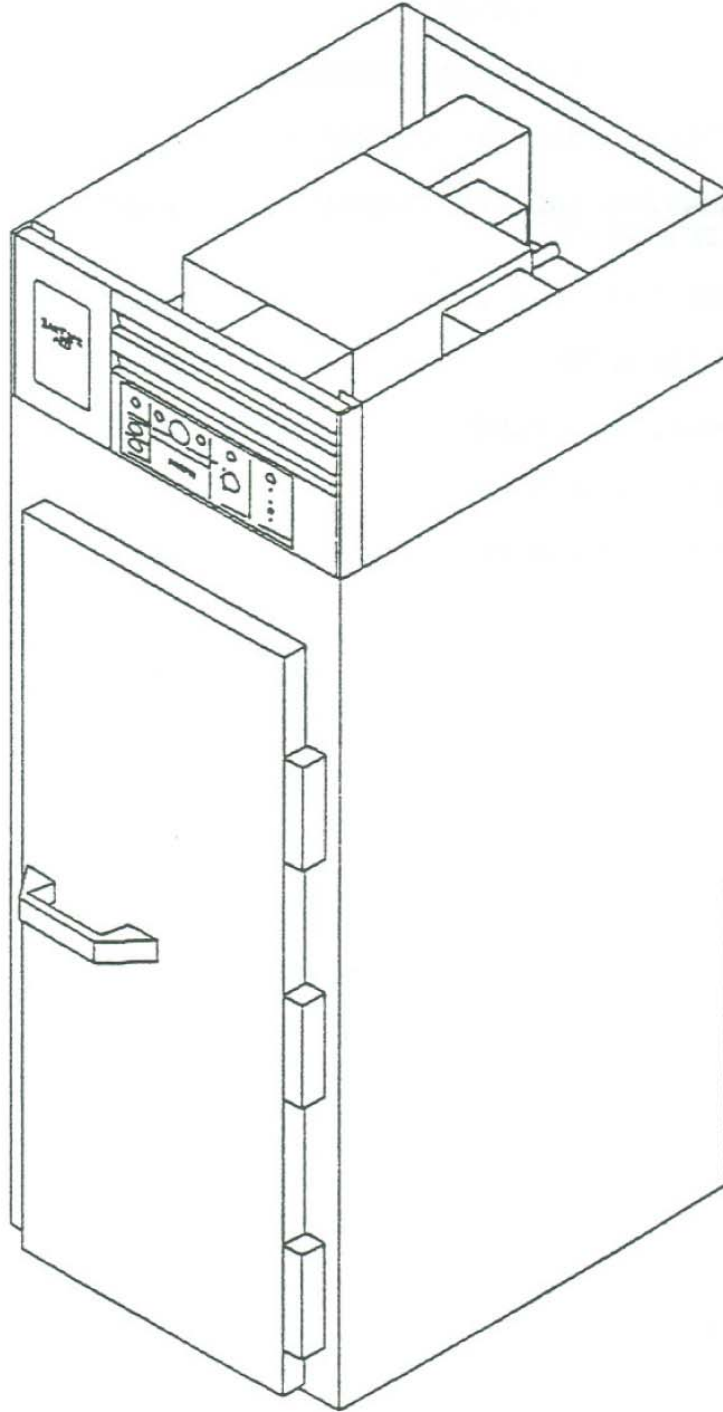


# BAKER'S AID PROOFER

## INSTRUCTION, INSTALLATION AND SERVICE MANUAL

MODELS: BAP-1-RI, BAP-2-RI, BAP-2-RIBF, BAP-3-RI, BAP-4-RI,  
BAP-6-RI, BAP-8-RI, BAP-12-RI



PRINTED: 6/13/95

F-24631-1

BAKER'S AID

## TABLE OF CONTENTS

SECTION I	PRODUCT DESCRIPTION	PAGE	1 - 3
SECTION II	WARRANTY	PAGE	4 - 5
SECTION III	TECHNICAL INFORMATION	PAGE	6 - 10
SECTION IV	INSTALLATION REQUIREMENTS	PAGE	10 - 13
SECTION V	INITIAL STARTUP PROCEDURE	PAGE	14
SECTION VI	CLEANING AND PREVENTIVE MAINTENANCE	PAGE	14 - 15
SECTION VII	DIRECTION FOR USE	PAGE	15 - 17
SECTION VIII	CALIBRATION	PAGE	17 - 18
SECTION IX	TROUBLESHOOTING	PAGE	19 - 20
SECTION X	PARTS BREAKDOWN	PAGE	21 - 27
SECTION XI	WIRING DIAGRAMS	PAGE	28 - 31

## SECTION I - PRODUCT DESCRIPTION

### General

All the proofer models are electronically controlled devices which provide an ideal environment for proofing yeast-raised bakery products. They allow exact temperature and humidity regulation to achieve the best proofing results for different products. A typical proofer is shown on Figure 1-1 on page 3. The models not shown are similar, varying in width and depth. One Rack models and BAP-2-RIBF (Two Rack Back To Front Proofer) have one door, all other models have two doors. All models have an operating panel centrally located on the cabinet structure above the door.

#### Models description:

BAP-1-RI	Bakers Aid 1 Rack Proofer Roll In
BAP-2-RI	Bakers Aid 2 Rack Proofer Roll In
BAP-2-RIBF	Bakers Aid 2 Rack Proofer Roll In Back to Front
BAP-3-RI	Bakers Aid 3 Rack Proofer Roll In
BAP-4-RI	Bakers Aid 4 Rack Proofer Roll In
BAP-6-RI	Bakers Aid 6 Rack Proofer Roll In
BAP-8-RI	Bakers Aid 8 Rack Proofer Roll In

Note: By special request a 12 rack model BAP-12-RI is also available (not shown on installation drawings)

### Construction

The proofer cabinet is made from stainless steel. The cabinet insulation is 1" thick, 100% frothed-in-place polyurethane foam. Door is completely insulated, equipped with a safety grip handle and self-adjusting magnetic gasket. Door remains stationery when opened beyond 90°, otherwise it is self closing. The standard door is right hand door (opens from left to right).

### Options

- Kwik-Thaw allows quick thawing process and eliminates the need of thawing products over night in a retarder. Available for 1 and 2 rack units. See separate Kwik-Thaw Proofer manual.
- Retarder/Proofer allows thawing products during a retard cycle (usually at night) and a proof cycle for a set pre-programmed start/stop time schedule available in daily or weekly models. Operation can be either automatic or manually operated for retard and proof cycles. Available for 1 and 2 rack units. See separate Retarder/Proofer manual.
- Undercounter version of Proofer and Kwik-Thaw Proofer are built for space saving purposes and can be combined with our Ultra Air or mini convection ovens. They have the same features as full size units. See separate Undercounter Proofer/Kwik-Thaw proofer manual.
- Glass door is available for 1 and 2 rack units



- Left hand door is available for 1-rack and 2-rack back to front proofer.
- Pass through option (unit is equipped with doors in front and back) is available for 4,6,8,12 rack proofers
- No floor option (unit is not equipped with floor, for drain purposes) is available for all types of proofers.

### Features

1. Temperature Control - thermostat for setting and regulating temperature. Dial thermometer indicates inside temperature.
2. Humidity Control - mechanical humidistat for setting and maintaining relative humidity inside unit.
3. Water Level Control - electronic water level control with stainless steel fill and stop probes.
4. Safety Feature - special safety probe senses low water level condition and shuts down unit operation and turns ON red trouble light.
5. Air Treatment - fully automatic heat and humidity control. Treated air is uniformly distributed by an oversized blower.
6. Flush System - fully automatic After Flush System to remove scale deposits from heating elements. System is activated for 8 minutes each time the Proofing operation is finished (Power switch-OFF) and leaves water pan drained until proofer is turned on again.

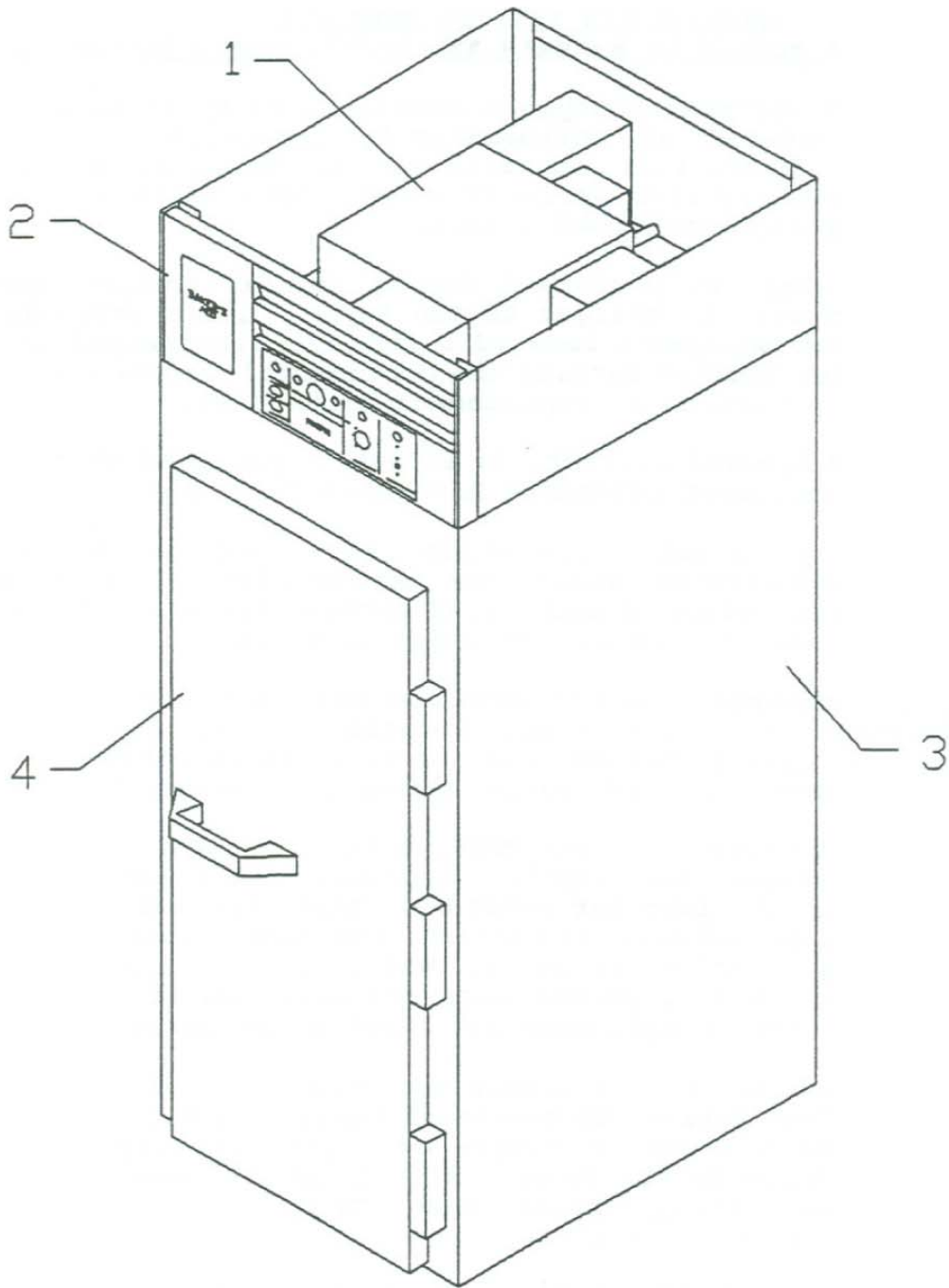


Figure 1-1. Baker's Aid Typical Proofer

- 1. Top unit
- 2. Front control panel
- 3. Proofer cabinet
- 4. Door

SECTION II - WARRANTY

BAKER'S AID LIMITED WARRANTY  
COVERING ALL MODELS OF BAKER'S AID MANUFACTURED EQUIPMENT

Baker's Aid warrants equipment manufactured by it to be free from defects in material and workmanship for the period of one year from the date of original installation or verified equipment startup. One year limited warranty covers both parts and labor except for conditions described within.

All labor shall be performed during regular working hours. Overtime premium will be charged to the Buyer. Labor warranty is effective only for equipment located inside the continental United States. Equipment located outside the continental United States is limited to the furnishing of replacement parts only.

Baker's Aid limited warranty is effective provided that terms of payment for equipment purchased have been fully met.

The warranty is not valid unless equipment is installed, started and demonstrated under the supervision of a factory authorized representative or authorized service agency. (There may be a charge for one, two or all of these services.)

Customer is responsible for normal maintenance functions which include lubrication, calibration, Rotation System Maintenance, programming of cyclic timers and routine maintenance of gas burners, replacement of light bulbs, fuses and indicating lights.

