SERVICE AND INSTALLATION MANUAL for INNOVATION TOTAL LITE

Cafection inc.
ENTERPRISES

Manufactured by:
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IMAGE SHOWS MACHINE WITH OPTIONNAL SHORT BEAN CANISTER

Revision 1

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1 INTRODUCTION

Cafection manufactures the INNOVATION TOTAL LITE brewer based on its original Avalon single-cup technology and is complemented with the coffee of your choice!

The INNOVATION family of brewers are designed and engineered based on Cafection's 35 years 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 INNOVATION TOTAL LITE brewer offers 3 choices of whole bean coffee that can be mixed with soluble products upon request as well as gourmet hot chocolate, americano and hot water.

All products are available in 2 adjustable cup sizes;
Small and Large; from 7 to 20 oz.

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

- Safety Instructions
- Reference Drawings
- Controls and Features
- Compact Flash Card
- 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 INNOVATION TOTAL LITE brewer and may differ from the previous Cafection 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.

2.1 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

2.2 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; never move when full.
- This brewing equipment is intended for indoor installation only.

2.3 Power supply

- Always use a grounded 120V AC 60Hz socket outlet rated for 15A service.
- Each piece of brewing equipment must have its own electrical outlet, on a dedicated circuit.
- Extension cords must 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.

2.4 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 OR INJURIES.

3 WARRANTY

Procedures and Conditions for Goods Returned

All warranty claims and products returns processed by our technical department is available Monday through Friday from 8:30 to 16:30 eastern time or alternatively by email service@cafection.com

3.1 Warranty Policy

Cafection provides a warranty period as follow unless otherwise confirmed in writing:

- All parts **in contact with water** (release valve, heating element, thermostat, sensor, valve water inlet and tank fleet) **3 months after the invoice date.**
- All other parts of the coffee brewer: **12 months from the invoice date.**

The warranty covers any malfunction due to manufacturing defects and does not cover defects resulting from negligence, improper installation or misuse of the product or equipment failure due to excessive mineral deposits or the quality of local water. **Any damage, alteration of serial #, date or codes will void the warranty.**

Obtaining a Return Merchandise Authorization number (RMA)

Before obtaining a return number, you should first contact our Technical Department to discuss the disruption and confirm that the product should be returned for further testing.

You will need to provide the following information:
- Company name and contact;
- Invoice #, product #;
- Quantity;
- Serial #;
- Detailed description of the problem.

Our Technical Department will then send you a return form with an RMA number and product (s) authorized for return.

The return numbers are valid for **30 days after the date issued**. Any RMA number over 30 days must be revalidated with our Technical Department.

3.2 Returning Products

After obtaining a RMA number, you must ship the product or products to the following address:

Cafection Enterprises Inc.
Attn: Service Department
2355 Dalton
Quebec (Quebec) G1P 3S3
Canada

The return shipping charges will be assumed by us for products guaranteed (only under authorization of the Technical Department). If we paid for the transportation and the product is not covered under warranty, you will be charged back the freight.

All products must be packaged carefully to avoid damage during transportation. Whenever possible, please use the original packaging. Any product damaged in transit or received in unsatisfactory conditions will not be covered by the warranty.

Cafection will not be held responsible for any loss or damage incurred during shipment.

All products must be accompanied by the return form with the valid return number and the return number must be clearly indicated on the outside of the package.

3.3 Returned Product Procedures

The RMA number does not guarantee the product will be accepted under guarantee.

Depending on the nature of the problem, after testing the defective product, we will authorize the repair or replacement by identical or equivalent specifications. It will then be determined whether there will be full or partial refund of the product.

If the product is no longer covered under warranty or returned damaged, we can get your item repaired or replaced at a price that will be determined depending on the product.

If the product is returned in unsatisfactory conditions, it will be subject to management fees of $35 and the guarantee may be refused.

All returned products involving no malfunction will be subject to administrative fees and test of $35, plus the freight charges associated with the return.

Advance Replacement

You can also request an advance replacement. In this case, it will be necessary to send an order for the anticipated replacement and follow the procedure explained above to return the defective product. You will receive an invoice for the advance replacement.

After testing, if the product is found defective, we will send you a credit.

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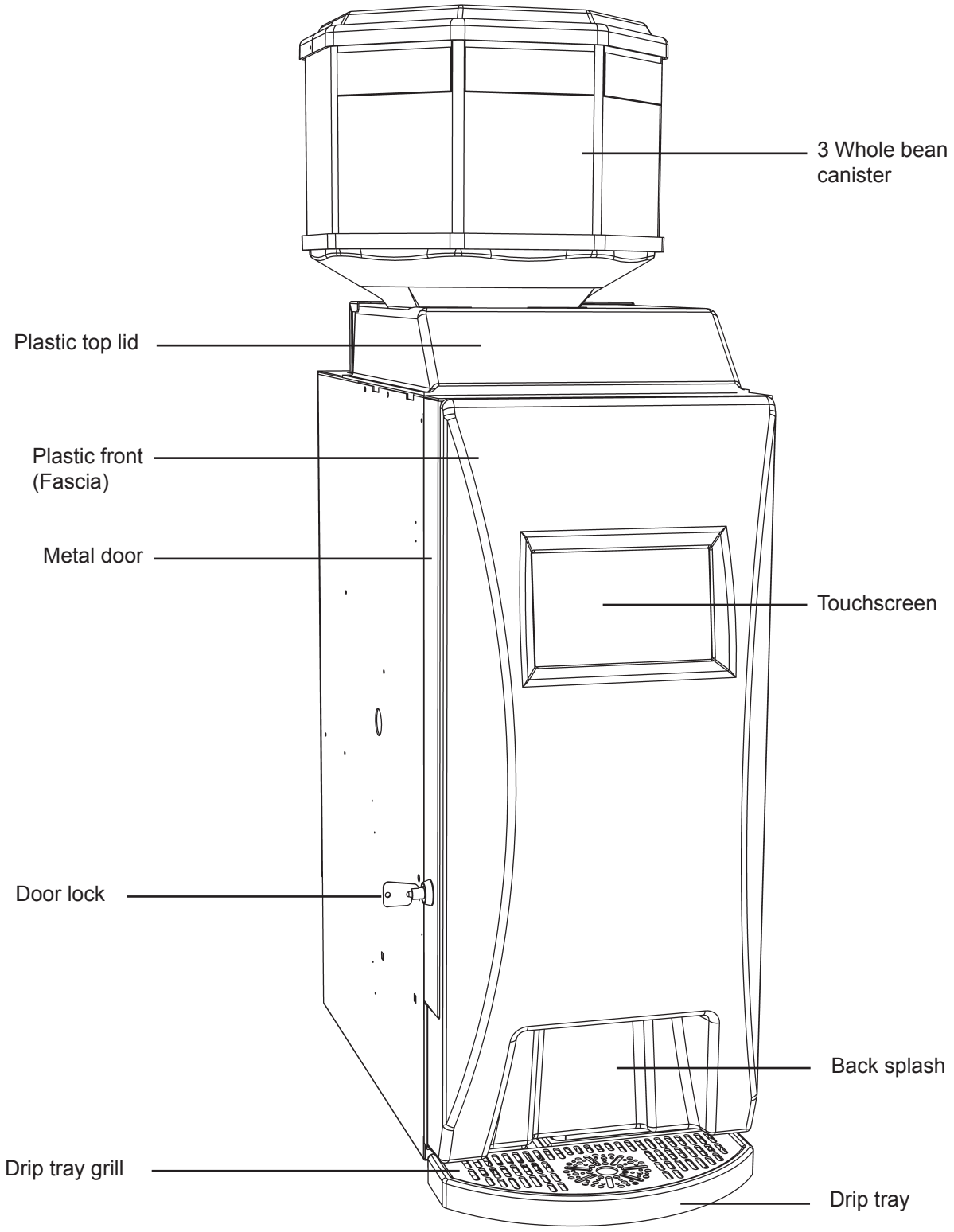
E-mail order@cafection
www.cafection.com

Cafection is committed to providing prompt and efficient service and an excellent customer service. Our intention is to process all returns within 15 days after the date of receipt to ensure the ongoing satisfaction of our customers.

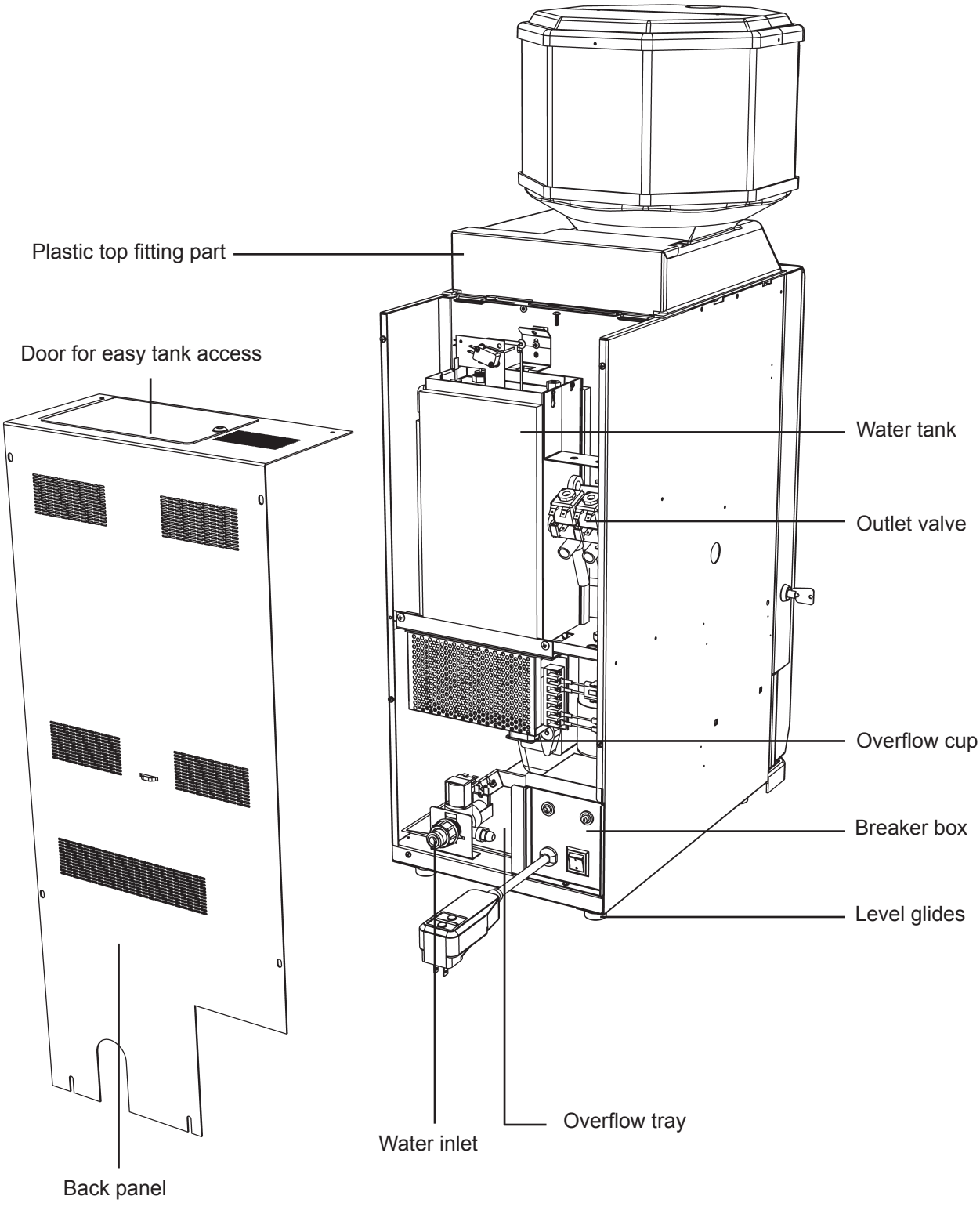
Last update, March 2012, G.A.

4 REFERENCE DRAWINGS

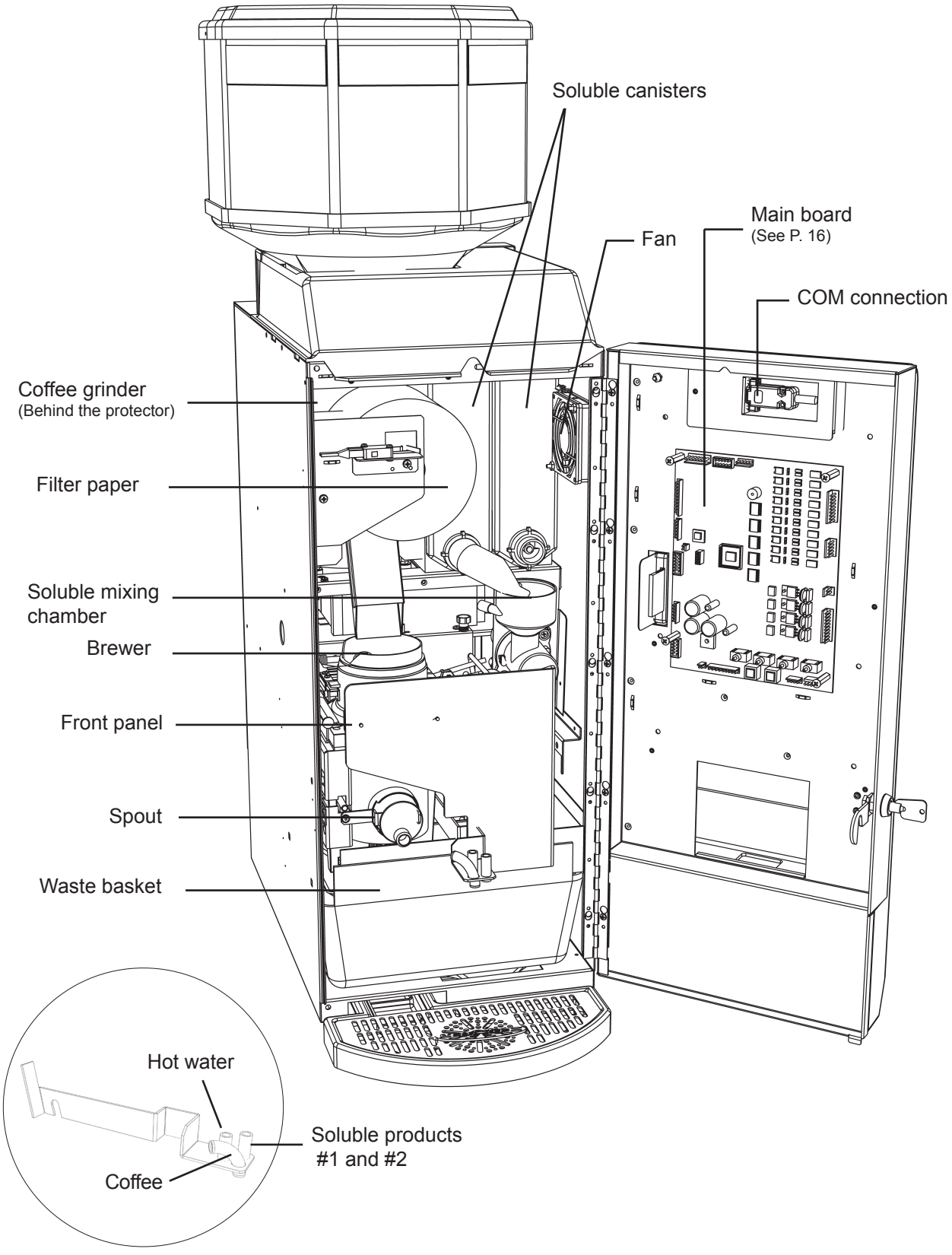
4.1 External View



4.2 Rear View

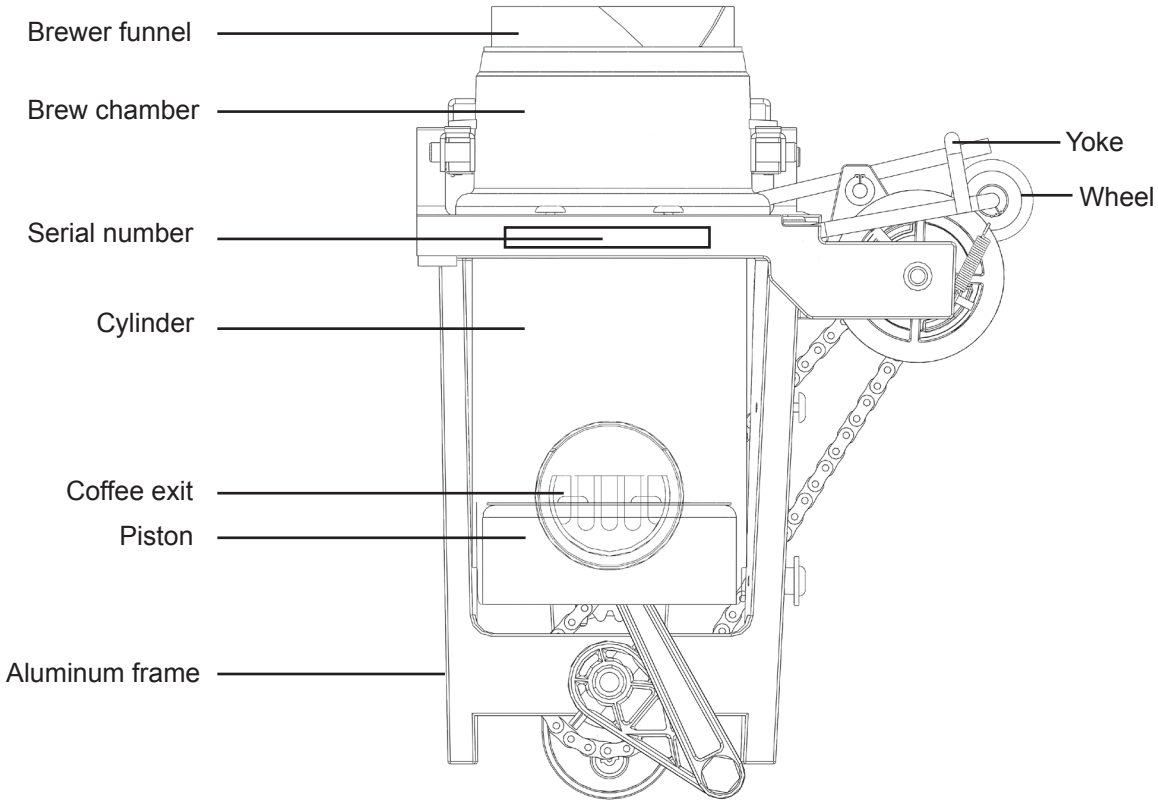

Plastic top fitting part
Door for easy tank access
Water tank
Outlet valve
Overflow cup
Breaker box
Level glides
Overflow tray
Water inlet
Back panel

4.3 Internal View



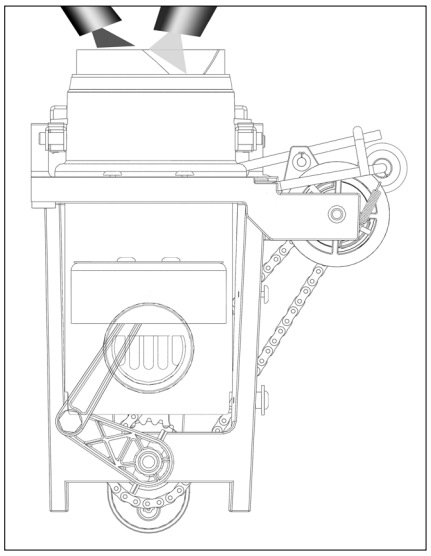
4.4 Brewer Assembly

The platinum brewing system is in a class of it's own in the single cup coffee business and is specifically designed for Cafection 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 most dicerning coffee drinkers. 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.



