

OPERATOR MANUAL

IMPORTANT INFORMATION, KEEP FOR OPERATOR

888-994-7636, fax 888-864-7636 unifiedbrands.net



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. Unified Brands suggests 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.

Manufacture Service/Questions 888-994-7636.

EQUIPMENT DESCRIPTION

Your Groen SSB-3E/5E/10E or (2)SSB-3E/5E/10E SmartSteam100 Boilerless Steamer is designed to give years of service. It has a stainless steel cavity (cooking chamber) which is served by a gas-heated atmospheric steam generating reservoir. A powerful blower circulates the steam in the cavity to increase heating efficiency.

Each cavity holds up to three, five or ten steam table pans (12" x 20" x 21/2" deep) as shown below.

PANS PER CAPACITY PER TYPE					
STEAMER	12 x 20 x 2-1/2 (steamer)	12 x 20 x 4 (steamer)	13 x 18 (half size bake)	18 x 26 (bake)	
SSB-3E	3	2	0	0	
(2)SSB-3E	6	4	0	0	
SSB-5E	5	3	0	0	
(2)SSB-5E	10	6	0	0	
SSB-10E	10	6	20	10	
(2)SSB-10E	20	12	40	20	

An 18-guage stainless steel case encloses the cavity, the steam generating reservoir and the control compartment that houses electrical components. Door hinges are field-reversible (the door may be set to open from the left or right). Operating controls are on the front panel.

This manual provides information for:

SSB-3E/5E/10E & (2)SSB-3E/5E/10E DOMESTIC SMARTSTEAM100™ BOILERLESS STEAMER

- · Self Contained
- · Electric Heated
- · Capacity: SSB-3E=

SSB-3E=3 Steamer Pans Per Cavity SSB-5E=5 Steamer Pans Per Cavity SSB-10E=10 Steamer Pans Per Cavity

REFERENCES

UNDERWRITERS LABORATORIES, INC. 333 Pfingsten Road Northbrook, Illinois 60062-2096

NATIONAL FIRE PROTECTION ASSOCIATION 1 Batterymarch Park Quincy, Massachusetts 02169-7471

NFPA/70 National Electrical Code

NSF INTERNATIONAL 789 N. Dixboro Rd. P.O. Box 130140 Ann Arbor, Michigan 48105-9723

The SSB-3E/5E/10E steamers are equipped with electronic controls. These units are readily identified by their unique control panels. Steamer function is controlled by touch pad controls and a rotary timer dial.

The drain system on all models includes a spray condenser, which cools drain water.

INSPECTION & UNPACKING

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

Your Groen SmartSteam100 Boilerless 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.

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

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.







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.

DO NOT INSTALL THE UNIT IN ANY WAY WHICH WILL BLOCK THE REAR **CAUTION:** VENTS, OR WITHIN 2 INCHES OF A HEAT SOURCE SUCH AS A BRAISING PAN,

DEEP FRYER, CHAR BROILER OR KETTLE.

CAUTION: LEVEL THE UNIT FRONT TO BACK, AND PITCH IT SLIGHTLY TO THE FRONT,

TO AVOID DRAINAGE PROBLEMS.

FOLLOW THE WIRING DIAGRAM EXACTLY WHEN CONNECTING A UNIT TO WARNING: AVOID DAMAGE OR INJURY. WIRING DIAGRAM IS LOCATED ON THE INSIDE

OF THE RIGHT PANEL.

DO NOT USE PLASTIC PIPE. DRAIN MUST BE RATED FOR BOILING WATER. CAUTION:

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 DRAIN 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 COMPLETELY BEFORE CLEANING.

WARNING: USE MILD CLEANING AGENTS ONLY. CAREFULLY READ THE WARNINGS AND FOLLOW THE DIRECTIONS ON THE LABEL OF EACH CLEANING AGENT. USE

SAFETY GLASSES AND RUBBER GLOVES AS RECOMMENDED BY CLEANING

AGENT MANUFACTURER.

DO NOT PUT HANDS OR TOOLS INTO THE COOKING CHAMBER UNTIL THE FAN WARNING:

HAS STOPPED TURNING.

WARNING: DO NOT OPERATE THE UNIT UNLESS THE REMOVABLE RIGHT SIDE PANEL HAS

BEEN RETURNED TO ITS PROPER LOCATION.

