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**SERVICE MANUAL AVALON *Triple-B* Single-Cup Brewer**

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OTHER RELATED DOCUMENTS

- A - User Card
- B - Service Card
- C - Order Form
- D - Parts Return Form

## 1 INTRODUCTION

Cafection manufactures the AVALON Triple-B Brewer based on its original Avalon single-cup technology and is complemented with the coffee of your choice!

The Avalon family of brewers are designed and engineered based on Cafection's 35 year experience in the office Coffee Service industry. This convenient, reliable and user friendly system assures fresh-tasting gourmet coffee, delicious hot chocolate and succulent cappuccinos whipped to perfection, every time, any time.

The Avalon Triple-B brewer offers 3 choices of whole bean coffee that can be mixed with soluble products upon request as well as gourmet hot chocolate, french vanilla, café latté, mokaccino and hot water.

All products are available in 2 adjustable cup sizes;  
5 to 12 oz. in one brew cycle, up to 24 oz in double brew cycle.

In the following pages, you will find clearly illustrated and easy-to-follow instructions regarding:

- Safety Instructions
- Reference Drawings
- Controls and Features
- Initial Setup
- Service Software
- Cleaning and Sanitizing
- Preventive Maintenance
- Servicing Parts
- Troubleshooting

### BEFORE YOU START

These brewers have been manufactured to comply with the highest sanitation, safety and performance standards. To maintain this degree of safety and performance, it is important that the installation and maintenance be performed in accordance with the recommendations made in this service manual. Any changes to the construction or wiring can be hazardous to the user. The brewer must not be altered in any way and only genuine replacement parts from Cafection must be used for the preventive maintenance and repair.

**This document refers to the specifications, parameters and user interface of the Avalon Triple-B Brewer and may differ from the previous Avalon models.**



**The steps outlined in “Initial Set-Up” of this manual must be completed before plugging in the Brewer!!!**

**2 SAFETY INSTRUCTIONS**

Basic safety precautions should always be followed when using electrical appliances. Read all instructions before using this brewing equipment.

**Food-Contact Parts**

- We recommend that you clean and sanitize all food-contact parts prior to installation and use. See the cleaning and sanitizing section for more details

**Warnings**

- To minimize the risk of fire or electric shock, do not expose this equipment to rain or moisture.
- Do not immerse this equipment in water; it could lead to electric shock or other malfunctions.
- Do not use this equipment other than for its intended use.
- This equipment contains hot water; extreme caution must be used when moving it.
- This brewing equipment is intended for indoor installation only.

**Power supply**

- Always use a grounded 120V AC 60Hz socket outlet rated for 15Amps service.
- Each piece of brewing equipment must have its own electrical outlet, on a dedicated circuit.
- Extension cords may not be used.
- This equipment is equipped with a polarized alternating current line plug (one blade wider than the other). Only use this plug with an outlet in which the prongs can be fully inserted. Avoid any exposure of the prongs on the polarized plug.

**Disconnect the equipment if:**

- Damage is done to the power cord;
- The equipment doesn't work properly;
- The temperature of the power cord or plug increases dramatically during use;
- Unusual conditions occur.



**FAILURE TO COMPLY CAN CAUSE EQUIPMENT DAMAGE, FIRE OR SEVERE BODILY INJURY.**



### 3 WARRANTY

#### 3.1 Warranty Policy

We hereby certify that the products manufactured by Cafection are, to the best of our knowledge, free from all defects and faulty workmanship. The following warranties and conditions are applicable:

All parts in contact with water (outlet valves, heating element, thermostat, probe, inlet valve and tank float) are warranted against material and workmanship defects for 90 days from date of shipment.

All remaining parts of the brewer are warranted against material and workmanship defects for one year from date of shipment.

All warranty service and returns must have prior authorization from Cafection. Please contact Cafection customer service at 1-800-561-6162.

#### **Conditions**

Cafection assumes no responsibility for substitute replacement parts installed on the Avalon Triple-B Brewer that have not been purchased from Cafection.

The following circumstances will void the warranty policy:

- Improper installation or operation of the equipment.
- Abuse or neglect, including but not limited to, failure to follow the preventive maintenance schedule.
- Variation in equipment performance due to excessive mineral deposit or local water conditions.
- Equipment altered in any way and/or dates, codes or serial numbers removed or modified.
- Equipment damaged in shipping from the customer to Cafection due to improper packaging.

Please note that labor is not covered by the warranty and that the repair protocol is limited to replacing the defective part. Should any additional repairs need to be done, they will be charged to the customer.

Equipment or parts will not be accepted without a Return Merchandise Authorization (RMA) number from Cafection.

Please return your warranty card to Cafection via mail or fax to validate your warranty and register your unit for part upgrades.



Tel.: 1-800-561-6162  
Fax: 1-800-463-2739  
E-mail - [order@cafection.com](mailto:order@cafection.com)  
[www.cafection.com](http://www.cafection.com)

### 3.2 Warranty Return Procedure

In order to always offer you better, faster service, we request your cooperation for the return of parts under warranty. We thank you in advance for taking the time to follow this procedure:

1. Please contact the Customer Service department to obtain a RMA# (Return merchandise authorization).
2. It is important to fill out the "Parts Return Form" (See Parts Manual) completely and fax it with a copy of the original invoice to Cafecton at (1-800-463-2739) for approval.
3. Do not destroy any parts before receiving a written confirmation that this part will or will not be credited or exchanged.
4. Keep a copy of the authorized parts return form for your records.
5. A copy of the "Part Return Form" **must be included** with your parts returned.



***PLEASE MAKE SURE THE MERCHANDISE IS WELL PACKED!***  
***Please use original packaging!***

6. Once the merchandise is received, Cafecton will check the parts and apply a credit to your account or exchange the merchandise if the warranty is applicable. Only guaranteed parts are authorized for return.
7. We suggest you keep replacement parts on hand.
8. The warranty covers only **regular shipping**. Overnight shipping charges will be applied to your order. Orders must be received before 12:00 pm Eastern Standard Time to leave the same day\*.

\* Some conditions may apply.



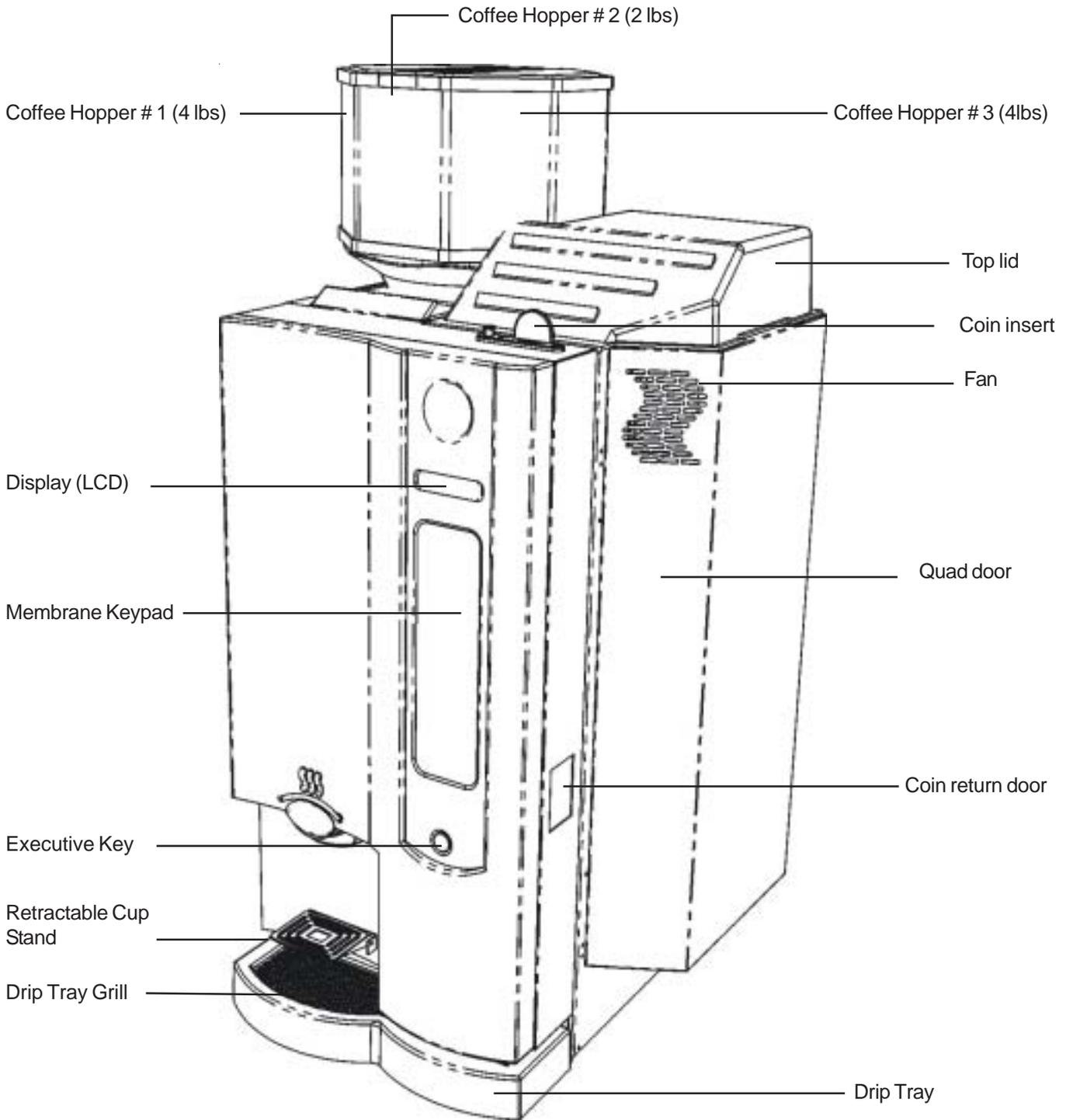
FOR MORE INFORMATION, PLEASE CALL CUSTOMER SERVICE AT 1-800-561-6162



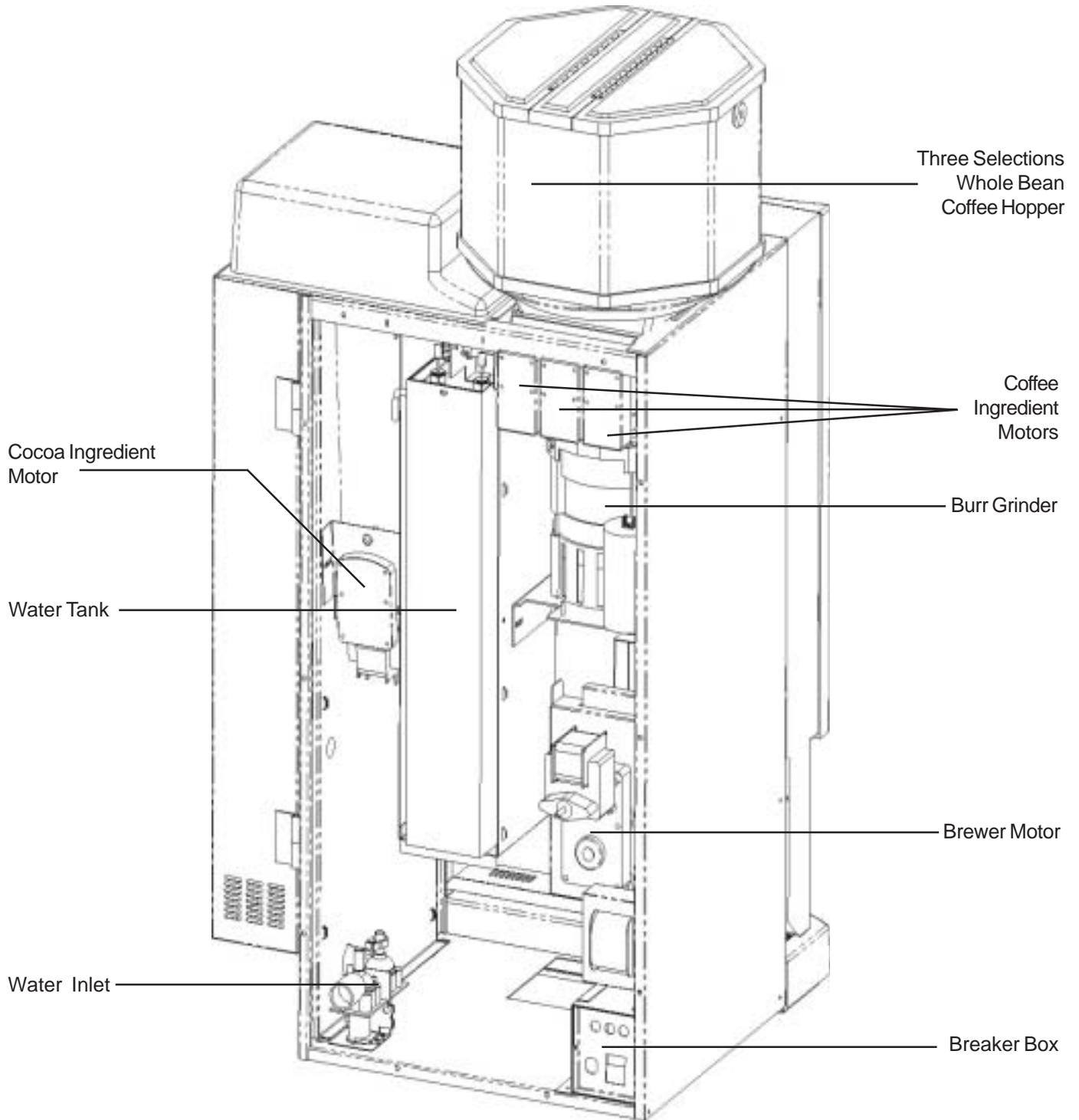
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**4 REFERENCE DRAWINGS**

