

BUNN®

G9WD-RH



INSTALLATION & OPERATING GUIDE

BUNN-O-MATIC CORPORATION

POST OFFICE BOX 3227

SPRINGFIELD, ILLINOIS 62708-3227

PHONE: (217) 529-6601 FAX: (217) 529-6644

To ensure you have the latest revision of the Operating Manual, or to view the Illustrated Parts Catalog, Programming Manual, or Service Manual, please visit the Bunn-O-Matic website, at www.bunn.com. This is absolutely FREE, and the quickest way to obtain the latest catalog and manual updates. For Technical Service, contact Bunn-O-Matic Corporation at 1-800-286-6070.



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.

AutoPOD, AXIOM, BrewLOGIC, BrewMETER, Brew Better Not Bitter, BrewWISE, BrewWIZARD, BUNN Espresso, BUNN Family Gourmet, BUNN Gourmet, BUNN Pour-O-Matic, BUNN, BUNN with the stylized red line, BUNNlink, Bunn-OMatic, Bunn-O-Matic, BUNNserve, BUNNSERVE with the stylized wrench design, Cool Froth, DBC, Dr. Brew stylized Dr. design, Dual, Easy Pour, EasyClear, EasyGard, FlavorGard, Gourmet Ice, Gourmet Juice, High Intensity, iMIX, Infusion Series, Intellisteam, My Café, PowerLogic, Quality Beverage Equipment Worldwide, Safety-Fresh, savemycoffee.com, Scale-Pro, Silver Series, Single, Smart Funnel, Smart Hopper, SmartWAVE, Soft Heat, SplashGard, The Mark of Quality in Beverage Equipment Worldwide, ThermoFresh, 392, A Partner You Can Count On, Air Brew, Air Infusion, Beverage Bar Creator, Beverage Profit Calculator, Brew better, not bitter., BUNNSource, Coffee At Its Best, Cyclonic Heating System, Digital Brewer Control, Nothing Brews Like a BUNN, Pouring Profits, Respect Earth, Respect Earth with the stylized leaf and coffee cherry design, Signature Series, Tea At Its Best, Phase Brew, The Horizontal Red Line, Titan, trifecta, Ultra, Velocity Brew are either trademarks or registered trademarks of Bunn-O-Matic Corporation.

CONTENTS

Introduction	3
User Notices	3
Electrical Requirements	4
Operating Controls	4
Coffee Grinding	5
Adjustments	5
Cleaning	6
Glossary	7
Ground Counter	8
Grinder Scale Calibration	8
Batch Size Setting	8
Coffee Calibration	8
Communicating With The Grinder	9
Troubleshooting	13
Electrical Schematic	15

INTRODUCTION

This equipment will store up-to six pounds of whole bean coffee in the hopper and grind it to a preset grind and amount into an awaiting funnel and filter from most commercial drip coffee brewers. The equipment is only for indoor use on a sturdy counter or shelf. Adequate space must be available above the grinder to raise the lids when adding beans. Use only with whole bean coffee.

The grind is preset at the factory to drip specifications as set forth by the United States Department of Commerce and adopted by the Coffee Brewing Center of the Pan American Coffee Bureau. Adjustments may be made to alter both the amount and grind from the factory setting.

USER NOTICES

Carefully read and follow all notices on the grinder and in this manual. They were written for your protection. All notices on the grinder are to be kept in good condition. Replace any unreadable or damaged labels.

⚠ CAUTION

PERSONAL INJURY
HAZARD.

KEEP FINGERS AND
FOREIGN OBJECTS
OUT OF HOPPER
OR CHUTE OPENING.

#05876.0000

⚠ WARNING

To reduce the risk of electric shock,
do not remove or open cover.
No user-serviceable parts inside.
Authorized service personnel only.
Disconnect power before servicing.

#37881.0000



00824.0000

⚠ WARNING

- ◆ Use only on a properly protected circuit capable of the rated load.
- ◆ Electrically ground the chassis.
- ◆ Follow national/local electrical codes.
- ◆ Do not use near combustibles.

An extension cord, when used, must be shorter than 20 feet if 16-gage 3-conductor wire, or shorter than 10 feet if 18-gage 3-conductor wire.

