BLOOMFIELD INDUSTRIES
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Model 8748 Brewer
with optional
8602 Iced Tea Dispenser

OWNERS MANUAL for

ICED TEA BREWING SYSTEM

MODELS:
8742
8748

Includes:

Installation
Operation
Use \& Care
Servicing Instructions

## WARRANTY STATEMENT

All electrical equipment manufactured by WELLS BLOOMFIELD 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, decanters excluded.

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 Wells Bloomfield 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 Wells Bloomfield 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). Wells Bloomfield 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 |  |
| :--- | :---: |
| Wells Bloomfield, LLC |  |
| 10 Sunnen Dr. |  |
| P.O. Box 430129 |  |
| St. Louis, MO |  |
| 63143 |  |

Phone: 1-800-807-9054 Fax: 1-800-396-2677

## 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 Wells 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.

Wells Bloomfield 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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Thank You for purchasing this Wells Bloomfield appliance.

Proper installation, professional operation and consistent maintenance of this appliance will ensure that it gives you the very best performance and a long, economical service life.

This manual contains the information needed to properly install this appliance, and to use, care for and maintain or repair the appliance in a manner which will ensure its optimum performance.

## SPECIFICATIONS

| 8742 \& 8748 3-5 Gallon Ice Tea Brewers |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MODEL | DIMENSIONS | VOLTS | WATTS | AMPS 1ø | POWER SUPPLY CORD |
| 3 Gallon Iced Tea Brewer |  |  |  |  |  |
| 8742 | 32-1/4" high 10-15/16" wide 15-11/16" deep | 120 | 1500 | 12.5 | NEMA 5-15P |
| 8742-3G |  | 220-240V | 1800 | 7.8 | CEE 7/VII |
| 8742-3GUK |  |  |  |  | CW 3100 |
| 5 Gallon Iced Tea Brewer |  |  |  |  |  |
| 8748 | 35-1/4" high 10-15/16" wide 15-11/16" deep | 120 | 1500 | 12.5 | NEMA 5-15P |
| 8748-5G |  | 220-240V | 1800 | 7.8 | CEE 7/VII |
| 8748-5GUK |  |  |  |  | CW 3100 |

## APPLICABILITY

This manual applies to the following Wells Bloomfield products:
8742
8748


## PRECAUTIONS AND GENERAL INFORMATION

WARNING: ELECTRIC SHOCK HAZARD
WARNING
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
WARNING
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

WARNING
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

## 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. 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.

4CAUTION: EQUIPMENT 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 HAZARDExposed surfaces of the appliance, brew chamber and dispenser may be HOT to the touch, and can cause serious burns.

## AGENCY LISTING INFORMATION

This brewer is (UL) listed under UL file E9253.

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

## INSTALLATION

## 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:

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 $3 / 8^{\prime \prime}$ for more than 12 feet from a 1/2" water supply line.

Unpack the unit. Inspect all components for completeness and condition. Ensure that all packing materials have been removed from the unit.

Verify that the Spray Head Gasket and Spray Disk are properly installed.

## LEVELING THE UNIT

Verify that an adjustable leg is installed at each corner of the brewer, and that a rubber foot is installed on each leg.

Set Brewer in its operating location. 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.
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

## Brewer must be connected to a POTABLE WATER, COLD <br> WATER line. Flush water line before connecting to Brewer.

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.

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 lines and solenoid.
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.

The provided water line strainer must be installed in the supply line, between the shutoff valve and inlet fitting. Note FLOW arrow marking on strainer body.

## INSTALLATION (continued)

NSF requires that the brewer be able to be moved for cleaning underneath. A flex line or loops of copper tubing will satisfy this requirement. See Figure 2 below.


Fig. 2 Water Supply Installation

## 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.

IMPORTANT: Before connecting to electricity, make sure automatic brewers are connected to the water supply.