4.5 Brewing Process

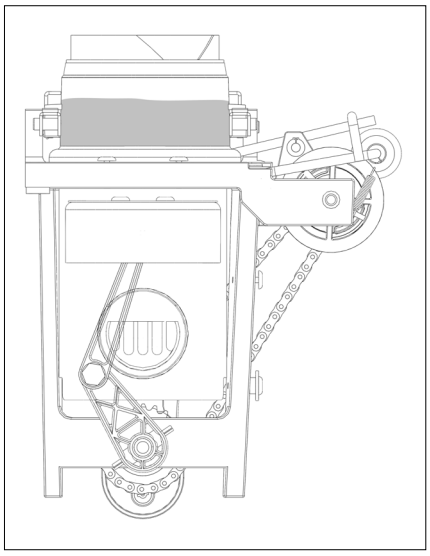
1



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.

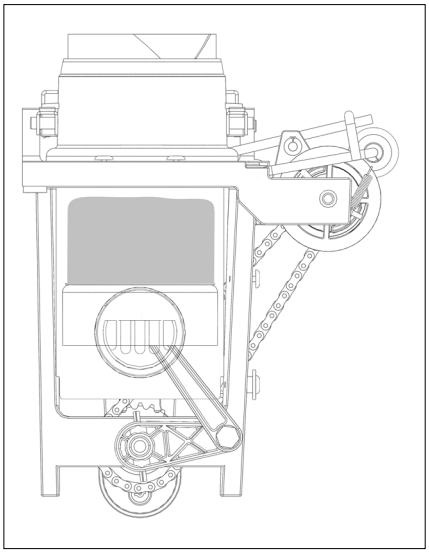
2



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.

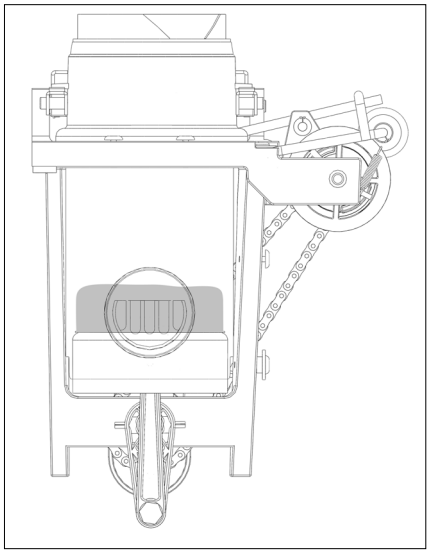
3



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. One last pause will be made to allow all the coffee to drip from the brew chamber.

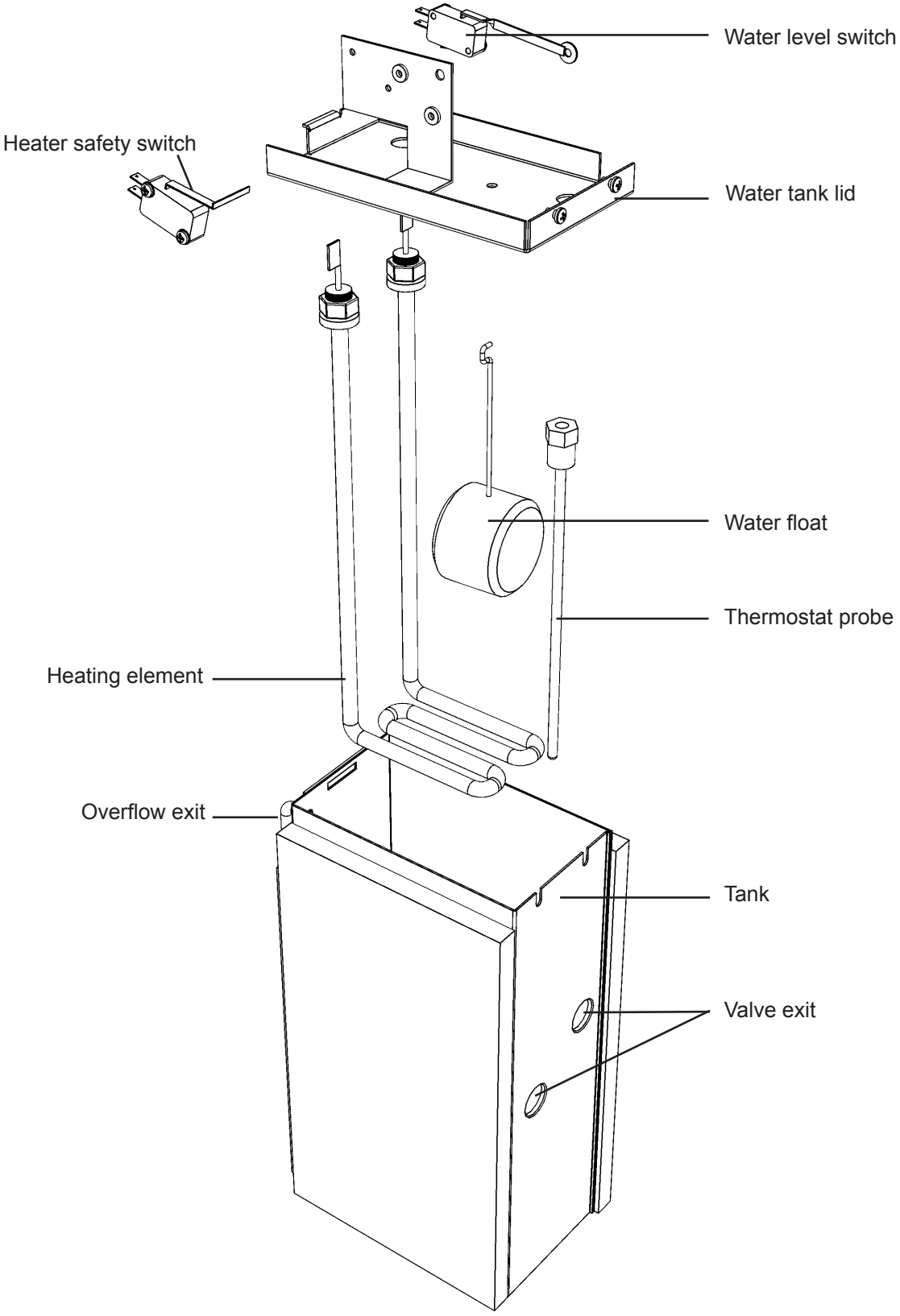
4



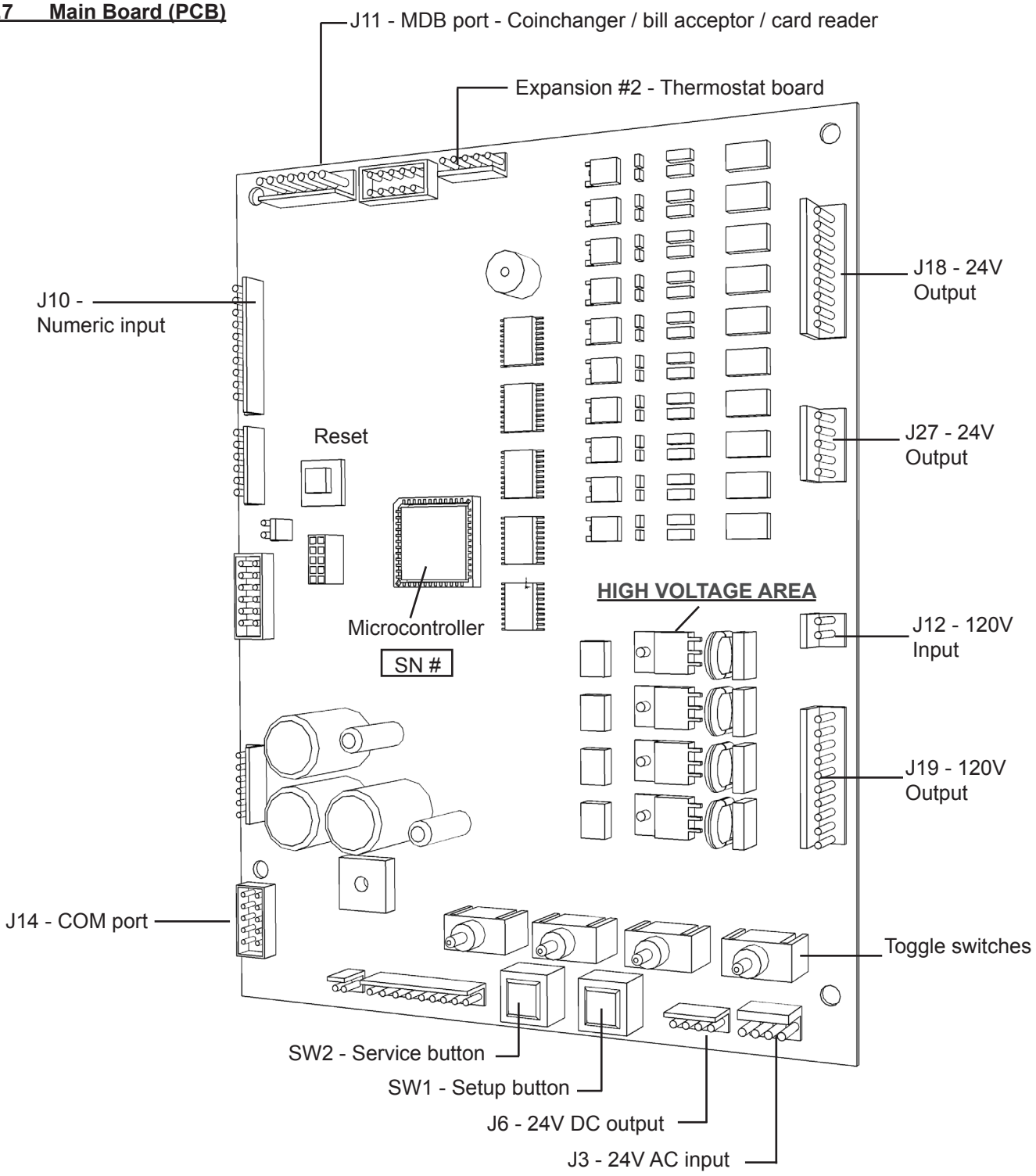
Step 4 Product delivery

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.

4.6 Hot Water Tank



4.7 Main Board (PCB)



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

IMPORTANT

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

4.7.1 Main Board (PCB) Descriptions

Interactive switches and buttons

1.Setup Button (SW1) White
Pressing this button gives you access to the tally counter data.

2.Service button (SW2) Black
Pressing this button will enter / exit to the service mode. See section 4.2 for details.

Toggles switches are not used in the Total Lite, but must be position correctly for proper operation. The two left switches must point to the left and the two right switches must point to the right.

Green LEDs

The green leds will illuminate to indicate the alarm that has been triggered.

DS18 - Drip tray overflow
DS13 - Cam switch
DS14 - Always off if filter paper required
DS15 - Water level switch ON
DS19 - Water level switch OFF
DS16 - N/A
DS17 - N/A
DS20 - N/A
DS25 - N/A
DS27 - N/A
DS26 - N/A
DS24 - N/A
DS23 - N/A

Red LEDs
The red leds will illuminate to indicate the part is in use.

DS2 - Coffee #1 motor
DS3 - Coffee #2 motor
DS4 - Soluble #1 motor
DS5 - Soluble #2 motor
DS6 - Coffee hot water
DS7 - Soluble hot water
DS21 - Chute Solenoïde
DS22 - Brewer motor
DS10 - Inlet valve
DS8 - Hot water
DS9 - Brewer motor
DS12 - N/A
DS11 - Grinder
DS29 - Whipper
DS31 - Coffee #3

The microcontroller, also known as the Eprom, can be swapped to incorporate new improvements to the programming.

IMPORTANT

- 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.

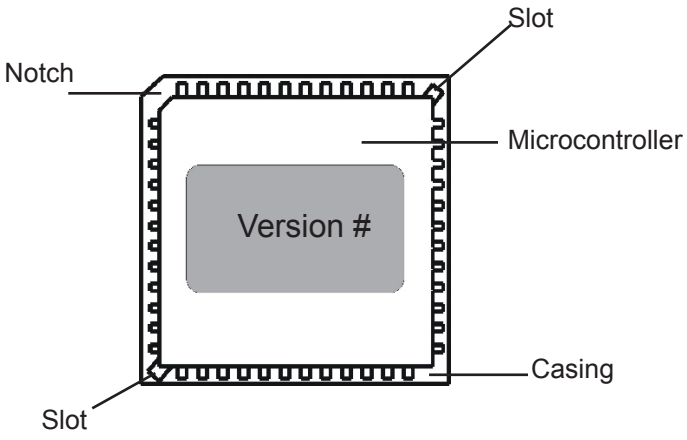
Removing

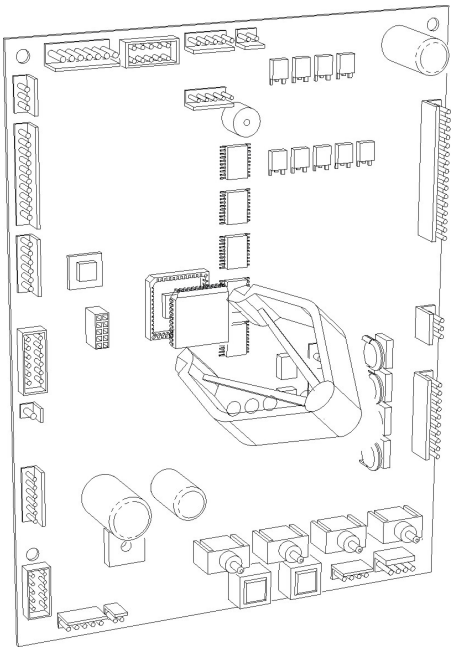
1. Turn off the machine and unplug from the outlet;
2. Open the door and remove the plastic protection via the 4 screws;
3. Locate the microcontroller (the black square piece in the middle of the board with a white label);
4. Using the Extractor, carefully insert the prongs in the top right and bottom left corner slots of the casing and grab the microcontroller;
5. Pull 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;
5. Plug the machine in and turn on the unit;
6. At start-up, the screen will indicate the microchip version #, see picture below;

```
Total Lite G.U.I  V TL 2.1.0
Serial number :TL-DEMO
Starting communication with coffee machine controler...OK
.Main controler ID :Total Lite V1.0
Water Thermostat ID :1.01
Water temp set to : 200 F
```





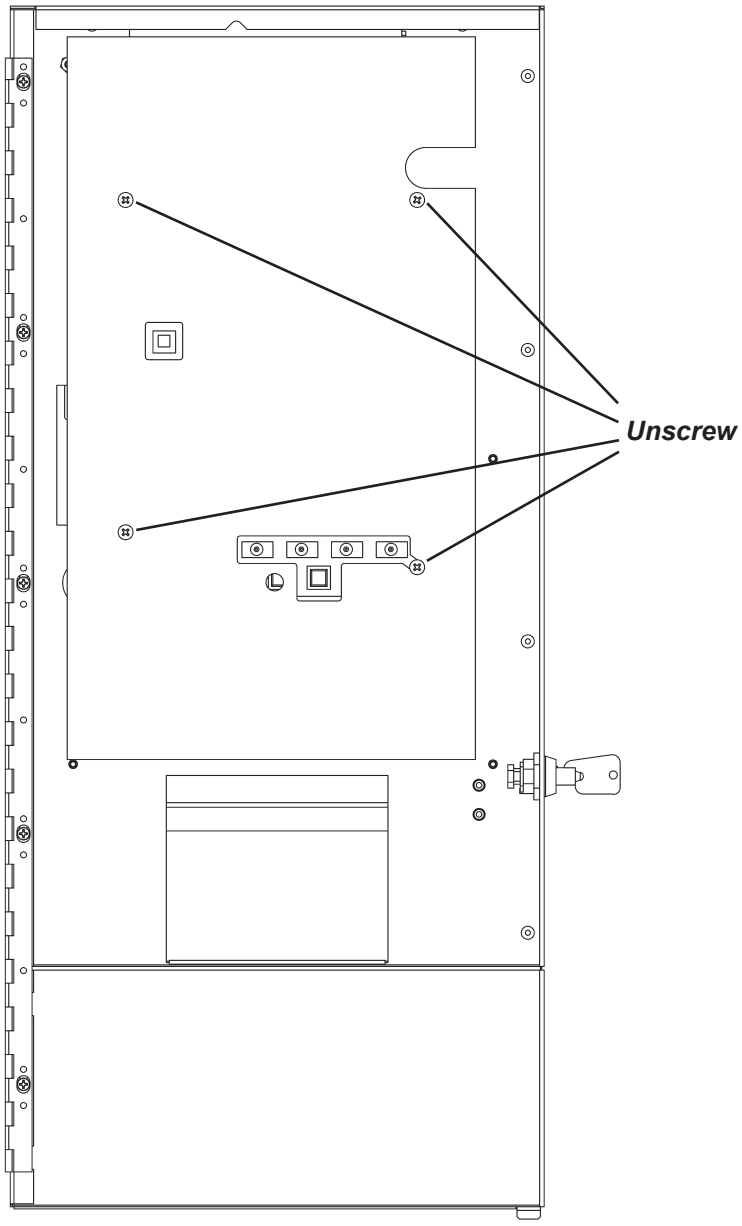
5 COMPACT FLASH CARD

5.1 Removing main board protection

1. TURN THE MACHINE OFF!

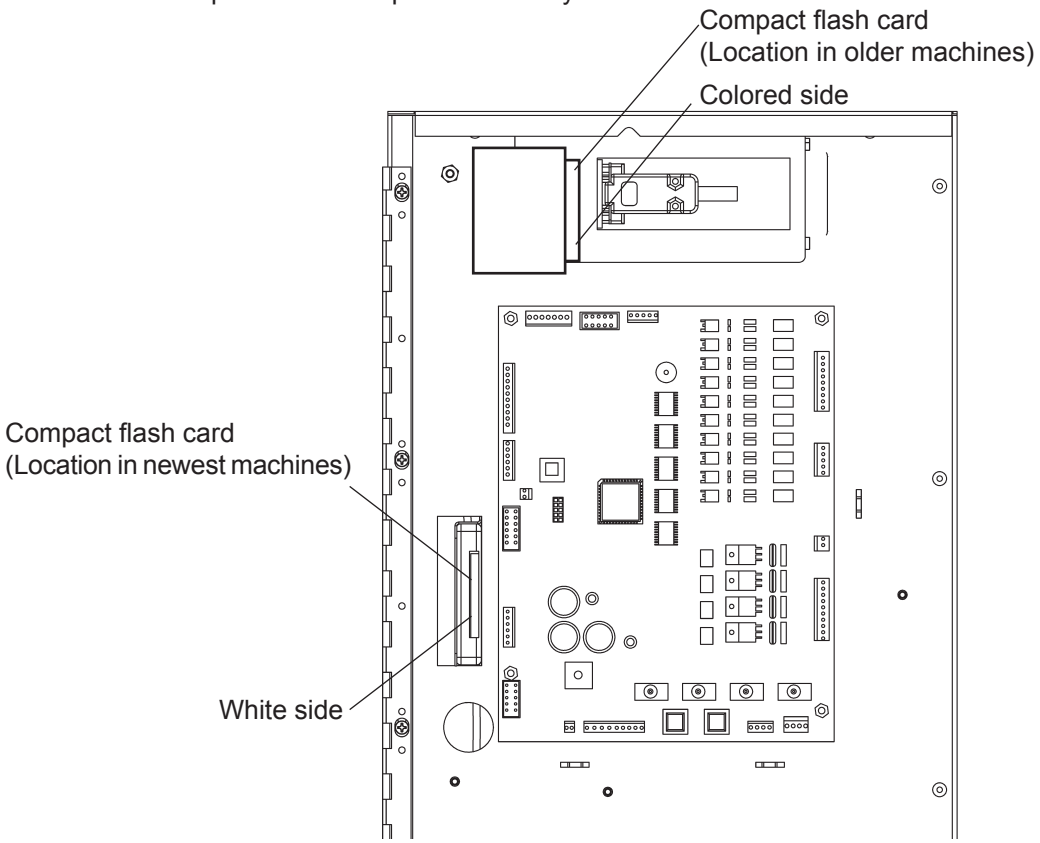
FAILURE TO COMPLY CAN CAUSE EQUIPMENT DAMAGE OR INJURIES

2. Remove the main board protection by unscrewing the four screws shown below.



5.2 Removing the compact flash card

To remove the compact flash card pull it towards you.



