

**BLOOMFIELD INDUSTRIES**

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Verdi, NV 89439

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www.wellsbloomfield.com



*Model 2082  
Airpot Brewer  
with optional  
7759 Airpot*



*Model 2080  
Thermal Brewer  
with optional  
7754 Thermal Server*

**E-Max™**

**OWNERS MANUAL  
for  
E-Max™  
AIRPOT and THERMAL  
COFFEE BREWERS**

**MODELS**

<b>2080</b>	<b>2082</b>
<b>2086</b>	<b>2086EX</b>
<b>2088</b>	<b>2088EX</b>

**Includes:**

**Installation  
Operation  
Use & Care  
Servicing Instructions**

E-Max BREWERS are covered under  
U. S. Patents #5704275, 5862738, 6095031.  
Other U.S. Patents and Canadian Patents Pending

**PRINTED IN UNITED STATES OF AMERICA**

## WARRANTY STATEMENT

All electrical equipment manufactured by BLOOMFIELD INDUSTRIES is warranted against defects in materials and workmanship for a period of one year from the date of original installation or eighteen (18) months from the date of shipment from our factory, whichever comes first, and is for the benefit of the original purchaser, except that:

- a. airpots carry a 30 day parts warranty only.
- b. dispensers; i.e., tea and coffee carry a 90 days parts warranty only, excludes decanters.

THE FOREGOING OBLIGATION IS EXPRESSLY GIVEN IN LIEU OF ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXCLUDED.

BLOOMFIELD INDUSTRIES DIVISION / SPECIALTY EQUIPMENT MANUFACTURING CORPORATION SHALL NOT BE LIABLE FOR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES FROM ANY CAUSE WHATSOEVER.

This warranty is void if it is determined that upon inspection by an Authorized Service Agency that the equipment has been modified, misused, misapplied, improperly installed, or damaged in transit or by fire, flood or act of God.

It also does not apply if the serial nameplate has been removed or unauthorized service personnel perform service. The prices charged by Bloomfield Industries for its products are based upon the limitations in this warranty. Seller's obligation under this warranty is limited to the repair of defects without charge by a Bloomfield Industries Authorized Service Agency or one of its sub-agencies. This service will be provided on customer's premises for non-portable models. Portable models (a device with a cord and plug) must be taken or shipped to the closest Authorized Service Agency, transportation charges prepaid, for services.

In addition to restrictions contained in this warranty, specific limitations are shown below (Additional Warranty Exclusions). Bloomfield Industries Authorized Service Agencies are located in principal cities.

This warranty is valid in the United States and void elsewhere. Please consult your classified telephone directory or your food service equipment dealer; or, for information and other details concerning warranty, write to:

**Service Parts Department  
Bloomfield Industries  
P.O. Box 280  
Verdi, NV 89439**

**Phone: (775) 689-5700**

**Fax: (888) 492-2783**

## SERVICE POLICY AND PROCEDURE GUIDE ADDITIONAL WARRANTY EXCLUSIONS

1. Resetting of safety thermostats, circuit breakers, overload protectors, or fuse replacements unless warranted conditions are the cause.
2. All problems due to operation at voltages other than specified on equipment nameplates; conversion to correct voltage must be the customer's responsibility.
3. All problems due to electrical connections not made in accordance with electrical code requirements and wiring diagrams supplied with the equipment.
4. Replacement of items subject to normal wear, to include such items as knobs and light bulbs. Normal maintenance functions including adjustment of thermostats, microswitches, and replacement of fuses and indicating lights are not covered under warranty.
5. All problems due to inadequate water supply, such as fluctuating, or high or low water pressure.
6. All problems due to mineral/calcium deposits, or contamination from chlorides/chlorines. De-liming is considered a preventative maintenance function and is not covered by warranty.
7. Full use, care and maintenance instructions are supplied with each machine. Those miscellaneous adjustments noted are customer responsibility. Proper attention will prolong the life of the machine.
8. Travel mileage is limited to sixty (60) miles from an authorized Service Agency or one of its sub-agencies.
9. All labor shall be performed during normal working hours. Overtime premium shall be charged to the customer.
10. All genuine Bloomfield replacement parts are warranted for ninety (90) days from date of purchase on non-warranted equipment. **Any use of non-genuine Bloomfield parts completely voids any warranty.**
11. Installation, labor and job check-out are not considered warranty.
12. Charges incurred by delays, waiting time or operating restrictions that hinder the service technicians ability to perform services are not covered by warranty. This includes institutional and correctional facilities.

## SHIPPING DAMAGE CLAIMS PROCEDURE

**NOTE:** For your protection, please note that equipment in this shipment was carefully inspected and packaged by skilled personnel before leaving the factory. Upon acceptance of this shipment, the transportation company assumes full responsibility for its safe delivery.

### **IF SHIPMENT ARRIVES DAMAGED:**

1. **VISIBLE LOSS OR DAMAGE:** Be certain that any visible loss or damage is noted on the freight bill or express receipt, and that the note of loss or damage is signed by the delivery person.
2. **FILE CLAIM FOR DAMAGE IMMEDIATELY:** Regardless of the extent of the damage.

3. **CONCEALED LOSS OR DAMAGE:** if damage is unnoticed until the merchandise is unpacked, notify the transportation company or carrier immediately, and file "CONCEALED DAMAGE" claim with them. This must be done within fifteen (15) days from the date the delivery was made to you. Be sure to retain the container for inspection.

Bloomfield Industries cannot assume liability for damage or loss incurred in transit. We will, however, at your request, supply you with the necessary documents to support your claim.

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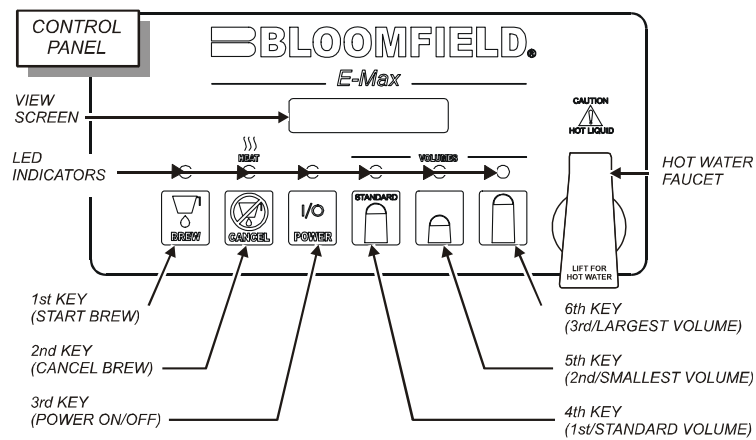
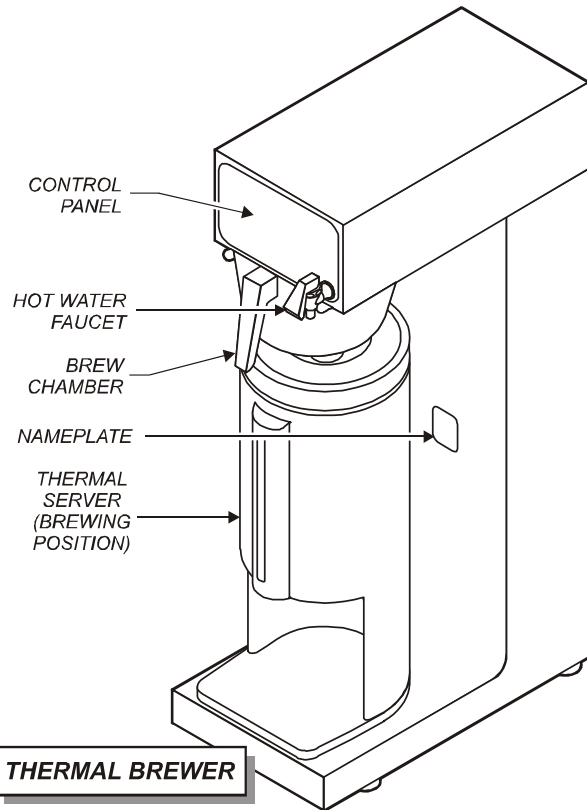
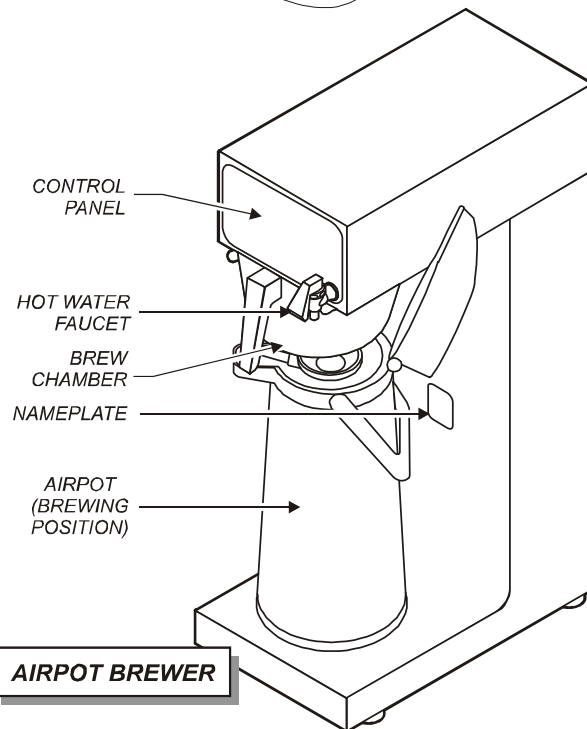
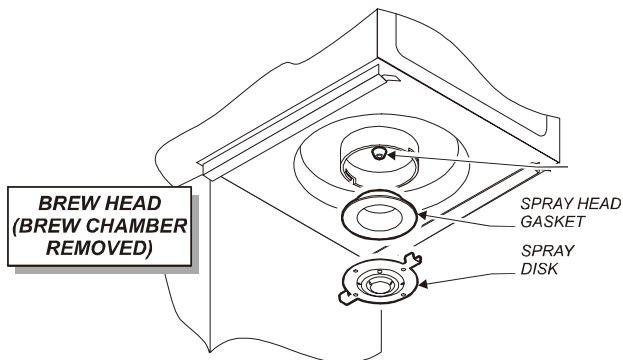
## SPECIFICATIONS

### ELECTRICAL SPECIFICATIONS

MODEL	VOLTS 50/60Hz 1ø	AMPS	WATTS	POWER SUPPLY REQUIREMENTS
2080 <i>Thermal</i> 2082 <i>Airpot (incl 2082SNB)</i>	120	15	1800 <sup>✶</sup>	15 Amp (NEMA 5-15R) L1, N plus Ground
2086 <i>Thermal</i> 2088 <i>Airpot</i>	120/240	13.3	3200	Hardwire to Circuit Breaker L1, L2, N plus Ground
2086EX 2088EX	220-240	13.3	3200	Hardwire to Circuit Breaker L1, L2, N plus Ground

<sup>✶</sup> 1500 watts in Canada

## FEATURES AND OPERATING CONTROLS



## PRECAUTIONS AND GENERAL INFORMATION



### **WARNING: Electric Shock Hazard**

All servicing requiring access to non-insulated components must be performed by qualified service personnel. Do not open any access panels which require the use of tools. Failure to heed this warning can result in electrical shock.