FAILURE TO COMPLY RISKS EQUIPMENT DAMAGE, FIRE, OR SHOCK HAZARD

READ THE ENTIRE OPERATING MANUAL INCLUDING THE LIMIT OF WARRANTY AND LIABILITY BEFORE BUYING OR USING THIS PRODUCT

20545-0000D 01/04 © 1990 Bunn-O-Matic Corporation

#20545.0000

ELECTRICAL REQUIREMENTS

This grinder has an attached cord set and requires 2-wire, grounded service rated 120 volts ac, 15 amp, single phase, 60 Hz.

OPERATING CONTROLS



Grind Pad (a)

Pressing initiates a grind cycle.

Stop Pad (b)

Pressing ends the operation of the grinder.

® Pad (c)

Pressing the copyright pad allows programming access.

Pads (d)

“Hidden” buttons used to navigate setup and programming menus.

Pads (e)

Press button to select small, medium or large batch size.

COFFEE GRINDING

1. Visually inspect the hopper for an ample supply of whole bean coffee.
2. Place a paper filter into the brew funnel. The filter must not be folded-over or tilted to one side.
3. Insert the funnel into the funnel rails until it stops.
4. Select batch size desired (e).
5. Momentarily press the “START” switch (a). The grinding will begin after a moment. The actual weight of the coffee being ground into the funnel will be shown on the display during grinding. The grinder will automatically stop when the correct weight is reached. **DO NOT TOUCH THE FUNNEL OR FUNNEL HANDLE DURING GRINDING. THIS WILL CAUSE THE INCORRECT WEIGHT OF COFFEE TO BE GROUND.**
6. Remove the funnel from the grinder and level the bed of grounds by gently shaking.
7. The loaded funnel is now ready for use in any commercial drip coffee brewer according to the manufacturer’s instructions.

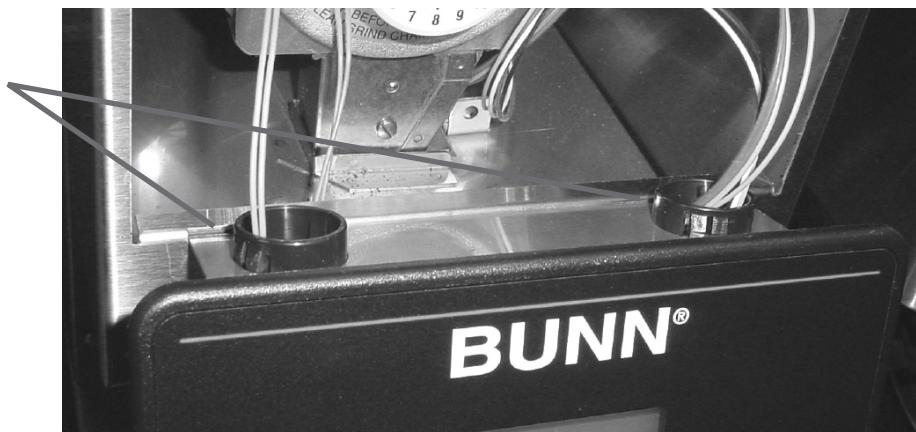
ADJUSTMENTS

The grind can be set from fine to very coarse. The grind may be adjusted for use in most commercial coffee brewers. The following procedures should be used to make adjustments.

Burr Adjustment

1. Unplug the grinder and remove the hopper by pulling forward with the handle.
 2. Plug-in the grinder, place funnel with filter into the funnel rails. Momentarily press the “START” button and release, run grind cycles until all of the coffee in the grind chamber is dispensed.
 3. Remove two black screws from the lower control panel bezel.
 4. Remove the control panel and hang the control panel on front of grinder by inserting metal tabs on the back of control panel into slots on the front of grinder.
 5. Make sure funnel with filter is still in place in the funnel rails. Go to the “GRIND MOTOR” menu under the level 1 “SERVICE TOOL?” menu, and press the button under “ON” to start the motor. Slowly turn the adjusting screw in a clockwise direction until a metallic whine is heard due to the rubbing of the grinding burrs. Reverse the adjusting screw just until the whining stops. Turn off the motor and exit to home screen.
 6. Remove the white plastic cap, and replace it on the end of the grinder with the “0” aligned with the adjusting screw slot.
 7. The following settings approximately correspond to the CBC recognized grinds.
FINE GRIND: Rotate the adjusting screw to the “7” in a counterclockwise direction.
DRIP GRIND: Rotate the adjusting screw to the “8” in a counterclockwise direction.
REGULAR (COARSE) GRIND: Rotate the adjusting screw to the “12” counterclockwise direction.
- NOTE:** Exact adjustment will vary according to bean roast or added flavoring
8. Reinstall front control panel.