Models 8742 and 8748 are equipped with a cord and plug. They require a 115-125 volt 20 amp circuit ( $50 / 60 \mathrm{~Hz}$, 2 wire plus ground, with NEMA 5-15R or 5-20R Receptacle).

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

## WARNING <br> WARNING: 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:

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.

IMPORTANT: Do not connect brewer to electrical power until you are ready to fill the tank. See instructions at left.


IMPORTANT: The ground prong of the plug is part of a system designed to protect you from electrical shock in the event of internal damage. Never cut off the ground prong nor twist a blade to fit an existing receptacle. Contact a licensed electrician to install the proper circuit and receptacle.

## OPERATION



Fig. 3 Brewer Operation Diagram

## IMPORTANT:

Tank must be full of water before pressing TANK HEATER SWITCH "on". Heating elements will be damaged if allowed to operate without being fully submerged in water. Damage caused by operating the brewer without water in the tank is NOT COVERED BY WARRANTY.

## A. START-UP

For initial start-up, or if the brewer has not been used for an extended period of time:

- Be sure spray disk and brew gasket are properly installed in the brew head.
- Be sure the water supply is properly connected and the water supply valve is turned ON.
- Be sure the WATER TANK IS FILLED.

IMPORTANT: Fill the water tank before energizing this unit:

1. Insert the brew chamber (empty) and place an empty dispenser in place under the brew chamber.
2. Be sure the TANK HEATER SWITCH is "OFF". Plug the unit into an appropriate receptacle.
3. Press The BREW switch. Water will start filling the tank. Run several consecutive brew cycles until water flows from the brew chamber.
4. When water stops dripping from the brew chamber, empty the dispenser, then press TANK HEAT switch "on". The heating element will begin heating water in the tank. When the water has reached the proper brewing temperature, the "READY TO BREW" light will glow.

## OPERATION (continued)

## WATER HEATER

Water temperature is sensed by a thermobulb inserted into the water tank. This temperature signal is fed to the mechanical thermostat.

The temperature setpoint is adjustable. Heating element is energized by the thermostat.
Excessive temperature will trip the hi-limit safety switch. The hi-limit will automatically reset when the brewer cools.

## WATER FLOW

## AUTOMATIC OPERATION

Pressing the BREW switch starts the timer, which in turn energizes the solenoid valve. This allows water from an external water supply to flow into the water tank. The incoming water forces heated water out of the tank to perform the brew.

Additionally, a portion of the unheated water is bypassed into the dispenser to dilute and cool the brew. The proportion of water delivered to the brew versus the amount water diverted to dilution is controlled by a restrictor in the bypass line, and an adjustable needle valve in the brew water line.

The solenoid uses a flow control device so that


Fig. 4 Heat Control Diagram


Fig. 5 Water Flow Diagram flow is consistent between 20 p.s.i. and 90 p.s.i.

The length of time the solenoid is open is controlled by the timer setting.

## BREWING TEA

Exposed surfaces of the brewer, brew chamber and dispenser may be HOT to the touch, and can cause serious burns.

CAUTION: BURN HAZARD

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

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

Examine the tea brew chamber to verify that the short the wire rack is in place.

Place one (1) genuine Bloomfield paper filter into the wire rack in the tea brew chamber.

Add an amount of fresh tea leaves to the brew chamber appropriate to the brew volume.

Model 8742: 3 Gallons
Model 8748: 5 Gallons


Fig. 7 Tea Brew Chamber

Gently shake the brew chamber to level the bed of tea leaves.

Slide the brew chamber into place under the brew head.

## B. AUTOMATIC OPERATION

BE sure "READY TO BREW" light is lit.
Place the appropriate EMPTY dispenser in place under the brew chamber. If a brew-thru lid is used, be sure the bypass opening in the lid is directly under the bypass nozzle.

Press the "BREW" switch. The tea brew solenoid will open for an amount of time determined by the timer setting, admitting a measured quantity of water into the tank.