### **WARNING: Injury Hazard**

All installation procedures must be performed by qualified personnel with full knowledge of all applicable electrical and plumbing codes. Failure could result in property damage and personal injury.



### **WARNING Electric Shock Hazard**

Brewer must be properly grounded to prevent possible shock hazard. DO NOT assume a plumbing line will provide such a ground. Electrical shock will cause death or serious Injury.



### **WARNING: Burn Hazard**

This appliance dispenses very hot liquid. Serious bodily injury from scalding can occur from contact with dispensed liquids.

This appliance is intended for commercial use only.

This appliance is intended for use to brew beverage products for human consumption. No other use is recommended or authorized by the manufacturer or its agents.

This appliance is intended for use in commercial establishments, where all operators are familiar with the appliance use, limitations and associated hazards. Operating instructions and warnings must be read and understood by all operators and users.

Except as noted, this piece of equipment is made in the USA and has American sizes on hardware. Please note: Metric hardware is used to mount the inlet (Fill) solenoid. All metric conversions are approximate and can vary in size.

The following trouble shooting, component views and parts lists are included for general reference, and are intended for use by qualified service personnel.

This manual should be considered a permanent part of this appliance. The manual must remain with the appliance if it is sold or moved to another location.



### **CAUTION: Equipment Electrical Damage**

DO NOT plug in or energize this appliance until all Installation Instructions are read and followed. Damage to the Brewer will occur if these instructions are not followed.



### **CAUTION: Burn Hazard**

To avoid splashing or overflowing hot liquids, ALWAYS use an empty decanter before starting the brew cycle. Failure to comply can cause serious burns.



### **CAUTION: Burn Hazard**

After a brew cycle, brew basket contents are HOT. Remove the brew basket and dispose of used grounds with care. Failure to comply can cause serious burns.



### **CAUTION: Burn Hazard**

Exposed surfaces of the appliance, brew basket and decanter may be HOT to the touch, and can cause serious burns.

## INSTALLATION INSTRUCTIONS

### READ THIS CAREFULLY BEFORE STARTING THE INSTALLATION

#### IMPORTANT:

To enable the installer to make a quality installation and to minimize installation time, the following suggestions and tests should be done before the actual unit installation is started:



#### **CAUTION: Equipment Electrical Damage**

DO NOT plug in or energize this appliance until all Installation Instructions are read and followed. Damage to the Brewer will occur if these instructions are not followed.



#### **CAUTION: Unstable Equipment Hazard**

It is very important for safety and for proper operation that the brewer is level and stable when standing in its final operating position. Provided adjustable, non-skid legs must be installed at each corner of the unit. Failure to do so will result in movement of the brewer which can cause personal injury and/or damage to brewer.

**NOTE:** Water supply inlet line must meet certain minimum criteria to insure successful operation of the brewer. Bloomfield recommends 1/4" copper tubing for installation of less than 12 feet and 3/8" for more than 12 feet from a 1/2" water supply line.

#### UNPACKING & INITIAL INSPECTION

1. Unpack the unit. Inspect all components for completeness and condition. Ensure that all packing materials have been removed from the unit.
2. (See page 13) Verify that the Spray Head and Spray Head Gasket are properly installed.

#### LEVELING THE UNIT

1. Verify that an adjustable leg is installed at each corner of the brewer.
2. Set Brewer in its operating location.
3. Level the Brewer. A spirit level should be placed on the top of the unit, at the edge, as a guide when making level adjustments.
4. Level the unit from left to right and front to back by turning the adjustable feet. Be sure all four feet touch the counter to prevent tipping.

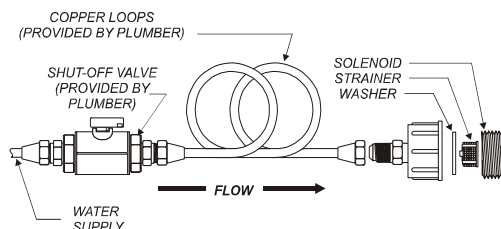
#### PLUMBER'S INSTALLATION INSTRUCTIONS

1. Brewer should be connected to a **POTABLE WATER, COLD WATER** line. Flush water line before connecting to brewer.
2. DO NOT use a saddle valve with a self-piercing tap for the water line connection. Such a tap can become restricted by waterline debris. For systems that must use a saddle tap, shut off the main water supply and drill a 3/16" (minimum) tap for the saddle connection, in order to insure an ample water supply. Remember to flush the line prior to installing the saddle.
3. The brewer must be installed on a water line with average pressure between 20 PSI and 90 PSI. If your water pressure exceeds 90 PSI at anytime, a pressure regulator must be installed in the water supply line to limit the pressure to not more than 90 PSI in order to avoid damage to filters, lines and solenoid.
4. A water shut-off valve should be installed on the incoming water line in a convenient location (Use a low restriction type valve, such as a 1/4-turn ball valve, to avoid loss of water flow thru the valve).

## INSTALLATION INSTRUCTIONS (continued)

For 'Filter-Ready' units, refer to filter installation and hook-up instructions packed with the brewer.

- NSF requires that the brewer be able to be moved for cleaning underneath. Loops of copper tubing will satisfy this requirement.



- In some areas, local codes require a backflow preventer (check valve) to be installed on the inlet water line. If a back flow preventer is used, you must install a **water hammer arrester** in the incoming line, between the backflow preventer and the brewer inlet, as far away from the brewer as space will allow. This will relieve the excessive back pressures that can cause faucet leaks and solenoid malfunctions.

### ELECTRICIAN'S INSTALLATION INSTRUCTIONS

REFER TO ELECTRICAL SPECIFICATIONS - Page 1

Check the nameplate to determine correct electrical service required for the Brewer to be installed.

**NOTE:** Models 2080 & 2082 require a 115 - 125 V 15A circuit (50/60 Hz, 2 wire plus earth ground, with NEMA 5-15R or 5-20R Receptacle)

Models 2086 & 2088 require a 120/240V 20A circuit (50/60 Hz, 2 hot legs / 1 neutral leg, plus earth ground). Circuit must be capable of 3500 Watts.

**NOTE:** This equipment must be installed to comply with applicable federal, state and local plumbing codes and ordinances.



### WARNING ELECTRIC SHOCK HAZARD:

Brewer must be properly grounded to prevent possible shock hazard. **DO NOT** assume a plumbing line will provide such a ground. Electrical shock will cause death or serious injury.

**IMPORTANT:** Do not attempt to override the automatic tank fill feature which requires that the tank must be full of water to start operations. Any attempt to override this feature will void the warranty.

#### IMPORTANT:


Before connecting to electricity, make sure the E-Max™ has been properly connected to the water supply.

#### IMPORTANT:

Supply power must match nameplate for voltage and phase. Connecting to the wrong voltage will damage the brewer or result in decreased performance. Such damage is not covered by warranty.

### AGENCY LISTING INFORMATION

This brewer is  and  listed under UL file E9253.

This brewer meets  Standard 4 only when installed, operated and maintained in accordance with the enclosed instructions.





## OPERATION

### OPERATING INSTRUCTIONS

#### IMPORTANT:

All E-Max™ brewers are tested and set at the factory. If programming adjustments are necessary, refer to the E-Max™ Programming Manual (p/n/73674).

**To over-ride the Brew Wait mode,** press and hold the BREW key for 3 seconds when the brewer is in Brew Wait mode (i.e. when brew light is flashing). The brew will proceed immediately regardless of water temperature. This feature should only be used when testing water volume, otherwise the brew will proceed with the water below the precise brew temperature.

**Note:** the following safety features have been incorporated to prevent multiple unattended brews:

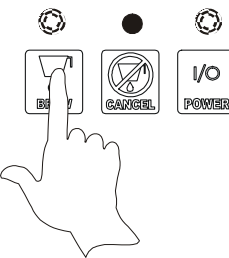
The brew key is disabled during a brew cycle. This minimizes the possibility of double brewing.

When the "Brew" light is on or flashing, repeated pressing of the BREW switch will be ignored, (there will be a beep each time it is pressed). A Brew will only be activated when the "Brew" light is off.

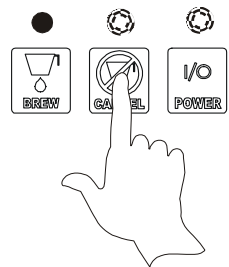
- 1. Energizing the Brewer:** When electricity has been connected to the unit, there will be a momentary flash of the power light. Turn the brewer on by pressing the POWER key. The brewer will start to fill the tank. With the proper water supply the tank should be filled in about 2½ minutes. Once filled, the heating element will come on until the proper tank temperature has been reached, (which will take about 20 minutes on 120-Volt models or about 12 minutes on 120/240 Volt models).



- 2. Brewing (Precise Temperature for Brewing™ — PTB™):** In the regular operating mode, the E-Max™ maintains the tank temperature within +/- 1°F of the brew temperature. Normally this will mean that a brew will be started as soon as the BREW key is pressed. However, there may be a slight delay if the BREW key is pressed immediately after a brew has been completed (notably on 120 volt models). If the tank temperature is below the brew temperature, the brew will be delayed, going into the "Brew Wait" mode, with the brew light flashing. As soon as the correct temperature is reached the brew will commence with the brew light on continuously during the brew. When the brew begins the main warming station will be turned on automatically (if it is not already on). During the brew cycle, if the BREW key is pressed, it will be ignored. Only when the brew is complete can another brew be started.



- 3. Brew Cancel:** To cancel a brew in progress, press the CANCEL KEY: two beeps will sound and the "Brew" light will go out. Water flowing to the brew chamber will be stopped immediately, but if there is already water in the brew chamber, it will take a few moments before this drips through as coffee.