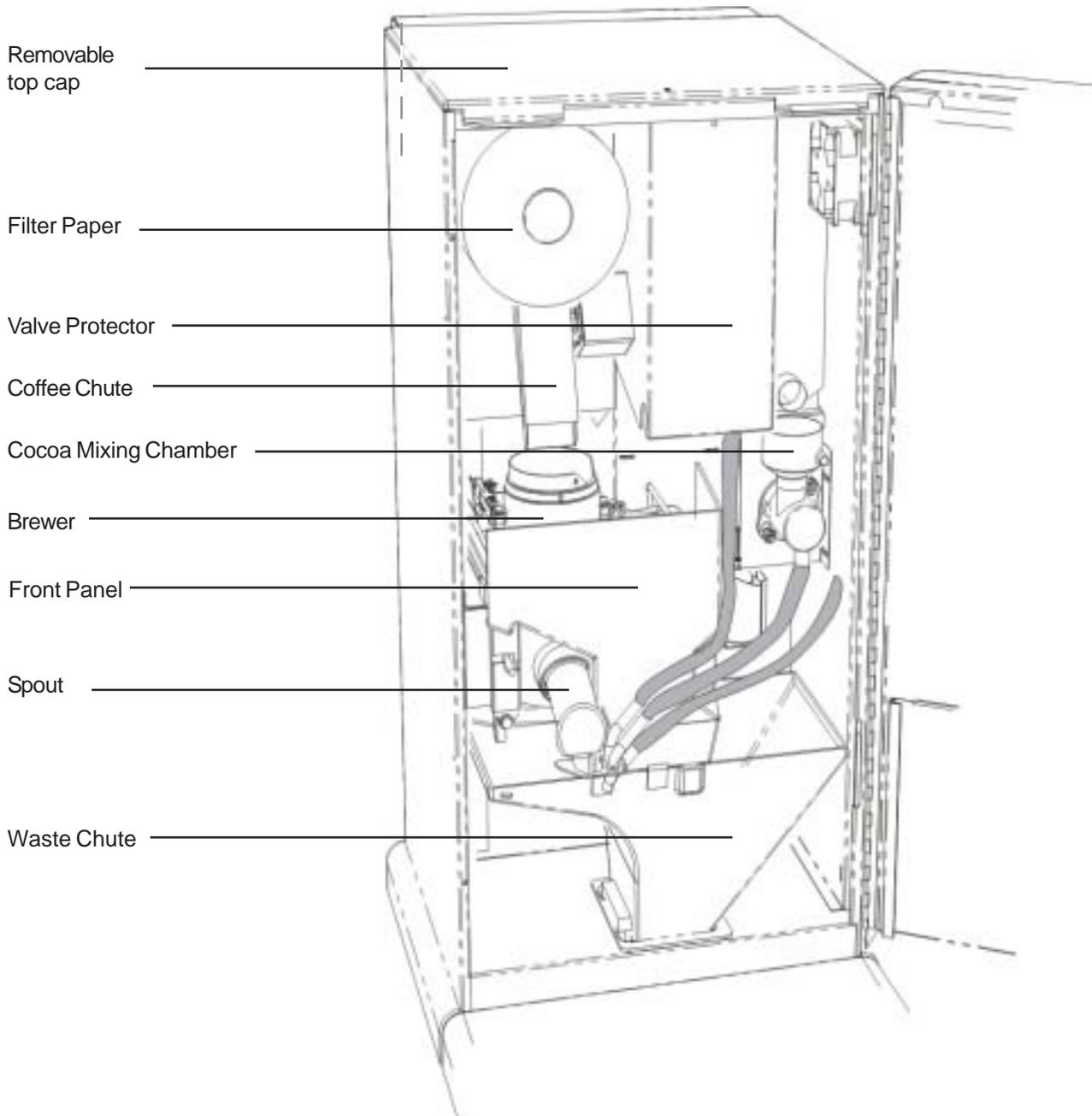
**4.1 External View**



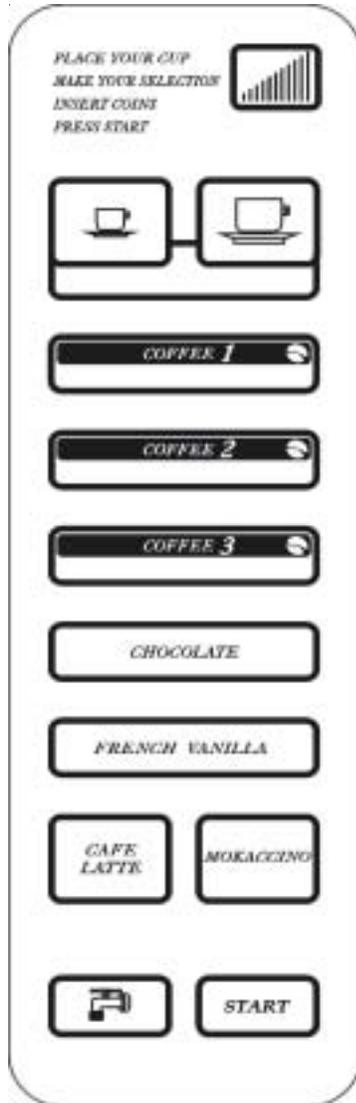
4.2 Rear View



4.3 Internal View



#### 4.4 Membrane Keypad



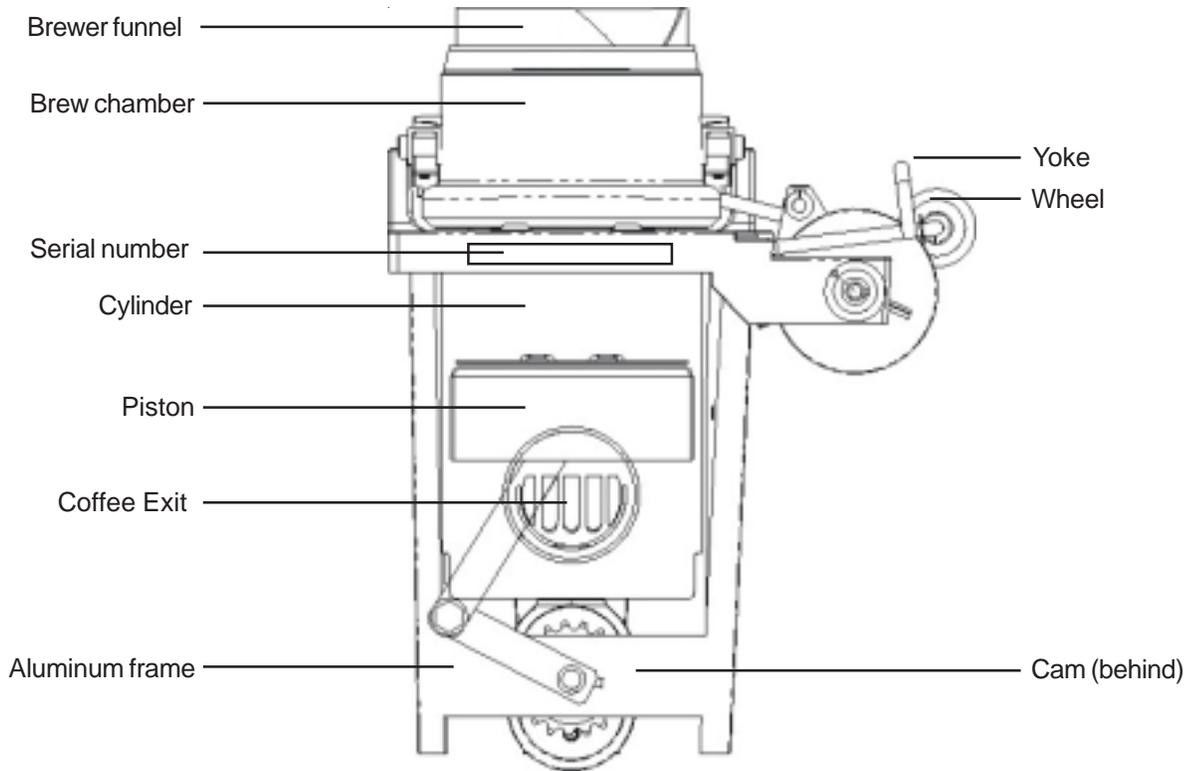
The user-friendly membrane keypad buttons are clear and simple:

1. Place your cup
2. Choose a beverage
3. Choose a size
3. Choose your strength
4. Press Start to brew

The cup area is always conveniently illuminated and the LCD will indicate the steps and communicate messages.

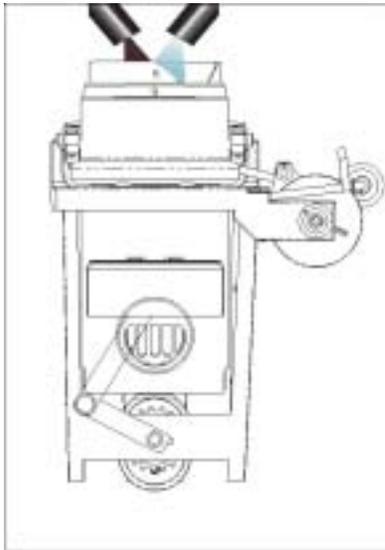
**4.5 Brewer Assembly**

The “Baron” platinum brewing system is in a class of its own in the single cup coffee business and is specifically designed for Avalon units. Its vacuum extraction process, joined with a high quality filter paper, brews a coffee of unsurpassed quality to meet the taste profile of the best coffee “connoisseurs”. Best of all, this is available for every cup of coffee at any time of day. See the following page for the description of the brewing process.



4.6 Brewing Process

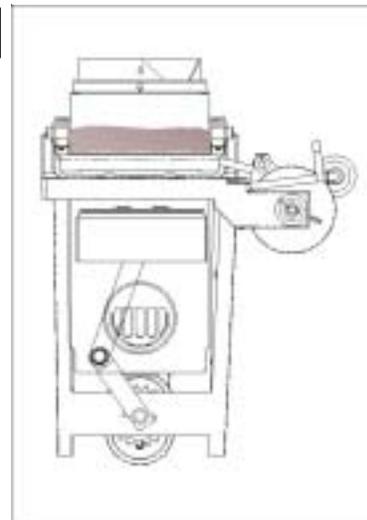
1



**Step 1 Ascent of the piston**

The ground coffee and the water are dispensed into the brew chamber during the ascension of the piston. This compresses the air in the cylinder and forces it through the coffee mixture in the brew chamber thereby agitating the brewing coffee.

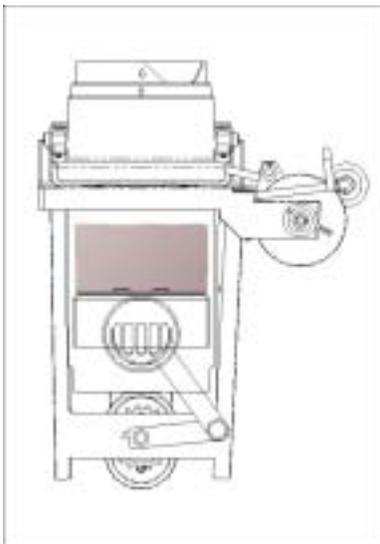
2



**Step 2 Pauses**

Once the piston has reached its top dead point, it will pause to allow the coffee to brew to the appropriate strength. There will be one shot of water before the descent to rinse the chamber.

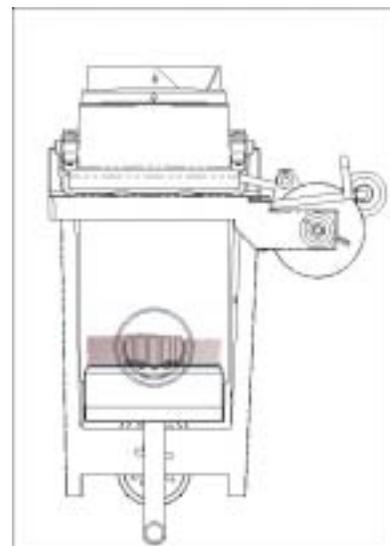
3



**Step 3 Descent of the piston**

The descent of the piston will create a vacuum thereby extracting the coffee from the grounds through the filter paper and into the cylinder. The last pause will be to allow all the coffee to drip from the brew chamber.

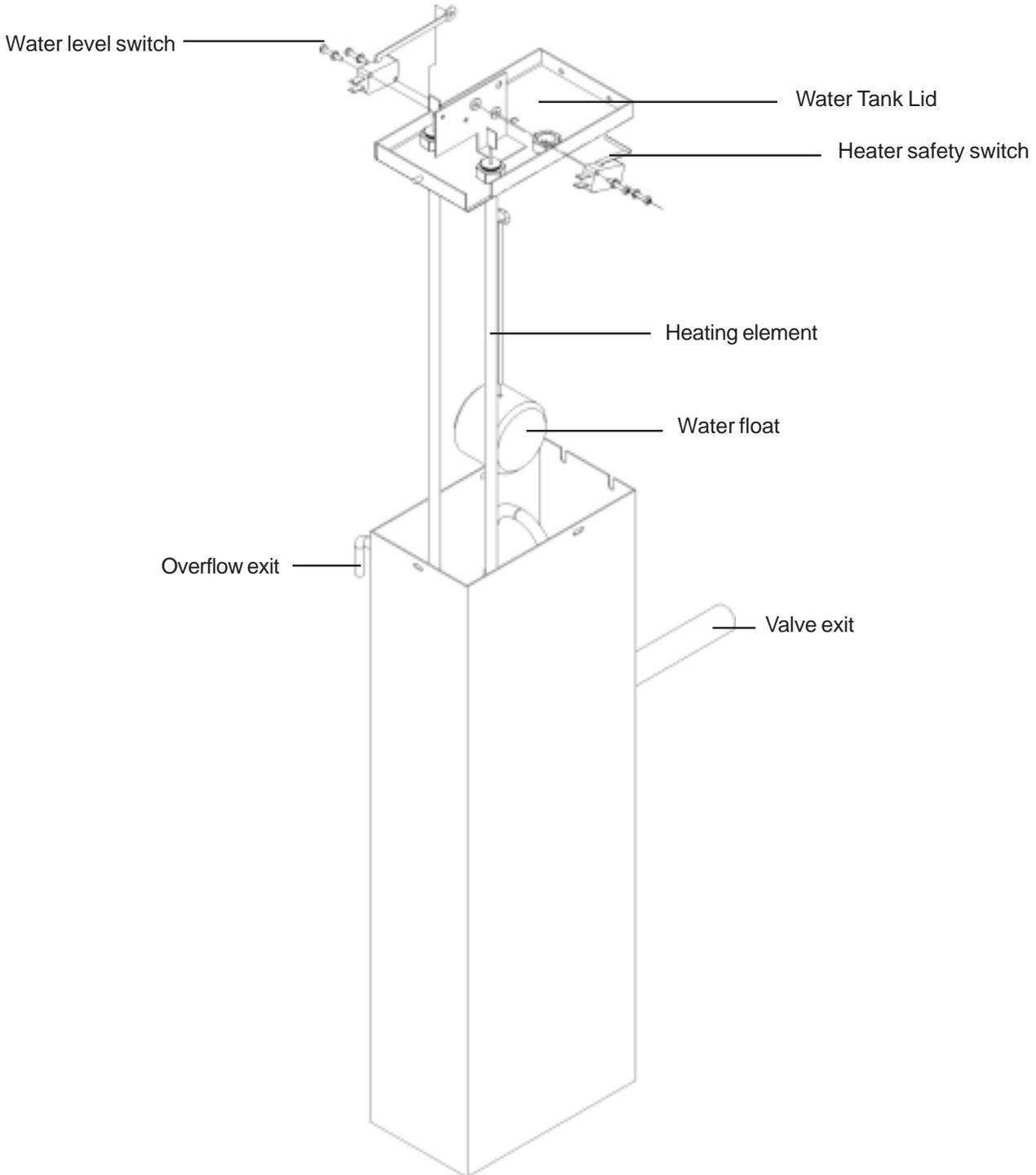
4



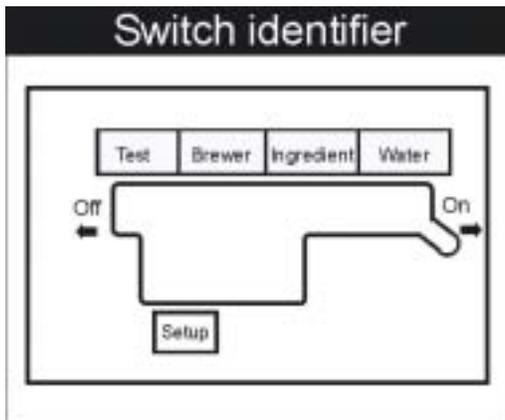
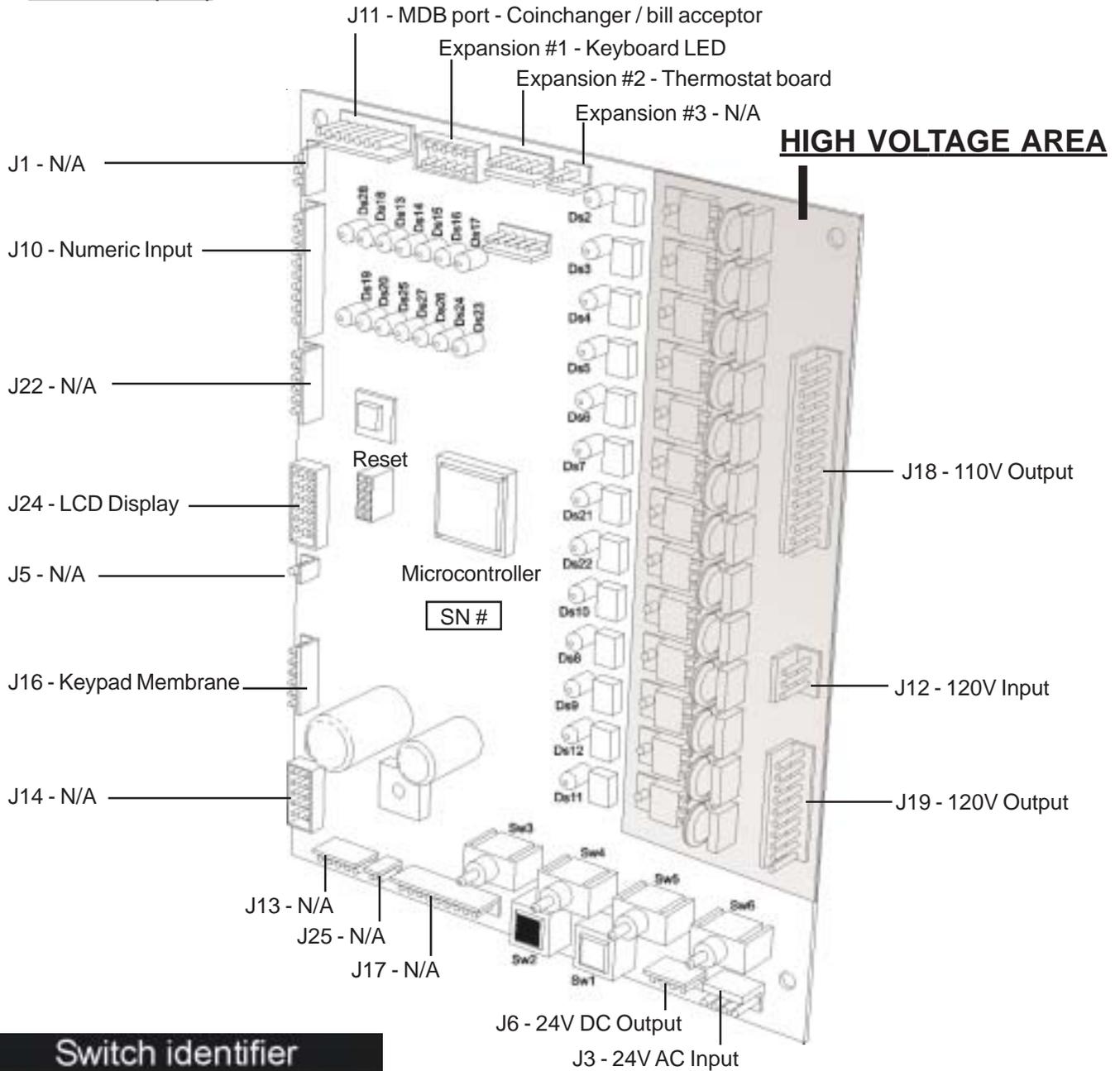
**Step 4 Product delivery**

The piston follows its course heading to its low dead point. Distribution of coffee through the spout begins once the piston is below the coffee exit. Meanwhile, the brew chamber lifts to allow the paper to advance thereby discarding the spent grounds into the waste chute.

4.7 Hot Water Tank



4.8 Main Board (PCB)



This is a schematic reference drawing only. Not to scale.



The equipment should always be unplugged from the electrical outlet before servicing any components within this main board assembly.

