



# MARKET FORGE

<b>IMPORTANT FOR FUTURE REFERENCE</b>	
Please complete this information and retain this manual for the life of the equipment:	
Model #:	_____
Serial #:	_____
Date Purchased:	_____

## Installation & Operation Manual

# SIRIUS II

## Gas Boilerless Convection Steamer

### SIRIUS II-(4, 6, 8, 10 & 12)



Sirius II - 6



Sirius II - 10

### **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.

### CROWN FOOD SERVICE EQUIPMENT



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Telephone: 919-762-1000

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



# SAFETY PRECAUTIONS

Before installing and operating this equipment, be sure everyone involved in its operation is fully trained and aware of precautions. Accidents and problems can be caused by failure to follow fundamental rules and precautions.

The following symbols, found throughout this manual, alert you to potentially dangerous conditions to the operator, service personnel, or to the equipment.



This symbol warns of immediate hazards that will result in severe injury or death.



This symbol refers to a potential hazard or unsafe practice that could result in injury or death.



This symbol refers to a potential hazard or unsafe practice that could result in injury, product damage, or property damage.



This symbol refers to information that needs special attention or must be fully understood, even though not dangerous.

## IMPORTANT NOTES FOR INSTALLATION AND OPERATION

### WARNING

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

### WARNING

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

### NOTICE

This product is intended for commercial use only. NOT FOR HOUSEHOLD USE.

### NOTICE

This manual should be retained for future reference.

### IMPORTANT

**PURCHASER:** Instructions to be followed in the event the operator of this appliance smells gas must be posted in a prominent location. This information shall be obtained by consulting the local gas supplier.

The information contained in this manual is important for the proper installation, use, and maintenance of this steamer. Adherence to these procedures and instructions will result in years of trouble-free service.

Please read this manual carefully and retain it for future reference.

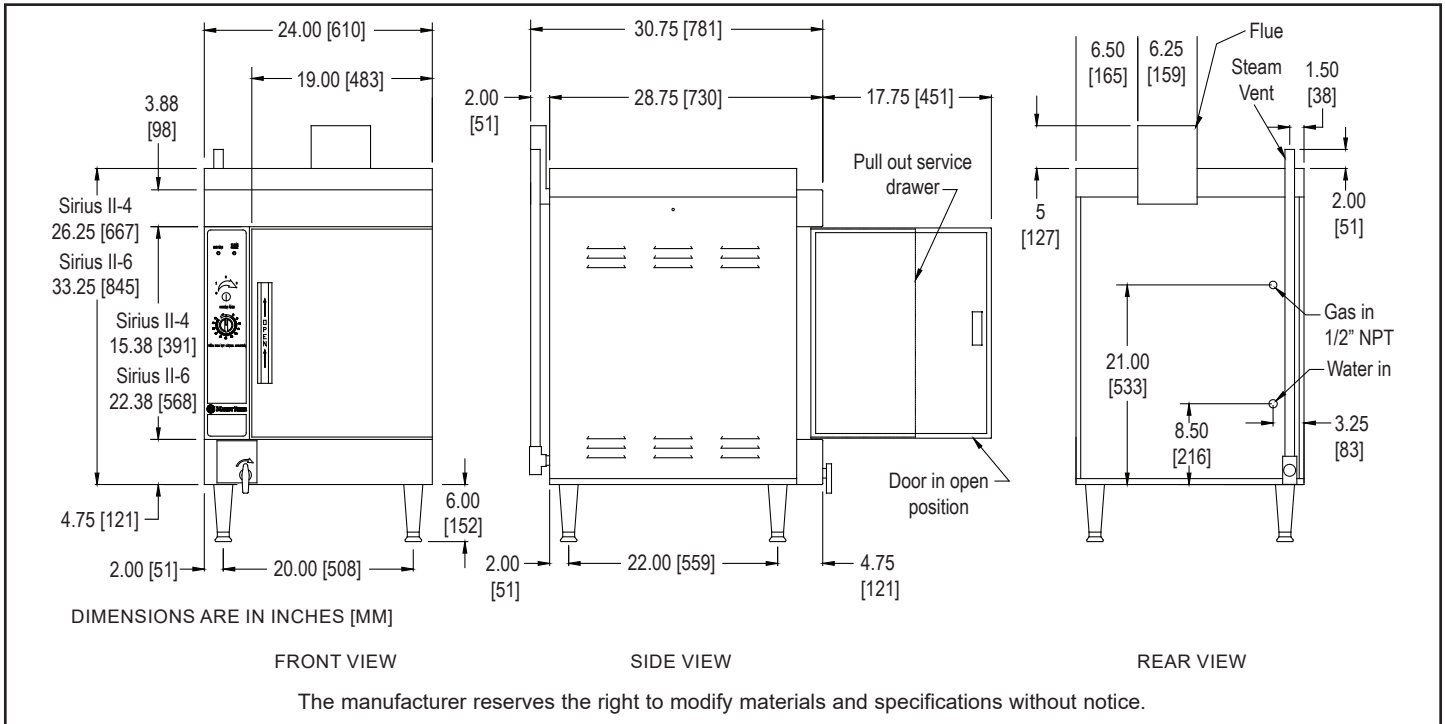
**ERRORS:** Descriptive, typographic or pictorial errors are subject to correction. Specifications are subject to change without notice.

