



## **SN-E Series** ELECTRIC ATMOSPHERIC STEAMER INSTALLATION - OPERATION - MAINTENANCE



#### **BLODGETT OVEN COMPANY**

www.blodgett.com 44 Lakeside Avenue, Burlington, Vermont 05401 USA Manufacture Service Questions: 866-518-3977

PART NUMBER 170136 REV A (04/11)

#### THIS MANUAL MUST BE RETAINED FOR FUTURE REFERENCE. READ, UNDERSTAND AND FOLLOW THE INSTRUCTIONS AND WARNINGS CONTAINED IN THIS MANUAL.

FOR YOUR SAFETY DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND 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.

NOTIFY CARRIER OF DAMAGE AT ONCE IT IS THE RESPONSIBILITY OF THE CONSIGNEE TO INSPECT THE CONTAINER UPON RECEIPT OF SAME AND TO DETERMINE THE POSSIBILITY OF ANY DAMAGE, INCLUDING CONCEALED DAMAGE. WE SUGGEST THAT IF YOU ARE SUSPICIOUS OF DAMAGE TO MAKE A NOTATION ON THE DELIVERY RECEIPT. IT WILL BE THE RESPONSIBILITY OF THE CONSIGNEE TO FILE A CLAIM WITH THE CARRIER. WE RECOMMEND THAT YOU DO SO AT ONCE.

### **IMPORTANT - READ FIRST - IMPORTANT**

- WARNING: THE UNIT MUST BE INSTALLED BY PERSONNEL QUALIFIED TO WORK WITH ELECTRICITY AND PLUMBING. IMPROPER INSTALLATION CAN CAUSE INJURY TO PERSONNEL AND/OR DAMAGE TO THE EQUIPMENT. THE UNIT MUST BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES.
- CAUTION: SHIPPING STRAPS ARE UNDER TENSION AND CAN SNAP BACK WHEN CUT.
- CAUTION: DO NOT INSTALL THE UNIT IN ANY WAY WHICH WILL BLOCK THE SIDE VENTS, OR WITHIN 12 INCHES OF A HEAT SOURCE SUCH AS A BRAISING PAN, DEEP FRYER, CHAR BROILER OR KETTLE.
- CAUTION: LEVEL THE UNIT FRONT TO BACK, OR PITCH IT SLIGHTLY TO THE REAR, TO AVOID DRAINAGE PROBLEMS.
- WARNING: FOLLOW THE WIRING DIAGRAM EXACTLY WHEN CONNECTING A UNIT TO AVOID DAMAGE OR INJURY.
- CAUTION: DO NOT USE PLASTIC PIPE. DRAIN MUST BE RATED FOR BOILING WATER.
- WARNING: DO NOT CONNECT THE DRAIN DIRECTLY TO A BUILDING DRAIN.
- WARNING: BLOCKING THE DRAIN IS HAZARDOUS.
- IMPORTANT: IMPROPER DRAIN CONNECTION WILL VOID WARRANTY.
- IMPORTANT: DO NOT ALLOW ANY WATER TRAPS IN THE LINE. A TRAP CAN CAUSE PRESSURE TO BUILD UP INSIDE THE CAVITY DURING STEAMING, WHICH WILL MAKE THE DOOR GASKET LEAK.
- WARNING: WHEN YOU OPEN THE DOOR, STAY AWAY FROM STEAM COMING OUT OF THE UNIT. STEAM CAN CAUSE BURNS.
- WARNING: BEFORE CLEANING THE OUTSIDE OF THE STEAMER, DISCONNECT THE ELECTRIC POWER SUPPLY. KEEP WATER AND CLEANING SOLUTIONS OUT OF CONTROLS AND ELECTRICAL COMPONENTS. NEVER HOSE OR STEAM CLEAN ANY PART OF THE UNIT.
- WARNING: ALLOW COOKING CHAMBER TO COOL BEFORE CLEANING.
- WARNING: CAREFULLY READ THE WARNINGS AND FOLLOW THE DIRECTIONS ON THE LABEL OF EACH CLEANING AGENT. USE SAFETY GLASSES AND RUBBER GLOVES AS RECOMMENDED BY DELIMING AGENT MANUFACTURER.
- WARNING: DO NOT MIX DE-LIMING AGENTS (ACID) AND DE-GREASERS (ALKALI).
- WARNING: DO NOT PUT HANDS OR TOOLS INTO THE COOKING CHAMBER UNTIL THE FAN HAS STOPPED TURNING.
- WARNING: DO NOT OPERATE THE UNIT UNLESS THE REMOVABLE RIGHT SIDE PANEL HAS BEEN RETURNED TO ITS PROPER LOCATION.
- NOTICE: DO NOT USE A CLEANING OR DE-LIMING AGENT THAT CONTAINS ANY SULFAMIC ACID OR ANY CHLORIDE, INCLUDING HYDROCHLORIC ACID. IF THE CHLORIDE CONTENT OF ANY PRODUCT IS UNCLEAR, CONSULT THE MANUFACTURER.
- NOTICE: DO NOT USE ANY DE-GREASER THAT CONTAINS POTASSIUM HYDROXIDE OR SODIUM HYDROXIDE OR THAT IS ALKALINE.
- WARNING: USE OF ANY REPLACEMENT PARTS OTHER THAN THOSE SUPPLIED BY THE MANUFACTURER OR THEIR AUTHORIZED DISTRIBUTOR VOIDS ALL WARRANTIES AND CAN RESULT IN BODILY INJURY TO THE OPERATOR AND DAMAGE THE EQUIPMENT. SERVICE BY OTHER THAN FACTORY-AUTHORIZED PERSONNEL WILL VOID ALL WARRANTIES.
- WARNING: HIGH VOLTAGE EXISTS INSIDE CONTROL COMPARTMENTS. DISCONNECT FROM BRANCH CIRCUIT BEFORE SERVICING. FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY OR DEATH.