#### 4.8.1 Main Board (PCB) Descriptions

##### Avalon switches and buttons

1. **Reset button (Red)**  
Pressing this button initializes the Triple-B Brewer (same as the on/off switch)
2. **Counter Button (SW1) White**  
Pressing this button gives you access to the tally counter data.
3. **Setup button (SW2) Black**  
Allows access to the product and brewer software parameters.
4. **Test Switch (SW3)**  
ON, this switch allows access to the TEST mode used to bypass the counters during service. For default user mode, the switch should be off.
5. **Brewer Switch (SW4)**  
ON, the switch lifts the brewer head to allow the filter paper replacement. The switch must be in the OFF position for default user mode. This will reset the bin counter if activated.
6. **Ingredient Switch (SW5)**  
Allows the neutralization of the ingredient dispensing motors. At OFF, the motors will not dispense ingredients.
7. **Water Switch (SW6)**  
Allow the neutralization of the 4 water dispensing valves. At OFF, the valves will not dispense water.



All units ship with the switches in the off position.



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**5. CONTROLS & FEATURES**

**5.1 Features & Benefits**

We understand the need for individuality, that’s why we offer you all the possibilities, and you choose the coffee whether you prefer organic coffee, big brand names or locally roasted coffee, that choice is yours with Avalon.

<b>FEATURE</b>	<b>BENEFIT</b>
Electronically adjustable settings and features	Adjust the brewing settings to suit your customers’ taste profile and the brand of coffee they have chosen.
3 Whole Bean coffee selections	Offer 3 different whole bean varieties or 3 different brands, all in one unit.
Multi-pricing capabilities	Suit all your consumers’ needs - free vend, vending or both.
2 Premium soluble selections	Experience Hot Chocolate & French Vanilla whipped to perfection or mixed with coffee a Café Latte or cappuccino.
Multi-cup capability	Eliminate waste, brewing only what you need - from one to nine cups to or a carafe.
State of the art brewing technology	The brewing system is in a class of it’s own in the single cup business offering an unsurpassed coffee beverage quality to meet the taste profile of the best coffee connoisseurs.
Improved, electronic control panel	Brewing steps and selection buttons are illuminated to guide the user through the ordering process.
Service Software	Allows the Operator to control features of the machines, diagnostic messages and keep track of all user data.



**5.2 SPECIFICATIONS**

Beverage Selections

- 3 Whole Bean Coffees (Ex.: dark roast, decaf and light roast)
- Chocolate
- French Vanilla / Cappuccino
- Café Latté (A blend of the coffee of your choice and French Vanilla)
- Mokaccino (A blend of the coffee of your choice and Chocolate)
- Hot water

Coffee Hopper Capacities

Whole Bean Coffee canister #1: 4 lbs  
Whole Bean Coffee canister #2: 2 lbs  
Whole Bean Coffee canister #3: 4 lbs

**Total 10lbs of coffee = 450 cup capacity**  
**Total 8 lbs of soluble = 300 cup capacity**

Machine Dimensions

Optional Stand Dimensions

Height:....41 1/2".....28"  
Width: ....16".....32"  
Depth: ....21.5".....22"

Weight:....150 lbs.....70 lbs

\*\*refer to page 24 for detailed dimensions

Water Tank

Capacity: 1.5 gallon  
Water valves: 4 valves  
Heating element: 1250 watts

Electrical requirements

110 Volts  
12 Amp  
60 Hz

**INTENDED FOR INDOOR USE ONLY**



### 5.3 Automatic Safety Features

There are various safety mechanisms in this brewing equipment to prevent a machine malfunction resulting in material damages.

#### Water Level Switch and Heater Safety Switch

The water level switch and the heater safety switch work together to ensure that the heating element is deactivated if there is insufficient water in the tank. The water level switch is controlled by a float and will shut off the inlet valve when the tank is full. If the level in the tank gets too low, the heater safety switch will be triggered and the heating element will be turned off.

#### Overflow Switch

If the water were to boil, the tank water would go into the overflow cup and all machine functions would be turned off, this is a fatal error. This could also be triggered if the float in the tank was defective or if the machine was moved while the tank was full. The unit would appear Off.

#### Overflow Drip Tray

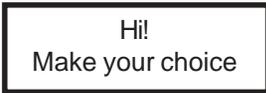
This will be triggered if the drip tray is full or if something is leaking inside the unit. This will deactivate the water inlet valve thereby preventing the element to heat. The unit would indicate "Drip tray full".

#### Software Safety Features

At the time of the first tank fill, the water inlet valve will close after 4.5 minutes of continuous demand. This is the amount of time necessary to completely fill the tank. After the initial tank fill, the inlet valve will close after 20 seconds of continuous demand. This safety mechanism is designed to prevent water from flowing continuously into the machine due to a mechanical malfunction. The unit will indicate "Low water level"

If the low water level switch is triggered but not the heater safety switch, the element will automatically be shut off. This is in the event of a mechanical failure of the heater safety switch.

**5.4 Brewing Instructions**



This screen is always on when the equipment is in the default user mode.

**Step 1: Place your cup:  
Paper cup or mug**

Make sure you verify whether your cup has an 8oz or 12oz capacity and center it on the cup stand.

**Travelling mugs or carafes**

If you are using a large travelling mug or a carafe, raise the cup stand to fit under the dispensing nozzle.

**Step 2: Choose a size:**



**Step 3: Choose the strength of the beverage**



**Step 4: Choose a beverage:**

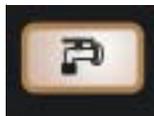


**Step 5: Brew:**



Push Start to begin the brew cycle.

While brewing, the cup area will illuminate and the LCD will display a cycle progress bar. No other features are available during the brewing process.



**Hot Water**

To order hot water, press and hold the hot water button to dispense up to 8oz of Hot water. Press and hold the button again for more hot water.



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## 6 INITIAL SETUP

Before you install the brewer on location, we strongly suggest that it be unpacked and inspected before you leave your warehouse. This unit is quite heavy and we recommend 2 people for transporting the unit or the proper equipment to do this safely.

### Overview of Installation Steps

- 6.2 Unpacking
- 6.3 Preparing the Stand
- 6.4 Leveling the Equipment
- 6.5 Hot Water Tank Preparation
- 6.6 Water Line Connection
- 6.7 Bean Hopper Installation
- 6.8 Electrical Connection
- 6.9 Water Temperature
- 6.10 Drip Tray and Overflow Tray Installation
- 6.11 Loading Products
- 6.12 Chute System Installation
- 6.13 Filter Paper Installation
- 6.14 Installation Testing
- 6.15 Warranty Card



Only Certified Service Technicians are authorized to install and service this equipment.

### 6.1 Installation Site Requirements

#### Operating Environment

For indoor use only

#### Power Supply

This unit must have its own electrical circuit that is located within 6 feet of the dedicated electrical outlet. Use only a polarized grounded receptacle.

Domestic 115 VAC / 60 Hz - 12 Amp Circuit

#### Water Supply

Should be a plastic 1/4" or 3/8" O.D. dedicated line branched off a larger line. An easily accessible shut off valve up stream of the unit is highly recommended for easy installation.

Water pressure should be at least 20 PSI and no more than 80 PSI

#### Tools Required

#2 Philips screw driver

Regular medium pliers

Adjustable wrench

Level indicator



Other tools may be required depending on the type of water supply tubing and location.



**6.1.1 Clearances**

	Unit	Clearances	Allowance for:
Height:	42"	7"	Filling the coffee hopper.
Width:	21"	6"	Per side. Key access on one side and door swing on the other.
Depth:	21.5"	10 3/4"	Front: when the door is open.
		6"	Back: clearance of water hookup, hoses, water filtration system and adequate air circulation.

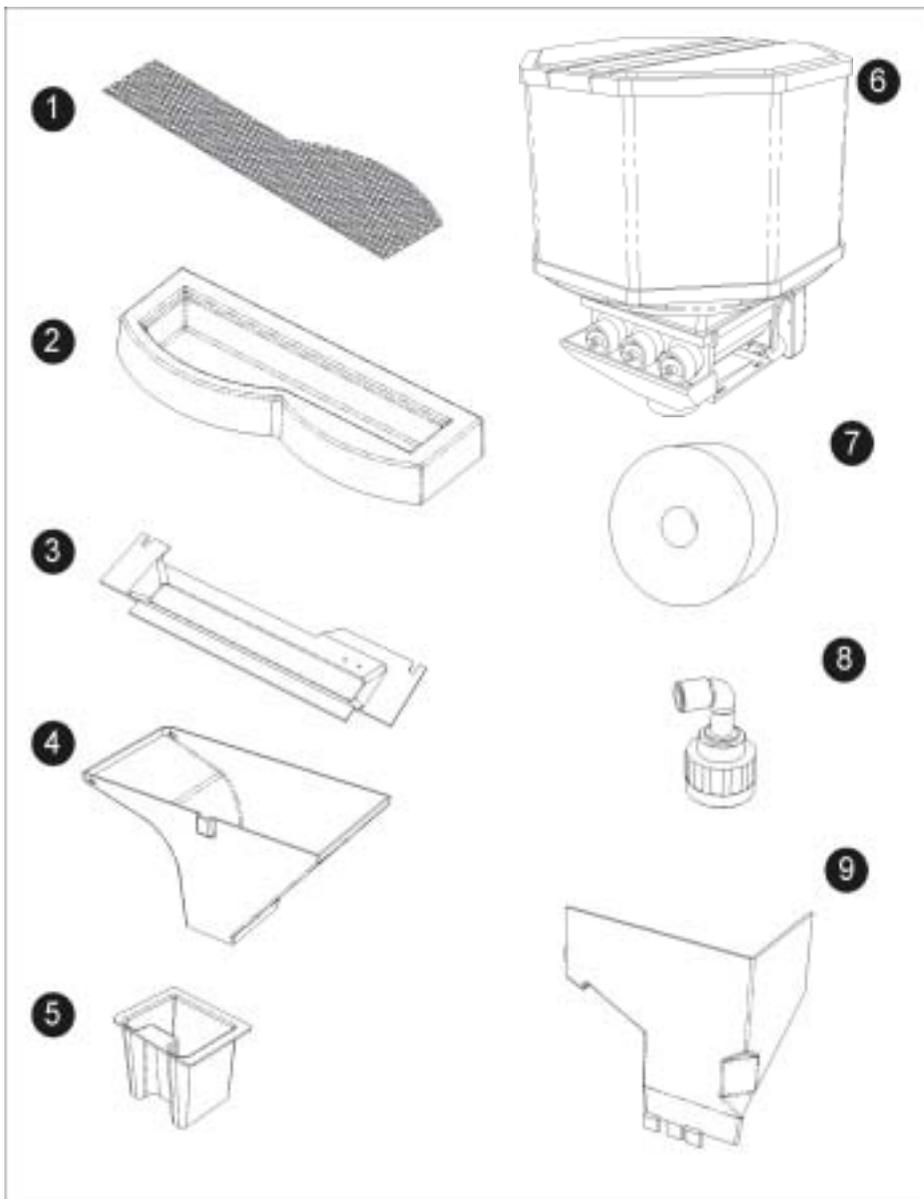
(Measurements do not include the stand)

**6.2 Unpacking**

Please verify for visible damages to the unit and its packaging before signing the bill of lading. If there are damages, please write the details on the bill.

To remove the unit from the box, carefully cut the straps holding the box in place on the skid and then lift the box up. Inspect the unit to see if any damage has occurred in shipment.

The parts and accessories that are shipped separately need to be installed on your equipment. In each box, you should find the following items:



- 1. Drip Tray Grill
  - 2. Plastic Drip Tray
  - 3. Overflow Drip Tray
  - 4. Chute
  - 5. Chute Base
  - 6. Coffee Hopper (with 2 keys)
  - 7. Filter Paper
  - 8. 1/4" Inlet Kit Fitting
  - 9. Front Panel
- Service Tracking sheet  
 Service Manual  
 Warranty Card

\* The keys for the unit are attached to the power cord located on the back of the unit.



### 6.3 Preparing the Stand

Install the stand by using the manufacturer instructions located inside the stand box.

With the help of another person, lift the brewer by the bottom of the metal cabinet onto the stand and carefully center it on the stand and the waste bin hole. **CAUTION: Do not lift by the door!**

Install a large waste basket with bags in the cabinet below the equipment. The ideal waste basket is as tall as possible to the top of the cabinet. This will help to contain the used filter paper and avoid grounds getting into the cabinet. Use plastic garbage bags to facilitate the emptying and reduce the cleaning for this part.

### 6.4 Levelling the Equipment

For optimal performance of the equipment, it is important to ensure that it is leveled. Avoiding to do so can create variations in product delivery.

1. Place a level on the top of the machine;
2. Unscrew the leveling glides approximately 3/8". Verify this by installing the overflow tray. The tray should fit easily around the exposed threads;
3. Adjust the 4 threaded level glides or legs of the equipment to reach a leveled position.

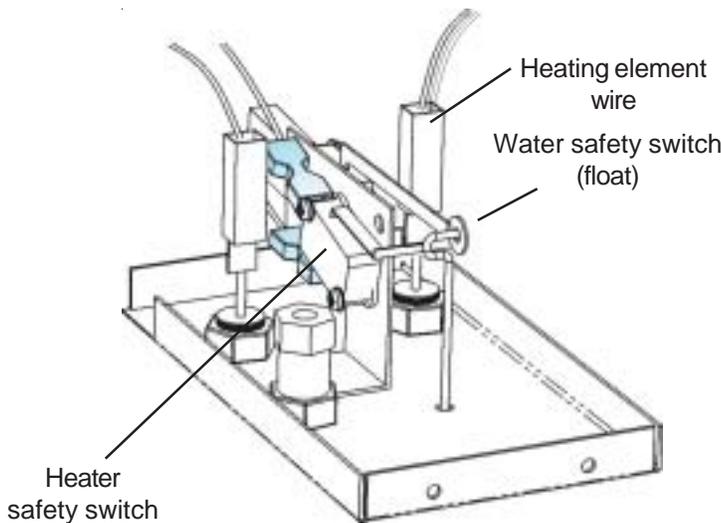
6.5 Hot Water Tank Preparation



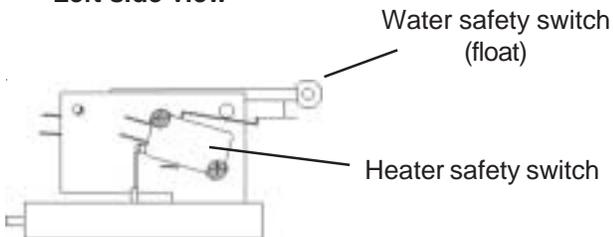
**Make sure equipment is unplugged!**

6.5.1 **Tank Lid Preparation**

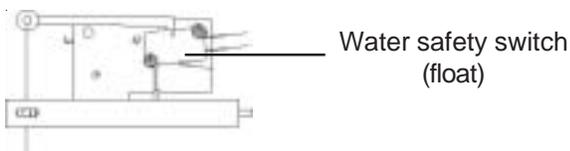
1. Open the door of the equipment;
2. Remove the plastic top cap of the machine by lifting and pulling towards you;
3. Locate the water tank and remove the twist-tie securing the float of the water tank;
4. Remove the silicone tubing on the heating element;
5. Connect the double white wire to the prong on the heating element;
6. **Adjust the water level switch;**
7. Replace the top lid and close door.



**Left side view**



**Right side view**



6.5.2 **Adjusting the Water Level Switch**

The water in the hot water tank relies strictly on gravity. Therefore, it is important to adjust the water level switch at the time of installation to ensure the appropriate water pressure in the tank for accurate water delivery.

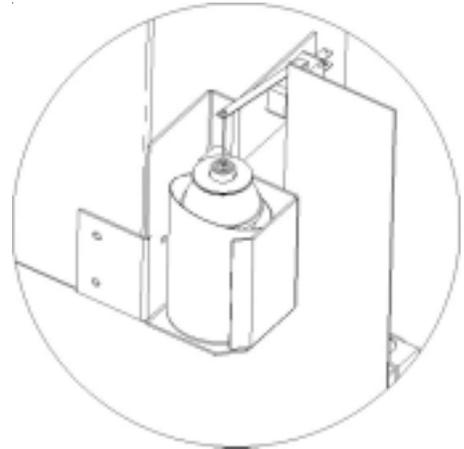
1. The switch should click to its on position just before it reaches the heater safety switch;
3. If you need to adjust it, very delicately bend the arm of the switch to the desired position;
4. Also verify that the water level switch triggers the heater safety switch only once it has reached its dead low position. The only time they should touch is in a cutoff situation.

**CAUTION - Over-bending the arm may break it and will prevent it from functioning**

### 6.5.3 Adjusting the Tank Overflow Float

It is important to verify that the float is positioned appropriately in the overflow cup since it can move around in transportation. If this float is not in place the switch will not be activated and the unit will automatically shut down sensing an overflow situation.

It is important to verify that the overflow cup is in place with the highest side in the front and secured with the red tape. If you need to remove this cup, please make sure that you replace it with the highest section facing the front and the overflow tube in the cup. Fasten in place with tape. This will ensure that the float will “float” and will activate the overflow switch if there is a problem.