DO NOT USE A CLEANING AGENT THAT CONTAINS ANY SULFAMIC ACID, OR NOTICE: ANY CHLORIDE, INCLUDING HYDROCHLORIC ACID. IF THE CHLORIDE CONTENT OF ANY PRODUCT IS UNCLEAR, CONSULT THE MANUFACTURER. DO NOT

> USE A CLEANING OR DELIMING AGENT THAT CONTAINS MORE THAN 30% PHOSPHORIC ACID.

DO NOT USE ANY DEGREASER THAT CONTAINS POTASSIUM HYDROXIDE OR NOTICE:

SODIUM HYDROXIDE OR THAT IS ALKALINE.

USE OF ANY REPLACEMENT PARTS OTHER THAN THOSE SUPPLIED BY GROEN WARNING:

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 INJURY OR DEATH.

STEAMER	Weight (LBS)	Weight (KGS)
SSB-3E Table Top	220	100
SSB-3E with Stand	310	141
(2)SSB-3E with Stand	500	227
SSB-5E Table Top	275	125
SSB-5E with Stand	350	159
(2)SSB-5E with Stand	555	252
SSB-10E with Stand	469	213
(2)SSB-10E with Stand	764	347

INSTALLATION & START-UP

THE UNIT MUST BE INSTALLED BY PERSONNEL WHO ARE QUALIFIED TO **WARNING:** 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. THE UNIT MUST BE INSTALLED BY A LICENSED PLUMBER WHEN INSTALLED WITHIN THE COMMONWEALTH OF MASSACHUSETTS.

CAUTION: DO NOT INSTALL THE UNIT WITH THE REAR VENTS BLOCKED OR WITHIN 2 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, AND

PITCH SLIGHTLY TO THE FRONT.

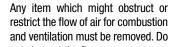
A. Installation

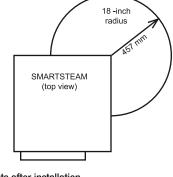
Minimum Clearances: SmartSteam100 Boilerless Steamer requires the following minimum clearances to any surface, combustible or noncombustible.

Right Side: 2 inches Left Side: 2 inches Rear: 6 inches

Steam Free Zone: The SmartSteam100 Boilerless Steamer can be damaged by steam from external sources. Do not install the steamer over a steam venting drain. Ensure that steam is not present in an area bounded by the footprint of the steamer and a circle 18 inches in radius about the right rear corner of the steamer (see figure below).

Install and operate the gas appliance in a well ventilated area. Adequate air must be supplied to replenish the air used for combustion. Installation must conform with local codes and/ or with the Naitonal Fuel Gas Code. ANSI Z223.1/NFPA-54 (latest edition) or the National Gas and Propane Code CSA B149.1 as applicable.





not obstruct the flue cover or rear vents after installation.

THE AREA DIRECTLY AROUND THE APPLIANCE MUST BE CLEARED OF ALL COMBUSTIBLE MATERIAL. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN CAUSE BODILY INJURY AND/OR PROPERTY DAMAGE.

The steamer must be disconnected from the gas supply system during any pressure testing of that system which has test pressures in excess of 1/2 PSI (3.45 kPa).

B. Electrical Supply Connection

CAUTION: EACH UNIT MUST HAVE A SEPARATE GROUND WIRE FOR SAFE

OPERATION.

WARNING: TO AVOID DAMAGE OR PERSONAL INJURY, FOLLOW THE WIRING

DIAGRAM EXACTLY



- 1. Panel Removal Right Side: Open the wiring and control panel by removing screws from the right side panel. Slide the panel forward and set it aside.
- Supply Voltage: The unit must be operated at the rated name plate voltage. The name plate can be found on the rear of the unit.

- 3. Phase Selection: Refer to steamer wiring diagram and element wiring at the end of this document 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.
- 5. Supply Wire: The equipment grounding wire must comply with the National Electrical Code (NEC) requirements. The wiring diagram on the inside of the unit's right side cover gives directions for proper connection of the terminal block jumpers. The wire must be used or the unit will not meet Underwriters Laboratories and NEC requirements. The electric hole is sized for a one-inch conduit fitting.
- Branch Circuit Protection: Each SmartSteam100 Boilerless Steamer, including individual units of stacked models, should have its own branch circuit protection and ground wire.