5.3 Inserting the compact flash card

To insert the compact flash card make sure it's aligned correctly with the receptacle and push it. It may required a LITTLE amount of force but do not push it too hard.

WARNING! If the compact flash card is not inserted the right way, it's upper corner will not enter the receptacle. If it happens DO NOT PUSH ANYMORE or damage could be done. Flip the card and push it back in.

5.4 Compact flash card version

At start-up, the screen will indicate the GUI (compact flash card) version #, see picture below;

```
Total Lite G.U.I  V TL 2.1.0
Serial number :TL-DEMO
Starting communication with coffee machine controler...OK
.Main controler ID :Total Lite V1.0
Water Thermostat ID :1.01
Water temp set to : 200 F
```

6 SERVICE SOFTWARE

6.1 User levels

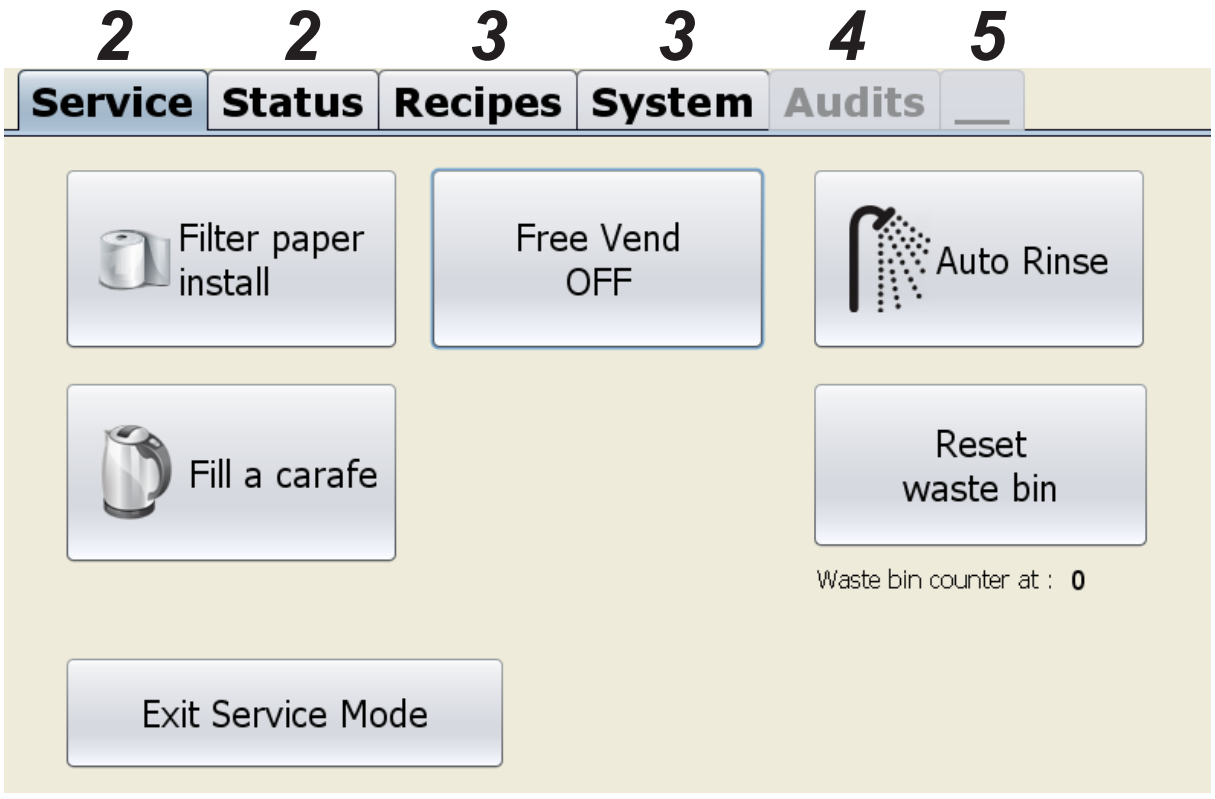
User level 1: End user, product selection and dispensing. No service can be made by users lever 1.

User level 2: Service personnel for basic maintenance. Door key needed. No password.

User level 3: Service tasks. Recipies modification, system settings.
Factory password for this level: tech
We highly recommend you to change this password.

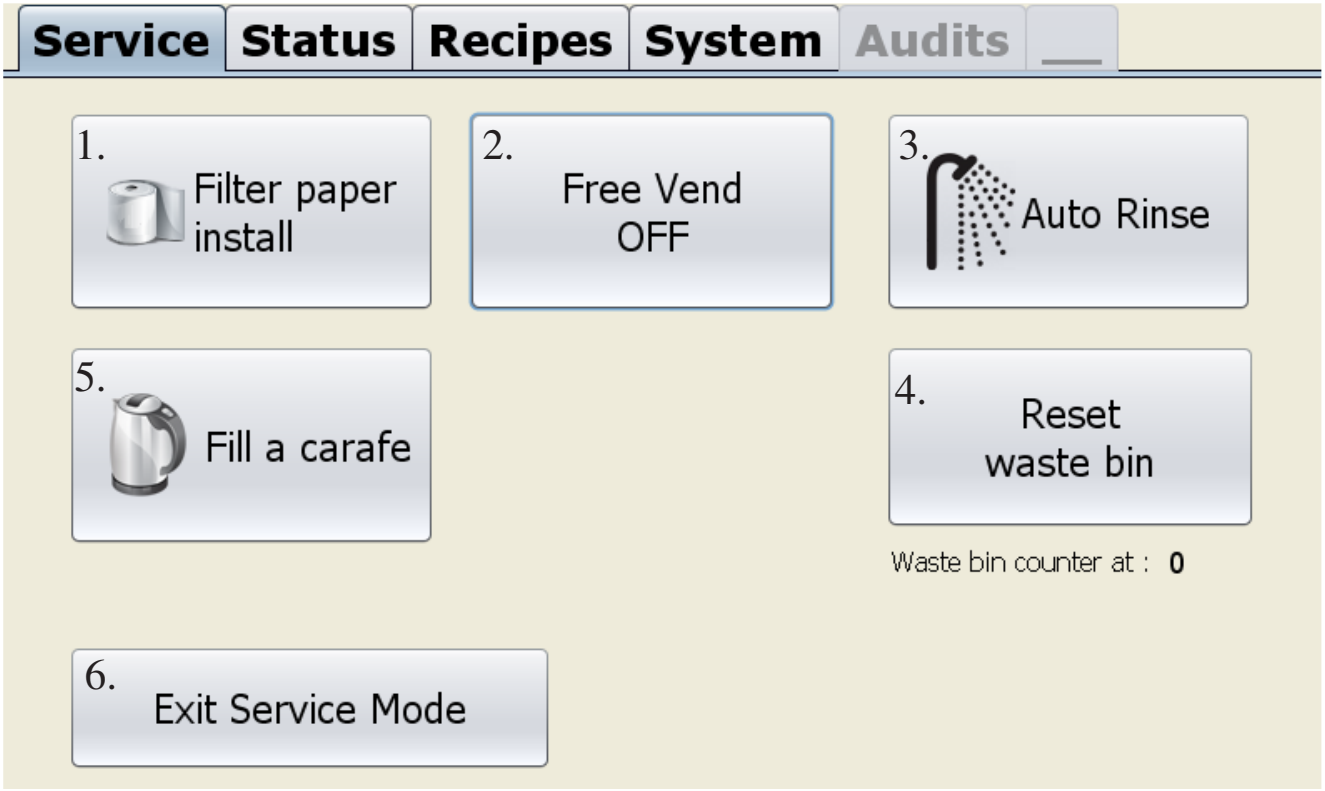
User level 4: Administrative tasks. Sales counters (audits) and password modification.
Factory password for this level: admin
We highly recommend you to change this password.

User level 5: For development purposes. For cafection only.



6.2 Service Screen

To get to the screen below press the setup (white) button (SW1 as shown in section 4.7) on the main board inside the door. The service tab will be displayed on the screen.



1. This button is used to change the filter paper. Follow the instructions on the screen after pressing it.
2. This button is used to put the brewer in free vending mode. If the brewer is in free vending mode the button will appear in green and show ON. If the brewer is not in free vending mode the button will show OFF. When free vend is enable, the coin, bill and card devices will be disabled so the customer can get product without paying. Please note, when free vend is ON, the optional printer will not print any coupons.
3. This button is used to rinse the brewer and the whipper chamber. Follow the instructions on the screen after pressing it. ***WARNING!*** make sure to place a container large enough (size is specified on the screen) . ***BE CAREFUL*** because water is ***VERY HOT!***
4. This button is used to enter carafe mode. For more information see next page.
5. This button is used to reset the waste bin counter.
6. This button is used to exit service mode.

6.3 Carafe mode

The carafe mode is always free and each drink is counted as a free vend in the sales counters.

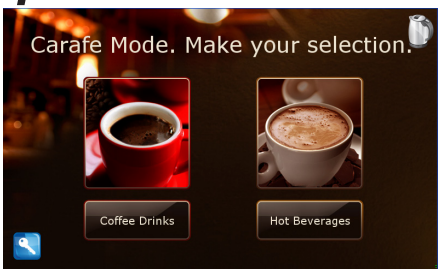
When you press the button “fill a carafe” in setup mode the screen will automatically return to the selection screen. The pictures below shows the process to fill a carafe.

If you want to cancel the product while the brewing is in process, press cancel. The machine will finish the product it is making and will not start another one.

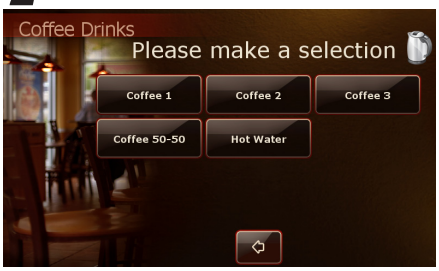
The carafe icon on the top right corner confirms that the machine is in carafe mode.

If you want to quit carafe mode you need the get back in setup mode and press the “fill a carafe” button so it turns back to white.

1

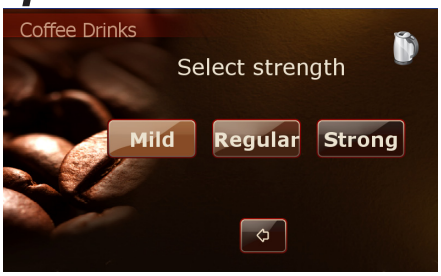


2

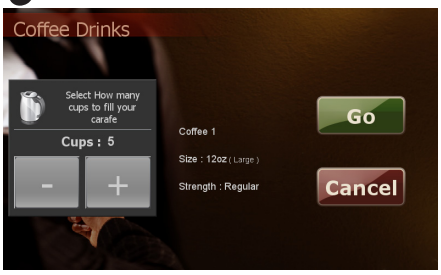


3

4



5

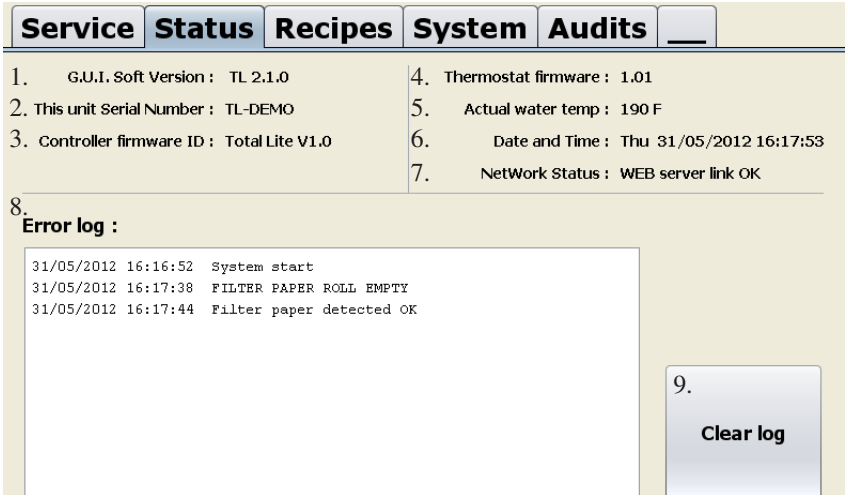


6

If you want to make carafes with a Total Lite, you will need to order an extended base.

6.4 Status Screen

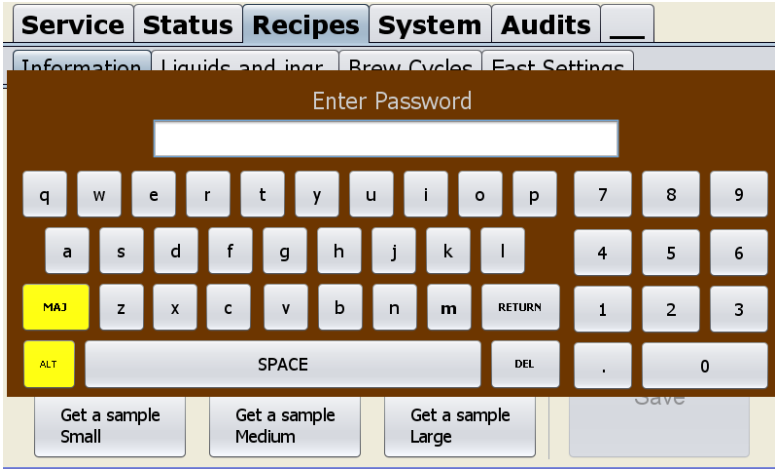
To get to the screen below press the setup (white) button (SW1 as shown in section 4.7) on the main board inside the door of the machine and press the STATUS tab.



1. The software version of the touch screen computer.
2. The serial number of the coffee brewer. Correct serial number is necessary for correct network communications. Service users with “admin” access can set the serial number. See section 6.7.5 for details.
3. This is the firmware version of the controler chip, also called the EPROM, on the main board.
4. The thermostat PCB on the back of the coffee brewer is equiped with a tiny computer chip. This is the version of the firmware contained in the computer chip.
5. Actual water temperature in Fahrenheit.
6. Actual time and date. Date and time can be set under ‘System’ sub tab ‘tools’
7. Three possible Status : Disabled, Enabled but NO link, WEB server link OK
8. The error board keeps the last 50 events in memory.
9. This button is used to clear the error board.

6.5 Password pop-up

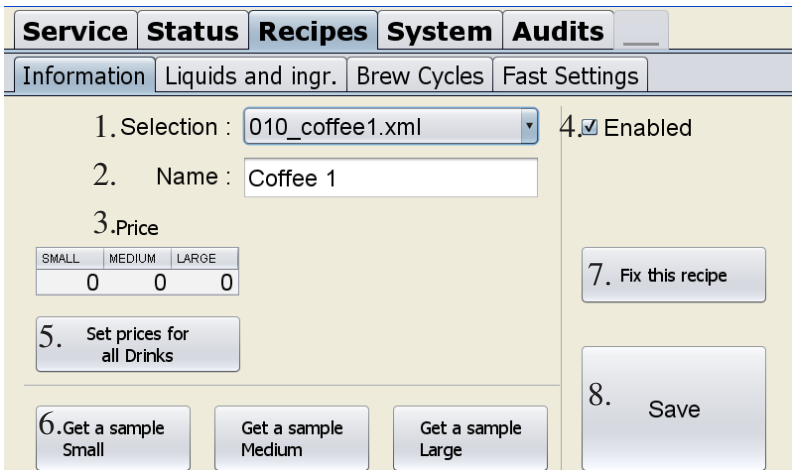
The screen below should pop-up when you press the AUDITS, RECIPES, SYSTEM and ”__” tabs. If so, type in your password with the virtual keyboard and then press return. Depending upon the password you enter, you will gain access to different service tabs. See section 6.1 for details about user levels.



6.6 Recipes Screen

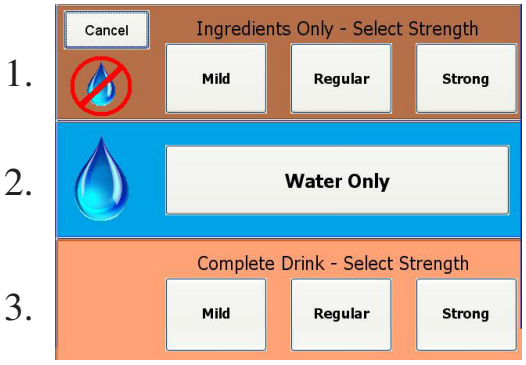
To get to the screen below press the setup (white) button (SW1 as shown in section 4.7) on the main board inside the door of the machine and press the RECIPES tab.

6.6.1 Information tab



1. This button is used to choose the recipe you want to modify.
2. This button is used to set the name that will be shown on the selection screen. Note that if the language of the system is changed the name of the products will be reset.
3. This table is used to set invidual prices for all the three sizes.
4. This button is used to enable or disable the drink on the selection screen. If you remove the check in the box the drink will not appear on the selection screen
5. This button is used to set the prices for all drinks (recipes) at once. To do so, set te prices in table 5 and press the button. The prices for all other drinks (recipes) will be automatically set at the same prices.
6. These button are used to get a sample of every size to help setting the amount of product and water needed. See next page to more information about the pop-up that appears when you hit this button.
7. This button is used to fix a recipe that has been lost or corrupted.
8. TO SAVE any parameters change press this button.

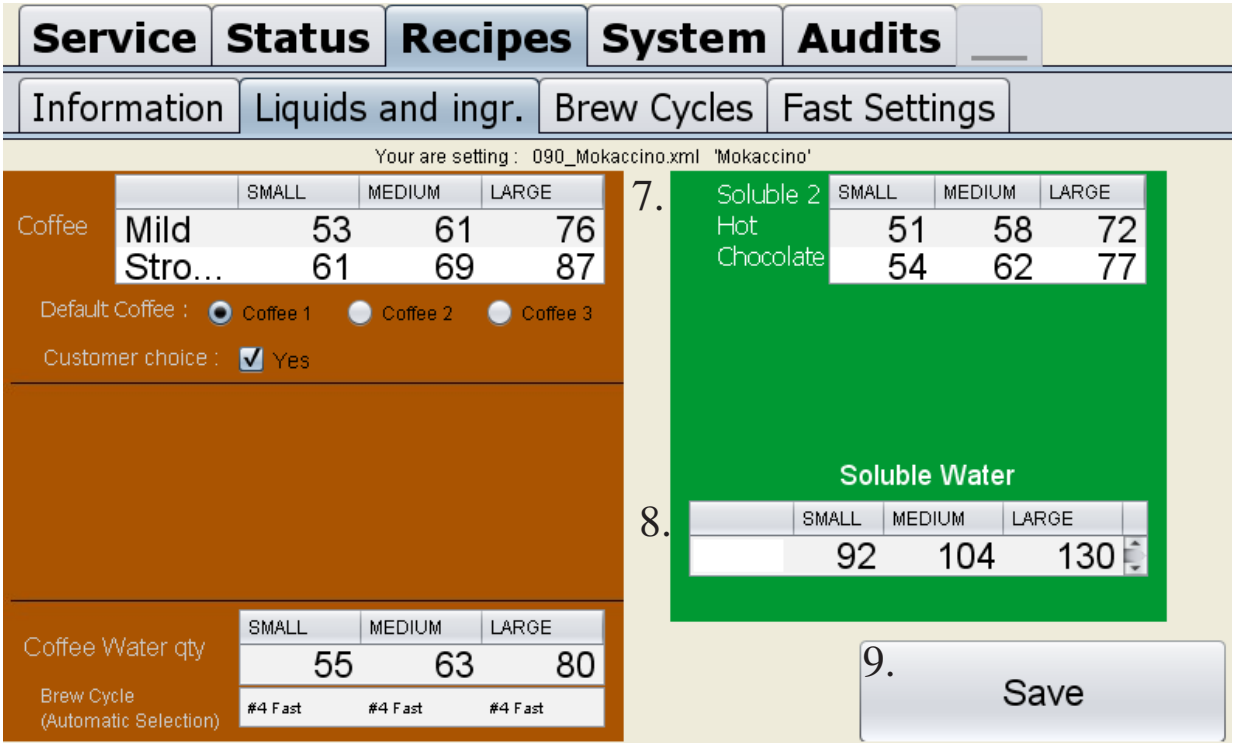
6.6.1.1 Sample pop-up explanation



1. These buttons allow the operator to have a sample of ALL the dry ingredients of the tested recipe. To weight the ingredients MAKE SURE that a container is placed under each product dispenser.
2. This button allows the operator to have a sample of the drink but without the ingredients. No soluble powder or coffee beans will be dispensed.
3. This button allows the operator to have a sample of a complete drink.

