

BUNN®

ULTRA-1 & 2 INSTRUCTIONS FOR INSTALLING LIQUID AUTOFILL KITS

INTRODUCTION

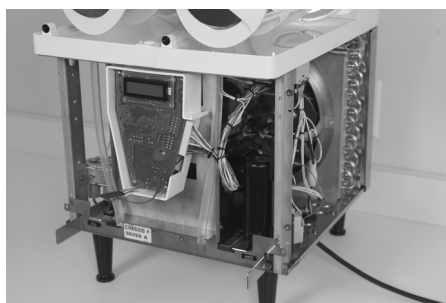
These instructions are for installing the Liquid Autofill Kits on Autofill ready ULTRA-1 and ULTRA-2 cold drink dispensers.

KIT CONTENTS	ULT-2	ULT-1	
A. 37567.0000	1*	-	Circuit Board, ULTRA 2 Auto-Fill
B. 37962.0001	1*	-	Wire Harness, AF Kit
C. 36329.0000	2	2	Tie, Cable-Nylon BLK 4.04"
D. 43120.xxxx	2	1	Cover Assy, Motor LAF-BLK
E. 38055.0003	2*	1	Probe Assy, LAF
F. 34362.0003	4*	2	Bushing .156" ID x .490" OD x .12" Flg
G. 00973.0000	4*	2	Nut, KEPS #6-32
H. 43131.0000	2	1	Bracket, Motor Cover Support
I. 43145.0000	2	1	Bracket, Motor Cover Mounting
J. 00970.0000	8	4	Nut, KEPS #8-32
K. 02308.0000	4	2	Screw, Pan Head, Slotted w/serr. #8-32 x .38"
L. 38129.0017	4	2	Hose, Braided .25 ID x 11.0" Lg
M. 21275.0006	8	4	Clamp .406/.504" Dia.
N. 01317.0000	4	2	Screw, Truss Head, Slotted #8-32 x .50"
O. 44194.0000	-	1	Wire Harness (Not Auto-fill Ready)
P. 44195.0000	-	1	Wire Harness (Auto-fill Ready)

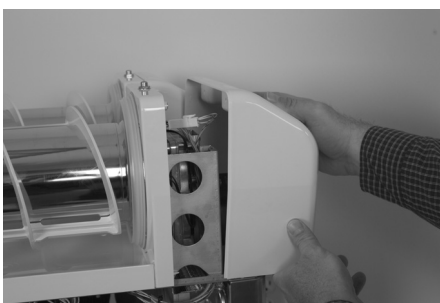
* Not included in all kits.

INSTRUCTIONS

1. Unplug machine from power source before removing any panels.
2. Drain both hoppers and clean the machine if needed before proceeding.



3. Remove hoppers, drip tray, both side panels and front panel.



4. Remove both motor covers and locate .50" round knock out in top right area of plastic drum mount. Discard screws.

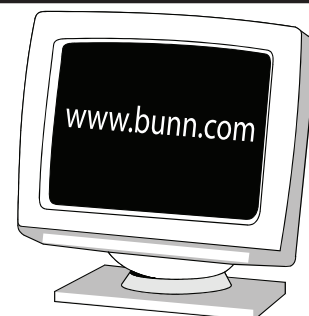
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5. With a standard screwdriver and a hammer, punch out the hole needed for the level probe. Repeat this step for all barrels.

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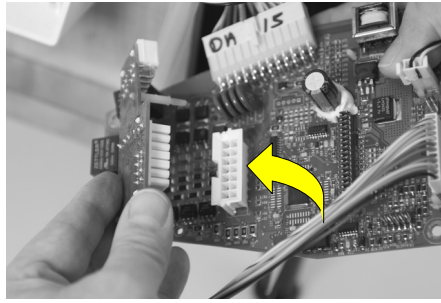
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INSTRUCTIONS (Continued)



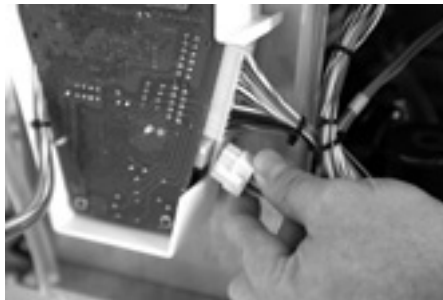
6. Remove 4 screws holding in the main circuit board.
On ULTRA-1 Models, proceed to Step 12.