C. 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 PSI. If pressure is above 60 PSI, a pressure regulator will be needed. These pressures must provide the 1.5 gallons per minute required for proper steamer function.

Dual water connection: A 3/4 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 1/2 inch. Use a washer in the hose connection. Do not allow the connection to leak, no matter how slowly. Do not over-tighten hose connections

This equipment is to be installed to comply with the basic plumbing code of the Building Officials and Code Administrators International, Inc. (BOCA) and the Food Service Sanitation Manual of the Food and Drug Administration (FDA).

NOTE: Local code may also require check valves in the water supply line.

D. Drain Connection

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

Level the steamer front to back, and pitch it slightly to the rear (maximum 1/4 inch) by adjusting the optional legs or the bullet feet on the optional stand.

STEAMER	Drain ID Hose Size Required (IN)
SSB-3E	1.5"
(2)SSB-3E	2.5"
SSB-5E	1.5"
(2)SSB-5E	2.5"
SSB-10E	2"
(2)SSB-10E	2.5"

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 restrictions between the unit drain and the free air gap.

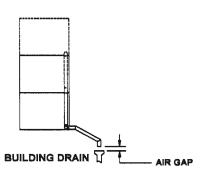
Install the drain line with a constant downward pitch.

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

Proper Drain Line Connection — Drain Line must have a constant downward pitch of at least 1/4" per foot. Observe local code regarding air gap spacing and drain connections.



IMPROPER DRAIN LINE CONNECTION



E. Factory-Stacked Units

This section is applicable only if you are installing factory-stacked units. 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.

1. Dual Water Connections

The same water supply connection is used for both units. At the water inlet valve a 3/4 inch female NH connector (garden hose type) is used for the water supply.

2. Electrical Supply Connection

Separate electrical connections will be required for each steamer to be stacked. Each steamer unit must have it's own branch circuit protection.

3. Drain Connection

Steamers must be leveled front to back, and pitched to the front (maximum 1/4 inch) by adjusting the bullet feet on the cabinet or stand base.

For all factory-stacked SSB steamers, a 21/2 inch ID hose is attached to the unit drain. It must be rated for boiling water.

F. Counter-Mounted Units

WARNING: DO NOT STACK SSB STEAMERS WHEN LEGS ARE USED.

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.

WATER QUALITY & TREATMENT

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

Most water supplies are full of minerals and chemicals which are not suitable for use in a steam generator.

Water quality varies from state to state and city to city. It is necessary that you know and understand the quality of the water you are using. Your water utility can tell you about the minerals and chemicals in your water. The water going to the steam generator should be within these guidelines.

WATER QUALITY REQUIREMENTS

Containment Water Supply рΗ 7 to 9 Total Dissolved Solids (TDS) 30 to 60 ppm less than 60 ppm Hardness Chlorine and Chloramine less than .1 ppm Chlorides less than 30 ppm less than 12 ppm Silica **Undissolved Solids** less than 5 microns

In order to accurately choose the correct water treatment solution, a water quality test has to be performed. If a "Free Start-up" is requested, the ASA will perform a water quality test and Unified Brands (UB) will be able to suggest the best solution for your water quality. If it isn't, your local manufacturing representative can coordinate this for you.

After the "Free Start-up" is performed, UB will add an additional 1-year parts and labor warranty. If UB suggests a water treatment system, the system is purchased from UB, installed and maintained, water related service issues will be covered for the duration of the warranty period.

INITIAL START-UP

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



After the SmartSteam100 Boilerless Steamer has been installed, test it to ensure that the unit is operating correctly.

- Remove all literature and packing materials from the interior and exterior of the unit.
- 2. Make sure the water supply line is open.
- 3. Turn on electrical service to the unit. The steamer will not operate without electrical power. Do not attempt to operate the unit during a power failure.

NOTE: The door MUST be closed for the main burner to work.

- 4. To turn the unit on, press the ON switch on the control panel.
- 5. When the steam generating reservoir has filled with water, the main burners will ignite automatically. Within 20 minutes or less the READY light will come on, indicating that the water has reached its standby temperature. When the READY light is displayed, you may take any one of the following steps;
 - a. Push TIMED and set the timer knob to the desired steaming time.
 - b. Push MANUAL for continuous steaming.
 - c. Push STOP to let the unit stay at ready condition.
- To shut down the unit, press the OFF switch. The steam generating reservoir will then fill with cold water and drain.
- If the steamer operates as described, the unit is functioning correctly and ready for USE.