### **Table of Contents**

Important Operator Warnings	page 1
References	page 2
Equipment Description	page 3
Inspection and Unpacking	page 4
Water Conditioning	page 5
Installation	page 6-8
Operation	page9-10
Cleaning	page 11-12
Maintenance	page 13
Troubleshooting	page 14
Schematics/Wiring Diagram	page 17-18
Service Log	page 19-20

### References

UNDERWRITERS LABORATORIES, INC. 333 Pfingsten Road Northbrook, Illinois 60062

NATIONAL FIRE PROTECTION ASSOCIATION 60 Battery March Park Quincy, Massachusetts 02269

NSF INTERNATIONAL 789 N. Dixboro Road P.O. Box 130140 Ann Arbor, Michigan 48113-0140

## **Equipment Description**



The 3-pan steamer holds three standard 12" x 20" x 21/2" steamer pans.

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The 5-pan steamer holds up to five pans.

Your 3-pan or 5-pan atmospheric convection steamer is designed to give years of service. It has a stainless steel cavity (cooking chamber) which is served by an independent atmospheric steam generator which is electricallyheated. A powerful blower circulates the steam in the cavity to increase heating efficiency.

The cavity holds up to five or three steam table pans  $(12" \times 20" \times 21/2" \text{ deep})$ . An 18 gauge stainless steel case encloses the cavity, the steam generator and the control compartment that houses electrical components. Door hinges are reversible (the door may be set to open from the left or right). Operating Controls are on the front panel.

The steamers are equipped with fully electronic controls and a button-activated, preprogrammed CLEAN cycle. These units are readily identified by their unique control panels. The On-Off switch is operated by touch pad controls, and the distinctive symbol for steam is integrated into the panel. The new models also have fewer panel louvers on the right side.

From the rear the units are distinguished by the addition of a fuse box, which lets operators change fuses without removing panels.

The drain system on all models includes a spray condenser, which helps keep steam from escaping from the chamber and cools drain water.

### **Inspection & Unpacking**

CAUTION SHIPPING STRAPS ARE UNDER TENSION AND CAN SNAP BACK WHEN CUT.

CAUTION THE 5-PAN UNIT WEIGHS 230 POUNDS (104 KG). THE 3-PAN UNIT WEIGHS 180 POUNDS (82 KG). YOU SHOULD GET HELP AS NEEDED TO LIFT THIS WEIGHT SAFELY. The Steamer will be delivered completely assembled in a heavy shipping carton strapped to a skid. On receipt, inspect carton carefully for exterior damage.