Inlet water will displace a like amount of heated water from the tank. The hot water will be forced into the brew head where it will spray over the bed of grounds. Freshly brewed tea will begin to fill the dispenser. Additionally, a measured amount of cold dilution water will flow from the bypass nozzle into the dispenser.
When the flow and all dripping stops at the end of the brew cycle, the tea is ready to serve.

Discard the contents of the brew chamber and rinse it in a sink. When the "READY TO BREW" light glows, the brewer is ready for another brew cycle.

## CLEANING INSTRUCTIONS

## PROCEDURE: Clean Tea Brewer

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

FREQUENCY: Daily
TOOLS: Mild Detergent, Clean Soft Cloth or Sponge Bristle Brush, Bottle Brush

1. Disconnect brewer from electric power. Allow brewer to cool before cleaning.
2. Remove dispenser.
3. Remove and empty brew chamber.
4. Remove the spray disk from the brew head (See figure 8): 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. Wipe the exterior of the brewer with a soft clean cloth or sponge moistened with clean water.
9. Reinstall the gasket INSIDE the brew head, then reinstall the spray disk.
10. Be sure the wire rack is in place in the brew chamber, then reinstall the brew chamber.
11. Clean dispensers by filling with warm soapy water. Empty and rinse with clean water. Wipe the exterior with a soft clean cloth or sponge moistened with clean water. Invert and allow to air dry.

Procedure is complete

| SYMPTOM | POSSIBLE CAUSE | SUGGESTED REMEDY |
| :---: | :---: | :---: |
| Water won't heat | Brewer unplugged or circuit breaker tripped | Check power supply cord |
|  |  | Check / reset circuit breaker |
|  | Temperature setpoint too low | Set for desired temperature |
|  | Hi-Limit safety switch tripped | Allow to cool hi-limit will self-reset |
|  | Damaged internal component or wiring | Examine wiring \& connectors, controller, power board and heating element, Repair/replace as needed |
| Tea level too high or low | Timer out of adjustment | Adjust timer |
| Brew chamber overflows | Too many filter papers or wrong filter paper | Use one (1) genuine Bloomfield filter per brew |
|  | Brew chamber dispense hole plugged | Thoroughly clean brew chamber |
|  | Too much tea leaves | Use correct amount of tea |
| Sprays water from brew head | Spray gasket improperly installed | Check/reinstall gasket on INSIDE of brew head |
| No brew | Spray disk plugged | Clean spray disk |
|  | Damaged internal component or wiring | Check switches, timer and solenoid. Repair, replace as needed |
|  | Water supply OFF | Turn water supply ON |
|  | " $Y$ " Strainer or solenoid inlet strainer plugged | Clean strainer |
|  | Water filter (if used) plugged | Replace filter element |
| Poor tea quality | Keep brewer and dispenser clean.Install a taste and odor filter in water supply, and replace cartridges regularly. Use a quality fresh supply of tea leaves. Use the amount of tea leaves appropriate to brew volume. The needle valve adjusts the ratio of brew water to dilution water. Set the needle valve to adjust the strength of the final brew. |  |

## SERVICING INSTRUCTIONS

ACCESS PANELS
TOP PANEL:
Remove top panel to access hot water tank, thermostat, timer, brew solenoid and brew circuit tubing.
Top panel is held by two screws at the rear and a retaining lip at the front .

## REAR PANEL:

Remove rear panel to access wiring and bypass nozzle tubing.
Rear panel is held by eight screws on the perimeter.


Fig. 8 Access Panels

## SERVICING INSTRUCTIONS (continued)

## TEMPERATURE ADJUSTMENT

Unplug power cord or turn circuit breaker OFF. Remove top panel.

Pull vent tube out of tank lid and insert a thermometer of known accuracy in hole. Reconnect brewer to electrical power. Place empty container under brew chamber. Energize brewer and allow unit to heat. When the READY TO BREW light first glows, read the temperature displayed on thermometer.