RETAIN THIS MANUAL FOR FUTURE REFERENCE.

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# SERVICE CONNECTIONS



### GAS PRESSURE AND CONNECTIONS

- Natural - 3.5" WC required, not to exceed 13.5"
- Propane - 9" WC required, not to exceed 13.5"
- Gas pipe size: 1/2" NPT required as a minimum

### SPECIFICATIONS AND COMPARTMENT PAN CAPACITY

	Sirius II-4	Sirius II-6	Pans	Sirius II-4	Sirius II-6
Voltage	120V	120V	12" x 20" x 2.5"	4	6
BTU's	27,000*	27,000*	12" x 20" x 4"	2	4
Gas NPT	1/2"	1/2"	12" x 20" x 6"	1	2

### WATER SUPPLY AND DRAIN SPECIFICATIONS

Good quality water feed is the responsibility of the owner. Water quality must be within the following general guidelines.  
 TDS: 40-125 ppm    Hardness: 35-100 ppm    pH: 7.0 - 8.5    Silica: <13 ppm    Chlorides: <25 ppm    Chlorine: <0.2 ppm    Chloramine: <0.2 ppm

The best defense against poor water quality is a water treatment system designed to meet your water quality conditions.

Pressure: 25(min)-50(max) PSI    Connections: Trough drain: 1/2 MNTP    Drain out: 1" FNPT    Water: 3/4" male garden hose

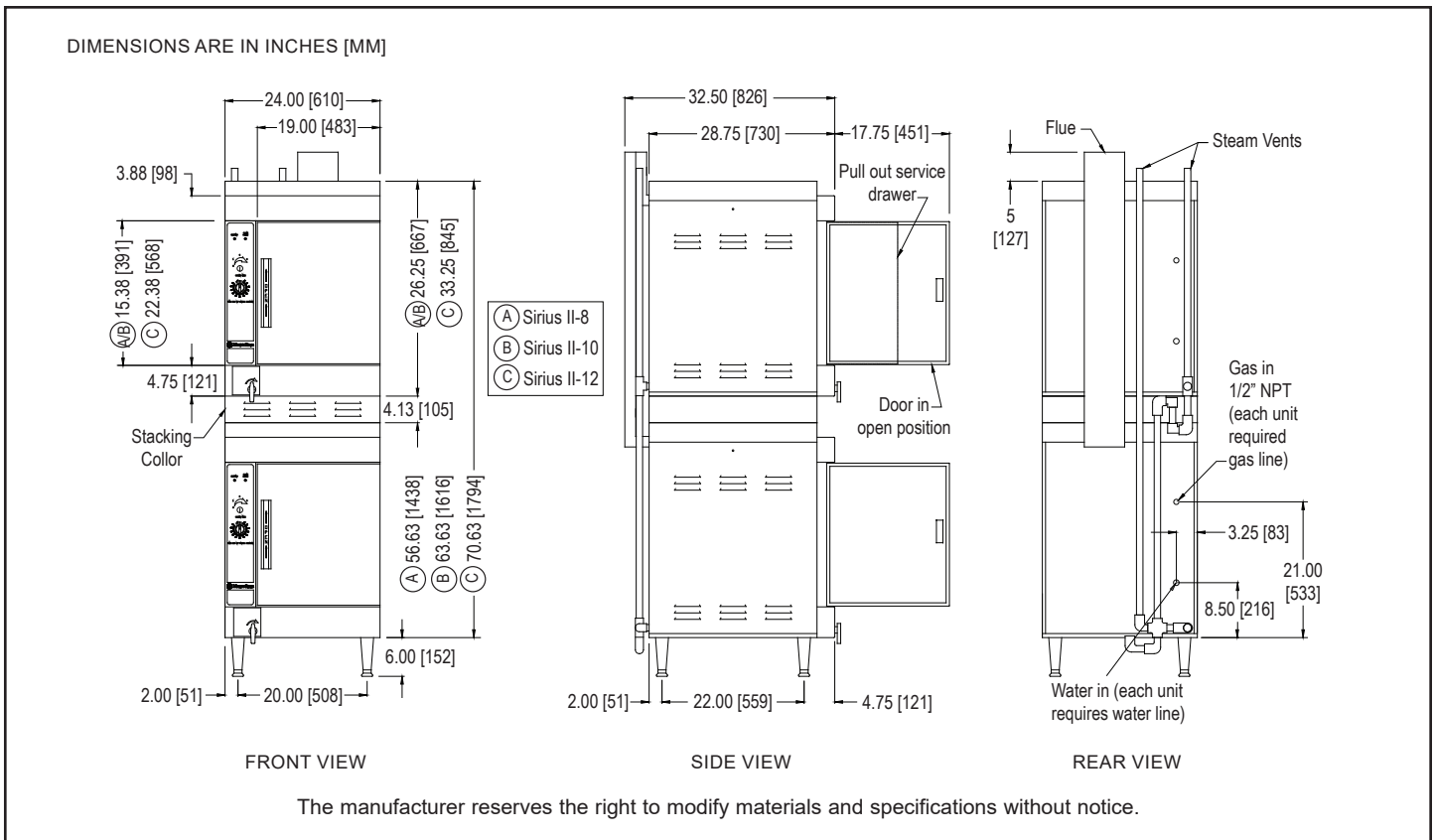
Appliance to be installed with backflow protection according to federal, state or local codes.