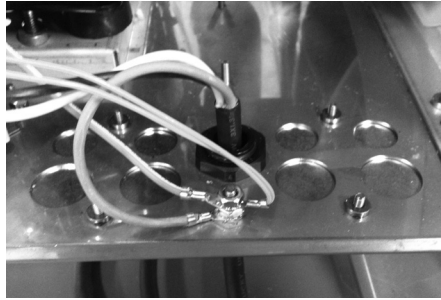
7. Connect Auto Fill board to J-12 on the main board. Be sure to snap the plastic stand off's completely into the main board.



8. Reinstall the main board into the machine using the original mounting screws.



9. Plug wire harness (B) into Auto Fill board connector and route wires in front of drain tube and back into the machine.

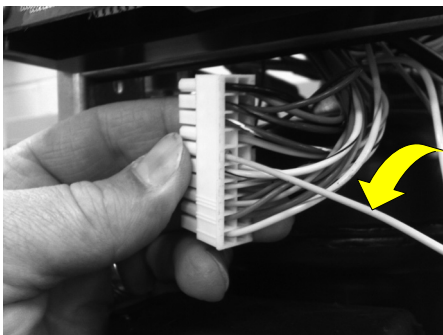


10. Remove top nut off of grounding stud in the base of the machine, add on the green grounding wire from the new harness and reinstall the nut onto the stud. Make sure that all the other grounding wires remain on the ground stud.

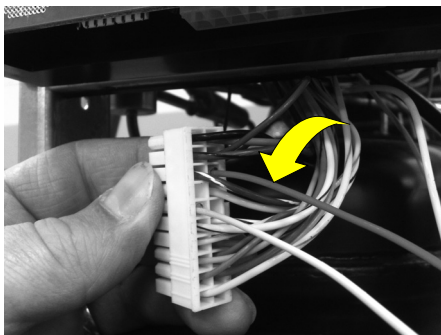


11. Route Pink and Tan wires up to level probes. To ease wire harness installation, remove both auger motors.
Note: valve connection wire colors – right is red and white, left is blue and white.

For ULTRA-1 Models not Auto-fill ready:



12. Disconnect main wiring harness from circuit board. Insert pink wire from Harness (Q) into terminal #6.



13. Insert red wire from Harness (Q) into terminal #18.

NOTE: The pin terminal must be oriented correctly to be inserted fully. After inserting these connections, pull lightly on the wires to insure they do not come out.

- Route new harness back into machine along with the main harness.

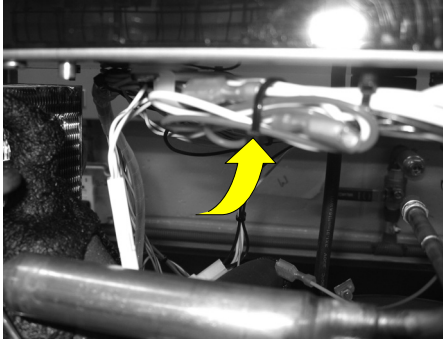


14. Locate white wire on new harness with piggy-back style spade connection. Remove white wire from refrigerant valve and connect piggy-back connector from new harness onto refrigerant valve. Reconnect white wire from main harness onto the new piggy-back connector. Route remaining portion of new harness toward the back of the machine.

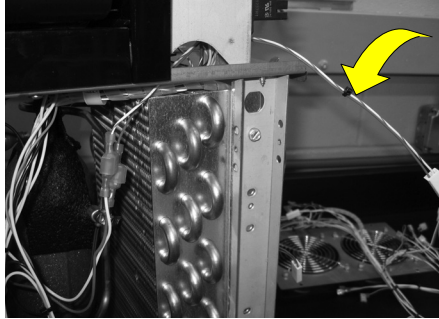
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INSTRUCTIONS (Continued)