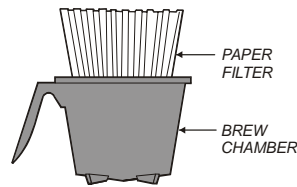


- 4. Normal Operation (Non Brewing):** When the unit is not brewing, the E-Max™ maintains the water temperature at the Precise Temperature for Brewing™ (PTB™). The heating element will cycle on and off automatically to maintain this temperature.
- 5. After Hours Mode:** If no brew is detected for a pre-selected length of time, the brewer will enter the After Hours mode. Temperature will be allowed to drop to save energy. Pressing the BREW KEY returns the brewer to normal operation.



## USER'S GUIDE

1. Remove the **brew chamber** from under the spray head. Place one (1) genuine Bloomfield paper filter into the brew chamber. Add your choice of pre-measured ground coffee. Shake the brew chamber gently to level the coffee. Slide the brew chamber back into place.

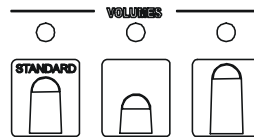


### **WARNING: Burn Hazard.**

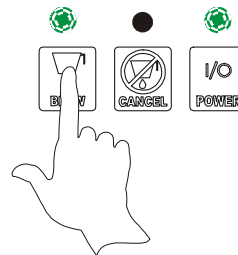
This appliance dispenses very hot liquid. Serious bodily injury from scalding can occur from contact with dispensed liquids.

2. Place an empty **airpot** or **thermal server** under the brew chamber.

3. If any volume other than "Standard" brew volume is required, press the appropriate volume key.



4. To begin the brew cycle, press BREW key. Hot water will start spraying over the coffee, and brewed coffee will start filling the server. When the coffee stops flowing from the brew chamber, the fresh coffee is ready to serve.



**NOTE:** Brewing will not begin until the Precise Temperature for Brewing™ has been reached. (See page 6)

5. At the end of the brew cycle, the view screen will read "Brew complete". After all dripping has stopped, remove the brew chamber from the brewer. Discard the used paper filter and grounds.

**Brew complete**



### **CAUTION: Burn Hazard**

To avoid splashing or overflowing hot liquids, ALWAYS use an empty airpot or thermal server before starting the brew cycle. Failure to comply can cause serious burns.



### **CAUTION: Burn Hazard**

After a brew cycle, brew chamber contents are HOT. Remove the brew chamber and dispose of used filter and grounds with care. Failure to comply can cause serious burns.



### **CAUTION: Burn Hazard**

Exposed surfaces of the appliance, as well as brew chamber may be HOT to the touch, and can cause serious burns.

6. The brewer is now be ready to begin another brewing cycle.

## OPERATION (continued)

### PROGRAMMING FEATURES AND OPTIONS

1. **View Water Temperature in Tank:** To view the water temperature on the screen, the E-Max™ brewer must be ON, and not brewing or in the filling mode. Press and hold the 4th key, and depress the 6th key. The actual water temperature will be displayed for 3 seconds.
2. **Daily Brew Count:** The E-Max™ maintains a count of the number of completed brews for a 7-day period. To access the count, turn the brewer OFF. In the OFF mode, press and hold the CANCEL key for 3 seconds. The current day and brew count will be displayed. Depress the ON/OFF key repeatedly to view each preceding day. When all 7 days have been displayed a 7-day total will be displayed. If you wish to exit the daily brew count before viewing all of the days, press CANCEL key.
3. **ON/OFF – Non Automatic Timer:** To turn the brewer OFF, press the ON/OFF switch: 2 beeps will be heard and the brewer will be turned OFF, indicated by all lights being off. To turn the brewer ON, press the ON/OFF switch: 2 beeps will sound, all lights will flash once, then the “Power” light will remain on, (the “Heat” light may come on if water temperature is too low).
4. **ON/OFF – Automatic Timer Feature:** The factory programmed E-Max™ has the automatic timer turned off. To set the automatic timer, refer to the *E-Max™ Programming Manual*, “Time Functions” Menu. If the Automatic Timer feature is programmed off, the brewer can be turned on and off by depressing the ON/OFF switch, as noted above.
  - \* When the Automatic Timer feature is programmed ON, the E-Max will turn on and off automatically, at a programmed time, Monday to Friday; with a separate on and off programmed time schedule for Saturday and Sunday.
  - \* Temporarily Overriding the Automatic ON/OFF function. While in the automatic timed OFF mode the brewer can be started by depressing the ON/OFF switch. The brewer will remain ON until the automatic programmed off time, when it will turn OFF and resume normal automatic timed functioning. Similarly, if turned OFF during the automatic timed ON mode the brewer will remain OFF until the next programmed on time, when it will turn on and resume normal automatic timed functioning.
5. **Automatic Start-Up in Previous Mode:** If the E-Max™ automatic timer is OFF (the factory setting) and power is disconnected, the brewer will start up when power is restored, in the mode it had been in prior to the power disconnection. If the E-Max™ has the timer setting ON and power is disconnected, the brewer will start up in the mode that it should be in at the time the power is restored.
6. **Viewing Programmed Brew Volume:** The E-Max™ can have up to 4 different brew volumes. When a volume other than the standard, or first brew volume, is selected, the E-Max™ will complete that volume and then automatically reset to the standard, or first brew volume. With the brewer ON, press and hold the CANCEL key. The 1st, or standard, volume will be displayed for 3 seconds (i.e. **Volume #1 64 oz.**), and then the day and time will be displayed.
7. **Changing Brew Volume:** As outlined above, display the current brew volume and, before the display changes to day and time, depress the CANCEL key momentarily, (not for 3 seconds). The next programmed brew volume (e.g. **Volume#2 32 oz.**) will be displayed on the LCD for 3 seconds, after which the display will return to the day and time. Repeatedly press CANCEL while programmed volumes are shown to view all brew volumes. (If there is only one brew volume programmed, only that volume will be displayed.) The last brew volume displayed, before the LCD returns to the day and time, is the brew volume that the E-Max™ will brew the next time the BREW switch is depressed. When a brew volume other than the 1st brew volume is selected, the E-Max™ will complete the brew then return to the 1st or standard brew volume automatically.

### 8. Clock

- A. **Time – Battery Backup.** The E-Max™ has a battery backup system which will maintain the proper time during power failures, or when the brewer is unplugged (even for very prolonged periods of time). Normally there will not be a need to set the time except for Daylight Saving Time changes, or moving the brewer to different time zones.
- B. **Changing Day and Time:** To change time, turn the E-Max™ off. Press the 2nd key twice followed by the 1st key twice to access the time change mode, (i.e. press CANCEL, CANCEL, BREW, BREW). In the time change mode the screen will read “Day:” followed by the current day setting. Use the 6th key to advance the day, or the 5th key to reverse. When day has been properly set, press the 3rd key. The screen will now read “Time:” with the set time on the screen, the hour and am or pm flashing. Use the 5th key to go back or the 6th key to advance the hour, making sure that the am or pm is correct. When the hour and am/pm is correctly set, press the 3rd key, and the screen will read “Time:” with the set time on the screen, minutes flashing. As previously use the 5th or 6th keys to adjust the minutes, and press the 3rd key when complete. The E-Max will return to the off mode. (Changing time can also be done in the regular programming mode. Consult the *E-Max™ Programming Manual*)
- C. **After Hours™:** Consult the *E-Max™ Programming Manual* to set the After Hours™ mode. The factory programming has the After Hours™ mode turned OFF. The After Hours™ can be programmed to come on from 1 to 6 hours after the last brew. When the E-Max™ goes into the After Hours™ mode, any warmer plates left on will be turned off (on decanter brewers), the water in the tank will be allowed to drop from the normal brewing temperature and will re heat less frequently – this feature saves energy and extend component life. *While in the After Hours mode, the power light will flash continuously.* When the BREW switch is pressed the E-Max™ automatically reverts back to normal operation, heating the water to the Precise Temperature for Brewing™ (PTB™), before starting the brew. (The power light will be on continuously and the Brew light will flash until the correct water temperature is reached.)

- 9. **Countdown Quality Timer™:** Refers to coffee warmers.  
Not applicable to Airpot and Thermal brewers.

- 10. **Pulse or Pre-Infusion Volume Options:** To set these features, refer to *E-Max™ Programming Manual*, Brew Settings Menu. If a particular brew volume has utilized the pulse or pre-infusion option, that volume will be displayed with an asterisk (\*) after the volume. As an example “**Volume#2 64oz\***” would indicate that the second programmed brew volume has utilized the pulse or pre-infusion program options.

- 11. **Keypadlock™:** This feature is OFF in the standard factory settings. To set the feature refer to *E-Max™ Programming Manual*, Machine Settings Menu. If the Keypadlock™ feature is activated, there will be no response by the brewer when the keys are depressed (except for the beep after a key is depressed). To temporarily “unlock” the keypad, press and hold the CANCEL key for 6 seconds. A beep will be heard indicating the keypad is now “unlocked”, — a brew can be initiated, warmer plates turned on or off, etc. The keypad will remain unlocked until the brew is completed, then automatically return to keypadlock™ mode. If a brew is not initiated 60 seconds after “unlocking”, the system will time out and return to the “locked” position.

## OPERATION (continued)

**12. View Filter Statistics:** To view filter statistics, turn the brewer off. Press and hold the 1st key (Brew), and depress the 3rd (ON/OFF) key. Total water volume will be displayed (TotalVol.). Press the 3rd key to view the Filter Life (FltrLife:). Press the 3rd key to view the percentage of the filter that has been used. (If the filter option is used, the filter life volume needs to be entered in the program – see *E-Max™ Programming Manual*, Service & Counters Menu.)

**13. Diagnostic Messages – Programmed Safety Features:** When the E-Max senses a problem, it will automatically turn off all elements and valves, flash lights, display the message “**Call For Service**” and display one of the messages below. (Additionally: a service phone number may appear if it has been programmed into the system.)

\*To reset the brewer it can be re-energized (or press and hold CANCEL for 3 seconds for all faults except the Valve Fault, which must be reset by re-energizing). The brewer will try to re-start, but if the same problem persists, the appropriate error message will appear again. Consult the Trouble Shooting section to determine how to solve the problem.

**A. “Probe/Heater Error”:** Overheating Detection (1): If the heating element is on for 5 minutes and the temperature does not change by +2°F (1°C) in the five minute period, the unit will go into the Over Temperature Mode *with all lights flashing*. When in this mode the brewer turns off the heating elements, the solenoid valves are turned off; the switches disabled; (and all lights flashing continuously). The LCD display will read “**Probe/Heater Error**”, followed by the message “**Call for Service**”, and then the service phone number (if it has been entered into memory). To reset press and hold CANCEL for 3 seconds, or re-energize the brewer. (Possible causes of problem: high limit needs to be re-set; defective high limit, element, triac, water level probe or control board.)