The drain piping must consist of temperature resistant material, greater than 160°F, and be of adequate diameter not to cause flow restriction. Improper materials may deform and cause restrictions, thus affecting performance.

### NOTES

- Each single compartment has one rear drain connection
- Single and stacked units require hood for ventilation of flue products
- 4" clearance left mandatory, right and rear is recommended.
- Each compartment requires separate electrical & water connection.
- Location near a floor drain is recommended.

As continued product improvement is a policy of Market Forge, specifications are subject to change without notice.



**GAS PRESSURE AND CONNECTIONS**

- Natural - 3.5" WC required, not to exceed 13.5"
- Propane - 9" WC required, not to exceed 13.5"
- Gas pipe size: 1/2" NPT required as a minimum

**SPECIFICATIONS AND COMPARTMENT PAN CAPACITY**

	Sirius II-8	Sirius II-10	Sirius II-12
Voltage	120V	120V	120V
BTU's	27,000*	27,000*	27,000*
Gas NPT	1/2"	1/2"	1/2"

Pans	Sirius II-8	Sirius II-10	Sirius II-12
12" x 20" x 2.5"	8	10	12
12" x 20" x 4"	4	6	8
12" x 20" x 6"	2	3	4

**WATER SUPPLY AND DRAIN SPECIFICATIONS**

Good quality water feed is the responsibility of the owner. Water quality must be within the following general guidelines.  
 TDS: 40-125 ppm    Hardness: 35-100 ppm    pH: 7.0 - 8.5    Silica: <13 ppm    Chlorides: <25 ppm    Chlorine: <0.2 ppm    Chloramine: <0.2 ppm

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Appliance to be installed with backflow protection according to federal, state or local codes.

The drain piping must consist of temperature resistant material, greater than 160°F, and be of adequate diameter not to cause flow restriction. Improper materials may deform and cause restrictions, thus affecting performance.

**NOTES**

- Each single compartment has a separate rear exiting drain plumbed directly into the stacked steamers main drain/vent line.
- 4" clearance left mandatory, right and rear is recommended.
- Location near a floor drain is recommended.
- 4" stacking collar between units (included when ordered)
- Single and stacked units require hood for ventilation of flue products.

As continued product improvement is a policy of Market Forge, specifications are subject to change without notice.

# INTRODUCTION

## PRODUCT DESCRIPTION

Congratulations on purchasing the Market Forge Sirius II. The Sirius II is a single compartment countertop or two compartment floor model steamer featuring pressureless steam cooking, a circulating fan inside the cooking chamber to speed cooking and an automatic preheated waterfill mechanism. Sirius II also features a clean water reservoir system. The cooking chamber of the SIRIUS II is treated with a scratch resistant, non-stick surface. A drain from the rear of the steamer is provided for easy safe draining.

The Sirius II steamer has a burner firing rate of 27,000 BTU/hr at a pressure of 3.5" W.C. for natural gas and 9" W.C. for propane gas.

### CAUTION

Do not use utensils, steel wool, or other harsh abrasives to clean your steamer. Scratching of the non-stick surface and stainless steel casing may occur.

## SAFETY FEATURES

As with any cooking process, or with any piece of commercial cooking equipment, there are potential hazards to both the operator and the piece of equipment if care is not taken. In designing the Sirius II steamer, safety features have been built in to protect against many of these potential hazards, but **TRAINING OF EACH OPERATOR AND CAREFUL ADHERENCE TO ALL WARNINGS ARE NECESSARY TO ENSURE THE SAFETY OF USERS.**

**Diagnostic Sensor Shut-off:** The thermostat controller has a built in diagnostic feature that will automatically shut down the burner if the sensor probe fails, which will avoid overheating.

**High Limit Shut-off:** If the steamer runs dry the burner will shut down.

**Overflow:** An overflow standpipe incorporated into the reservoir drain allows water to flow out the back drain of the steamer in case of a waterfill malfunction.

### WARNING

Failure to keep the overflow outlets clear and unobstructed may result in hot water flowing out the door of the steamer. A blocked overflow and drain could allow water to flow to the countertop or floor, which can cause slippery conditions. Modifying the steamer to operate without the overflow standpipe could cause dangerous situations and will void the warranty.

**High Water Sensor:** Two water level sensors are located on the lower backside of the steamer. The lower sensor activates the waterfill mechanism. The upper sensor will shut off water flow if an overflow situation occurs. It is important that both sensors are kept clean so that the stainless part is shiny.

### WARNING

Failure to keep both water level sensors clean may result in hot water flowing out the overflow or the front door of the steamer.

