

OPERATOR MANUAL

Part Number 121026

OM-HY-3E(S — • eta)
DOMESTIC

MODEL: HY-3E/•
HyPerSteam™
Atmospheric Convection
Steamer

BETA — 1.0

Self-Contained
Electric Heated
Capacity: 3 Steamer Pans
(12" x 20" x 2½")



KEEP THIS SUPPLEMENT WITH THE HY-3E OPERATOR AND SERVICE MANUALS. OPERATORS AND TECHNICIANS SHOULD READ, UNDERSTAND AND FOLLOW WARNINGS AND INSTRUCTIONS IN THIS SUPPLEMENT, THE SERVICE MANUAL AND THE OPERATOR MANUAL. ALL PROCEDURES ARE IDENTICAL TO THOSE DESCRIBED IN THE STANDARD OM-HY-3E MANUAL EXCEPT AS DESCRIBED HEREIN.



Information contained in this document is known to be current and accurate at the time of printing/creation. Unified Brands recommends referencing our product line websites, unifiedbrands.net, for the most updated product information and specifications.



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Equipment Description

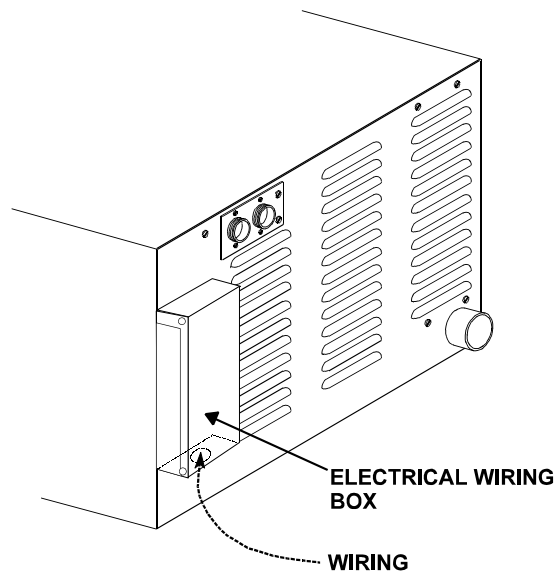
The Groen HY-3E\$ HyPerSteam Convection Steamer is an improved version of Groen's popular HY-3E Convection Steamer. It is equipped with fully electronic controls and a button-activated, pre-programmed CLEAN cycle.

The unit is readily identifiable by its controls. The On-Off Switch on older models has been replaced by touch controls, and the distinctive symbol for steam has been integrated into the control panel.

From the rear, the HY-3E\$ is distinguished by the addition of an electrical wiring box, which eliminates the requirement to remove panels when installing the unit.



The HY-3E\$ has a New Control Panel.



Installation and Start-Up [Also See OM-HY-3E]

1. Electrical Supply Connection

A. Panel Removal

Open the wiring box by removing four screws on the side of the box.

B. Supply Voltage

The unit must be operated at the rated nameplate voltage, plus or minus 10 percent.

C. Phase Selection

Refer to the heater schematic (Page 10) for wiring information.

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

D. Terminal Block

The terminal block for incoming power is located at the bottom of the wiring box.

The ground terminal is located in the wiring compartment to the left of the terminal block. Minimum size for the ground wire is 10 AWG.

Operation [Also See OM-HY-3E]

A. Controls

Operator controls are on the front right of the unit. The control panel has the following buttons and indicator lights:

- The ON/OFF button gets the HyPerSteam ready for use, or shuts it off.
- The READY indicator light shows that the steam generator is at standby temperature, which means that the cavity is hot enough to begin cooking.
- The CLEANING indicator light is lit when the unit is operating in the cleaning mode.
- The SERVICE indicator light shows when the water level probes have stopped working, and need to be cleaned (normally an indication of lime deposits).

When one probe is not working, the light flashes briefly every few seconds. When both probes fail, the light will flash continuously and the beeper will sound.

- The HI TEMP indicator light comes on when the steam generator is too hot.

The unit will automatically shut off, and cannot be turned on again until the steam generator cools and the HI TEMP indicator light goes out.
- The TIMING indicator light stays on when the timer is running.
- The CLEAN button is used to start the automatic 50 minute cleaning cycle.