This warranty does not cover repairs due to lack of preventive maintenance, improper gas supply, improper electrical supply, improper water supply, improper water conditions (including but not limited to high lime and mineral content, sediment or contamination of water supply, uncleanliness of water supply line, etc.), improper venting, lack of proper care and cleaning of equipment, damage due to misuse or equipment not supplied by Baker's Aid.

Baker's Aid shall not be liable for consequential damages of any kind which occur during the course of installation of equipment which result from the use or misuse by Buyer, its employees or other tradesmen hired by the Buyer. All claims for damage must be reported to the delivering carrier immediately and all claims made through the delivering carrier.

The foregoing warranty shall be valid and binding upon Baker's Aid only if Buyer loads, operates and maintains the equipment supplied hereunder in accordance with the instruction manual provided to the Buyer.

Baker's Aid shall not be liable, directly or indirectly, under any circumstances for any loss of business or profits and labor, product or other charges, claims, loss or damage incurred or suffered due to operation or downtime of equipment purchased.



**Warranty continued**

This warranty does not cover any defect due to or resulting from handling, abuse, misuse, or harsh chemical action, removed or altered serial numbers, unauthorized modifications, damage by flood, leaking roofs, water pipes, gas pipes, fire, electrical power failure or surges, etc.

The foregoing warranty is exclusive and in lieu of all other express and implied warranties whatsoever. Specifically, there are no implied warranties of merchantability or of fitness for a particular purpose.

The foregoing shall be Baker's Aid's sole and exclusive obligation and Buyer's sole and exclusive remedy for any action, whether in breach of contract or negligence. In no event shall Baker's Aid be liable for a sum in excess of the purchase price of the equipment purchased.

**SECTION III - TECHNICAL INFORMATION**

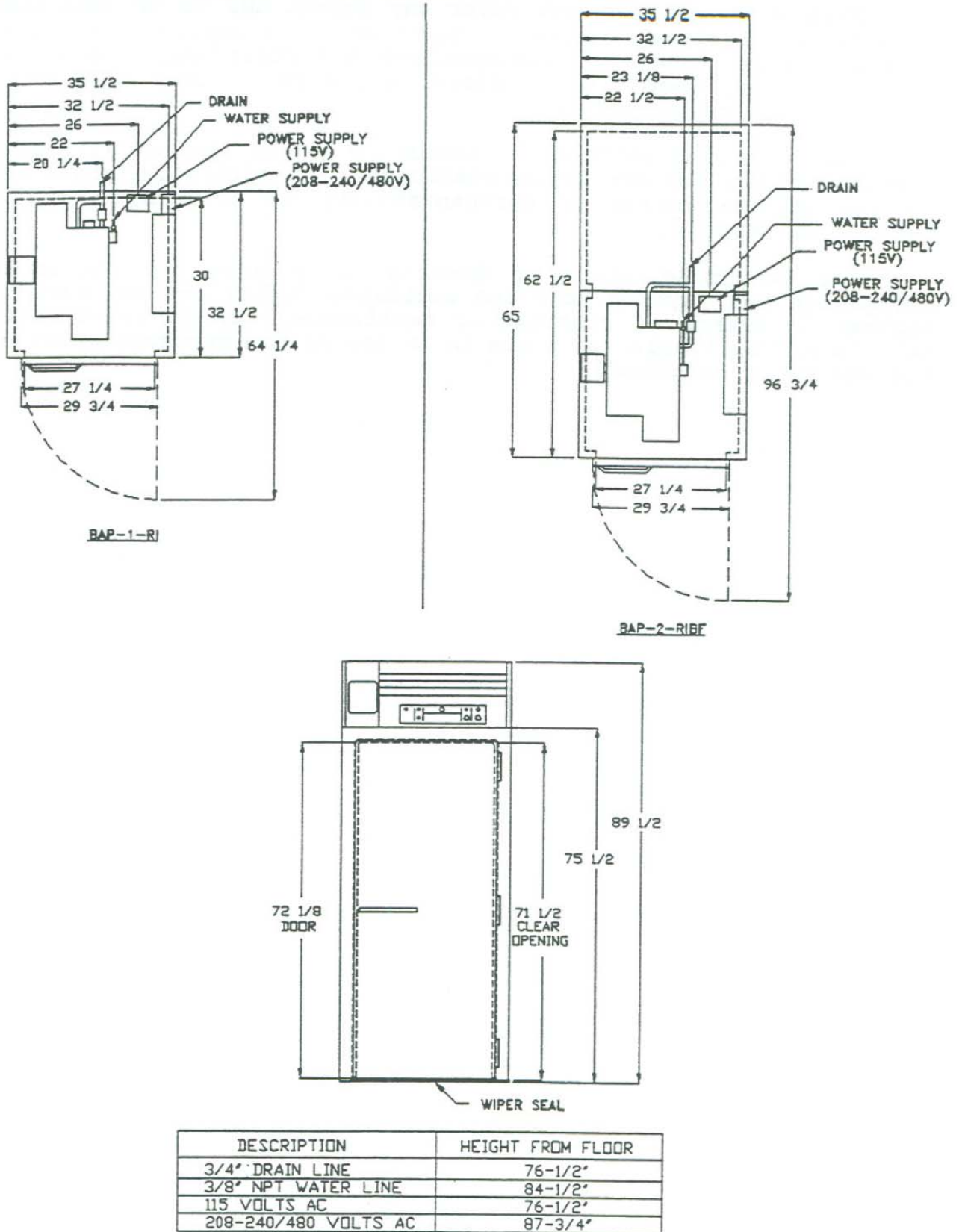
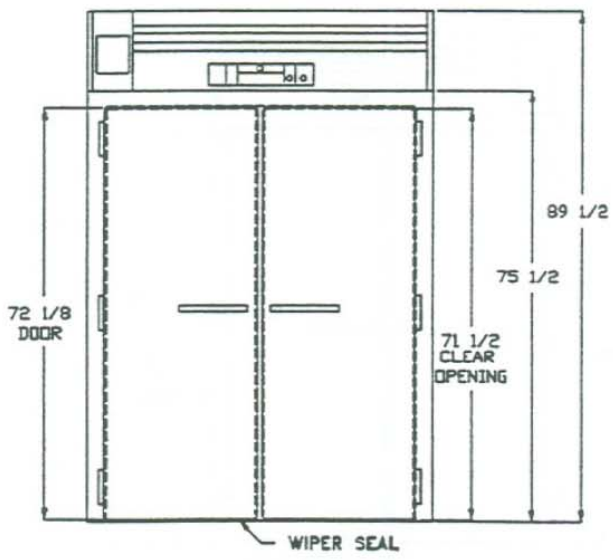
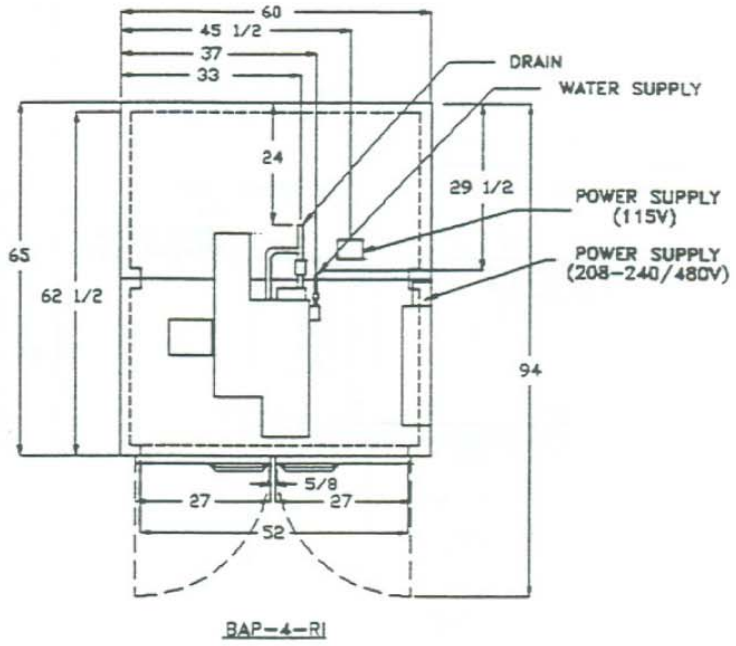
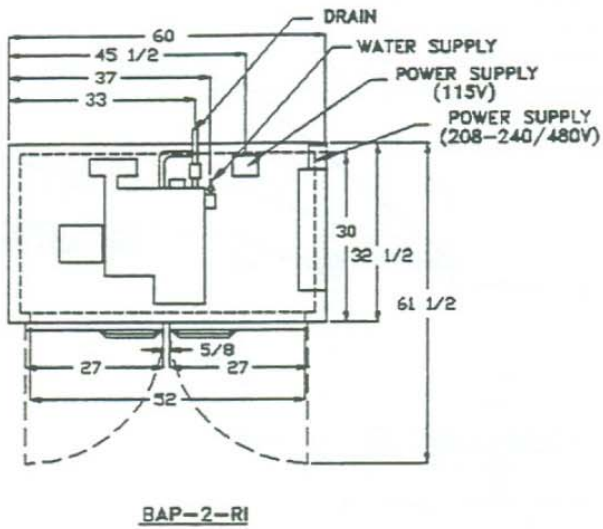


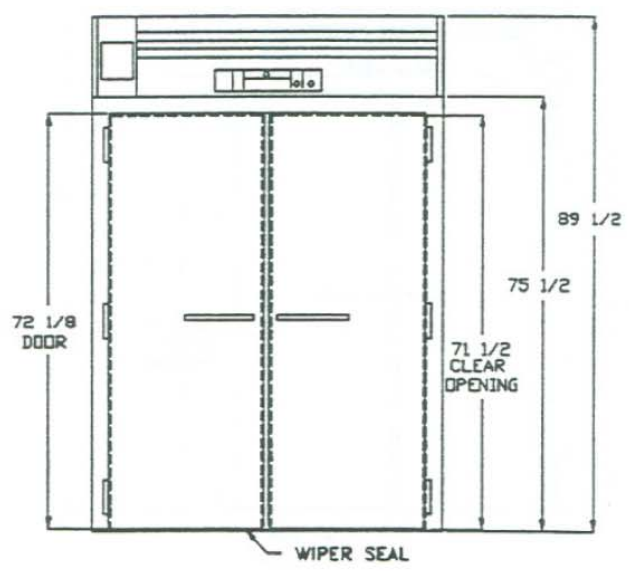
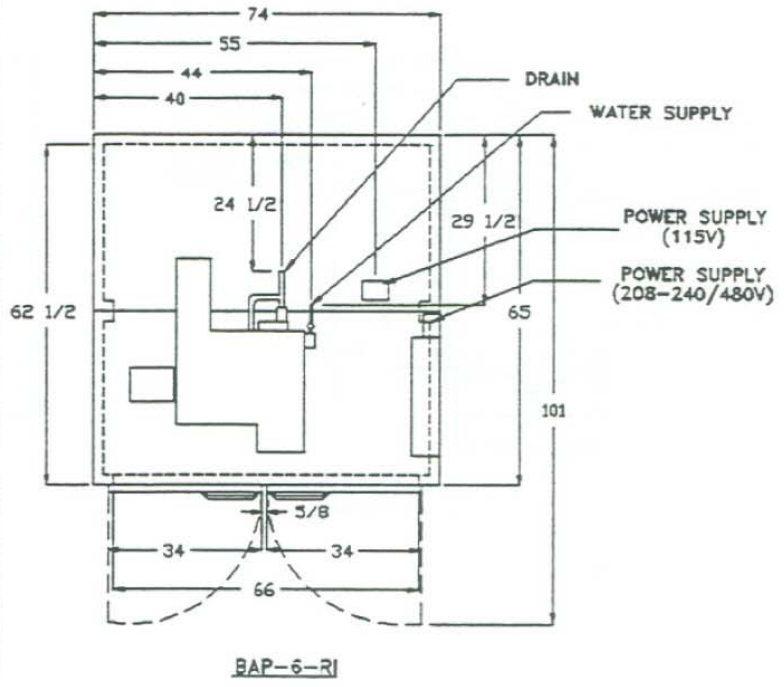
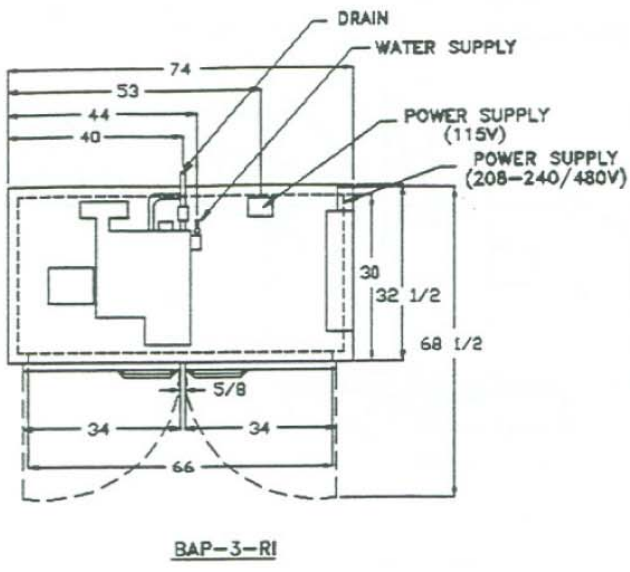
Figure 3-1. Overall dimensions and utility connection points for BAP-1-RI and BAP-2-RIBF Proofer