**Door Open Safety Switch:** There is a safety switch built into the door frame that shuts down the burner, fan and lights when the door is opened. Once the door is closed, all functions return. **THE DOOR MUST BE FIRMLY CLOSED IN ORDER FOR THE STEAMER TO FUNCTION. IF STEAM IS ESCAPING, DOOR IS NOT PROPERLY SHUT AND MAY AFFECT COOK TIMES, PRODUCT QUALITY AND WATER CONSUMPTION.**

**Time Delay Relay:** The steamer has two timers built into the electrical system to shut down should the water level system fail. When the steamer is first turned on and the reservoir is empty two countdown timers will begin to count. If it takes longer than 60 seconds for the level of the water to come into contact with the lower water sensor probe, the burner and the heating light will turn off. After the water comes in contact with the lower probe the burner and heating light will come back on.

**Ignition Control:** In the event of flame failure, the ignition control will lock out. It can be reset by turning the steamer off. Wait 5 minutes and turn on again.

 **WARNING**

Failure to shut the steamer door adequately can cause the door to pop open when in operation. Close door firmly.

## DIMENSIONS

- **4-pan:** External dimensions are 24" wide x 26 $\frac{1}{4}$ " high (plus 4"-6" adjustable legs) x 28 $\frac{3}{4}$ " deep (plus vent pipe).
- **6-pan:** External dimensions are 24" wide x 33 $\frac{1}{4}$ " high (plus 4"-6" adjustable legs) x 28 $\frac{3}{4}$ " deep (plus vent pipe).
- **8-pan:** External dimensions are 24" wide x 52 $\frac{1}{2}$ " high (plus 6"-9" adjustable legs) x 28 $\frac{3}{4}$ " deep (plus vent pipe).
- **10-pan:** External dimensions are 24" wide x 59 $\frac{1}{2}$ " high (plus 6"-9" adjustable legs) x 28 $\frac{3}{4}$ " deep (plus vent pipe).
- **12-pan:** External dimensions are 24" wide x 66 $\frac{1}{2}$ " high (plus 6"-9" adjustable legs) x 28 $\frac{3}{4}$ " deep (plus vent pipe).

## SERVICE CONTACTS

Should repairs be required, a network of authorized agencies is available to assist with prompt service.

A current Directory of Authorized Service Agencies may be obtained by contacting the factory or visiting our website at [www.mfii.com](http://www.mfii.com).

# INSTALLATION

## DELIVERY AND INSPECTION

**Damage Inspection:** Reporting shipping damage is the responsibility of the purchaser.

Do not discard packaging if filing a freight damage claim. Upon receipt of steamer immediately inspect the exterior of packaging for damage. Remove wrapping. Inspect the exterior of the Sirius II for visible shipping damage.

**Unpacking / Removal from Pallet:** To remove the steamer from the pallet, carefully cut the strapping. Make sure the pan racks, water reservoir cover and standpipe installed inside the steamer have not become dislodged during shipping.

## Assembly

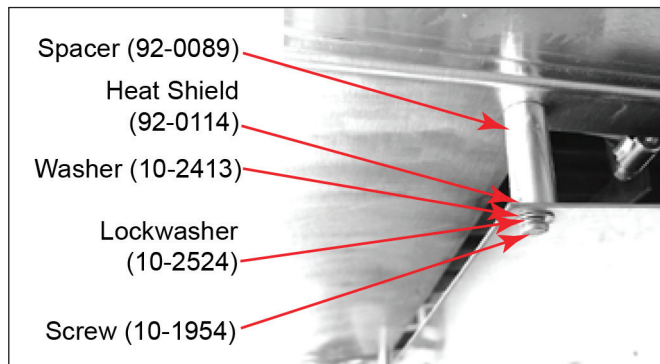
**Legs / Caster Installation:** Install 4 legs or casters (shipped inside the steamer) into the threaded mounting holes located on the base of the unit. If casters are supplied, locking casters should be on the front of the steamer.

**Bottom Heat Shield:** The heat shield needs to be installed as follows for proper operation.

1. Position the heat shield so that the notch in the shield is in the front right of the unit.



2. Use screw, lockwasher, washer and spacer to secure the heat shield as shown.



## LOCATION

98% of all maintenance and service can be done from the front or left side. The Sirius II steamer must be installed under a properly designed ventilation hood. (See *Venting*). A minimum of 6" clearance from adjacent equipment on the left side and rear is recommended. A 4" clearance from bottom of steamer to countertop or floor must be maintained.

 **WARNING**

Do not store any flammable vapors or liquids in the vicinity of this appliance.



## VENTING

The Sirius II must be installed in an adequately ventilated area under a properly designed exhaust hood. Failure to do so could result in component failure and the introduction of unwanted flue gasses into the work area. A properly designed hood system is one that exhausts 100% of grease-laden vapor and flue products and replenishes at least 80% of the air it exhausts.

**Vent Pipe Installation (double & single compartment steamers):** Steamers come with the vent piping in rear of unit completely assembled. Two 90° elbows are shipped loose for your convenience that may be useful in running a drain line to your floor trough (if applicable). **DO NOT BLOCK VENT PIPE.**

**Air Intake:** The air intake to the burner in the bottom of the unit should not be obstructed in any manner. The installation of the unit must comply with local codes or, in the lack of local codes, with the ANSI Z223.1 (latest edition) and the National Fuel Gas Code.