### 6.6 Water Line Connection



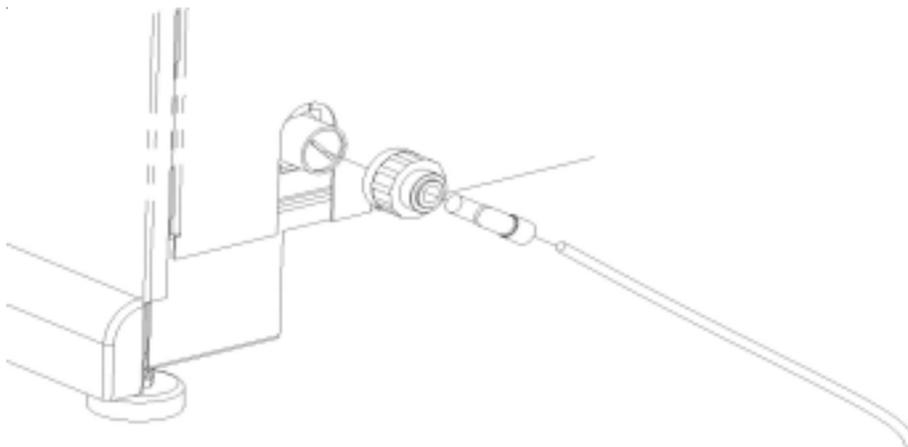
**This equipment must be installed in compliance with applicable Federal, State and/or Municipal plumbing codes having jurisdiction.**

**Make sure that the equipment is unplugged before proceeding with the water supply installation. Also verify that the incoming water pressure is greater than 20 psi and no more than 80 psi.**

1. Prior to installing the unit, flush out the water line by running approximately 1 gal. of water into a pail. This will ensure no sediment from a new installation can get in the unit;
2. The incoming water supply should have a shut-off valve connected in-line. Water supply should be a plastic ¼” O.D. dedicated line branched off a larger supply line;
3. Make sure your water source is turned off. Secure the inlet fitting firmly onto the inlet valve. Do not overtighten;
4. Make sure the equipment is unplugged. Connect the water line to the quick connect inlet fitting;
5. Turn the water valve on, sending water to the brewer. If there are any leaks, tighten connections to stop leakage.



This procedure does not take into consideration the installation of a water filtration system. Please refer to the water filter manufacturer installation instructions and incorporate them into the above.



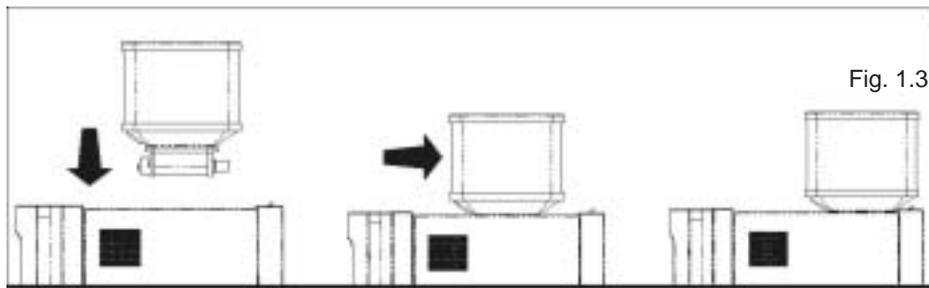
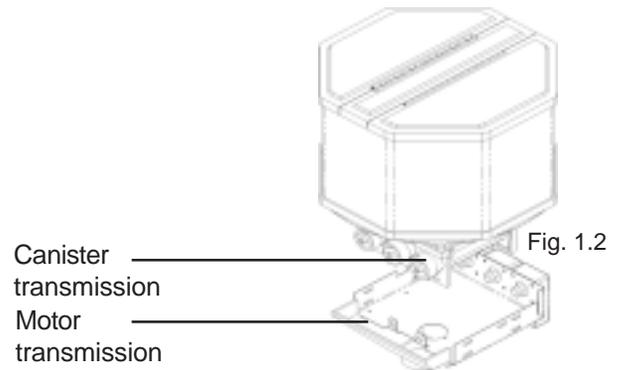
**6.7 Bean Hopper Installation**

**Step 1 Removing the top cap**

1. Unlock and open the main door;
2. Remove the top cap by lifting and pulling toward you;
3. Verify that the coffee grinder is not obstructed.

**Step 2 Installing the Coffee Hopper**

1. Align the canister transmission in the motor transmission (fig 1.2);
2. Align the metal lock with the hole in the front of the canister to the base;
3. Push the canister to the back;
4. Rotate the 2 locks to latch in the groove of the metal pins.



**Step 3 Reinstalling**

1. Reinstall the 2 top caps, close and lock the main door.

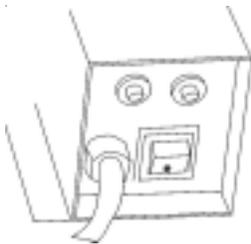
**6.8 Electrical Connection**



**This equipment must be installed in compliance with applicable Federal, State and/or Local electrical codes having jurisdiction.**

- Make sure:**
- The equipment is OFF before plugging it in,
  - The equipment has its own electrical outlet and
  - An extension cord is not used.

1. Make sure that the power switch in the back of the unit is in the OFF position before plugging in the unit;
2. Locate the unit's 6 foot power cord and plug it into its own grounded electrical outlet;
3. Reach to the back of the brewer and toggle the power switch to the On position. The front lights will go on, and water will automatically enter the brewer. The tank will fill in 2-3 minutes from the moment the brewer is turned on;
4. Once the tank is full, it will take 15-20 minutes to heat the water to brewing temperature.
5. Once the brewing equipment is ready, the LCD will indicate "Hi! Make Your Choice".



The main power switch turns the equipment off and on. This switch should be turned OFF when servicing any (AC line voltage) electrical components on the equipment.



## 6.9 Water Temperature

This equipment has a coffee brewing setpoint of 195 F water temperature to offer a consistent beverage quality for the users.

This is an average and is not what you would get from a manual temperature measure. The actual water temperature fluctuates since cold water enters the tank after every beverage delivery and time is required to heat the incoming water up to the setpoint.

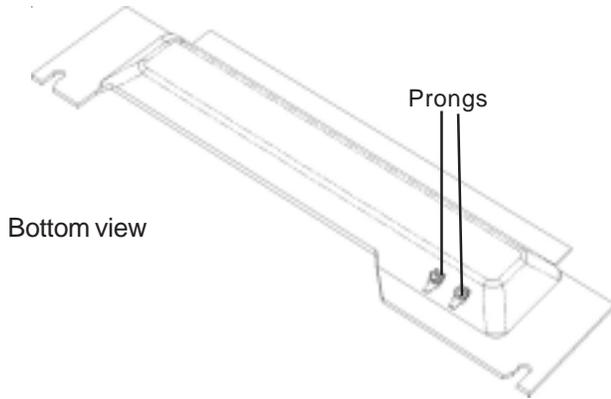
You can take the water's brewing temperature manually by ordering a cup of hot water and measuring its temperature with a thermometer. There may be a slight difference from the tank reading. This is normal.

If you are experiencing large temperature differences, verify that your tank is clean and not obstructed by mineral deposits and scale.

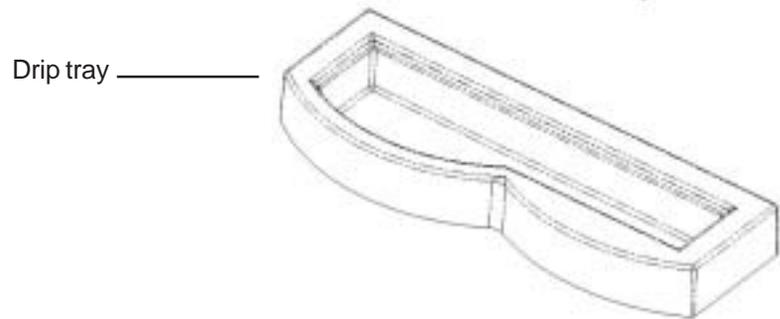
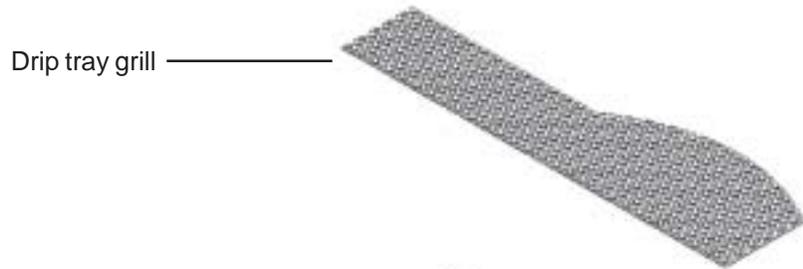
### Unit Safety Measures

In the event of a temperature probe failure, the tank may start to boil. This will cause it to overflow into the "Overflow Cup" and will automatically shut off the unit.

**6.10 Drip Tray and Overflow Tray Installation**



1. Connect the overflow sensor wires found inside the machine and fastened with a tie wrap, to the prongs underneath the overflow tray;
2. Unscrew the level glides approximately 3/8" and slide the overflow tray underneath the brewer and secure onto the level glides;
3. To install the drip tray, insert the lip into the metal support plate under the door;
4. Finally, put the drip tray grill in the drip tray.



**6.11 Loading Products**

Coffee

Unlock and open only the coffee hopper lid and fill the whole bean coffee hopper compartment of your choice until it reaches 1 inch from the top.

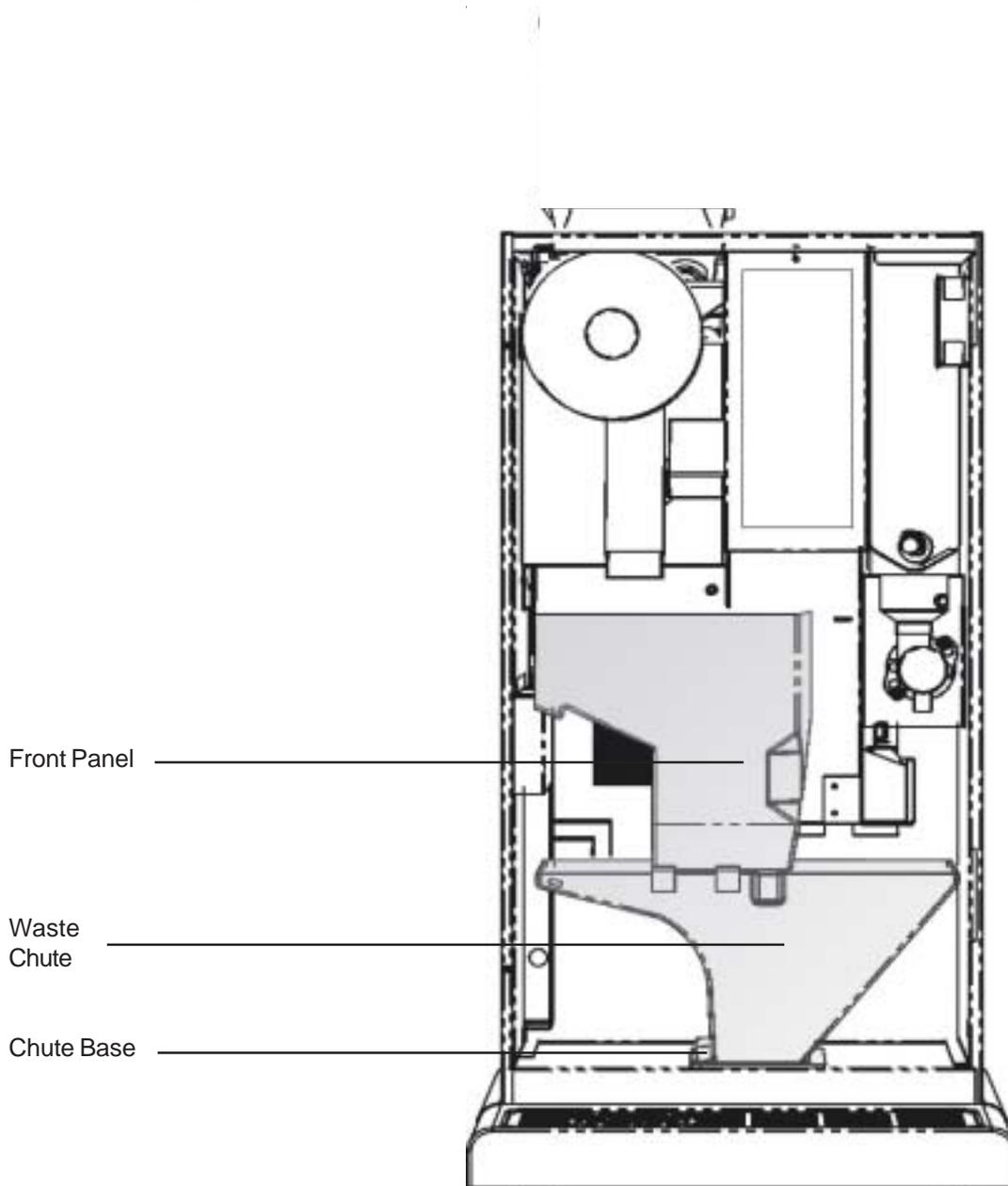
To fill the center compartment, lift the second lid and pour carefully.

Soluble Products

Remove the top cap and remove the canister lid. Pour in carefully not to get any inside the unit. Do not overfill. Make sure that the lids close comfortably, replace the top cap and wipe any spills.



6.12 Chute System Installation



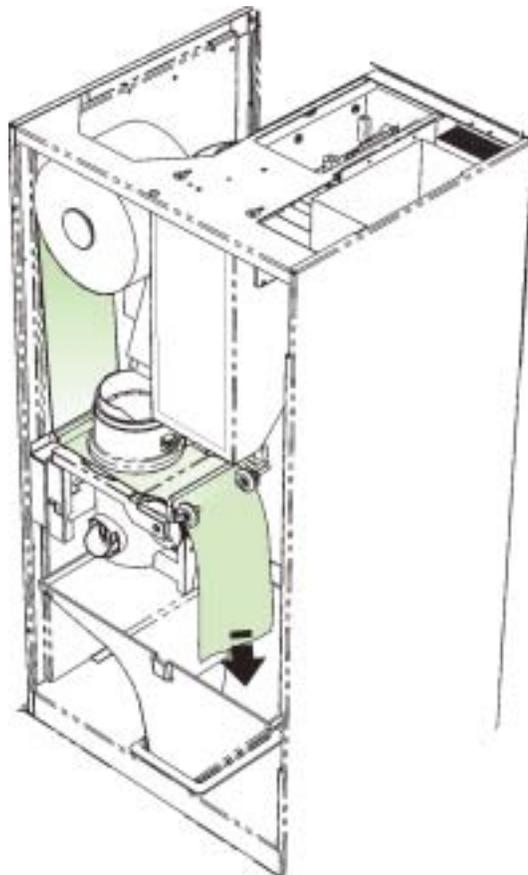
1. Open the door of the equipment;
2. Insert the chute base through the chute hole of the cabinet with the indent on the left;
4. Insert the large waste chute into the chute base;
5. Install the front panel onto the chute by aligning the prongs to the left of the catch and clip onto the left side of the brewer assembly.

### 6.13 Filter Paper Installation



Only use Avalon platinum filter paper (4 1/16" wide) which is good for 2,300 cups of coffee.

1. Make sure the power to the brewer is ON;
2. Place the roll on the paper support bracket so that it dispenses on the left hand side;  
(See the diagram inside the brewer)
3. Toggle the brewer paper switch to ON (SW4 on the main board), the brew chamber will rise;  
**Note: the brew chamber will not rise if the filter paper switch does not sense the filter paper roll.**
4. Pass it under the left guide bracket of the brew group, under the brew chamber and under the wheel guides by gently lifting them by the yoke;
5. Pull on the paper and route it through the cabinet chute hole and into the waste bin;
6. Make sure that it is feeding straight. Verify that it stays within the first guide. Improperly placed filter paper will cause a vacuum leak and may cause grounds to spill off into the machine.
7. Toggle the brewer paper switch back to the OFF position (SW4 on the main board);
8. The filter paper will advance while the brewer assembly cycles and the brew chamber comes down on the paper, ready for the next cup.





**6.14 Installation Testing**

It is important to have the unit perform several cycles before completing the installation. It is important that you order at least 2 of each product selections that the machine is operating as per the specifications laid out in this manual. During this process, review the check list as a reminder.

You need to be sure that each machine is clean, safe and functioning when you leave it.

	<b><u>What to check</u></b>	<b><u>Remedy, if it is not</u></b>	<b><u>Pg.#</u></b>
<input checked="" type="checkbox"/>	Inlet valve is free from leaks	Verify that it is secure and not overtighten	30
<input checked="" type="checkbox"/>	Brew chamber is empty of coffee	Verify that the unit is leveled	28
<input checked="" type="checkbox"/>	Filter paper feeds without resistance and goes straight into the waste bin	Verify that the chute is properly installed Repeat the installation procedure	35, 36
<input checked="" type="checkbox"/>	Cocoa mixing bowl is free of leaks	Verify that it is on straight and tube is secure	--
<input checked="" type="checkbox"/>	Cup stand is sturdy and folds back completely to the back splash with ease		--
<input checked="" type="checkbox"/>	Water temperature is acceptable	See water temperature	33
<input checked="" type="checkbox"/>	Products are loaded	Refer to this manual	33
<input checked="" type="checkbox"/>	Brewer and area are clean and tidy	Please tidy up	48
<input checked="" type="checkbox"/>	Test switch is at OFF	Toggle to off	17
<input checked="" type="checkbox"/>	Programming is complete	Refer to programming section in this manual	39
<input checked="" type="checkbox"/>			

**6.15 Warranty card**

Install the service tracking sheet in the inside panel of the door to the left of the main board. See the cleaning and maintenance section for suggestions on how to use the sheet.

Fill out the warranty card and fax or send it in the mail to Cafecton to validate your warranty and register your unit for part upgrades.



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**7 SERVICE SOFTWARE**

The software allows you to control the machine parameters and retrieve user data from the equipment.

