b>	<b>LP</b>	<b>Natural gas</b>
SN-GBM-2NG/LP	2		6,200	#75	#65
SN-GBM-3NG/LP	3		9,300	#75	#65
SN-GBM-4NG/LP	4		12,400	#75	#65
SN-GBM-5NG/LP	5		15,500	#75	#65

## UNPACKING

This steam table was carefully inspected before leaving the factory. Upon acceptance of the shipment, the transportation company assumes full responsibility for safe delivery.

Immediately after unpacking the steam table, check for possible shipping damage. If the steam table is damaged, save the packaging material and contact the carrier immediately

## CODES AND STANDARDS

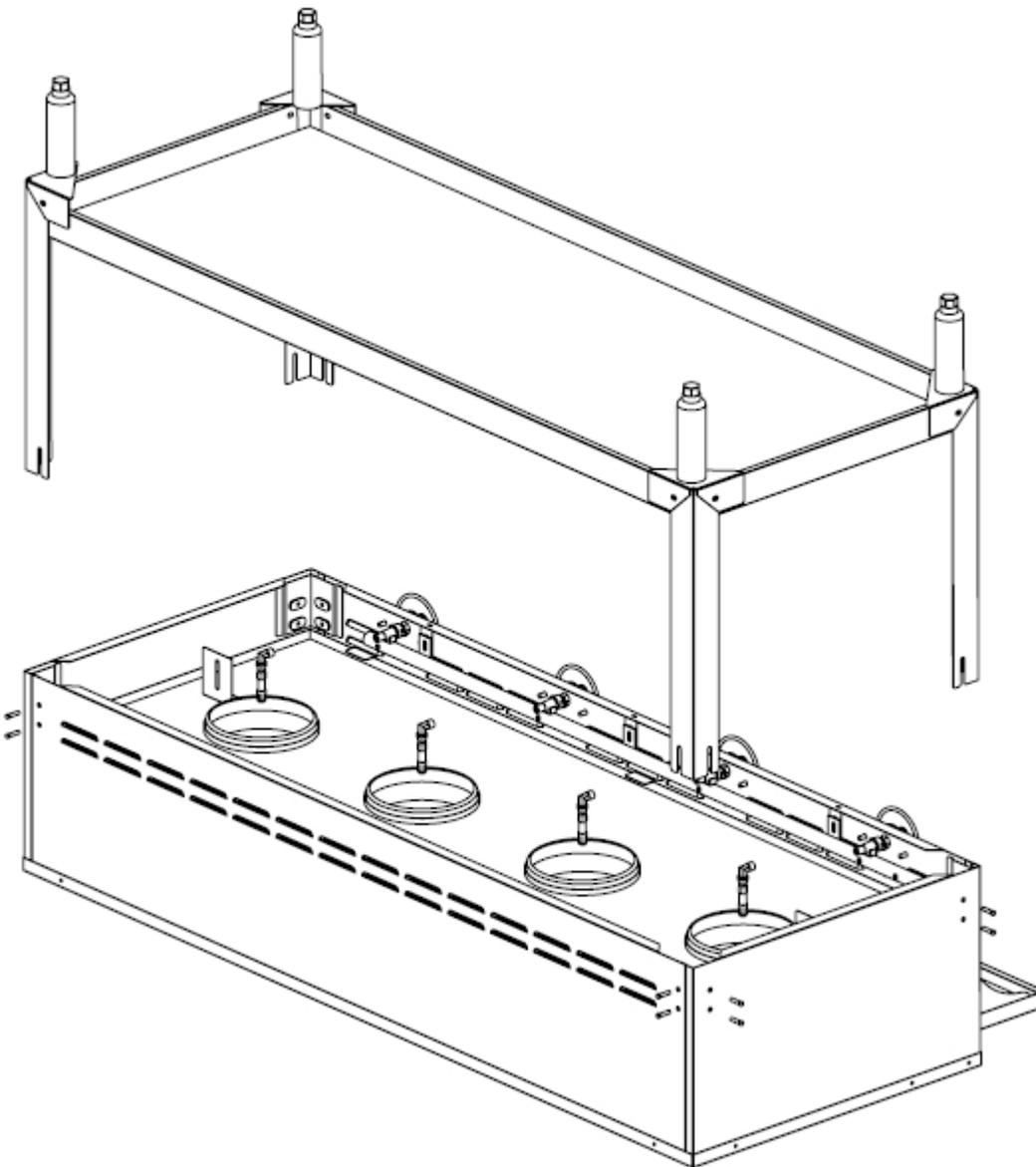
The steam table must be installed in accordance with:

- ◆ State and local codes, or in the absence of local codes, with:
- ◆ National Fuel Gas Code, ANSI-Z223.1/NFPA #54 (latest edition). 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.
- ◆ NFPA Standard #96 Vapor Removal from Cooking Equipment, latest edition, available from the National Fire Protection Association, Batterymarch Park, Quincy, MA.
- ◆ National Electrical Code, ANSI/NFPA-70 (latest edition). Copies may be obtained from The National Fire Protection Association, Batterymarch Park, Quincy, MA. 02169-7471.
- ◆ In the commonwealth of Massachusetts all gas appliances vented through a ventilation hood or exhaust system with a damper or with a power means of exhaust shall comply with 248 CMR.

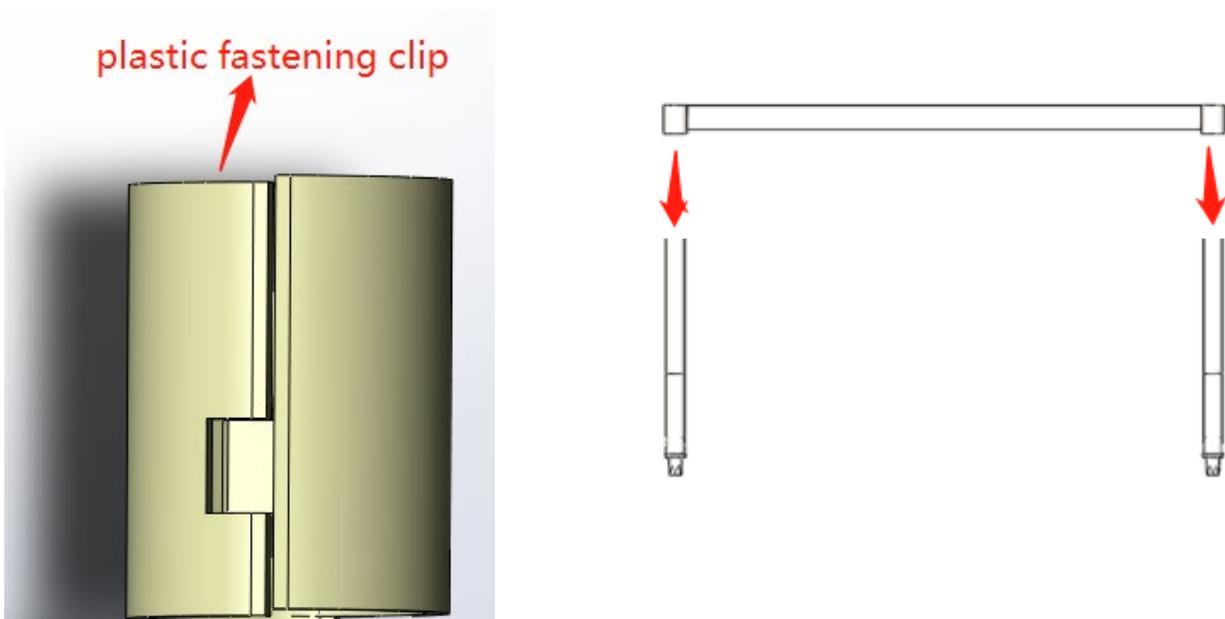
## STEAM TABLE ASSEMBLY INSTRUCTIONS

The steam table must be restrained to prevent tipping and the splashing of hot liquid. The means of restraint may be the manner of installation, such as connection to a battery of appliances, installing the steaming tables in an alcove, or by separate means such as adequate ties.