Carefully cut the straps and detach the sides of the carton from the skid. Pull the carton up off the unit. Be careful to avoid personal injury or equipment damage from staples which might be left in the carton walls.

Write down the model number, serial number and installation date. Keep this information for reference. Space for these entries is provided at the top of the Service Log in the back of this manual.

When starting installation, check packing materials to make sure loose parts such as the condensate drip tray are not discarded with this material.

### Water Conditioning



TREATED WATER UNTREATED WATER

Stacked steamers

It is essential to supply the steam generator with water that will not form scale. Even though the steam generator is engineered to minimize scale formation, scale development depends on the hardness of your water and the number of hours per day you operate the equipment.

Most water supplies are full of minerals which form scale. It is this scale which could lead to an early component failure.

Your water utility can tell you about the minerals in your water. The water going to the steam generator should have no more than 10 to 30 parts per million (ppm) total dissolved solids (TDS) and should have a pH (acidity rating) of 7.0 or higher. Please follow these simple precautions:

- 1. The best way to prevent scale is to use a water treatment system which has been specifically designed for steamers and combination ovens. Do not rely on unproven water treatment systems sold for scale prevention and removal. They are not specifically designed to work with steamers and combination ovens.
- 2. A well-maintained water treatment system and a regular cartridge replacement schedule is essential.
- 3. Using a water treatment system will provide longer steam generator/boiler life, higher steam capacity, and reduce maintenance requirements.
- 4. If you notice a slowdown in steam production or an increase in deliming, have the steamer checked for scale build-up. This could be an indication that the water treatment cartridges need replacing. Heavy scale reduces the unit s ability to boil water, and can even cause component failure.

MINIMIZE SCALE PROBLEMS BY USING AND MAINTAINING A SOFTENER AND BY CLEANING (DELIMING) THE STEAMER REGULARLY.

On both the 3-pan and 5-pan, the dual water connections are side by side on the rear of the unit. When seen from the back of the unit, the treated (softened) water intake is on the right.

## Installation

#### WARNING

THE UNIT MUST BE INSTALLED BY PERSONNEL WHO ARE QUALIFIED TO WORK WITH ELECTRICITY AND PLUMBING. IMPROPER INSTALLATION CAN CAUSE INJURY TO PERSONNEL AND/OR DAMAGE TO THE EQUIPMENT. THE UNIT MUST BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES.

#### CAUTION

DO NOT INSTALL THE UNIT WITH THE RIGHT OR LEFT SIDE VENTS BLOCKED OR WITHIN 12 INCHES OF A HEAT SOURCE (SUCH AS A BRAISING PAN, DEEP FAT FRYER, CHARBROILER OR KETTLE). TO AVOID DRAINAGE PROBLEMS, LEVEL THE UNIT FRONT TO BACK.

#### CAUTION EACH UNIT MUST HAVE A SEPARATE GROUND WIRE FOR SAFE OPERATION.

WARNING TO AVOID DAMAGE OR PERSONAL INJURY, FOLLOW THE WIRING DIAGRAM EXACTLY.



ELECTRICAL SUPPLY CONNECTION FIELD WIRING TABLE - USE COPPER WIRE ONLY - INSULATION RATING THHN (90°C)						
VOLTAGE KW RATING FIELD WIRING (AWG)		RATED CURRENT DEMAND (Amps)				
	3-PAN	5-PAN	3-PAN	5-PAN	3-PAN	5-PAN
208V, 1-Ph	8.1	15.5	8	4	39	74.5
208V, 3-Ph	8.1	15.5	10	6	23	43
240V, 1-Ph	8.1	15.5	8	4	33	64.6
240V, 3-Ph	8.1	15.5	10	8	20	37.3
480V, 3-Ph	8.1	15.5	14	12	10	18.6

#### 1. Electrical Supply Connection

Current and power demands for each unit are as shown above.

A. Panel Removal

Open the wiring and control panel by removing screws from the right side panel. Slide the panel forward, and set it aside.