## GAS CONNECTION

The gas inlet to the Sirius II is 1/2" NPT. The firing rate is 27,000 BTU's; the required supply pressure for natural gas is 3.5" W.C. For LP or propane gas the required supply pressure is 9" of W.C. Consult your local gas supplier or installing agency to properly size the gas pipe supplying gas to the appliance. For installation in Canada the unit installation must conform to the Canadian Gas Code: CAN 1 – B149 Installation for Gas Burning Appliances.

### NOTICE

A qualified electrician must perform all electrical hookups and meet all local codes. Installation is the responsibility of the purchaser.

## ELECTRICAL CONNECTION

The Sirius II steamer is equipped with a 120 volt cord and three- prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

The appliance must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electric Code (ANSI/NFPA70), or the Canadian Electric Code (CSA C22.2) as applicable.

### NOTICE

A qualified electrician must perform all electrical hookups and meet all local codes.  
Installation is the responsibility of the purchaser.

### NOTICE

Stacked units will require 2 separate electrical connections.

## WATER AND DRAIN CONNECTION

**Water Hookup:** Steamer requires 1/2" water line. Termination is 3/4" male garden hose connection. Make sure waterline is flushed to remove grit and soldering particles prior to connecting steamer. Dirty water lines may affect solenoid operation.

Double (stacked) compartment steamers require separate water connections, which may be manifolded. Inadequate water supply may cause one steamer not to fill properly when both steamers are turned on at the same time. If that happens turn on one steamer a few minutes after the first.

Appliance is to be installed with backflow prevention in accordance with applicable federal, province and local codes.

**Do not connect to de-ionized water. Probes will not sense the level of the water. Recommended water pressure is 30 – 35 lbs.**

### CAUTION

Flush incoming water line prior to connecting to steamer. Debris in water lines may cause solenoid valve to malfunction. If solenoid valve is stuck open water must be turned off at the source.

**Recommended Water Quality:** Refer to Service Connections in this Manual for the recommended water quality criteria.

### NOTICE

Water level probes will not sense water level if steamer is connected to a de-ionized water or reverse osmosis system.

**Rear Drain:** Make sure the 1" rear drain is plumbed to a floor trough or air gap drain. Customer supplies plumbing. However, one 90° elbow is shipped with the steamer to be used as needed. The drip trough located under the door is plumbed to the main drain internally.

The drain piping must consist of temperature resistant material, greater than 160°F, and be of adequate diameter not to cause flow restriction. Improper materials may deform and cause restrictions, thus affecting performance.

Customer supplies plumbing, however, one 90° elbow is supplied with the steamer to be used as needed. The drip trough located under the door is plumbed to the main drain internally.

### WARNING

The water may be very hot. It is advisable to allow the water to cool down before draining. Leaving the door open will aid cooling.

**Overflow Pipe:** An overflow incorporated into the reservoir drain standpipe allows water to flow into the drain line out the back of the steamer in case of a waterfill malfunction.

### WARNING

Failure to keep the overflow standpipe and drain pipe clear and unobstructed may result in an unsafe condition.

## LEVELING

Once the legs have been installed and the steamer has been placed in its final location, the unit must be leveled. This is done by turning the base of the leg. Use the top of the steamer casing as a reference. It is recommended to use a level to ensure proper installation.

### WARNING

The steamer must be level in order for the water sensors and overflow outlet to function properly.

## RACK INSTALLATION

Two pan support racks have been included with the steamer. Both racks are identical; there is no specific left or right side rack. To install, position a rack inside the cooking chamber so that the mounting bracket, with the 'tear-drop' shaped hole, fits over the pre-installed rack screws at the top of the cooking chamber wall. The curved wires on the rack should be facing to the front of the steamer. Repeat this process for the rack mounted on the other side. These racks are designed to be removed easily for cleaning.

## TESTING AND INSPECTION

Once your steamer is in place and properly leveled, plumbed and wired, test unit to make sure it is functioning properly.

## STARTUP PROCEDURE

1. Make sure water line is flushed prior to connecting steamer.
2. Make sure water is connected and supplied to the steamer.
3. Make sure appropriate gas is connected and supplied to the steamer.
4. Using a soft sponge and mild detergent, wipe out the interior of the cooking chamber to remove shipping debris prior to use. Rinse with clean water.

### CAUTION

Do not use any abrasive cleaners, utensils or scrubbers on the non-stick coating. Use vinegar and water to clean reservoir. Nylon bristle brushes or soft sponges are recommended.

5. Make sure drain/overflow standpipe is fitted firmly into cooking compartment drain opening.
6. Install reservoir cover with left side drain fitted into hole at side of steamer – tip cover slightly to insert drain fitting into side drain hole. Lip at front of reservoir cover fits over base of door opening.
7. **Power On/Heat Up:** Make sure the door is closed, then turn the cooking mode selector to the 1 position. The Amber HEATING light on the upper left corner of the control panel will turn on. If the burner does not light, turn power switch off, wait 5 minutes and try again. If the burner still does not light, contact your local service agent or the factory.

### NOTICE

The burner can be seen from the underside of the steamer. When the HEATING light goes out (it takes less than 25 minutes) you are ready to test the steamer.