NOTE: For operation at high altitudes (2000 feet and above), please consult the Groen Foodservice Engineering Department.

OPERATION

A. Controls

Operator controls are on the front right of the unit. The control panels have the following touch pads and indicator lights:

- The TIME display shows the remaining cooking time. It displays three dashes in MANUAL mode.
- The ON/OFF rocker switch gets the SmartSteam100 ready for use or shuts it off.
- The READY indicator light indicates the unit has
- Hour meter records cumulative hours of operation.
- The FAULT display shows the current fault, achieved the ready temperature.

The push button operations:

- In the STOP mode the steam generator stays at a low boil or ready temperature.
- When the TIMED button is pushed, the TIMED light will illuminate and time can be set by turning the TIMER knob (cook time can be increased or decreased at any time by turning the timer knob). The unit steams until the timer counts down to zero and the temperature drops to ready. At

TIME display TIMER knob MANUAL button and indicator MANUAL (((TIMED button and indicator TIMED STOP button and indicator STOP CANCEL button CANCEL **FAULT display** READY **READY** indicator ON/OFF rocker switch Hour meter smart@steam

that time the STOP light illuminates and a beeper sounds.

- When the MANUAL button is pushed, the unit steams continuously. The MANUAL light will stay illuminated.
- 4. CANCEL button should be pushed to stop beeping.

B. Operating Procedure

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



- Press the ON/OFF rocker to the ON position, (Fi_) is displayed in the TIME display window. The steam generating reservoir will begin filling, displaying (Fi=) and (Fi=) as it fills. After initial fill the unit will begin draining displaying (Fi=), refilling displaying (Fi=), and then begin heating until the READY light comes on (about 15-20 minutes).
- 2. Load food into pans in uniform layers. Pans should be filled to about the same levels, and should not be mounded.
- 3. Open the door and slide the pans into the supports. If you will only be steaming one pan, put it in the middle position. Some foods will cause foam. When cooking foods that foam, such as shrimp, put an empty solid 2½" deep pan in the bottom slot of the pan racks.

Close the door. When the READY indicator is lit take one of the following steps:

If you want to steam the food for a certain length of time push the TIMED button and set the desired time with the TIMER knob. The timer will automatically run the steamer for the set time and then STOP. A beeper will sound. Push CANCEL to stop beeping.

If you want to steam continuously push the MANUAL button. The unit will continue steaming until stopped.

Push STOP to stop producing steam.

- To remove pans from cavity 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 off the unit press the ON/OFF rocker switch to OFF, (FL≡) will appear in the timer display. The steam generating reservoir will begin draining, displaying (Fi=) and (Fi≡) as it drains, and refill to the high float twice and finally drain completely and turn off the unit.

NOTE: When filling or draining the steam generating reservoir (\equiv) will be displayed indicating the water level in the reservoir. ($_$) reservoir is empty, (=) low float is satisfied, (\equiv) high float is satisfied.

NOTE: If a large amount of shrimp is cooked in the SmartSteam100 foaming will occur because the steam lid actually gets so hot that the shrimp will cook on its surface and the shrimp proteins in the dripping will foam on the surface of the steam lid.

* To avoid this use a catch pan to catch shrimp drippings and proteins to prevent foaming when cooking a large amount of shrimp.

High Float
Low Float

Empty

CLEANING

WARNING: DISCONNECT THE POWER SUPPLY BEFORE CLEANING THE OUTSIDE OF THE

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

AVOID CONTACT WITH ANY CLEANERS, DELIMING 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 AGENT THAT CONTAINS ANY SULFAMIC AGENT OR ANY CHLORIDE, INCLUDING HYDROCHLORIC ACID (HCL). 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.

WARNING: ALLOW THE STEAMER TO COOL COMPLETELY BEFORE CLEANING. HOT SURFACES CAN CAUSE SEVERE BURNS.

WARNING: FAILURE TO CLEAN THE STEAMER AS SPECIFIED COULD NEGATIVELY IMPACT THE PERFORMANCE OF THE STEAMER.