Tabs into slots on front of grinder.



CLEANING

WARNING – Unplug grinder before the removal of any panel or grind chamber-housing parts.

1. Clean all exterior surfaces using a damp cloth rinsed in any mild, nonabrasive, liquid detergent. Care should be taken not to scratch the grinder with any abrasive material.
2. Remove the hopper by sliding all the way forward.
3. Remove the lid from the hopper, and empty of beans.
4. Clean and sanitize the hopper and lid. Care should be taken not to scratch the hoppers with any abrasive material.
5. Place an empty funnel with filter in the funnel rails. Press and release the “GRIND” button. Run a few cycles until all coffee in the grind chamber is dispensed and disconnect the grinder from the power source.
6. Remove the funnel and filter and discard any remaining coffee grounds.
7. Remove two black screws from the lower control panel bezel.
8. Remove the control panel and hang the control panel on front of grinder by inserting metal tabs on the back of control panel into slots on the front of grinder.
9. Remove the two screws holding the front cover to the burr housing. Carefully remove the burr housing front cover. Clean inside surface with a dry stiff non-metallic bristle brush and wipe with a dry clean cloth.
10. Carefully remove the rotor cup, shear plate, burr rotor and motor shaft extension from the grinder. Clean all parts with a dry stiff non-metallic bristle brush and wipe with a dry clean cloth.
11. Clean the grind chamber with a dry stiff non-metallic bristle brush and wipe with a dry clean cloth.
12. Reinstall the motor shaft extension, burr rotor, shear plate, rotor cup and front cover to the burr housing.
13. Reinstall the front control panel.
14. Refer to the “*Adjustment*” section of the Operating and Service manual for burr adjustment.
15. Reinstall the cleaned hopper on the grinder.



Align rear of hopper with rails for proper installation.

GLOSSARY

<p>GRIND OZ: ##.## (-) DONE (+)</p> <p><i>Digital Brewer Control™</i></p>	<p>Adjust current weight setting using (-) and (+) buttons</p>	<p>CENTER SW TARE</p> <p><i>Digital Brewer Control™</i></p>	<p>Allows present weight on scale to be tared</p>
<p>SET GRIND TIME? NO YES</p> <p><i>Digital Brewer Control™</i></p>	<p>Allows adjustment of current time setting</p>	<p>OUNCES = #.## EXIT TARE</p> <p><i>Digital Brewer Control™</i></p>	<p>Shows current weight on scale</p>
<p>GRIND SEC: #.# (-) DONE (+)</p> <p><i>Digital Brewer Control™</i></p>	<p>Adjust current time setting using (-) and (+) buttons</p>	<p>TEST FREQUENCY? NO YES</p> <p><i>Digital Brewer Control™</i></p>	<p>Test read/write coils (Brew-WISE enabled grinders only)</p>
<p>3 BATCHES DONE? NO YES</p> <p><i>Digital Brewer Control™</i></p>	<p>Allows adjustment of other batch sizes (multiple batch size grinders only)</p>	<p>FACTORY DEFAULT? NO YES</p> <p><i>Digital Brewer Control™</i></p>	<p>Resets all functions to factory defaults</p>
<p>SERVICE TOOLS? NO YES</p> <p><i>Digital Brewer Control™</i></p>	<p>Test individual inputs and outputs</p>	<p>MACHINE TYPE? WEIGHT TIMED</p> <p><i>Digital Brewer Control™</i></p>	<p>Select between weight based or time based grinding</p>
<p>TEST GRIND MOTOR NO NEXT YES</p> <p><i>Digital Brewer Control™</i></p>	<p>Allow selection of grinder motor test</p>	<p>CALIBRATE SCALE? NO YES</p> <p><i>Digital Brewer Control™</i></p>	<p>Allows calibration of scale</p>
<p>GRIND MOTOR ON DONE OFF</p> <p><i>Digital Brewer Control™</i></p>	<p>Turns grinder motor ON and OFF</p>	<p>CALIBRATE SCALE EXIT TARE</p> <p><i>Digital Brewer Control™</i></p>	<p>Allows scale to be tared for calibration</p>
<p>TEST SWITCHES? NO YES</p> <p><i>Digital Brewer Control™</i></p>	<p>Allows selection of switch test</p>	<p>PLEASE WAIT TARE</p> <p><i>Digital Brewer Control™</i></p>	<p>Displayed while scale is being tared</p>
<p>PRESS RIGHT HIDDEN TO EXIT</p> <p><i>Digital Brewer Control™</i></p>	<p>Pressing any switch will show switch selected on screen</p>	<p>CALIBRATION OZ (-) 8.00 (+)</p> <p><i>Digital Brewer Control™</i></p>	<p>Adjust weight be added for calibration</p>
<p>TEST SCALES? NO YES</p> <p><i>Digital Brewer Control™</i></p>	<p>Allows selection of scale test</p>	<p>PLEASE WAIT CAL</p> <p><i>Digital Brewer Control™</i></p>	<p>Displayed while scale is calibrating</p>
<p>CALIBRATE COFFEE NO YES</p> <p><i>Digital Brewer Control™</i></p>	<p>Set “offset” weight for coffee name selected</p>	<p>MAX BIT SPREAD # (-) DONE (+)</p> <p><i>Digital Brewer Control™</i></p>	<p>Set maximum “offset” adjustment for grind</p>
<p>SWITCHES ENABLE DISABLE</p> <p><i>Digital Brewer Control™</i></p>	<p>Allows switches on control panel to be disabled for servicing grinder</p>	<p>Pm Burr LBS # RESET</p> <p><i>Digital Brewer Control™</i></p>	<p>Shows total amount of coffee which has been ground through grinder</p>