- B. Supply Voltage The unit must be operated at the rated nameplate voltage.
- C. Phase Selection Refer to steamer schematics (Pages 17-18) for wiring information.
  - Terminal Block The terminal block for incoming power is located at the back of the control compartment. The ground terminal is located in the wiring compartment near the terminal block.
- E. Supply Wire

D.

To determine the type of wire you need for the power supply, find the operating voltage and number of phases on the unit data plate. Refer to the table below or to the label on the units back for correct wire size and temperature rating. The equipment grounding wire must comply with the National Electrical Code (NEC) requirements. The schematic on the inside of the units right side cover gives directions for proper connection of the terminal block jumpers. The specified wire must be used, or the unit will not meet Underwriters Laboratories and NEC requirements. The knockout hole is sized for a <sup>3</sup>/<sub>4</sub> inch conduit fitting on the 3-pan and for a one inch conduit fitting on the 5-pan.

F. Branch Circuit Protection

Each Steamer, including individual units of stacked models, should have its own branch circuit protection and ground wire. Current and power demands for each unit are as shown above.

### Installation

WARNING DO NOT CONNECT THE DRAIN DIRECTLY TO A BUILDING DRAIN. BLOCKING THE DRAIN IS HAZARDOUS.

CAUTION Do not use plastic pipe. Drain must be rated for boiling water.

IMPORTANT DO NOT ALLOW WATER TRAPS IN THE LINE. A TRAP CAN CAUSE PRESSURE BUILD-UP IN THE CAVITY, WHICH MAY CAUSE THE DOOR GASKET TO LEAK.

#### 2. Water Connection(s)

Install a check valve to prevent back flow in the incoming cold water line, as required by local plumbing codes. Water pressure in the line should be between 30 and 60 PSIG and must deliver a flow rate of 1.5 to 3.0 gallons per minute. If pressure is above 60 PSIG, a pressure regulator will be needed.

A  $\frac{34}{100}$  inch female NH connector (garden hose type) is used to attach the water supply to the inlet valve. Minimum inside diameter of the water feed line is  $\frac{1}{2}$ inch. Use a washer in the hose connection. Do not allow the connection to leak, no matter how slowly. The dual water standard connection, treated (softened) water goes to the right (seen from the rear of the unit), and untreated water to the left. Connections for both are as shown on Page 5.

#### 3. Drain Connection

Level the steamer front to back, or pitch it slightly to the rear (maximum  $\frac{1}{4}$  inch) by adjusting the bullet feet on the stand or cabinet base.

A 2 inch (5-pan) or  $1\frac{1}{2}$  inch (3-pan) ID hose may be attached to the drain pipe (supplied).

There must be a free air gap between the end of the hose and the building drain. The free air gap should be as close as possible to the unit drain. There must also be no other elbows or other restrictions between the unit drain and the free air gap.

Install the drain line with a constant downward pitch.

#### 4. Factory-Stacked Units

This section is applicable only if you are installing factory-stacked units. If you plan to stack steamers yourself, whether purchasing a new one for stacking or a kit to stack two units you already own, you will require a field stacking kit.

Installing stacked steamers is similar to installing a single unit. The steamers are stacked and assembled at the factory and delivered with the water connections and drain hoses required for a single point connection.

A. Water Connection

At the water inlet valve a 3⁄4 inch female NH connector (garden hose type) is used for the water supply. The dual water connection has two connections to be made. Treated water (softened) is connected to the right valve fitting (looking from the rear of the unit) and untreated water to the left fitting.

B. Electrical Supply Connection

Separate, individual electrical connections will be required for each steamer in the stack. Each Steamer must have its own branch circuit protection.

C. Drain Connection Steamers must be leveled front to back, or pitched to the rear (maximum <sup>1</sup>/<sub>4</sub> inch) by adjusting the bullet feet on the cabinet or stand base.

For a double 3-pan stack a  $1\frac{1}{2}$  inch and for double 5-pan stack a 2 inch ID hose may be attached to the unit drain. It must be rated for boiling water.

### Installation



Proper drain line connection Note: Drain line must have a constant downward pitch of at least ¼" per foot. Connection is 1½" for a 3-pan, 2" for 5-pan.

