



IMPORTANT
FOR FUTURE REFERENCE
Please complete this information and
retain this manual for the life of the
equipment.
MODEL # _____
SERIAL # _____
DATE PURCHASED _____

OWNER'S MANUAL

INSTALLTION
USER'S GUIDE
SERVICE
PARTS

COUNTER TOP CONVECTION STEAMER

MODEL R-1: STEAMMASTER

These instructions should be read thoroughly before attempting installation. Installation and Start Up should be performed by a qualified service technician. The Manufacturer, Southbend (1100 Old Honeycutt Rd., Fuquay-Varina, North Carolina 27526), informs you that unless the installation instructions for the above described Southbend product are followed and performed by a qualified service technician, (a person experienced in and knowledgeable concerning the installation of commercial gas and/or electrical cooking equipment) then the terms and conditions of the Manufacturer's Limited Warranty will be rendered void and no warranty of any kind shall apply.

If the equipment has been changed, altered, modified or repaired by other than a qualified service technician during or after the 12-month limited warranty period, then the manufacturer shall not be liable for any incidental or consequential damages to any person or to any property which may result from the use of the equipment thereafter. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion thereto may not apply to you. In the event you have any questions concerning the installation, use, care, or service of the product, write Customer Service Department, Southbend, 1100 Old Honeycutt Rd., Fuquay-Varina, North Carolina 27526.

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.

Congratulations! You have just purchased one of the finest pieces of heavy-duty, commercial cooking equipment on the market today.

You will find that your new equipment, like all Southbend equipment, has been designed and manufactured to some of the toughest standards in the industry — those of Southbend Corporation. Each piece of Southbend equipment has been carefully engineered and designs have been verified through laboratory tests and field installations in some of the more strenuous commercial cooking applications. With proper care and field maintenance, you will experience years of reliable, trouble-free operation from your Southbend equipment. To get the best results, it's important that you read this manual carefully.

TABLE OF CONTENTS:

SECTION ONE - INSTALLATION	
Specifications	1
Installation	3
For Sectional Battery Assembly Instruction See ATTENTION INSTALLER MANUAL, Part No. 1165403/1	
SECTION TWO - USER'S GUIDE	
Warranty	1
Operation	2
Cooking Hints	6
Maintenance	8
SECTION THREE – SERVICE	
Adjustments	1
Service	6
Troubleshooting	6
Schematic Drawings	9
SECTION FOUR – PARTS	
Parts List.....	1

**RETAIN THIS MANUAL FOR FUTURE REFERENCE.
INTENDED FOR COMMERCIAL USE ONLY. NOT FOR HOUSEHOLD USE.**

WARNING-WARRANTY WILL BE VOID IF

- A. SERVICE WORK IS PERFORMED BY OTHER THAN A QUALIFIED TECHNICIAN.**
- B. OTHER THAN GENUINE SOUTHBEND REPLACEMENT PARTS ARE INSTALLED.**

FOR YOUR SAFETY

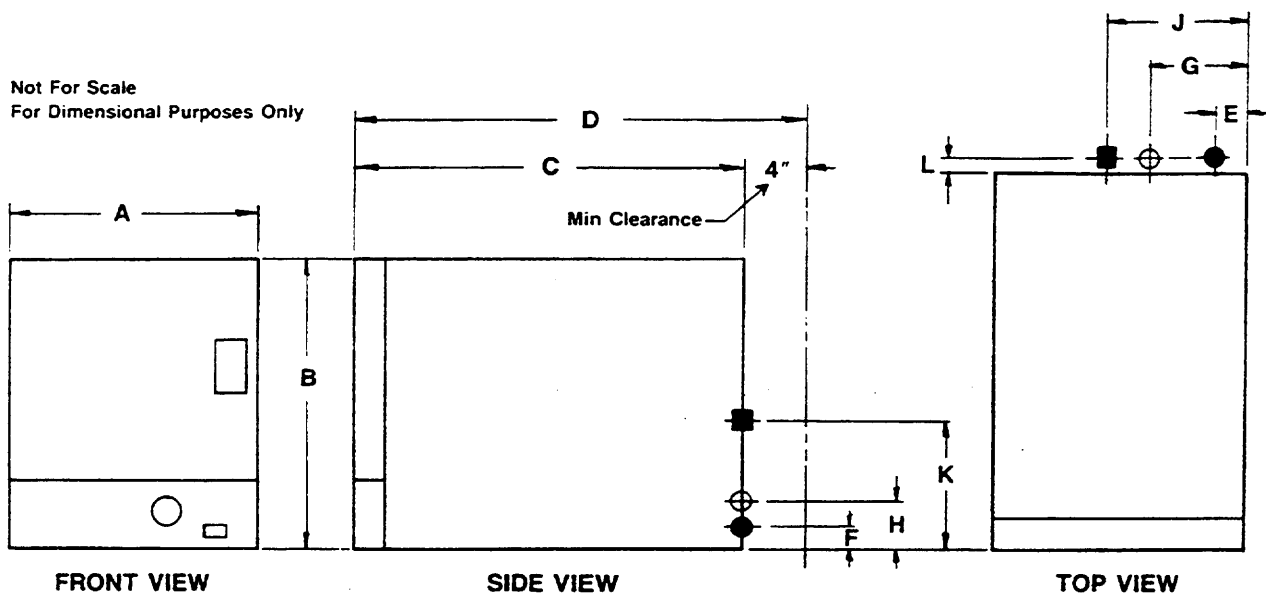
DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

KEEP AREA AROUND APPLIANCES FREE AND CLEAR FROM COMBUSTIBLES.

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

COUNTER TOP CONVECTION STEAMER INSTALLATION

SPECIFICATIONS



- ⬤ Electric connection – terminal block.
- ⬤ Drain 1 1/4" o.d., leave open, do not connect to floor drain.
- ⬤ Cold water inlet 1/4", 30 p.s.i. min. – 60 p.s.i. max.

DIMENSIONS: () = Millimeters

MODEL	Width	Width	DEPTH		DRAIN		WATER		ELECTRIC CONN.			CRATE SIZE			Cubic Volume	Crated Weight
	A	B	C	O	E	F	G	H	J	K	L	Width	Depth	Height		
STEAM	16"	19"	24 1/2"	28 3/4"	2"	W	6 1/2"	3 3/4"	9 1/2"	8V7-	1"	19"	30"	22"	7.25 cu. U.	90 lbs.
MASTER	(406)	(482)	(625)	(727)	(51)	(38)	(158)	(82)	(235)	(216)	(25)	(482)	(762)	(559)	.20 cu. m.	41kg.

UTILITY INFORMATION:

ELECTRIC: One electric connection required. Controls on all units and, elements 208/60/1, 240/60/1, 208/60/3, or 240/60/3.

	208/240 V
TOTAL CONNECTED AMPS	9KW
ø 208/60/1	44
ø 208/60/3	25
ø 240/60/1	38
ø 240/60/3	22

'Circuit must be wired for maximum 9 KW at required voltage.

WATER USAGE: 0.12 gallons per minute at 45 p.s.i. water pressure in cavity.
0.16 gallons per minute at 45 p.s.i. water pressure in condenser.

APPROVALS:





INSTALLATION

GENERAL:

THE UNIT WHEN INSTALLED MUST BE ELECTRICALLY GROUNDED AND COMPLY WITH LOCAL CODES, OR IN THE ABSENCE OF LOCAL CODES, WITH THE NATIONAL ELECTRICAL CODE ANSI NFPA 70-1990.

CANADIAN INSTALLATION MUST COMPLY WITH CSA STANDARD C22.2 No. 0-M1982 -General Requirements - Canadian Electrical Code, Part II. 109-M1981 - Commercial Cooking Appliances

CLEARANCES:

Allow at least a four inch (4") 102 mm. clearance between the back of the unit and any wall obstruction for proper ventilation of the unit, and room for plumbing and electrical connections. Do not locate the STEAMMASTER adjacent to any high heat[producing piece of equipment, such as a range top, griddle, fryer, etc., that could allow radiant heat to raise the exterior temperature of the STEAMMASTER above 130T (54°C).

DO NOT MOUNT ABOVE OTHER COOKING EQUIPMENT.

WARNING:
THESE PROCEDURES MUST BE FOLLOWED BY QUALIFIED PERSONNEL OR WARRANTY WILL BE VOIDED.

TO INSTALL:

1. Uncrate carefully. Report any hidden freight damage to the freight company immediately.
2. Do not remove any tags or labels until the unit is installed and working properly.
3. Set unit in place.
4. **Counter Model** — Set on non-flammable surface and shim to make level. Seal to counter top with sealer such as G.E. or DOW Corning RTV type sealant. (Consult local code for exact requirements.)

LEVELING:

Unit must be level to assure maximum performance. Improper leveling may void warranty.

WATER CONNECTION:

Connect cold water line, 1/4" (6 mm.) pipe. Water line pressure should be 30 psi (205 Kpa) minimum — 60 psi (410 Kpa) maximum.

NOTE: To facilitate cleaning, plus allowing access to rear of unit, flexible connections are recommended.

WATER SPECIFICATION:

To meet warranty requirement, supply water must be as follows:

Pressure: 30 to 60 psi
Total dissolved solids (TDS) — 60 PPM
Hardness: 2 grains or 35 PPM
PH factor: 7.0 to 7.5

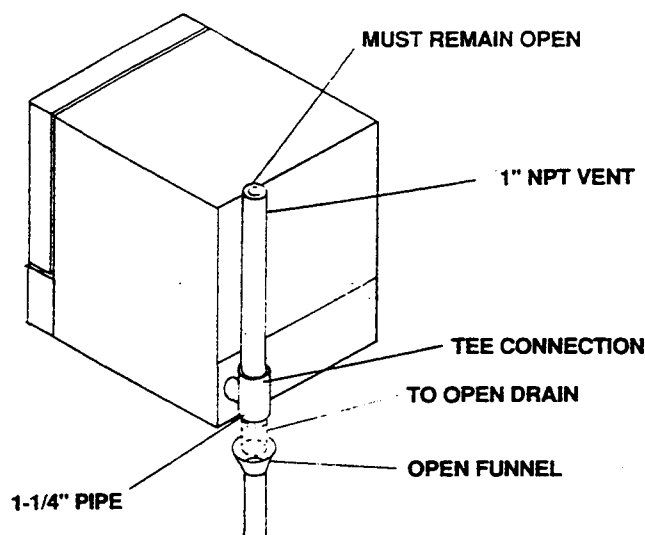
WATER LEVEL SWITCH FLOAT INSTALLATION:

See page 5 SERVICE.



DRAIN LINE:

The drain line connection size from the unit is 1-1/4" NPT (32 mm). Position the unit near, but not on top of, an open floor drain. **DO NOT** directly plumb to the unit unless you also install an "open funnel" downstream of this connection in the drain system. Make the drain line from the unit to the air gap above the "open funnel" as short as possible. There should be no horizontal piping between the unit and the air gap above the "open funnel". The "open funnel" is intended to eliminate any water from entering the steamer because of a blocked drain and it also prevents any back pressure within the steamer cavity. The unit must be free-venting to atmosphere. Any connection that allows the build-up of back pressure in the unit such as a reduction in pipe size to a line smaller than 1-1/4" or a 90 degree angle in the line prior to the "open funnel" drain discharge point will void the warranty. This is a pressureless, free-venting steam cooker and will not operate properly unless the drain line is short, at a steep angle, and open!