GROUND COFFEE COUNTER

The grinder will keep a running total of the pounds of coffee the grinder has ground. This running total is shown in the “PmBurrslbs #” menu, under the “SERVICE TOOLS” menu. This running total can be used to determine when the grinding burrs need cleaning or replacement. Pressing the button under “RESET” will reset this total to zero.

GRINDER SCALE CALIBRATION

1. Place empty funnel into funnel rails.
2. Press and hold the right hidden (copyright) button until the “MACHINE TYPE” menu appears. (See level 2 programming)
3. Press the middle button under the screen until the “CALIBRATE SCALES?” menu appears.
4. Press the right button under “YES” in the “CALIBRATE SCALES?” screen.
5. Press the middle button under “TARE”.
6. When the “PLACE 8oz” screen appears, remove the funnel, and place a calibrated 8oz weight in the funnel. Replace the funnel in the funnel rails.
7. Press the middle button under “DONE”. The grinder will go through a calibration, and then return to the main screen when calibration is complete.
8. Remove the weight from the funnel. The grinder is now ready calibrated and ready for normal operation.

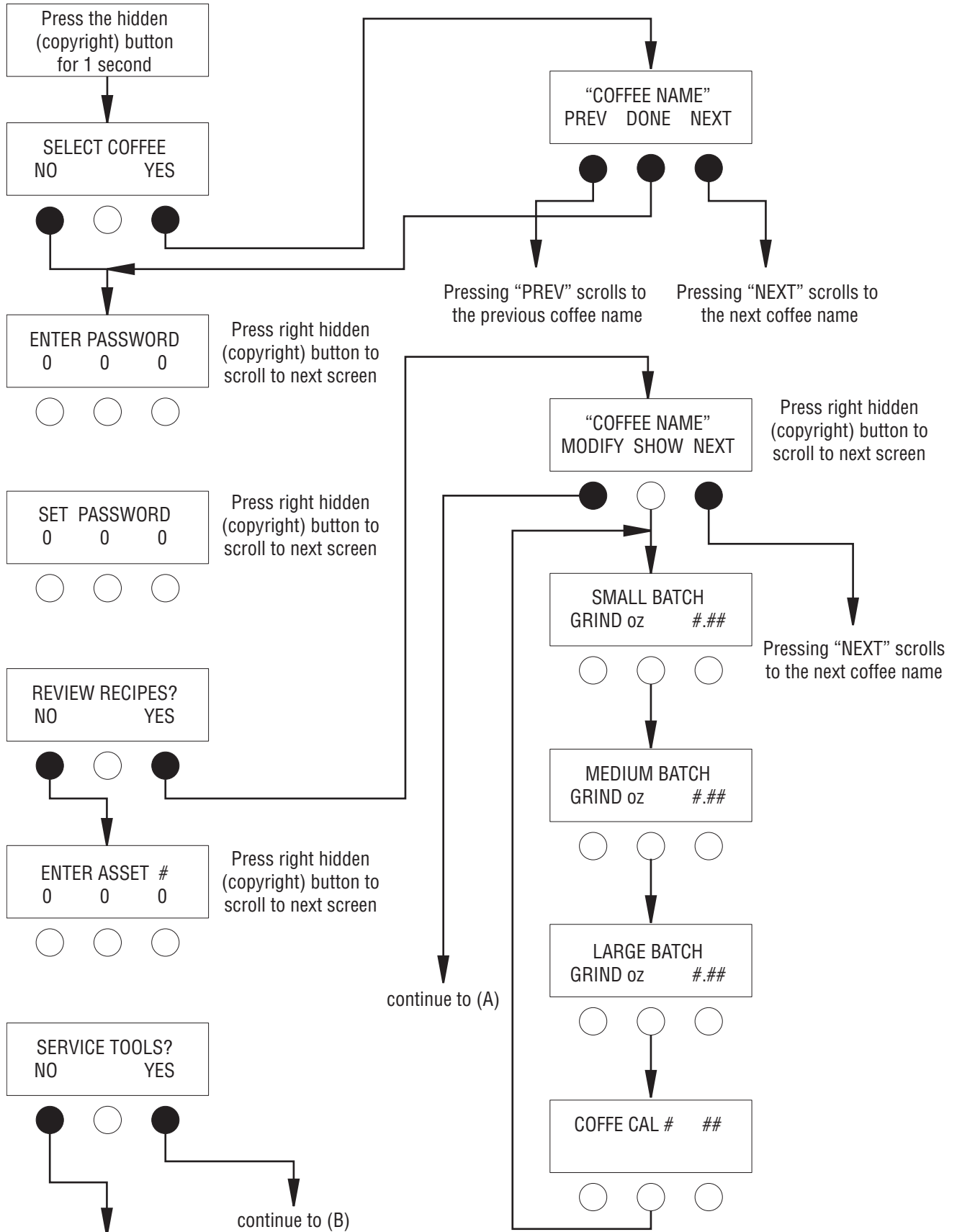
BATCH SIZE SETTING

1. Press and hold the right hidden, (copyright) button until the “REVIEW RECIPIES” menu appears. (See level 1 programming)
2. Press the button under “YES” and the “COFFEE NAME” screen appears.
3. Press the button under “NEXT” until the name of the coffee you wish to set the batch sizes for appears.
4. Press “MODIFY” under the screen containing the name of the coffee you wish to set the batch sizes for.
5. Using the buttons under (-) and (+), change the weight displayed to the new weight desired. Press a different batch size button to set the weight for that batch size. Press the button under “DONE” when complete.
6. In the “3 BATCHES DONE” menu, if no further changes are to be made, press the button under “YES” to exit the “COFFEE CALIBRATION” menu.