#### 5. Counter-Mounted Units

This section is applicable if the steamer will be mounted to a counter. All four edges of the bottom of the steamer must be sealed with RTV to the counter if the 4 inch legs are not used. Counter must be made of a noncombustible material such as metal or tile.

Ensure that there is a free air gap between the end of the unit drain and the building drain. This gap should be as close as possible to the unit drain. Do not allow elbows or restrictions between the unit and the free air gap.

Install the line with a constant downward pitch.



Rear view of double stack 5-pan assembly. Note: Some drain parts (elbow, clamps) for single models are packed inside the steamer cavity. Stacked units are factory assembled. Installation is the same for double stacked 5-pan and 3-pan units.

### Operation

WARNING ANY POTENTIAL USER OF THE EQUIPMENT MUST BE TRAINED IN SAFE AND CORRECT OPERATING PROCEDURES.



#### A. Controls

Operator controls are on the front right of the unit.

The control panels have the following touch pads and indicator lights:

- 1. The ON/OFF touch pad gets the steamer ready for use, or shuts it off.
- 2. The READY indicator light shows that the steam generator is at standby temperature and the cavity is hot enough to begin steaming.
- 3. When one probe is covered with lime scale or fails, the DELIME light flashes briefly every few seconds, but the unit will continue to operate. Delime the unit as soon as possible. The DELIME light will flash until power is removed from the unit, or the unit goes through a clean cycle.
- 4. If the problem continues, both probes may fail. Then the steamer stops working, and the SERVICE light is lit. If DELIMING/CLEANING does not correct, turn off the power and contact an Authorized Service Representative for repair.
- 5. The DELIME indicator light is lit when the unit is operating in the cleaning mode.
- 6. The HI TEMP indicator light comes on when the steam generator is too hot.

The unit will automatically shut off, and cannot be turned on again until the steam generator cools and the HI TEMP indicator light goes out.

- 7. The TIMING indicator light stays on when the timer is running.
- 8. The CLEAN touch pad is used to start the automatic 50 minute cleaning cycle.
- 9. The timer is used in three ways:
  - 1. In the OFF position the steam generator stays at a low boil or "holding" temperature.
  - 2. When a cook time is set, the unit steams until the timer runs down to OFF. At that time steaming stops, a red light comes on and a beeper sounds.
  - 3. With the timer turned to the ON position, the unit steams continuously. The green light stays lit. The steamer will not time down.

### Operation

WARNING WHEN YOU OPEN THE DOOR, STAY AWAY FROM THE STEAM COMING OUT OF THE UNIT. THE STEAM CAN CAUSE BURNS.



#### **B.** Operating Procedure

- 1. Press the ON/OFF touch pad for the steamer. The steam generator will fill, and heat until the READY light comes on. (About 10 minutes.)
- 2. Load food into pans in uniform layers. Pans should be filled to about the same levels, and should be even on top.
- 3. Open the door and slide the pans onto the supports. If you will only be steaming one pan, put it in the middle position.
- 4. Close the door. With the READY indicator lit, take one of the following steps:
  - a. If you want to steam the food for a certain length of time, set the timer for that period. The timer will automatically run the steamer for the set time and then turn it off. A red light will come on and a beeper will sound. Steam production stops.
  - b. If you want to steam continuously, turn the timer to the manual ON position. A green light will come on. The unit will continue steaming until you stop it by turning the timer to OFF. When steaming continuously YOU MUST CONTROL STEAMING TIME.
- 5. Open the door. Remove the pans from the steamer, using hot pads or oven mitts to protect your hands from the hot pans.
- 6. To shut down the unit, press the ON/OFF touch pad to OFF. The steam generator will automatically drain.

### Cleaning

#### WARNING

DISCONNECT THE POWER SUPPLY BEFORE CLEANING THE OUTSIDE OF THE STEAMER.

KEEP WATER AND CLEANING SOLUTIONS OUT OF CONTROLS AND ELECTRICAL COMPONENTS. NEVER HOSE OR STEAM CLEAN ANY PART OF THE UNIT.

DON'T MIX DE-LIMING AGENTS (ACID) WITH DE-GREASERS (ALKALI) ANYWHERE IN THE UNIT.