ELECTRICAL CONNECTION:

For proper connection of field wiring to terminal block, see Wiring Diagram, Section 3, Page 6. Be sure that the input voltage and phase match the requirements shown on the serial plate located on the left rear side of each piece of equipment.

NOTE: This unit has **one** power supply for controls and elements, as well as one (1) ground wire. A **POSITIVE GROUND CONNECTION IS ESSENTIAL**.

DO NOT ALLOW ANY TAMPERING OR ADJUSTMENT OF ANY CONTROL OR WIRING. THE UNIT IS FACTORY SET. ADJUSTMENT OF ANY INTERNAL COMPONENT OTHER THAN THE FIELD TERMINAL BLOCK CAN VOID THE WARRANTY.

FINAL:

5. Open water valve to full open position.

CHECK:

- a. Power to unit.
- b. Water to unit.
- c. Open drain.

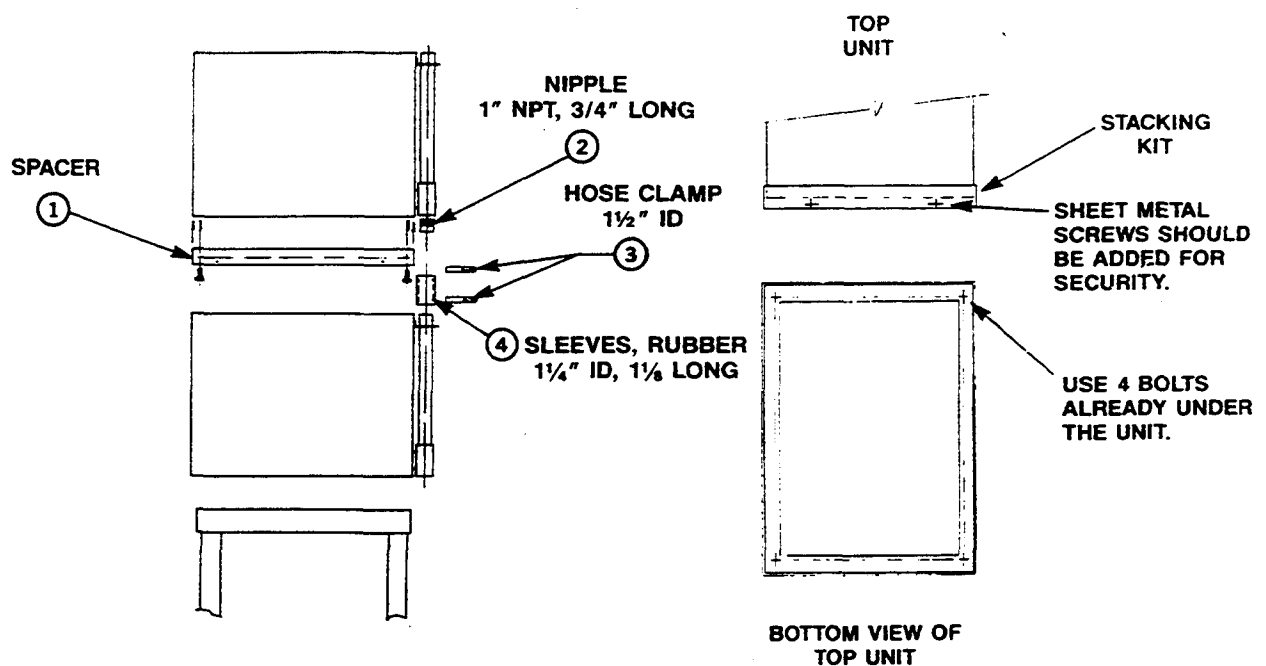
Unit is now ready for initial start-up.



INSTALLATION

STEAMMASTER STACKING INSTRUCTIONS:

1. Bolt spacer (Item 1) to bottom of top unit, using the 3/8" bolts holding the lower cover on. Cover remains on.
2. Attach nipple (Item 2) to lower threads of drain "tee" at rear of top unit.
3. Place rubber sleeve (Item 4) on lower portion of just installed nipple (top unit).
4. Carefully lower top unit onto lower unit, lining up sleeve with top of vent pipe on lower unit. Secure with clamps.
5. It is recommended to drill (2) 3/32" holes in each side through the spacer bracket holes and secure in place with #10 sheet metal screws.



PERFORMANCE CHECK:

The following items should be checked before or within the first 30 days of operation by a qualified service technician.

1. Check doors for proper alignment.
2. Check door gaskets for wear and sealing ability.
3. Check spray tubes or nozzles for cleanliness and/or leakage.
4. Check all gauges, timers, valves and switches for proper operation.
5. Visually check control compartment wiring for burned or loose connections.
6. Is user keeping compartment clean?
7. Check electrical load on elements, where applicable, for proper wattage.
8. Check hoses at clamped connections, it is particularly important to ensure that the hose connected to front panel drain tube is securely attached.

COUNTER TOP CONVECTION STEAMER USER'S GUIDE

LIMITED WARRANTY

Southbend warrants that the equipment, as supplied by the factory to the original purchasers, is free from defects in materials and workmanship. Should any part thereof become defective as a result of normal use within the period and limits defined below, then at the option of Southbend such parts will be repaired or replaced by Southbend or its Authorized Service Agency. This warranty is subject to the following conditions:

If upon inspection by Southbend or its Authorized Service Agency it is determined that this equipment has not been used in an appropriate manner, has been modified, has not been properly maintained, or has been subject to misuse or misapplication, neglect, abuse, accident, damage during transit or delivery, fire, flood, riot or Act of God, then this warranty shall be void.

Specifically excluded under this warranty are claims relating to installation; examples are improper utility connections and improper utilities supply. Claims relating to normal care and maintenance are also excluded; examples are calibration of controls, and adjustments to pilots and burners.

Equipment failure caused by inadequate water quality is not covered under warranty. WATER QUALITY must not exceed the following limits: Total Dissolved Solids (TDS) - 60 PPM (Parts Per Million). Hardness - 2 Grains or 35 PPM, PH Factor - 7.0 to 7.5. Water pressure 30 PSI minimum, 60 PSI maximum. Boiler maintenance is the responsibility of the owner and is not covered by warranty.

This equipment is intended for commercial use only. Warranty is void if equipment is installed in other than commercial application. Repairs under this warranty are to be performed only by a Southbend Authorized Service Agency. Southbend can not be responsible for charges incurred from other than Authorized Southbend Agencies. THIS WARRANTY MUST BE SHOWN TO AN AUTHORIZED SERVICE AGENCY WHEN REQUESTING IN-WARRANTY SERVICE WORK. THE AUTHORIZED SERVICE AGENCY MAY AT HIS OPTION REQUIRE PROOF OF PURCHASE. This warranty does not cover services performed at overtime or premium labor rates nor does Southbend assume any liability for extended delays in replacing or repairing any items in the equipment beyond the control of Southbend. "Southbend shall not be liable for consequential or special damages of any nature that may arise in connection with such product or part." Should service be required at times which normally involve overtime or premium labor rates, the owner shall be charged for the difference between normal service rates and such premium rates. In all circumstances, a maximum of one hundred miles in travel and two and one half hours (2.5) travel time shall be allowable. In all cases the closest Southbend Authorized Agency must be used. The actual warranty time periods and exceptions are as follows:

This warranty only covers product shipped into the 48 contiguous United States and Hawaii, one year labor, one year parts effective from the date of original purchase. There will be no labor coverage for equipment located on any island not connected by roadway to the mainland. Exceptions to standard warranty, effective within above limitations:

Glass Windows, Door Gaskets, Rubber Seals, Light Bulbs, Ceramic Bricks, Sight Glasses, Cathodic Descalers or Anodes
..... 90 days material and labor

Stainless Steel Fry Pot.....4 years extended material warranty on fry pot only — no labor

Stainless Steel Open Top Burners.....4 years extended material warranty on burners only — no labor

Pressure Steam Boiler Shell Prorated 4 years extended warranty on boiler shell only — no labor

Boiler shells which have not been properly maintained will not be covered by warranty. In all cases parts covered by a five year warranty will be shipped FOB the factory after the first year. Our warranty on all replacement parts which are replaced in the field by our Authorized Service Agencies will be limited to three months on labor, six months on materials (parts) effective from the date of installation. See LIMITED WARRANTY

- REPLACEMENT PARTS for conditions and limitations.

If the equipment has been changed, altered, modified or repaired by other than a qualified service technician during or after the one year limited warranty period, then the manufacturer shall not be liable for any damages to any person or to any property which may result from the use of the equipment thereafter.

"THE FOREGOING WARRANTY IS IN LIEU OF ANY AND ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS, AND CONSTITUTES THE ENTIRE LIABILITY OF SOUTHBEND. IN NO EVENT DOES THE LIMITED WARRANTY EXTEND BEYOND THE DURATION OF ONE YEAR FROM THE EFFECTIVE DATE OF SAID WARRANTY."



OPERATION

THEORY OF OPERATION:

Compared to other steam cookers with complicated boilers, the STEAMMASTER is a very simple machine. Immersion elements are installed on the left side of the cavity and when water covers the elements, water starts to boil and turn to steam. There is no pressure in this unit.

All equipment must be installed correctly to ensure proper operation and reliable service. Installation instructions must be followed by a qualified technician.

Before you turn the unit on, be sure that you have: POWER to unit, WATER to unit, and OPEN DRAIN.

NOTE: Your STEAMMASTER must be thoroughly cleaned every day.

CAUTION: DO NOT USE ANY CORROSIVE CLEANER. USE ONLY CLEANERS APPROVED FOR STAINLESS STEEL.

Before starting the unit, review the following:

- A. Be sure overflow pipe in back right hand corner of the cooking compartment is in position.
- B. Be sure the drain outlet is not blocked in any way. (The STEAMMASTER drain line must be free venting.)
- C. Be sure the pan supports and steam deflector are well secured.

CONTROL INSTRUCTIONS:

1. For manual operation, press right-hand rocker switch to "MANUAL" and the light will turn on. The unit is now in operation and will be generating steam in a few minutes (approximately 9 minutes from a cold start).
2. For timed operation, press right-hand rocker switch to "⌚". Set timer by positioning knob pointer to desired time marking. When time elapses buzzer will sound. Buzzer may be shut off by opening door, moving selector switch to "👉", shutting unit off, resetting to a new time or turning knob *counterclockwise* to the Hold/Off position (counterclockwise past "0" time).
3. To restart timer, set to new time marking.

NOTE: Timer is an audible time reminder only. It does not control cook time or shut off elements. HEATING ELEMENTS REMAIN ON.

4. The STEAMMASTER is designed to accept standard 12" x 20" pans (305 x 508 mm.). Fractional size pans can be used as well with optional stainless steel perforated shelf.

INSTRUCTIONS FOR TURNING OFF BUZZER:

The STEAMMASTER is supplied with a continuous ring buzzer. This buzzer is activated automatically in the automatic mode of operation when the cooking cycle is complete. This buzzer can be turned off by:

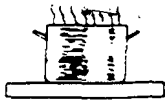
1. Reset timer to begin a new time cycle.
2. Set the three position rocker switch to "👉" or to off position.
3. Open the door of the unit
4. Turn knob counterclockwise *past* "0" time.