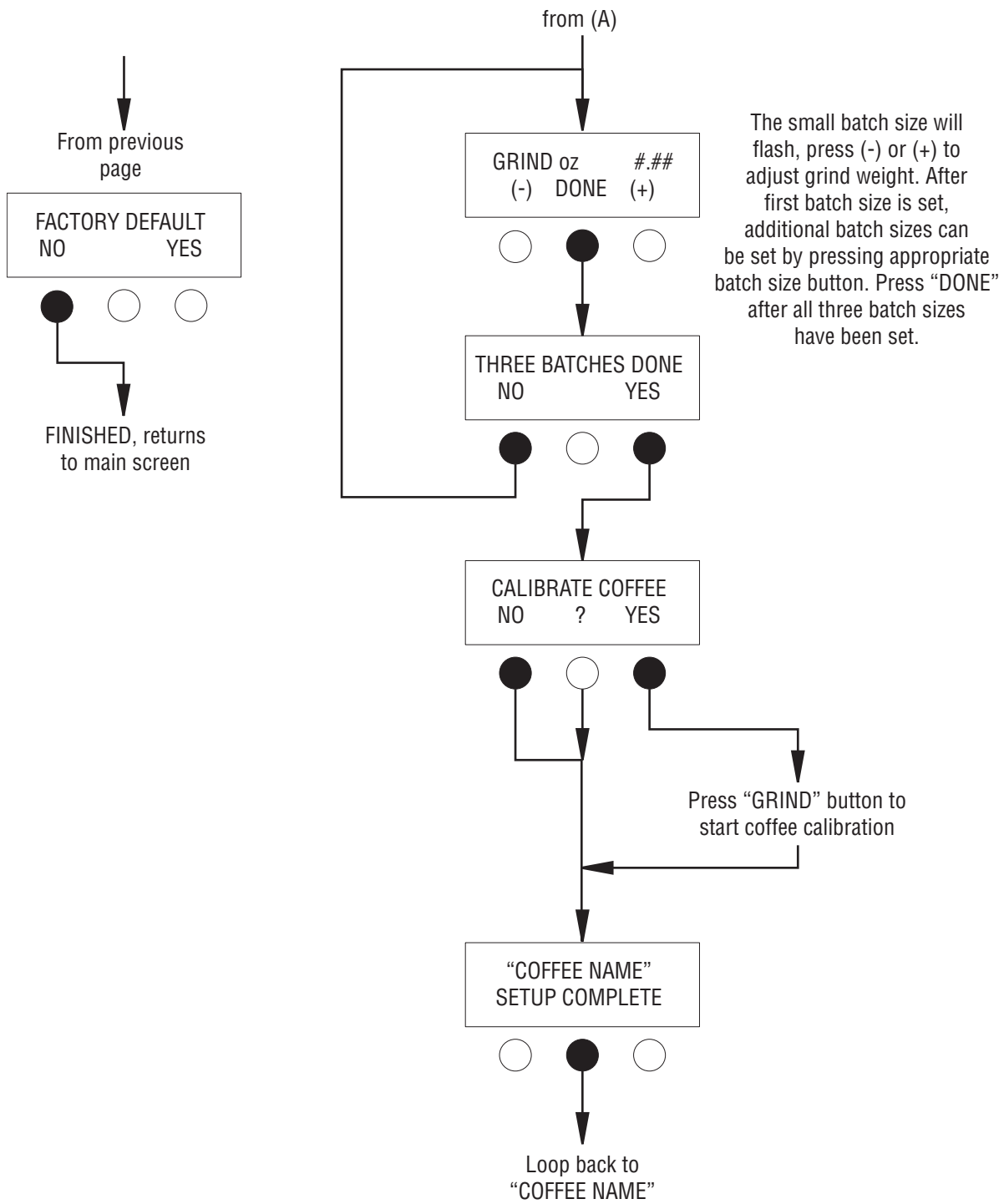
COFFEE CALIBRATION

1. After the “3 BATCHES DONE” menu, press “YES” to enter the “COFFEE CALIBRATION” menu.
2. This menu sets the “offset” weight for the coffee name selected, so that accurate weight grinding will be achieved.
3. With a funnel in place, press the “GRIND” button. After grinding, the coffee weight will be read and calibrated, and the “COFFEE NAME” “SETUP COMPLETE” menu will appear. Press the middle button to loop back and select another coffee name for batch size setting and calibration.