AVOID CONTACT WITH ANY CLEANERS, DE-LIMING AGENT OR DEGREASER AS RECOMMENDED BY THE SUPPLIER. MANY ARE HARMFUL. READ THE WARNINGS AND FOLLOW THE DIRECTIONS!

EVEN WHEN THE UNIT HAS BEEN SHUT OFF, DON'T PUT HANDS OR TOOLS INTO THE COOKING CHAMBER UNTIL THE FAN HAS STOPPED TURNING.

DON'T OPERATE THE UNIT UNLESS THE REMOVABLE PARTITION HAS BEEN PUT BACK IN ITS PROPER LOCATION.

DON'T USE ANY CLEANING OR DELIMING AGENT THAT CONTAINS ANY SULFAMIC AGENT OR ANY CHLORIDE, INCLUDING HYDROCHLORIC ACID (HCI). TO CHECK FOR CHLORIDE CONTENT SEE ANY MATERIAL SAFETY DATA SHEETS PROVIDED BY THE CLEANING AGENT MANUFACTURER.

#### IMPORTANT

DO NOT USE ANY METAL MATERIAL (SUCH AS METAL SPONGES) OR METAL IMPLEMENTS (SUCH AS A SPOON, SCRAPER OR WIRE BRUSH) THAT MIGHT SCRATCH ANY STAINLESS STEEL SURFACE. SCRATCHES MAKE THE SURFACE HARD TO CLEAN AND PROVIDE PLACES FOR BACTERIA TO GROW. DO NOT USE STEEL WOOL, WHICH MAY LEAVE PARTICLES EMBEDDED IN THE SURFACE, WHICH COULD EVENTUALLY CAUSE CORROSION AND PITTING.



To keep your steamer in proper working condition, use the following procedure to clean the unit. This regular cleaning will reduce the effort required to clean the steam generator and cavity.

#### A. Suggested Supplies

- 1. Mild detergent
- 2. Stainless steel exterior cleaner such as Zepper®
- 3. Steam generator de-liming agent. A liquid de-liming agent will be easier to use than crystals or powders. Do NOT use any product containing chlorides or sulfmic acid, including hydrochloric acid.
- 4. Spray De-Greaser
- 5. Cloth or sponge
- 6. Plastic wool or a brush with soft bristles
- 7. Spray bottle
- 8. Measuring cup
- 9. Nylon pad
- 10. Towels
- 11. Plastic disposable gloves
- 12. Funnel

#### B. Procedure

- 1. Exterior Cleaning
  - a. Prepare a warm solution of the mild detergent as instructed by the supplier. Wet a cloth with this solution and wring it out. Use the moist cloth to clean the outside of the unit. Do not allow freely running liquid to touch the controls, the control panel, any electrical part, or any louver on the side or rear panels.
  - b. To remove material which may be stuck to the unit, use plastic wool, a fiber brush, or a plastic or rubber scraper with a detergent solution.
  - c. Stainless steel surfaces may be polished with a recognized stainless steel cleaner such as Zepper®.
- 2. Steam Generator and Cooking Chamber

Regular deliming, depending on your steamer usage and local water quality, must be done to enhance performance and prolong the life of your convection steamer. Steamer must be turned off after every use to prevent lime scale buildup - do not run steamer continuously.

#### ALWAYS USE HOT PADS OR MITTS WHEN HANDLING HOT STEAMER PAN-ELS OR RACKS. RECOMMENDED TOOLS & CLEANERS:

- a. Delimer/Descaler. Do NOT use any product containing chlorides or sulfamic acid, including hydrochloric acid.
- b. Nylon scrub pad, cloth and/or sponge.

### Cleaning



Deliming Port



#### C. Deliming Instructions (Use Touch Pad)

STEP 1 - Press ON/OFF to turn steamer off. Open door.

STEP 2 - Let cavity cool for 5 minutes or longer. While cool, wipe out cavity. Close door.

STEP 3 - Press and hold CLEAN while also turning steamer on by pressing ON/ OFF, until only DELIME and POWER lights remain on (all lights will turn on, then off, except DELIME and POWER).