**B. “Overheat Error”:** Overheating Detection (2): If the E-Max™ senses a temperature over the Maximum Temperature set in the program (factory set at 208°F or 98°C) it will go into the over temperature mode as above with all lights flashing, except the LCD will read “**overheat error**”, and “**Call for Service**”. To reset press and hold CANCEL for 3 seconds, or re-energize the brewer. (Possible cause of problem is a defective triac, temperature probe or related wiring and connections.)

**C. “No Water Sensed” — Time-Out — Inlet Valve:** When filling for the first time, the inlet valve will remain open for 4¼ minutes, (the screen will read “**filling...**”). If water is not detected at the end of this time the E-Max will shut down with the message “**no water sensed**”. The valves and all elements are turned off, and the Brew and Power light flash alternately with the Heat light, until the brewer is reset. To reset press and hold CANCEL for 3 seconds, or re-energize the brewer. (Possible causes of the problem are: no incoming water; slow flow of incoming water (i.e. less than 45 oz/minute); sensor not reading (check for placement, connections or lime scale).)

**D. “No Water Sensed” — Time-Out – Brew Valve:** During the brew the inlet solenoid valve cycles on intermittently to maintain the proper level in the tank. If the valve is open for 60 seconds without water being detected at the proper level, the brewer will go into the same error mode as above (“**no water sensed**”). To reset press and hold CANCEL for 3 seconds, or re-energize the brewer. (Possible causes of the problem are: no incoming water; slow flow of incoming water, sensor not reading, etc.).

**E. Keyswitch Locked:** If a key switch is depressed for 10 seconds this error message will occur. Lights will flash alternately and the brewer will turn off all valves and elements. Press and hold the CANCEL key for 3 seconds to reset the brewer (or re-energize the brewer). If the problem re-occurs this indicates a defective switch on the key pad.

**F. “Valve Fault”- Faulty Valve Detection:** When an electric or switching problem is detected with either the inlet or brew valve the brewer turns off all elements and valves and displays “**valve fault...**”. All of the lights will be turned on. Before re-setting the brewer the valves must be checked to determine the problem. The brewer must be re-energized to re-set, (pressing CANCEL for 3 seconds will not reset a valve fault).

## CLEANING INSTRUCTIONS

### PROCEDURE: Clean Coffee Brewer

**PRECAUTIONS:** Disconnect brewer from electric power.  
Allow brewer to cool.

**FREQUENCY:** Daily

**TOOLS:** Mild Detergent, Clean Soft Cloth or Sponge  
Bristle Brush

1. Disconnect brewer from electric power.  
Allow brewer to cool before cleaning.
2. Remove airpot or thermal server.
3. Remove and empty brew chamber.
4. Remove the spray disk from the brew head:  
Press up on the spray disk ears, then turn the disk to the left to unlatch. Remove the gasket from inside the brew head.
5. Wipe inside of brew head and area around the brew head with a soft clean cloth or sponge moistened with clean water.
6. Wash the spray disk in a sink using warm water and a mild detergent. A bristle brush may be used to clear clogged spray holes. Rinse the spray disk with clean water and allow to air dry.
7. Wash the brew chamber in a sink using warm water and a mild detergent. A bristle brush may be used to clean the inside. Rinse with clean water and allow to air dry.
8. Reinstall the gasket **INSIDE** the brew head, then reinstall the spray disk.
9. Reinstall the brew chamber.
10. **IMPORTANT:** Do NOT submerge airpots or thermal servers in water.  
Wash airpots and thermal servers:
  - a. Fill with warm soapy water
  - b. Shake gently, then empty water
  - c. Rinse thoroughly
  - d. Wipe exterior with a clean soft cloth dampened with clean water.

Procedure is complete



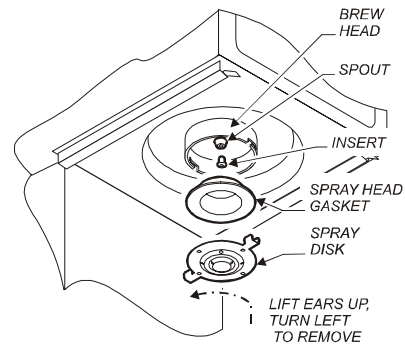
#### **CAUTION:** Burn Hazard

Brewing and serving temperatures of coffee are extremely hot.  
Hot coffee will cause serious skin burns.



#### **CAUTION:** Electric Shock Hazard

Do not submerge or immerse brewer in water. Do not pour or splash water into or over air vents, control panel or warmer plates.



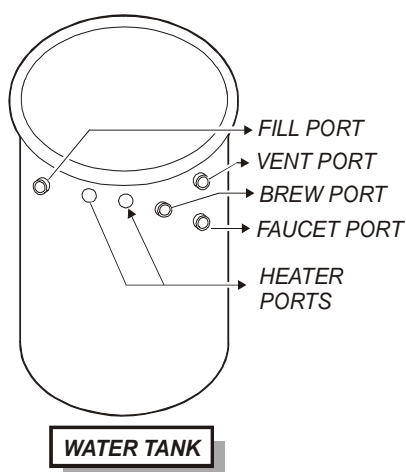
#### **IMPORTANT:**

DO NOT use steel wool, sharp objects, or caustic, abrasive or chlorinated cleansers to clean the brewer or airpots or thermal servers.

**IMPORTANT:** DO NOT submerge airpots or thermal servers in water.

## SERVICING INSTRUCTIONS — PLUMBING

### FUNCTION



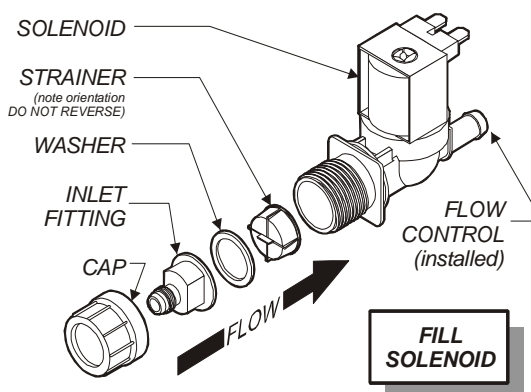
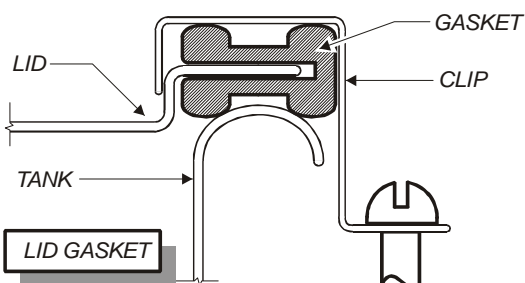
1. Water enters at the inlet fitting of the fill solenoid (32). The solenoid admits water via a command from the controller.

**NOTE:** The solenoid has an internal strainer. To clean the strainer: Shut off water supply. Unscrew the plastic cap protruding from the rear of the brewer. Remove the cap, inlet fitting and washer. With pliers, grasp the bar of the strainer and pull straight out. Wash any debris from the strainer. Note orientation - DO NOT reverse strainer. Reassemble and reinstall. Turn water supply back on.

2. Water enters the tank (2) thru the fill tube (16). Water is heated in the tank by the heating element (15).
3. The tank lid (9) is sealed around the edge with a gasket (6), and is secured by 3 clips (10).
4. Heated water is dispensed to the brew head through the brew tube (14), brew solenoid (18), and spout of the brew fitting (19). The brew solenoid is energized during the brew cycle by the controller.

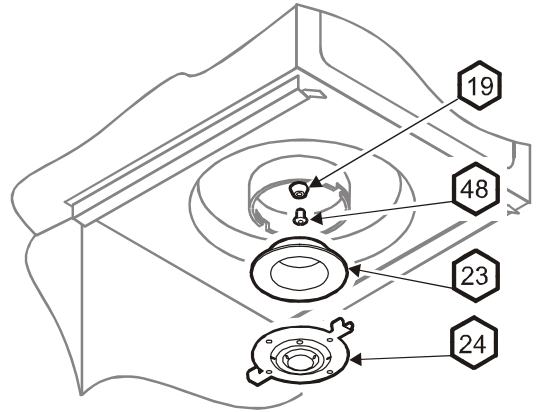
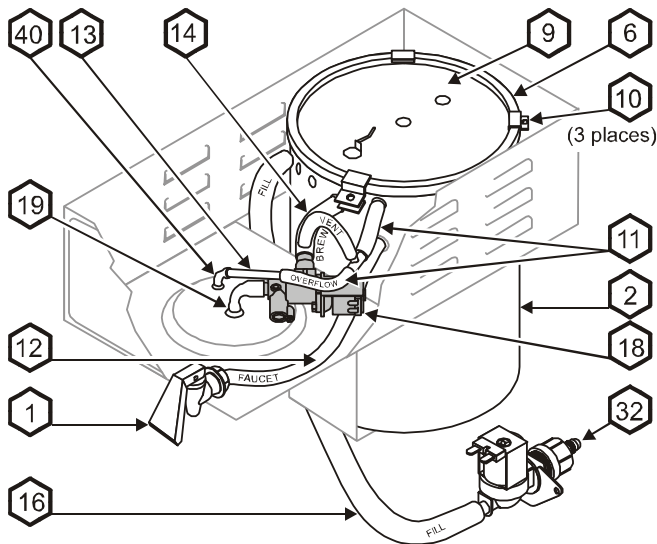
**NOTE:** The flow rate of the brew solenoid is factory set. DO NOT adjust.

5. Hot water is sprayed over the coffee grounds by the spray disc (24), which is sealed to the brew head by a gasket (23).
6. The tank is vented through the vent elbow fitting (40) and vent tubes (11 & 13).
7. Water for the hot water faucet (1) is supplied from the tank through the faucet supply tube (12).