To access the machine parameters:

1. Unlock and open the door of the equipment
2. Press the black SET UP button located on the lower section of the main board (#SW2)

The LCD will indicate:

Setup mode  
Press START to exit

To access the user data:

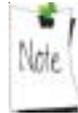
1. Unlock and open the door of the equipment
2. Press the white COUNTER button located on the lower section of the main board (#SW1)

The LCD will indicate:

Display TOTAL  
Press START to exit

**Machine Parameters Menu**

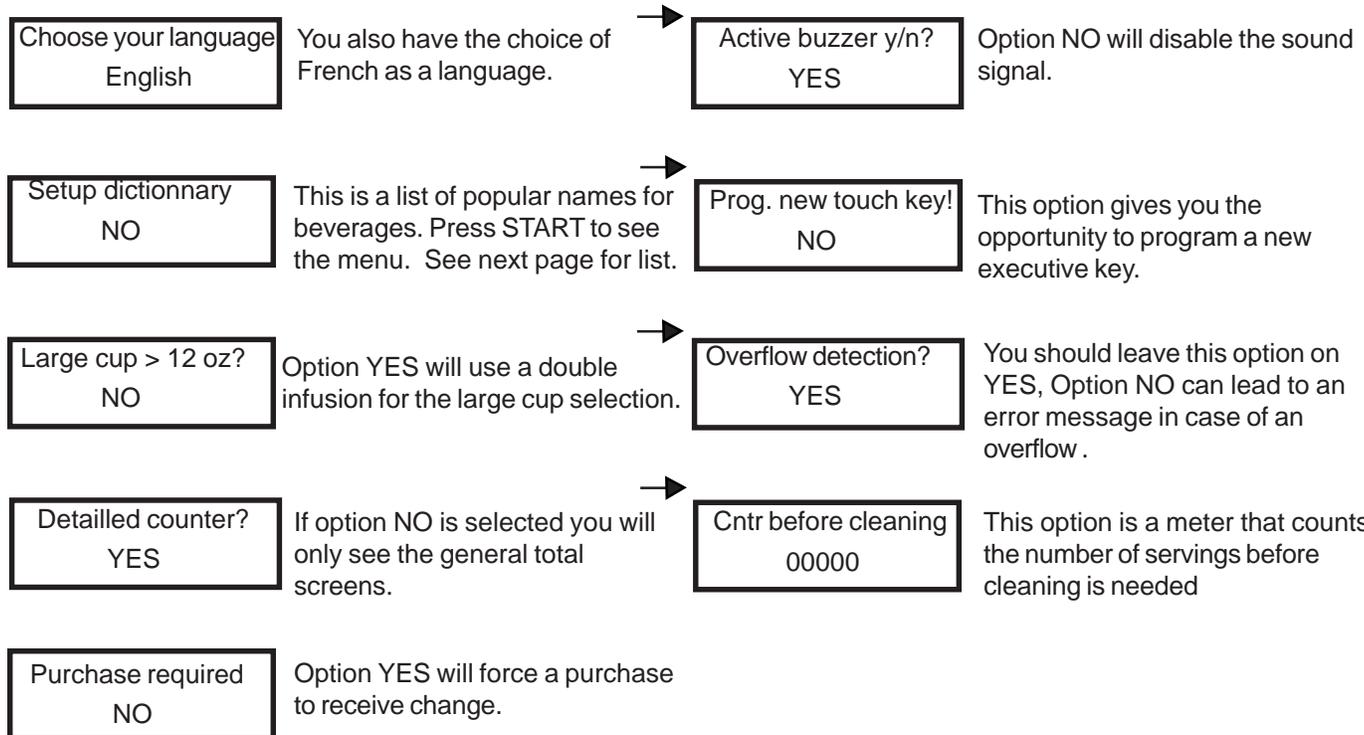
Café Latte: Backward / No  
Mokaccino: Forward / Yes  
Hot Water: Move window  
Start: Move charater / Exit



The START button is also used to confirm a change in a configuration, if it is not pushed after a change the modification will not be kept in memory.

**7.1 Configuration:**

Open the main door and press the black SETUP button on the power board. Hit the hidden key on the selection membrane and the configuration menu will appear. Scroll through the options using the hot water button and keep in mind that the café latte button equals no and the mokaccino button equals yes. Follow the menu from left to right.



**7.1.1 Dictionary**

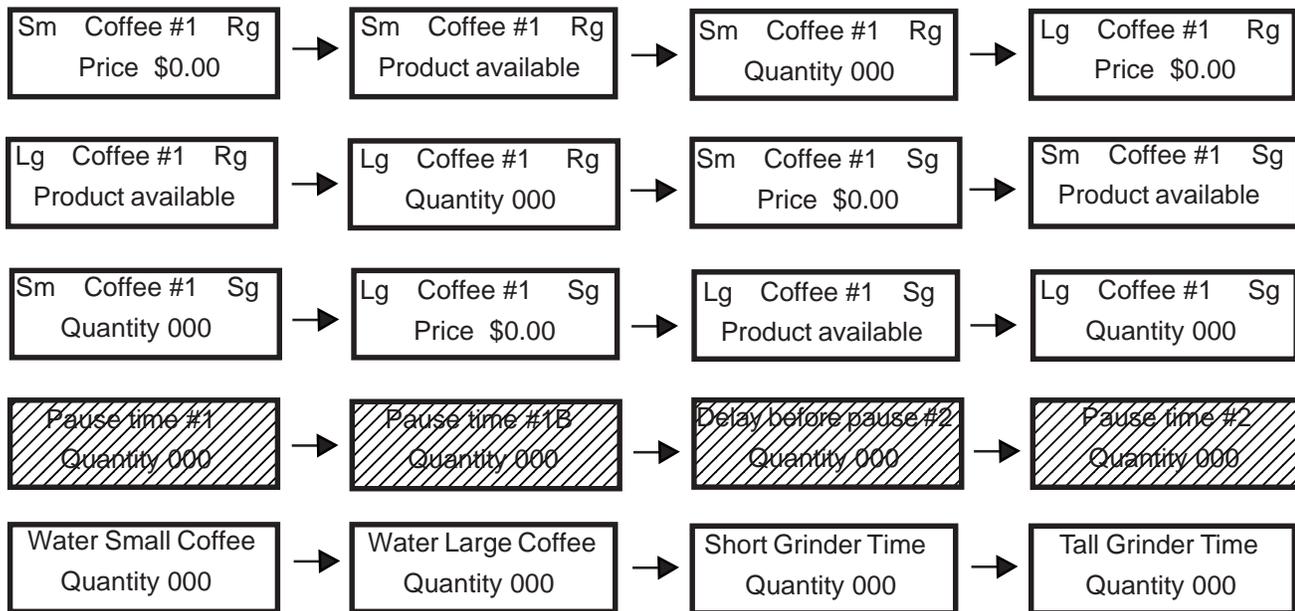
- |                   |                    |                    |
|-------------------|--------------------|--------------------|
| 1. Coffee #1      | 11. French roast   | 21. Adagio         |
| 2. Coffee #2      | 12. Kona blend     | 22. Bistro         |
| 3. Coffee #3      | 13. Decaf Col 100% | 23. Amaretto       |
| 4. House Blend    | 14. La Passion     | 24. Vanilla        |
| 5. Decaffeinated  | 15. Folie Noire    | 25. Irish cream    |
| 6. Columbian 100% | 16. Cafe creme     | 26. French vanilla |
| 7. Premium        | 17. Illegal        | 27. Chocolate      |
| 8. Java moka      | 18. Cappuccino     | 28. Haselnut       |
| 9. Black velvet   | 19. Mococoa        | 29. Cafe Latte     |
| 10. Moka cream    | 20. Arabica Noir   | 30. Corse          |
|                   |                    | 31. French Roast   |

Press the button of the selection you wish to detail with a word from the dictionary.

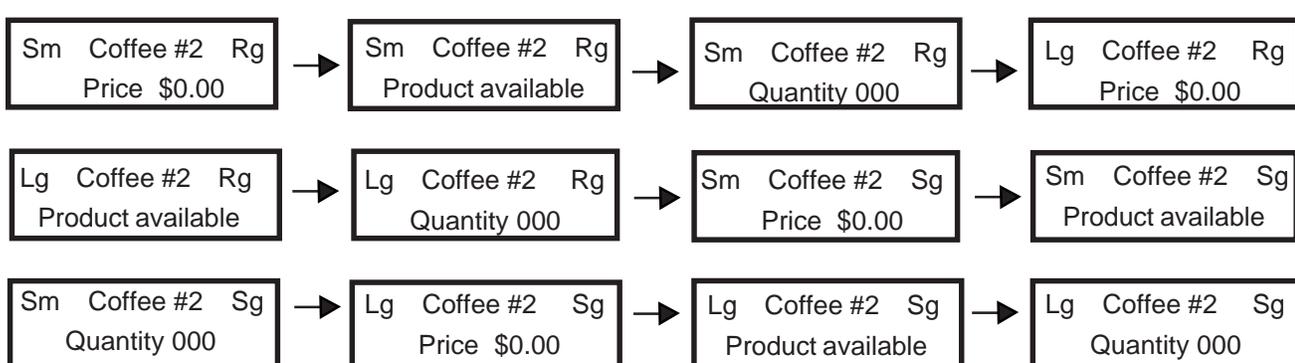
**7.2 Product Configuration**

The shaded selections should not be changed without calling the manufacturer.

**Selection Coffee #1 (from left to right)**

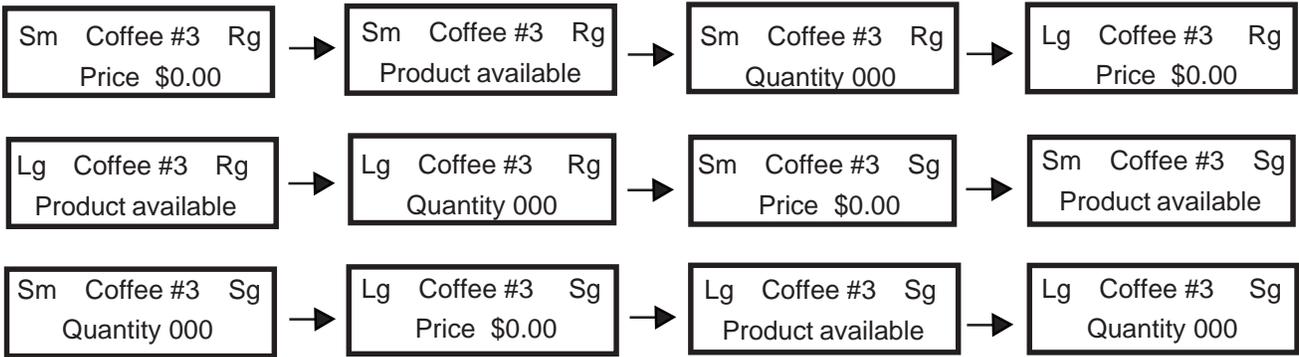


**Selection Coffee #2 (from left to right)**

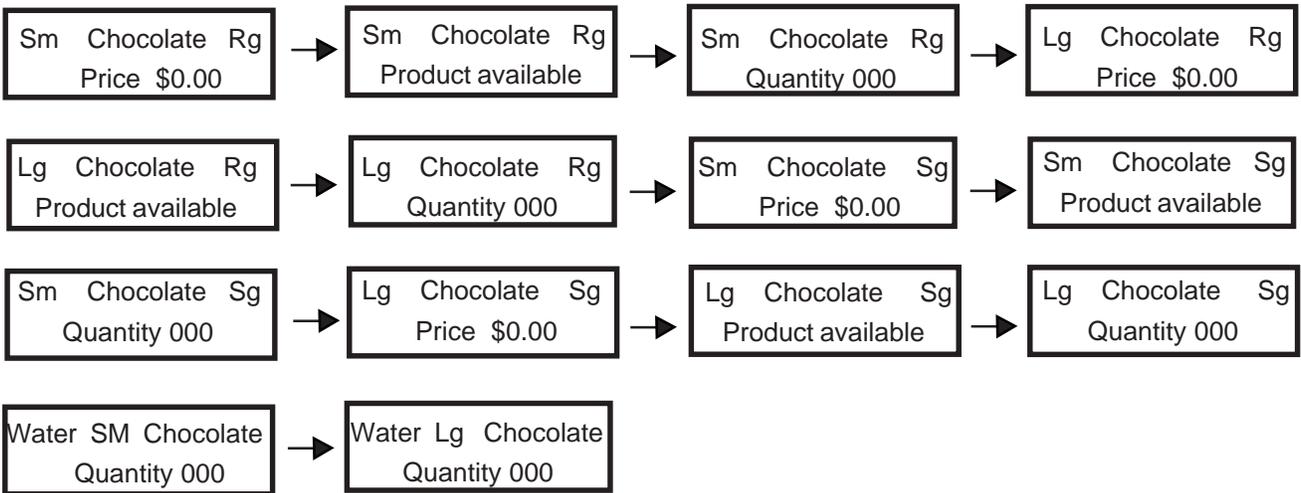




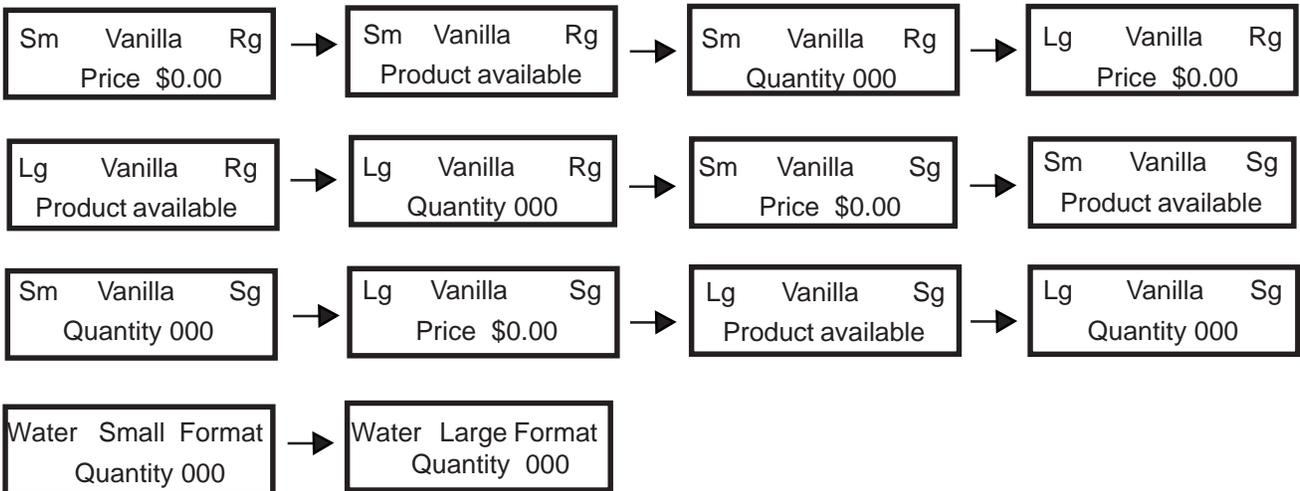
**Selection Coffee #3 (from left to right)**



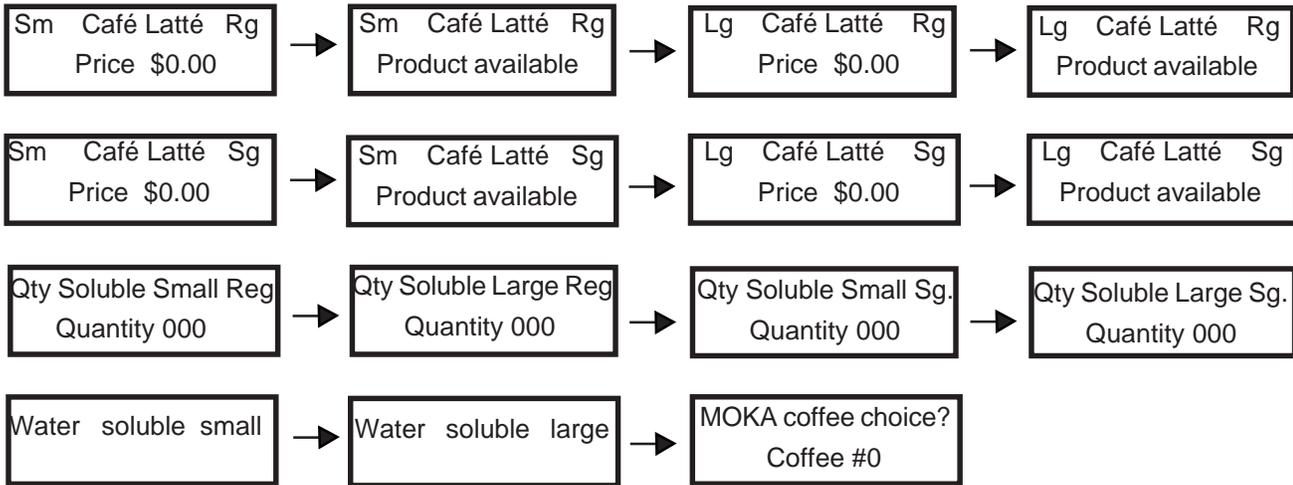
**Selection Chocolate (from left to right)**