### WARNING

If during the operation of this appliance, the smell of gas is present, turn off the main switch on the front of the unit and contact your gas company and service agent.

### WARNING

Do not attempt operation of this unit during a power failure.

### WARNING

Your steamer is equipped with an electronic ignition; never attempt to light your steamer with a flame.

8. Turn the cooking mode selector switch to the 2 position. The HEATING light will go on as heat is called for. You may open the door and inspect the steaming process (note that the HEATING light goes out and the burner is turned off when the door is opened). You may see or smell smoke from the oils left from manufacturing – don't be alarmed, they will burn off quickly.
9. To shut down your steamer, turn the cooking mode selector to the OFF position (Φ).
10. **Drain Steamer:** Make sure that the drain line exiting from the rear of the steamer is plumbed either to a floor trough or air gap drain. To drain, turn the drain valve handle 90 degrees.

# OPERATION

## OPERATING INFORMATION

**Electrical Connection:** Make sure unit is plugged into a proper receptacle or wired properly and the breaker for the circuit is on.

**Water Connection:** Make sure the steamer is properly connected to a water source. Do not connect the unit to de-ionized water; the water probes will not sense the water level. Make sure the water lines are open.

**Gas Connection:** Make sure the unit is properly connected to the gas supply line and that all gas valves prior to the unit are open.

Install drain/overflow standpipe and reservoir cover. Make sure drain/overflow standpipe is fitted into cooking compartment bottom drain opening and reservoir cover drain is fitted into side drain hole. Lip at front of reservoir cover fits over base of door opening.

**Automatic Waterfill:** Water will be added to the steamer as needed periodically and it should not run dry until turned off and manually drained.

**Clean Probe Indicator:** If the CLEAN PROBE indicator comes on and stays on the system has detected a fault and will shut down the burners until the fault has been cleared. Most commonly, this requires cleaning the water sensor probes.

### CAUTION

Do not manually refill hot, dry reservoir with cold water. Damage to the interior may result if cold water is added to a hot, dry reservoir.

**Condensate Trough:** The trough under the door catches water dripping from the door and exits the steamer at the rear.

**Power On / Heat Up:** Make sure the door is closed then turn the cooking mode selector to the desired temperature setting (1, 2 or 3) position. If the burner does not light, turn power switch off, wait 5 minutes and try again. If the burner still does not light, contact your local service agent or the factory.

### NOTICE

The burner can be seen from the underside of the steamer.

The Amber HEAT indicator will light up. When pre-heating is completed, the HEATING indicator light will turn off. The HEAT light will continue to go on and off as the burner cycles to maintain the set temperature.

### WARNING

If during the operation of this appliance, the smell of gas is present, turn off the main switch on the front of the unit and contact your gas company and service agent.

### WARNING

Do not attempt operation of this unit during a power failure.

### WARNING

Your steamer is equipped with an electronic ignition; never attempt to light your steamer with a flame.

**NOTICE**

If the door is open, nothing will happen. Close the door and the steamer will turn on and begin warming up.

**Door Operation:** The door must be closed at all times while cooking. If the door is opened during cooking, the burner will shut down and the amber HEAT light will go off until the door is closed. You may open the door at any time to check the progress of cooking, stir product and add or remove cooking pans. If the door handle is loose the door is not firmly shut; re-shut the door by slamming firmly.

**Pan Combinations:** The Sirius II steamer accommodates 4" and 6" deep pans. However, for best steam cooking performance 1 1/4" or 2 1/2" deep pans work best. Other combinations of these pan sizes will fit in your steamer.

The steamer will accommodate gastronorm pans.

Pan Size	Quantity per 4-pan steamer	Quantity per 6-pan steamer
12 × 20 × 1¼	8	12
12 × 20 × 2½	4	6
12 × 20 × 4	2	4

**STEAM COOKING GUIDELINES****COOKING WITH ATMOSPHERIC / PRESSURELESS STEAM**

- Atmospheric or pressureless steaming is perfect for a la carte cooking. The door can always be opened during cooking to add or remove pans of food, to season food or to check on its progress.
- Multiple products can be cooked at one time because there is no crossover of cooking flavors in atmospheric steam. Large and small portions of food can be cooked at the same time.
- Less attention is required to cooking foods and overcooking is rare.

**Recommended Uses**

A La Carte	Preserving	Stewing
Thawing	Blanching	Rethermalizing
Simmering	Poaching	

**Typical Foods**

Casseroles, Fresh or Frozen	Vegetables, Fresh or Frozen	Seafood, Fresh or Frozen
Desserts	Pasta	Rice
Fruits	Potatoes	Cereals
Eggs	Meats	Poultry
Prepared Foods	Sauces	And Much More

**Tips On Cooking Frozen Product**

- Preheat cooking compartment.
- Break up frozen vegetables or product, if possible.
- If product is an ice block, set it in the pan on its narrowest side. This allows the steam to contact a greater surface area.
- Thawing is faster and better for the food in atmospheric steaming.
- Make sure frozen product is uniform in size to get best results.
- Season vegetables AFTER steaming.
- Less seasoning is required because steaming preserves natural flavors.
- When reheating prepared foods, stir occasionally to speed heating.
- Shallower pans will allow faster cooking times.