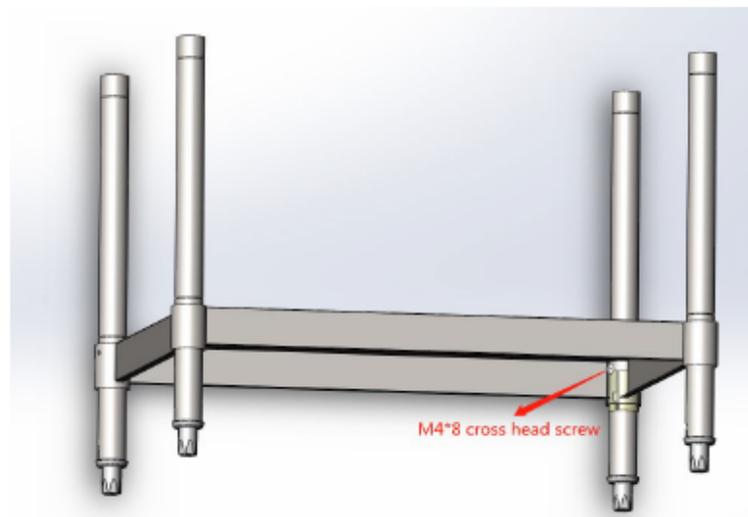
Before installing the steam table bottom shelf and legs, verify that the type of gas (natural or propane) is the same as what's on the steam table data plate, which is located on the inside of the door panel. Make sure the steam table is configured for the proper elevation.



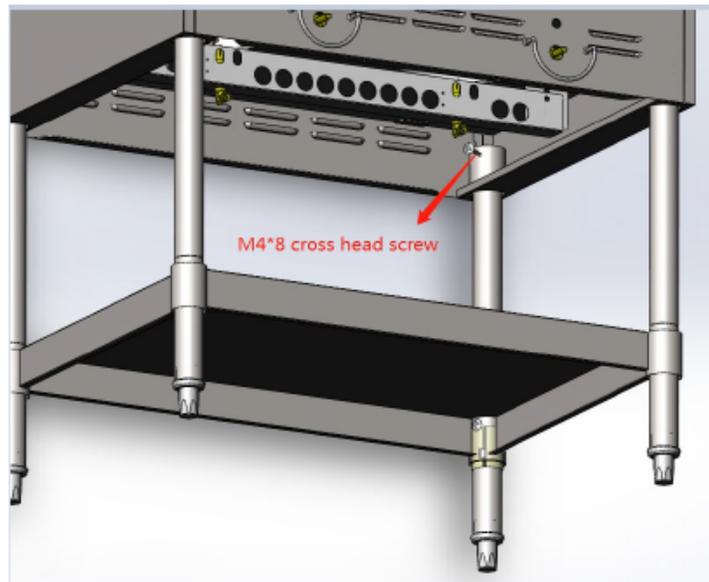
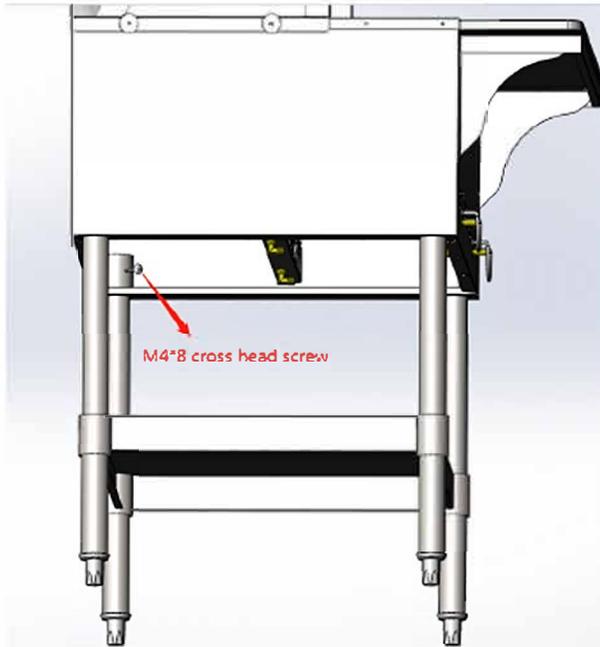
- (1) Put the round plastic fastening clip at the bottom pressed channel position. Insert the legs underneath the bottom shelf



There is a hole at the shelf corner pipe. Use a screwdriver to secure the shelf with the M4\*8 cross head screw.



- (2) Put the round plastic fastening clip at the top pressed channel position. Insert the leg assembly with under-shelf inside the pipe. There is a hole at the shelf corner pipe. Use a screwdriver to secure the shelf with the M4\*8 cross head screw.



**Clearances**

- ◆ Minimum clearance from combustible construction:
  - 6" (15 cm) from the sides of the steam table
  - 6" (15 cm) from the back of the steam table
  
- ◆ Minimum clearance from noncombustible construction:
  - 0" from the sides of the steaming tables
  - 0" from the back of the steaming tables
- ◆ 16" (41 cm) Between the steam table and any open-top flames
- ◆ Allow space for servicing and operation.