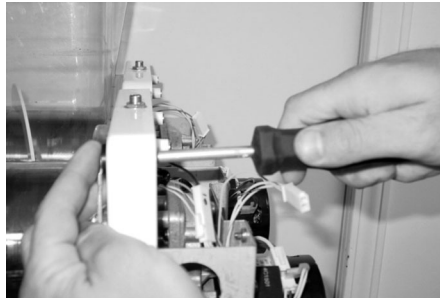
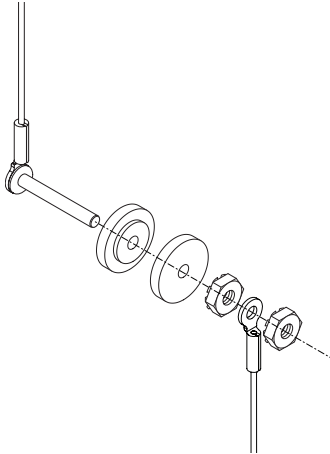
For ULTRA-1 Models that are Auto-fill ready:



15. Locate unused white and red auto-fill valve wire connections tied in a bundle on the main wiring harness. Carefully cut wire tie to free the bundle.



16. Connect white and red wires from the new harness (R) to white and red wires respectively on the main harness. Route the new harness toward the back of the machine.



17. Install level probe assembly into hole and secure with nuts provided (G).



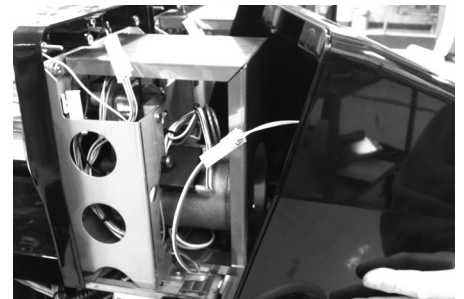
18. Position wire and connector away from metal bracket as shown. Attach using nuts provided. Pink is the right probe and Tan is the left probe. Reinstall motors using original screws.



19. Remove the two lower motor bracket screws and align new bracket in place. Attach with new screws (K) provided.



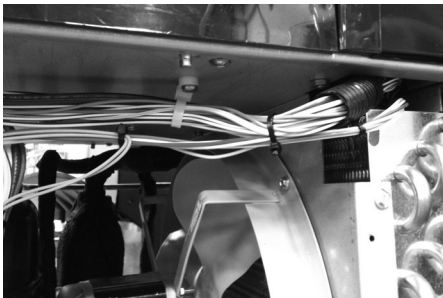
20. Install larger metal bracket as shown. Route light connection wires above plastic boss to keep from being pinched under the new mounting bracket. Route torque sensor wires away to keep from being pinched under metal mounting bracket. Secure with 4 nuts (J) provided.



21. Connect harness to each new motor cover assembly with Auto Fill, then mount motor cover to machine with new screws (N) provided. Hint: Align the motor cover in at the top, then snap the bottom in place.

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INSTRUCTIONS (Continued)



22. Using supplied cable tie (C), attach the new harness to the main harness to keep away from the condenser fan.

Plumbing & Water Pressure Requirements

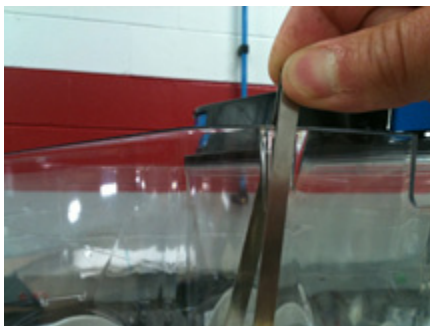
- Supply water pressure requirement is 50 – 80 psi.
Syrup supply is to be 30 – 80 psi.



23. Connect syrup supply lines from BIB system. Connect water lines from source. NOTE: Connection points for these are marked on the rear of the motor cover.



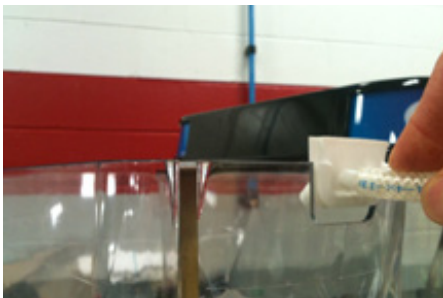
24. Reinstall front and side panels.