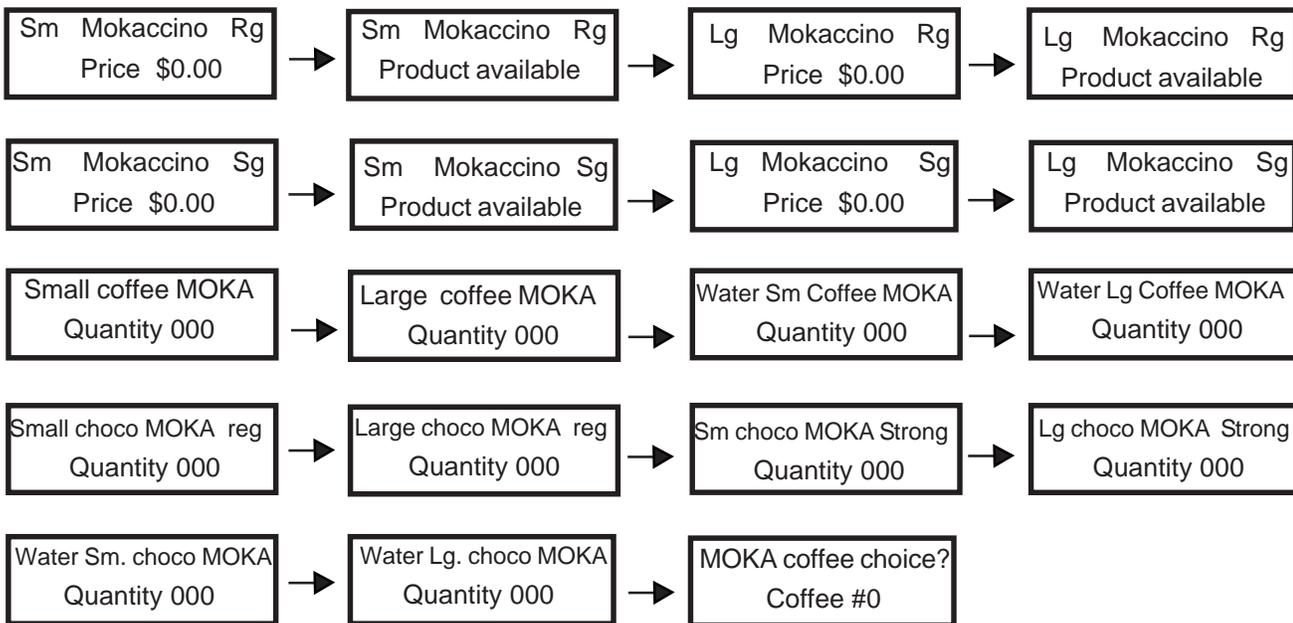
**Selection French Vanilla (from left to right)**



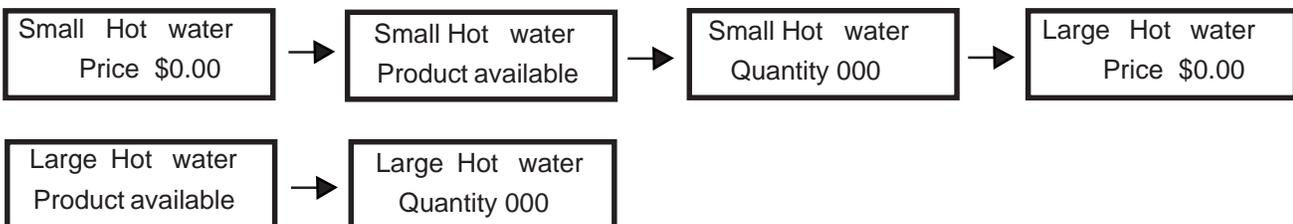
**Selection Café Latté (from left to right)**



**Selection Mokaccino (from left to right)**



**Selection Hot Water(from left to right)**





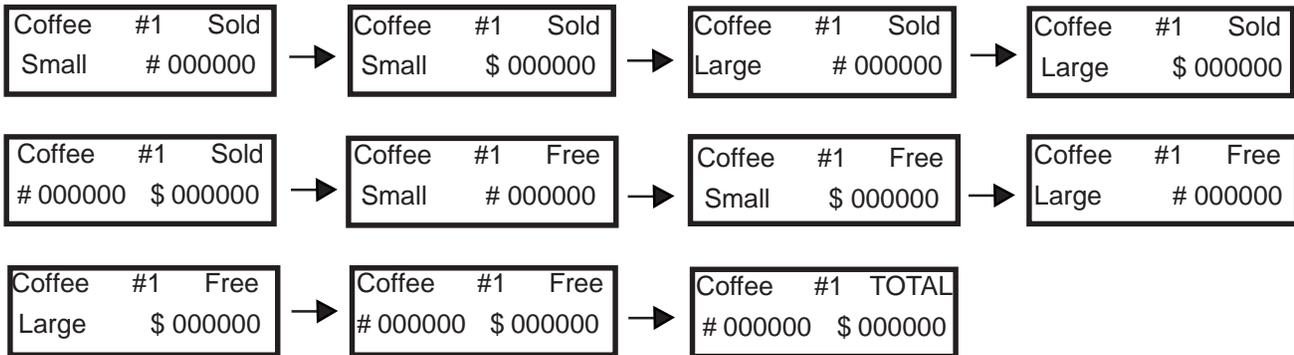
**7.3 COUNTER DISPLAY**

To see the counter display, unlock and open the front door and press the white SETUP button. The screen should show this:

Display TOTAL  
Press START to exit

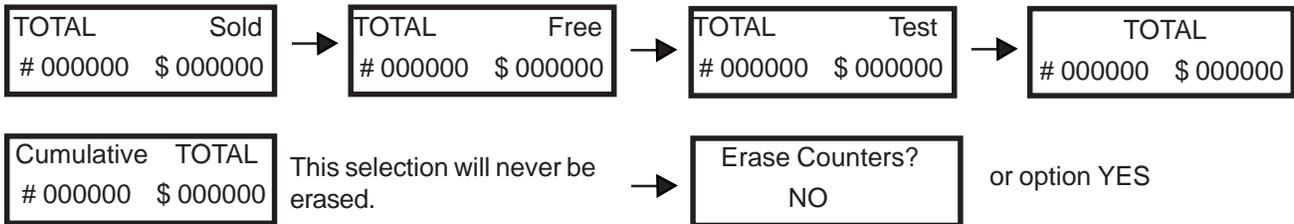
To scroll through this menu, use the small cup button and press START to exit. Below are the screens that will be shown:

**Selection Coffee #1 (from left to right)**



\*\*This menu is exactly the same for Coffee #2, Coffee #3, Chocolate, French Vanilla, Café Latté, Mokaccino and Hot Water, only the name of the selection changes.

To see the total quantity and amount counter, unlock and open the front door of your unit, press on the white SETUP button and press the hidden button. To scroll through the menu use the hot water button and press START to exit.



This selection will never be erased.

or option YES



7.4 **Counter Tracking Sheet**

Use this sheet to record the data of the unit.

\*\* sm = Small, la = Large

Beverage type	Counter data				
	Qty	Sold \$	Free #	Total#	Total \$
Coffee #1 - sm					
Coffee #1 - la					
Coffee #2 - sm					
Coffee #2 - la					
Coffee #3 - sm					
Coffee #3 - la					
Chocolate - sm					
Chocolate - la					
French vanilla - sm					
French vanilla - la					
Café latté - sm					
Café latté - la					
Mokaccino - sm					
Mokaccino - la					
Hot water - sm					
Hot water - la					
<b>GRAND TOTAL</b>					

Location: \_\_\_\_\_

S/N#: \_\_\_\_\_

Customer signature: \_\_\_\_\_

Date: \_\_\_\_\_



7.5 Setting Tracking Sheet

Use this sheet to record the data of the unit.

Beverage type	Setting data							
	Small regular		Large regular		Small strong		Large strong	
	Qty	Price	Qty	Price	Qty	Price	Qty	Price
Coffee #1								
Water coffee		///		///	///	///	///	///
Coffee #2								
Coffee #3								
Chocolate								
Water chocolate		///		///	///	///	///	///
Vanilla								
Water vanilla		///		///	///	///	///	///
Café latté								
Soluble café latté		///		///	///	///	///	///
Water café latté		///		///	///	///	///	///
Mokaccino								
Coffee mokaccino		///		///	///	///	///	///
Water coffee moka		///		///	///	///	///	///
Choco mokaccino		///		///	///	///	///	///
Water choco moka		///		///	///	///	///	///
Hot water					///	///	///	///

Location: \_\_\_\_\_

S/N#: \_\_\_\_\_

Customer signature: \_\_\_\_\_

Date: \_\_\_\_\_

**7.6 Product Values**

Factory Settings: Small, 8 oz and Large, 10 oz.  
 The definition of "value" is the time that the mechanism will run the ingredients or water.

**Coffee (#1, #2, #3)**

	Regular					Strong					Qty of hot water for coffee				
Cup size	7oz	8oz	9oz	10oz	12oz	7oz	8oz	9oz	10oz	12oz	7oz	8oz	9oz	10oz	12oz
Value	34	36	40	45	55	50	60	70	75	90	70	80	90	100	120

**Soluble Product (#1, #2)**

	Regular					Strong (sweeter)					Qty of hot water for soluble				
Cup size	7oz	8oz	9oz	10oz	12oz	7oz	8oz	9oz	10oz	12oz	7oz	8oz	9oz	10oz	12oz
Value	30	35	40	45	55	40	43	53	58	69	135	150	175	190	235

**Mokaccino, Cafe Latte**

	Product					Qty of hot water					
Cup size	7oz	8oz	9oz	10oz	12oz	Cup size	7oz	8oz	9oz	10oz	12oz
Coffee	17	19	20	23	30	Coffee	35	40	45	55	65
Regular soluble	21	25	28	31	38	Soluble	60	70	75	85	110
Sweeter soluble	28	33	37	41	50						

**Hot Water**

Cup size	7oz	8oz	9oz	10oz	12oz
Value	90	115	125	140	170

\*These values are for reference only.

**Grinder**

Small	Large
100	165

**7.6.1 Recommended Measures for Setting**

We recommend the following measures for grind coffee and soluble:

- Regular Coffee                      1 gram / oz liquid
- Strong Coffee                        1.6 grams / oz liquid
- Regular Chocolate                  2 grams / oz liquid
- Strong Chocolate                    2.6 grams / oz liquid
- Regular French Vanilla            2 grams / oz liquid
- Strong French Vanilla              2.6 grams / oz liquid
- Mokaccino                            1/3 coffee , 2/3 soluble
- Café Latté                            1/3 coffee, 2/3 soluble



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## 8 CLEANING AND SANITIZING

### 8.1 Cleaning and Sanitizing Instructions

It is important to clean and sanitize this equipment on a regular basis in order to maintain the highest beverage quality and ensure the safety of the users. It is therefore important for anyone servicing this unit to follow Federal and State / Province Health Department regulations. These regulations require that all parts in contact with food be cleaned and sanitized regularly and that hands be cleaned before handling these parts or other commodities such as cups and stirrers.

Cleaning and sanitizing should be done in separate steps as prescribed by health regulations and good industry practice.

**Cleaning:** Cleaning means "Making free of visible soil, stains or impurities". This also means removing food soils, oil or mineral deposits that could alter the beverage taste or appearance, and therefore its quality.

**Sanitizing:** Sanitizing means application of measures designed to protect public health. This is done by reducing bacteria remaining on the surface after it has been cleaned.

There are two sanitation methods:

- 1) Chemically, the part can be treated with a bactericidal compound to remove bacteria;
- 2) With hot water of at least 170 F, the bacteria can be killed if the temperature of the part is raised high enough.

Always unplug the unit before using water on electrical parts of the machine.

For the sanitation process to work effectively, the part must be cleaned and free of all visible food soil, completely rinsed and preferably air dried. Wiping with towels or cloths can recontaminate sanitized food-contact surfaces. Therefore, we recommend to air dry sanitized food - contact surfaces and not wipe dry.

#### **FREQUENCY:**

There are two important variables that need to be considered when evaluating cleaning and sanitizing frequencies:

- Product consumption
- Water quality

Since the expected customer usage may vary for one location to another, the cleaning and maintenance is recommended upon the given time lines or cycle counts, whichever comes first. Note that these are intended as a guideline to ensure a part does not go without cleaning. We recommend you verify each part listed in this section upon each visit and that they be cleaned as needed.

### 8.2 Recommended Cleaning Tools

In order to perform the following cleaning procedure effectively, we recommend that you have at least the following tools:

- Sanitation pail or bucket
- Small tube and nozzle brush, suitable for food-contact surfaces and hot water
- Medium size long and flexible brush, suitable for food-contact surfaces (coffee chute)
- Medium brush for coffee grounds, suitable for food-contact surfaces
- Disposable towels, wet-strength and lint-free
- Mild nonabrasive detergent for exterior cleaning
- Urn cleaner packets for coffee parts
- Spare parts if extensive cleaning is to be done at the shop
- Garbage bags for the waste bin

**8.3 Cleaning and Sanitizing Schedule**

The cleaning schedule and instructions outlined in this manual must be followed to honor the warranty and ensure consistent product quality and maintain health safety levels.



All parts should be visually inspected upon each visit and cleaned as needed.

<b>Exterior</b>	<b>Daily</b>	<b>Weekly</b>	<b>Monthly</b>	<b>Quarterly</b>	<b>As needed</b>
Waste bin	Inspect				Clean
Hopper		Inspect			Clean
Drip tray	Clean				
Unit + Stand	Clean				

<b>Interior / Food Contact Parts</b>	<b>Daily</b>	<b>Weekly</b>	<b>Monthly</b>	<b>Quarterly</b>	<b>As needed</b>
Brewer assembly		Sanitize	Clean	Treatment	
Brew chamber		Sanitize			Clean
Whipper & mixing bowls		Sanitize			Clean
Hopper			Sanitize		Clean
Coffee hopper funnel		Clean			
Coffee chute			Clean		
Fan			Inspect	Clean	
Soluble canister			Sanitize		

These recommendations are based on 1,500 cycles per month, medium blend coffee and superior water quality levels . The above recommendations will need to be adjusted if the beverage volume, coffee blends used and water quality differ.

## 8.4 Overall Cleaning

It is important to keep the brewer and its surroundings clean and tidy. Inspect your brewer both inside and out upon each visit and clean where needed. Please make sure that the unit is clean, safe and functioning before you leave.

## 8.5 Exterior Cleaning

Frequency: Daily

To minimize scratching and preserve appearance, we recommend using a clean damp sponge or soft cloth lightly treated with a nonabrasive detergent for cleaning the exterior of the unit and the base cabinet. After removing all food soils, thoroughly dry with a clean, soft cloth.



### Non food-contact parts to be verified and wiped clean

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Top cap                | <input checked="" type="checkbox"/> Backsplash |
| <input checked="" type="checkbox"/> Metal cabinet          | <input checked="" type="checkbox"/> Cup stand  |
| <input checked="" type="checkbox"/> Plastic door           | <input checked="" type="checkbox"/> Stand      |
| <input checked="" type="checkbox"/> Coffee hopper exterior |  |



### Exterior parts requiring additional cleaning instructions (see below)

- Drip tray
- Waste bin



Parts for this brewer are **NOT** dishwasher safe!

### 8.5.1 Cleaning the drip tray

Frequency: Daily or as needed

The drip tray is not hooked up to a drain therefore it should be inspected and emptied periodically.

**WARNING**, drip tray may be full.

Use caution and keep it level to avoid spilling. Remove the drip tray by simply lifting gently and pulling it out from underneath the door. Rinse both parts under water and dry thoroughly with a clean dry cloth or towel. Reinstall the drip tray onto the brewer and make sure that both prongs are secure.

If the drip tray is full, verify that the overflow is not also full. If it is, wash and dry with a cloth.

### 8.5.2 Emptying the waste bin

Frequency: Daily or every 200 cycles\*

After each coffee cycle, the spent grounds and used filter paper are automatically discarded into the waste bin located in the stand. To prevent the bin from overflowing there is an automatic function which stops the brewer and shows the following message on the LCD screen:



The maximum setting = 399

The minimum setting = 0

Setting it to 0 will disable the automatic function and will cause an overflow problem if the bin is full.

The equipment will not dispense beverages until the bin is emptied and the counter is reset. To reset the counter the brewer switch (#SW4) needs to be activated by being turned on and off. This factory set counter can be adjusted to the waste bin size used. See the machine parameters for more instructions on changing the setting.

How to empty the stand waste bin:

1. Open the stand door located directly below the brewer;
2. Cut the filter paper 4 " below the drum with scissors or tear gently; **DO NOT YANK ON THE PAPER!**
3. Remove the filled plastic bag from the spent grounds bin and replace with a new one;
4. Activate the brewer switch (#SW4) by turning it on and off (right then left).

How to empty the brewer waste bin:

1. Open the brewer door;
2. Take the front panel off;
3. Activate the brewer switch (#SW4) by turning it off (to the left);
4. Cut the filter paper 4" below the drum with scissors or tear gently; **DO NOT YANK ON PAPER!**
5. Activate the brewer switch (#SW4) by turning it on (to the right);
6. Replace the front panel and close the door.



It is very important not to yank on the filter paper. Doing so may prevent the brewer from functioning properly.

**8.6 Interior Parts Cleaning & Sanitizing**

For sanitary reasons, do not use soap or detergent inside the brewer. Use hot water for on-site sanitation or suitable chemical products in the shop. Wiping with towels or cloths can recontaminate sanitized food-contact surfaces. Therefore, we recommend to air dry sanitized food-contact surfaces and not wipe dry. Allow sufficient time for the parts to dry thoroughly before closing the door.