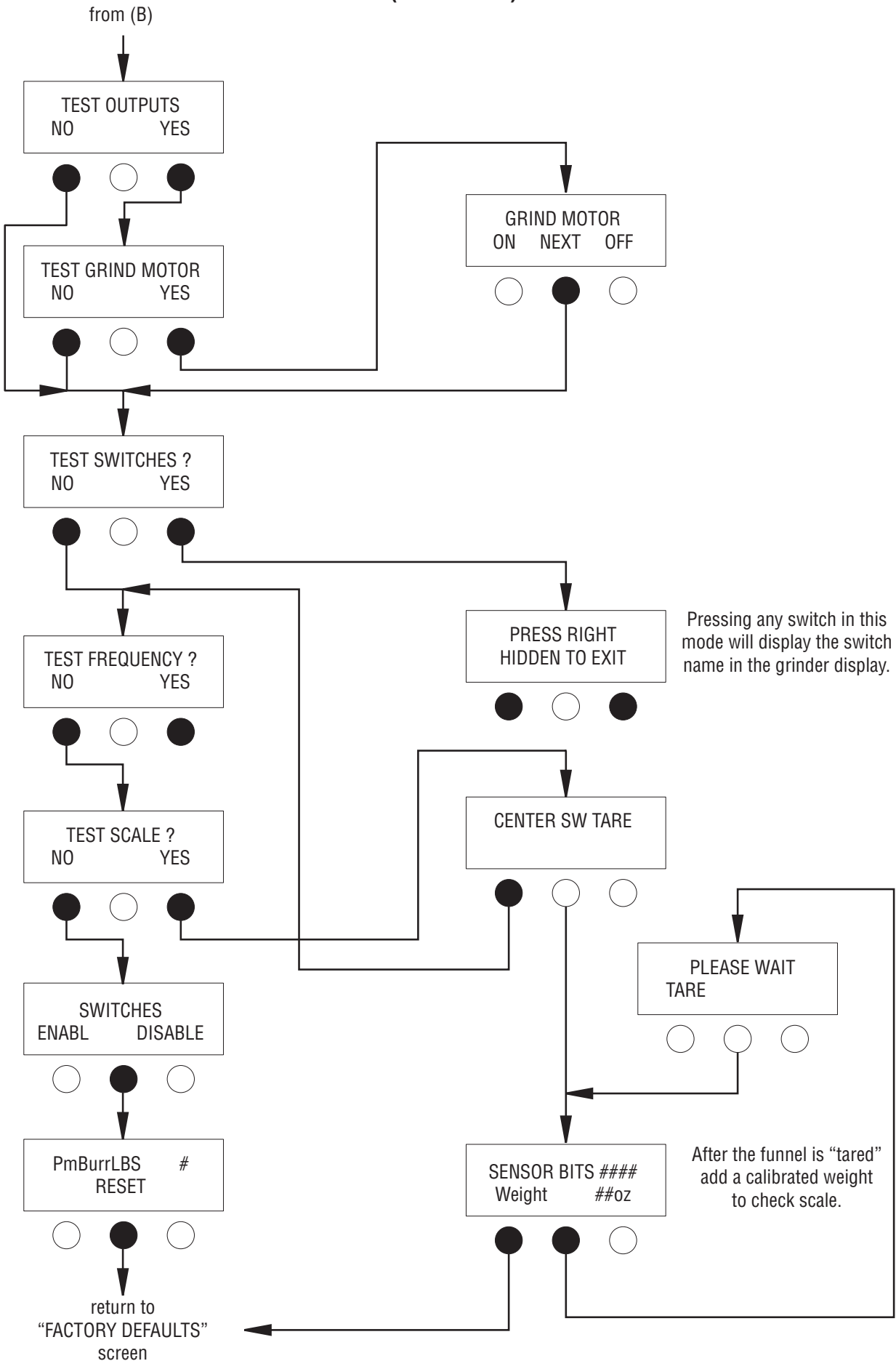
COMMUNICATING WITH THE GRINDER



COMMUNICATING WITH THE GRINDER (Continued)