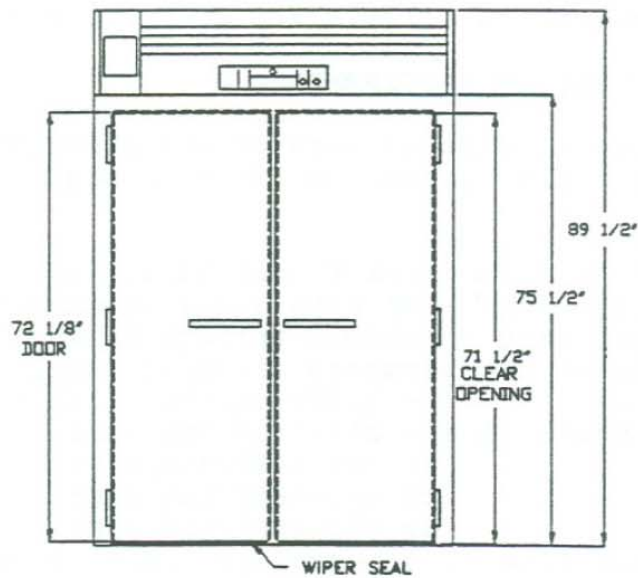
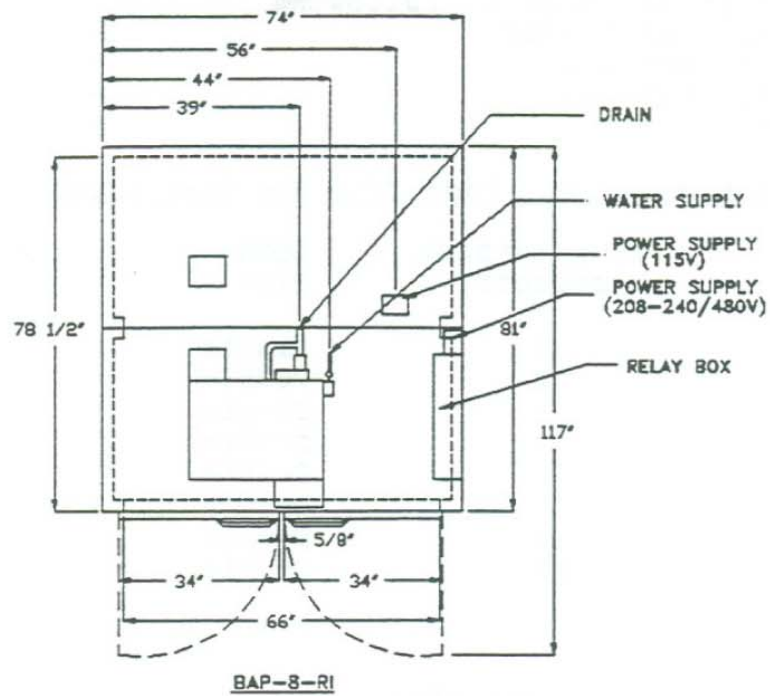
DESCRIPTION	HEIGHT FROM FLOOR
3/4" DRAIN LINE	76-1/2"
3/8" NPT WATER LINE	84-1/2"
115 VOLTS AC	76-1/2"
208-240/480 VOLTS AC	87-3/4"

Figure 3-2. Overall dimensions and utility connection points for BAP-2-RI and BAP-4-RI Proofer



DESCRIPTION	HEIGHT FROM FLOOR
3/4" DRAIN LINE	76-1/2"
3/8" NPT WATER LINE	84-1/2"
115 VOLTS AC	76-1/2"
208-240/480 VOLTS AC	87-3/4"

Figure 3-3. Overall dimensions and utility connection points for BAP-3-RI and BAP-6-RI Proofer



DESCRIPTION	HEIGHT FROM FLOOR
3/4" DRAIN LINE	76-1/2"
3/8" NPT WATER LINE	84-1/2"
115 VOLTS AC	76-1/2"
208-240/480 VOLTS AC	87-3/4"

Figure 3-4. Overall dimensions and utility connection points for BAP-8-RI Proofer



## Dimensions

For overall dimensions and utility connection points for all type of units refer to following drawings:

BAP-1-RI, BAP-2-RIBF	- Fig 3-1, page 6
BAP-2-RI, BAP-4-RI	- Fig 3-2, page 7
BAP-3-RI, BAP-6-RI	- Fig 3-3, page 8
BAP-8-RI	- Fig 3-4, page 9

## Cabinet - Rack Capacity, Door Type and Unit Weight

UNIT TYPE	18"x 26" RACK CAPACITY	DOOR TYPE	WEIGHT lbs
BAP-1-RI	1	Single	465
BAP-2-RI	2	Double	670
BAP-2-RIBF	2	Single	670
BAP-3-RI	3	Double	770
BAP-4-RI	4	Double	970
BAP-6-RI	6	Double	1100
BAP-8-RI	8	Double	1550
BAP-12-RI	12	Double	2050

### **Note:**

1. The standard racks are:
  - 18" x 26" pan rack
  - 23" x 23" donut screen rack
2. Double racks are available for 2,4,6,8,12 rack units.

## SECTION IV - INSTALLATION REQUIREMENTS

Typical proofer electrical service and plumbing utility connection points are shown on Fig 4-2, page 13.

### Electrical Service

All Bakers Aid proofers are UL and CLU listed. Customers are responsible for complying with local electrical codes when installing equipment purchased through Bakers Aid.

All units require two separate electric supply lines:

1. Control line - 115V/1ph/60Hz, 20A - service
2. Heating element line - 208-240V/1ph/60Hz  
or 208-240V/3ph/60Hz  
or 460-480V/1ph/60Hz  
or 460-480V/3ph/60Hz

Heating element line is 3 phase for 4,6,8,12 rack units.

Refer to table on following page for electrical data for all available units.

Note: Per customer request the unit can be manufactured specially for use of other non-standard or foreign voltages and frequencies.

### Electrical Data

UNIT TYPE	POWER CONSUMPTION AT 208/480V	CONTROLS LINE	HEATING ELEMENTS LINE
BAP-1-RI	4.8kW/23A 4.8kW/10A	115/1/60	208-240/1/60 460-480/1/60
BAP-2-RI BAP-2-RIBF BAP-3-RI	7kW/34A 7kW/15A	115/1/60	208-240/1/60 460-480/1/60
BAP-4-RI BAP-6-RI BAP-8-RI	12kW/34A 12kW/15A	115/1/60	208-240/3/60 460-480/3/60
BAP-12-RI	15kW/42A 15kW/18A	115/1/60	208-240/3/60 460-480/3/60

The above information should be used to calculate the correct heating element supply line size and circuit breaker size. The controls supply line should be 115V/1ph/60Hz protected with 20A circuit breaker for all the units.

#### Plumbing installation

The plumbing should be installed and connected to be compliant with local codes. All proofer models require the following plumbing utilities:

1. Cold water inlet line - 3/8" NPT pipe, connected to water strainer on valve assembly. Water pressure must be 20-30 psi. A shut off valve and a disconnect fitting should be installed as close to proofer as practical.
2. Drain line - 3/4" copper pipe connected between the proofer drain valve and approved drain source. The drain should be installed by fitting a 90° elbow and directly piping down the unit back to the floor and pitched downward to drain source (minimum required pitch is 1" per foot).  
A trough drain installed in front of the proofer is highly recommended.
3. An inlet water filter and/or water softener may be required in areas with known water quality problems.

#### Note:

1. The equipment is to be installed to comply with the Basic Plumbing Code (\*) of the Building Officials and Code Administrators International, Inc. (BOCA) and Food Service Sanitation Manual (\*\*) of the Food and Drug Administration (FDA).

\* Available from Building Officials and Code Administrators International, Inc. 4051 W. Flossmoor Rd. Country Club Hill, Ill 60477-5795, USA

\*\* Available from the Superintendent of Documents, U>S> Government Printing Office, Washington, DC 20402, USA  
DHEW Publication No.(FDA) 78-2081.  
Stock No. 017-012-00267-6



2. Scaling minerals should be filtered from water to prevent heating element encapsulation. Proper unit operation depends on presence of some ions in water. Deionized water may cause difficulties or stop unit operation. In areas where there are known water quality problems contact a local water company for recommended filter/softener treatment installations.  
Maximum water resistivity is 90 kOhm/cm.
3. National Sanitation Foundation NSF Code requires a seal between bottom of box and floor to prevent moisture and dirt from being trapped underneath. DOW Corning #732 silicone sealant is required. Sealant should ooze out from under box when box is in place, at which time it can be smoothed out. See Fig 4-1.