To keep your SmartSteam100 Boilerless 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
- Stainless steel exterior cleaner Groen Spray DeGreaser (Part Number 140830WS)
- 3. Cloth or sponge
- 4. Brush with soft bristles
- 5. Spray bottle
- 6. Measuring cup
- 7. Nylon pad
- 8. Towels
- 9. Plastic disposable gloves
- 10. 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 rear panels.
 - To remove material which may be stuck to the unit, use a fiber brush or a plastic or rubber scraper with a detergent solution.
 - Stainless steel surfaces may be polished with a recognized stainless steel cleaner.

2. Interior Cleaning

Daily cleaning must be done in order to enhance the performance and prolong the life of your SmartSteam Boilerless Steamer.

CLEANING INSTRUCTIONS:

- STEP 1 Press OFF switch to turn steamer OFF and open steamer door.
- STEP 2 CAUTION: allow the steamer to cool completely before cleaning.
- STEP 3 Remove steam lid by grasping the two tabs located on the lid front and sliding pan forward.
- STEP 4 Remove left pan rack by lifting rack up and pulling away from cavity wall.
- STEP 5 Remove right fan shroud and rack assembly by lifting rack up and pulling away from cavity wall.
- STEP 6 Clean steam lid, left pan rack and rack/ shroud assembly to remove food soils. These three parts may be cleaned in a dishwasher.
- STEP 7 -Use a mild detergent to wipe down the entire steamer cavity to remove food and scale particles. Carefully clean float probes if food residue or loose scale is present. A thin layer of tightly bound scale is normal and will not affect steamer performance. If scale is excessive, then refer to deliming instructions below.
- STEP 8 Remove drain strainer and clean thoroughly to remove any buildup of debris.
- STEP 9 Replace pan racks and steam lid. Steamer is now cleaned and ready to use.

DELIMING INSTRUCTIONS:

When using Groen Boilerless Water Filtration System use vinegar as a deliming agent. Groen approved delimer may be used to remove excessive scale build-up.

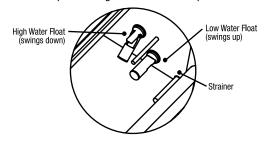
STEP 1 - After following all cleaning steps 1 through 7 listed above, turn

steamer on and allow water to enter steamer cavity.

- STEP 2 Pour 1 cup of vinegar or delimer into steamer cavity and shut door.
- STEP 3 Set steamer timer to 30 minutes and allow steam cleaning to occur.
- STEP 4 After 30 minutes cleaning cycle is complete, turn steamer OFF and allow to cool completely.
- STEP 5 Open steamer door and wipe down the entire steamer cavity to remove loosened scale particles. Carefully clean float probes if loose scale is present.
- STEP 6 Replace pan racks and steam lid. Steamer is now cleaned and ready to use.

FLOAT PROBE ORIENTATION:

Following is an inside view of steamer cavity with no water present. High level float probe swings down. Note water probe orientation:



OVERFLOW DRAIN:

- Turn your unit off and allow it to completely drain. SmartSteam units will drain automatically when the units are powered off. This is a 5 minute process.
- Once the reservoir has completely drained (approximately 5 minutes), stand to the hinged side of the door (Figure 2), slowly open the door allowing all of the steam to escape from the cavity. Allow the cavity to completely cool down and confirm that the reservoir has completely emptied before cleaning the overflow drain.



FIGURE 2

Remove the steam lid (Figure 3) and fan cover assembly (Figure 4), prior to cleaning the overflow drain.





FIGURE 4

4. Insert the cleaning brush into the overflow drain located at the lower, back right side of your steamer's cavity (Figure 5). As the brush is pushed through the overflow drain, it will bend to follow the shape of the drain as it travels the length of the overflow drain. Once you use the cleaning brush for the first time, the wire between the handle and the bristles will retain a curved shape after the brush is removed

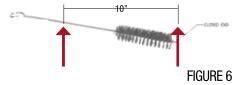
from the overflow drain. The brush is designed to bend/curve in this fashion. There is no need to straighten the wire between cleanings/ usage.



FIGURE 5

5. With the cleaning brush, push and pull through the entire lengthy of the overflow drain several times. The brush should be inserted at least ten inches (10") into the overflow drain to pass through the entire length of the drain piping. Repeat as necessary until the overflow drain is clean. Ensure that the overflow drain works properly by squirting water into the overflow drain and confirming that the water is flowing freely into the drain receptacle and not being blocked and backing up into the steamer cavity.