Adjust thermostat by turning shaft; clockwise increases temperature. $1 / 8$ turn = approximately $10^{\circ} \mathrm{F}$, or $5.6^{\circ} \mathrm{C}$.
Refer to Table 1 below for proper brewing temperature based on altitude.


Upon completion, remove thermometer and reinstall the vent line and top panel.

Fig. 9 Checking and Adjusting Brew Temperature



CAUTION: SHOCK HAZARD

These procedures involve exposed electrical circuits. These procedures are to be performed by qualified technical personnel only.

NOTE: Optimum brewing temperature is $195^{\circ} \mathrm{F}$ to $205^{\circ} \mathrm{F}$ ( $90^{\circ} \mathrm{C}$ to $96^{\circ} \mathrm{C}$ ).
Thermostat should be adjusted to a maximum temperature of $200^{\circ} \mathrm{F}\left(95^{\circ} \mathrm{C}\right)$.

## IMPORTANT:

A mechanical thermostat will maintain temperature within $\pm 5^{\circ} \mathrm{F}$.
To prevent boiling water in the brewer, controller should be adjusted to a maximum temperature equal to the local boiling temperature minus $5^{\circ} \mathrm{F}$, or $200^{\circ} \mathrm{F}\left(94^{\circ} \mathrm{C}\right)$, whichever is less.
NOTE: $1 / 8$ turn = approximately $10^{\circ} \mathrm{F}\left(5.6^{\circ} \mathrm{C}\right)$.


Fig. 10 Adjust Thermostat

Table 1 Boiling Temperature by Altitude

## SERVICING INSTRUCTIONS (continued)

## SOLENOID TIME ADJUSTMENT

The amount of water dispensed automatically during a brew cycle is controlled by the SOLENOID TIME section of the controller.

Place empty dispenser under brew chamber. Press the BREW switch. Including both brew water and dilution water, brewer should dispense:
A total of 3 gallons (Model 8742) of water; or,
A total of 5 gallons (Model 8748) of water.
To adjust:
Remove top panel.
Total delivered volume is dependant upon the total time the solenoid is energized. Adjust timer; clockwise increases time; counterclockwise decreases time. Run several cycles to check total amount of water delivered.

Adjust dilution. Turn needle valve all the way in (closed), then open 4-1/2 turns.
Brew several batches of tea to check for proper concentration and taste. Readjust needle valve and timer as required.
Reinstall top panel.

## REMOVE TANK COVER ASSEMBLY

Unplug brewer or turn circuit breaker OFF. Turn OFF water supply. Remove top panel.

Disconnect brew fill and outlet tubes from tank lid fittings.
Disconnect all wiring from thermostat, hi-limit and heating element.

Loosen center screw on tank hold-down bracket. Remove hold-down bracket by sliding short slotted end off of locking stud and lifting it off. Remove cover assembly by lifting it straight up. Reassemble in reverse order.

## REPLACE THERMOSTAT

Unplug brewer or turn circuit breaker OFF. Turn OFF water supply. Remove top panel.

Disconnect all wiring from thermostat only. Loosen and free jam nut from pass-thru fitting securing temperature sensing bulb. Remove two screws holding thermostat to bracket.
Lift out thermostat, sensing bulb and thermostat gasket.
Reassemble in reverse order.

IMPORTANT: Water pressure must be between 20 p.s.i and 90 p.s.i. flowing pressure. If water pressure exceeds this value, or if water pressure varies greatly, a pressure regulator must be installed in the water supply line.


IMPORTANT: Before setting assembly into tank, make sure tank lid gasket is properly seated on flange of lid.

IMPORTANT: When mounting thermostat, be sure a new seal washer is placed below the fitting on the capillary line. Push sensing bulb thru tank lid until fitting seats.