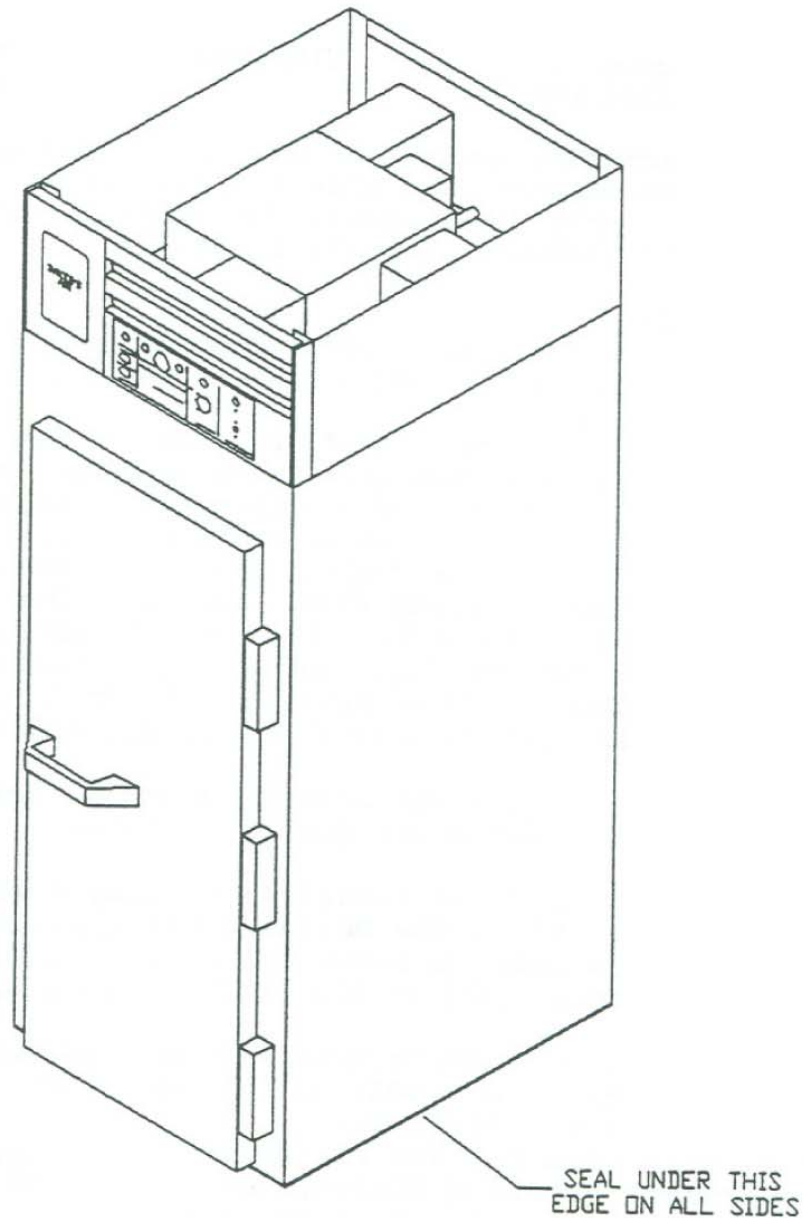


Figure 4-1. Proofer installation - floor sealing



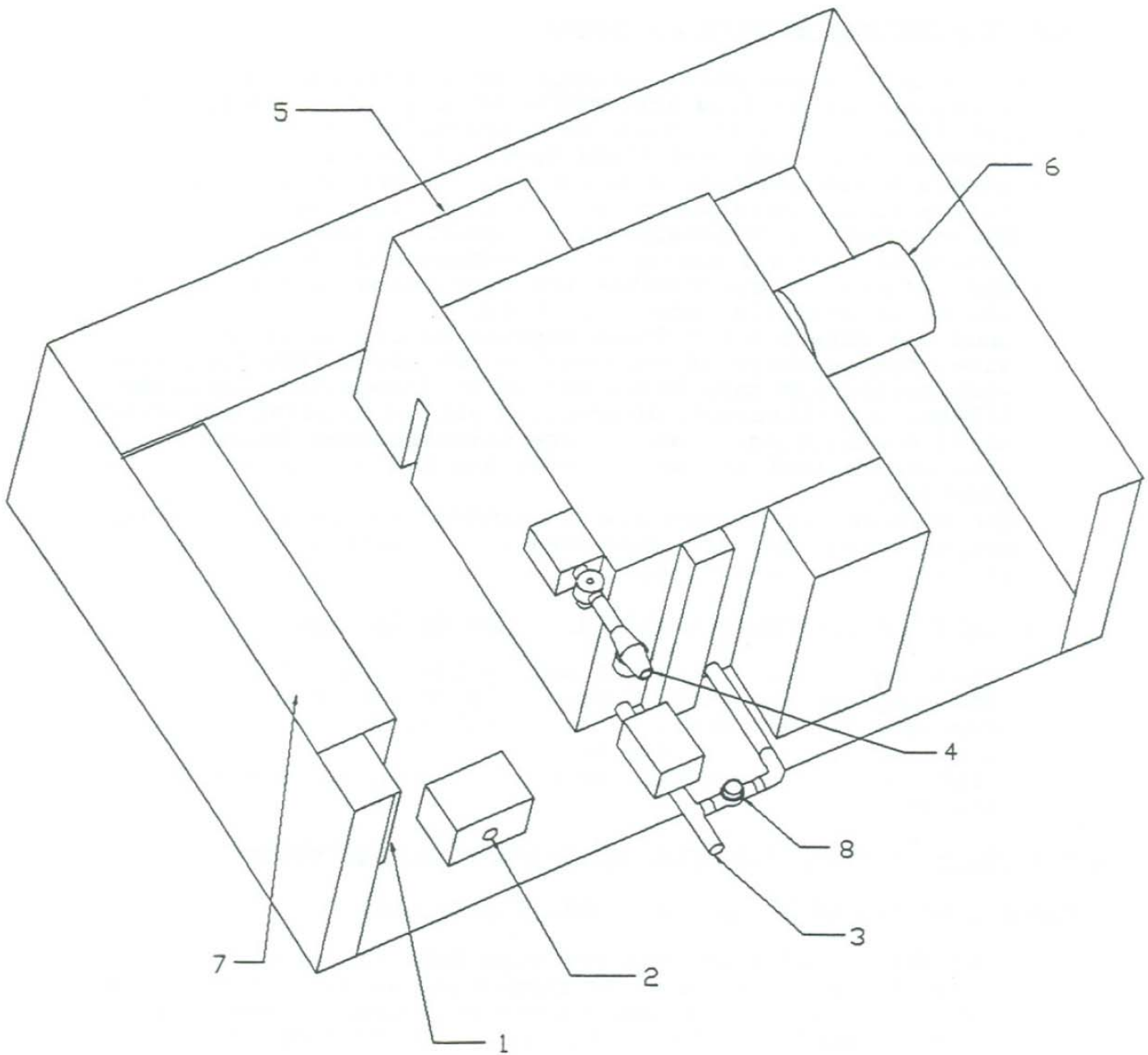


Figure 4-2. Typical Proofer, electrical service and plumbing utility connection points:

1. 208-240V or 480V AC power supply connection point
2. 115 AC power supply connection point
3. 3/4" drain outlet connection point
4. 3/8" NPT water inlet connection point
5. Top unit
6. Blower motor
7. Starting box
8. 3/4" swing check valve (only for 4,6,8,12 rack units)

## SECTION V - INITIAL STARTUP PROCEDURE

After a unit is installed, customer should contact Baker's Aid and request an on-site inspection of the installation and a first time startup to check that operation is normal. The following terms and conditions apply to this service:

- Bakers's Aid requires a minimum of 5 working days advance notice to schedule personnel for this field assignment.
- The customer is responsible for a quality assurance check to determine that all installation requirements have been met.
- The customer is responsible for confirming that electrical and water utilities are in service.
- Once the Bakers's Aid field representative is at the job site, the customer is responsible for costs resulting from work delays and call backs caused by incomplete, improper, illegal installations, or problems with electrical and water service utilities. Under these circumstances Bakers's Aid will charge back to the customer any and all extraordinary expenses.
- The customer is responsible for correcting any installation deficiencies that are uncovered as a result of the inspection by Baker's Aid.

The Startup Procedure consists of the following:

1. Checking proper electrical supply line installation
2. Checking correct water supply line installation
3. Checking correct drain line installation
4. Checking if unit is leveled
5. Starting the unit, operating and calibrating thermostat and humidistat

## SECTION VI - IN STORE CLEANING AND PREVENTIVE MAINTENANCE

Cleaning - Performed by in store bakery personnel.

**Daily:** At the end of each work day wipe down the proofer interior walls and door to remove any excess condensation and mop out floor of any excess moisture. Leave doors open slightly to allow walls and floor to completely dry.

**Weekly:** Clean interior and exterior of proofer with mild soap and water solution or stainless steel polish.

Note:

1. Never use stainless steel cleaner as this may mar the surface, only the use of a stainless steel polish is acceptable.
2. Always follow the grain of the stainless steel when cleaning.
3. Use special caution when cleaning the front control panel not to allow any water to get into the electrical components.
4. Never use a hose or power washer to wash down the exterior or interior of the unit as this could cause water to get into the electrical panels.



## Preventive Maintenance

Preventive maintenance is to be performed by service agency or trained store maintenance technician.

### **Every four months:**

1. Check condition of door gaskets.
2. Check door operation and door seal. Door must self close and seal on all sides properly.
3. Clean all debris from the top of the unit.
4. Check condition of heating elements.
5. Clean water pan if necessary.
6. Clean probes if necessary.
7. Oil blower motor.
8. Check operation and calibration of thermostat, humidistat and hi-limit thermostat. Refer to page 17
9. Check After Flush operation. Refer to page 17

## SECTION VII - OPERATION AND DIRECTION FOR USE

The controls and indicators of the proofer are located on a control panel as shown on Figure 7-1, page 16. Refer to list below for the purpose of each control and indicator.

### Proofer controls and indicators:

1. Blower switch - operates blower motor. Green light power ON indicates power to the motor.  
Control switch - operates proofer controls and starts proofing operation.
2. Power ON (Green light) - indicates blower motor operation.
3. Trouble (Red light) - indicates low water level in the unit. If ON heating element operation is stopped, when OFF unit is ready for operation.
4. Flush Klean (Yellow light) - indicates that proofing operation is finished (blower and control switches are in OFF position) and unit is in After Flush Cycle.
5. Humidity (White light) - indicates wet elements operation (creating humidity), extinguishes when proofer reaches set humidity level.
6. Proof Temp. (Blue light) - indicates dry elements operation (creating heat), extinguishes when proofer reaches set temperature.
7. Thermometer - provides a direct reading of temperature inside proofer (range 0-180°F)
8. Humidistat - mechanical humidistat for controlling the relative air humidity (setting range 20%-90%, suggested setting 60%-70%)
9. Thermostat - mechanical temperature controller inside proofer (setting range 70-170°F, suggested setting 90-110°F)



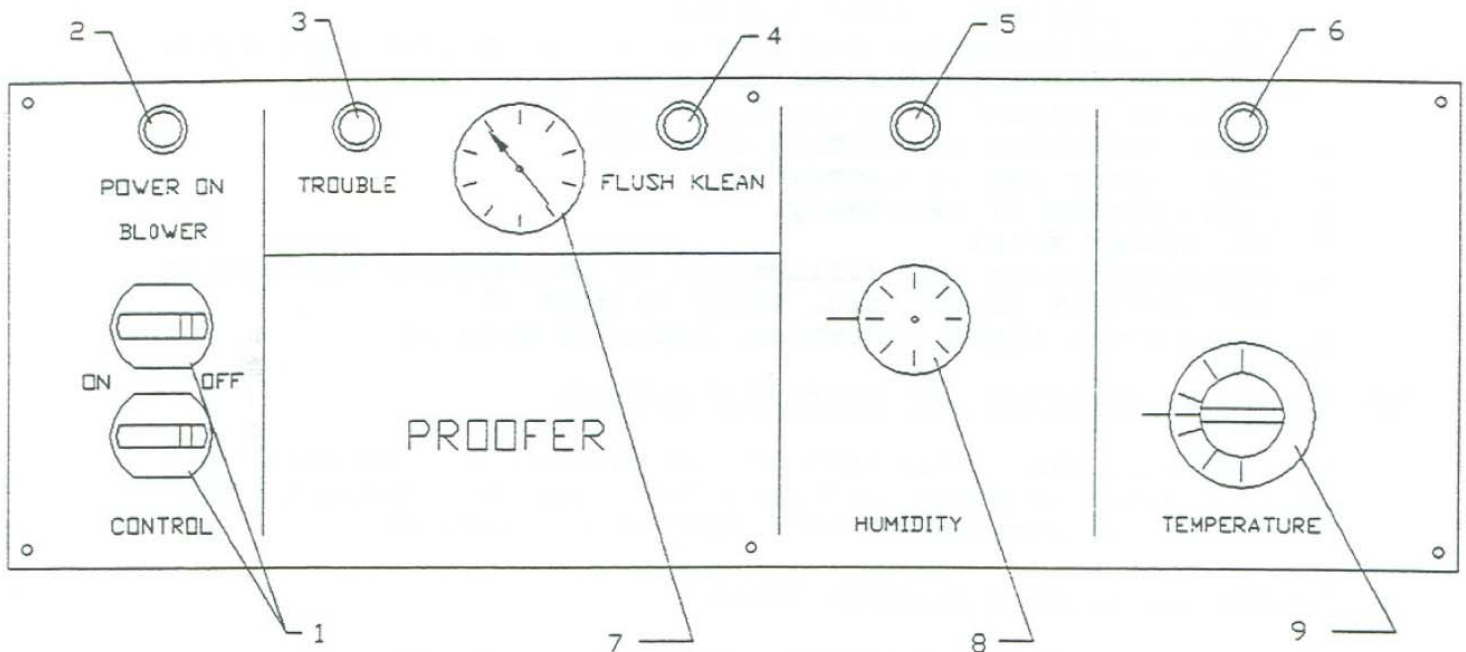


Figure 7-1. Front control panel

Directions for use

1. Set Blower and Control switches (1) to ON position
  - blower starts to run
  - Power ON (2) indicator lights (green light)
  - Trouble (3) (red light) lights for about 30 Sec - 1 Min (depends on unit size) while unit is filling up with water and extinguishes when within operating range.
2. Set desired temperature on thermostat (9) (recommended setting is 90-110°F depending on local conditions and product to be proofed)
  - Blue indicating light (6) is ON. During the operation the light will go ON and OFF according to thermostat maintaining temperature in desired range.
3. Set Humidistat (8) to desired humidity. Recommended setting is 60%-70%.
  - White indicating light (5) is ON. During the operation the light will go ON and OFF according to humidistat maintaining humidity in desired range.

Note:

- \* For 2,3,4,6,8,12 rack and models there is 5 Min preheat time in the beginning of operation (during this time proofer is not creating humidity).
- \* If humidity is set to high, condensation within proofer may be excessive and water will accumulate on the floor.

4. Before the first proofing cycle proofer requires a few minutes time (depends of unit size) to create desired temperature and humidity. Blue (6) and white (5) indicating lights extinguish indicating that proofer is ready and product can be placed inside.
5. Load the product into proofer and proceed with proofing jobs for the day.

Note:

- \* Frozen dough products must be completely thawed before placing in a standard proofer for proofing.
  - \* In the proofer humidity does not cause dough to rise, but does add moisture to prevent drying.
  - \* For "crusty bread" products, texture of proofed dough should be soft and pliable to the touch, not sticky or dry. If the proofed product goes into the oven sticky or dry, no matter how much steam is added during baking, a proper durable crust will not form.
  - \* When the proofer door is open to load, unload and reload product, the humidity and temperature indicators normally light to indicate that these conditions inside proofer are temporarily outside of normal range, and the proofer is working to restore them. After proofer door is closed with product inside, humidity and temperature will soon extinguish to again show heat and humidity conditions are normal.
6. After removing last proofing job at end of the work day, shut down the proofer by setting the Blower and Control switches to OFF. The proofer turns now to After Flush cycle:
    - Yellow indicating light is ON
    - Drain valve opens and water drains out of the unit to drain pipe
    - After 3 minutes fill valve opens for 1 minutes and water flushes the water pan (drain valve remains open)
    - After 8 min from the beginning of After Flush cycle Yellow Light extinguishes and drain valve closes.The proofer operation has been finished.