Note : Samples are not registered in the products counters.

6.6.2 Liquids and ingredients. tab



1. This line shows the recipe you are modifying.
2. This table is used to set the amount of coffee beans used to make coffee drinks.
3. These boxes are used to set the default coffee used the make the coffee drink.
4. This check box is used to set if the customer can choose the coffee he wants to make the coffee drink.
5. This table is used to set the amount of water used to make coffee drinks.
6. This table is showing the operator what brew cycle is choosen automatically by the software regarding the amount of water set on “coffee water qty” table above. See section 6.6.3 for more information.
7. This table is used to set the amount of soluble powder used to make drinks.
8. This table is used to set the amount of water used to make drinks with soluble powder.
9. TO SAVE any parameters change press this button.

All values in the recipes are time values. A water level setting is an amount of time the dispensing water valve is opened. An ingredient setting is is an amount of time the motor is running to dispense coffee beans or soluble powder.

20 units = 1 second.

The box beside numeric keypad will show an estimated conversion of the value VS liquid amount or value VS ingredient weight when you modify a setting.

6.6.3 Brew cycle tab

There are four different brew cycles in the TOTAL LITE. The brew cycle is automatically selected depending on water level in the coffee recipe.

For brewer water quantities equal or bellow 100 units, Cycle #4 will be selected. It is a quick cycle for low water levels.

For brewer water quantities between 101 and 187 units,Cycle #1 will be selected. It is the regular Avalon brew cycle.

For brewer water quantities between 188 and 269 units, Cycle #2 will be selected. It is a 3 swirling cycle. Water volume is high and coffee quantity must be also high. Water is dispensed in 3 shots in the brewer and the coffee-water mix is swirled 3 times to make sure the all coffee is in contact with the water.

For brewer water quantities of 270 and higher, the double brew cycle #3 is selected. The coffee machine will split in half the water and ingredient quantity and do two brew cycles.

Extra grind time : The amount of time the grinder is activated to grind all the beans depends on the amount of coffee beans set and is calculated by the computer. If the grinder is aged and does not grind all the beans you can add some extra grind time via this box. The default setting is 0.
20 units = 1 second.

Pause 1 : One of the contact time of water and coffee. If you want more extraction, increase this time.
20 units = 1 second.

Pause 2 : Another contact time of water and coffee. If you want more extraction, increase this time.
20 units = 1 second.

Move 3 : Brewer motor moving time. A brewer position setting. It is the position where the brewer piston stops before restarting to dispense into the cup.

If this setting is too high, the brewer piston goes too far down, prematurly opening the top brew chamber, causing a mess of wet coffee grinds inside.

If this setting is too low, the brewer piston does not move down far enough, not pulling all the coffee through the filter.

Change this setting with caution.

Pause 3 : Pause before the top brew chamber opens and the coffee is dispensed into the drink. If you have wet coffee grinds on the filter paper at the end of the brew, increasing this setting might solve the problem. 20 units = 1 second.

Pause 4 : The brewer drain time. Must be high enough to empty the brewer at the end of the cycle.
20 units = 1 second.

There are no individual cycle table for each drink. There is one cycle table for all the drinks.

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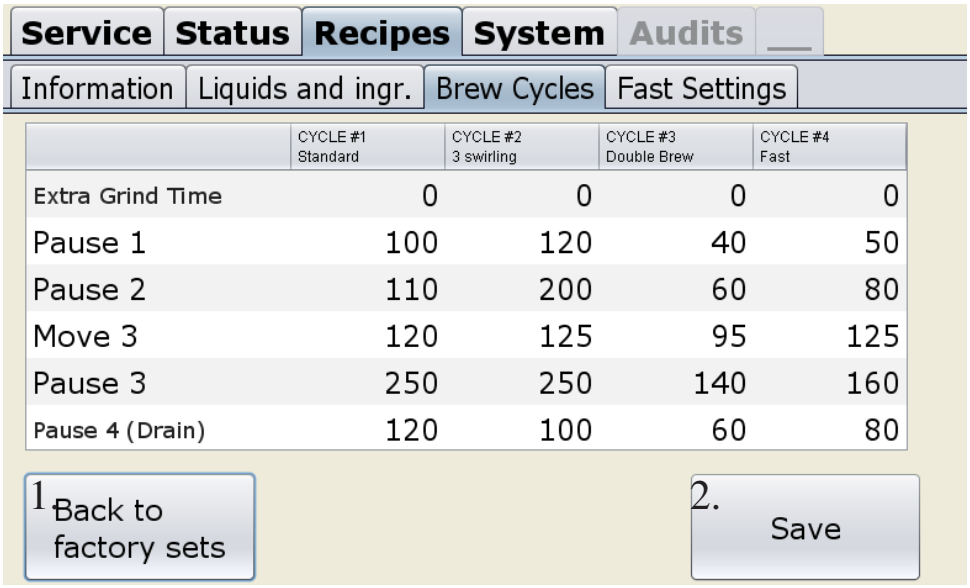
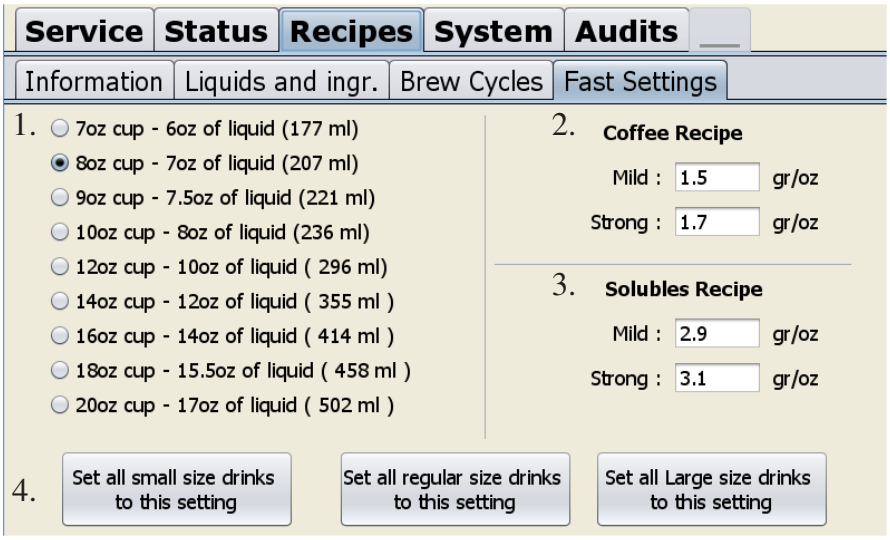


1. Brings back all brew cycles setting to factory settings.
2. TO SAVE any parameters change press this button.

6.6.4 Fast settings tab



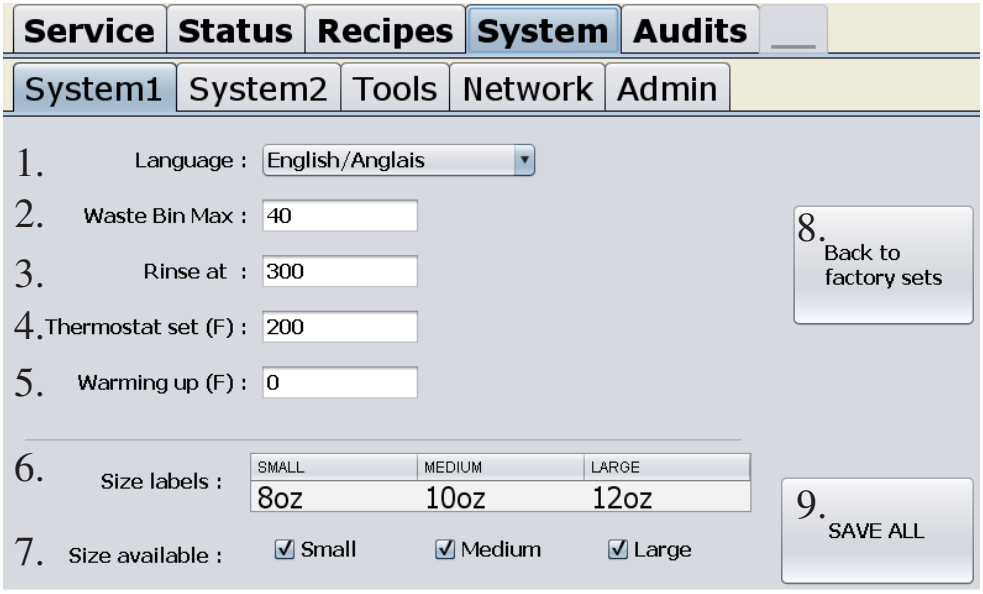
1.Select the cup size you want. (7oz to 20oz cup).
2.This table is used to set the amount of coffee grind per water onces. Set your coffee recipe.
3.This table is used to set the amount of soluble powder per water onces. Set your soluble recipe.
4.Assign your settings to a cup size (small, medium, large). Press one of the 3 buttons at the bottom of the screen. All drinks will be automatically set in the liquids and ingredients tables.

N.B.: The fast settings does not take in charge the gourmet selection, which can only be edited manually.

6.7 System Screen

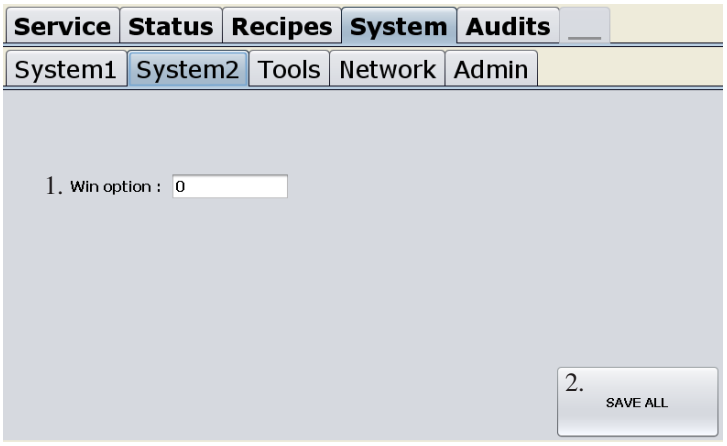
To get to the screen below press the setup (white) button (SW1 as shown in section 4.7) on the main board inside the door of the machine and press the SYSTEM tab.

6.7.1 System 1 tab



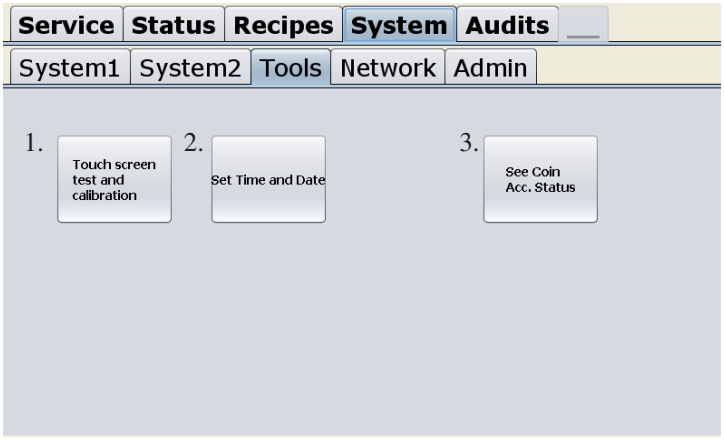
1. This button is used to set the language of the system. To change the language select which language you want then press SAVE ALL. A window will pop-up and tell you what to do. Note that if the language is changed, the name of the products will be reset.
2. This button is used to set the number of coffees before showing the waste bin full message on the selection screen. Disable the waste bin full message feature by putting this counter to zero.
3. This button is used to set the number of drinks made before showing rinse needed message on the selection screen. Disable this feature by putting the counter to zero.
4. This button is used to set the water temperature in the tank in Fahrenheit.
5. This button is used to set the minimum temperature of the water in the tank. If the water temperature drops below this setting, the coffee brewer will show an error until the temperature rises above this temperature.
6. This table is used to set the labels that will be shown under the size buttons on the selection screen.
7. These buttons are used to enable or disable each size of coffee cups. If only one size is available, the size selection screen will be skipped in the drink selection process.
8. This button is used to reset the system back to factory settings.
9. TO SAVE any parameters change press this button.

6.7.2 System 2 tab

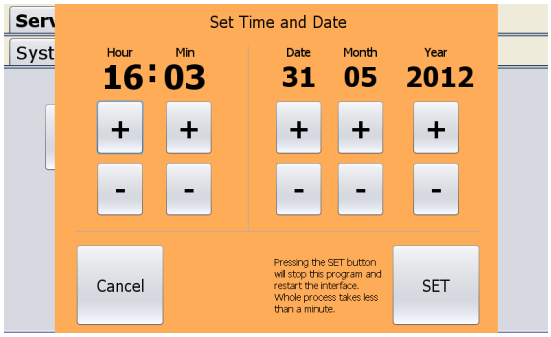


1. This is used to set the number of drinks ordered before someone gets one for free. To disable this function, set it to 0. It is not recommended to use this feature if you are using an optionnal printer.
2. TO SAVE any parameters change press this button.

6.7.3 Tools tab

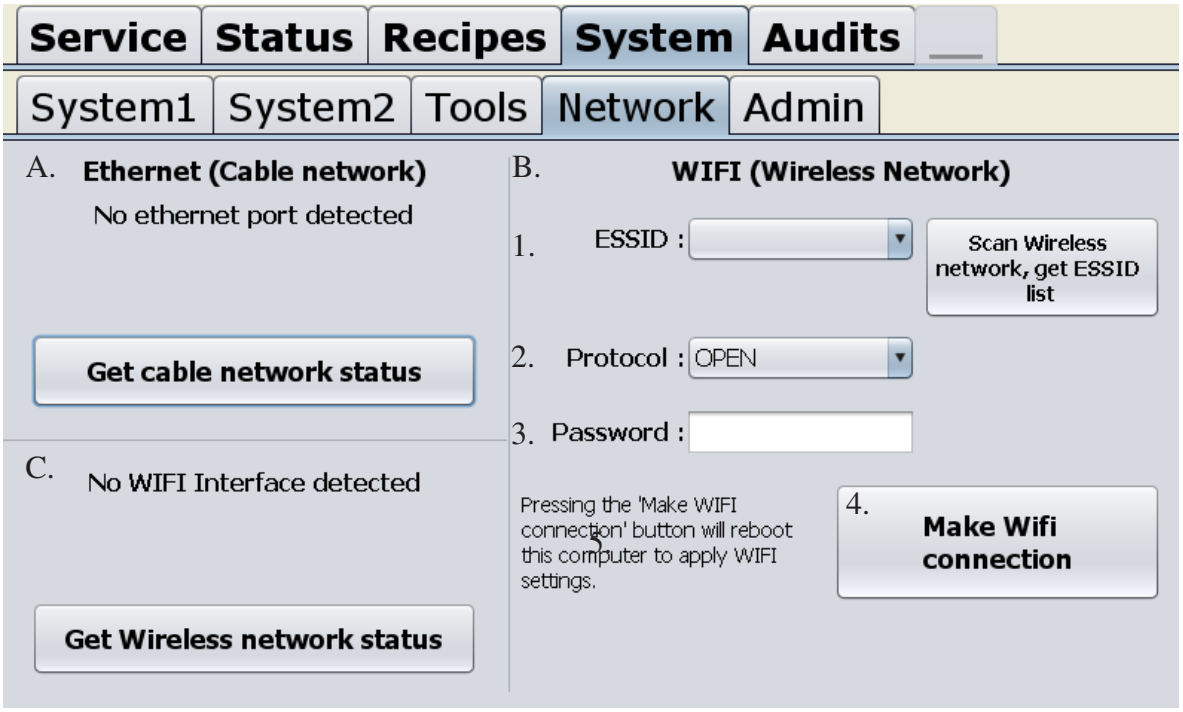


1. Pushing this button will open the touch screen utility screen. Only use the options and tools in the “Tools” tab of the utility screen. ‘Draw Test’ Make a drawing on screen to test the accuracy of the touch screen calibration. The touch screen is already calibrated during assembly. If you want to do the calibration again, press the ‘clear parameter’ button and then ‘linearization’. Choose 9 points calibration. Press on all 9 circles one after the other.
2. After pushing this button the screen below will pop-up and you will be able to set time and date.



3. This button is used to see the coin acceptor status. Note: if there is no coin acceptor in the machine or it is not plugged correctly, this box won’t be visible.

6.7.4 Network tab



A.Get cable network status

This is the cable network section.

B.Wifi (Wireless Network)

Use this section to wirelessly link your coffee brewer to Internet. To do so, follow these steps :

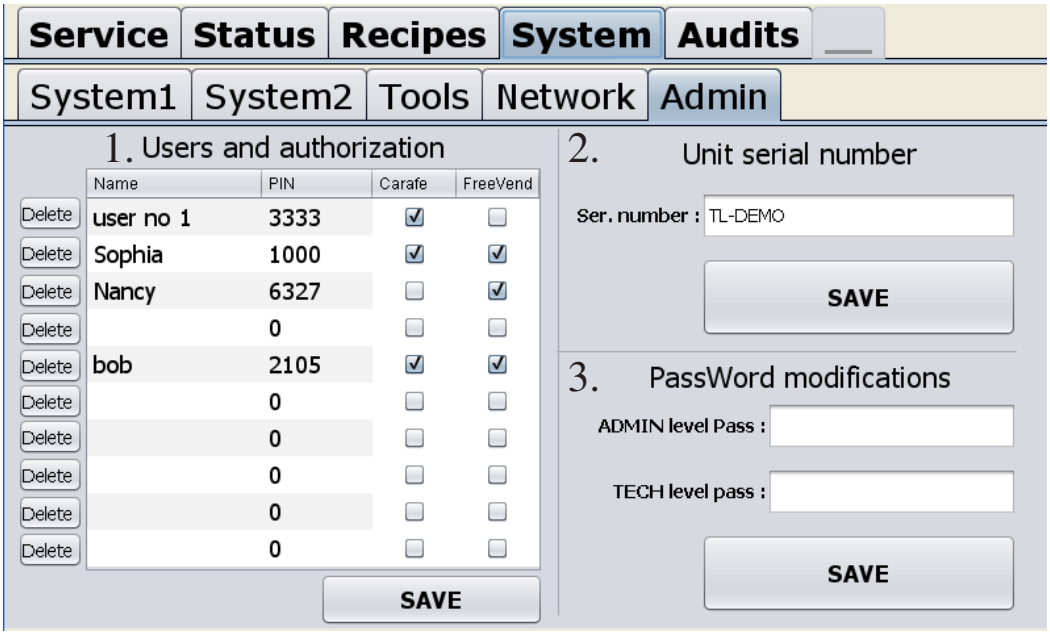
1. Press on the “Scan wireless network” button. Within less than a minute, a list of available networks will be available.
2. Select the network you want to use in the box beside ‘ESSID’
3. Select the protocol: OPEN or WPA/WPA2
4. If the selected protocol is WPA/WPA2, you have to enter the selected network password. (8 to 63 letters and / or numbers). Contact your IT department for this password.
5. Press the ‘make WIFI connection’ button. The computer screen has to restart to apply the settings. Complete process takes about 2 minutes.

C.Get wireless network status

Wifi (Wireless Network) section will not keep in memory the wireless network settings. The “ESSID”, “Protcol” and “Password” boxes will always be empty. To check the status of the wireless link, press this button.

6.7.5 Admin tab

The system "Admin" tab is available to 'admin' user level 4. See section 6.1 for details.