**Location**

- ◆ Install steam table in an area with sufficient air supply for gas combustion.
- ◆ Do not obstruct the flow of combustion and ventilation air.
- ◆ Provide adequate clearance for air openings into the combustion chamber.
- ◆ Do not permit fans to blow directly onto steam table.
- ◆ Avoid wall-type fans, which create crosscurrents within a room.

## FLUE CONNECTION

Make the flue connection as follows:

- ◆ Comply with *Vapor Removal from Cooking Equipment* , ANSI-NFPA Standard #96 (latest edition), available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.
  
- ◆ Locate the steam table under a hood with adequate connection to an exhaust duct. The hood must extend 6” (15 cm) beyond steaming tables on both sides.
  
- ◆ Clearance above the steam table should be adequate for combustion byproducts to be removed efficiently.
  
- ◆ An 18” (46 cm) minimum clearance should be maintained between the flue vents and the filters of the hood venting system.
  
- ◆ Never make flue connections directly to the steam table.
  
- ◆ Do not obstruct the flow of the gases from the appliance. Proper air balance should be maintained in the room.
  
- ◆ Ensure that your ventilation system does not cause a down draft at the steam tables’s bottom opening. Down draft will not allow the steam table to exhaust properly and will cause overheating which may cause permanent damage. Damage caused by down draft will not be covered under equipment warranty. Never allow anything to obstruct the flue or ventilation exiting from the steam table.

## GAS CONNECTION

### **⚠ WARNING**

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

The gas inlet is located on the lower rear of the steam table. Codes require that a gas shutoff valve be installed in the gas line ahead of the steam table.

The gas supply line must be at least the equivalent of ½" (12.7 mm) iron pipe, quick-disconnect flex hose, ¾" (19 mm) iron pipe.

Make sure the pipes are clean and free of obstructions, dirt, and piping compound. A battery requires one or two connections of appropriate size for the gas requirement.

### **⚠ 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, fully purge gas pipes to remove air.

### **GAS PRESSURES (ALL MODELS):**

The gas pressure should be set at 4" W.C. (Water Column) (0.8 kPa) for natural gas and 10" W.C. (2.75 kPa) for propane gas. If incoming pressure exceeds ½ PSI (3.45 kPa), an additional pressure regulator must be installed.

### **TESTING THE GAS SUPPLY PIPING SYSTEM:**

When test pressures exceed ½ PSI (3.45 kPa), the steam table and its individual shutoff valve must be disconnected from the gas supply piping system.

When test pressures are ½ PSI (3.45 kPa) or less, the steam table must be isolated from the gas supply piping system by closing its individual shutoff valve.

## LEVELING THE STEAM TABLE

Check the level of the steam table by placing a level on top of the steam table after gas connections have been made.

Ensure that the steam table is level front-to-back and side-to-side in the final installed position.

## OPERATION

### **▲ WARNING**

Hot parts can cause burns. Use care when operating, cleaning, and servicing the steam table.

### **▲ WARNING**

Steam table is not to be used during a power outage

## BEFORE FIRST USE

New units are wiped down at the factory to remove any visible signs of dirt, oil, grease, etc. remaining from the manufacturing process.

Before any food preparation, thoroughly wash the protective oil from all surface parts and with hot soapy water to remove any film residue and dust or debris.