COOKING HINTS

SUGGESTED COOKING TIMES:

Timer settings are for general guidance only. Differences in food quality, size, shape, freshness, load size and degree of cook desired must be considered and adjustments made in time if necessary.

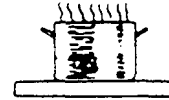
Product	Weight	Portions	Cooking Time (minutes)	Pan Used
ASPARAGUS				
Fresh	3 1/2 lbs.	14(40Z.)	8-10	Full/Perforated
Frozen Spears (Thawed)	5 IDS.	20 (4 oz.)	9	Full/Perforated
BEANS				
Green — Frozen, Cut	5 lbs.	20 (4 oz.)	12	Full/Perforated
Green — Fresh	5 lbs.	20 (4 oz.)	15-17	Full/Perforated
Wax — Frozen	5 lbs.	20 (4 oz.)	13	Full/Perforated
Lima — Frozen	5 lbs.	20 (4 oz.)	10	Full/Perforated
BROCCOLI				
Spears — Fresh	4 lbs.	16(4oz.)	10-12	Full/Perforated
Spears — Frozen (Thawed)	5 lbs.	20 (4 oz.)	8	Full/Perforated
BRUSSEL SPROUTS				
Fresh	5 lb.	20 (4 oz.)	15-17	Full/Perforated
Fresh	5 lbs.	20 (4 oz.)	13	Full/Perforated
CARROTS				
Frozen — Whole Baby	5 lbs.	20 (4 oz.)	12	Full/Perforated
Fresh — V4-Inch Bias Cut	5 lbs.	20 (4 oz.)	12	Full/Perforated
CABBAGE				
Green, Cut Into Wedges		24	15	Full/Perforated
Red, Cut Into Wedges		16	18-20	Full/Perforated
CAULIFLOWER				
Fresh, Whole	2 lbs.	8 (4 oz.)	9-10	Full/Perforated
Fresh, Whole	2 lbs. 12oz.	11 (4 oz.)	15	Full/Perforated
Frozen, Flowerettes	5 lbs.	20 (4 oz.)	10-12	Full/Perforated
CORN				
Fresh — Cob, 4-5 Inch Ears	5V2 lbs.	15	13-15	Full/Perforated
Frozen — Whole Kernel	5 lbs.	20 (4 oz.)	8	Full/Perforated
Frozen — Cob, 6 Inch Ears	9 lbs.	14	12-14	Full/Perforated
MIXED VEGETABLES				
Frozen	5 lbs.	20 (4 oz.)	12	Full/Perforated
PEAS				
Frozen	5 lbs.	20 (4 oz.)	8	Full/Perforated



COOKING HINTS

Product	Weight	Portions	Cooking Time (minutes)	Pan Used
POTATOES				
Red Bliss — Whole	7lbs.	28	35	Full/Perforated
Russetts — Whole	8lbs.	20	23-25	Full/Perforated
Russetts — Peeled	5lbs.	12	20	Full/Perforated
Russetts 1-Inch Cubes	5lbs.	20 (4 oz.)	17	Full/Perforated
SPINACH				
Fresh, Leaf	2Vz lbs.	10(4oz.)	5	Full/Perforated
Frozen, Chopped	6lbs.	24 (4 oz.)	35	Full/Perforated
ZUCCHINI				
Fresh — Slices y4-Inch Thick	5lbs.	20 (4 oz.)	6-8	Full/Perforated
EGGS				
Large — Hard Cooked	12 lbs.	12	15-16	V2 Perforated
MEATS				
Corned Beef	6% lbs.	18(6oz.)	2 hours	Full
Hot Dogs, Thawed	5lbs.	40 (2 OZ.)	5	Full/Perforated
Hot Dogs, Frozen	5lbs.	40 (2 oz.)	10	Full/Perforated
FOWL				
Boneless Chicken Breast	4V2 lbs.	12 (6 oz.)	15	Full/Perforated
Tamales, Frozen	3 lbs.	12(4oz.)	20	Full/Perforated
Tortilla, Frozen 8-Inch	4 Tortillas	4	45 Seconds	Half/Perforated
Beef Ravioli, Frozen	48 Ravioli (1 lb. 8 oz.)	8	5-6	Full/Perforated
Elbow Macaroni	2 lbs. Uncooked	32 (2 oz.)	7	In Perforated Pan Nested
Spaghetti	2 lbs. Uncooked	32 (2 oz.)	14	in 4-Inch Full/Perforated
Egg Noodles	2lbs. Uncooked	32 (2 oz.)	10	
Converted Rice	2 lbs. 2Vz Qts. Water + Oil & Salt		25	Full/Perforated
Navy Beans	2 lbs.			Full/Perforated
Place beans in pan & cover w/3-quarts hot tap water. Steam for 2 minutes; remove from steamer & cover for 1 hour. Remove cover & place back in steamer for 40 minutes.				
Black Eyed Peas	2 lbs.			Full/Perforated
Place peas in pan & cover w/3-quarts hot tap water. Steam for 2 minutes; remove from steamer & cover for 1 hour. Remove cover & place back in steamer for 35 minutes.				

COOKING HINTS



Product	Weight	Portions	Cooking Time (minutes)	Pan Used
Oysters	5 lbs.	16 Count	12	Perforated Pan Nested in a Full Pan 2V2-Inch Deep
Shrimp, Fresh, Medium, Heads Removed	5 lbs.		6-7	Full/Perforated
Shrimp, Frozen, Large, Peeled & Devined	5 lbs.		8	Full/Perforated
Lobster	13/4 lbs.		8	Full/Perforated
Alaskan King Crab Legs	1 lb.		4-5	Full/Perforated
Cherrystone Clams	5 lbs.	12	7	Full/Perforated
Fish Fillets	7V2 lbs.	12 (10 oz.)	18	Full/Perforated Nested in Full Hotel Pan



COOKING HINTS

END USER TIPS:

Schedule cooking of fresh vegetables so that they will be served soon after they are cooked. If it is necessary to prepare them in advance, they can be plunged into cold water, drained thoroughly and held under refrigeration until needed for service.

Five pounds of cold cooked vegetables can be reheated in the steamer in 5 to 10 minutes, depending upon the variety.

Adding salt to the water for eggs cooked in the shell makes the cooking water more efficient and faster at its job. If the egg cracks, the "white" is cooked at the crack and is sealed right away.

To avoid the dreaded green yolk (which is a deposit of iron sulfide) chill the eggs immediately after removing from the steamer by plunging them into a cold water bath (preferably containing ice).

A quick and easy way to cook eggs for a salad mixture is to crack them directly into a solid steam table pan which has been lightly coated with salad oil. *Do not mix.* Steam until they are hard cooked. Remove and chop as you would for egg salad. The job of peeling has been eliminated.

Transfer steamed hot chicken to deep pan, cover with Cacciatore Sauce and finish in oven. Bake 20 to 30 minutes. May be held on steam table.

After cooking, chicken may be browned in Infra-Red or Radiant Broiler. Brush with melted margarine mixed with salad oil to give a golden brown color.

Use juice saved from steamed chicken to make soups, sauces, or casserole dishes.

Chicken may be steamed in advance and held under refrigeration for next day's use. Be sure to bring product back to 180 °F before serving.

Save the juice from the corned beef. After the cabbage has been steamed, place it in a solid pan and add the juice for flavoring and holding on a steam table.

Steaming brisket in the STEAMMASTER is a definite time saver. Boiling in water takes 40 to 50 minutes per pound. Using the STEAMMASTER can save 50% in cooking time.

Cabbage when steamed, retains its color and wedge identity. It will not break apart as it does when boiled in an open pot.

When removing items prepared in a perforated pan, put a solid pan underneath the perforated pan to hold the pan of cooked food. This will prevent dripping on the floor.

The STEAMMASTER is designed to accept standard 12 x 20 pans. Fractional size pans can be used as well with the optional perforated shelf.

For stirring, the pan does not have to be removed from the steamer. Pull pan 1/3 way out of the cavity and the entire surface is accessible.

The door may be opened at any time during operation to remove or add food.



Southbend equipment is sturdily constructed of the best quality materials and is designed to provide durable service when treated with ordinary care. To expect the best performance, your equipment must be maintained in good condition and cleaned daily. Naturally, the periods for this care and cleaning depend on the amount and degree of usage.

Following daily and periodic maintenance procedures will enhance long-life for your equipment. Climatic conditions - salt air - seasonings - water quality - may require more thorough and frequent cleaning or the life of the equipment could be adversely affected.

DAILY CLEANING

- Remove the pan supports, well cover, and overflow pipe. Wash separately in a sink with a mild detergent and warm water. Dry thoroughly with a clean cloth.
- Wash interior surfaces, including the heating elements with a mild detergent and warm water. Rinse with clean water. Dry thoroughly with a clean cloth. If discoloration starts due to build up of seasonings or food products remove by using Scotch-Brite scouring pad. Then wash, rinse, and dry as above.
- Wipe exterior surface with a clean damp cloth.
- Return all cleaned parts to the unit, placing in their proper position.
- **LEAVE THE DOOR OPEN AT NIGHT AFTER CLEANING.** This allows the unit to dry thoroughly after cleaning and also prolongs the life of the door gasket.

PERIODIC CLEANING - AS REQUIRED:

If a lime or mineral deposit starts to build up the interior this should be cleaned by using lime-away or other non caustic deliming solution. Follow manufacturers recommended procedures. Thoroughly rinse out unit.

To remove food build up or discoloration apply cleanser to a damp cloth or sponge and rub cleanser on the material in the direction of the polishing lines on the metal. Never rub with a circular motion. Soil and discoloration which do not respond to the above procedure can usually be removed by rubbing the surface with Scotch-Brite scouring pads or stainless scouring pads.

CAUTION:

DO NOT USE ordinary steel wool as any particles left on the surface will rust. **NEVER USE** a wire brush, steel or abrasive scouring pads (except stainless), scraper, file or other steel tools. Surfaces which are marred collect dirt more rapidly and become more difficult to clean. Marring also increases the possibility of corrosive attack.

DO NOT clean door gaskets with a high chlorine solution or bleach.

NEVER use vinegar or any corrosive cleaner. Use only cleaners approved for stainless steel.

STAINLESS STEEL: To remove normal dirt, grease or product residue from stainless steel, use ordinary soap and water (with or without detergent) applied with a sponge or cloth. Dry thoroughly with a clean cloth. Never use corrosive cleaner.

To remove grease and food splatter or condensed vapors that have baked on the equipment, apply cleanser to a damp cloth or sponge and rub cleanser on the metal in the direction of the polishing lines on the metal. Rubbing cleanser as gently as possible in the direction of the polished lines will not mar the finish of the stainless steel. **NEVER RUB WITH A CIRCULAR MOTION.** Soil and burnt deposits which do not respond to the above procedure can usually be removed by rubbing the surface with **SCOTCH-BRITE** scouring pads or **STAINLESS** scouring pads. **DO NOT USE ORDINARY STEEL WOOL** as any particles left on the surface will rust and further spoil the appearance of the finish. **NEVER USE A WIRE BRUSH, STEEL SCOURING PADS (EXCEPT STAINLESS), SCRAPER, FILE OR OTHER STEEL TOOLS.** Surfaces which are marred collect dirt more rapidly and become more difficult to clean. Marring also increases the possibility of corrosive attack. Refinishing may then be required.