## SECTION VIII - PROOFER CALIBRATION

### 1. Adjusting Humidity Control

- a. Turn proofer ON
- b. Set Temperature to 100°F and Humidity to 70%. Observe the Humidity indicator (white light) change from lit to extinguish three times.
- c. The fourth time the Humidity indicator extinguishes, open the proofer and place the hygrometer near the center of empty cabinet.
- d. Close the proofer and allow the hygrometer to remain in the cabinet undisturbed for 5 min.
- e. After 5 min at the time when the Humidity indicator is extinguished open the proofer and read the hygrometer. Compare this reading with the set point on the Humidistat. The hygrometer reading should be in the range from 67.2% to 72.8% relative humidity. If not perform step "f".



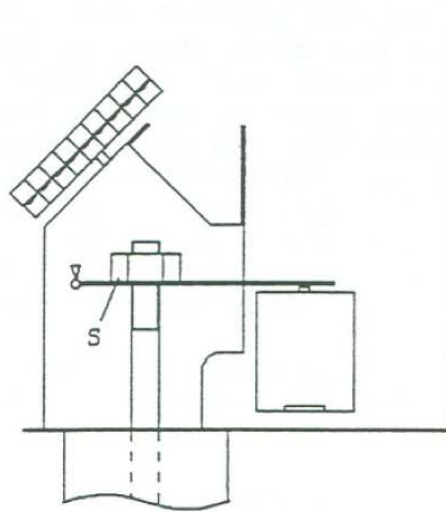
- f. Remove the Humidistat control dial and reposition it to match the hygrometer reading (within 8%).

Note:

If proper adjustment can not be achieved by procedure in step "f" the humidistat should be removed from proofer and recalibrated by turning setting nut "S" on it's microswitch actuator. (See drawing below)

- if the actual value is higher than the set point turn the nut counterclockwise
- if the actual value is lower than the set point turn the nut clockwise.

Turning setting nut 1/6 of a turn gives result of  $\pm 7\%$  relative humidity at 70% set point.



2. Adjusting Thermostat

- a. Turn proofer ON
- b. Set Thermostat to 100°F and Humidistat to 75%. Observe the blue temperature indicator change from lit to extinguish three times.
- c. The fourth time the temperature indicator extinguish, open the proofer and place a mercury thermometer near the center of the empty cabinet.
- d. Close the proofer and leave unit undisturbed while the white temperature indicator changes from lit to extinguish two more times.
- e. After the third time the temperature indicator extinguishes, open the proofer and read the temperature on the mercury thermometer. Compare this reading with the set point on the thermostat. The thermometer reading should be in the range from 94-106°F. If not remove the thermostat dial and reset the small adjusting screw as follows:
  - If the temperature in the proofer is below 94°F turn the adjusting screw slightly (less than 1/4 turn) counterclockwise.
  - If the temperature in the proofer is above 106°F turn the adjusting screw (less than 1/4 turn) clockwise.
- f. After making an adjustment, repeat this procedure to check the results. Repeat the adjustment if necessary.



## SECTION IX - TROUBLESHOOTING

Important: Possible repair work should always be performed by authorized service personnel. Never remove protective panels before having switched OFF both supply lines: control line 115V and heating elements line 208-240V or 480V. Both lines should be switched OFF from customer circuit breaker panel. There is a power to after flush board even when both switches: control and blower are OFF.

SYMPTOM	POSSIBLE CAUSES AND SOLUTIONS
1. Proofer will not start blower and control switches are in ON position. Fan is not running all indicating lights are OFF	1. There is no 120V power to the unit - check circuit breaker on supply line 2. Circuit breaker in starting box tripped out - find possible cause and reset 3. Check wiring, blower and control switch
2. Proofer starts operation but does not create heat and humidity and: A. Indicator lights for fan, heat, humidity are ON (trouble light goes ON and extinguish after 1Min) B. Indicator lights: fan - ON heat - OFF humidity - OFF trouble - extinguish after 1Min	A. There is no 208V power to the unit - check circuit breaker on 208V supply line B. Hi-limit thermostat out of adjustment or defective - check operation and adjustment A, B. Check contactors, wiring and heating elements
3. Proofer starts operation but creates only heat no humidity after time longer than 10 Min (humidistat is set to 90%, no humidity can be felt inside) and: A. Humidity indicator light-OFF B. Humidity indicator light-ON	A. Humidistat defective-check operation, replace if necessary B. Check 3 Sec. timer (check power to contactor) Check contactor and wiring Check 5 Min. preheat timer (2 Rack and larger units) Check wet elements
4. Proofer starts operation but creates only humidity (heats up very slowly) and: A. Heat indicator light-OFF B. Heat indicator light-ON	A. Thermostat defective-check operation, replace if necessary B. Check contactor and wiring Check dry heating elements
5. After few minutes from turn ON the trouble (red) light remains ON and proofer does not start cycle (no heat, no humidity)	1. Water does not reach normal level: -there is no water to the unit-check water inlet and cutoff valves

2. Water overflowed:

- Check safety probe and After Flush board by grounding terminal 1 on After Flush board (if red light extinguished-probe is defective, if red light remains On-replace board
- Water deionized-check water filter and softener (if installed). Contact water company for water treatment.

6. Proofer starts operation (green light is ON) but blower does not work

Check power to blower motor  
Check blower motor  
Check motor relay (only for 4, 6, 8, 12 rack units)

7. After turn OFF proofer does not start After Flush cycle  
Not draining water from water pan, yellow light OFF.

1. Check yellow indicator light
2. Check power to terminals 7 and 11 on the board:
  - 120V on 11, zero volts on 7 After Flush board is defective
  - Zero volts on 11, zero volts on 7 check wiring to After Flush board

8. Proofer overflowing during:  
A. Proof cycle  
B. After Flush cycle

- A. Check high water probe by grounding terminal 3 on After Flush board:
  - Fill valve shuts OFF-probe is defective
  - Fill valve does not shut OFF After Flush board defective
  - Check fill valveRefer to SYMPTOM 7 (water conditions if trouble light is ON)
- B. Check drain valve  
Check drain and clear if clogged  
Check After Flush board by measuring voltage on terminal 7 (if zero volts on 7 during After Flush cycle - board is defective)

*THIS PAGE*

*PURPOSELY*

*LEFT*

*BLANK*



**SECTION X - PARTS BREAKDOWN**

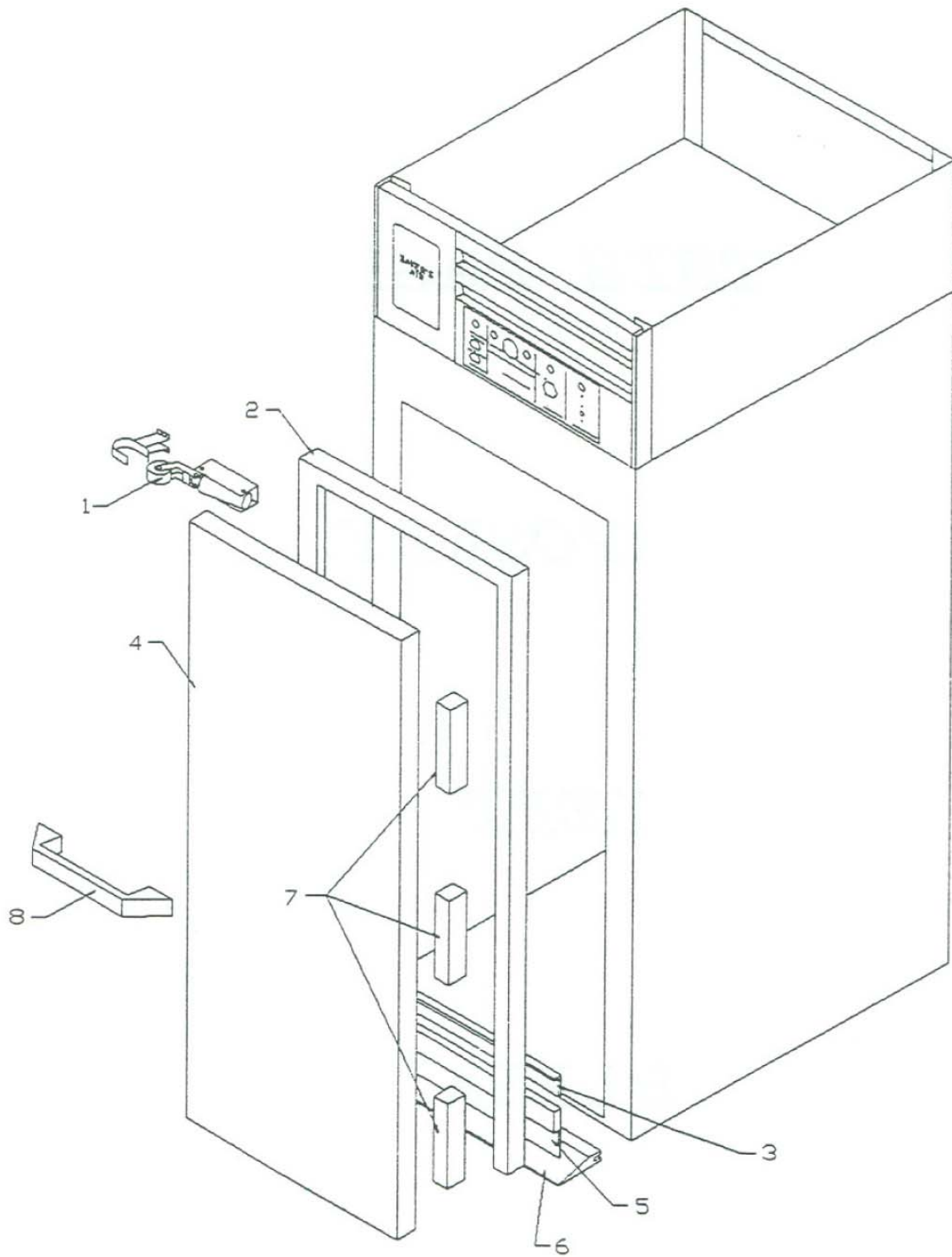


Figure 10-1. Parts location - Door assembly

Parts list for figure 10-1, page 21.

Item Number	Part Number	Description	Used in other models
1	PB109	Hydraulic door closure kit	All models except BAP-1-RI, BAP-2-RIBF
2	PB080 PB081 PB082	1 rack door gasket 2 rack door gasket 3 rack door gasket	BAP-2-RIBF BAP-4-RI BAP-6-RI, BAP-8-RI
3	PB083 PB084 PB085	1 rack sweep holddown plate 2 rack sweep holddown plate 3 rack sweep holddown plate	BAP-2-RIBF BAP-4-RI BAP-6-RI, BAP-8-RI
4	PB129 PB130 PB131	1 rack door (new) 2 rack door (new) 3 rack door (new) Specify left or right hinge.	BAP-2-RIBF BAP-4-RI BAP-6-RI, BAP-8-RI
5	PB039 PB113 PB039A PB040 PB114 PB040A PB041 PB115 PB041A	1 rack sweep (old style) 1 rack sweep support (old) 1 rack sweep (new style) 2 rack sweep (old style) 2 rack sweep support (old) 2 rack sweep (new style) 3 rack sweep (old style) 3 rack sweep support (old) 3 rack sweep (new style)	BAP-2-RIBF BAP-2-RIBF BAP-2-RIBF BAP-4-RI BAP-4-RI BAP-4-RI BAP-6-RI, BAP-8-RI BAP-6-RI, BAP-8-RI BAP-6-RI, BAP-8-RI
6	PB133 PB134 PB135	1 rack entrance plate 2 rack entrance plate 3 rack entrance plate	BAP-2-RIBF BAP-4-RI BAP-6-RI, BAP-8-RI
7	PB045 PB116 PB116A PB116B	Door hinge - complete Nylon cam (old style) Hinge cover Nylon cam (new style)	All models Part of PB045 Part of PB045 Part of PB045
8	PB046 PB047	Door handle Door handle w/lock cylinder	All models Optional models with glass door

Parts not shown on drawing

1	PB123	Hinge - male portion	All models
2	PB124	Hinge - female portion	All models
3	PB125	Screw - mount hinge	All models
4	PB126	Hinge spring assembly	All models
5	PB127	Door closure bracket	All models
6	PB119	Clip for door gasket	All models
7	PB141	Internal return duct w/louvers	All models