The timer is used in three ways:

- In the OFF position the steam generator stays at a low boil or “holding” temperature.
- When a cook time is set, the timing light comes on and the unit steams until the timer reaches DONE. Then steaming stops, a red light comes on and a beeper sounds.
- When turned all the way to the ON position, the unit steams continuously. The green light stays on, the steamer will **not** time down, and the timing light will not be on.

B. Operating Procedure

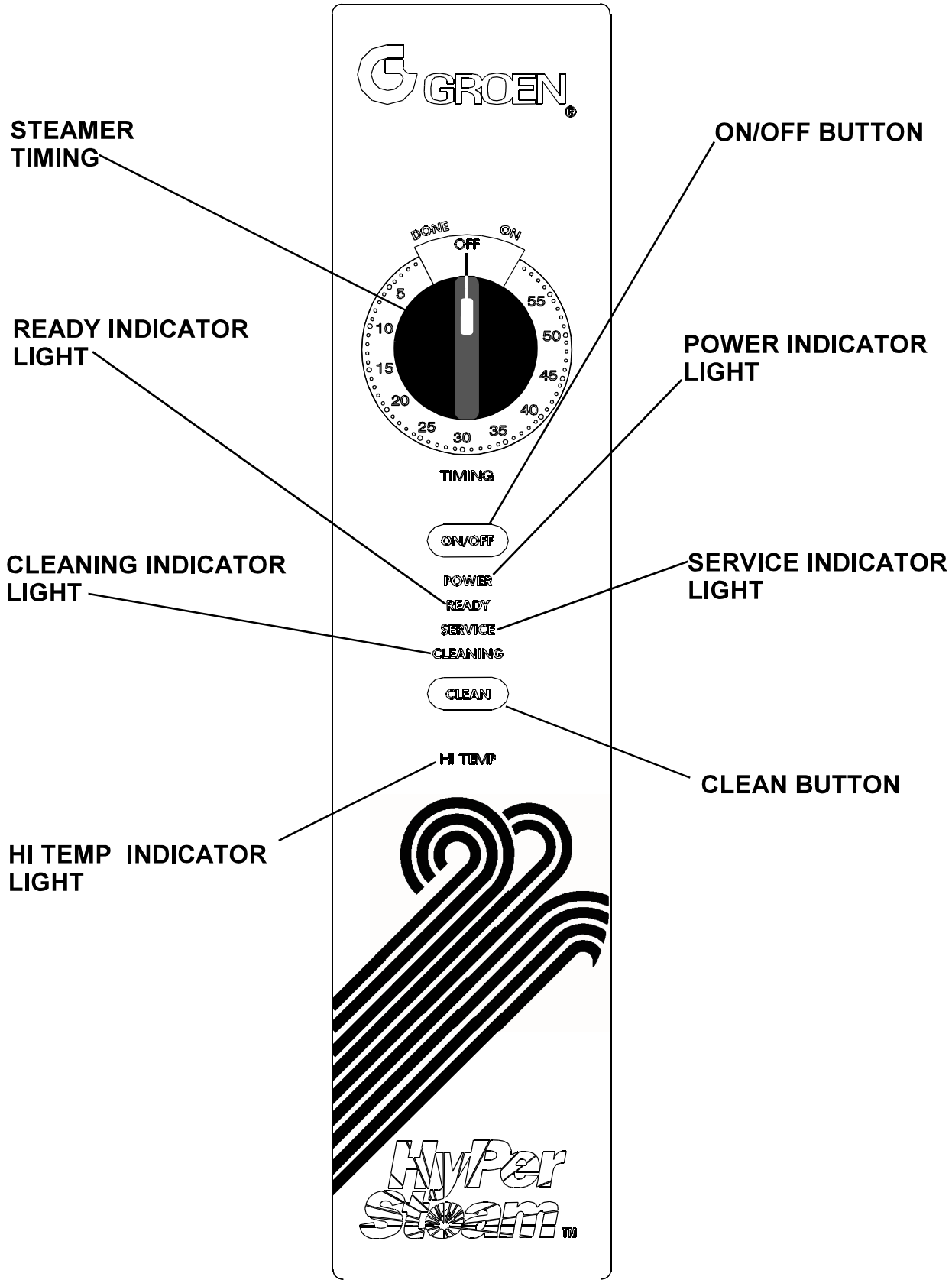
1. Press the ON/OFF button. The orange light will come on, the steam generator will fill with water, and heat until the READY light comes on. (the light should come on within 10 minutes).
2. Load food into pans in uniform layers. Pans should be filled to about the same levels, and should be even on top.
3. Open the door and slide the pans onto the supports. If you will only be steaming one pan, put it in the middle RACK position.
4. Close the door. With the READY indicator lit, take one of the following steps:
 - To steam the food for a certain length of time, set the timer to that time. The timer will automatically run the steamer for the set time and turn it off. A red light will come on and a beeper will sound. Steam stops.
 - To steam continuously, turn the timer to the manual ON position. A green light will come on. The unit will continue steaming until you stop it by turning the timer to DONE. When steaming continuously YOU MUST CONTROL STEAMING TIME.