COUNTER TOP CONVECTION STEAMER SERVICE

ADJUSTMENTS



WARNING:

ADJUSTMENTS AND SERVICE WORK MAY BE PERFORMED ONLY BY A QUALIFIED TECHNICIAN WHO IS EXPERIENCED IN, AND KNOWLEDGEABLE WITH, THE OPERATION OF COMMERCIAL COOKING EQUIPMENT. HOWEVER, TO ASSURE YOUR CONFIDENCE, CONTACT YOUR AUTHORIZED SERVICE AGENCY FOR RELIABLE SERVICE, DEPENDABLE ADVICE OR OTHER ASSISTANCES, AND FOR GENUINE FACTORY PARTS.

The following is a brief explanation of the operation of your STEAMMASTER Convection Steamer. The unique design of the STEAMMASTER Convection Steamer allows you to cook with steam without the problems of bulky, troublesome steam boilers. The STEAMMASTER uses 9 KW for a fast response until the temperature of the cavity reaches 212 degrees F, and then the elements will cut automatically to 6 kw for **energy miser**. The STEAMMASTER generates its own steam on the bottom of the cavity.

When the selector switch is placed in either the "MANUAL" or "AUTOMATIC" position, voltage is applied to the coil of contactor (relays) from LI, L2, L3 at the terminal block and then to the elements; through this switch, through safety thermostats, through door magnet switch. Voltage is also applied to the water solenoid of the boiler which will fill the boiler to the top of the elements first; at that point the float switch will give power to the elements. Water will still continue to flow until it reaches the overflow level which is the appropriate amount of water in the boiler. This will be done only if the door is *closed*. Otherwise (with the door open), the elements are off, boiler solenoid and condenser solenoid are off.

NOTE: From a cold start, the unit should be up to temperature within 9 to 10 minutes.

When contactor energizes, the higher rated voltage is applied to heating elements through the closure of contactor contacts LI, L2, and L3 from the LINE voltage at terminal block.

Anytime the unit is turned "ON," a small amount of water will be noticed coming out of the drain-line. This is due to a "water mist," which is sprayed across the exhaust of the cooking compartment. This eliminates "live" steam ever reaching a drain line. This feature is required by most local codes on *ALL* pressureless, atmospheric steamers.

NOTE: The water connection into any STEAMMASTER must be cold water.

NOTE: It is important to note that anytime the lower front panel is removed, extreme care must be exercised when re-installing panel to ensure that the flexible drain hose lines up and fits securely over the metal tube extension on the rear side of the panel, engagement of the hose to the panel should be tested by pouring a small amount of water in the front drain trough and observing no leaks at the front panel lower edge.



ADJUSTMENTS

FOR REPLACEMENT OF HEATING

ELEMENTS A. REMOVAL OF ELEMENTS:

1. Close water valve and remove power to the unit.
2. Disconnect field connection to unit, or close the main switch.
3. Unscrew the top door bracket and the control panel.
4. Disconnect and remove defective element. Note carefully where each element is connected.

B. INSTALLATION OF NEW ELEMENTS:

5. Make sure the new elements are of correct voltage. Voltage marked on elements must be exactly the same as marked on the nameplate of the unit.
6. IMPORTANT: With new elements, always replace seal washers.
7. Reinstall elements. Markings should be visible.
8. Connect the new elements in accordance with the wiring diagram.
9. Replace the top door bracket, the door and then the control panel. IMPORTANT: The front drain must fit into the hose going to the rear of the unit.
10. Reset power to the unit, turn unit ON and test amperage on each phase and each element.

NOTE: 208 Volt elements should have a resistance of 14.4 ohms. 240 Volt elements should have a resistance of 19.2 ohms.

C. STEAM DEFLECTOR:

INSTALLATION: *Install steam deflector on the first rod of the paf shelves.* **NOTE:** *The steam deflector must be installed before each cooking.*

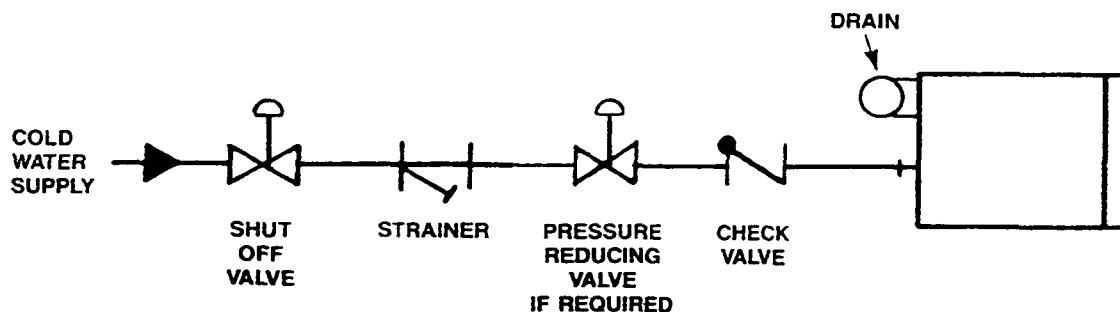


INSTALLATION
OF STEAM
DEFLECTOR

ADJUSTMENTS

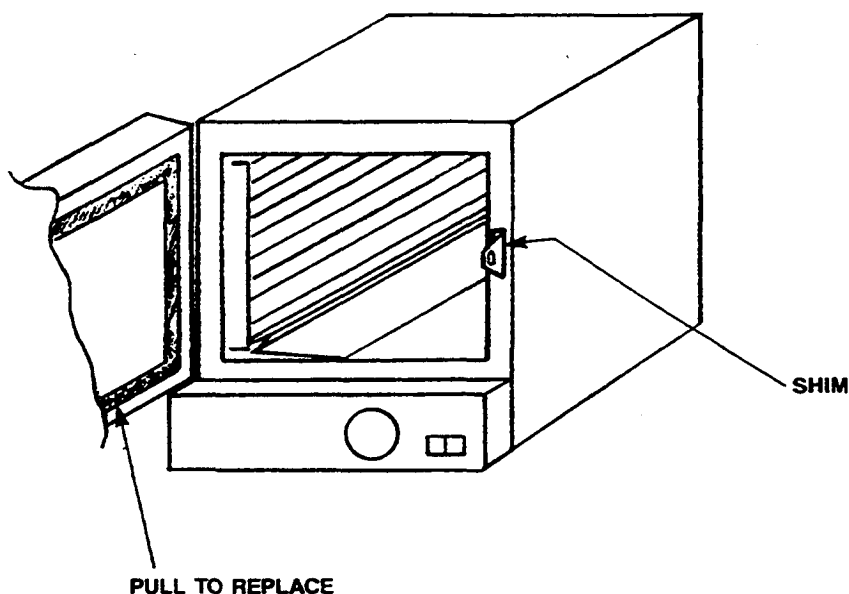


RECOMMENDED PLUMBING (Furnished by Installer):

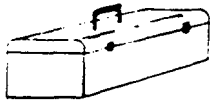


REPLACEMENT OF **DOOR** GASKET (See Drawing on Parts Page 2):

1. Open door and remove the slotted screw in the center of inside panel (gasket retainer panel). Remove panel and gasket.
2. Carefully position new gasket into place with outer edge fitting into channel on inside of door (wet gasket with water to ease installation).
3. Position retainer panel (wet with water) into groove on inside edges of gasket. Be careful to ensure that legs of panel fit into gasket groove and do not displace the inside gasket material. Replace retainer screw.
4. Close door. Turn unit on and check gasket fit to cavity front lip. Door latch striker may be adjusted by adding or removing shims to achieve correct gasket compression. Door should close easily with a firm push (NOT a hard slam). There should be no steam leaks and the door should close easily — when properly adjusted.



NOTE: This unit must be free-venting through the drain. Any restriction at drain outlet or failure to install drain according to installation instructions will cause the steam to escape around door due to backpressure in the unit



SERVICE

TROUBLE SHOOTING:

FIRST — CHECK THE BASICS. The unit needs power, water, and an open drain to operate properly.

BASIC #1 — POWER: Is there power to the unit of the proper voltage and phase?

BASIC #2 — LOW WATER: Is there water flowing into the compartment? Be sure all water valves are open.

BASIC #3 — DRAIN: Is the drain line open (no solid connection), short (about three feet), and without obstructions?

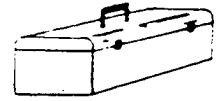
Check the BASICS. Then, and only then, can malfunction of controls be considered.

Refer to "INSTALLATION INSTRUCTIONS" section of this service manual to make sure the unit was installed properly. After all previous steps have been complied with, proceed with this trouble shooting guide. Carefully check *all* symptoms listed to find the one closest to the actual malfunction of your steamer.

NOTE: Improper installation may void warranty. **TROUBLE**

SHOOTING GUIDE: (Always Press Power Off)

Problem:		Look For:	Correction:
Steam leaks around the door.	—	BASIC #3 - DRAIN The drain either wasn't installed properly or has developed an obstruction of some sort, causing a back pressure in the cooking compartment.	Check drain line installation. The drain line must be short, at a slope, not physically connected to any drain system and without restrictions. (No drain traps.)
	—	Worn door gasket.	Replace gasket.
No water in the cooking compartment (or very little water). (Yellow light Low Water)	—	BASIC #2 - WATER Drain overflow not in place.	Drain overflow should be inserted in drain of cooking compartment.
	—	Water valve shut off.	Check any water valves to the unit.
	—	Water may be shut off elsewhere in building.	Make sure <i>cold</i> water line to unit is on.
	—	Waterstrainer may be plugged.	Clean as necessary.
	—	Flow control valve may be plugged.	Clean as necessary.
	—	Tank solenoid may be plugged or not operating.	Check tank solenoid.
	—	Inlet to cooking compartment may be plugged.	Clean as necessary.
		Low water pressure.	Water pressure must be 30 P.S.I. (207 KPA) minimum.