## Blanching

Many foods can be blanched in atmospheric steam before being finished in ovens, fryers, or on grills and griddles. This reduces total cooking time, helps ensure complete cooking and a moist product. Potatoes, poultry and seafood are excellent examples. Blanching before frying reduces grease absorption by food products.

## Tips On Pan Use

- For faster cook times, 2 1/2" deep perforated pans are recommended.
- It is not necessary and we do not recommend covering most pans of product. When cooking with only one pan, place it in the center of the cooking chamber.
- Use solid pans where appropriate: scrambled eggs, rice, beans, dehydrated foods, prepared casseroles, sauces, cake or other desserts (you can bake a cake in atmospheric steam), and when you want to prevent food from dripping on a lower pan.
- When cooking proteins (meat, poultry or seafood) use a solid catch pan under the perforated pan. Accumulated juices can be used for soup stock, gravy or broth.
- Protein foods (meat, poultry or seafood) can be cooked in perforated or solid pans. If you are batch-cooking protein foods use perforated pans and place a solid pan on the bottom rail. All the juices will then accumulate in this pan for later use and to keep them out of the water reservoir.
- When atmospheric steaming, a pan cover can increase the cooking time up to 400%. Items such as frozen casseroles, meat loaf, or sauces can be covered to avoid excess condensation.
- Root vegetables should be steamed in a perforated pan.
- Eggs can be hard cooked out of the shell and then chopped to avoid peeling shells.
- Always cook potatoes in perforated pans. This allows steam to circulate properly.

## Other Helpful Hints

- Got a tough cleaning problem, pot, pan, utensil? Put it in your steamer to loosen burned-on food; it makes washing much easier.
- Stale or frozen bread can be thawed or renewed in your steamer.
- Allow adequate spacing between pans for even steam circulation. Your pan rails and the shape of the steamer walls are designed to maximize steam flow. Do not try to load more than the rack is designed for. Maximum capacity loads cook best with perforated pans.
- Loosely packed pans will cook faster than tightly packed pans.
- To skin tomatoes, oranges etc. more easily, steam for a short time, then chill in cold water.
- When steaming pasta, shrimp, or ground meat, nesting a perforated pan in a solid pan works well. Lift out the perforated pan to drain.
- Never have the water high enough or a pan low enough to touch water. Allow enough space for steam circulation. Steam has 6 times more energy than boiling water – use the steam to cook.

## Other Helpful Hints (continued)

- When possible, cook in two shallow pans instead of one deeper pan – it cooks faster and you avoid bruising the product.
- If using 1/2 size or smaller pans on one level, with different products, load the faster cooking items last, this will make unloading easier.
- In steam cooking, load size has little effect on the cooking time. For the highest efficiency cook with full loads.
- Pre-cook roasts, especially fat-encrusted roasts, in steam for 1/3 of their cooking time, then place in oven. Juices are sealed in, there is more flavor, more nutrients are retained and the roast shrinks less.
- Cook whole poultry the same way, only cook it until it is nearly completed and allow just enough time in the oven to finish and brown.

## WARNINGS & CAUTIONS

### Warnings

- Failure to keep the overflow outlets clear and unobstructed may result in hot water flowing out the door of the steamer. A blocked overflow and drain could allow water to flow to the countertop or floor, which can cause slippery conditions. Modifying the steamer to operate without the overflow standpipe could cause dangerous situations and will void the warranty.
- Failure to keep both water level sensors clean may result in hot water flowing out the rear overflow or the front door of the steamer.
- A qualified electrician must perform all electrical hookups and meet all local codes. Installation is the responsibility of the purchaser.
- Failure to keep the overflow standpipe and drain clear and unobstructed may result in an unsafe condition.
- The steamer must be level in order for the water sensor and overflow outlet to function properly.
- The reservoir water may still be hot. It is advisable to let the water cool down prior to draining.
- The cooking chamber is designed to retain heat. It may still be hot to the touch when cleaning. Wear protective gloves, or wait for the surface to cool before cleaning. Do not add cold water to a hot empty cooking chamber until unit has cooled down or damage may result.

### Cautions

- Do not use utensils, steel wool, or other harsh abrasives to clean your steamer. Scratching of the non-stick surface and stainless steel casing may occur.
- Flush incoming water line prior to connecting to steamer. Debris in water lines may cause solenoid valve to malfunction. If solenoid valve is stuck open water must be turned off at the source.
- Do not use any abrasive cleaners, utensils or scrubbers on the non-stick coating – this will damage the coating. Use vinegar and water to clean reservoir. Nylon bristle brushes or soft sponges are recommended.
- Do not manually refill hot, dry reservoir with cold water. Damage to the interior may result if cold water is added to a hot, dry reservoir.

**Cooking:** When ready to cook turn the cooking mode selector dial to the desired setting.

### NOTICE

If starchy food products (potatoes, pasta) cause water to get frothy add 2 tablespoons of cooking oil to the water to control foaming.

Setting	Temperature	Use for
1	180 °F 11,069 ohms	Green vegetables, delicate egg dishes, and seafood for higher yield. Cook times will be slower than steaming.
2	212 °F 6,311 ohms	Steam cooking
3	Steam Plus Radiant Heat 230 °F 4,695 ohms	Heavy dense foods like meat or potatoes, retherm frozen foods.