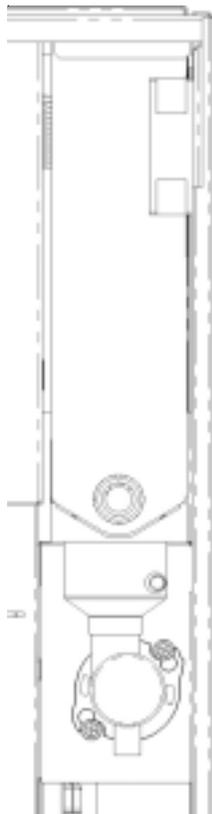
Use a medium size brush dedicated for coffee grounds and a small dust pan to easily brush away coffee grounds and dust inside the brewer before cleaning with water.

 **Interior Parts to be cleaned**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Soluble Canisters | <input checked="" type="checkbox"/> Coffee Hopper |
| <input checked="" type="checkbox"/> Coffee Brewer     | <input checked="" type="checkbox"/> Fan           |
| <input checked="" type="checkbox"/> Coffee Funnel     |   |
| <input checked="" type="checkbox"/> Coffee Chute      |   |



Caution! The rinse water is HOT. Be careful not to get any on you while proceeding with the following steps.



### 8.6.1 Soluble Canisters

#### Sanitizing the whipping assemblies

Frequency: Weekly or every 375 cycles

This will prevent residue from attaching to the sides of the funnel.

#### **Caution! The rinse water is HOT**

1. Place a Tall cup or other suitable container below the dispensing nozzle to catch the HOT rinse water;
2. Toggle the ingredient switch to Off (SW5);
3. Order several beverages for the hot water to flow through the system;
4. Toggle the ingredient switch back to ON;
5. Order a large beverage to confirm that all parts or switches have been replaced.

#### Removing whipping assembly for cleaning

Frequency: Weekly or every 375 cycles

If there is residue, remove the assembly for manual cleaning under hot water:

1. Remove the tube from the base;
2. Lift off the funnel and twist off the whipper base in a clockwise manner;
3. Rinse thoroughly under hot water and use tube brush if necessary for tubing area;
4. Air dry completely;
5. Reinstall all parts in the reverse order.
6. Order a large beverage to confirm that all parts or switches have been replaced.

#### Removing canisters for cleaning

Frequency: Monthly or every 1,500 cycles

To ensure a consistent product quality, we recommend removing and emptying the canisters on a monthly basis. This will ensure that the product does not adhere to the walls of the canister.

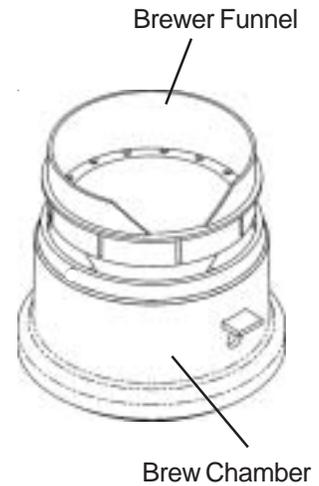
1. Unlock the door;
2. Remove the top cap of the machine;
3. Pull the canister through the top of the brewer to disengage it from the motor and transmission;
4. Clean and sanitize under hot water and air dry completely;
5. Reinstall all parts in the reverse order.
6. Order a large beverage to confirm that all parts or switches have been replaced.

### 8.6.2 Coffee Brewer

Sanitizing the Brew Chamber:

Frequency: Weekly or every 375 cycles

1. Place a large cup or other suitable container below the dispensing nozzle to catch the HOT rinse water;
2. Toggle the ingredient switch to Off (SW5 see main board);
3. Order several coffees for the hot water to flow through the system;
4. Toggle the ingredient switch back ON;
5. Remove the brown hose and remove the brew chamber's funnel to dislodge coffee residue trapped underneath it and rinse it out;
6. **Replace it and align the opening with the brown water hose so that it is against the wall to form a circular water motion around the funnel;**
7. Order a large coffee to confirm that all parts have been replaced correctly.



Brewer Funnel

Frequency: As needed or weekly

If there are coffee grounds accumulated, remove the assembly for manual cleaning under hot water:

1. Remove the brown water hose;
2. Lift off the funnel and pull out of the brew chamber;
3. Rinse thoroughly under hot water;
4. Air dry completely;
5. Reinstall all parts in the reverse order.
6. Order a large coffee to confirm that all parts have been replaced correctly.

Brewer Assembly Cleaning

Frequency: Monthly or every 1,500 cycles

In order to maintain optimal performance of the brewer assembly, we recommend that it be removed from the unit and cleaned / rinsed with hot water. (see instructions on removing the brewer)

1. Rinse thoroughly under hot water to remove visible soil;
2. Lift off the funnel and pull out of the brew chamber;
3. Rinse thoroughly under hot water;
4. Air dry completely;
5. Reinstall all parts in the reverse order.
6. Order a large coffee to confirm that all parts have been replaced correctly.

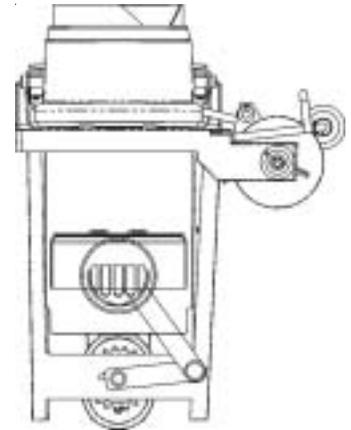


Brewer Assembly Sanitizing Treatment

Frequency: Quarterly or Every 5,000 Cycles

Regular sanitation treatments of the brewer assembly prevents residue from affecting the vacuum in the brewer mechanism and altering taste in the beverage delivered.

1. Place a large cup or other suitable container below the dispensing nozzle to catch the HOT sanitizing treatment;
2. Pour 1 portion of commercial urn cleaner (brand such as Urnex as directed by manufacturer) into the brew chamber;
3. Toggle the ingredient switch to Off (SW6 on the main board);
4. Select a small regular coffee on the membrane keypad and hit start;
5. Once the brew chamber is filled with water, turn the brewer OFF via **the main switch at the back and wait for 5 minutes**;
6. After 5 minutes, turn the brewer back ON to complete the brew cycle;
7. To rinse, make at least 10 cups of coffee with the ingredients set to "OFF";
8. Toggle the ingredients switch (SW6) back ON;
9. Make 2 more coffee selections to complete the rinsing cycle of the brewer.



**8.6.3 Coffee Hopper**

Frequency: Monthly or every 1,500 cycles

The frequency for cleaning the coffee hopper parts is contingent upon the level of oil in the coffee beans used. The more oils they have, the more residue will be left. These oils, if not removed, can alter the taste and quality of the product. To reduce your time on site, we recommend swapping the hopper with a clean one and performing cleaning in the shop.

Removing the Hopper

1. Open the door of the unit;
2. Remove the top cap;
3. Unlatch the hopper from the safety pin located in the front;
4. Gently pull it towards you and up to disengage from the transmissions.

Sanitizing

1. Sanitize with hot water;
2. Use urn cleaner powder for coffee oil stains;
3. Rinse thoroughly with hot water;
4. Air dry, do not wipe dry ;
5. Reinstall in the reverse order and load products.

Hopper Funnel

Frequency: Weekly or every 375 cycles

Depending upon the level of oil in your coffee, wipe the funnel with a clean DRY absorbent disposable towel to remove all excess oils at least once a week. This will ensure a consistent beverage quality. **DO NOT USE WATER** as it will leak into the grinder and cause damage.



Funnel \_\_\_\_\_



Coffee grinder chute

Frequency: Monthly or every 1,500 cycles

The chute needs to have the oil residue removed to ensure a consistent beverage quality.

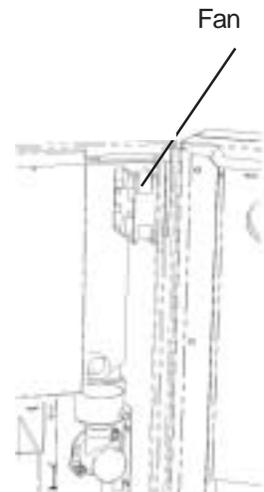
1. Clean dry, with a long flexible tube brush making grounds fall into the brew chamber;
2. Eliminate these grounds from the brew chamber by ordering a coffee.

**8.6.4 Fan**

Frequency: Quarterly or as needed

Visually inspect the fan located directly to the right of the hot chocolate canister. If it requires cleaning:

1. Turn off the unit and unplug it to stop the fan;
2. Unplug the fan and remove the guard for access;
3. Wipe clean with a dry disposable towel;
4. Replace parts in the reverse order.



Fan



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**9 PREVENTIVE MAINTENANCE**

All major parts of this unit need to be maintained as per the schedule to honor the warranty and to prevent them from failing. With adequate maintenance you will extend the life of your unit and deliver a consistent high quality beverage.



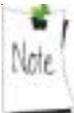
The preventive maintenance schedule and instructions below must be followed to honor the warranty.

**9.1 Preventive Maintenance (PM) Schedule**

All parts should be visually inspected upon each visit and cleaned as needed.

<b>Parts</b>	<b>Monthly</b>	<b>Quarterly</b>	<b>10,000</b>	<b>20,000</b>	<b>60,000</b>	<b>100,000</b>
Brewer	Inspect			PM		
Outlet Valves	Inspect		PM			
Water Tank		Inspect			PM	
Grinder		Inspect				PM

These recommendations are based on 1,500 cycles per month, medium blend coffee and water quality levels that meet market standards. The above recommendations will need to be adjusted if the beverage volume, coffee blends used and water quality differ.



We suggest that you use the service tracking sheet installed inside the door of the unit to record when parts have been serviced and maintained.

## 9.2 **Brewer Assembly**

PM: Yearly or every 25,000 coffee cycles

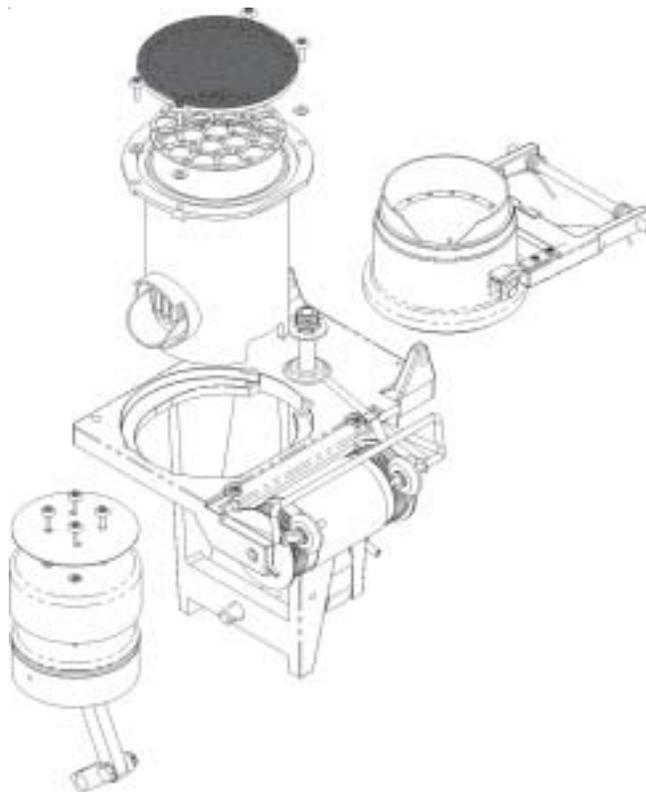
The brewer is the heart of the equipment and is responsible for the taste in the cup. It needs to be serviced regularly to maintain the quality of the beverages served. We recommend having your brewer assembly swapped with a new one that you have on hand and returned to Cafection for Preventive Maintenance every 25,000 coffee cycles. For a minimum charge, Cafection will completely clean and replace all parts necessary such as the cylinder, the teflon seal, and the screen and seal which are all responsible for the vacuum extraction and coffee taste in the cup. It will then be returned with a 1 year warranty against defective parts.

Contact the manufacturer for parts and additional instructions.

### **Inspection**

The following are signs that the extraction is not being performed adequately and that your brewer may be due for preventive maintenance:

- if the seal is damaged;
- if air gets into the cylinder and creates bubbles in the coffee;
- if there are coffee grounds in the delivered product;
- if the spent coffee grounds remain wet.



### 9.3 Water Outlet Valves

PM: every 6 months or 10,000 cycles

To avoid any problems related to mineral deposits over time, we recommend having the 4 valves swapped, and rebuilt in your shop with the kits included in the spare parts briefcase. Refer to the manufacturer's instructions included with the valve kits.

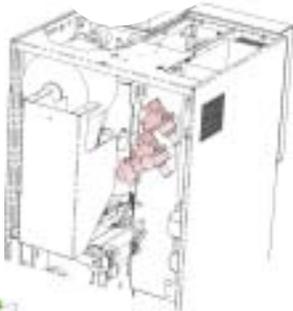
#### Leaking valve

- a) Identify the leaking valve, change it and rebuild it
- b) If the leak comes from under the body of the valve or from the tank exit, try simply changing the O-ring
- c) If the coffee valve leaks via the tubing, water will accumulate in the brew chamber. If it drips all night, the first coffee of the morning may cause the chamber to flood since it contained too much water.

#### Removing and installing the valves

1. Open the machine door;
2. Drain the tank, see instructions;
3. Pull the cover valves off;
4. Drain the water from the water tank into a pail until you see no water in the lowest valve;
5. Unplug the 3 prongs from the valve;
6. Carefully twist off the valves by pulling it towards you;
7. Reinstall by repeating in the reverse order

Warning: Caution water is hot!



It is important to twist the valves gently so that you do not damage the O-ring.



If you choose to install a water filtration system, it is recommended that the filter be checked on a monthly basis.

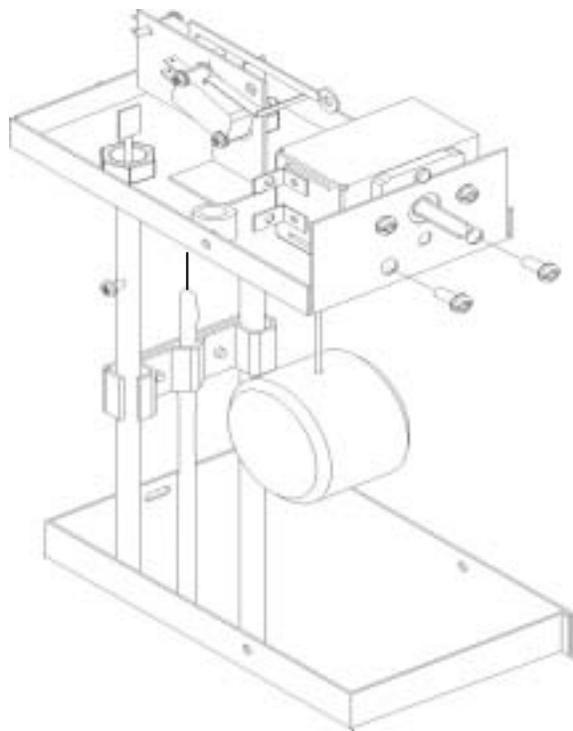
**9.4 Hot Water Tank**

PM: every 60,000 Cycles, quarterly inspection

To avoid any problems related with mineral deposits over time, we recommend having the water tank assembly delimed to remove all scale in the unit. Upon visual inspection, you may wish to replace the element, thermostat and the water level and heater safety switch.

Use a scale remover product. Such as Scale Kleen by Everpure.

See the manufacturer instructions for more details.



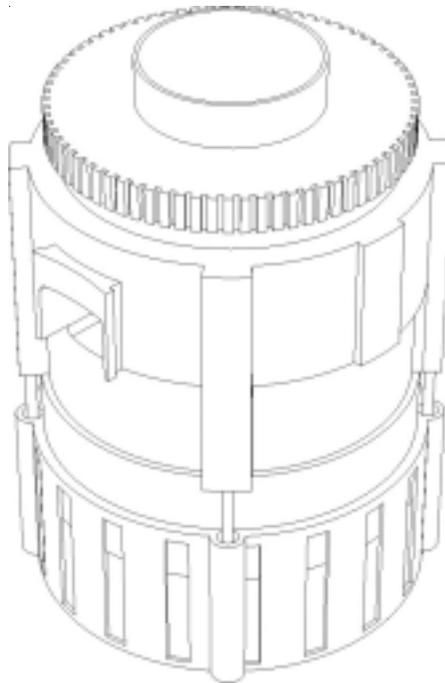
**9.5 Grinder**

PM: every 100,000 Cycles, quarterly inspection

The grinder used in the equipment is a large commercial grade burr grinder that minimizes the temperature increase in the finished product of ground coffee. The motor of the grinder has a lifetime warranty.

The ground coffee particle size is very important to achieve the desired coffee extraction. Therefore, the burrs of the grinder need to be changed once they reach about 100,000 coffee cycles.

Contact the manufacturer for parts and instructions.