TROUBLE SHOOTING GUIDE: (Continued)

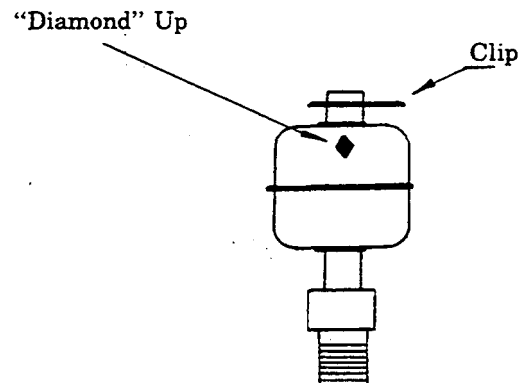
Problem:	Look For:	Correction:
No steam.	— BASIC #1 - POWER	Is there power to the unit? Does the supply match the rating on the nameplate?
	BASIC #2 - WATER	Elements must be covered by water. (If not enough water in the cooking compartment, SEE SYMPTOM #2).
	— No power to the relays or defective relays.	See Wiring Diagram and trace voltages through proper circuits. If relays are operating properly, check both sides of relays to make certain all phases are going to the elements.
	— Defective heating elements.	Check all elements. Replace if necessary. <i>NOTE: If elements are replaced, check Section 3-Page 1 for service procedure.</i>

WATER LEVEL SWITCH FLOAT INSTALLATION:

IMPORTANT:

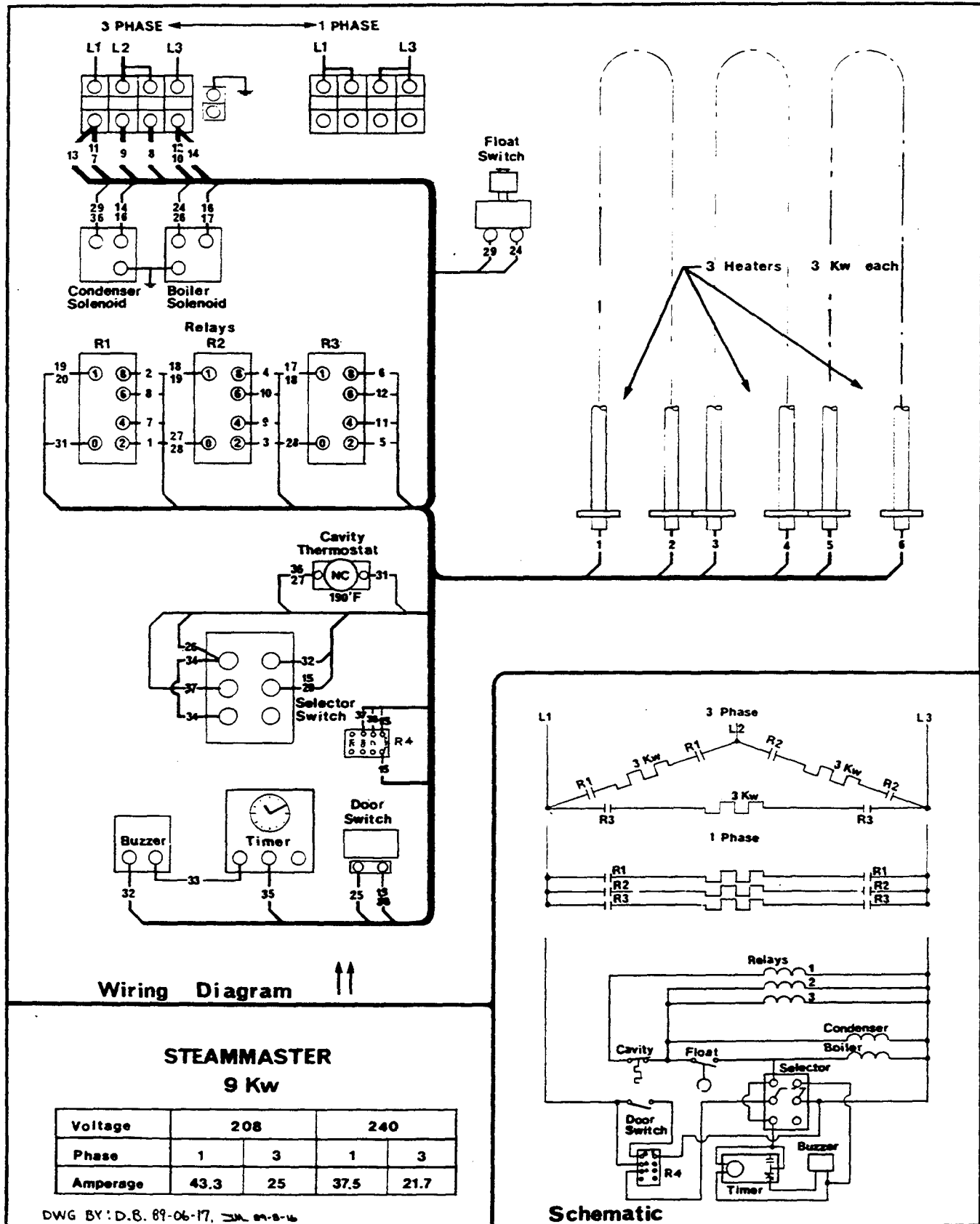
Correct orientation of the Stainless Steel "Float" on the Water Level Switch (in well) is critical to proper operation of the unit. The float **MUST** be installed with the "diamond" shape stamp on the **UPPER** half of the float for proper operation. When float is removed for cleaning, care must be used to ensure it is reinstalled in this position. Failure to do so will result in damage to the unit due to improper water control.

Float Installation

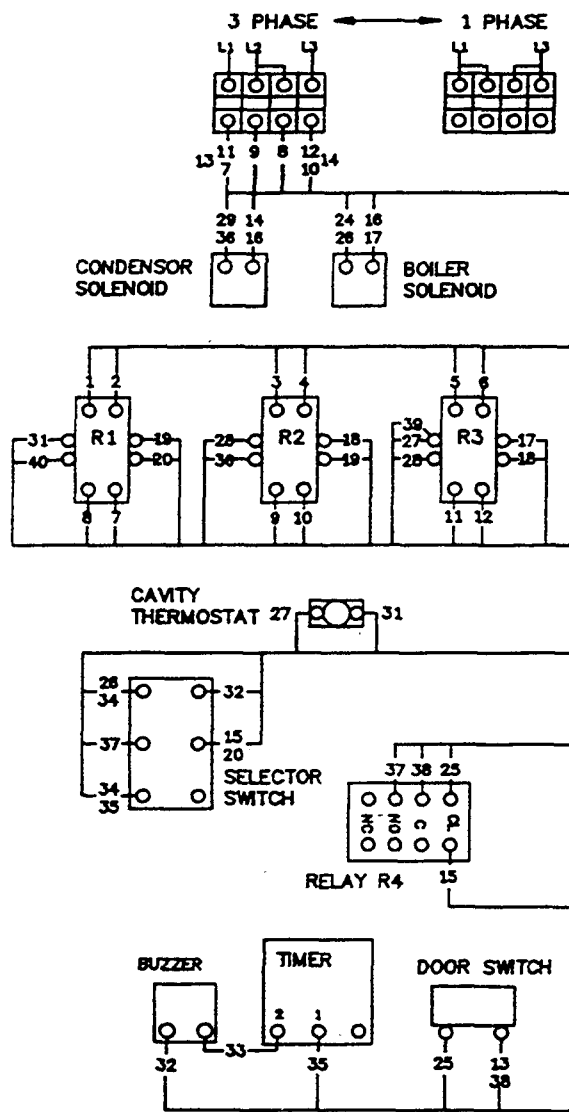




SERVICE



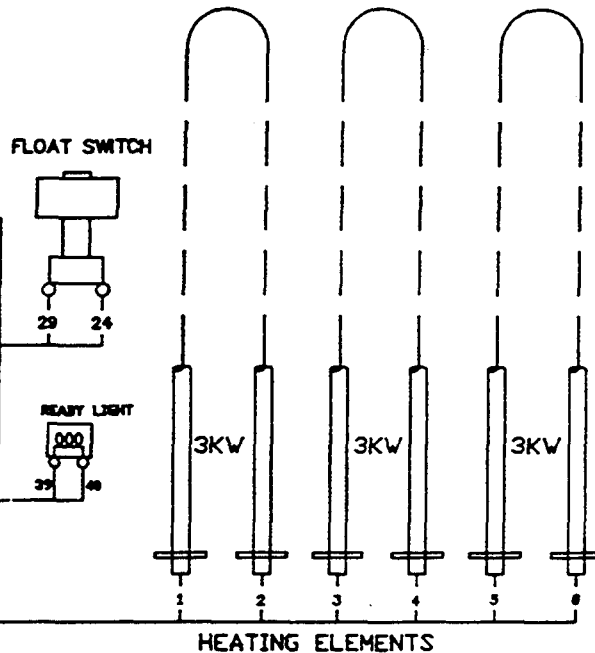
FOR UNITS WITH RELAYS-
1332029 Manufactured Drier to Nov. 1991 - Serial 91K53344 and before.



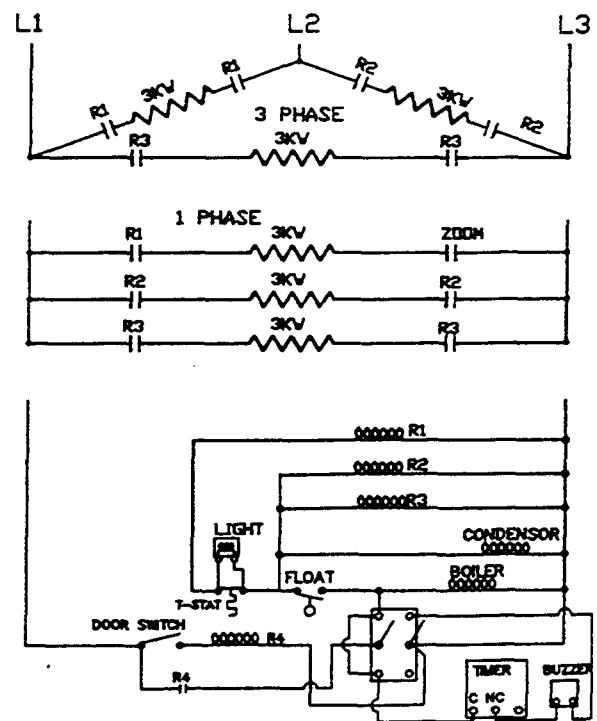
WIRING DIAGRAM

VOLTAGE	208		240	
PHASE	1	3	1	3
AMPERAGE	43.3	25	37.5	21.7

CONTACTOR VERSION 10-91 JAM



HEATING ELEMENTS



SCHEMATIC

SOUTHBEND

WIRING DIAGRAM

STEAMER MODEL R-1
208/240V, 50/60 HZ

P/N
1174336

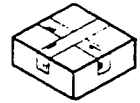
FOR UNITS WITH CONTACTORS-Manufactured Nov. 1991
and after-starting with Serial 91K3345.

Counter Top Convection Steamer
Section Three – Service
Page 7

COUNTER TOP CONVECTION STEAMER

PARTS

PARTS



WARNING:

INSTALLATION OF OTHER THAN GENUINE SOUTHBEND PARTS WILL VOID THE WARRANTY ON THIS EQUIPMENT.

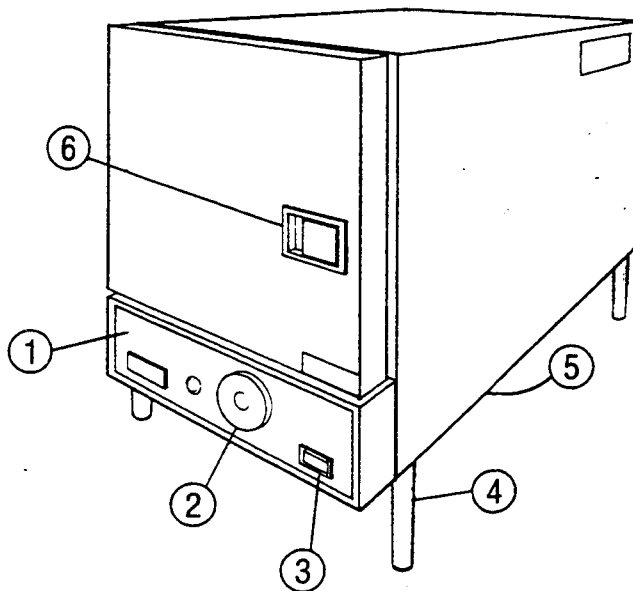
The serial plate is located on exterior right side at rear.