## SERVICING INSTRUCTIONS — PLUMBING (continued)



### E-MAX™ PLUMBING COMPONENTS

ITEM	DESCRIPTION	PART NO.	USED ON
1	FAUCET, HOT WATER	8783-1	ALL
2	ASSEMBLY, WATER TANK (120V) ASSEMBLY, WATER TANK (240V) ASSEMBLY, WATER TANK (DUAL VOLTAGE)	83500 83753 84010	2012, 2072 2016, 2074 2015, 2075
6	GASKET, TANK LID	83499	ALL
9	TANK LID	83504	ALL
10	RETAINING CLIP, TANK LID	83506	ALL
11	HOSE, OVERFLOW (2 pc SILICONE 4.5" LONG)	86014	ALL
12	HOSE, FAUCET SUPPLY (SILICONE, 10" LONG)	83538	ALL
13	TUBE, VENT (METAL, 2.3" LONG)	83384	ALL
14	TUBE, BREW SUPPLY VENTED ASSEMBLY	86013	ALL
16	TUBE, FILL (SILICONE,	83540	ALL
18	SOLENOID, BREW (DUMP)	83388	ALL
19	ELBOW, BREW	83152	ALL
23	GASKET, SPRAY HEAD	82215	ALL
24	SPRAY DISK	82727	ALL
32	SOLENOID, FILL	83612	ALL
40	ELBOW, VENT	8043-11	ALL
48	INSERT, SPRAY HEAD	83571	ALL



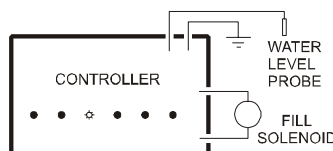
## SERVICING INSTRUCTIONS - ELECTRICAL



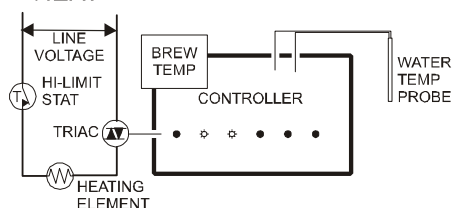
### WARNING: RISK OF INJURY

The following servicing sections are for operator reference only. All servicing and/or repairs must be performed by a qualified technician

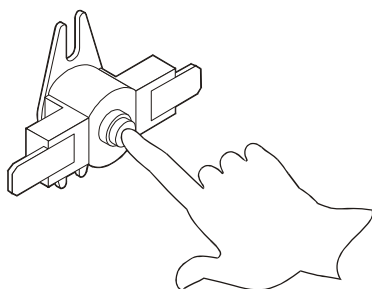
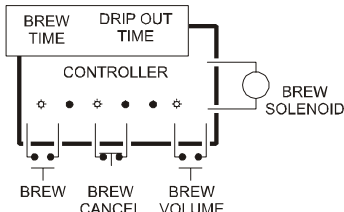
#### FILL



#### HEAT



#### BREW

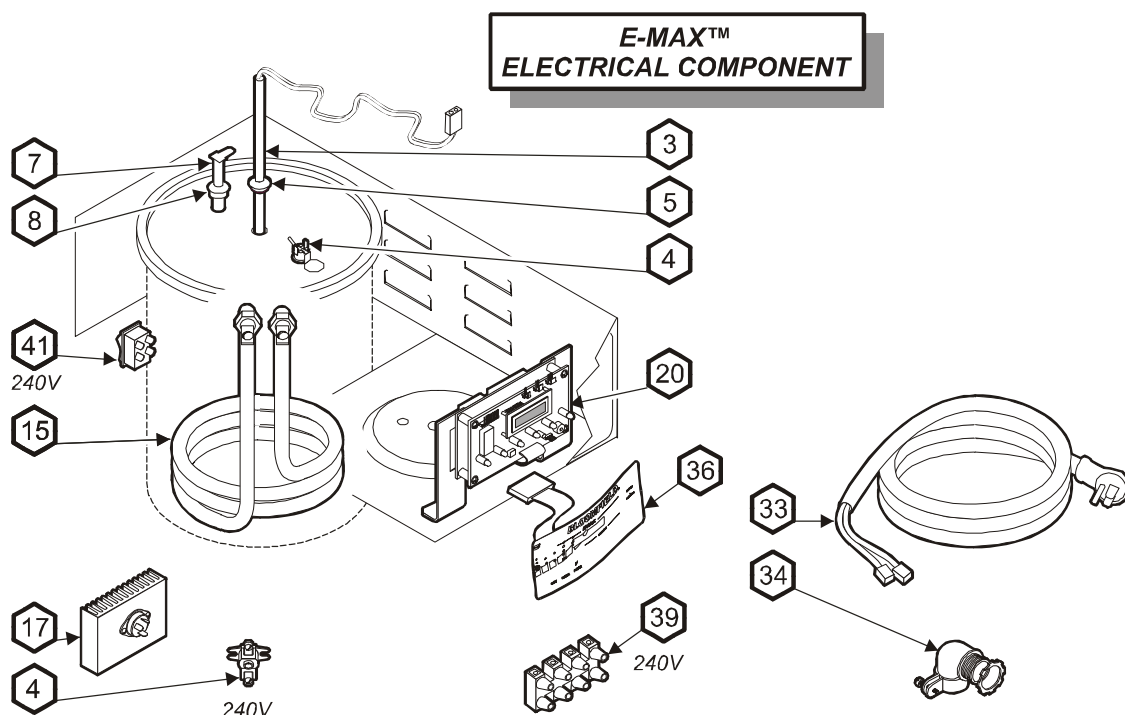


*Reset Hi-Limit Thermostat  
240 V & Dual Voltage Units*

### FUNCTION

1. Pressing the POWER key energizes the unit. The POWER LED will glow whenever the unit is ON.
  2. Automatic fill is accomplished via a FILL SOLENOID (32) and a WATER LEVEL PROBE (7). The probe senses ground through the water in the tank. When the water level falls below the probe and ground is no longer sensed, the CONTROLLER (20) energizes the fill solenoid (32) until the water level again reaches the water level probe.
  3. Pressing any VOLUME key selects that pre-programmed volume.
  4. Pressing the BREW key begins the brew cycle. Pressing the CANCEL key at any time during the brew cycle terminates the brew. The BREW SOLENOID (18) is energized by the CONTROLLER (20) for a time determined by the BREW TIME setting. A second brew can be started only after the brew time plus the DRIP OUT time has elapsed.
  5. Brew water temperature is controlled via a WATER TEMPERATURE SENSOR (3) and a HEATING ELEMENT (15) controlled by a TRIAC (17) electronic switch. The element is energized according to the sensed water temperature and the BREW TEMP setting.
- An over-temperature condition will trip the HI-LIMIT THERMOSTAT (4), de-energizing the heating element. Note: On 120 volt units, hi-limit will automatically reset once the tank has cooled by approximately 30°F. On 240 volt units and dual voltage units, the hi-limit must be manually reset by pressing the red button after the unit cools.
6. The unit will revert to the energy-saver mode some time after the last brew, based on AFTER HOURS TIME setting.

## SERVICING INSTRUCTIONS - ELECTRICAL (continued)



ITEM	DESCRIPTION	PART NO.	USED ON
3	PROBE, TEMPERATURE	83480	ALL
4	THERMOSTAT, HI-LIMIT SAFETY (120V) THERMOSTAT, HI-LIMIT SAFETY (240V)	83949 8552-50	2080, 2082 ALL except 2080, 2082
5	GROMMET, TEMP PROBE	84063	ALL
7	SENSOR, WATER LEVEL	83521	ALL
8	SLEEVE, WATER LEVEL SENSOR	83532	ALL
15	ELEMENT, HEATER 1500W (120V) ELEMENT, HEATER 1200W (120V) ELEMENT, HEATER 3200 W (240V) ELEMENT, HEATER 1500/3200W ELEMENT, HEATER 1800/3200W	83518 83747 83748 84008 84009	2080, 2082 2080CA, 2082CA 2086, 2088 2083CA, 2085CA 2083, 2085
17	ASSEMBLY, TRIAC & HEATSINK	83475	ALL
20	CONTROLLER, 120V CONTROLLER, 240V CONTROLLER, CUSTOM PROGRAM	83481 83826 86292	ALL (except -EX, -SNB) 2086EX, 2088EX 2082SNB
33	POWER CORD (120V)	6407-15	2080, 2082
34	STRAIN RELIEF, POWER CORD	51218	2080, 2082
36	OVERLAY DECAL, KEYPAD	85018	ALL
39	TERMINAL STRIP, 4-POLE	8552-18	2086, 2088
41	SWITCH ROCKER ON-OFF	82936	2086, 2088

## SERVICING INSTRUCTIONS — DE-LIMING HEATER TANK



### CAUTION - CHEMICAL BURN HAZARD

De-liming chemicals are caustic. Wear appropriate protective gloves and goggles during this procedure.



### CAUTION - CHEMICAL BURN HAZARD

Never siphon de-liming chemicals or solutions by mouth. This operation must only be performed by qualified and experienced service personnel.

**IMPORTANT:** DO NOT spill, splash or pour water or de-liming solution into or over any internal component other than the inside of the water tank.

**IMPORTANT:** DO NOT allow any internal components to come into contact with the de-liming solution. Take care to keep all internal components dry.

**NOTE:** Repeat steps 4 thru 7 as required to remove all scale and lime build-up.

**NOTE:** Normally, silicone hoses do not need to be de-limed. Should de-liming hoses become necessary, Bloomfield Industries recommends replacing the hoses.

1. Disconnect brewer from the electrical supply. Turn off the water supply and disconnect water supply from the brewer inlet fitting.
2. Remove the top panel or top warmer section to gain access to internal components.
3. Disconnect water level sensor and water temperature sensor from the controller. On 120V units, slip hi-limit thermostat from under its holder clip. Disassemble the three lid clips and lift the lid off of the water tank. Store lid assembly in a safe location.
4. Mix de-liming solution according to the manufacturer's directions. Add the de-liming solution to the water tank. Set lid assembly back on tank. Allow to sit for 30 minutes, or as directed by the manufacturer.
5. At end of soaking period, remove lid assembly from tank. Thoroughly rinse interior components of lid assembly with clear water. Wipe temperature sensor and water level sensor with a clean, soft cloth. Store lid assembly in a safe location.
6. Using a stiff bristle brush, scrub the coils of the heating element and the interior surfaces of the water tank.
7. Siphon the used solution and loose lime/scale into an appropriate container. Dispose of the used solution as required by local ordinances.  
**CAUTION:** Never siphon by mouth. Serious injury can result!
8. Fill the water tank with clean tap water. Rinse thoroughly, then siphon the rinse water into an appropriate container for disposal. Again, take care to keep all internal components dry.
9. Reassemble the tank lid to the water tank. Make sure the gasket is properly attached to the lid before assembling the lid clips. Re-connect the water level and temperature probes, then reinstall the hi-limit thermostat (if removed). Verify that all internal components are dry, then reinstall the top panel.
10. Reconnect brewer to water and electrical. Run and discard at least three full decanters from the faucet. Install the brew chamber without filter paper or grounds, then run and discard at least three full decanters as normal brew.
11. Brewer is ready to use.