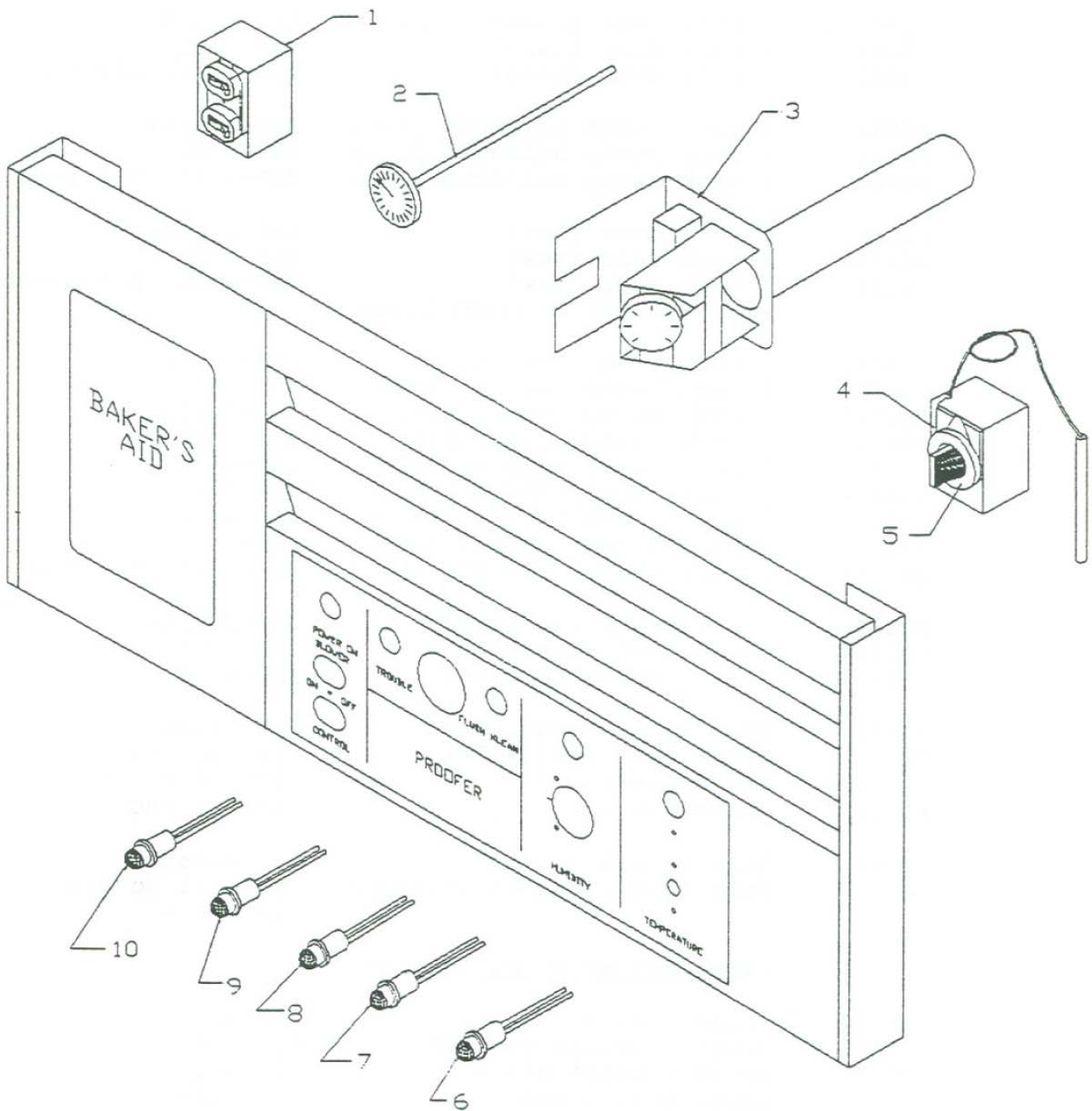


Figure 10-2. Parts location - Front panel



Parts list for figure 10-2, page 23

Item	Part Number	Description	Used in other units
1	PB017	Blower, Control switch	All models
2	PB018	Thermometer	All models
	PB018A	Thermometer (°C)	Special order
3	PB011	Humidistat	All models
4	PB016	Thermostat (Max. adj 170°F)	All models
5	PB063	Thermostat dial	All models
6	PB093	Blue indicator light	All models
7	PB094	White indicator light	All models
8	PB095	Yellow indicator light	All models
9	PB097	Red indicator light	All models
10	PB098	Green indicator light	All models
--	PB096	Holding clip for indicating lamp	All models

Parts not shown on drawings

	Part number	Description	Notes
1	PB012	Water level relay 1500G	Before 1/27/95
2	PB013	Water level relay 1500D	Before 1/27/95
3	PB014	Flush Klean board	Before 1/27/95
4	PB025	Transformer 110/24V	Before 9/29/93
5	PB118	24 hour timer for controls	Optional
6	PB143	Terminal nut for elements	All models
7	PB144	Washer for elements	All models
8	PB145	Brass nut for elements	All models
9	PB146	Seal washer for elements	All models
10	PB147	Probe nut	All models
11	PB159	Humidity hygrometer	Test equipment
12	PB160	Probe bracket	All models
13	PB211	White caulking-butyl rubber	All models
14	PB259	Bracket for door closure	All models
15	PB277	Hinged prison panel cover	Opt. prison package
16	PB311	Transformer 220/120V	Optional 220V models
17	PB310	Soft water level control	Special request

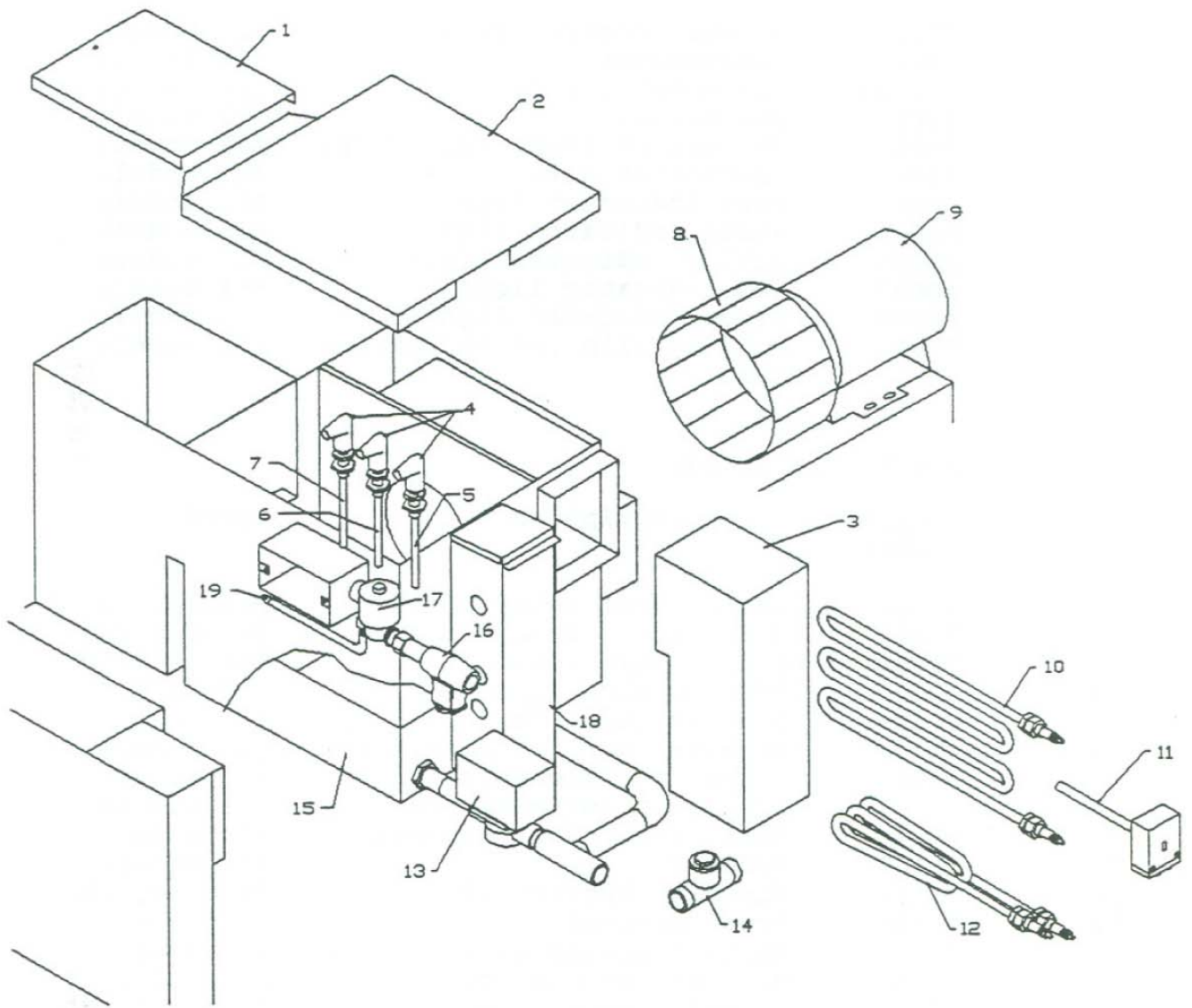


Figure 10-3. Parts location - Top unit.

Parts list for figure 10-3, page 25

Item	Part Number	Description	Used in other models
1,2	PB117	1 rack top cover	BAP-2-RIBF
	PB120	2 & 3 rack top cover	2 & 3 rack models
	PB322	4, 6, 8 rack top cover	4, 6, 8 rack models
3	PB158B	Transfer elbow	Specify model when ordering
4	PB024A	Probe boots	All models
5	PB035	Safety probe (long)	All models
6	PB036	Fill probe (center)	All models
7	PB037	Stop probe (short)	All models
8	PB087	1 rack blower impeller	2 & 3 rack models
	PB089	4 rack blower impeller	4 rack model
	PB089A	6 & 8 rack blower impeller	6 & 8 rack models
	PB308	Steel fan wheel w/5/8"	12 rack model
9	PB086A	1/12 HP blower motor	1, 2, 3 rack models
	PB088	1/2 HP blower motor	4, 6, 8 rack models
	PB306	3/4 HP, 1ph blower motor	12 rack model
	PB002	Dry element 3000W, 220V	2 rack & larger
10	PB003	Dry element 2800W, 220V	1 rack models
	PB287	Dry element 2800W, 480V	1 rack, 480V model
	PB275	Dry element 3000W, 480V	2 rack & larger 480V
11	PB015	Safety thermostat (225°F)	All models
12	PB001	Wet element 2000W, 220V	All models
	PB276	Wet element 2000W, 480V	All 480V models
13	PB026A	Drain valve	All models
14	PB217	Check valve	4 rack & larger
15	PB110	Water pan w/dividers & holes	1 rack model
	PB111	Water pan w/dividers & holes	2 & 3 rack models
	PB111A	Water pan w/out holes	2 & 3 rack models
	PB112	Water pan	4 rack model
	PB112A	Water pan	6 & 8 rack model
16	U013	Strainer, watts No.27	All models
17	PB020	Water solenoid valve	All models
18	-----	Element cover	Specify model when ordering
19	-----	Water fill tube	Specify model when ordering