Replacement parts may be ordered either through a Southbend Authorized Parts Distributor or a Southbend Authorized Service Agency.

When ordering parts please supply the Model Number, Serial Number, Part Number, Description, plus Finish, and Electrical Characteristics, as applicable.

For parts not listed consult a Southbend Authorized Parts Distributor or Southbend Authorized Service Agency. If necessary, please consult Southbend Parts Department for assistance.

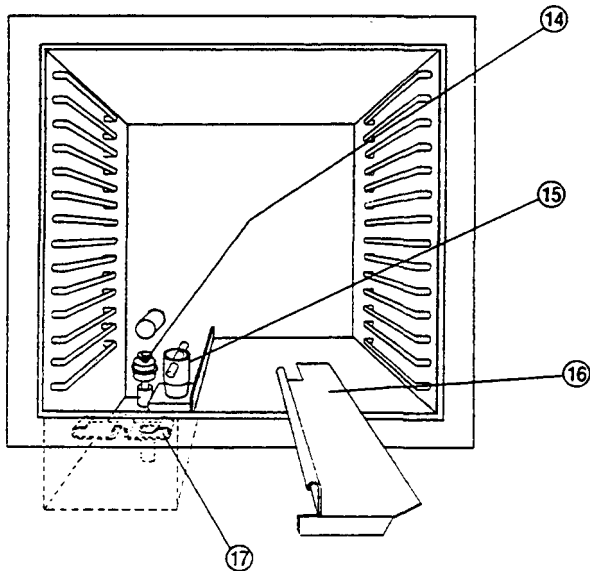
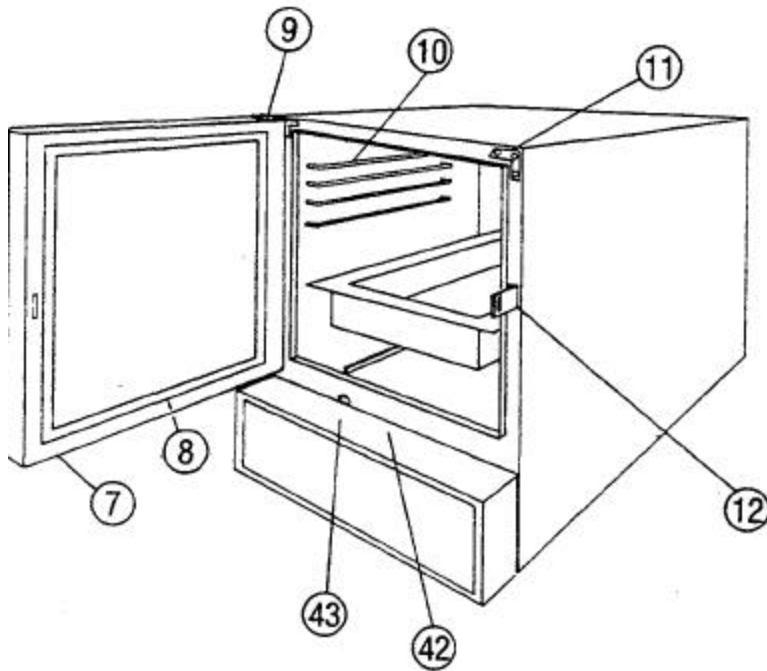
CONTROL PANEL VIEW



KEY NO.	PART NO.	DESCRIPTION
1	1333083	POLYPANEL-Units prior to June 1990
1	1173423	POLYPANEL-With ready light-Units mfg. June 1990 and after.
2	PE-195	TIMER
	PE-196	KNOB
3	PE-191	SELECTOR SWITCH
4	1172857	STNLS. STEEL LEGS-SET OF 4. (6600362)
4	1163561	STNLS. STEEL LEGS ASS'Y-1 ONLY (PM-015) Note: Legs are optional.
5	1332015	BOTTOM COVER
6	1173188	DOOR LATCH
7	PE-196	KNOB FOR TIMER



PARTS



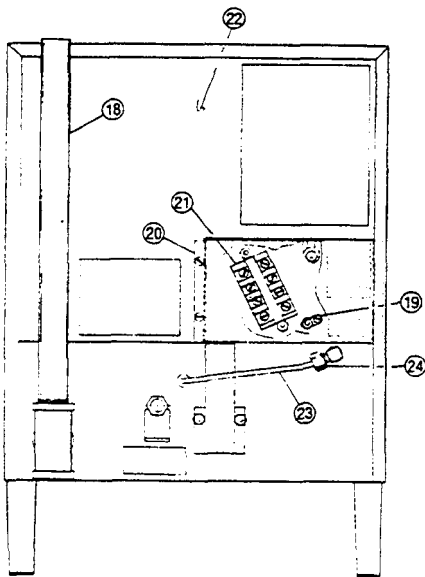
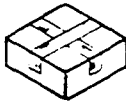
KEY NO.	PART NO.	DESCRIPTION
7	1173295	DOOR ASSEMBLY COMPLETE WITH GASKET & LATCH
8	1172994	DOOR GASKET
9	1332048-1	DOOR HINGE L.H.
9	1332048-1	DOOR HINGE R.H. (INCLUDED WITH UNIT)
10	1173289	PAN SUPPORT -NEW STYLE SER. NO. WITH SUFFIX 2
	1333005	PAN SUPPORT -OLD STYLE SER. NO. WITH NO SUFFIX 2
11	1332076	BLANK FOR DOOR HINGE
12	1173198	STRIKER FOR HANDLE (1332004)
42	PE-185	MAGNET SWITCH
43	110990	BUZZER (INSIDE PANEL) (132-146-2)
	PE-179	RELAY, DOOR SWITCH

NOT SHOWN:

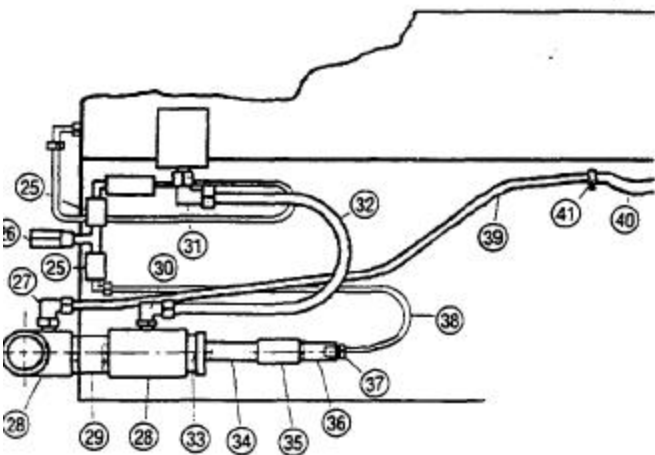
1332003	DOOR SHIM
PH-292	NYLON WASHER-1/8- THICK
PH-255	NYLON WASHER-1/16' THICK
PH-423	BRONZE BUSHING-FOR DOOR (TOP)
PH-424	BRONZE BUSHING-FOR DOOR (BOTTOM)
PM-141	PLUG BUTTON-1/4- NYLON

KEY NO.	PART NO.	DESCRIPTION
14	PE-193	FLOAT SWITCH
15	1331110	OVERFLOW TUBE
16	1332013	STEAM DEFLECTOR
17	1332062	ELEMENT RETAINER

ARTS

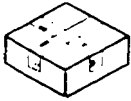


KEY NO.	PART NO.	DESCRIPTION
18	1333045	AIR VENT
19	1160031	GROUND LUG (PH-342)
20	1332025	JUNCTION BOX
21	PE-023	TERMINAL BLOCK 4
	PE-024	TERMINAL BLOCK 1
22	1332014	BACK PANEL
23	1332056	TUBING, COPPER
24	P4119	FITTING

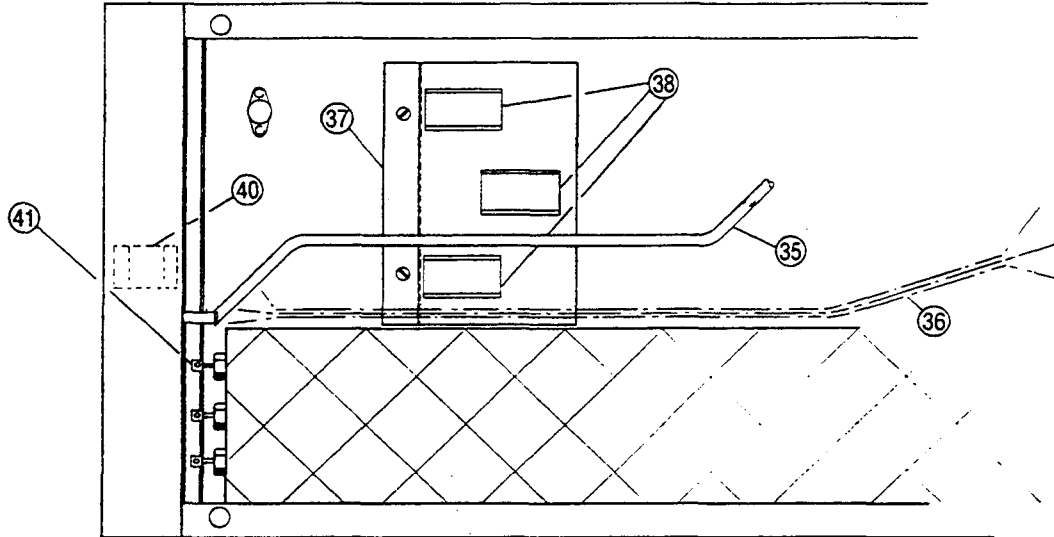


KEY HO.	PART NO.	DESCRIPTION
25	PE-184	SOLENOID VALVE
26	1173428	IN-LINE STRAINER
26A	1173429	REPLACEMENT SCREEN ONLY FOR 1173428
	4440329	REPLACEMENT STRAINER
28	1173219	TÉE, r,TAPPED
29	1146808	1'NIPPLE
30	1-3347	ELBOW
31	1060499	ELBOW
32	1173220	TUBE, 1/2-, DRAIN
33	PP-441	REDUCER
34	1146810	1/2'NIPPLE
35	1147203	1/2-COUPLING
36	PP-273	SPRAY NOZZLE
37	PP-285	FITTING
38	1332011	TUBE, CONDENSOR
39	1173221	TUBE, FRONT DRAIN
40	1332031	FRONT DRAIN HOSE
41	PM-019	HOSE CLAMP (2 REQ'D.)

2-1173428 Replaces # PP629 starting January 1991-Serial 91A and up. For older units-Ser. 90L and before use # 4440329 Kit for first time replacement and only add then #1173428 or 1173429.