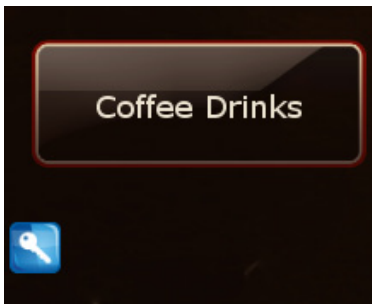
1. This section allows the creation of a users list that can make free coffee and / or carafes directly from the selection screen. For more precision on the user counters, see section 6.8.3

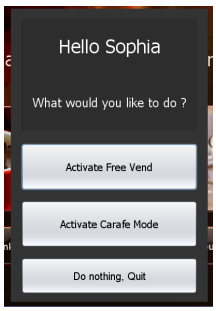
- To create a new user first, press the name section and enter the name of the user.
- Secondly, enter a PIN from 1 to 99999. (For a minimum of security we suggest to chose a minimum of 4 digits PIN).
- Select the autorization Carafe and / or FreeVend.
- Do not forget to save the list when done.

When done, the key icon appears on the selection screen to the left on the coffee drinks icon, as shown below.

When the user presses this key, a window with a keyboard will pop-up. The user will have to enter his PIN. If the user enters it correctly, a window will pop-up and give him three choices, as shown below.

If the user enters a wrong number five times, the key icon will be locked. To unlock it you will simply have to enter and exit service mode by pressing "SW1" (as shown in section 4.7) twice.





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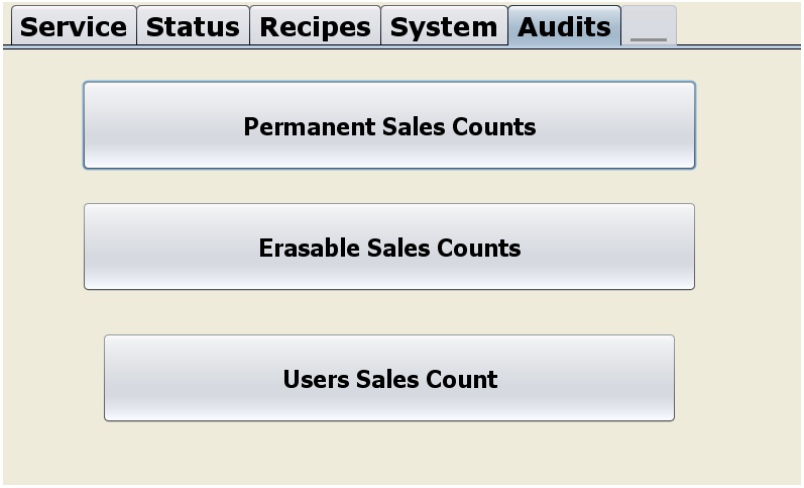
2. This allows you to change the serial number of the unit if you have changed the flash card. Anytime you change a flash card, make sure the serial number in this box is the same as the serial number inside the machine over the fan Ex: TL1204-123456. If the serial number is different, it will be impossible to connect to the web management tool. Do not forget to SAVE after entering the serial number.

3. This box allows to modify the admin and tech password.

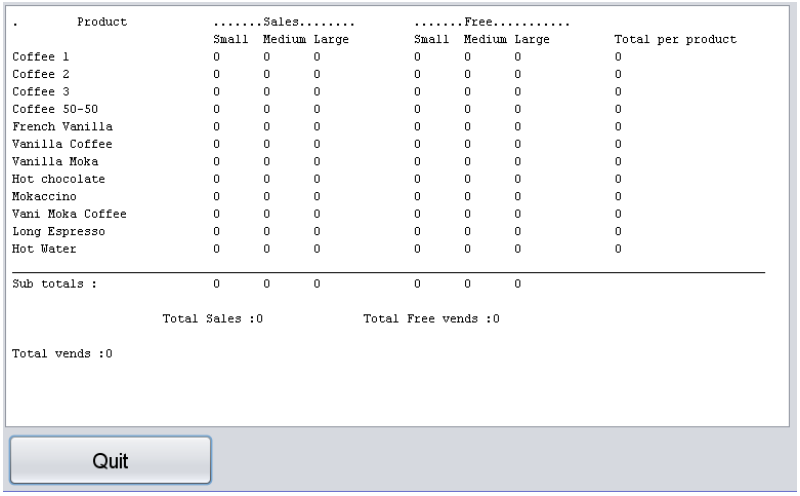
If you cannot log into any user levels because the passwords have been changed and you lost or forgot the passwords, you will have to do a general reset. Contact our technical support team for the procedure. Doing a general reset will reset all drinks recipes, settings and passwords except the permanent sales counters, users list and serial number data.

6.8 Audit Screen



6.8.1 Permanent counters

To get to the screen below press the setup (white) button (SW1 as shown in section 4.7) on the main board inside the door of the machine and press the AUDITS tab. This tab indicates the amount of drinks sold since the machine as been built.



. Product	.....Sales.....			.....Free.....			
	Small	Medium	Large	Small	Medium	Large	Total per product
Coffee 1	0	0	0	0	0	0	0
Coffee 2	0	0	0	0	0	0	0
Coffee 3	0	0	0	0	0	0	0
Coffee 50-50	0	0	0	0	0	0	0
French Vanilla	0	0	0	0	0	0	0
Vanilla Coffee	0	0	0	0	0	0	0
Vanilla Moka	0	0	0	0	0	0	0
Hot chocolate	0	0	0	0	0	0	0
Mokaccino	0	0	0	0	0	0	0
Vani Moka Coffee	0	0	0	0	0	0	0
Long Espresso	0	0	0	0	0	0	0
Hot Water	0	0	0	0	0	0	0
Sub totals :	0	0	0	0	0	0	

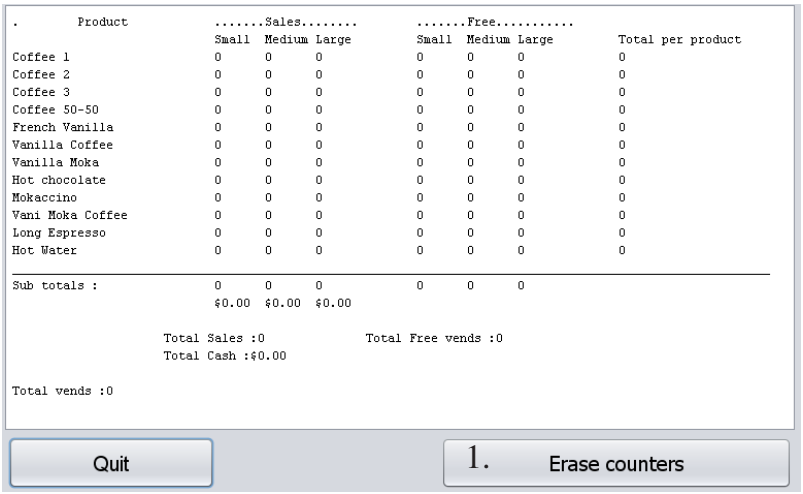
Total Sales :0 Total Free vends :0

Total vends :0

Quit

6.8.2 Erasable and counters

This tab indicates the amount of drinks sold since the last time that the counters have been erased. It also indicates the total sales, free vends and vends in cash value.



. Product	.....Sales.....			.....Free.....			
	Small	Medium	Large	Small	Medium	Large	Total per product
Coffee 1	0	0	0	0	0	0	0
Coffee 2	0	0	0	0	0	0	0
Coffee 3	0	0	0	0	0	0	0
Coffee 50-50	0	0	0	0	0	0	0
French Vanilla	0	0	0	0	0	0	0
Vanilla Coffee	0	0	0	0	0	0	0
Vanilla Moka	0	0	0	0	0	0	0
Hot chocolate	0	0	0	0	0	0	0
Mokaccino	0	0	0	0	0	0	0
Vani Moka Coffee	0	0	0	0	0	0	0
Long Espresso	0	0	0	0	0	0	0
Hot Water	0	0	0	0	0	0	0
Sub totals :	0	0	0	0	0	0	
	$0.00	$0.00	$0.00				

Total Sales :0 Total Free vends :0
Total Cash :$0.00

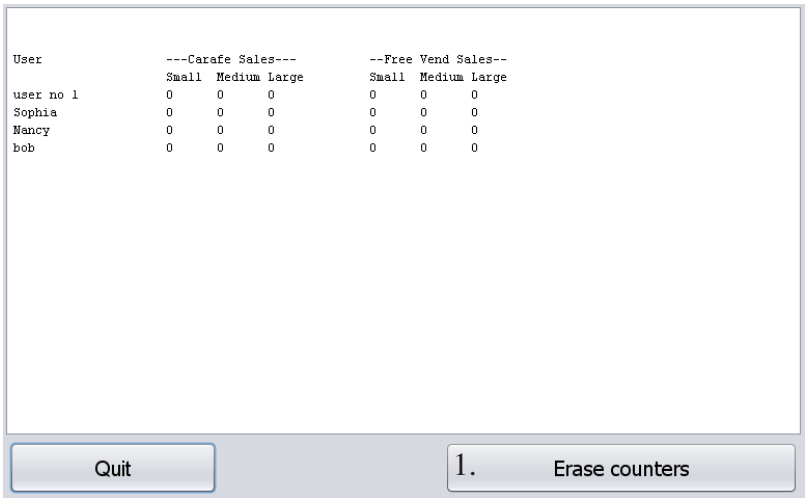
Total vends :0

Quit 1. Erase counters

1.This button is used to reset the erasable counters.

6.8.3 User counters

This tab indicates the amount of drinks ordered by each user set in the “User and authorization” since the last time that the counters have been erased. It also indicates the total sales, free vends and vends in cash value.



User	---Carafe Sales---			--Free Vend Sales--		
	Small	Medium	Large	Small	Medium	Large
user no 1	0	0	0	0	0	0
Sophia	0	0	0	0	0	0
Nancy	0	0	0	0	0	0
bob	0	0	0	0	0	0

Quit 1. Erase counters

1.This button is used to reset the erasable counters.

See next page for more information about how the user counter works.

How the user counters work : When a user orders a drinks, the user counter will be increased as well as the permanent and eraseable sales counter.

Example #1 : User name ‘user1’ enables the carafe mode and fills a carafe with 8 large Mokaccino drinks.

-The user counter of ‘user1’ will be increased by 8 under Large carafe sales.

-The erasable and permanent sales counts of the Mokaccino drink will be increased by 8 under Free vends, Large.

Example #2 : User name ‘user2’ enables the free vend mode. The free vend mode is activated for a period of one hour. During this time products are made :

-10x small size Coffee #3

-2x regular size Long espresso

-5x large size hot chocolate

-The user counter of ‘user2’ will be increased by 10 under Small size Free vends

-The user counter of ‘user2’ will be increased by 2 under Regular size Free vends

-The user counter of ‘user2’ will be increased by 5 under Large size Free vends

-The erasable and permanent sales counts of the Coffee #3 drink will be increased by 10 under Free vends, Small.

-The erasable and permanent sales counts of the Long espresso drink will be increased by 2 under Free vends, Regular.

-The erasable and permanent sales counts of the Hot Chocolate drink will be increased by 5 under Free vends, Small.

7 INITIAL SETUP

Before you install the brewer on location, we strongly suggest that it be unpacked, inspected and bench tested before you leave your warehouse.

Overview of installation steps

7.1 Installation site requirements

Operating environment
For indoor use only

Power Supply
Ensure that this unit will have its own electrical circuit and located within 6 feet of the dedicated electrical outlet.
Use only a polarized grounded receptacle.
Domestic 115 VAC / 60 Hz - 15 A 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 ease of installation.
Water pressure should be at least 20 PSI and no more than 80 PSI.

Tools Required
#2 Philips screwdriver
Regular medium pliers
Adjustable wrench
Level indicator

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

7.1.1 Clearances

	Unit	Clearances	Allowance for:
Height:	39 3/4”	13 1/4”	Open the top of themachine.
Width:	131/2’’	6”	Per side. Key access on one side and door swing on the other.*You need 12” clearance to open the coin acceptor (optional)*
Depth:	23’’	11 1/2”	Front when the door is open.
		6”	Clearance of water hookup, hoses, water filtration system and adequate air circulation.

7.1.2 Specifications

Canisters Capacities

Whole bean hopper 1: 4 lbs
Whole bean hopper 2: 2 lbs
Whole bean hopper 3: 4 lbs

Soluble hot chocolate: 2.50 lbs
Soluble powdered milk : 0.70 lbs

Water Tank

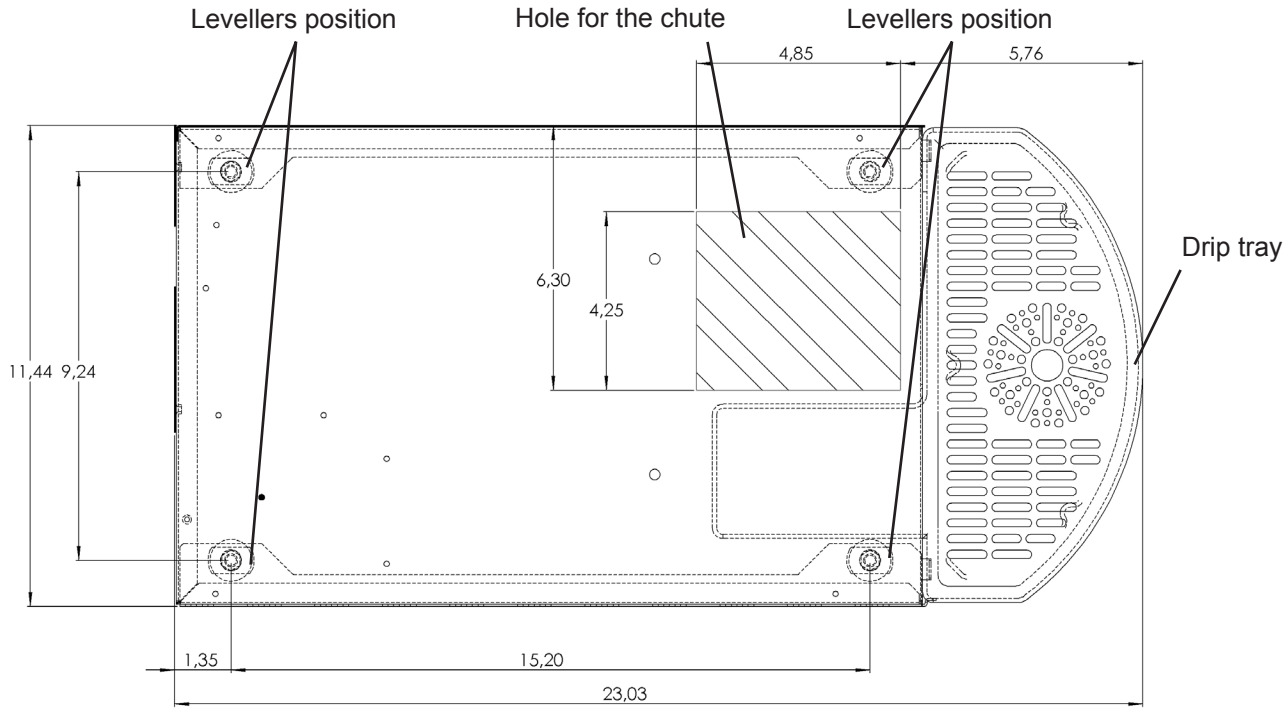
Capacity:	0.8 gallon us (3.0 l)
Water valves:	1 simple valve ; 1 double valve
Heating element:	1250 watts

Electrical requirements

115 VAC
15 A circuit
60 Hz

Chute

TOP VIEW



7.2 Unpacking

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.

For each brewing equipment kit you should have the following 3 boxes: the brewer,the accessories (in the brewer box) and the 3 bean canister.

The parts and accessories that are packed 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.Waste Basket

4.1/4" or 3/8" *Inlet Kit Fitting*

5.Plastic Top fitting part

6.Plastic Top

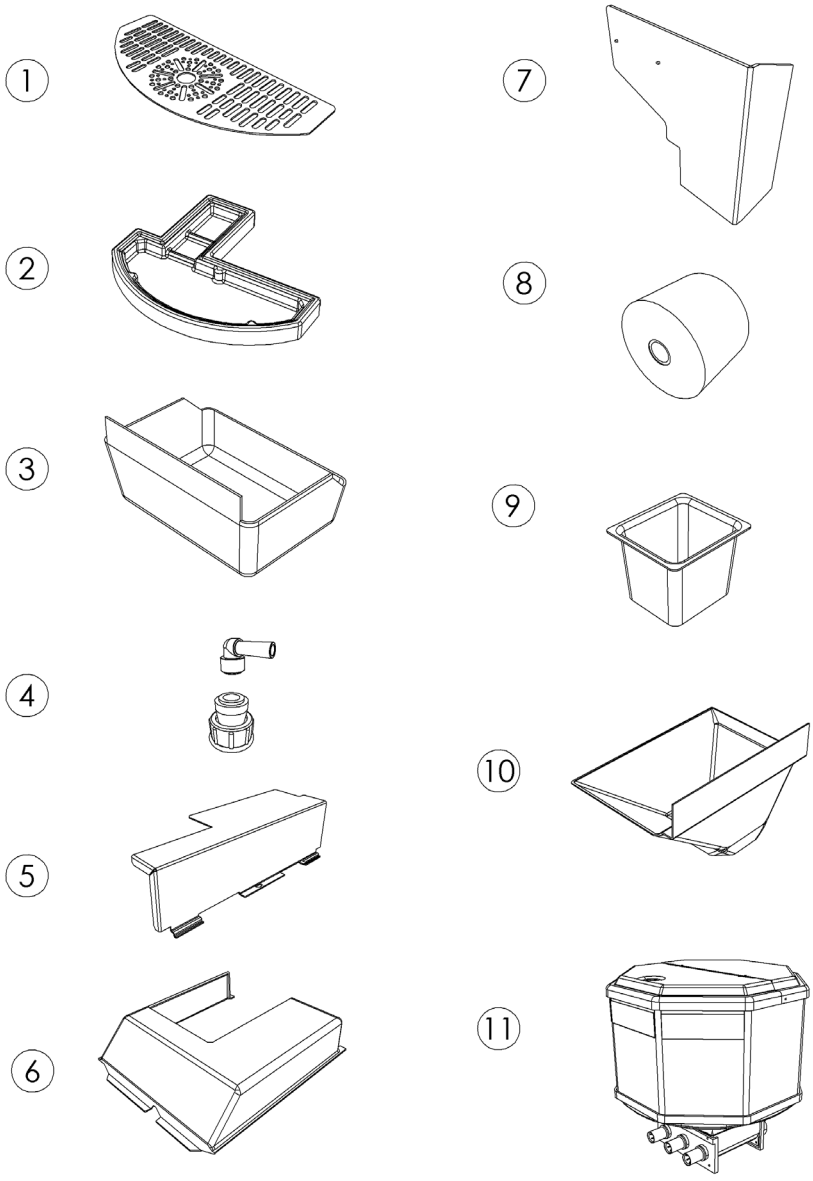
7.Front Panel

8.Filter Paper

9.Chute Base (optional)

10. Chute (optional)

11. 3 Bean Canister (individually packaged)



Note

*** The keys for the unit are attached to the back panel of the unit.**

7.3 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. Adjust the 4 threaded level glides or legs of the equipment to reach a leveled position.