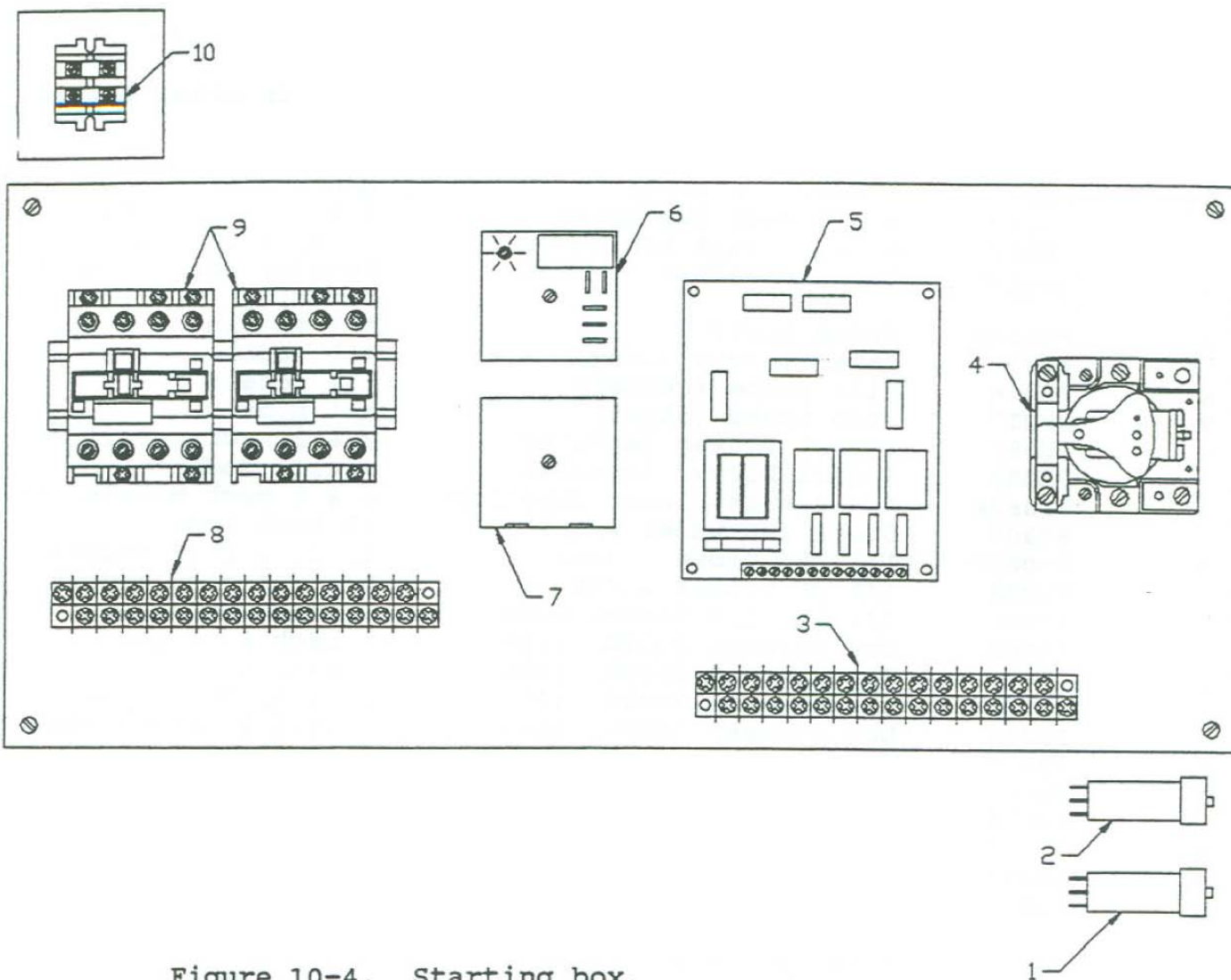


Figure 10-4. Starting box.

Parts list for figure 10-4. Starting box.

Item	Part number	Description	Used in other models
1	PB102	10A circuit breaker	All models
2	PB324	15A circuit breaker	4, 6, 8, 12 rack
3	PB034	8 place terminal	1, 2, 3 rack model
	U140	14 place terminal	4, 6, 8, 12 rack
4	PB064	Motor control relay	4, 6, 8 rack
5	PB280	After flush board	All models
6	GB008C	5 min timer - preheat delay	2 rack & larger
7	PB323	3 sec timer - humidity delay	All models
8	U140	14 place terminal	All models
9	U154	Dry & wet element contactor, 120V, 40A	All models
10	PB167A	Buchanan terminal	All models
	PB167	Buchanan terminal, side piece	All models

Note: For models manufactured prior to 1/27/95 refer to parts list on page 24 under "Parts not shown on drawings".

### SECTION XI - WIRING DIAGRAMS

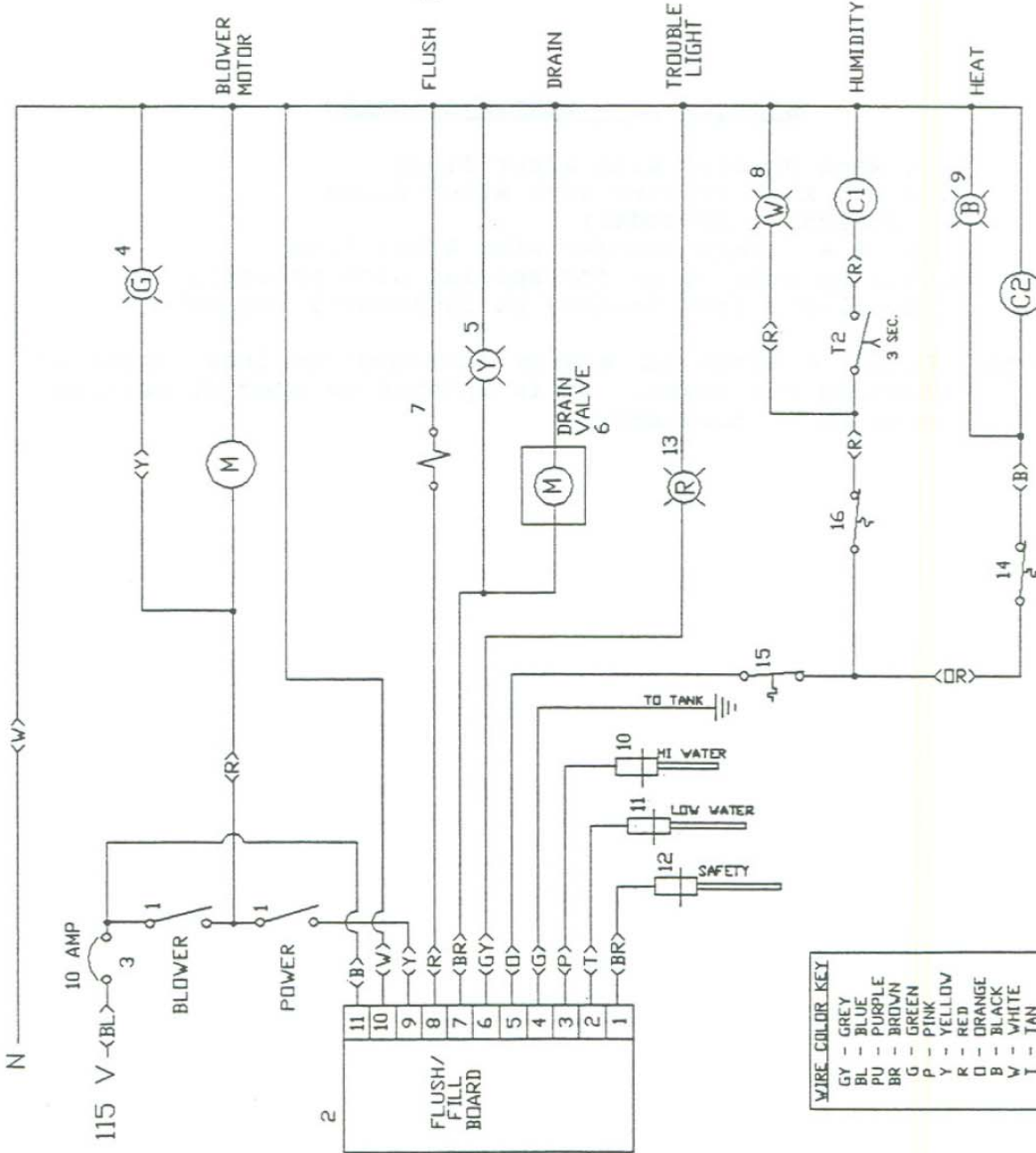
1. 1 Rack Proofer with After Flush
2. 2 & 3 Rack Proofer with After Flush  
(Including BF model)
3. 4, 6 & 8 Rack Proofer with After Flush
4. Wiring schematics for special size proofers  
available from factory at customer's request

Note: Wiring diagram is always attached to inner side of starting box cover. It is updated to special customer requests if necessary.

**LEGEND**

- 1-TWO SINGLE POLE SWITCHES 120V AC, 15A
- 2-FLUSH/FILL BOARD
- 3-CIRCUIT BREAKER 250V AC, 10A, 1 PHASE
- 4-GREEN LIGHT (POWER) 120V AC
- 5-YELLOW LIGHT (FLUSH/KLEAN) 120V AC
- 6-3/4" MOTORIZED DRAIN VALVE 120V AC
- 7-1/4" FLUSH/FILL VALVE 120V AC
- 8-WHITE LIGHT (HUMIDITY) 120V AC
- 9-BLUE LIGHT (HEAT) 120V AC
- 10-HI WATER PROBE 5 1/2" LONG
- 11-LO WATER PROBE 5 3/4" LONG
- 12- SAFETY PROBE 6" LONG
- 13-RED LIGHT (TROUBLE) 120V AC
- 14-MECHANICAL TEMP CONTROLLER
- 15-HI TEMP LIMITOR SET AT 225°F
- 16-MECHANICAL HUMIDITY CONTROL

- M-1/12 HP 115V, 2-1A BLOWER MOTOR
  - C1-HUMIDITY CONTACTOR 120V AC, 40A
  - C2-HEAT CONTACTOR 120V AC, 40A
  - T2-HUMIDISTAT DELAY TIMER (3 SEC)
- NOTE: LETTERS IN < > ARE WIRE COLORS.  
SEE COLOR KEY



**WIRE COLOR KEY**

GY	-	GREY
BL	-	BLUE
PU	-	PURPLE
BR	-	BROWN
G	-	GREEN
P	-	PINK
Y	-	YELLOW
R	-	RED
O	-	ORANGE
B	-	BLACK
W	-	WHITE
T	-	TAN

TOTAL LOAD  
4.8KW/23A

WET ELEMENTS  
1-2000 WATT  
ELEMENT

DRY ELEMENTS  
1-2800 WATT  
ELEMENT

**BAKER'S AID**  
74 BROADWAY, NEW YORK, NY 10013  
CIB 7-14-1986

TITLE: 1 RACK & 1 UNDERCOUNTER PROOFER  
V/Z AFTER FLUSH

DWC#-EPB-104  
V: 5/20/94 REV  
CHECKED BY: M. T. PARKER C

REV.	REVISIONS	DATE:	INIT:
C	CORRECTED WIRE COLOR TO TERMINAL #11 & C2 COIL, REVISED TOTAL LOAD AMPS TO 23A	6/14/95	M.F.
B	CHANGED ITEM'S 14,16 AND NOTE #15 (225° WAS 200°)	1/26/95	S.C.
A	REMOVED 3-FLUSH INTERLOCK RELAY	1/16/95	S.C.

BAKERS AID DIVISION  
ALL RIGHTS RESERVED

ALL INFORMATION ON THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF BAKER'S AID. NO REPRODUCTION OR DISTRIBUTION FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF BAKER'S AID.



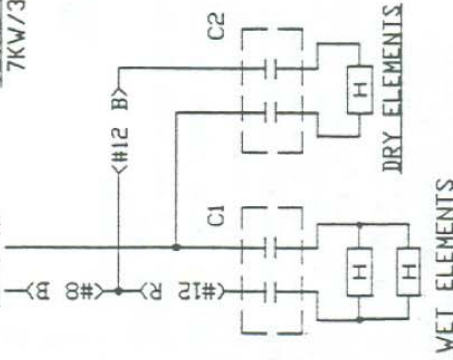
**LEGEND**

- 1-TWO SINGLE SWITCHES 120V AC, 15A
- 2-FLUSH/FILL BOARD
- 3-CIRCUIT BREAKER 1 PHASE, 250V AC, 10A
- 4-GREEN LIGHT (POWER) 120V AC
- 5-YELLOW LIGHT (FLUSH/KLEAN) 120V AC
- 6-3/4" MOTORIZED DRAIN VALVE 120V AC
- 7-1/4" FLUSH/FILL VALVE 120V AC
- 8-WHITE LIGHT (HUMIDITY) 120V AC
- 9-BLUE LIGHT (HEAT) 120V AC
- 10-HI WATER PROBE 5 1/2" LONG
- 11-LO WATER PROBE 5 3/4" LONG
- 12- SAFETY PROBE 6" LONG
- 13-RED LIGHT (TROUBLE) 120V AC
- 14-MECHANICAL TEMP CONTROLLER
- 15-HI TEMP LIMITER SET AT 225°F
- 16-MECHANICAL HUMIDITY CONTROL
- M-1/12 HP, 115V, 2.1A BLOWER MOTOR
- C1-HUMIDITY CONTACTOR 120V AC, 40A
- C2-HEAT CONTACTOR 120V AC, 40A
- T1-PRE-HEAT TIMER, 5-10 MIN, 120V AC (SET FOR 5 MIN)
- T2-HUMIDISTAT DELAY TIMER (3 SEC) 120V AC