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

5. Open the door. Using hot pads or oven mitts to protect your hands, remove the pans.
6. To shut off the unit, press the ON/OFF button. The steam generator automatically drains.

Model HY-3E\$ Control Panel



Cleaning [Also See OM-HY-3E]

The Exterior Cleaning procedures provided in OM-HY-3E are unchanged, but the new model has an automatic self-cleaning mode for the steam generator. The following procedures replace those in the basic manual.

Steam Generator and Cooking Chamber

The steamer cavity and steam generator may be cleaned separately. When cleaning is scheduled, or if the SERVICE light is on, follow these simple de-liming instructions. REMEMBER: DON'T ALLOW DE-LIMING AGENTS TO MIX WITH DE-GREASERS.

- Turn off the steamer for five minutes.
- Open the door and allow the cavity to cool.
- After the cavity has cooled five minutes, make sure that the fan has stopped and remove the fan baffle partition by lifting it up and toward the center of the cavity.
- Wipe out the cavity. **Make sure the drain holes at the back of the cavity are clear of debris.**



- Hold down the CLEAN button while turning on the steamer. Continue holding it until the CLEANING indicator light comes on. Release the button.
- After about five minutes, the beeper will start to beep rapidly. This is the signal to add two cups of **Groen Delimer Descaler** (P/N 114800), EcoLab Lime-A-Way® or equivalent containing at least 30% phosphoric acid into the delimer port as shown at right. (use a measuring cup or funnel to help prevent spilling). Do not use any de-limer that contains sulfamic acid or chlorine, including hydrochloric acid.



- Replace fan baffle partition.
- Close door.
- The cleaning cycle consists of a *boiling clean* stage, a *soak* stage and a *rinse* stage. The full cycle takes about 50 minutes to complete.
- WEAR PROTECTIVE GLOVES AND EYE PROTECTION FOR THIS STEP. When the steamer beeper sounds, turn off the steamer and open the door. After the fan has stopped, remove the fan baffle partition and rinse it well in a sink. Wipe out

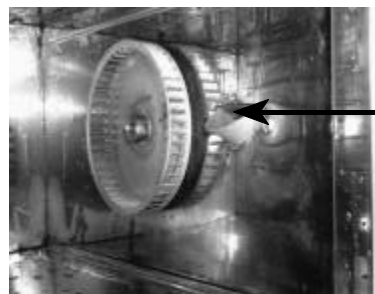
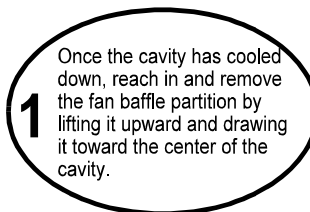


the cavity completely. If necessary, use a damp nylon pad.

- Reinstall the fan baffle.
- If the steamer will not be used, leave it turned off. Otherwise, wait 10 minutes and turn it back on. When the READY light comes on, the steamer is ready for operation.

If the SERVICE light stays on:

- Check that the water supply is on and that the supply hose is not kinked. With the problem corrected, turn the steamer off for 10 seconds and then re-start.
- Repeat steam generator cleaning.



The process for de-liming your HY-3E Steamer is simple, tool-less and quick.