## TROUBLESHOOTING SUGGESTIONS

If the E-Max™ goes into the error diagnostic mode as outlined below, it will likely be necessary to reset the brewer in order to test individual components. Note the reset procedure below:

- \* For the first four error modes, press and hold CANCEL for 3 seconds, or RE-ENERGIZE the brewer by disconnecting from electric power for 5 seconds, then reconnecting.
- \* From "VALVE FAULT", the brewer must be RE-ENERGIZED! Using the CANCEL button will not reset the brewer from "Valve Fault".

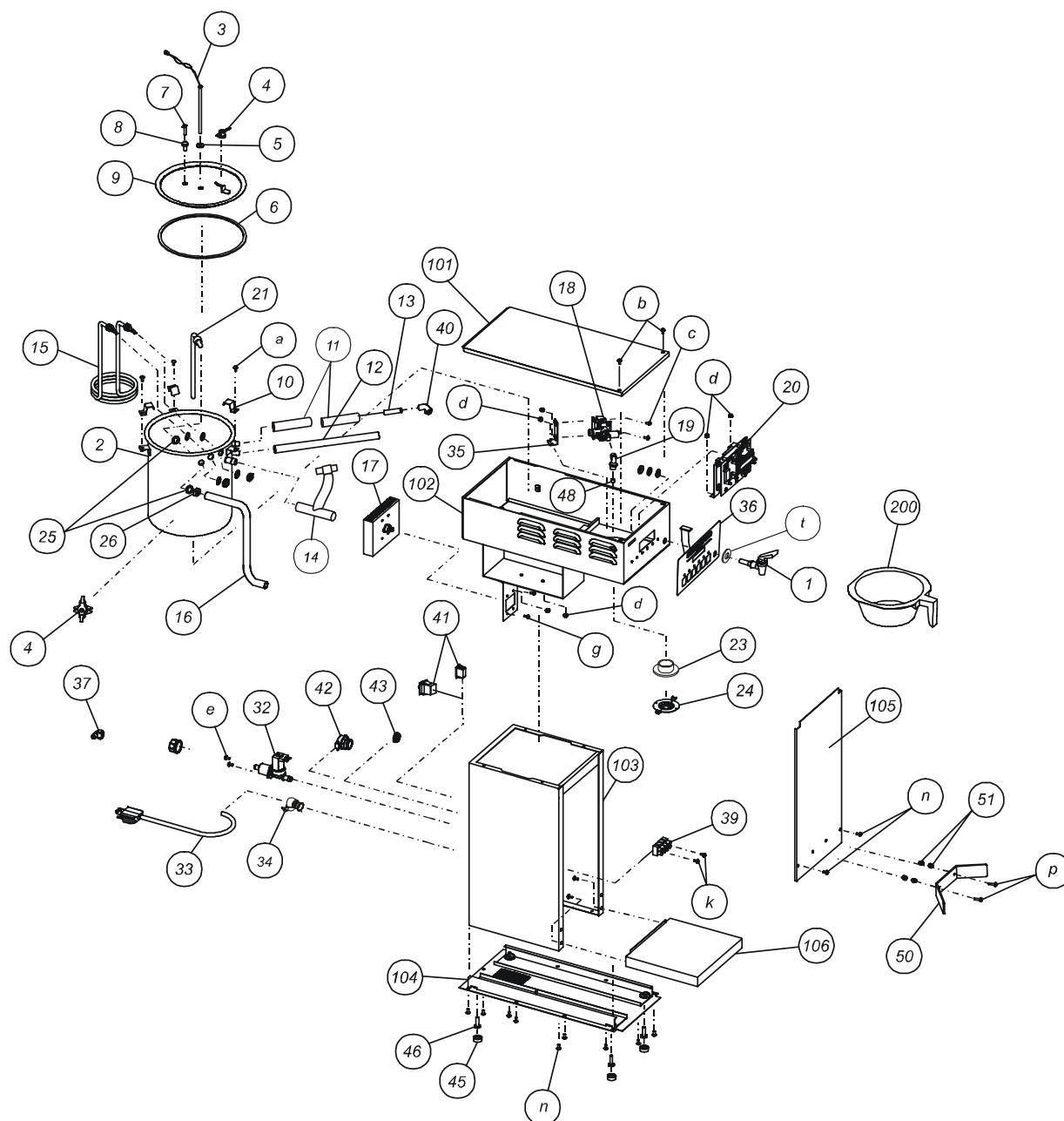
The Test Program will also assist in isolating and testing specific components. As an example to test the three main components in the heater system, go to the test program and proceed to turn the "heater on". Use a meter or test light to determine if power is getting to and from: the triac, the high limit and the element.

ERROR MESSAGE	CAUSE	SUGGESTIONS FOR REMEDIAL ACTION
1. "Probe/Heater" Error RESET by holding CANCEL switch for 3 seconds	Controller has turned heating element on for 5 minutes without sensing a +2°F change in water temperature.	<ol style="list-style-type: none"> <li>Temp Probe may not be connected properly, or may be defective. CHECK &amp; CORRECT. To test probe, go to Test Program and view probe value. A value of over 155 indicates a defective probe; a value of under 15 indicates a bad connection of the probe to the board. With an ohmmeter measure resistance of probe. At 212°F, resistance is approx. 2,000Ω. If less than 1800Ω at room temperature, probe is defective.</li> <li>May be boiling due to high altitude (boiling point below Brew Temp.) or Triac has failed ON and hi-limit has interrupted power to heating element. REDUCE BREW TEMP. CHECK TRIAC; REPLACE IF DEFECTIVE.</li> <li>Heating element defective. CHECK ELEMENT; REPLACE IF DEFECTIVE.</li> <li>Hi-limit thermostat may be cutting out at too low a temperature. CHECK HI-LIMIT THERMOSTAT; REPLACE IF DEFECTIVE. (Note: hi-limit will reset itself if allowed to cool by 30°F, making troubleshooting a challenge as the brewer cools then functions normally.)</li> <li>Heating element may be encrusted with lime or scale build-up. DELIME BREWER AS DETAILED ON PAGE 16.</li> </ol>
2. "Overheat" Error RESET by holding CANCEL switch for 3 seconds	Water temperature has exceeded Maximum Water Temperature programmed into "Machine Settings" menu.	<ol style="list-style-type: none"> <li>Brew Temperature may be set too close to Maximum Temperature. Brew Temperature should be at least 5°F below Maximum Water Temperature. LOWER BREW TEMPERATURE or RAISE MAXIMUM TEMPERATURE (Software versions after May, 1999 enforce the 5°F differential)</li> <li>Triac has failed ON; element continues to heat even when controller is OFF. CHECK TRIAC; REPLACE IF DEFECTIVE.</li> <li>Temp Probe defective. See probe test procedure in Item #1 above. CHECK PROBE; REPLACE IF DEFECTIVE.</li> </ol>
3. "No Water Sensed" Error RESET by holding CANCEL switch for 3 seconds	Inlet valve energized but no water is sensed during regular operation for 60 seconds; or, no water sensed during start-up (manual or timed) for 4½ minutes.	<ol style="list-style-type: none"> <li>Sleeve on water level sensor is too long, or sensor is not pushed down fully. Sensor should extend beyond sleeve a minimum of ¼" to a maximum of ¾". REMOVE TANK LID, CUT SLEEVE TO PROPER LENGTH. ENSURE SENSOR IS PUSHED DOWN ALL THE WAY.</li> <li>Wiring to water level sensor disconnected or defective; or, sensor pulled out of tank. CHECK &amp; CORRECT.</li> <li>Water level sensor may be encrusted with lime build-up. CLEAN SENSOR.</li> <li>Water supply may be OFF. CHECK &amp; RESTORE WATER SUPPLY.</li> </ol>
4. "Keyswitch Locked" Error RESET as above	A switch on the keypad has been held down for more than 10 seconds.	<ol style="list-style-type: none"> <li>Switch has been accidentally held for 10 or more seconds. RELEASE SWITCH</li> <li>Defective keypad. PRESS &amp; HOLD "CANCEL" FOR 3 SECONDS. Observe brewer to determine if problem persists. (Note: available on software versions MFW 275 Rev. 3.4 and later versions only).</li> </ol>
5. "Valve Fault" Error RESET by disconnecting/reconnecting electric power	Detection of a problem with the valve switching system, or with the wiring to the valves.	<ol style="list-style-type: none"> <li>Wiring to either inlet or outlet valve not properly connected. CHECK WIRING AND CONNECTIONS.</li> <li>The controller has two switches for each valve and one or both has been detected as failing ON. (This prevents the brewer from operating unless both switches are working properly.) REPLACE CONTROLLER.</li> </ol>