Shut down, draining and cleaning of steamer.

1. **Shut Down:** To shut down the steamer at the end of the day just turn the cooking mode selector dial to  $\Phi$  (OFF).
2. **Water Reservoir Draining:** To drain, turn the drain valve handle 90 degrees.

### WARNING

The reservoir water may still be hot. It is advisable to let the water cool down prior to cleaning.

### NOTICE

Opening the steamer door will speed the cooling process. It is also advisable to leave the steamer door open when not in use. This will lengthen the life of the door gasket.

# MAINTENANCE

## CLEANING GUIDELINES

### Daily Cleaning

Once the power is off and the reservoir has been drained, a simple cleaning process should be followed:

#### **WARNING**

The cooking chamber is designed to retain heat. It may still be hot to the touch when cleaning. Wear protective gloves, or wait for the surface to cool before cleaning. Do not add cold water to a hot, empty cooking chamber until it has cooled down, or damage may result.

1. Lift the pan racks up and off mounting screws, and remove from the steamer for cleaning.
2. Lift reservoir cover out of cooking chamber compartment, clean cover.
3. Remove the drain/overflow standpipe, clean, making sure overflow holes are clear and open.
4. Using a soft sponge, clean the non-stick coating on the interior of the cooking chamber.
5. Clean the door gasket with gentle soap and water and allow to air dry.

#### **NOTICE**

Only use mild soap, white vinegar, and water to clean your steamer. Do not use abrasive utensils, caustic cleaners, or products containing chlorine, lye, or phosphorus (such as Lime-A-Way). After cleaning, rinse thoroughly by wiping with a wet cloth dampened with fresh water. Never spray water on your steamer.

**FAILURE TO FOLLOW PROPER INSTRUCTIONS MAY CAUSE AN UNSAFE CONDITION AND/OR DAMAGE YOUR STEAMER, AND WILL VOID YOUR WARRANTY.**

6. Rinse the cooking chamber and door area with clean water. Rinse the cavity.
7. Wipe with clean towel or soft sponge.
8. To remove the white mineral deposits at and below the water line, spray white vinegar directly on the mineral build-up using a spray bottle. For heavy mineral deposits, replace drain/overflow standpipe, pour two cups of white vinegar in the water reservoir and turn on steamer to add enough water to cover the white minerals, let soak for half an hour or overnight. Loosen mineral deposits with a nylon bristled brush. Drain, wipe and rinse. Use water and white vinegar to clean reservoir.
9. Make sure two stainless probes on lower backside of cooking chamber interior are clean.
10. Wipe out the condensate trough located under the door. Remove food particles. Make sure the drain is kept clear.
11. Make sure the drain is kept clear.

#### **NOTICE**

It is always advisable to leave the steamer door open when the unit is shut down for the evening. This will extend the life of your gasket.

#### **NOTICE**

It is normal for the white lime to collect at the water line and in the reservoir area. Liming is easily removed with daily cleaning – white vinegar is very effective and will not damage the cooking chamber. Use only white vinegar and water to clean reservoir on a daily basis.

12. Replace the drain/overflow standpipe and the reservoir cover. The reservoir cover and the drain/overflow standpipe must be replaced or the steamer will not function properly.
13. Your steamer is now ready for another day's work!



## Weekly Cleaning

In addition to the daily cleaning it is necessary to clean the air intakes on a weekly basis. Air intakes provide necessary cooling air to the internal components. They are generally located on the rear and sides of the equipment.

## Monthly Cleaning

Market Forge recommends using Optipure DSP descaling powder to clean your steamer on a monthly basis or whenever necessary.

### NOTICE

Optipure DSP is an acid based descaler that is effective in dissolving and removing build up caused by hard water. DSP is a non-hazardous, biodegradable citrus based powder that when mixed with water becomes a powerful lime scale remover. For additional information contact Optipure at 800-535-5035.

1. Make sure the steamer is off and cool.
2. Drain water from the cooking cavity and wipe away any food debris.
3. Make sure the drain is plugged.
4. Pour one pound of Optipure DSP per steamer into the bottom of the cooking cavity.

### NOTICE

One pound is equal to 16 scoops (measuring scoop included), or one-half of a 2 lb. jar of descaling powder.

5. Set the control to Steam (#2) position. This will automatically fill the unit with water.
6. Allow the unit to reach steaming temperature and continue steaming for one hour.
7. Turn the unit off, and allow it to cool for one hour.
8. Drain the unit, and rinse the entire cooking chamber thoroughly.
9. If the unit is heavily scaled, it may be necessary to repeat the process.

# NOTES

## NOTES

# SIRIUS II-(4, 6, 8, 10 & 12) SIRIUS II Gas Boilerless Convection Steamer



A product with the Market Forge name incorporates the best in durability and low maintenance. We all recognize, however, that replacement parts and occasional professional service may be necessary to extend the useful life of this appliance. When service is needed, contact a Market Forge Authorized Service Agency, or your dealer. To avoid confusion, always refer to the model number, serial number, and type of your appliance.



## CROWN FOOD SERVICE EQUIPMENT

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