Troubleshooting

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

SYMPTOM	WHO	WHAT TO CHECK
<ul style="list-style-type: none"> Steam generator does not fill with water. 	User	a. Is the POWER indicator on? b. Is the water supply connected? c. Is the water turned on? d. Check for low water pressure (less than 30 PSI or 210 kPa). e. Is the screen at the water connection clogged? f. Has the steam generator been delimed?
<ul style="list-style-type: none"> No steam. 	User	a. Is the POWER indicator on? b. Is the water supply connected? c. Is the water turned on? d. Are steamer doors open? e. Is the steam generator limed up?
<ul style="list-style-type: none"> SERVICE light comes on after four minutes. 	User	a. Is the water supply connected? b. Is the water turned on? c. Has the unit been delimed? (Refer to Cleaning Section)
<ul style="list-style-type: none"> Excessive steam escaping from rear of unit 	User	a. Is the water spray hose kinked or obstructed?
	Auth Service Rep Only	b. Is the water spray solenoid connected?(Y) c. Is the drain properly vented? (Y)
<ul style="list-style-type: none"> Power indicator will not come on. 	User	a. Is the HI TEMP indicator light on? The unit cannot be turned on until it has cooled to operating temperature range.

Parts List

A number of parts have been replaced or added to improve the performance of the HY-3E. The parts lists provided below follow the illustrations in OM-HY-3E to the extent possible. Parts or numbers which have changed are in bold, italicized type

Changes for Page 12 - OM-HY-3E

Key	Description	Part No.	Key	Description	Part No.
1	<i>Right Side Panel</i>	123152	20	Water Valve - Two Way	071235
1a	<i>Left Side Panel</i>	123153	20a	Dual Water Valve	108702
2	Door Assembly, Complete	094150	21	Steamer Table - Optional	100913
3	Door Handle	070123	22	Drip Tray	094151
4	Door Gasket	094147	23	Timer Fastener Nut	101145
5	Left pan Rack	094148	25	Diverter and Vent Assembly	088876
6	Blower Cover/Rack	096788	26	<i>Cover, Line Connection</i>	119825
7	Door Locking Pin	078914	*	Heat Shield	118127
8	Door Pin Lock Nut	003823	*	Dual Water Kit	108702
11	Cavity Fan	096790	*	Optional Legs	041121
12	Timer	096826	*	Drain Box Flap Kit	107143
13	<i>Time Knob</i>	123100	*	Drain Kit	088879
17	<i>Mylar Overlay Plate</i>	123126	*	Diverter and Vent Kit	088862
18	<i>Top Panel</i>	122278	*	<i>P. C. Board Cover</i>	119806
19	<i>Back Panel</i>	123114	*	Supports	099901

* Part Not Shown

Changes for Page 13 - OM-HY-3E

Key	Description	Part No.	Key	Description	Part No.
1a	<i>Heater Element, 200 Volt</i>	123104		<i>PC Board, Light & Timer</i>	119817
1b	<i>Heater Element, 208 Volt</i>	123101		<i>Relay, 24V</i>	119814
1c	<i>Heater Element, 240 Volt</i>	123102		<i>Relay, 12 V</i>	119813
1d	<i>Heater Element, 480 Volt</i>	123103	11	<i>Transformer 208/240/480 Volt Pri./ 24 Volt Sec. 75 VA</i>	119812
2	Heater Element Gasket	042366	12	<i>High Heat Contactor</i>	119811
3	High Limit Thermostat	094161	12b	<i>Low Heat Contactor</i>	101165
4	Thermostat Clamp	093482		<i>(24 Volt Coil)</i>	
5	Water Level Probes	070178		<i>For 480 Volt Units</i>	
6	Water Valve - Two Way	071235	13	<i>Toroid Transformer 480 Volt Pri./ 240 Volt Sec. 115 VA</i>	101110
10	<i>Fuse, 6 Amp</i>	119823			
	<i>Transformer 20VPP</i>	119815			
	<i>PC Board, Steamer Control</i>	119800			