NOTE: LETTERS IN < > ARE WIRE COLORS, SEE COLOR KEY

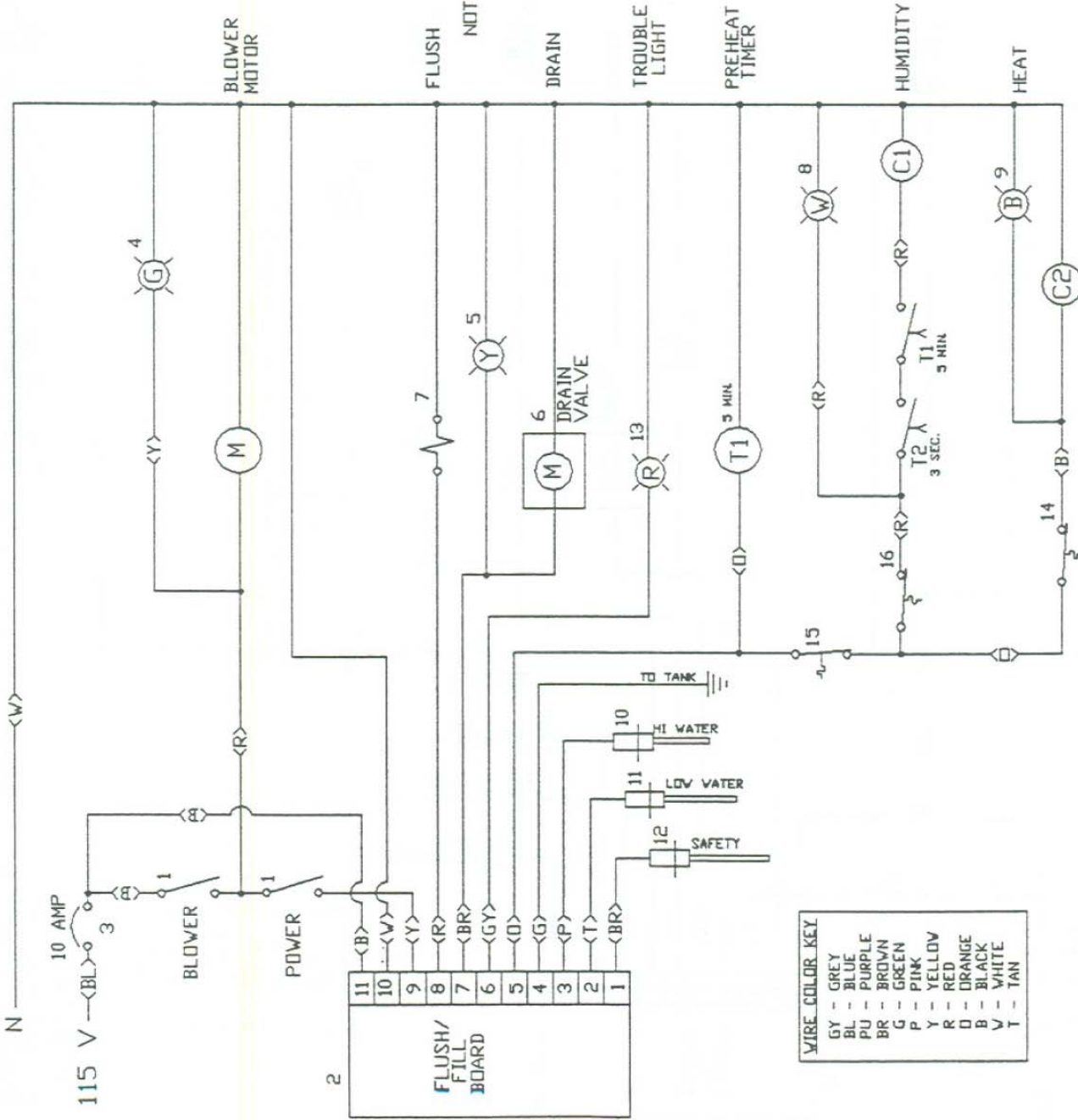
TOTAL LOAD  
7KW/34A

208V AC



WET ELEMENTS  
2-2000 WATT ELEMENT

DRY ELEMENTS  
1-3000 WATT ELEMENT



**WIRE COLOR KEY**

GY	-	GREY
BL	-	BLUE
PU	-	PURPLE
BR	-	BROWN
G	-	GREEN
P	-	PINK
Y	-	YELLOW
R	-	RED
D	-	DRANGE
B	-	BLACK
V	-	WHITE
T	-	TAN

BAKERS AID DIVISION  
ALL RIGHTS RESERVED

ALL INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BAKERS AID AND MAY NOT BE COPIED OR DISTRIBUTED FOR ANY PURPOSE WITHOUT PRIOR WRITTEN CONSENT OF BAKERS AID

**BAKERS AID**  
74 BROADWAY, NEW YORK, NY 10013

TITLE: 2 & 3 RACK PROOFER  
V/ AFTER FLUSH  
DWG#: EPB-1039 DATE: 5/20/94 REV: C  
CHECKED BY: R. VROOM, T. PARKER

REV:	REVISIONS	DATE:	INIT:
C	CORRECTED WIRE COLOR TO TERMINAL #11 & C2 COIL	6/8/95	MF.
B	CHANGED ITEMS #14, 16 AND NOTE #15 (225° WAS 200°)	1/26/95	S.C.
A	REMOVED C3-FLUSH INTERLOCK RELAY	1/16/95	S.C.

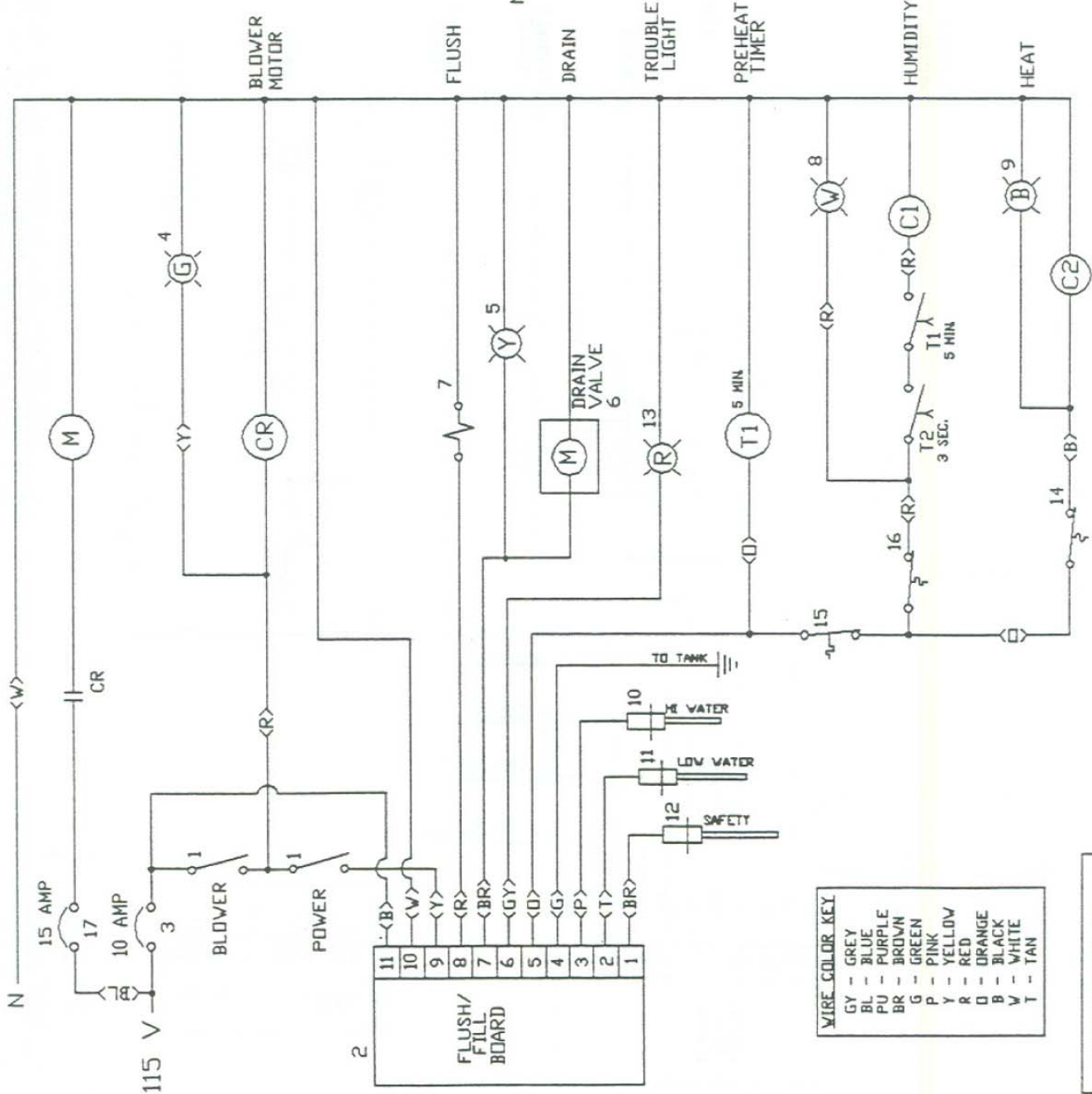
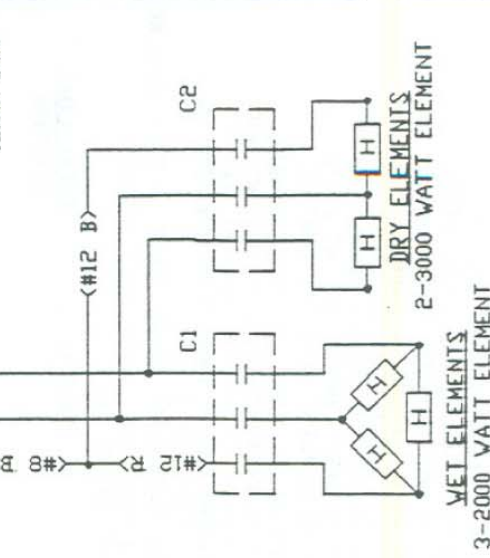
**LEGEND**

- 1-TWO SINGLE POLE SWITCHES, 120V AC, 15A
- 2-FLUSH/FILL BOARD
- 3-CIRCUIT BREAKER 250V AC, 10A, 1 PHASE
- 4-GREEN LIGHT (POWER) 120V AC
- 5-YELLOW LIGHT (FLUSH/KLEAN) 120V AC
- 6-3/4" MOTORIZED DRAIN VALVE 120V AC
- 7-1/4" FLUSH/FILL VALVE 120V AC
- 8-WHITE LIGHT (HUMIDITY) 120V AC
- 9-BLUE LIGHT (HEAT) 120V AC
- 10-HI WATER PROBE 5 1/2" LONG
- 11-LD WATER PROBE 5 3/4" LONG
- 12- SAFETY PROBE 6" LONG
- 13-RED LIGHT (TROUBLE) 120V AC
- 14-MECHANICAL TEMP CONTROLLER
- 15-HI TEMP LIMITOR SET AT 225°F
- 16-MECHANICAL HUMIDITY CONTROL
- 17-CIRCUIT BREAKER 250V AC, 15A, 1 PHASE

- M-1/2 HP, 115V, 7.8A BLOWER MOTOR
- C1-HUMIDITY CONTACTOR 120V AC, 40A
- C2-HEAT CONTACTOR 120V AC, 40A
- CR-MOTOR CONTROL RELAY 120V AC, 10A
- T1-PRE-HEAT TIMER 5-10 MIN, 120V AC (SET FOR 5 MIN)
- T2-HUMIDISTAT DELAY TIMER (3 SEC) 120V AC

NOTE: LETTERS IN < > ARE WIRE COLORS, SEE COLOR KEY

208V AC/3/60 Hz  
TOTAL LOAD  
12KW/34A



**WIRE COLOR KEY**

GY	-	GREY
BL	-	BLUE
PU	-	PURPLE
BR	-	BROWN
G	-	GREEN
P	-	PINK
Y	-	YELLOW
R	-	RED
O	-	ORANGE
B	-	BLACK
V	-	WHITE
T	-	TAN

BAKERS AID DIVISION  
ALL RIGHTS RESERVED  
ALL INFORMATION ON THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF BAKERS AID DIVISION AND IS NOT TO BE DISTRIBUTED FOR ANY PURPOSES WITHOUT OUR WRITTEN CONSENT  
D

**BAKERS AID**  
71 OGDON RD., BOSTON, MA 02128  
TEL: 617-252-1440

C	CORRECTED WIRE COLOR TO TERMINAL #11 & C2 COIL	6/8/95	M.F.
B	CHANGED ITEM'S 14,16 AND NOTE #15 (225° WAS 200°)	1/26/95	S.C.
A	REMOVE FLUSH INTERLOCK RELAY	1/16/95	S.C.
REV:		DATE:	INIT:
			M. T. PARKER