### **NOTICE**

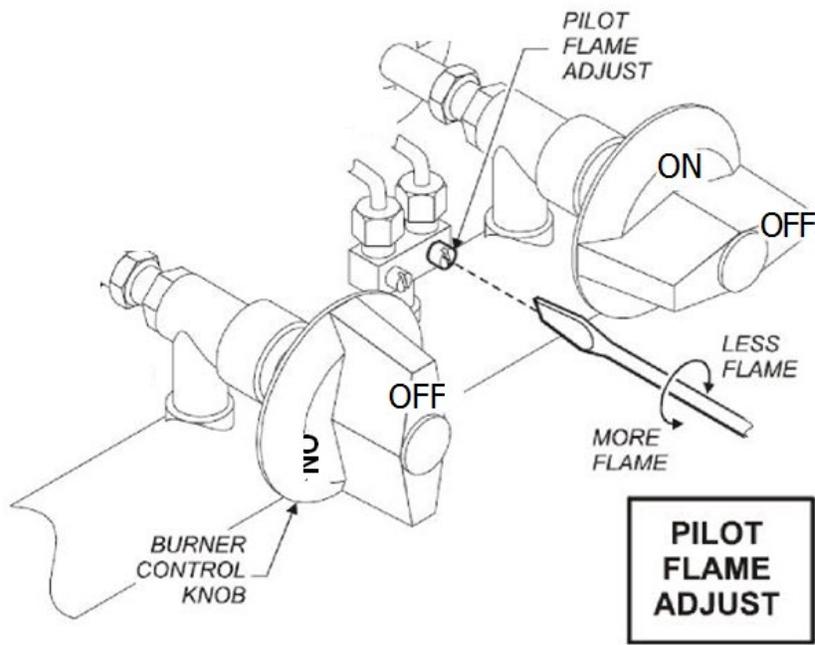
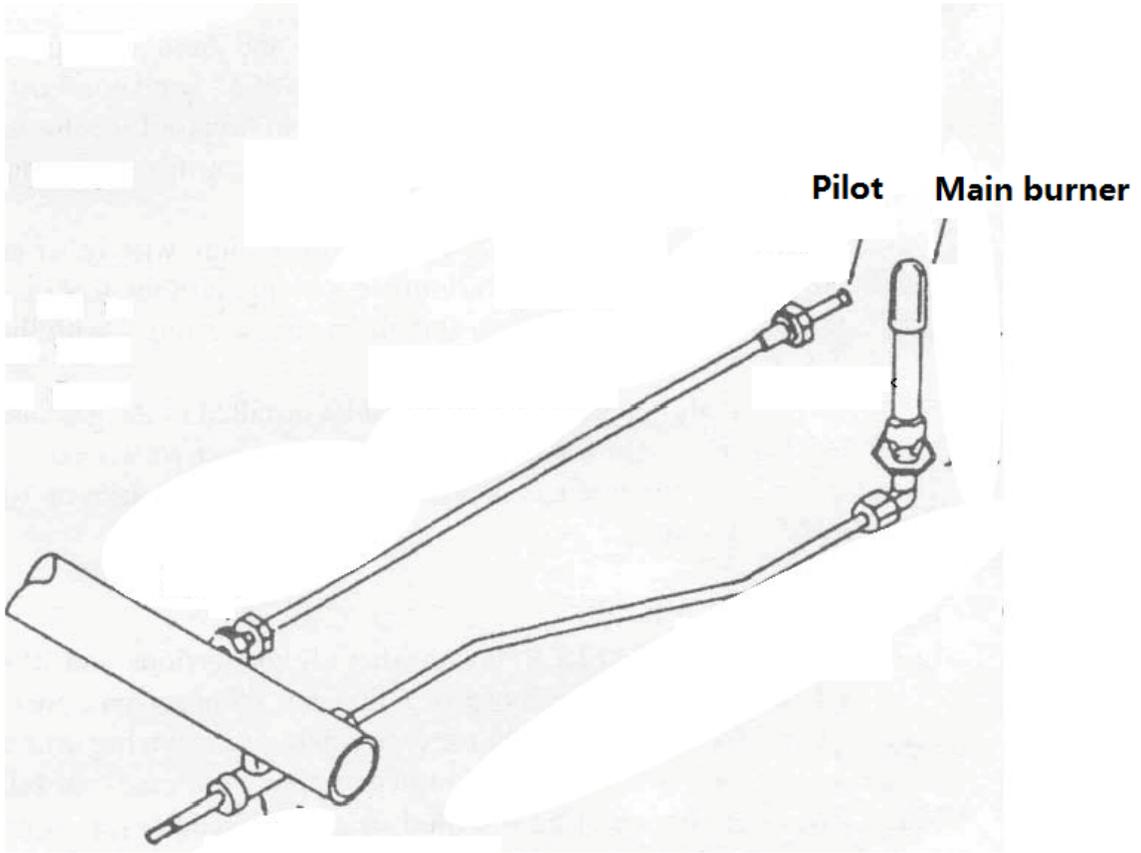
Do not use chlorine or sulfate/sulfide cleaners.

- ◆ Wash any accessories shipped with unit.
- ◆ Rinse steam table and accessories thoroughly.
- ◆ Wipe tank completely dry with a soft, clean cloth.