If replacing gray-bodied thermo with $\mathrm{p} / \mathrm{n}$ 8512-51, be sure to remove tube from thermowell.

Tighten capillary lock nut only enough to ensure no water leakage. Excessive tightening is not necessary.

SERVICING INSTRUCTIONS (continued)

IMPORTANT: When replacing heating element, also replace seal gaskets.

REPLACE HEATING ELEMENT
Remove tank cover assembly (see page 13).
Remove two hex nuts holding element to cover. Pull element from mounting holes.
Reassemble in reverse order.

## REPLACE SOLENOID

Symptom: Automatic brewer will not flow water; or, automatic brewer drips continuously from brew head.

Unplug power cord or turn circuit breaker OFF. Turn water supply OFF.
Remove top panel.
Disconnect wiring from solenoid.
Unscrew water inlet piping from solenoid.
Remove two screws holding solenoid to bracket.
Remove brew and dilution manifold from solenoid, transfer components to new solenoid

Transfer solenoid bracket to new solenoid.
Reassemble in reverse order.

## REPLACE TIMER ASSEMBLY

Unplug power cord or turn circuit breaker OFF.
Remove top panel. Remove knob and three screws holding timer to bracket. Disconnect wiring to timer.
Reassemble in reverse order.
Adjust timer as described on page 13

## CLEAN STRAINER SCREEN

Unplug power cord or turn circuit breaker OFF. Turn water supply OFF.
Remove bottom cap from strainer. Withdraw filter screen from strainer body.
Clean screen with a suitable brush.
Reassemble in reverse order.

## SERVICING INSTRUCTIONS (continued)

## PROCEDURE: Delime the Water Tank

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

FREQUENCY: As required (Brewer slow to heat)
TOOLS: Deliming Solution Protective Gloves, Goggles \& Apron Mild Detergent, Clean Soft Cloth or Sponge Bristle Brush, Bottle Brush Large Sink (or other appropriate work area)

1. Unplug power cord. Turn off the water shut-off valve and disconnect the water supply line from the brewer inlet fitting.
2. Remove the tank cover assembly as described on page 13.
3. Remove the water tank from the brewer body by lifting straight up. Empty all water from the tank. Set the tank back into the brewer.
4. Mix 2 quarts of deliming solution according to the manufacturer's directions. Carefully pour the deliming solution into the water tank. Lower the lid assembly back onto the 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 internal components of lid assembly with clear water. Using a stiff bristle brush, scrub the heating element and faucet water coil to remove lime and calcium build-up. Rinse with clean water. Store the lid assembly in a safe location.
6. Remove the tank from the brewer and empty. Using a stiff bristle brush, scrub the interior of the water tank to remove lime and calcium build-up. Rinse with clean water.
7. Set the tank back into the brewer. Reassemble the tank lid to the water tank. Make sure the gasket is properly in place, and then reinstall lid clamps.
8. Reinstall wiring to heating element and thermostat.

Reassemble piping for the faucet. Verify that all internal components are dry, and then reinstall the top panel.
9. Reconnect brewer to electrical supply and reconnect water supply.
11. Install the brew chamber without filter paper or grounds. Run at least three full brew cycles and discard all water generated.
12. Brewer is ready to use.

CAUTION: CHEMICAL BURN HAZARD
Deliming chemicals are caustic. Wear appropriate protective gloves and goggles during this procedure.
Never siphon deliming chemicals or solutions by mouth.
This operation should only be performed by qualified and experienced service personnel.

IMPORTANT: DO NOT spill, splash or pour water or deliming 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 deliming solution. Take care to keep all internal components dry.

NOTE: Repeat steps 4 thru 5 as required to remove all scale and lime build-up.

NOTE: Normally, silicone hoses do not need to be delimed. Should deliming hoses become necessary, Bloomfield recommends replacing the hoses.