PARTS



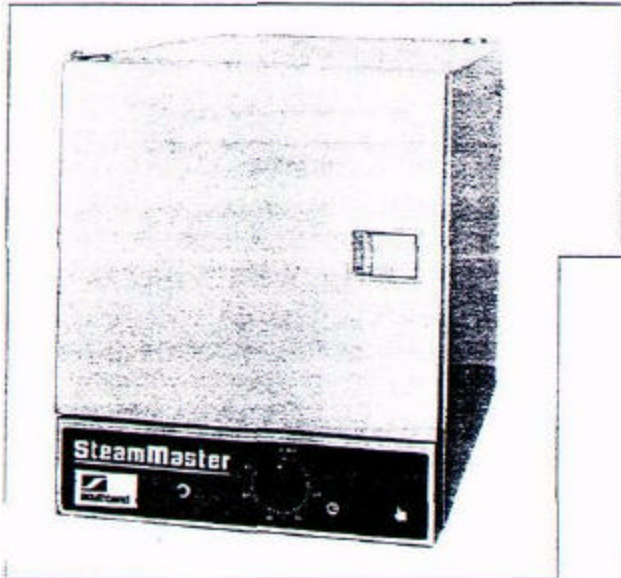
KEY NO.	PART NO.	DESCRIPTION
35	1173221	FRONT DRAIN COPPER TUBE (1332050)
36	1333019	ELECTRICAL WIRE HARNESS
37	1332057	RELAY MOUNTING BRACKET-For units prior to Ser. 91K53353 that are not converted to contactors.
37	1173761	CONTACTOR MOUNTING BRACKET-For units Ser # 91K53354 and up and for older units that have been converted from relays to contactors
38	PE-194	RELAY (3 REQUIRED) .
38	1161525	CONTACTOR, 2 POLE (3 REQ'D) For units Ser. 4(91X53354 and after and for older units that have been converted from relays to contactors.
40	PE-185	MAGNETIC SWITCH
41	1333039-	208V HEATING ELEMENT (3 REQ'D)
	1333039-	240V HEATING ELEMENT (3 REQ-D)
	PE-182	CAVITY TEMPERATURE THERMOSTAT- 190°F

PARTS NOT SHOWN

	1173011	OWNERS MANUAL
	1173355	LAMINATED CLEANING INSTRUCTIONS

Pressureless Steamer, Electric, Self-contained

MODEL: R-1



Model R-1



R-1 Quad Steam Center
(Special cabinet base)

#4450011 pan shelf for 1/2 & 1/3 size pans
#4450002 12" x 20" x 1"
solid stainless steel pan
#4450003 12" x 20" x 2 1/2"
perforated stainless steel pan
#4450004 12" x 20" x 2 1/4"
solid stainless steel pan
#4450005 12" x 20" x 4"
perforated stainless steel pan
#4450006 12" x 20" x 4"
solid stainless steel pan
Stainless steel tubular stand for single unit.
24" w x 25" d x 28" h
(stand has 24" width to provide stability)

Stainless steel tubular stand for double
side-by-side units
32" w x 25" d x 28" h

Stainless steel tubular stand for
Quad Steam Center (2 units by 2 units) with
two stacking kits
Stand dimension is 32" w x 25" d x 22" h

208/60/1
208/60/3
240/60/1
240/60/3
4" high adjustable legs

INQUIRE TO FACTORY
FOR SPECIAL OR CUSTOM
REQUIREMENTS.



SteamMaster by Southbend...

offers a breakthrough in steam cooking with more advantages in a more compact unit than any other steamer presently available. It is totally self-contained which means steam is generated within the cavity without the cost of expensive boiler maintenance.

The Convection System

The steam is generated in a well containing heating elements and directed in a toroidal pattern throughout the cooking compartment.

Standard Features

- **Capacity:**
7 pans - 12" x 20" x 1" 4 pans - 12" x 20" x 2 1/2" 3 pans - 12" x 20" x 4" Over 33% more capacity.
- **Automatic Dual Power.** For fast recovery the unit will operate at 9KW until operating temperature is reached at which time it will automatically reduce to 6KW. This allows for fast preheat and fast recovery yet economical operation.
- **Selector Switch and Timer:** The selector switch allows either manual or automatic time control.
- **Ready Light:** When cavity reaches cooking temperature the amber ready light will illuminate.
- **Field Reversible Door.** The door can easily be reversed if required by the user.
- **Built-in Condensation Drain:** Condensation on the door is diverted to the condenser through a built-in drain in the door frame.
- **Continuous Cleaning of Steam Reservoir:** A controlled flow of water continuously flushes mineral deposits from the reservoir to minimize energy consuming build-up.
- **No Side Clearance Required:** The SteamMaster units may abut with one another or another piece of equipment without adverse effects.
- **Quad Steam Center** High production can be obtained in a minimum of space. The small footprint of the unit allows using sixteen 2V2" pans in a quad assembly of 4 units (2 x 2) in a space of only 32" wide x 25" deep x 62" high. (See options for stand.)

Technical Data

Unit dimensions, utility information, construction specifications and miscellaneous information is listed on the reverse side.

Warranty

One year Parts and Labor Warranty at no extra charge from the date of installation, except that the gasket shall have a warranty of 90 days from date of purchase.

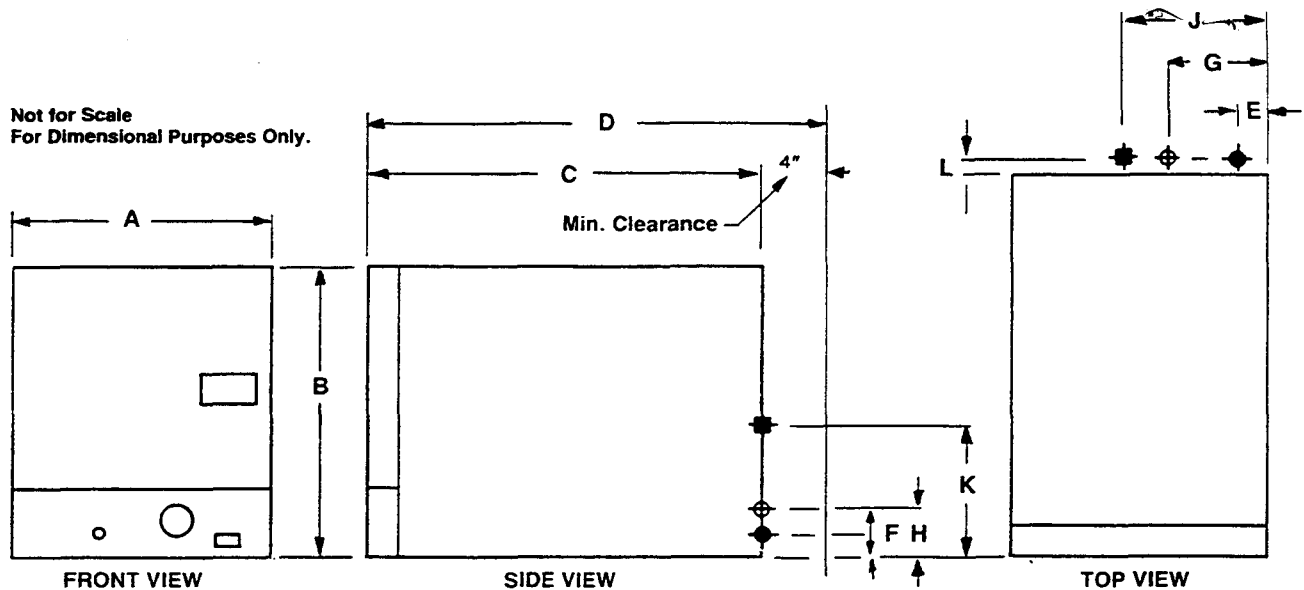
1100 Old Honeycutt Road
Fuquay-Varina, NC 27526
(919) 552 9161
FAX (919) 552 9796
(800) 348 2558

Page ST-01



We reserve the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment. Southbend has a policy of continuous product research and improvement

Not for Scale
For Dimensional Purposes Only.



- ✱ Electric connection — terminal block
- ◆ Drain 1 1/4" o.d., leave open, do not connect to floor drain
- ⊕ Cold water inlet 1/4", 30 p.s.i. min. — 60 p.s.i. max.

DIMENSIONS:

() = Millimeters

MODEL	Width A	Width B	DEPTH		DRAIN		WATER		ELECTRIC CONN.			CRATE SIZE			Cubic Volume	Crated Weight
			C	D	E	F	G	H	J	K	L	Width	Depth	Height		
STEAM MASTER	16" (406)	19" (482)	24 3/8" (625)	28 3/8" (727)	2" (51)	1 1/2" (38)	6 1/4" (158)	3 1/8" (82)	9 1/4" (235)	8 1/2" (216)	1" (25)	19" (482)	30" (762)	22" (559)	7.25 cu.ft. 20 cu.m.	90 lbs. 41 kg.

Internal Dimensions: 13 7/8" w x 22 d x 12 7/8" h

UTILITY INFORMATION

ELECTRIC: One electric connection required. Controls on all units and elements 208/1, 240/1, 208/3, or 240/3.

TOTAL	208/240V
CONNECTED AMPS	9KW
[] 208/1"	44
[] 208/3	25
[] 240/1"	38
[] 240/3	22

Circuit must be wired for maximum 9KW at required voltage.

WATER USAGE: 0.12 gallons per minute at 45 p.s.i. water pressure in cavity. 0.16 gallons per minute at 45 p.s.i. water pressure in condensor. 0.28 total gallons per minute at 45 p.s.i.

IMPORTANT: UNIT MUST BE LEVEL FOR PROPER OPERATION. WARRANTY WILL BE VOIDED FOR IMPROPER INSTALLATION.

"All units shipped 3 Phase. Field interchangeable to 1 Phase.

CONSTRUCTION (BIDDING) SPECIFICATIONS:

3 Commercial Convection Steamer - Self contained - Electric

Exterior: Type 304 stainless steel with »4 sanitary finish.

Interior: Type 304 stainless steel.

Power Source: Electric, single wire. One power source for controls and elements as well as one ground wire. A positive ground connection is essential.

Controls:

Selector Switch: Selects manual or automatic operation.

60-Minute Automatic Reset Timer: Compensates for start-up time and door openings. Constant buzzer continues until manually shut off. Elements remain on when buzzer sounds.

Automatic Dual Power Unit will operate at 9KW until operating temperature is reached. It will then automatically reduce to 6KW.

Ready Light: Amber light illuminates when cooking temperature in cavity is reached.

Water Quality Specifications: Water Pressure, 60 p.s.i. maximum 30 p.s.i. minimum.

Install a pressure regulator if pressure exceeds 60 p.s.i.

In order to minimize service problems and to meet the warranty requirements, a water treatment system (softener) is recommended when water quality exceeds the limits stated.

Total Dissolved Solids (TDS): 60 PPM (Parts Per Million). Hardness: 2 grains or 35 PPM. Ph Factor: 7.0 to 7.5

Convection System: Steam generated in a water well in which elements are submerged.

Fully insulated cooking compartment.

Recommended — install under vented hood. Check local codes for fire and sanitary regulations.

Southbend, in line with its policy to continually improve Its products, reserves the right to change materials or specifications without notice.