STEP 4- After 5 minutes, beeper will beep rapidly, signaling you to add Delimer/ Descaler. Door(s) must remain closed for entire delime cycle.

STEP 5- Pour 1 pint (2 cups) of delimer PER CAVITY into upper and /or lower deliming port(s) and then close port(s). Press CLEAN. Double-stacked unit cavities may be delimed together or separately.

STEP 6- Delime cycle will start, taking about 30 minutes. When delime cycle is complete, DELIME light will appear, DONE light will flash and beeper will beep.

STEP 7- Press ON/OFF to turn steamer off. Let cavity cool for 5 minutes or longer. Open door, wipe out inside of cavity and wipe door gasket. Close door.

STEP 8- To use steamer, press ON/OFF. When READY light appears, steamer is ready to use.

NOTES:

- a. If DELIME light flashes rapidly (5 times per second), press CLEAN to restart delime cycle.
- b. If power outage occurs during deliming, delime cycle must be restarted. Press CLEAN.
- c. For best performance, do not interrupt delime cycle. If delime cycle must be stopped, press ON/OFF to turn on. Set timer for 5 minutes. After beeper beeps, press ON/OFF to turn off. Let cavity cool for 5 minutes or longer, carefully open door(s) and wipe out cavity completely.

### Maintenance

The steamers are designed for minimum maintenance, and no user adjustments should be necessary. Certain parts may need replacement after prolonged use. If there is a need for service, only authorized Service Representatives should perform the work.

Always supply water with a low mineral count that meets the standards outlined in the Water Conditioning section of this manual. If steam or condensate is seen leaking from around the door, take the following steps:

- 1. Check the door gasket. Replace it if it is cracked or split.
- 2. Inspect the cooking chamber drain to be sure it is not blocked.
- 3. Adjust the door latch pin to allow for changes that might occur as the gasket ages.
  - a. Loosen the lock nut at the base of the latch pin, then turn the latch pin 1/4 turn clockwise, and tighten the lock nut.
  - b. After adjustment, run the unit to test for further steam leakage.
  - c. If there is still leakage, repeat the adjustment
  - d. Continue adjusting the pin clockwise until the door fits tightly enough to prevent leakage.

### Troubleshooting

This steamer is designed to operate smoothly and efficiently if properly maintained. However, the following is a list of checks to make in the event of a problem. Wiring diagrams are furnished inside the service panel. If an item on the check list is marked with (x), it means that the work should be done by a factory authorized service representative.

SYMPTOM	WHO	WHAT TO CHECK
Steam generator does not fill with water.	User	<ul> <li>a. Is the ON switch depressed?</li> <li>b. Is the water supply connected?</li> <li>c. Is the water turned on?</li> <li>d. Check for low water pressure (less than 30 PSI) or low water flow (less than 1.5 gpm).</li> <li>e. Is the screen at the water connection clogged?</li> <li>f. Has the steam generator been de-limed?</li> </ul>
No steam.	User	<ul><li>a. Is the ON switch depressed?</li><li>b. Is the water supply connected?</li><li>c. Is the water turned on?</li><li>d. Are steamer doors completely closed?</li><li>e. Is the steam generator blocked with lime build-up?</li></ul>
DELIME light comes on after four minutes.	User	<ul><li>a. Is the water supply connected and adequate?</li><li>b. Is the water turned on?</li><li>c. Has the unit been de-limed? (Refer to Cleaning Section)</li></ul>
Excessive steam escaping from rear of unit	User	a. Is the water spray hose kinked or obstructed?
	Auth Service Rep Only	<ul><li>b. Is the water spray solenoid connected?(x)</li><li>c. Is the drain properly vented? (x)</li></ul>

### Parts List Atmospheric Steamer



### Parts List Atmospheric Steamer

To order parts, contact your Authorized Service Agent. Supply the model designation, serial number, part description, part number, quantity, and when applicable, voltage and phase.