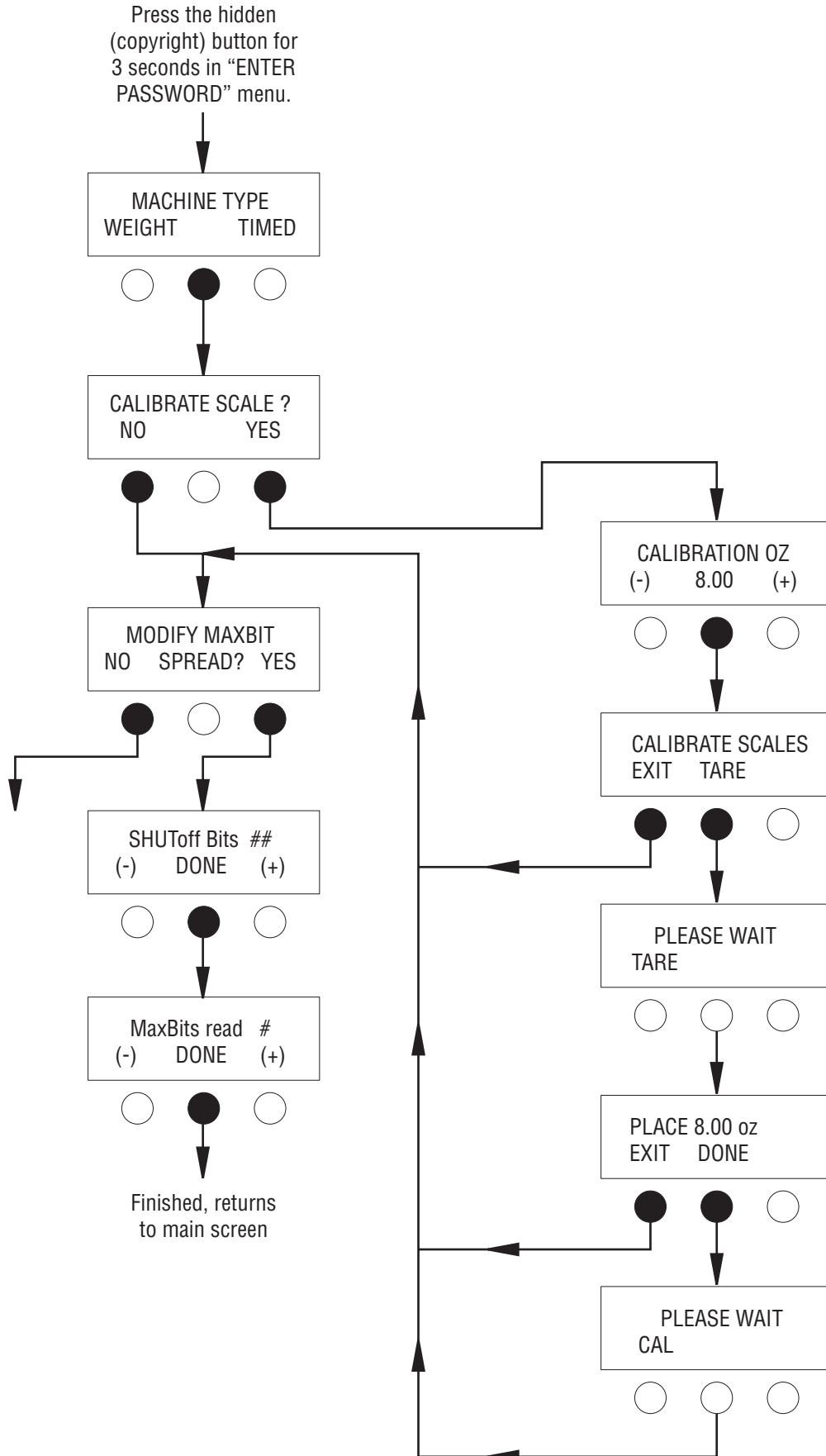


COMMUNICATING WITH THE GRINDER (Continued)



COMMUNICATING WITH THE GRINDER (Continued)

LEVEL 2 FUNCTIONS:



TROUBLESHOOTING

A troubleshooting guide is provided to suggest probable causes and remedies for the most likely problems encountered. If the problem remains after exhausting the troubleshooting steps, contact the Bunn-O-Matic Technical Service Department.

- Inspection, testing and repair of electrical equipment should be performed only by qualified service personnel.
- All electronic components have 120 volts ac and low voltage dc potential on their terminals. Shorting of terminals or the application of external voltage may result in board failure.
- Intermittent operation of electronic circuit boards is unlikely. Board failure will normally be permanent. Of an intermittent condition is encountered, the cause will likely be a switch contact or a loose connection at a terminal or crimp.
- Make certain that all electrical connections are tight and isolated.

WARNING

- Exercise extreme caution when servicing electrical equipment.
- Turn power OFF when servicing, except when electrical tests are specified.
- Follow recommended service procedures.
- Replace all protective shields or safety notices.

Problem

Grinder will not start

Probable Cause

1. Motor overload protector

Remedy