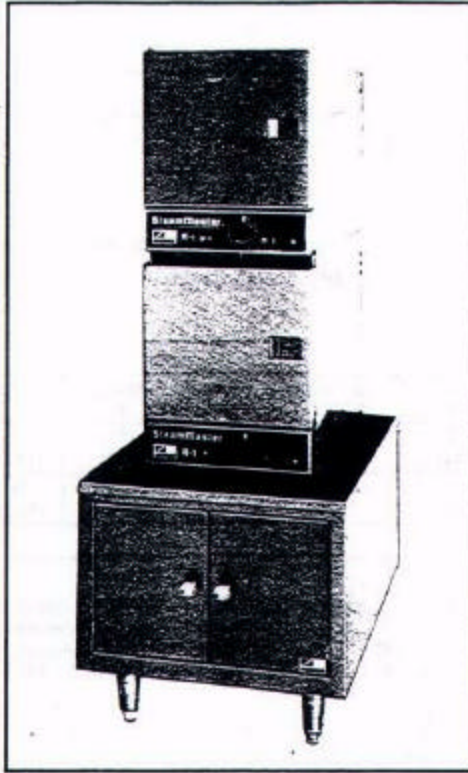
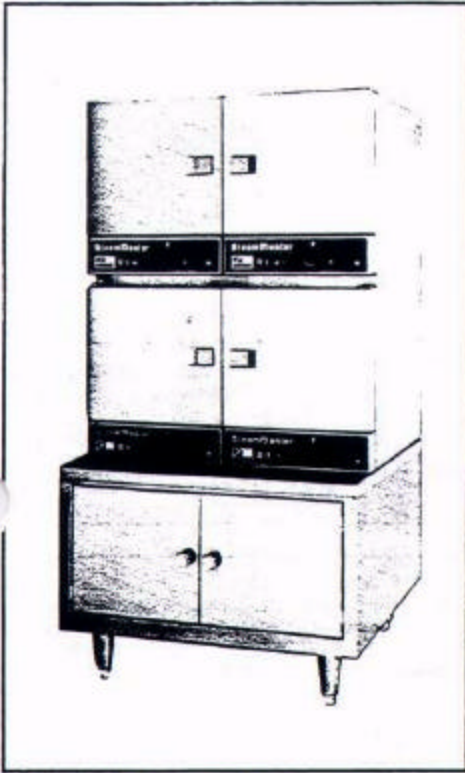


1100 Old Honeycutt Road Fuquay-Varina. NC 27526 (919)552-9161 FAX (919) 552-9796 (800) 348-2558

MODULAR PRESSURELESS STEAM SYSTEMS

Quad or Stacked on Cabinet Base

Models: R-1 QC Quad With Cabinet Base
R-1 SC Stacked With Cabinet Base



Model R-1QC: Quad Steam System (left)
Model R-1SC: Stacked Steam System (right)

OPTIONS:

SteamMaster R-1 Electrical Accessory Kit
208/240 60/50 hz *Single Phase* 72" Power
Cord with Plug (NEMA 6-50P)
Receptacle with Cover Plate (NEMA 6-50R)
208/240 60/50 hz *Three Phase* 72" Power
Cord with Pfug (NEMA 15-50P)
Receptacle with Cover Plate (NEMA 15-
50R)
D For individual steamer options see R-1
sheet

• INQUIRE TO FACTORY FOR SPECIAL OR CUSTOM REQUIREMENTS.

We reserve the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.

Modular Steam Systems

A break through in steam cooking has been achieved with the introduction of SteamMaster's R-1 Modular Quad or Stacked Steam Systems. These systems can now offer you more advantages in a compact area than any other self-contained or boiler-base pressureless steamer presently available.

Two Systems Available

- R-1 Modular Quad Steam System comprised of four R-1 individual steamers (2 on 2) mounted on a stainless steel pan storage cabinet to give you the most pan capacity in the smallest footprint than any other system — 32" wide x 32 1/2" deep.
- R-1 Stacked Steam System (1 on 1) is mounted on a stainless steel pan storage cabinet. The footprint is 24" wide x 32 1/2" deep.

Standard Features

- Total pan capacity for Quad System:
28 pans - 12" x 20" x 1" 16 pans - 12" x 20" x 2 1/2" 12 pans - 12" x 20" x 4"
- Total pan capacity for Stacked System:
14 pans - 12" x 20" x 1" 8 pans - 12" x 20" x 2 1/2" 6 pans - 12" x 20" x 4"
- Pan Storage Cabinet stainless steel doors and sides. Cabinet interior stainless steel. Storage for six 12" x 20" x 2 1/2" pans in quad or stacked cabinet.
- Integrated incoming 3/4" water manifold to connect all units.
- Individual water shut-off for each cavity.
- Easy-cleaning "Y" water strainers to minimize mineral build-up.
- 6 KW to 36 KW electrical capacity with automatic load compensation.
- Integrated drain system for all cavities with din screen.
- No boiler base maintenance or "blow-down."
- Built-in redundancy for dependability assurance.
- Priced below boiler base steamers.
- Units may be hard-wired or Optional Electrical Accessory Kits may be purchased.

Technical Data

Unit dimensions, utility information, construction specifications and miscellaneous information is listed on the reverse side.

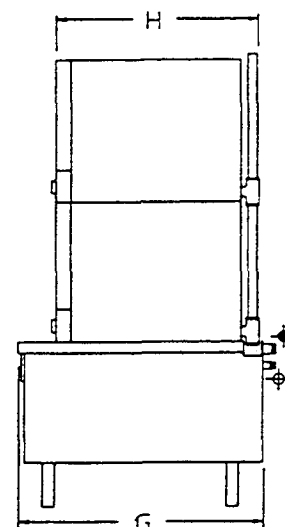
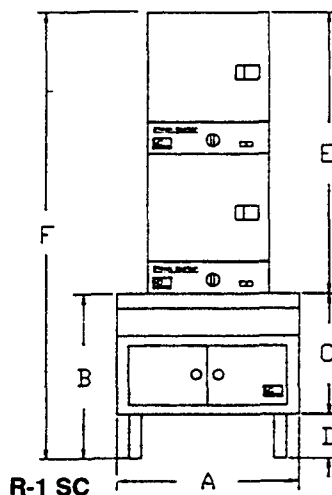
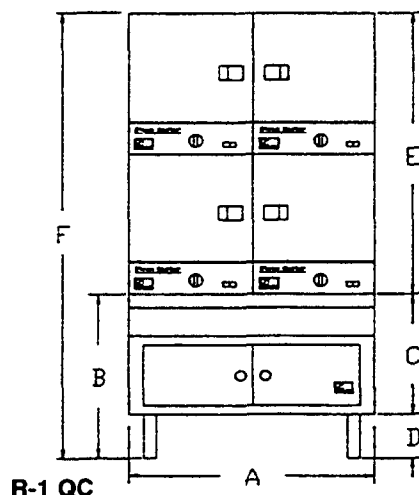
Warranty

One year Parts and Labor Warranty at no extra charge from the date of purchase, except that the gasket shall have a warranty of 90 days from date of purchase.

1100 Old Honeycutt Road
Fuquay-Varina, NC 27526
(919) 552 9161
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MODEL:**R-1 QC: 4 Modular Steamers Mounted on Cabinet: Base****R-1 SC: 8 Modular Steamers Mounted on Cabinet Base**

Not For Scale
For Dimensional Purposes Only



◆ Drain 1 1/4" o.d., leave open, do not connect to floor drain.

◆ Cold water inlet 3/4" NPT, 30 p.s.i. min. — 60 p.s.i. max.

DIMENSIONS: () = Millimeters

MODEL	Width A	HEIGHT					DEPTH		CRATE SIZE*			Cubic Volume	Crated Weight
		Base & Legs B	Base C	Legs D	Steamer E	Total Height F	Base G	Steamer H	Width	Depth	Height		
R-1QC	32" (813)	22 1/2" (572)	16 1/2" (419)	6" (152)	33" (965)	60 1/2" (1537)	32 1/2" (826)	28 3/8" (727)	55" (1397)	45 1/2" (1156)	81 1/2" (2070)	11.8cu.ft. 3.34 cu.m.	610 lbs. 277.3 kg.
R-1SC	24. (607)	22 1/2" (572)	16 1/2" (419)	6" (152)	33" (965)	60 1/2" (1537)	32 1/2" (826)	28 3/8" (727)	55" (1397)	45 1/2" (1156)	81 1/2" (2070)	11.8cu.ft. 3.34 cu.m.	360 lbs. 163.6 kg.

* Units will be shipped assembled.

UTILITY INFORMATION:

ELECTRIC: One electric connection required for each cavity. Controls on all units and elements 208/1, 240/1, 208/3, or 240/3.

TOTAL	R-1 SC 208/240V	R-1 QC Each Unit 2 Units'	Stacked Quad 4 Units'
CONNECTED AMPS	9KW'	9KW'	9KW'
[] 208/1	44	44 for each of 2 lines	44 for each of 4 lines
[] 208/3	25	25 for each of 2 lines	25 for each of 4 lines
[] 240/1	38	38 for each of 2 lines	38 for each of 4 lines
[] 240/3	22	22 for each of 2 lines	22 for each of 4 lines

- Circuit must be wtrfd for maximum 9KW at required voltage for each unit.

- Two separate Incoming lines required. One for each unit.

- Four separate Incoming lines required. One for each unit.

CONSTRUCTION (BIDDING) SPECIFICATIONS:**Commercial Convection Steamer — Sen-Contained — Electric**

Exterior: Type 304 stainless steel with #4 sanitary finish.

Interior: Type 304 stainless steel.

Power Source: Electric, single wire for each individual steamer. One power source for controls and elements as well as one ground wire. A positive ground connection is essential.

Controls:

Selector Switch: Selects manual or automatic operation.

60-Minute Automatic Reset Timer: Compensates for start-up time and door openings. Constant buzzer continues until manually shut off.

Automatic Dual Power: Unit will operate at 9KW until operating temperature is reached. It will then automatically reduce to 6KW.

Ready Light: Amber light illuminates when cooking temperature in cavity is reached.

MISCELLANEOUS INFORMATION:

INTENDED FOR COMMERCIAL USE ONLY. NOT FOR HOUSEHOLD USE.

WATER USAGE PER CAVITY: 0.12 gallons per minute at 45 p.s.i. water pressure in cavity. 0.16 gallons per minute at 45 p.s.i. water pressure in condenser. 0.26 total gallons per minute at 45 p.s.i. per cavity. R-1 SC (Two cavities) — 056 total gallons per minute at 45 p.s.i. R-1 QC (Four cavities) — 1.12 total gallons per minute at 45 p.s.i.

IMPORTANT: UNIT MUST BE LEVEL FOR PROPER OPERATION. WARRANTY WILL BE VOIDED FOR IMPROPER INSTALLATION.

Water Connection: One incoming water supply connects to W water manifold that supplies all units. Each individual steamer has a shut-off valve. Water connections located 18" from floor and 2" from right side of unit as you face the front. **Water Quality Specifications:** Water Pressure, 60 p.s.i. maximum; 30 p.s.i. minimum. Install a pressure regulator if pressure exceeds 60 p.s.i. In order to minimize service problems and to meet the warranty requirements, a water treatment system (softener) is recommended when water quality exceeds the limits stated.

1" O.D. Drain Common For All Cavities: Drain located 6" from left side as you face the front, and 20" from floor.

Total Dissolved Solids (TDS): 60 PPM (Parts Per Million). Hardness: 2 grains or 35 PPM. Ph Factor: 7.0 to 7.5.

Convection System: Steam generated in a water well in which elements are submerged. Fully insulated cooking compartment.

Recommended — Install under vented hood.

Check local codes for fire and sanitary regulations.

Southbend, in line with its policy to continually improve its products, reserves the right to change materials or specifications without notice.



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COUNTER TOP CONVECTION STEAMER

A product with the Southbend 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 unit. When service is needed, contact a Southbend Authorized Service Agency, or your dealer. To avoid confusion, always refer to the model number, serial number, and type of your unit.