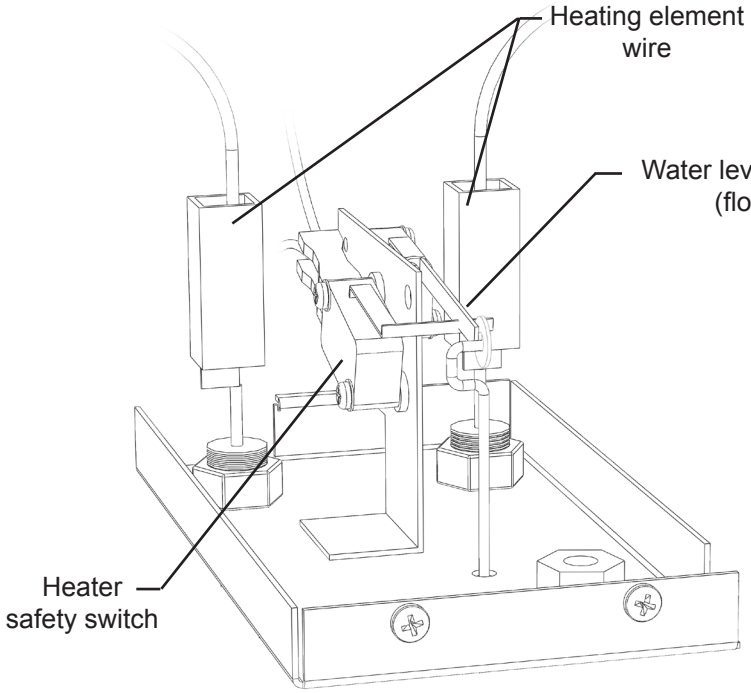
7.4 Hot Water Tank Preparation

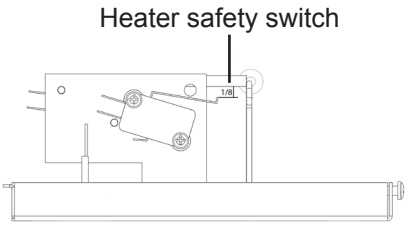
MAKE SURE THE EQUIPMENT IS UNPLUGGED! FAILURE TO COMPLY CAN CAUSE EQUIPMENT DAMAGE OR INJURIES

7.4.1 Tank Lid Preparation

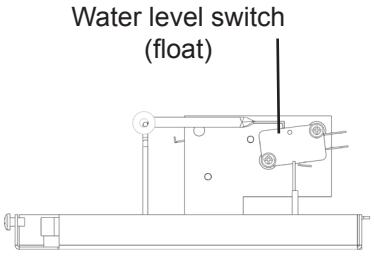
1. Open the door of the equipment;
2. Remove the back panel or small tank lid;
3. Locate the water tank and remove the twist-tie securing the float of the water tank;
4. Remove the silicone tubing on the heating element;
5. Connect the white wire to the prong on the heating element;
6. Replace the top lid and close door.

*** You can easily access to the switches by opening the door on the top of the back panel**



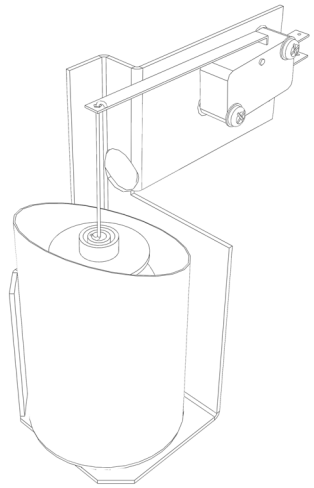


Left side view



Right side view

7.4.2 Adjusting the Tank Overflow Float



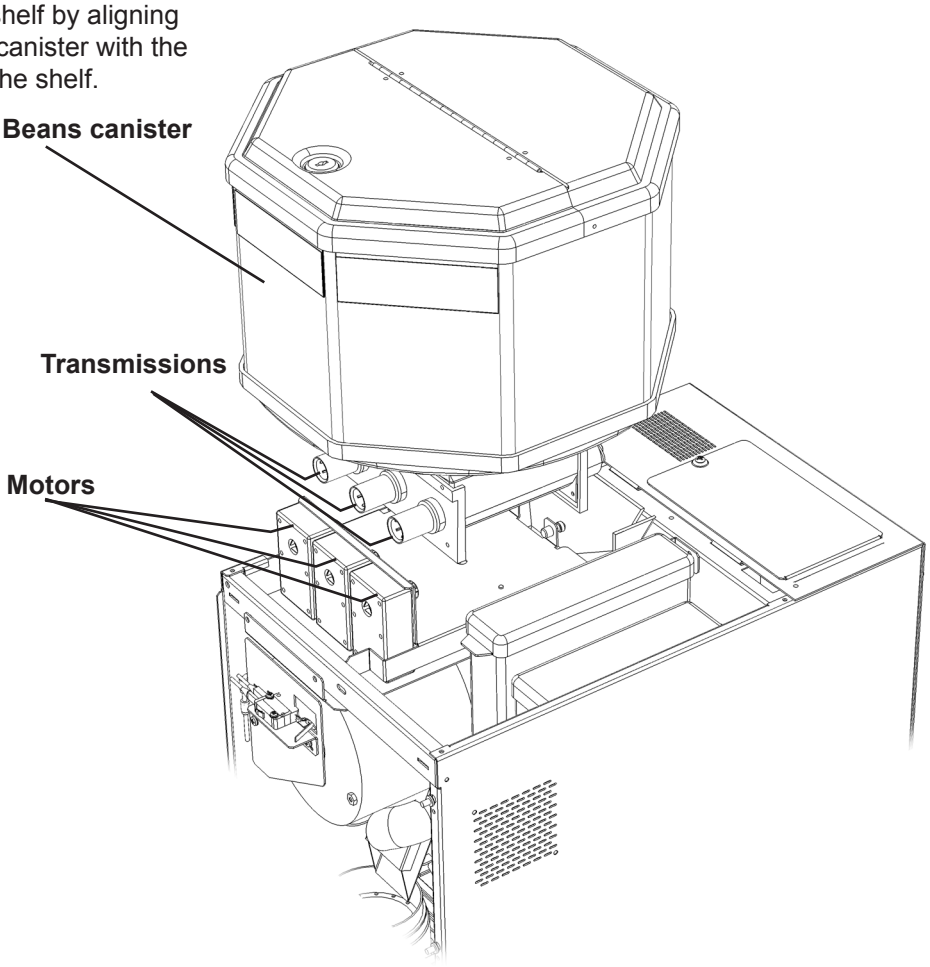
It is important to verify that the float is positioned appropriately in the overflow cup since it can move around in transportation. If this float is not in place the switch will not be activated and the unit will automatically shut down sensing an overflow situation.

It is important to verify that the overflow cup is in place with the highest side in the front and secured with the 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. This will ensure that the float will "float" and will activate the overflow switch if there is a problem.

7.5 3 Beans canister installation

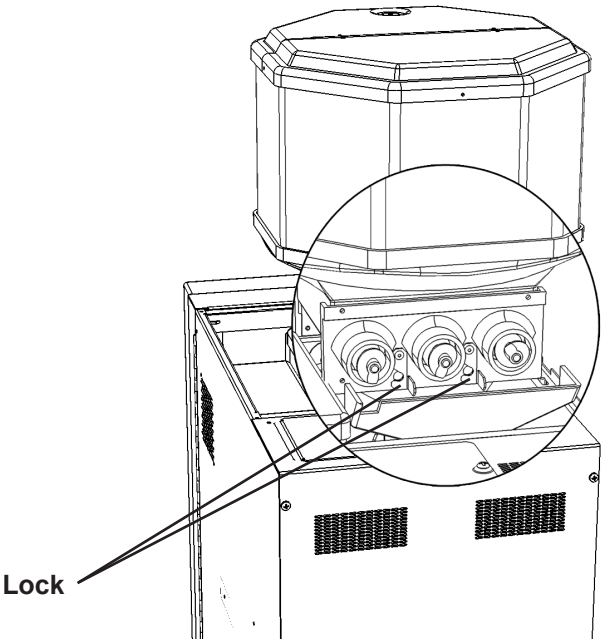
7.5.1 Install the 3 Beans Canister

Unpack the 3 beans canister.
Remove the tape from transmission.
Install the canister on the shelf by aligning the 3 transmissions of the canister with the 3 motors already fixed on the shelf.



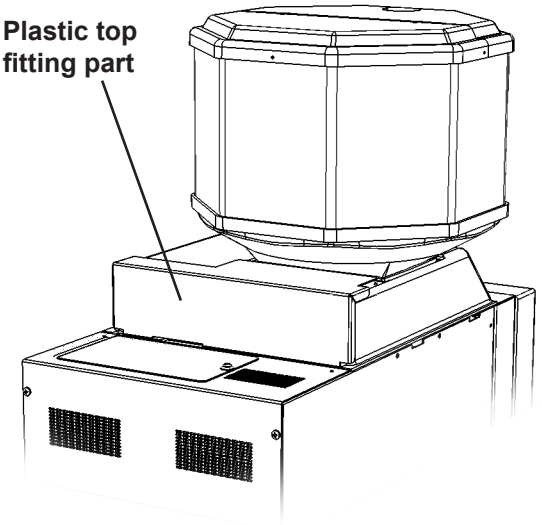
7.5.2 Lock the 3 Bean canister

Pivot the 2 locks vertically, so they clip on the metal pins.



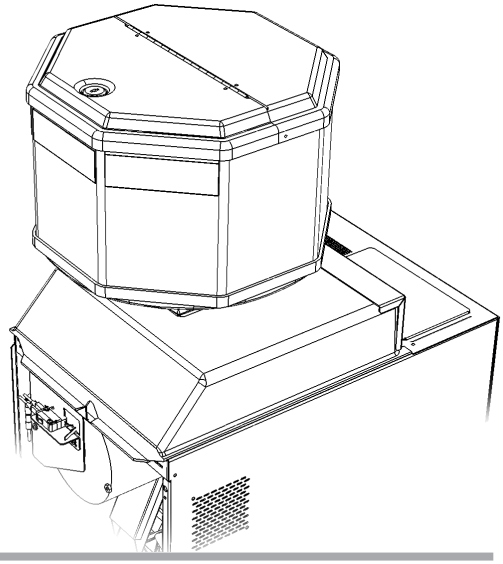
7.5.3 Install the Plastic Top fitting part

Place the part on the back of the 3 beans canister with the 6-32 screw already in place.



7.5.4 Install the Plastic Top

Simply place the plastic top on the top of the machine as illustrated.



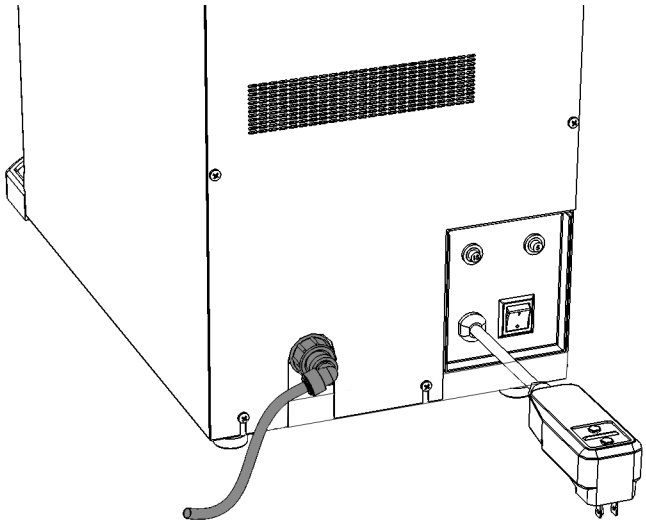
7.6 Water Line Connection

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 1/4" or 3/8" 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.



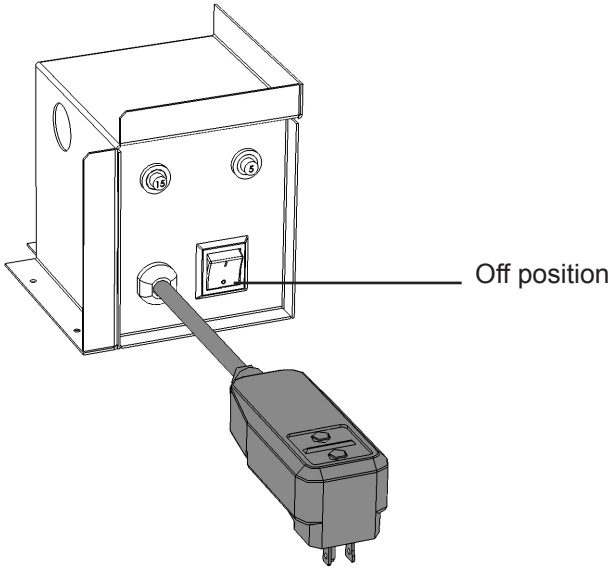
7.7 Electrical Connection

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
- No extension cord is 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 screen will turn on and white text on black background will scroll for about 1 minute. While the computer is starting, the water tank will fill automatically in about 2-3 minutes;
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 selection screen will appear.



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.

7.8 Water Temperature

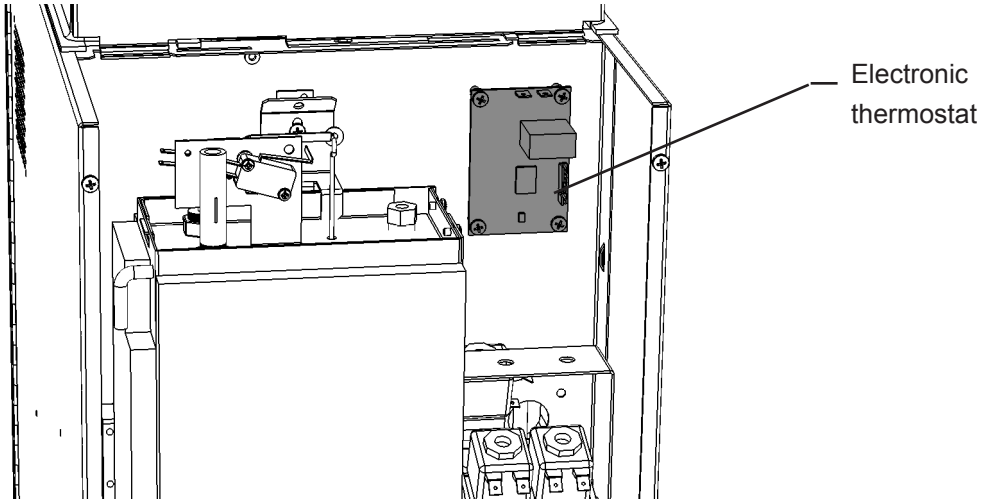
This equipment has a coffee brewing setpoint of 200 °F water temperature to offer a consistent beverage quality for the users. There is a +/- 2 °F tolerance.

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 also 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.

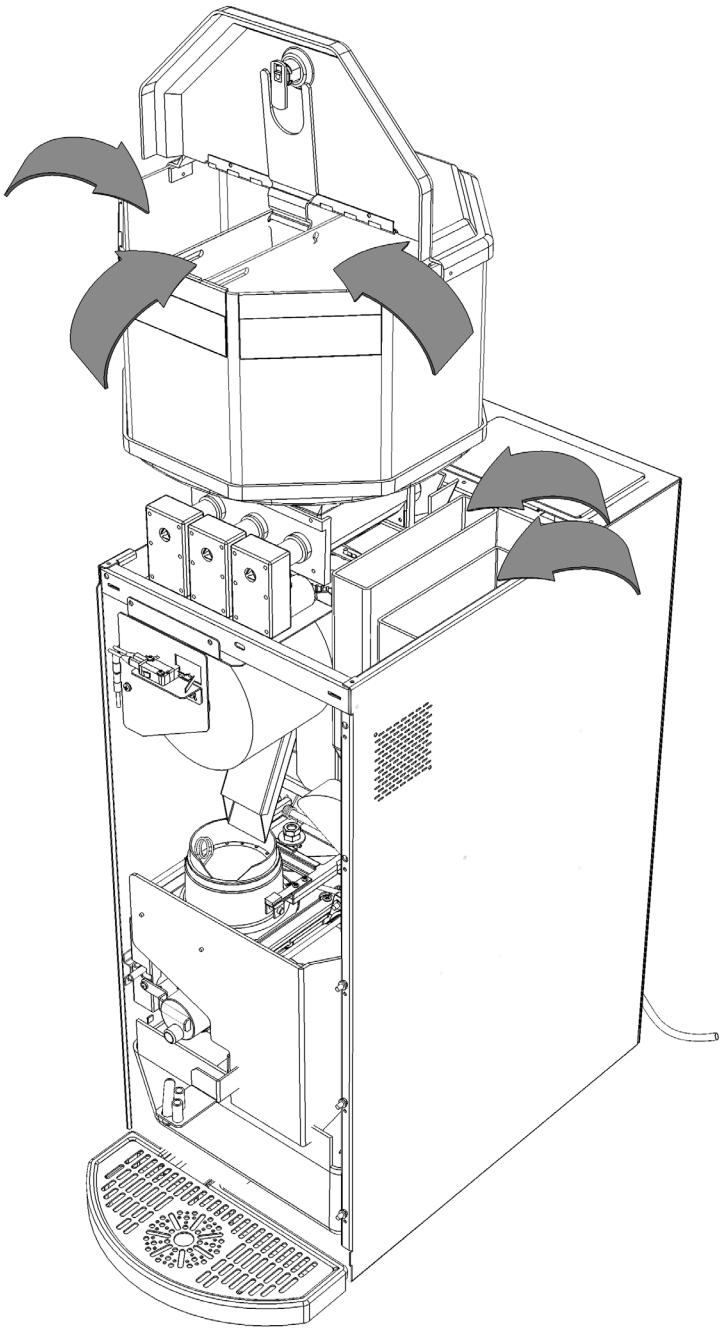


7.9 Loading Products

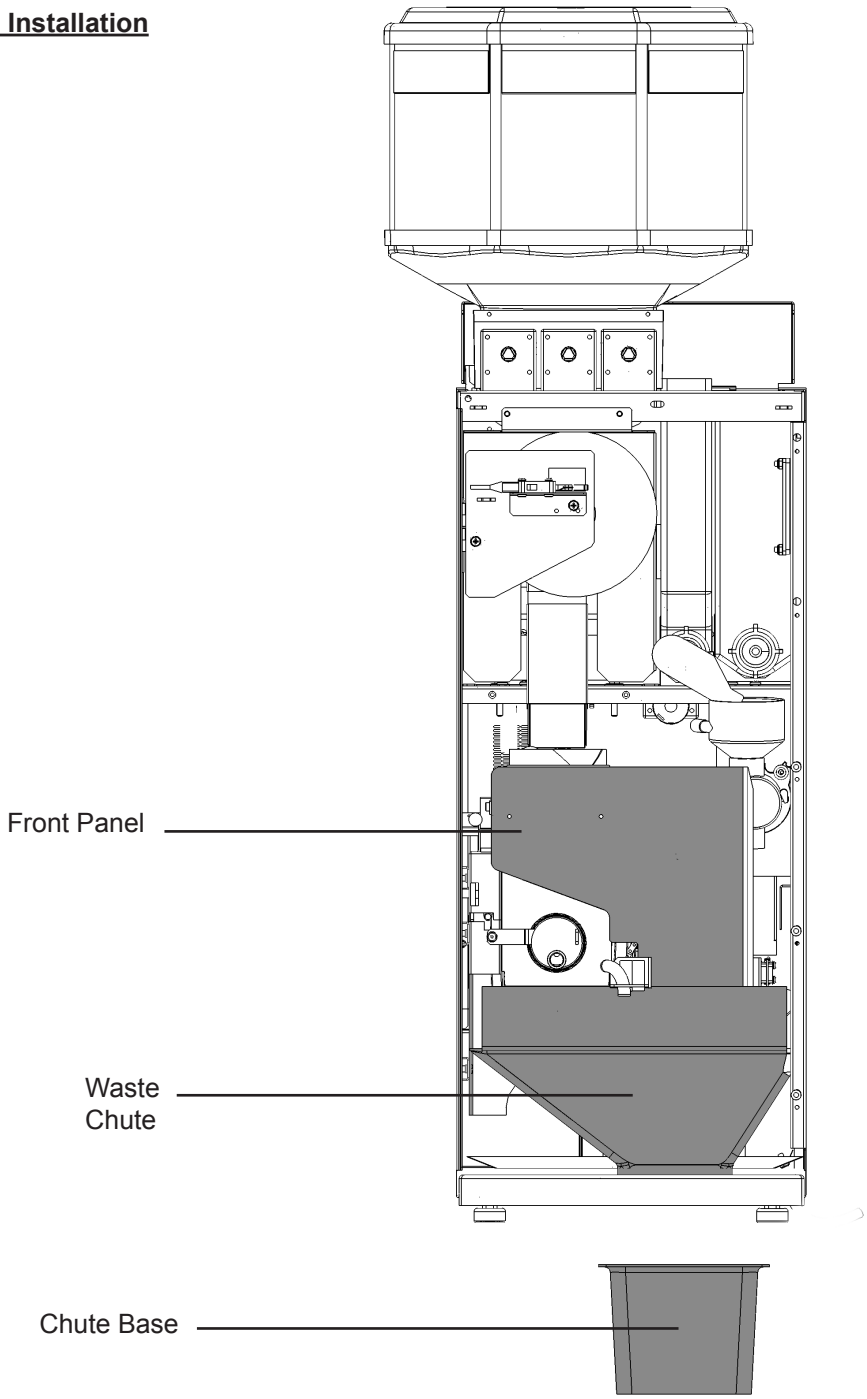
1. Unlock the main door
2. Remove the plastic top
3. Remove the cap of the canister
4. **Do not overfill the canister**

For the 3 beans canister:

Unlock the cover of the canister and open the plastic top cap.
Do not overfill the canister.