Remove the metal plug located on the right side of the housing. Press the red "Reset" button. Listen carefully for a "click". This resets the motor protection circuit and indicates that the motor may have encountered an overload. (An overload can occur when something other than coffee is inserted into the hopper for grinding)

2. No power

Check the voltage at the power cord with a voltmeter. Voltage must be 120 volts across the black and white wires.

3. START button

Use "TEST SWITCHES?" menu under "SERVICE TOOLS?" menu in level 1 functions to test START button.

4. Circuit board

Circuit board. Check that there is 24VDC to the relay coil when the Start button is pressed.

TROUBLESHOOTING (Continued)

Problem	Probable Cause	Remedy
Grinder will not start (continued)	5. Relay	Check that relay contacts close when start switch is pressed.
	6. Motor	With a voltmeter, check that 120 volts AC is present across L1 and L2 on the rear of the motor when the Start switch is pressed. If voltage is present, and motor does not start, replace motor.
Grinder will not shut off	1. STOP button	Use “TEST SWITCHES?” menu under “SERVICE TOOLS?” menu in level 1 functions to test STOP button.
	2. Relay	With power removed from the machine, check that there is no continuity across the relay contacts.
Incorrect weight of coffee dispensed	1. Grinder scale requires calibration.	Refer to GRINDER WEIGHT CALIBRATION procedure.
	2. Funnel handle touched during grinding.	Do not touch funnel or funnel handle during grinding operation.

SCHEMATIC WIRING DIAGRAM G9WD-RH