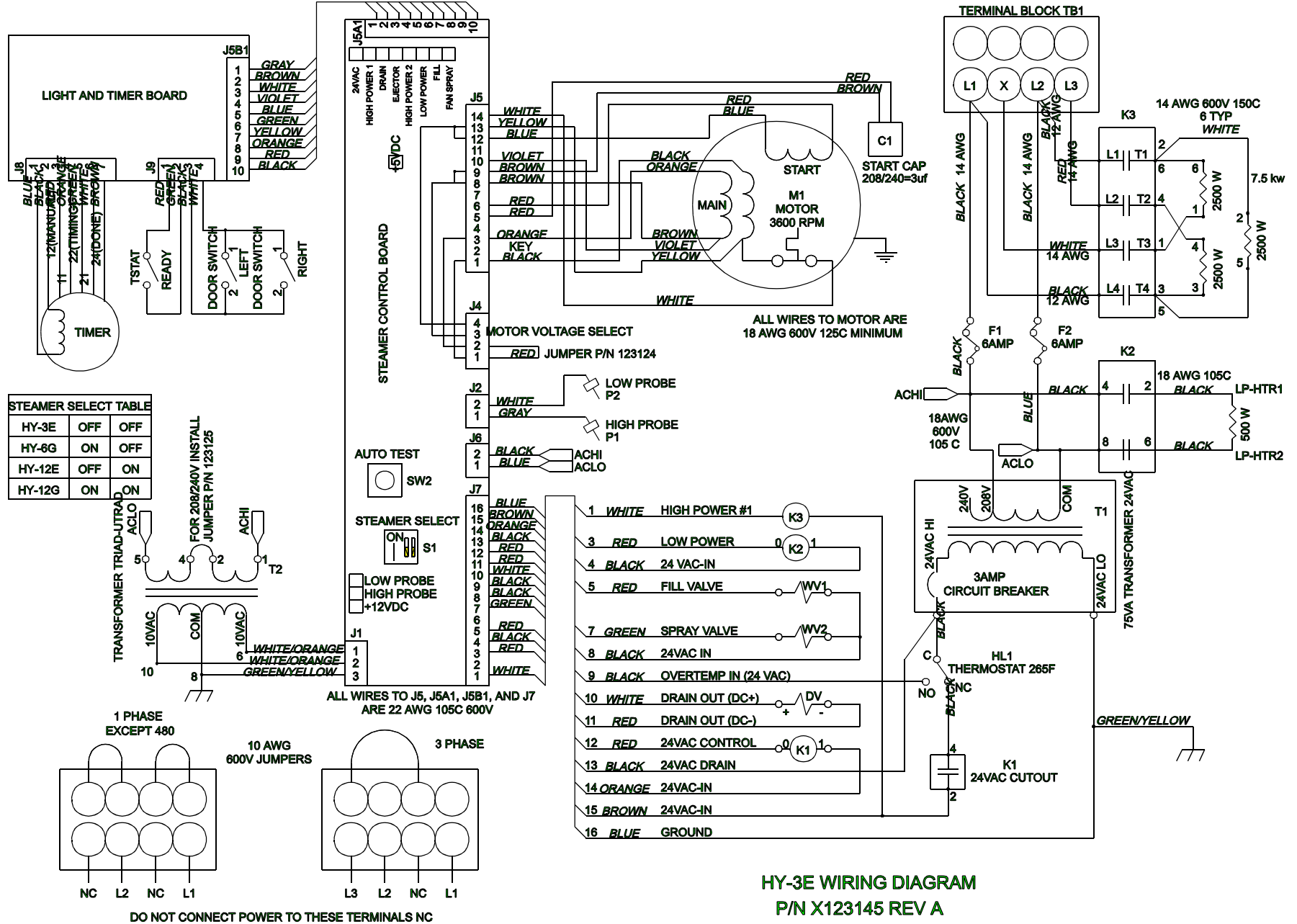
*Part Not Shown in Photograph

Changes for Page 14 - OM-HY-3E

Key	Description	Part No.	Key	Description	Part No.
3	Tinnerman Clip	096849	26	Drain Hose,* Steam Generator	096806
4	Timer	096826	27	Spray Nozzle*	078933
8	Door Switch	096857	28	Spray Hose*	096807
11	Steam Port	118103	29	Water Inlet Hose*	096773
11a	Steam Port Gasket	099250	30	Motor Capacitor*	096813
12	Fan Motor	096740	31	Drain Hose, Cavity*	112953
12a	Motor Seal	096868	32	Ready Thermostat	088865
13	Upper Steam Hose	100925	33	6 AMP Fuses	119823
14	Lower Clean Hose	100926	35*	Timer Fastener Nut*	101145
15	Hose Clamps 1-3/8"	010873	36	High Heat Contactor	119811
16	Electric Heater Gasket	042366	37*	Harnesses*-Call Groen Authorized Svc Agent	
17	Transformer 208/240/480 Volt	119812	38	Low Heat Contactor(24 Volt Coil)	119813
	Pri./24 Volt Sec. 75 VA			480 Volt Units	
19a	Electric Heater, 208 Volt	123101	40*	Toroid Transformer 115 VA, 480	101110
19b	Electric Heater, 240 Volt	123102		Volt Pri./230 Volt Sec.*	
19c	Electric Heater, 480 Volt	123103	41*	Fuse Holder*	077854
19d	Electric Heater, 200 Volt	123104	42*	Fuse .75 AMP SLO-BLO*	101112
20	High Limit Thermostat	094161	43*	Harnesses*-Call Groen Authorized Svc Agent	
21	Steam Generator	096836	—	Cavity	096825
*21a	Insulation Steam Generator	100922	—	Insulation	096738
22	Fuse Block	096809	—	Water Flow Reducer	106445
23	Terminal Block	088214	—	Water Fill Assembly	100988
24	Inlet Water Valve - Two Way*	071235	—	Drain Box (old style)	100975
	Brackets	094189	—	Tube	100975
25	Drain Valve*	071234	—	Boiler with Insulation	100923
	Brackets	099991	—	Safety Valve	014355
	Transformer 20 VPP	119815	—	Grommet	003492
	PC Board, Steamer Control	119800	—	Thermostat (old style)	099947
	PC Board Light & Timer	119817	—	Drain Tube Assembly	100989
	Relay, 24 Volt	119814			
	Relay, 12 Volt	119813			

*Part Not Shown in Photograph

Electrical Schematics



HY-3E WIRING DIAGRAM
P/N X123145 REV A

**LIMITED WARRANTY TO
COMMERCIAL PURCHASERS***

(Continental U.S., Hawaii and Canadian Sales Only)

Groen Foodservice Equipment ("Groen Equipment") has been skillfully manufactured, carefully inspected, and packaged to meet rigid standards of excellence. Groen warrants its Equipment to be free from defects in material and workmanship for (12) twelve months with the following conditions and subject to the following limitations.