25. Install hoppers onto machine and slide probes onto hoppers into slots provided.



26. Route the tubes from the motor cover together and connect to hopper fitting.



27. Slide hopper fitting into place in the slot on the hopper.



28. Install customer supplied pump system. Turn on pump system and water supply. Check all tubing connections for leaks.

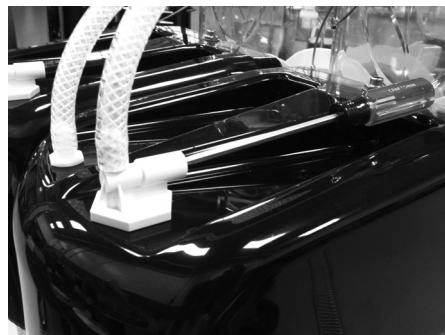
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INSTRUCTIONS (Continued)

Set up and calibration:

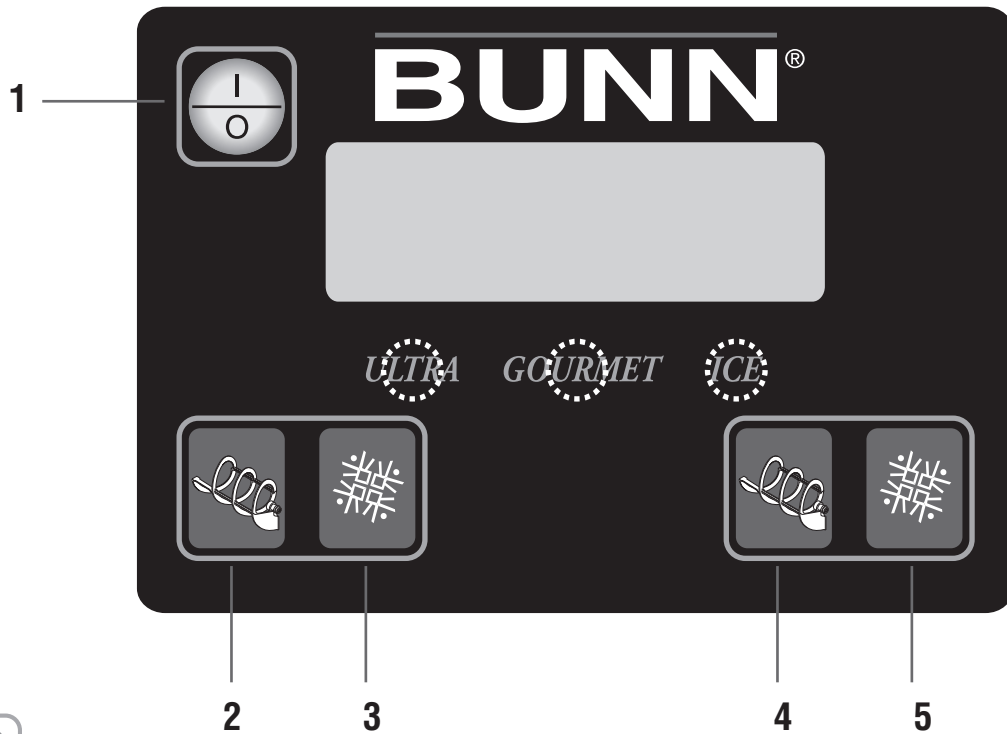
29. Apply power to machine and turn on water and syrup supply. Refer to the Programming section of this manual in the Refill Threshold section to check refill for proper operation.
30. At the threshold screen, with no product in the hopper, confirm the number on the left (top) of the screen is around 250. The number on the right of the screen is factory set to 155. The factory set point should not need any adjustment.
31. After confirming that both hoppers are reading about 250 for the threshold, proceed to the next screen to test the refill circuit.
32. At the test refill screen, select yes.
33. The Activate Valve screen will allow you to test the pumping and refill circuit. Press and hold the ULTRA button to activate the left refill system. Confirm that the left side is filling when the ULTRA button is pressed. Release the ULTRA button to stop the filling process. Repeat this process for the right side by pressing the ICE button to test. Check for leaks at the hoses while pumping system is running.
34. Run each side until water and product are flowing freely.
35. Take a sample from each side (directly from the tubes going into the hopper) to check for proper brix ratio.
36. Make adjustments to the brix/ratio by turning the screw/valve adjuster on the water side at the top of the motor cover (at right). Turning the screw clockwise will decrease the water flow. Counter-clockwise will increase the water flow. The flow rate on the syrup side is not adjustable.
37. Once the testing is complete, exit the programming menu.
38. The auto fill feature can be turned on by pressing the auger button for each side until the display reads "AUGER REFILL ON".