## **FOLLOW THESE INSTRUCTIONS FOR GAS PIPING**

1. Check all connections and fittings on valves and tubing supplied as a part of this unit to make sure they did not come loose during shipment. 2. The installation of this unit must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54 – latest edition, or the booklet titled “CSA B149.1-10: Natural gas and propane installation code”. This booklet is available from the American Gas Association, 400 North Capitol St., NW, Washington, DC 20001. If in doubt, contact a certified and experienced installer. 3. A manual shut-off valve should be installed between the gas supply system and the gas inlet on the appliance. This item is not included with the unit and must be purchased separately. A gas regulator should be installed on the gas supply line to maintain a 4” WC for Natural Units and/or 10” WC for LP (bottled gas) units. 4. 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 more than 1/2 psig (3.45 kPa). 5. 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 pressures equal to or less than 1/2 psig (3.45 kPa). 6. Before the initial lighting of this appliance, check for gas leaks by applying a soapy solution to all connections. **DO NOT USE AN OPEN FLAME TO CHECK FOR APPLIANCE LEAKS.** **VENTILATION:** 1. Care should be taken so as not to obstruct the area around the burner or pilot. **DO NOT** close off the space between the undershelf and lower edge of the body. A minimum of 4 inches air space must be maintained between items stored the undershelf and the burner. 2. **DO NOT** obstruct the ventilation air flow or the combustion air flow. Keep area around the front and the rear of the unit clear. 3. This unit must be placed in an area free and clear from combustibles. **CLEARANCES:** 1. This appliance is approved for installation on both combustible and noncombustible floors with the clearances listed to the right. 2. Adequate clearances for service, cleaning, and ease of proper operation of this appliance must be allowed.

# LIGHTING THE PILOT



## **FOLLOW THESE INSTRUCTIONS FOR LIGHTING THE PILOT**

1. Turn all control and the main gas valves to the off position. Wait at least 5 minutes before trying to light the pilots. This will allow any gas that has accumulated in the burner compartment to escape. 2. After waiting 5 minutes, open the main gas valve and place a lighted match at each pilot and adjust the pilot to a height of at least 5/8 inches. This can be performed by taking a screwdriver and placing it in the pilot adjustment screw slot and turning it. Turn the screw counterclockwise to increase the pilot flame, or clockwise to make decrease it. 3. If the pilot extinguishes, repeat the lighting instructions beginning with STEP 1. 4. Turn the main burner valve in a counterclockwise direction to the desired setting. If the main burners do not light within 4 seconds, then repeat the light instructions beginning with STEP 1.

## **SHUT-DOWN INSTRUCTIONS**

For a nightly shut-down, just turn the main burner manual valve in a clockwise direction to off position. For a seasonal shut down, tum the main burner manual valve in clockwise direction to off position. Then turn the pilot adjustment screw also in a clockwise direction until the screw is snug and there is no longer a pilot flame.

## **HEATING INSTRUCTIONS**

Turn the main burner manual valves to the maximum setting for approximately 10 to 20 minutes with the openings covered before the food is placed in the compartment. The pan openings should be covered to prevent the loss of heat. The height of the burner flame that is required to hold at a desired temperature will vary with different types of operations. Many things will affect this such as room temperature, air movement, amount of food in pan, size of pan, amount of water in unit, and food turn over. Experience, in most cases, will determine the correct setting for your usage.

## CLEANING

### **⚠ WARNING**

**Hot parts can cause burns. Use care when operating, cleaning, and servicing the steam table.**

Clean regularly and polish with a soft dry cloth. If regular cleaning is neglected, grease will be burned on and discolorations may form. Fingerprints are sometimes a problem on highly polished surfaces of stainless steel. They can be minimized by applying a cleaner that will leave a thin oily or waxy film.

### **NOTICE**

Do not use chlorine or sulfate/sulfide cleaners.

- ◆ Rinse thoroughly, and then polish with a soft dry cloth.
- ◆ Keep the steam table exterior clean and free of accumulated grease to prevent stubborn stains from forming.
- ◆ Remove discolorations by washing with any detergent or soap and water.
- ◆ Use a self-soaping, non-metallic scouring pad for particularly stubborn discolorations.
- ◆ Always rub with the grain of the stainless steel.
- ◆ Do not use a metallic scoring pad or harsh cleaners.