Key	Description	Part #
1	TRANSFORMER 20VA	119815
2	CAPACITOR, 3MF	096813
3	TRANSFORMER 208/240V PRIMARY/ 24V SECONDARY, 75VA	121716
4	CONTACTOR	148102
5	FUSE BLOCK ASSEMBLY	119848
6	FUSEHOLDER	096809
7	FUSE	119823
8	GROUND TERMINAL	119829
9	TERMINAL BLOCK	003888
10	WATER VALVE	100934
11	TIMER	096826
12	PRESSURE RELIEF VALVE	140867
13	DRAIN VALVE	071234
14	STEAM INLET PORT	141336
15	GASKET, STEAM INLET PORT	099250
16	READY THERMOSTAT	088865
17	WATER LEVEL PROBE, LEFT	141424
18	WATER LEVEL PROBE, RIGHT	141285
19	DOOR SWITCH	096857
20	DOOR ASSEMBLY, COMPLETE (3-PAN)	130858
20	DOOR ASSEMBLY, COMPLETE (5-PAN)	125922
21	KNOB	123100
22	CONTROL BOARD	141082
23	LIGHT AND TIMER BOARD	137233
24	CONTROL BOARD COVER	143255
25	TEROID (480V ONLY)	119833
26	MOTOR ASSEMBLY	146880
27	ELEMENT 208V 8KW	141183
27	ELEMENT 240V 8KW	141184
27	ELEMENT 480V 8KW	141185
28	THERMOSTAT ASSEMBLY	094161
29	GASKET, ELEMENT	042366
30	RELAY, 12VDC	119813
31	ELECTRICAL PANEL ASSEMBLY	148572
32	LINE CONNECTION PANEL ASSEMBLY	148622

Key	Description	Part #
Х	TOP PANEL	142428
Х	FRONT PANEL OVERLAY, 3-PAN	170158
Х	FRONT PANE OVERLAY, 5-PAN	170159
Х	DOOR LATCH PIN	078914
Х	DOOR PIN LOCK NUT	003823
Х	CAVITY FAN	096790
Х	GENERATOR ASSEMBLY, 3-PAN	142417
Х	GENERATOR ASSEMBLY, 5-PAN	142138
Х	LEFT PAN RACK, 3-PAN	094148
Х	LEFT PAN RACK, 5-PAN	125901
Х	DOOR HANDLE	070123
Х	DOOR GASKET, 3-PAN	124849
Х	DOOR GASKET, 5-PAN	125907
Х	MOTOR SHAFT SEAL	096868
Х	BLOWER COVER, 3-PAN	096788
Х	BLOWER COVER, 5-PAN	125902
Х	RIGHT PAN RACK, 3-PAN	094191
Х	RIGHT PAN RACK, 5-PAN	125904
Х	DRIP TRAY	094151
Х	LEFT SIDE PANEL, 3-PAN	141332
Х	LEFT SIDE PANEL, 5-PAN	141624
Х	RIGHT SIDE PANEL, 3-PAN	141331
Х	RIGHT SIDE PANEL, 5-PAN	141623
Х	FLOW REDUCER, CONDENSATE, 3-PAN	112720
Х	FLOW REDUCER, CONDENSATE, 5-PAN	088877
Х	HARNESS, CONTROL	148111
Х	HARNESS, POWER (208/240V)	148112
Х	HARNESS, POWER (480V)	149905
Х	HARNESS, HEATER, 3-PAN (208/240V)	148113
Х	HARNESS, HEATER, 5-PAN (208/240V)	148115
Х	HARNESS, HEATER (480V)	126092
Х	HARNESS, TIMER	123120
Х	HARNESS, CONTROL BOARD TO TIMER BOARD	123122
Х	JUMPER, VOLTAGE SELECT	123124
Х	JUMPER, T2	213125

x- Item not depicted/called out in drawing or photograph

### Wiring Diagram 3-Pan



### Wiring Diagram 5-Pan



# Service Log

Model No:	Purchased From:
Serial No:	Location:
Date Purchased:	Date Installed:
Purchase Order No:	For Service Call:

Date	Maintenance Performed	Performed By

# Service Log

Model No:	Purchased From:
Serial No:	Location:
Date Purchased:	Date Installed:
Purchase Order No:	For Service Call:

Date	Maintenance Performed	Performed By



#### **BLODGETT OVEN COMPANY**

www.blodgett.com

44 Lakeside Avenue, Burlington, Vermont 05401 USA Telephone: 866-518-3977