7.10 Chute System Installation



1. Open the door of the equipment;
2. Insert the chute base through the chute hole of the cabinet;
3. Insert the large waste chute into the chute base;
4. 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.

7.11 Filter Paper Installation

1. Make sure the power of the brewer is turned ON;

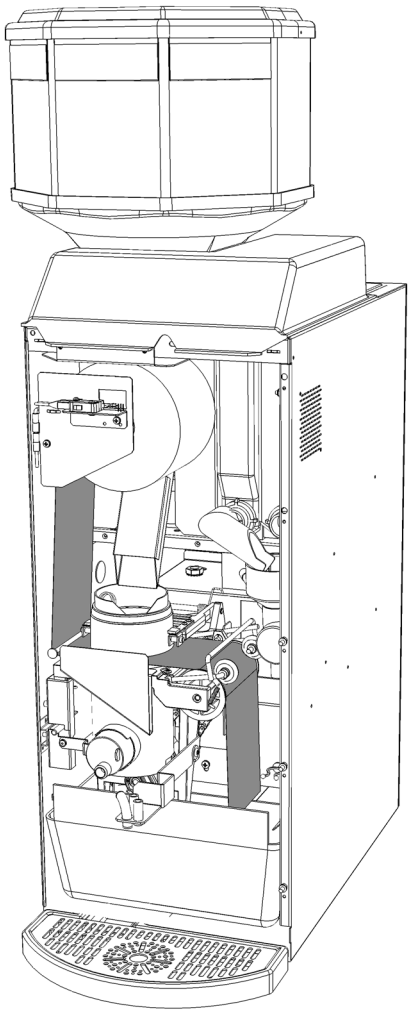
2. Place the filter paper roll on the support bracket so that it dispenses on the left hand side; (See the diagram inside the brewer)

3. Go in service mode (for more informations see section 6.2) and press the Install filter paper text box an follow the instructions at the screen; **Note: the brew chamber will not lift up if the switch does not detect any filter paper**

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 using the yoke;

5. Pull on the paper and carry 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. Improper filter paper feeding will cause a vacuum leak and may cause grounds to spill inside the equipment.



7.12 Installation Testing

It is important to have the unit perform several cycles before completing the installation by ordering each product selection twice to insure 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.

	What to check	Remedy, if it is not
☑	Inlet valve is free from leaks	Verify that it is secure and not overtightened
☑	Brew chamber is empty of coffee	Verify that the unit is leveled
☑	Filter paper feeds without resistance and goes straight into the waste bin	Verify that the chute is properly installed Repeat the installation procedure
☑	Soluble mixing bowl is free of leaks	Verify that it is on straight and tube is secure
☑	Water temperature is acceptable	See water temperature
☑	Products are loaded	Load the product
☑	Brewer and area are clean and tidy	Please tidy up
☑	All switches are in the right position	Toggle on or off

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.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 stirs.

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 removing 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 water of at least 212 F, the bacteria can be killed if the temperature of the part is raised high enough.

Always unplug the unit before using water to clean the machine. DO NOT spray water on electrical parts.

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 cleaned 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, which ever 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:

- Pail or bucket
- Small tube brush suitable for food-contact surfaces
- Medium size long and flexible brush, suitable for food-contact surfaces
- 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.

Exterior	Daily	Weekly	Monthly	Quarterly	As needed
Waste bin	Inspect				Clean
Canisters (3 beans canister)		Inspect			Clean
Drip tray	Clean				
Unit + Stand	Clean				

Interior / Food Contact Parts	Daily	Weekly	Monthly	Quarterly	As needed
Brewer assembly	Sanitize	Clean	Treatment		
Brew chamber		Sanitize			Clean
Whipper & mixing bowls		Sanitize			Clean
Fan			Inspect	Clean	
Soluble canister			Sanitize		
3 Beans canister			Clean		
Stainless coffee chute			Clean		
3 Beans canister plastic chute			Clean		
Rinse cycle	Process				

These recommendations are based on 1,000 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.

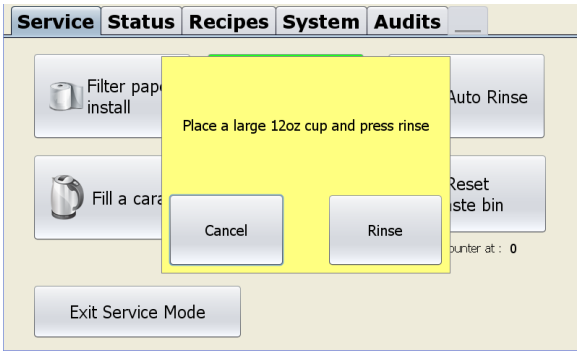
8.4 Overall Cleaning

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 Automatic Rinsing Function

To use the auto rinse function press the rinse text box and follow the instructions that will appear on the screen.

WARNING! make sure to place a container large enough (size is specified on the screen) . BE CAREFUL because water is VERY HOT!



8.6 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**
  - ☑ Metal Top Cap
  - ☑ Stand (optionnal)
  - ☑ Metal Cabinet
  - ☑ Plastic Door
- ☑ **Exterior parts requiring additional cleaning instructions (see below)**
  - ☑ Drip Tray
  - ☑ Waste Bin

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

8.6.1 Cleaning the drip tray

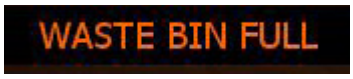
Frequency: Daily or as needed

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

WARNING, drip tray may be full of HOT liquid!

8.6.2 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 screen:



The maximum setting = 2000
The minimum setting = 0

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

The equipment will not dispense coffee beverages until the bin is emptied and the counter is reset. To reset the counter see section 6.2. 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.See section 7.11 to see how to put the paper back in place.

How to empty the brewer waste bin:

1.Open the brewer door;
2.Take the front panel off;
3.Cut the filter paper 4" below the drum with scissors or tear gently; DO NOT YANK ON PAPER!
4.See section 7.11 to see how to put the paper back in place;
5.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.

* If you are using the internal waste bin provided with the unit, we recommend to set the counter to 25 cycles.

8.7 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. Wipping 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

- Canisters
- Coffee brewer
- Coffee funnel
- Fan
- Stainless coffee chute
- 3 Beans hopper plastic chute

8.7.1 Coffee Canisters

Removing canisters for cleaning
Frequency: Monthly or every 1,000 cycles

Coffee Bean Hopper

1. Unscrew and remove the plastic top fitting part behind the top cap;
2. Remove the top cap of the machine;
3. Unlock the 3 bean canister;
4. Remove the 3 bean canister;
5. Clean and sanitize under hot water and air dry completely;
6. Reinstall all parts in the reverse order.
7. Order a coffee to confirm that all parts or switches have been replaced.

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

8.7.2 Soluble Canisters

Removing whipping assembly for cleaning
Frequency: Weekly or every 200 cycles

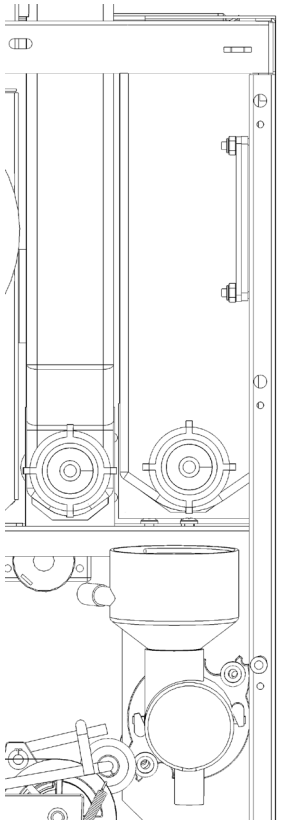
If there is residue, remove the assembly for manual cleaning under hot water:

1.Remove the tube from the base;
2.Lift off the funnel and twist off the whipper chamber, remove propeller, whipper
base and clean all parts and gaskets with hot water;
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 1,000 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.

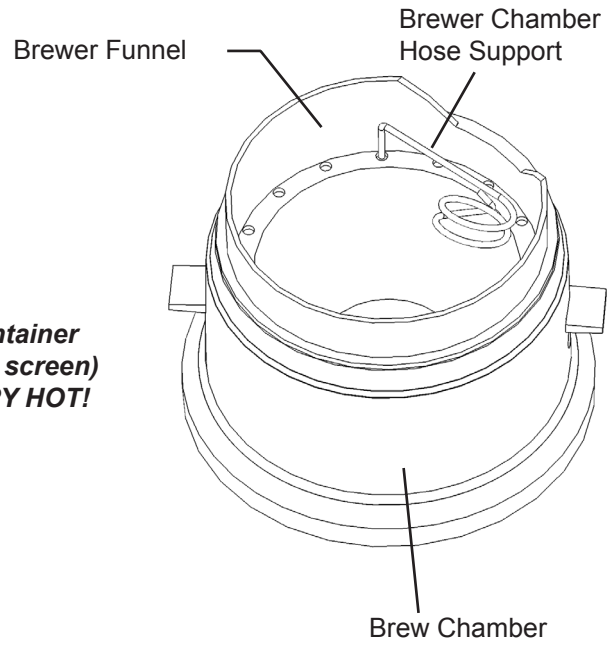
1. Unlock the door;
2. Remove the top cap of the machine;
3. Pull the canister up through the top of the brewer to disengage it from the motor and transmission;
4. Clean and sanitize under hot water and air dry completely;
5. Reinstall all parts and reload products in the reverse order.
6. Order a beverage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



8.7.3 Coffee Brewer

Rinsing the Brew Chamber:
Frequency: Weekly or every 200 cycles

See section 8.5 for automatic rinsing function.



WARNING! make sure to place a container large enough (size is specified on the screen) . BE CAREFUL because water is VERY HOT!

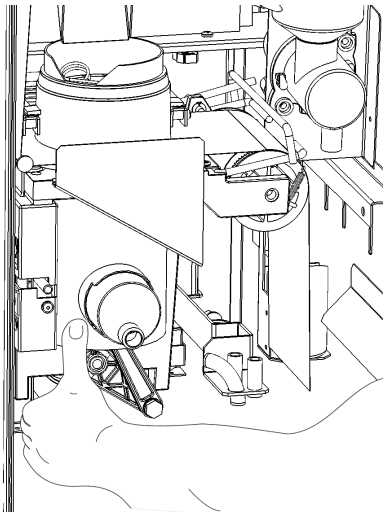
Brewer Funnel
Frequency: As needed or weekly

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 1,000 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 section 10.3 for instructions on removing the brewer)

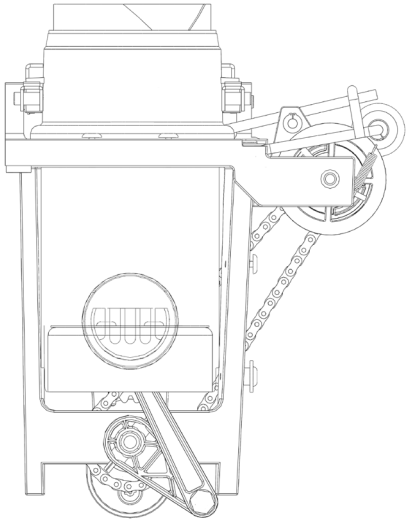
1. Rinse thoroughly under hot water to remove visible soil;
2. Lift off the funnel and pull out of the brew chamber;
3. Rinse thoroughly under hot water;
4. Air dry completely;
5. Reinstall all parts in the reverse order.
6. Order a large coffee to confirm that all parts have been replaced correctly.



Brewer Assembly Sanitizing Treatment
Frequency:Quarterly or Every 3,000 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 liquid;
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 5 brewing cycles 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.



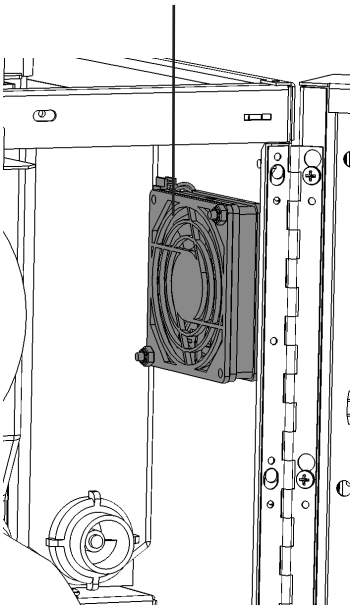
8.7.4 Fan

Frequency: Quarterly or as needed

Visually inspect the fan located directly to the right.
If it requires cleaning:

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

Fan

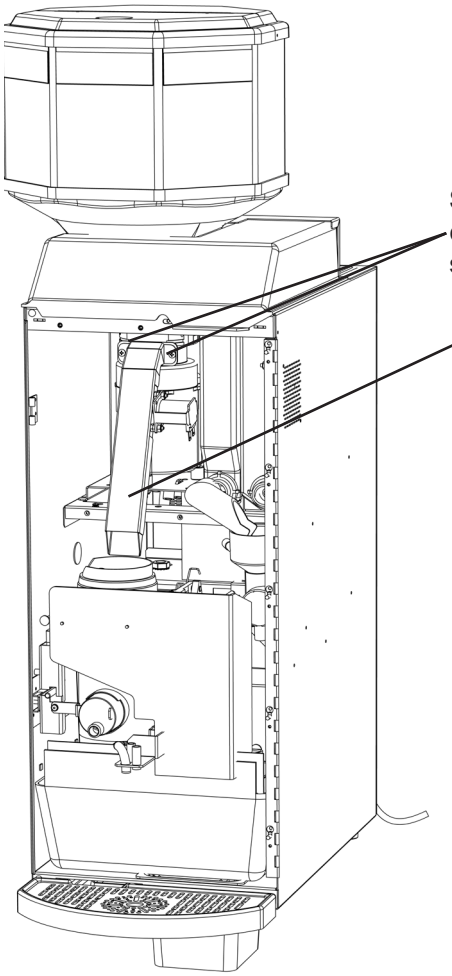


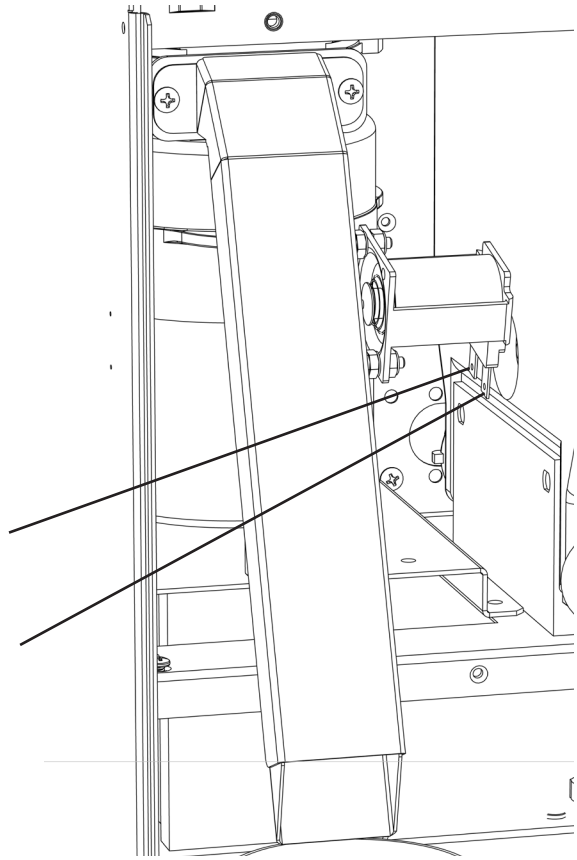
8.7.5 Stainless coffee chute

Frequency: Monthly or every 1,000 cycles

1. Open the door of the machine;
2. Remove the filter paper;
3. Remove the grinder protector;
4. Unplug the 2 connectors from the solenoid;
5. Remove the stainless chute by removing the screw;
6. Clean the stainless chute by rinsing with hot water;
7. Make sure it is dry before reinstalling.

Repeat the steps in reverse order after cleaning for the reinstallation.



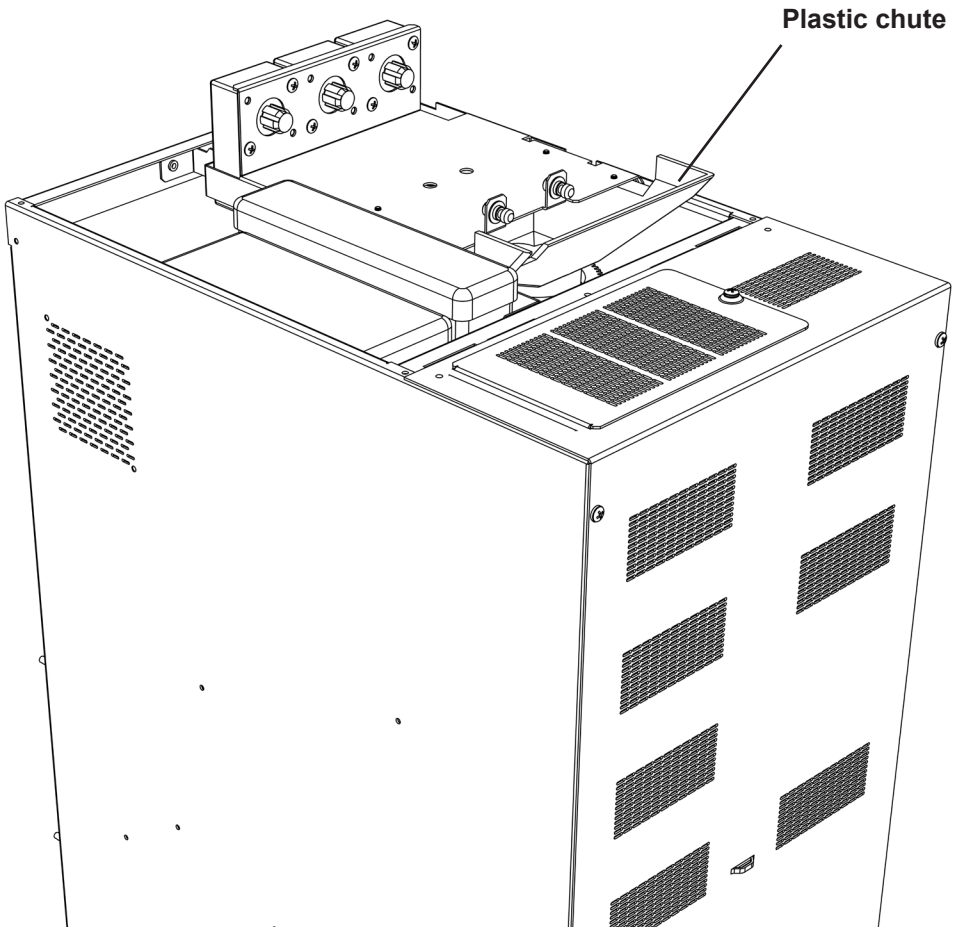


8.7.6 Plastic chute of the 3 bean canister

Frequency: Monthly or every 1,000 cycles

1. Open the door of the machine;
2. Remove the plastic top cap;
3. Unscrew and remove the plastic top fitting part accessing by the rear;
4. Unlock the 3 bean canister;
5. Remove the 3 bean canister;
6. Clean the interior of the plastic chute (accessible by the rear).

Repeat these steps in reverse order when the cleaning is done.