- I. This parts and labor warranty is limited to Groen Equipment sold to the original commercial purchaser/users (but not original equipment manufacturers {O.E.M.}), at its original place of installation in the continental United States, Hawaii and Canada.
- II. Damage during shipment is to be reported to the carrier, is not covered under this warranty, and is the sole responsibility of the purchaser/user.
- III. Groen, or an authorized service representative, will repair or replace, at Groen's sole election, any Groen equipment, including but not limited to, drawoff valves, safety valves, gas and electric components, found to be defective during the warranty period. As to warranty service in the territory described above, Groen will absorb labor and portal to portal transportation costs (time and mileage) for the first twelve (12) months from date of installation or fifteen (15) months from date of shipment from Groen.
- IV. This warranty does not cover boiler maintenance, calibration, periodic adjustments as specified in operating instructions or manuals, and consumable parts such as scraper blades, gaskets, packing, etc., or labor costs incurred for removal of adjacent equipment or objects to gain access to Groen Equipment. This warranty does not cover defects caused by improper installation, abuse, careless operation, or improper maintenance of equipment. This warranty does not cover damage caused by poor water quality or improper boiler maintenance.
- V. **THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, EACH OF WHICH IS HEREBY EXPRESSLY DISCLAIMED. THE REMEDIES DESCRIBED ABOVE ARE EXCLUSIVE AND IN NO EVENT SHALL GROEN BE LIABLE FOR SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR THE BREACH OR DELAY IN PERFORMANCE OF THIS WARRANTY.**
- VI. Groen Equipment is for commercial use only. If sold as a component of another (O.E.M.) Manufacturer's equipment, or if used as a consumer product, such Equipment is sold AS IS and without any warranty.

***(Covers all Foodservice Equipment Ordered after October 1, 1995)**



1055 Mendell Davis Drive
Jackson, MS 39272
Telephone 601 372-3903
Fax 601 373-9587

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Revised 07/98