If the overflow drain is clogged such that the cleaning brush will not clear the blockage or if water cannot move through the overflow drain into the drain receptacle without backing up into the steamer cavity, then a service call needs to be made and all use of the steamer must be discontinued until the service agent evaluates the issue and confirms that the unit is ready for further operation.



- Clean the cooking cavity per the cleaning instructions in your operators' manual.
- 7. Re-install the steam lid and fan cover assembly.
- Leave the door open to prolong the life of the door gasket and to allow the cavity to air out.
- 9. Clean, dry and store the overflow cleaning brush after each use.
- 10. If a replacement brush is needed, the part number is 175977.

MAINTENANCE

The SmartSteam100 Boilerless Steamer is 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 Groen Authorized Service Agents should perform the work.

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.
- Adjust the door latch pin to allow for changes that might occur as the gasket ages.
 - 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. The hinge may also be adjusted.

REPLACEMENT PARTS

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.

CONTACT US

If you have questions pertaining to the content in this manual, contact Unified Brands at 888-994-7636.

TROUBLESHOOTING

This unit 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 found at the end of this manual. When in doubt, turn unit off and call for service at 888-994-7636. If an item on the check list is marked with (*), it means that the work should be done by a Groen Authorized Service Agent.

SYMPTOM	PROCEDURE
	Clean floats in unit / Check float probe orientation.
Fault Display 1 or 2	Be sure water supply is adequate to run steamer(s) during normal operation.
	Check wall circuit breaker.
No power	Disconnect power, then check fuses on inside of steamer.*
	Call service technician.
	Clean floats in unit / Check float probe orientation.
Unit overfills with water at start up	Clean drain strainer.
otta t up	Call service technician.
	Is the ON switch depressed?
	Is the water supply connected?
04	Is the water turned on?
Steamer does not fill with water	Is the water supply hose kinked or obstructed?
	Check for low water pressure (less than 30 PSI) or low water flow (less than 1.5 gpm).
	Is the screen at the water connection clogged?
"Door" shown in time display window	
	Is the ON switch depressed?
No steam	Is the water supply connected?
No steam	Is the water turned on?
	Is steamer door completely closed?
Fault Display 7	The component cooling fan may not be operating. The display may come on for several minutes during normal operation. If it stays on for more than 30 minutes, call service technician. Unit may be used for cooking, while waiting for service.
Any unusual operation	Press OFF switch to turn steamer off. Momentarily turn circuit breaker off and then on or unplug from power. Turn unit back on.
	Ensure drain and vent are not plugged. No more than two units should be attached to a single drain line.
Door pops open	Check door pin adjustment per above.
	Call service technician.
Fault Diamlay C	Wait 30 minutes for unit to cool down.
Fault Display 6	Call service technician.

WARRANTY

Congratulations on the purchase of your new Unified Brands equipment. We hope you enjoy many years of reliable service in connection with the same. Please review all of the important safety and operational information contained in the Operator's Manual for this equipment before it is placed in service. If you have any questions related to equipment set up, operations, or service, please call 888-994-7636.

In addition, please review the sales terms and conditions set forth below.

*****IMPORTANT NOTICE*****

WARRANTIES, LIMITATIONS ON WARRANTIES, AND LIMITATION OF REMEDIES

The following Warranties, Limitation on Warranties, and Limitation of Remedies are included in the terms of sale for this product. Please read this entire warranty and all warranty modifications, disclaimers, and limitations of remedies set forth herein before accepting or using this equipment or product. Customer acknowledges and accepts the provisions of this notice by Customer's acceptance and use of the product. If these provisions are not acceptable and agreed to by Customer, then please return this product in its unused condition to Unified Brands or a Unified Brands authorized dealer.

UNIFIED BRANDS warrants this product against defects in material and workmanship under normal use and services for which this product was designed. This warranty runs only to the original end user and is in lieu of any other liability for defects. THE WARRANTIES EXPRESSED IN THESE TERMS AND CONDITIONS ARE IN PLACE OF ANY AND ALL OTHER EXPRESS WARRANTIES (UNLESS SEPARATELY STATED IN PRINTED MATERIAL PREPARED BY US DESCRIBING OUR EQUIPMENT) AND EXCLUDE ALL IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE; NOR ARE THERE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, BY OPERATION OF LAW OR OTHERWISE. In no event shall UNIFIED BRANDS be liable for damages or delay or for any consequential, special or contingent damages arising out of any breach of our warranty, whether or not we have knowledge of specific needs or our employees or agents have given any specific assurances. Anyone claiming that there has been a breach of warranty by UNIFIED BRANDS must give us written notice within THIRTY (30) days after discovery of the relevant defect or the right to assert such claim will have been waived conclusively and provided further that any such claim must also be asserted within the general warranty period for such equipment and/or parts.