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EXPLODED VIEW: 8742-8748
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8742 \& 8748 PLUMBING \& HOT WATER TANK

| Fig No | Part No | Description |
| :---: | :---: | :---: |
| 1 | 2V-70102 | TUBE VENT |
| 2 | 2K-70421 | FTG NYLON Y 3/16 |
| 3 | 2V-70398 | TUBE VENT LONG |
| 4 | 2K-70479 | FTG MALE HOSE BARB |
| 5 | A6-73537 | TUBE SIL . 312 ID X 9 LG |
| 6 | 2K-76687 | FTG 1/4 SWIVEL FF X 3/8 |
| 7 | 2V-70352 | VALVE NEEDLE SEAT |
| 8 | 2K-70478 | FTG PIPE TEE |
| 9 | 2K-70476 | FTG REDUCER 1/4X1/8FPT |
| 10 | 2V-70124 | VALVE SOLENOID 120V |
| 11 | 2E-70477 | CONNECTOR 1/47 MALE FLARE |
| 12 | 2V-70424 | TUBE ASSY VALVE INLET |
| 13 | F4-70422 | TUBE SIL . 312 ID X 1 |
| 14 | 2V-70131 | TUBE OUTLET WATER 4 3/4L |
| 15 | 2K-70130 | ELBOW SPRAYER |
| 16 | A6-70163 | RETAINER HEAD SPRAY |
| 17 | 21-70139 | GASKET SPRAY HEAD |
| 18 | F4-70140 | DISC SPRAYER STD. |
| 19 | 2K-70154 | FTG-UNION 1/4X1/4 |
| 20 | 2C-70155 | NUT 7/16-20 HEX HD BRASS |
| 21 | 2V-70111 | TUBE FORMED INLET ASSY |
| 22 | 2V-73027 | STRAINER "Y" PLASTIC W/FT |
| 23 | 2V-70102 | TUBE VENT |
| 24 | 2K-70429 | FTG NYLON Y 1/4X3/16 |
| 25 | F4-70426 | TUBE SIL . 25 ID X 1.5 LG |
| 26 | 2C-70414 | WASHER RESTRICTOR |
| 27 | F4-70430 | TUBE SIL . 25 ID X 12 LG |
| 28 | F4-70423 | SPOUT WATER ASSY |
| 29 | 2C-73457 | NUT 8-32 HEX HEAD KEPS MS |
| 31 | 2C-70134 | STRAP HOLD DOWN ASSY |
| 32 | F4-70420 | ELBOW OUTLET ASSY |
| 33 | 21-70152 | GASKET ELEM HTG |
| 34 | F4-70409 | WASHER BEVELLED |
| 35 | 2C-70410 | NUT 1/2-22HEX HD BRS/BRIT |
| 37 | F4-70415 | TANK ASSY TEA BREWER 3 \& 5 G |
| 38 | 2N-70143UL | ELEM HEATING 120V 1500W |
| 39 | 21-70152 | GASKET ELEM HTG |
| 40 | 2T-47499 | THERMO HI LIMIT 120/240V |
| 41 | 21-70147 | GASKET TANK COVER |
| 42 | F4-70516 | COVER WELDED TANK ASSY TE |
| 43 | 21-72390 | GROMMET . 375 ID TRANSLUCE |
| 44 | WS-8512-51 | THERMO CONTROL BREWERS |
| 45 | WS-86280 | T-STAT COTHERM SUBST 851 |
| 46 | 2V-73034 | TUBE FILL 90DEG BEND L=13 |