NOTE: Some models also include a "Delay Refill" option. This feature is used to dose in small amounts of new product while delaying between doses. This can help the already frozen product from becoming deluted and not ready to serve. These delay and fill times are to be determined and set based on each application as desired by the end user.








OPERATING CONTROLS (ULTRA-2 Shown)

There are five of these switches that will be used for the operation of the dispenser.



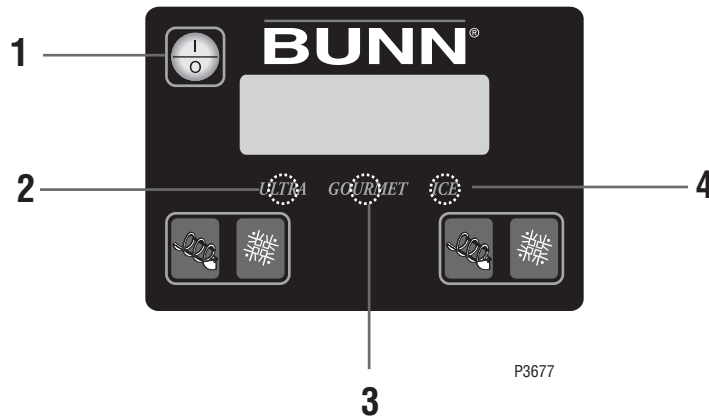
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1.  switch (upper left corner of the control pad)
This switch is the ON/OFF toggle switch which powers up the dispenser and the LCD display. When ON the Date and Time toggle back and forth continuously except during programming.
2.  (bottom left corner)
This is used to turn the left side auger motor to AUGER ON, AUGER OFF or AUGER REFILL ON. (Refill only applicable when installed)
3.  (bottom left corner)
This is used to turn the left side ice control to OFF, ICE or CHILL. (In ICE or CHILL mode, Auger will turn ON)
4.  (bottom right corner)
This is used to turn the right side auger motor AUGER ON, AUGER OFF or AUGER REFILL ON. (Refill only applicable when installed)
5.  (bottom right corner)
This is used to turn the right side ice control to OFF, ICE or CHILL. (In ICE or CHILL mode, Auger will turn ON)

PROGRAMMING

Using the menu-driven display on the front of the dispenser, the operator has the ability to alter or modify various parameters such as beverage consistency and set day/night “ON/OFF” times. The operator is also prompted to check a variety of periodic service functions or even a step-by-step cleaning routine. There is also the opportunity to return all changes back to factory default settings.

Access to most controls can be password protected to allow only qualified personnel to make changes.



ULTRA-2 Shown

PROGRAMMING SWITCHES

To access the programming mode, and to scroll through the different function screens, hidden programming switches are used. There are three of these switches that will be used for the setup of the dispenser.

1. **I/O** switch (upper left corner of the control pad)

This switch is the ON/OFF toggle switch which powers up the dispenser and the LCD display. This switch is also used as back up switch in menu mode.

2. **“GOURMET”** (center under display)

Press and hold this switch 5 seconds to access the Menu Function Index. This switch is also used as “NEXT” to scroll through the functions.

3. **“ULTRA”** (left under display)

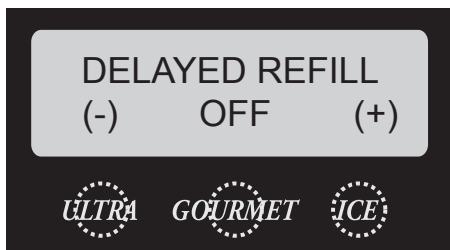
When prompted by a selection from the menu to answer yes or no, the “ULTRA” switch is used to answer “NO” or (-) minus.

4. **“ICE”** (right under display)

When prompted by a selection from the menu to answer yes or no, the “ICE” switch is used to answer “YES” or (+) plus.

Delayed Refill (Late Model Dispensers with Refill Kit Installed only)

This function allows the operator to dose in small amounts of new product while delaying between doses. This can help the already frozen product from becoming diluted and not ready to serve. These delay and fill times are to be determined and set based on each application as desired by the end user.



Refill Threshold (Late Model Dispensers with Refill Kit Installed only)

This function allows the operator to adjust the Refill Threshold depending on the type of product being dispensed.



Auto-fill Sanitizing Instructions (With Internal Brixing System Installed)

1. Fill bucket with 4 gallons of 120 Degree F water and sanitizing solution to equal 100 ppm of available chlorine.

Note: some installations may require more sanitizer solution to fill the supply lines completely.