UNIFIED BRANDS will not be liable for any expense incurred without our prior written authorization for alterations made outside of our factory or for repairs which are not performed by UNIFIED BRANDS authorized service departments using UNIFIED BRANDS factory parts. Nor shall we be responsible for the performance of equipment as to which any repairs, revisions or alterations have been made by others.

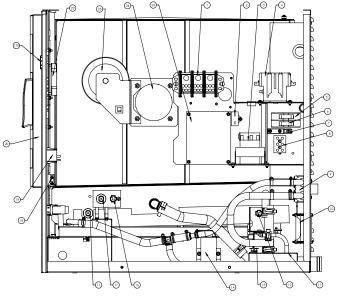
THE EXCLUSIVE REMEDY OF THE USER OR BUYER AND THE EXCLUSIVE LIABILITY OF UNIFIED BRANDS OR ANY SELLER OF UNIFIED BRANDS PRODUCTS, FOR ANY AND ALL CLAIMS, LOSSES, INJURIES, OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY, OR OTHERWISE) RESULTING FROM OR ARISING OUT OF THE USE OF HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OR AN AMOUNT NOT TO EXCEED THE ORIGINAL PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF UNIFIED BRANDS OR THE SELLER. THE REPLACEMENT OF THE PRODUCT.

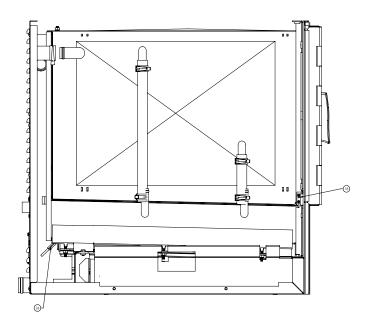


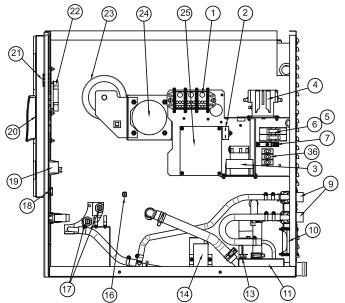


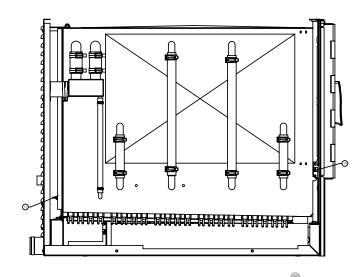
CALL FACTORY FOR REPLACEMENT PARTS: 888-994-7636

Parts List











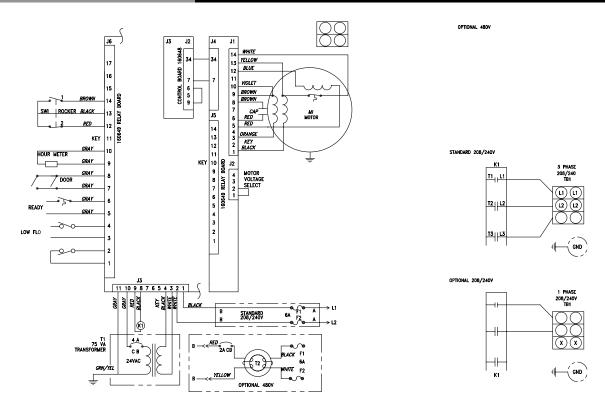
CALL FACTORY FOR REPLACEMENT PARTS: 888-994-7636