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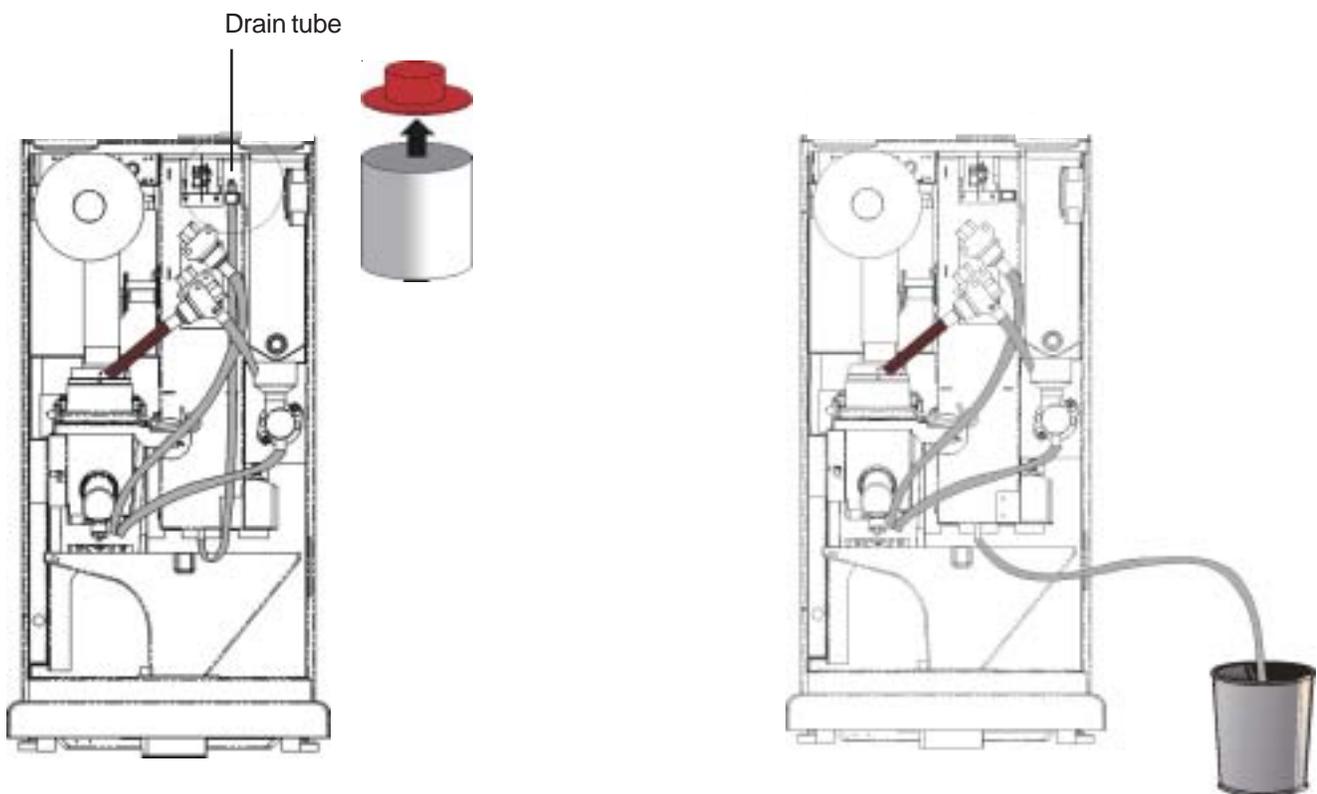
## 10 SERVICING PARTS

This section is intended to assist you in servicing various parts of the unit.

### 10.1 Draining the hot water tank

We recommend allowing 3 hours for the hot water to cool prior to emptying the tank. Make sure you have a 2 gallon container suitable for holding hot water.

1. Turn off and unplug the brewer;
2. Turn off the main water supply to the machine;
3. Open the machine door;
4. Remove the machine top cap;
5. Remove the valve cap by unscrewing the top, with a screwdriver;
6. Locate the drain tube with a red plug behind the valves;
7. Direct the tube into the pail and remove the red plug. **Warning, water may be hot!;**
8. Drain the water from the water tank completely.





## 10.2 Shutdown / Storage

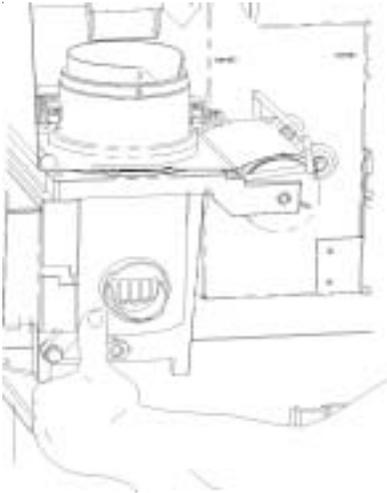
Should you need to store this brewing equipment for an extended period of time, follow this procedure to avoid any risk of injury or damage to the equipment.

1. Turn the unit off and unplug from the power outlet;
2. Drain the hot water tank (see instructions);
3. Empty the soluble canister and the coffee canister;
4. Clean all parts of the unit before storing (see cleaning instructions)
5. Disconnect the white double wire from the heating element (see installation diagram)
6. Tie down the water level switch's arm with a "tie-wrap" to keep the float from pulling down on the switch during transportation. **"Do not overtighten"**, this may damage the switch; this is simply to keep the float from bouncing up and down on the switch.

### 10.2.1 Storing the Brewer

The brewer is the heart of equipment and is responsible for the taste of the cup of coffee. It is therefore important that you store it properly when it is not in the brewer. Always disengage your brewer clutch by using a pair of pliers and turning the pin located on the back clockwise until the brew chamber lifts up. This will release the pressure on the screen and seal. Your brewer must be on its back or its left side while on a table top. Do not sit the brewer on its right side (wheels and yoke) or straight up as these positions are not sturdy and could cause it to fall.

**10.3 Brewer Assembly**

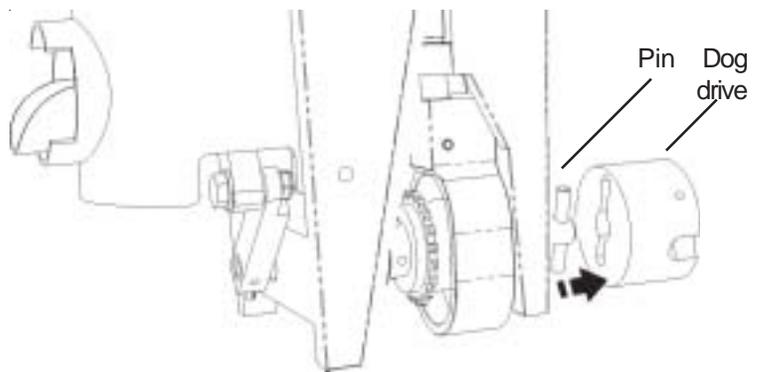
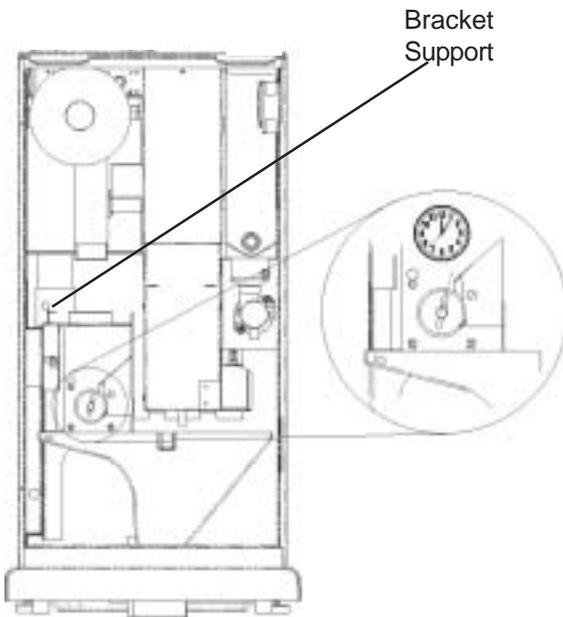


Removing the brewer

1. Open the machine door;
2. Togle the brewer switch (SW4 ) to release the filter paper and cut the filter paper;
3. Remove the coffee spout and the hose support bracket from the right side of the brewer assembly;
4. Support the brewer assembly by holding the aluminum shaft on the right side of the brewer assembly;
5. With your left hand, slide the retaining pin over to the right and then down;
6. Pull the brewer assembly straight towards you.

Installing the brewer

1. Make sure that the dog drive pin in the back of the brewer is at 1 o'clock;
2. Align the left edge of the brewer on the left bracket support;
3. Push the brewer back completely into the dog drive motor;
4. Slide the brewer's retaining pin up and then left.



### 10.4 Microcontroller (Eeprom)

The microcontroller, also known as the Eeprom, can be swapped to incorporate new improvements to the programming such as new settings or new functions.



- Please take all counter readings before changing the microcontroller because all data will be reset.
- Use the necessary precautions for handling static sensitive devices.
- Do not attempt to pry the chip out of the socket with anything. This will damage the casing.

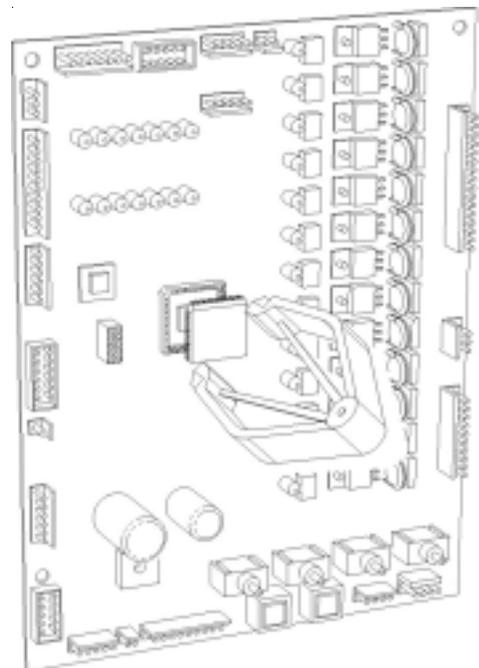
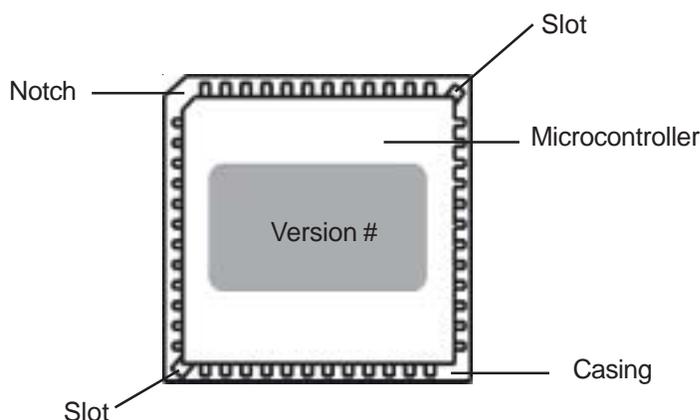
**Tool required:** You will need to purchase a PLCC Extractor as showed in the diagram below . This can be found in most electronics stores or via the internet. Without this tool, you may damage the casing for the microchip and damage the board.

#### Removing

1. Retrieve all your data;
2. Turn off the machine and unplug from the outlet;
3. Open the door and remove the lexan plate via the 4 screws;
4. Locate the microcontroller (the black square piece in the middle of the board with a white label);
5. Using the Extractor, carefully insert the prongs in the top right and bottom left corner slots of the casing and grab the microcontroller;
6. Lift out of the socket gently.

#### Replacing

1. Align the notched corner of the microcontroller with the notched corner of the empty socket;
2. Make sure that all contacts are aligned with the appropriate slots on the socket;
3. Push the microcontroller firmly, straight down until the top of the chip is flush with the top of the socket;
4. Replace remaining parts in the reverse order;
2. Plug the machine in and turn on the unit;
3. At start-up, the LCD will indicate the microchip version #;
4. Test the new features outlined in the documentation supplied with the new microcontroller.



### 10.5 Main Board

Like all electronic main boards, they are very susceptible to power surges in the building. If this is your reason for changing the main board and this persists, verify your power source. Use the necessary precautions for handling static sensitive devices.

#### Removing

1. Retrieve all your data;
2. Turn off the machine and unplug from the outlet;
3. Open the door and remove the lexan plate via the 4 screws;
4. Unplug the connections: (Clockwise from the top left corner)
  - **MDB Port** (if coinco)
  - **Main board:** Exp.#2, J18, J2, J19, J3, J6, J16, J24, J10
  - **24 volt card:** J3, J1, J2
5. Unscrew 4 plastic 1" posts;
6. Remove the board.

#### Replacing

1. Replace the board and fasten with the 4 posts;
2. Plug the connections and refer to the board diagram for full size view;
3. Verify that all is in place, the board will fail if the connections are reversed or in the wrong place;
4. Replace all parts in the reverse order;
5. Plug in the brewer and turn it on;
6. Verify on the LCD that all is functioning.



All cables must be replaced in the correct order and direction before turning the power on or the board will fail and be damaged.

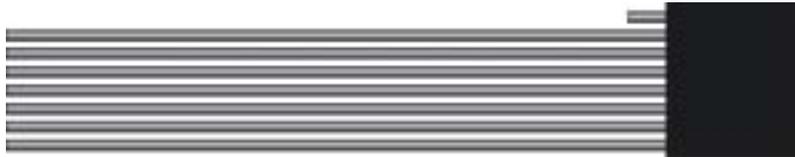
## 10.6 Keypad Membrane

Refer to the picture below to see which way the membrane should be placed.

### Replacing

1. Turn off the machine;
2. Unlock and open the main door;
3. Remove the lexan plate via the 4 screws;
4. Unplug the connection J16;
5. Unstick the keypad membrane;
6. Install the new keypad membrane, be careful to center it ;
7. Slide the membrane cable through the door carefully;
8. Plug the connection J16 as it was (see picture below for the right position);
9. Replace the lexan plate;
10. Close and lock the main door;
11. Turn on the machine.

**N.B.** To make sure you installed the keypad membrane correctly run a few cycles of beverages.





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**11 TROUBLESHOOTING**

**11.1 “Error” Appearing on the LCD Screen**

Error Overflow Drip Tray
-----------------------------

This message indicates that there is water in the overflow drip tray of the machine.

Solution

Inspect the overflow drip tray underneath the machine to make sure it is clean and dry. Also make sure that the overflow drip tray underneath the fourth canister is clean and dry.

Error Low Water Level
--------------------------

This message indicates that the water level in the tank is too low.

Solution

- 1) Check if the water gets in the tank. If so, the message on the LCD screen should disappear in a few minutes.
- 2) Check if the entrance of the water is working (outlet valve from the wall, inlet valve, etc.)
- 3) Inspect the overflow drip tray and make sure it is clean and dry. Even if your overflow detection is not activated, the inlet valve (D16) won't work and it will indicate this message.
- 4) Check the water level switch. If there is chocolate and/or coffee on the top of the lid it might keep the switch from working properly.
- 5) Make sure the water level switch is properly adjusted.

Error Cam Position
-----------------------

This message indicates that the coupling (dog drive) is not at its starting position.

Solution

- 1) This situation might arrive when you have a mess inside the machine and the brewer switch got wet. Clean the switch and make sure it is dry. When you will turn the machine back ON, it will reset itself.
- 2) Check the coupling (dog driver). If the safety pin is still in place and properly installed.
- 3) Make sure the brewer switch stops when the little roller of the brewer switch gets in the coupling hole. If it isn't you may have to readjust the arm with pointed-nose pliers.

Error Filter Paper
-----------------------

This message indicates that the filter paper roll is empty.

Solution

Make sure the filter paper roll is correctly placed. Put a new roll if it's too low. (It is normal to have 1/6 to 1/8 of paper left on the roll).

**11.2 Other Message Possibilitites on the LCD Screen:**

Change Filter Paper

This message indicates that the brewchamber is lifted up.

Solution

Desactivate the brewer/paper switch on the power supply board.

Coinco not ready

This message indicates that the main board does not recognize the coin changer.

Solution

- 1) Shut OFF the machine. Unplug the coin changer. Turn the machine back ON. Then shut it OFF again. Plug the coin changer to its connector, and turn the machine back ON.
- 2) If the coin changer still doesn't work try with another coin changer.
- 3) Check the J1 with a tester.

Make Coffee Choice

This question appears when you press on the Mokacinno or Café Latté buttons. The machine gives you 3 seconds to select the type of coffee you want. Otherwise, by default it takes the coffee programmed.

Needs service  
Activate brewer

This message appears when a number of cups have been setup on the maintenance counter.

Solution

TO reset everything you have to put the brewer switch ON. Clean your machine thouroughly and the turn the switch on OFF again.

Insert exact change

This message indicates that the coin changer's tubes are empty.

Solution

Fill the tubes with change and this message will disappear.

**11.3 Particular Cases**

Back-up, chamber flood, bad extraction, etc.

- 1) Check if you are using the appropriate filter paper; Filter Paper 106 for the Platinum brewer.
- 2) If the problem appears with only one coffee selection, empty the canister and try another "batch" of the same blend.
- 3) Check if the brew chamber or the cylinder are cracked. In this case, the piston would pull more air than liquid.
- 4) If water comes out on both sides (left and right) of the brew chamber and more than 3/4 inches, you have to readjust the tension.

Element not heating

- 1) Check the connectors and make sure hey are connected properly.
- 2) If the tank lid is dirty of coffee and chocolate it can affect the switches and keep them from operating correctly. In this case, change the heater safety level switch.
- 3) Verify the condition of the element by taking out the complete tank lid.



Water is warm or cold

Check the thermostat fader. Make sure it is all the way to the right. If it is, check the heater element.

Machine is off (doesn't work while it is turned on)

Check and empty if necessary the overflow cup inside the machine. If the cup fills up with water again, check the water level switch. Its arm could be under the heater safety level switch. If not, it might be because the water level switch is dirty or because it needs a little adjustment. To adjust it, slightly bend down the switch's arm (app. 1/6" should suffice).

Quantity of liquid too low (in cup)

Verify the machines settings and make sure they correspond to the valve given in the programming manual. Make sure the outlet valves are clean and not clogged up of lime.

**11.4 Parts in Trouble:**

Light Bulb

The light bulb is not lighting up. Check if it is burned.

Valve Leaking

Identify the valve in trouble and change it. If the leak comes from under the body valve or under the tank tube exit, just change the O- ring of the valve.