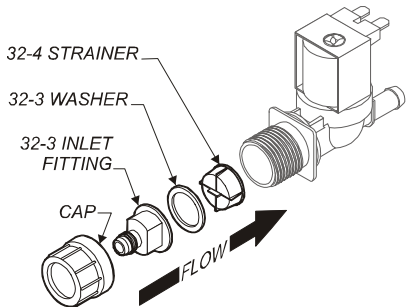
## EXPLODED VIEW & PARTS LIST

### AIRPOT BREWER

MODELS: 2082, 2083, 2088



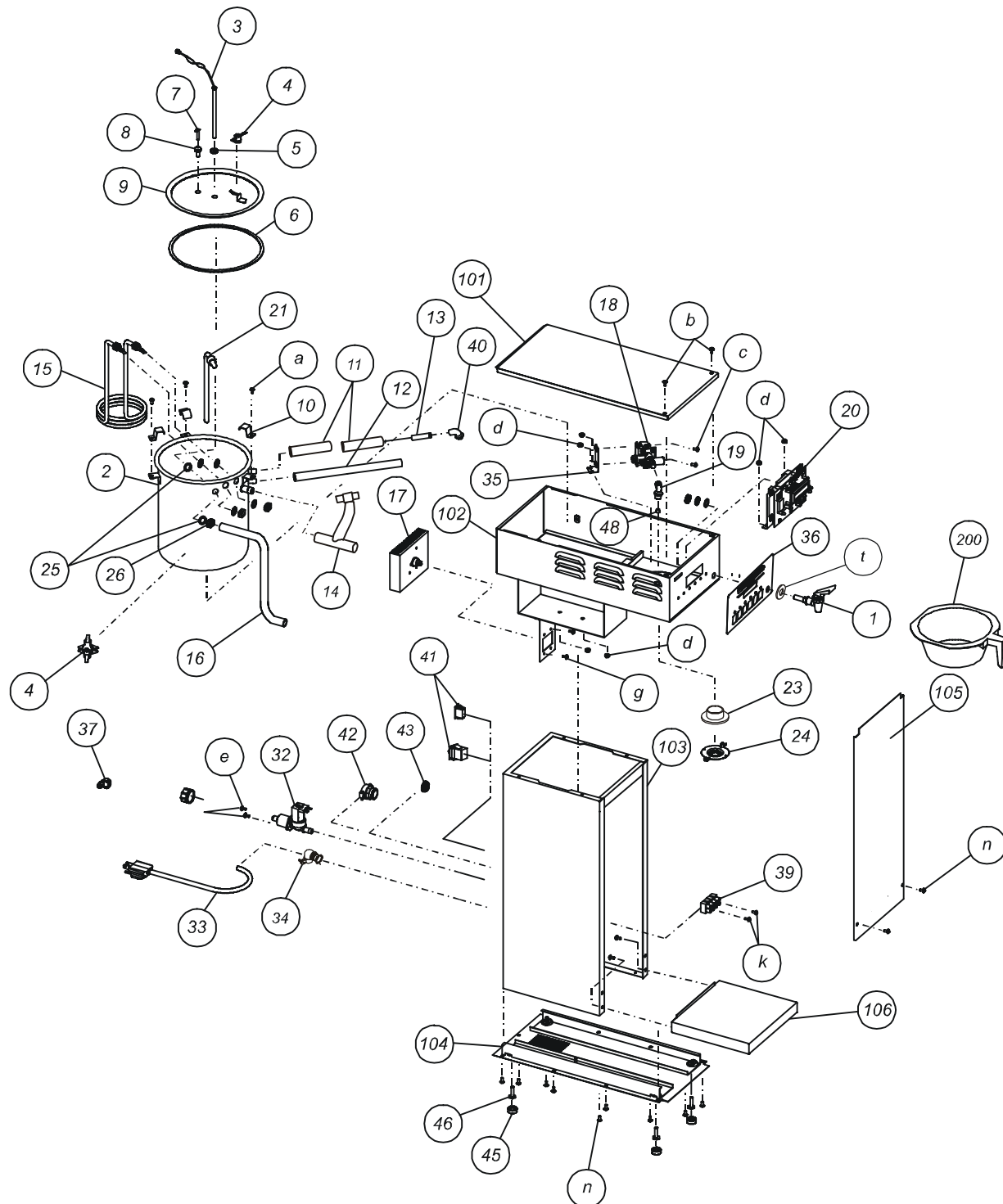
## EXPLODED VIEW & PARTS LIST (continued)

ITEM	PART #	DESCRIPTION	QT	ITEM	PART #	DESCRIPTION	QT						
1	8763-1	FAUCET HOT WATER	1	42	66385 9012-38	FITTING, CONDUIT 3/4" STR 240V STRAIN RELIEF LIQ. TIGHT 120V	1						
2	83500 83753 84010	TANK ASST 8 QT TANK ASSY 8 QT 240V TANK ASSY 8 QT DUAL VOLTAGE	1	43	63046	PLUG, HOLE 1" 120V	1						
3	83480	THERMISTOR 5-1/2"	1	45	8033-56	CAP LEVELER	4						
4	83949 8552-50 84713	THERMO HI-LIMIT CERAMIC 120V THERMO HI-LIMIT RESET 240V THERMO HI-LIMIT 25A SCREW TERM	1	46	8033-55	LEG LEVELER PLATED	4						
5	84063	GROMMET .510 x .250 id	1	48	83571	INSERT, SPRAY HEAD	1						
6	83499	GASKET TANK COVER	1	50	83810	BRACKET POSITIONING	1						
7	83521	PROBE ASSY WATER LEVEL	1	51	63201	SPACER	4						
8	83532	SLEEVE WATER LEVEL PROBE	1	CABINET COMPONENTS									
9	83504	COVER ASSY TANK	1	101		COVER, DUAL WARMER	1						
10	83506	RETAINING CLIP TANK COVER	3	102		UPPER HOUSING	1						
11	83537	TUBE SILICONE 9" LONG	1	103		LOWER HOUSING	1						
12	83538	TUBE SILICONE 10" LONG	1	104		ASSY BOTTOM PLATE	1						
13	83384	TUBE, SPRAY HEAD, 2.3" LONG	1	105		PANEL FRONT	1						
14	86013	BREW SUPPLY VENTED ASSY	1	106		BASE	1						
15	83518 83519 83748	HEATING ELEMENT 1500W 120V HEATING ELEMENT 1800W 120V HEATING ELEMENT 3200W 240V	1	200	8942-6B 8707-6	BREW CHAMBER, PLASTIC BREW CHAMBER STAINLESS STEEL	1						
16	83540	TUBE SILICONE 23" LONG	1		POF	COFFEE FILTER, PAPER (pack of 1000)							
17	83475	HEAT SINK & TRIAC ASSY	1	STANDARD FASTENERS									
18	83388 84619	WATER OUTLET VALVE 120V WATER OUTLET VALVE 240V	1	a	7506-39	SCREW PHL 8-32 x 1/2"	3						
19	83152	ELBOW SPRAYER	1	b		SCREW PHL SS 8 x 3/8	30						
20	83474 83826 86292	BOARD SET, CONTROLLER, 120V BOARD SET, CONTROLLER, 240V BOARD SET, CONTROLLER, for 2082 SNB	1	c	D 20002-3	SCREW PAN PHL SS 10-32 x 5/16	4						
21	83516	FITTING w/EXTENSION	1	d		NUT KEP 8-32	10						
23	82215	GASKET, SPRAYHEAD 1/5" ID	1	e		SCREW PAN 4mm x 6mm	2						
24	82727	SPRAY DISK EMPOSED	1	g		SCREW PAN 8-32 x 1/4 Ni	2						
25	83147	WASHER, GYLON	6	k	616-5	SCREW RND SLT SS 6-32 x 3/4	2						
26	8043-28	NUT, HEX BRASS 1/2-20	1	n	7200-6X	SCREW 8-32 x 5/16	17						
32	83612 84777	ASSY, WATER INLET SOLENOID, 120V ASSY, WATER INLET SOLENOID, 240V	1	t	82681	WASHER FLAT SS 15/32 ID x 1-1/8 OD	1						
33	6407-15	CORD ASSY 120V	1										
34	51217	STRAIN RELIEF 90° CLAMP	1										
35		BRACKET, WATER OUTLET VALVE	1										
36	85018	DECAL, KEYPAD OVERLAY	1										
37	83745	7/16-20 FEM x 7/16-20 MALE	1										
39	8552-18	TERMINAL BLOCK 240V	1										
40	83571	INSERT, SPRAYHEAD	1										
41	83763 82936	SWITCH 120V SWITCH, ROCKER ON-OFF 240V	1										
				<table><tr><th>PART #</th><th>VALVE REPAIR KIT</th></tr><tr><td>85218</td><td>CONTAINS 32-1 CAP, 32-2 FITTING, 32-3 GASKET AND 32-4 STRAINER</td></tr><tr><td>85219</td><td>32-4 STRAINER ONLY</td></tr></table>				PART #	VALVE REPAIR KIT	85218	CONTAINS 32-1 CAP, 32-2 FITTING, 32-3 GASKET AND 32-4 STRAINER	85219	32-4 STRAINER ONLY
PART #	VALVE REPAIR KIT												
85218	CONTAINS 32-1 CAP, 32-2 FITTING, 32-3 GASKET AND 32-4 STRAINER												
85219	32-4 STRAINER ONLY												

## EXPLODED VIEW & PARTS LIST (continued)

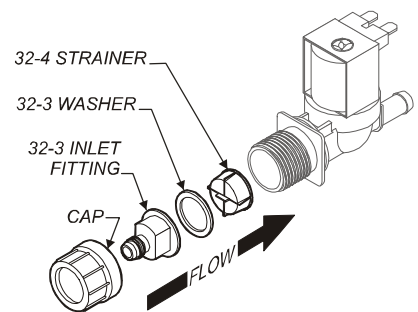
### THERMAL BREWER

MODELS: 2080, 2085, 2086





## EXPLODED VIEW & PARTS LIST (continued)

ITEM	PART #	DESCRIPTION	Q	ITEM	PART #	DESCRIPTION	QT				
1	8763-1	FAUCET HOT WATER	1	42	66385 9012-38	FITTING, CONDUIT 3/4" STR 240V STRAIN RELIEF LIQ. TIGHT 120V	1				
2	83500 83753 84010	TANK ASST 8 QT TANK ASSY 8 QT 240V TANK ASSY 8 QT DUAL VOLTAGE	1	43	63046	PLUG, HOLE 1" 120V	1				
3	83480	THERMISTOR 5-1/2"	1	45	8033-56	CAP LEVELER	4				
4	83949 8552-50 84713	THERMO HI-LIMIT CERAMIC 120V THERMO HI-LIMIT RESET 240V THERMO HI-LIMIT 25A SCREW TERM	1	46	8033-55	LEG LEVELER PLATED	4				
5	84063	GROMMET .510 x .250 id	1	48	83571	INSERT, SPRAY HEAD	1				
6	83499	GASKET TANK COVER	1	50	83810	BRACKET POSITIONING	1				
7	83521	PROBE ASSY WATER LEVEL	1	51	63201	SPACER	4				
8	83532	SLEEVE WATER LEVEL PROBE	1	CABINET COMPONENTS							
9	83504	COVER ASSY TANK	1	101		COVER, DUAL WARMER	1				
10	83506	RETAINING CLIP TANK COVER	3	102		UPPER HOUSING	1				
11	86014	TUBE SILICONE 4.5" LONG	2	103		LOWER HOUSING	1				
12	83538	TUBE SILICONE 10" LONG	1	104		ASSY BOTTOM PLATE	1				
13	83384	TUBE, SPRAY HEAD, 2.3" LONG	1	105		PANEL FRONT	1				
14	86013	BREW SUPPLY VENTED ASSY	1	106		BASE	1				
15	83518 83519 83748	HEATING ELEMENT 1500W 120V HEATING ELEMENT 1800W 120V HEATING ELEMENT 3200W 240V	1	200	8942-6B 8707-6	BREW CHAMBER, PLASTIC BREW CHAMBER STAINLESS STEEL	1				
16	83540	TUBE SILICONE 23" LONG	1		POF	COFFEE FILTER, PAPER (pack of 1000)					
17	83475	HEAT SINK & TRIAC ASSY	1	STANDARD FASTENERS							
18	83388 84619	WATER OUTLET VALVE 120V WATER OUTLET VALVE 240V	1	a	7506-39	SCREW PHL 8-32 x 1/2"	3				
19	83152	ELBOW SPRAYER	1	b		SCREW PHL SS 8 x 3/8	30				
20	83474 83826	BOARD SET, CONTROLLER, 120V BOARD SET, CONTROLLER, 240V	1	c	D 20002-3	SCREW PAN PHL SS 10-32 x 5/16	4				
21	83516	FITTING w/EXTENSION	1	d		NUT KEP 8-32	10				
23	82215	GASKET, SPRAYHEAD 1/5" ID	1	e		SCREW PAN 4mm x 6mm	2				
24	82727	SPRAY DISK EMPOSED	1	g		SCREW PAN 8-32 x 1/4 Ni	2				
25	83147	WASHER, GYLON	6	k	616-5	SCREW RND SLT SS 6-32 x 3/4	2				
26	8043-28	NUT, HEX BRASS 1/2-20	1	n	7200-6X	SCREW 8-32 x 5/16	17				
32	83612 84777	ASSY, WATER INLET SOLENOID, 120V ASSY, WATER INLET SOLENOID, 240V	1	t	82681	WASHER FLAT SS 15/32 ID x 1-1/8 OD	1				
33	6407-15	CORD ASSY 120V	1								
34	51217	STRAIN RELIEF 90° CLAMP	1								
35		BRACKET, WATER OUTLET VALVE	1								
36	85018	DECAL, KEYPAD OVERLAY	1								
37	83745	7/16-20 FEM x 7/16-20 MALE	1								
39	8552-18	TERMINAL BLOCK 240V	1								
40	8043-11	ELBOW, VENT	1								
41	83763 82936	SWITCH 120V SWITCH, ROCKER ON-OFF 240V	1								