EXPLODED VIEW (continued): 8742-8748


Model: 8742, 8748
ICE TEA BREWING SYSTEM

8742 \& 8748 CABINET \& ELECTICAL COMP

| Fig No | Part No | Description | Application |
| :---: | :---: | :---: | :---: |
| 1 | WS-8512-51 | THERMO CONTROL BREWERS |  |
| 2 | 2T-47499 | THERMO HI LIMIT |  |
| 3 | WS-8512-51 | THERMO CONTROL BREWERS |  |
| 4 | 2N-70143UL | ELEM HEATING 120V 1500W | 120 V |
|  | 2N-70173UL | ELEM 240V 1800W TANK | 230UK, 230V |
| 5 | A6-70163 | RETAINER HEAD SPRAY |  |
| 6 | 21-70139 | GASKET SPRAY HEAD |  |
| 7 | F4-70140 | DISC SPRAYER STD. |  |
| 8 | 2D-70333 | CHAMBER BREW ASY 3G T-BREW | 8742 |
|  | F4-70437 | CHAMBER BREW ASSY 5\&6GAS | 8748 |
| 9 | 2C-70115 | SCREW 10-32X5/16 HEX HD |  |
| 10 | 21-70324 | FILTER PAPER CASE OF 500 |  |
| 11 | 2B-70570 | RACK WIRE FINISHED | 8742 |
|  | 2B-70466 | RACK WIRE BREW CHAMBER | 8748 |
| 12 | 2D-70468 | CHAMBER BREW . 104 HOLE | 8748 |
| 13 | 2R-70112 | HANDLE BLACK |  |
| 14 | 2L-76058 | COVER 3 GAL TEA DISP. MOL |  |
| 15 | DD-70332 | TUBE DIP |  |
| 16 | 2M-70416 | DECAL TEA BREWER 3,5,6 |  |
| 17 | 2E-70411 | SWITCH ON-OFF LITED RED |  |
| 18 | 2E-70435 | SWITCH MOMENTARY NC 125/2 |  |
| 19 | 2E-70733 | SWITCH ROCKER BREW START |  |
| 20 | 2J-72671 | LIGHT PILOT GREEN 125V | 120 V |
|  | 2J-70644 | LIGHT PILOT GREEN 250V | 230UK, 230V |
| 21 | 2K-70215 | STRAIN RELIEF STR HEYCO | 120 V |
|  | 2K-70648 | STRAIN RELIEF SMALL | 230UK, 230V |
| 22 | 2E-70353 | CORD \& CAP ASSY 120V 15A |  |
|  | F4-WL0143 | CORD \& EU PLUG MALE TERM | 230 V |
|  | A6-71651 | CORD \& CAP ASSY BREWER UK | 230UK |
| 23 | 2A-71732 | LEG ASSY LEVELING |  |
| 24 | F4-70569 | PLATE BOTTOM TEA BREWERS |  |
| 25 | F4-70432 | BASE WELDED ASSY |  |
| 26 | F4-71766 | BODY ASSY WELDED | 8742 |
|  | F4-70412 | BODY WELDED ASSY | 8747/48 |
| 27 | F4-70563 | PANEL BACK 3G TEA BREW | 8742 |
|  | F4-70413 | PANEL BACK 8748 | 8748 |
| 28 | F4-77122 | BRACKET SOLENOID 8742/8748 |  |
| 29 | 2V-70124 | VALVE SOLENOID 120V | 120 V |
|  | 2V-70774 | VALVE SOLENOID 240V ROHS | 230UK, 230V |
| 30 | 2C-70132 | NUT TNR ZI \#8 |  |
| 31 | 2P-70431 | TIMER 8-MIN 120V |  |
| 32 | F4-70417 | COVER BASIN TEA BREWER |  |

## 8742-8748 SERVICE KITS

SOLENOID REPAIR KITS (SKINNER SOLENOID ONLY)


WS-8541-120CS
Coil Assembly (item 45-1)
WS-8541-120K

PS-71456

WS-8541-120KS

WS-8541-120F
Flow Control (item 45-5 includes 45-6 Retainer Ring \& 45-7 Flow Control Washer)
WS-8541-120R Flow Control Washer Retaining Ring (item 45-6)
WS-8541-120FW
WS-8541-120WS
Service Wrench (item 45t)

8742-8748 WIRING DIAGRAM


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