Parts List

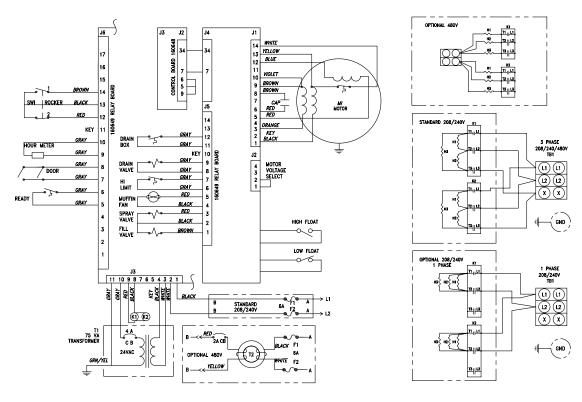
Key	Description	Part No.	Key	Description	Part No.
1	Terminal Block	070185	28	Front Panel Overlay (3E)	153015
2	Capacitor, 3MF	096813		Front Panel Overlay (5E/10E)	153472
3	Transformer 208/240v Primary/	121716	29	Door Latch Pin	078914
	24v secondary, 75VA		30	Door Pin Lock Nut	003823
4	Contactor	145081	31	Steam Lid (3E/5E)	149299
5	Fuseholder	096809		Steam Lid (10E)	149452
6	Fuse	119823	32	Cavity Fan	096790
7	Ground Terminal (3E/5E)	106412	33	Left Pan Rack (3E)	149883
	Ground Terminal (10E)	129714		Left Pan Rack (5E)	149872
8	Terminal Block (3E/5E)	003888		Left Pan Rack (10E)	145642
	Terminal Block (10E)	002577	34	Door Handle	129723
9	Water Valve PRE-2015	071235	35	Door Gasket (3E)	124849
9	Water Valve 2016	100934		Door Gasket (5E)	125907
10	Muffin Fan	177564		Door Gasket (10E)	143879
11	Drain Box (3E/5E)	150659	36	Terminal Block 480v Only (10E)	003888
	Drain Box (10E)	150661	X	Motor Shaft Seal	096868
12	Hi-Limit	144484	X	Blower Cover (3E)	149387
13	Thermostat (drain box)	145248		Blower Cover (5E)	149313
14	Drain Valve	071234		Blower Cover (10E)	149451
16	Ready Thermostat	147285	X	Right Pan Rack (3E)	141571
17	Water Level Probe (Serial Number	142689		Right Pan Rack (5E)	140157
	MSA and MSB)			Right Pan Rack (10E)	145721
	Float Probe (Serial Number	149880	Х	Drip Tray (3E/5E)	094151
	MSC and Following)			Drip Tray (10E)	145520
18	Door Switch	096857	Х	Left Side Panel (3E)	149229
19	Power Switch	160920		Left Side Panel (5E)	149233
20	Door Assembly, Complete (3G)	130858		Left Side Panel (10E)	149446
	Door Assembly, Complete (5G)	125922	Х	Right Side Panel (3E)	149231
	Door Assembly, Complete (10G)	143874		Right Side Panel (5E)	149235
21	Knob	160921		Right Side Panel (10E)	149448
22	Control Board	160648	Х	Flow Reducer, Condensate	147371
23	Tooroid (480V only)	119833	Х	Flow Reducer, Fill	144481
24	Motor Assembly	146880	Х	Harness, Control To Relay	160884
25	Relay Board	160649		Board SSB	
26	Element 208v 1000w (3E/5E)	148553	Х	Harness, SSB Rear (3E/5E)	160883
	Element 240v 1000w (3E/5E)	148554	Х	Harness, SSB Low Voltage (3E/5E)	160880
	Element 277v 1000w (3E/5E)	148552	Х	Harness, SSB Foward (3E/5E)	160882
	Element 208v 1000w (10E)	148444	Х	Harness, Steamer High Voltage (3E/5E)	160874
	Element 240v 1000w (10E)	148551	Χ	Harness, SSB High Voltage	153486
	Element 277v 1000w (10E)	148443	Х	Jumper, Voltage Select	123124
27	Top Panel (3E/5E)	150637	X	Harness, SSB-10E Low Voltage	153841
	Top Panel (10E)	149444	Χ	Harness, SSB-10E Forward	153842
			X	Harness, SSB-10E Rear	153843
			Х	Harness, Steamer 480v only	153118

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

Wiring Diagram



153333 REV. B SSB-3E/5E WIRING DIAGRAM



160469 SSB-10E WIRING DIAGRAM

Service Log

Model No:		Purchased From:		
Serial No:		Location:		
Date Purchased:		Date Installed:		
Purchase Order No:		For Service Call:		
·				
Date	Maintenance Perform	Maintenance Performed		

Date	Maintenance Performed	Performed By