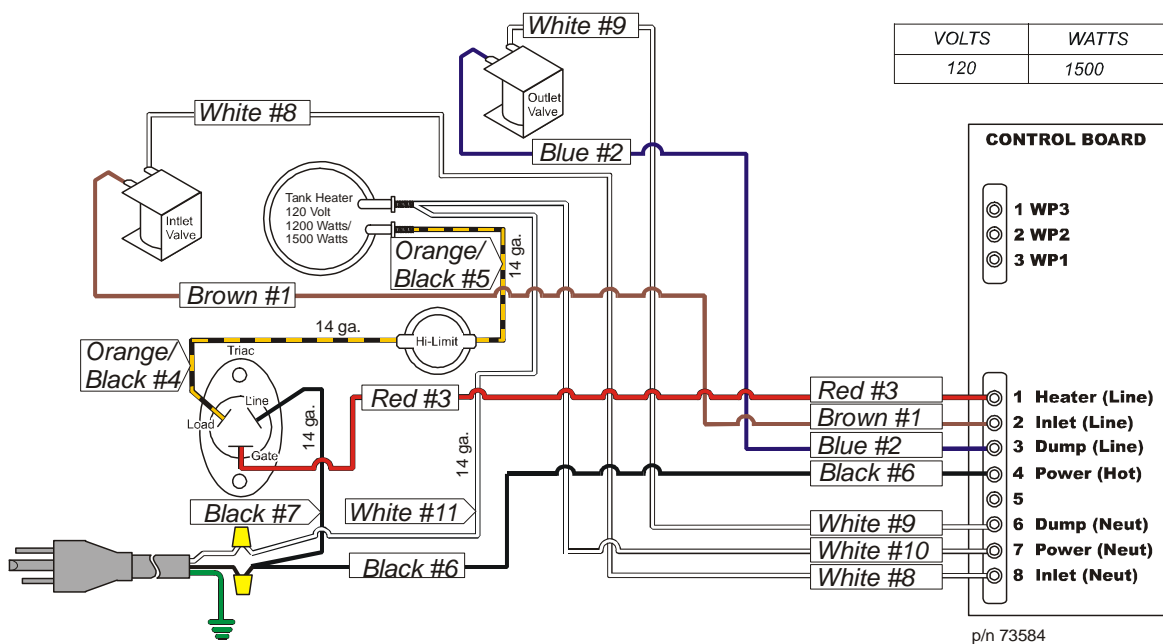
PART #	VALVE REPAIR KIT
85218	CONTAINS 32-1 CAP, 32-2 FITTING, 32-3 GASKET AND 32-4 STRAINER
85219	32-4 STRAINER ONLY

PART #	VALVE REPAIR KIT
85218	CONTAINS 32-1 CAP, 32-2 FITTING, 32-3 GASKET AND 32-4 STRAINER
85219	32-4 STRAINER ONLY

## WIRING DIAGRAMS

### 120 VOLT BREWERS AIRPOT and THERMAL

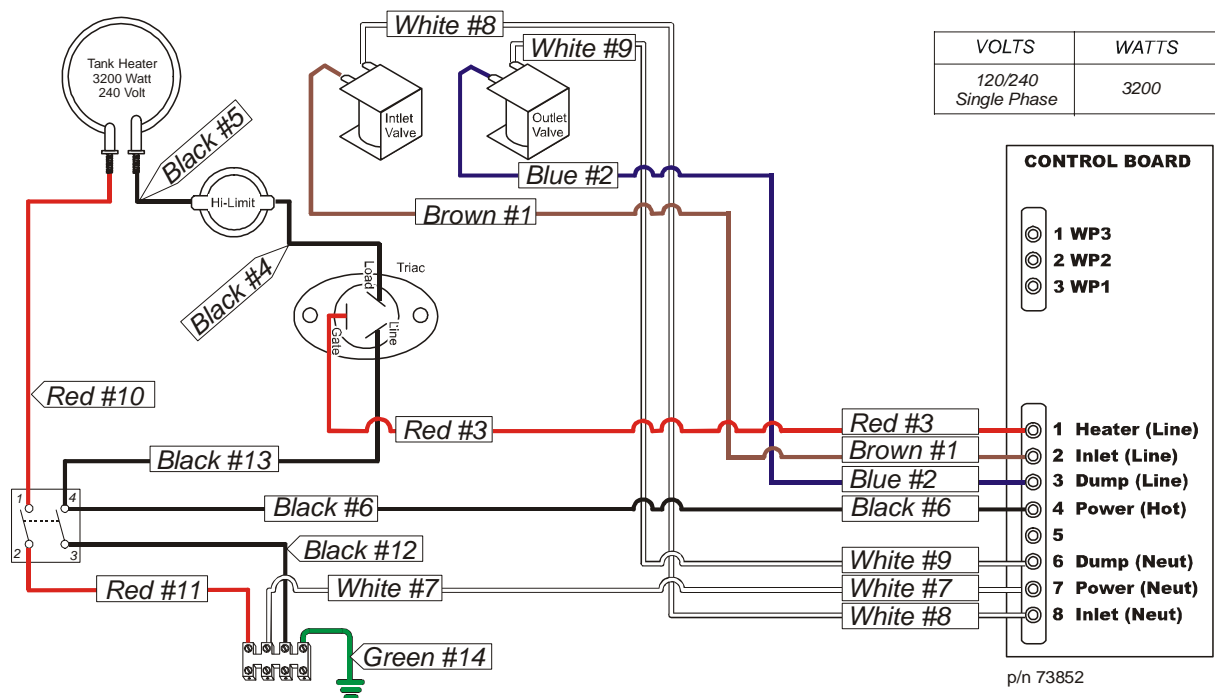
MODEL 2080 & 2082



## WIRING DIAGRAMS (continued)

### 120/240 VOLT BREWERS AIRPOT and THERMAL

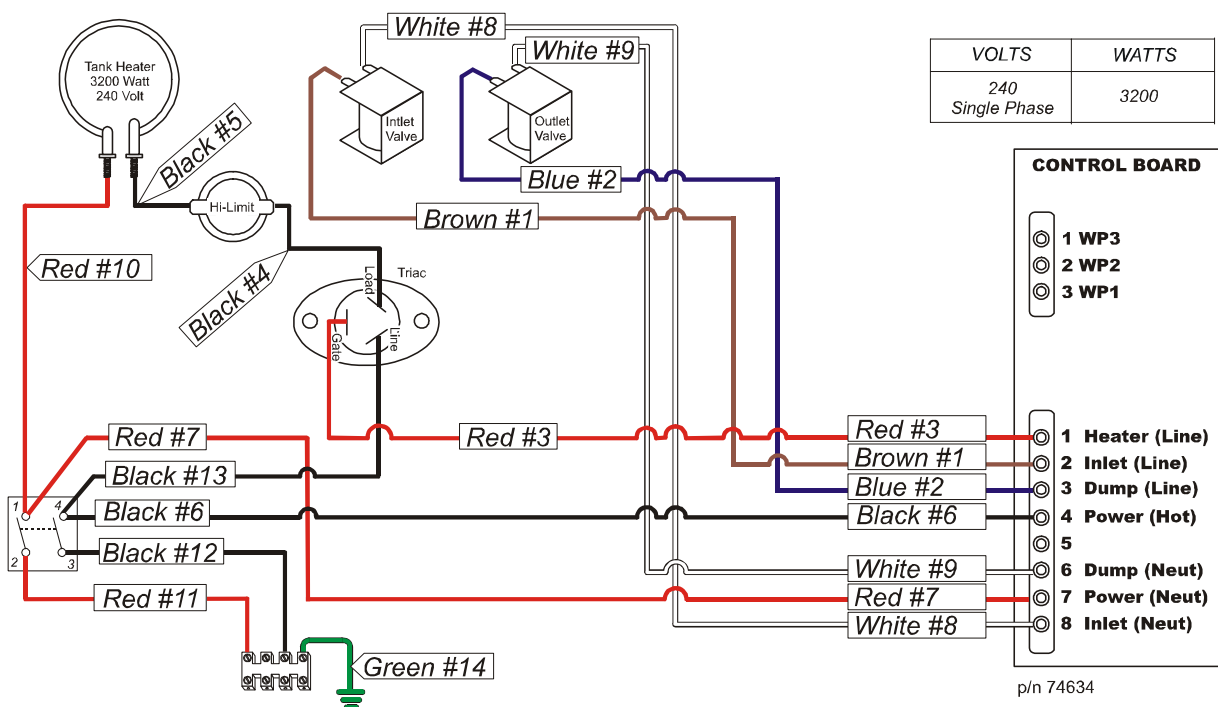
MODEL 2086 & 2088



## WIRING DIAGRAMS (continued)

### 240 VOLT BREWERS AIRPOT and THERMAL

MODEL 2086EX & 2088EX







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