2. Select “auger on” and set the cooling mode to “off” for each hopper being sanitized.
3. Empty product from each hopper being sanitized.
4. Pour one gallon of warm water into each hopper to rinse the remaining product, and then drain hopper(s).
5. Disconnect concentrate line from the B-I-B and set so the sanitizer can flow freely through it. Place the connector in the bottom of the sanitizer solution bucket.
6. Select “auger refill on” for each hopper being sanitized. Allow hoppers to fill until system reaches the fill probe. If a refill fault occurs, press the Ultra button to clear and continue filling. Repeat this process until the product line runs clear.

Note: You may need to drain the hopper again and allow filling until the product line runs clear, indicating sanitizer has completely filled the lines. If the delay refill system is activated, you may also need to turn the auger off, then back to “auger refill on” to fill the hopper without the delay.

7. Once full, allow sanitizer to sit in the hopper(s) for 10 minutes.
8. Select “auger off” for each hopper being sanitized. Drain the sanitizer from the hopper(s).
9. Remove the B-I-B connector(s) from the sanitizer bucket and reconnect to the product B-I-B(s).
10. Refer to the *Recommended Cleaning* instructions of the ULTRA operating manual and follow the steps to remove, clean and sanitize the hopper(s), lid(s) and other dispense parts.
11. Select “auger refill on” for each hopper being sanitized and allow to run until product starts flowing into the hopper(s).
12. Select “auger off” for each hopper being sanitized, then drain hopper(s).
13. The dispenser is now ready to be turned on and filled for use.

BUNN-O-MATIC COMMERCIAL PRODUCT WARRANTY

Bunn-O-Matic Corp. ("BUNN") warrants equipment manufactured by it as follows:

- 1) All equipment other than as specified below: 2 years parts and 1 year labor.
- 2) Electronic circuit and/or control boards: parts and labor for 3 years.
- 3) Compressors on refrigeration equipment: 5 years parts and 1 year labor.
- 4) Grinding burrs on coffee grinding equipment to grind coffee to meet original factory screen sieve analysis: parts and labor for 3 years or 30,000 pounds of coffee, whichever comes first.

These warranty periods run from the date of installation BUNN warrants that the equipment manufactured by it will be commercially free of defects in material and workmanship existing at the time of manufacture and appearing within the applicable warranty period. This warranty does not apply to any equipment, component or part that was not manufactured by BUNN or that, in BUNN's judgment, has been affected by misuse, neglect, alteration, improper installation or operation, improper maintenance or repair, damage or casualty. This warranty is conditioned on the Buyer 1) giving BUNN prompt notice of any claim to be made under this warranty by telephone at (217) 529-6601 or by writing to Post Office Box 3227, Springfield, Illinois 62708-3227; 2) if requested by BUNN, shipping the defective equipment prepaid to an authorized BUNN service location; and 3) receiving prior authorization from BUNN that the defective equipment is under warranty.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTY, WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF EITHER MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The agents, dealers or employees of BUNN are not authorized to make modifications to this warranty or to make additional warranties that are binding on BUNN. Accordingly, statements by such individuals, whether oral or written, do not constitute warranties and should not be relied upon.

If BUNN determines in its sole discretion that the equipment does not conform to the warranty, BUNN, at its exclusive option while the equipment is under warranty, shall either 1) provide at no charge replacement parts and/or labor (during the applicable parts and labor warranty periods specified above) to repair the defective components, provided that this repair is done by a BUNN Authorized Service Representative; or 2) shall replace the equipment or refund the purchase price for the equipment.

THE BUYER'S REMEDY AGAINST BUNN FOR THE BREACH OF ANY OBLIGATION ARISING OUT OF THE SALE OF THIS EQUIPMENT, WHETHER DERIVED FROM WARRANTY OR OTHERWISE, SHALL BE LIMITED, AT BUNN'S SOLE OPTION AS SPECIFIED HEREIN, TO REPAIR, REPLACEMENT OR REFUND.

In no event shall BUNN be liable for any other damage or loss, including, but not limited to, lost profits, lost sales, loss of use of equipment, claims of Buyer's customers, cost of capital, cost of down time, cost of substitute equipment, facilities or services, or any other special, incidental or consequential damages.

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