9 PREVENTIVE MAINTENANCE

All major parts of this unit need to be maintained as per the schedule to honor the warranty and to prevent it 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.

Parts	Monthly	Quarterly	10,000	25,000	60,000	100,000
Brewer	Inspect			Replace		
Outlet Valves	Inspect		PM			
Water Tank		Inspect			PM	

9.2 Brewer Assembly

Preventive Maintenance (PM): Yearly or every 25,000 coffee cycles

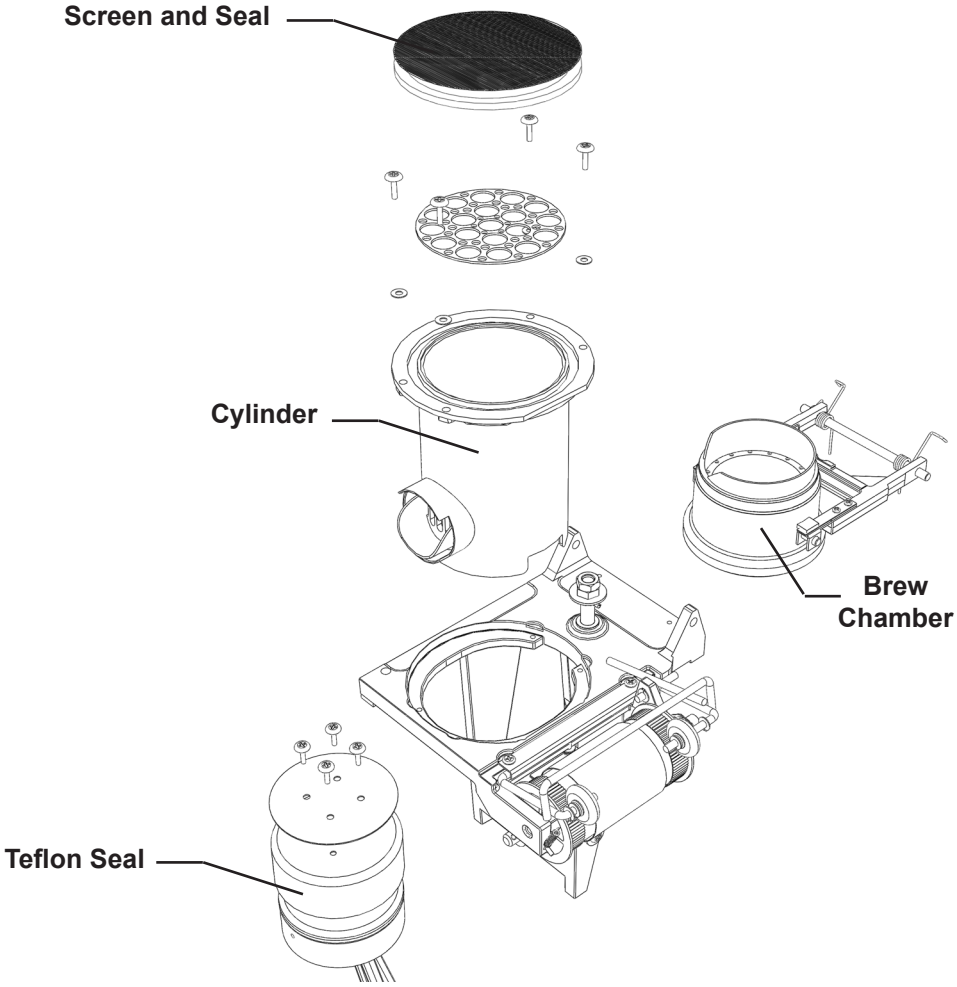
The brewer is the heart of the equipment and is responsible for the taste of the beverage. It needs to be replaced or refurbished to maintain the quality of the beverages served. We recommend having your brewer assembly replaced every 25,000 coffee cycles.

Contact 1-800-561-6162 for parts and additional information.

Inspection

The following are signs of the vacuum is not functioning 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

Quarterly or every 10,000 cycles

To avoid any problems related to mineral deposits over time, we recommend having the 3 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 kit.

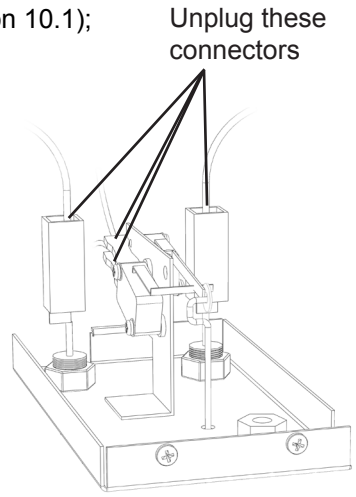
Leaking valve

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 conical mounting seal.
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 and may be lukewarn.

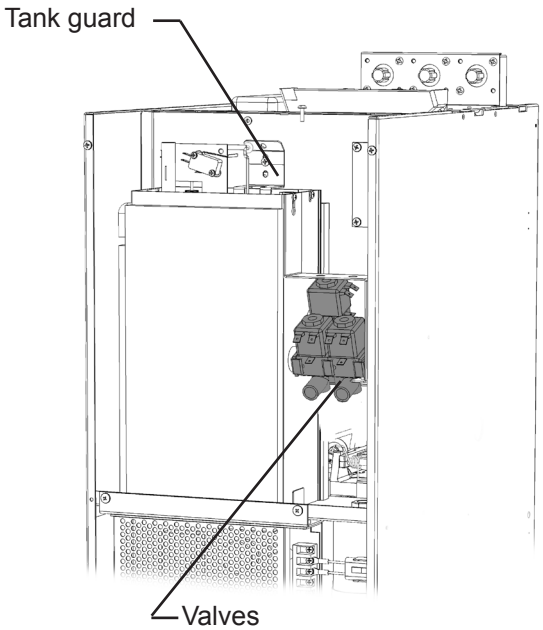
Removing and installing the valves

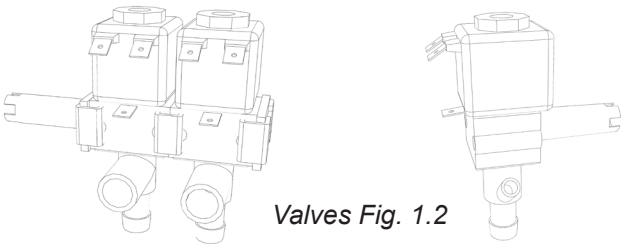
Caution water is hot!

1. Turn off the machine;
2. Unplug the lid (fig.1.1) and the valves (fig. 1.2);
3. Drain the water from the water tank completely (see section 10.1);
4. Remove the tubes;
5. Unscrew the tank guard to remove the tank;
6. Tilt the tank towards you to have access to the valves;
7. Remove the valves;
8. Reinstall by repeating in the reverse order



Tank Lid Fig. 1.1





Valves Fig. 1.2

Double valve Simple valve

Note

u choose to install a water filtration system, it i filter be checked on a thly basis.

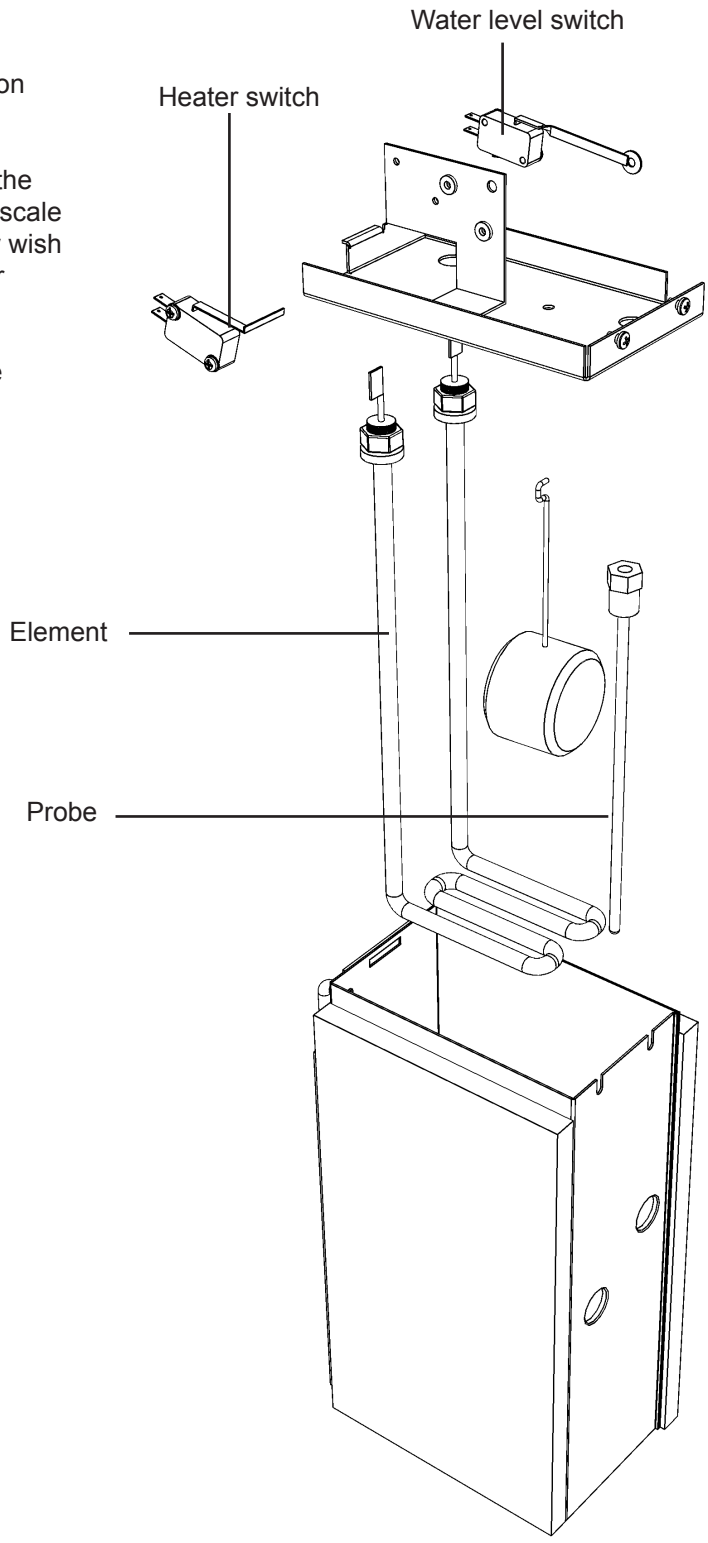
9.4 Hot Water Tank

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, probe 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.



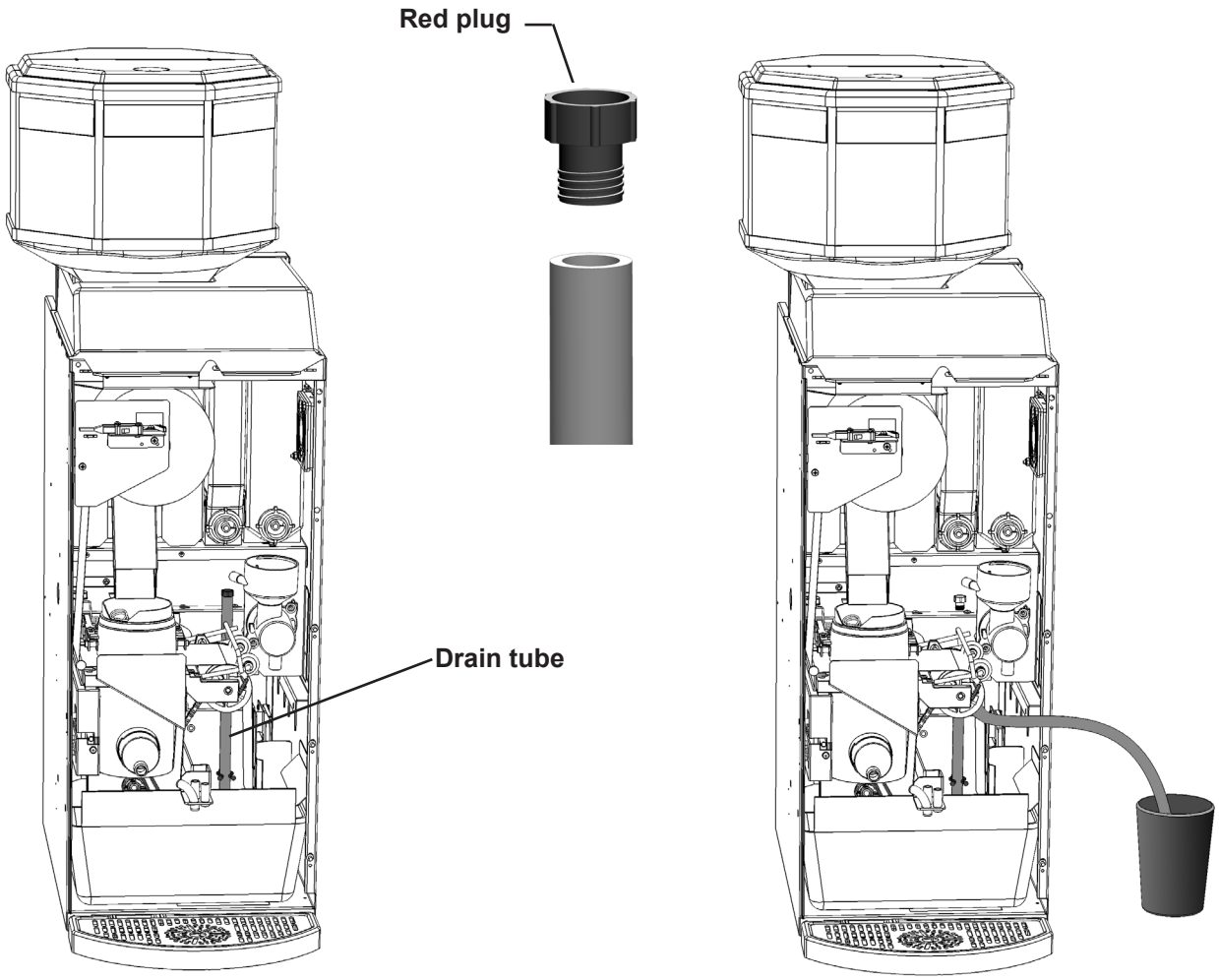
10 SERVICING PARTS

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 0.8 gallon container suitable for holding hot water.

1. Turn off and unplug the brewer;
2. Turn off the main water supply of the machine;
3. Remove the back panel;
4. Locate the drain tube with a red plug;
5. Direct the tube into the pail and remove the red plug. **Warning, water may be hot!**;
6. Drain the water from the water tank completely;
7. Reinstall by repeating these steps in the reverse order.



10.2 Shutdown / Storage

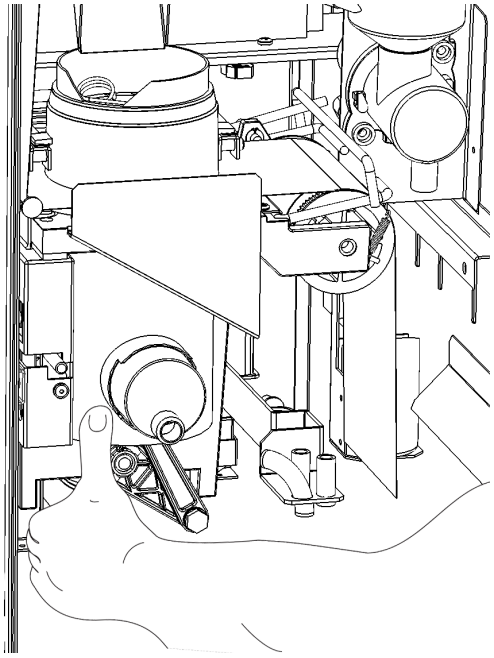
If you need to store this brewing equipment for an extended period of time, follow this procedure to avoid any risk of injury or damage to the equipment.

1. Turn the unit off and unplug from the power outlet;
2. Drain the hot water tank (see instructions see section 10.1);
3. Empty the soluble canisters and the 3 bean canister;
4. Clean all parts of the unit before storing (see cleaning instructions see section 8)
5. Disconnect the white wire from the heating element (see installation diagram see section 9.3)
6. Tie down the water level switch's arm with a twist tie 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 Assembly

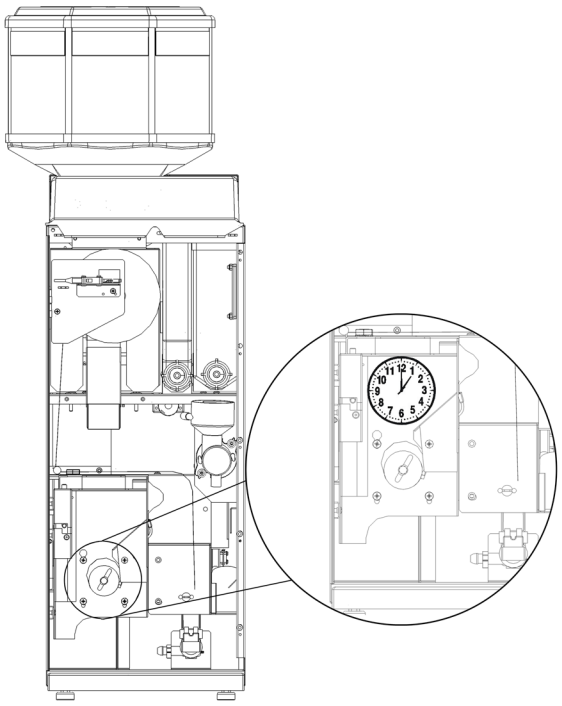
The brewer assembly is the heart of the equipment and is responsible for the taste of the coffee. It is therefore important that you store it properly when it is not in the unit. Always disengage your brewer clutch by using a pair of pliers and turning the pin located on the back clockwise until the 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



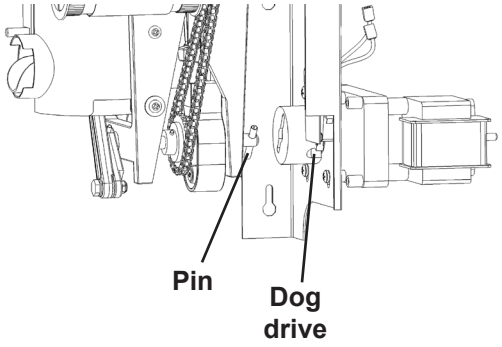
Removing the brewer

1. Open the machine door;
2. Go in service mode by pressing Setup Button SW1 (See section 4.7). Press change filter paper once.
3. Wait for the brew chamber to open.cut the filter paper;
4. Cut the filter
5. Remove the coffee spout and the hose support bracket from the right side of the brewer assembly;
6. Support the brewer assembly by holding the aluminum frame on the right side of the brewer assembly;
7. With your left hand, slide the retaining pin over to the right and then down;
8. 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 (EPROM)

The microcontroller, also known as the Eprom, 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.

IMPORTANT

Tool required:

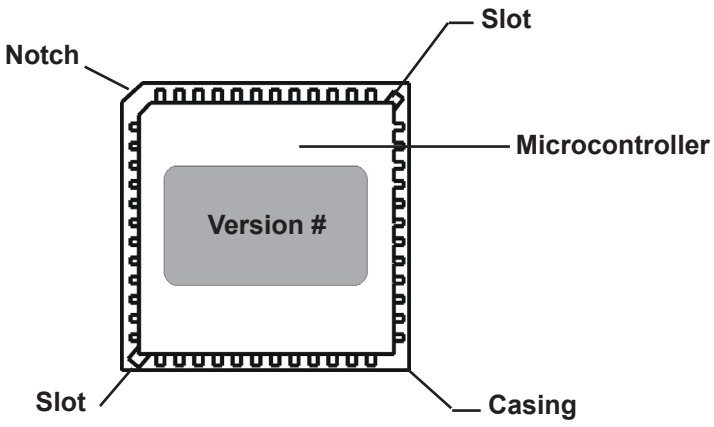
You will need to purchase a PLCC Extractor as showed in the diagram below. This can be found in most electronics stores or via the Internet. Without this tool, you may damage the casing for the microchip and damage the board.

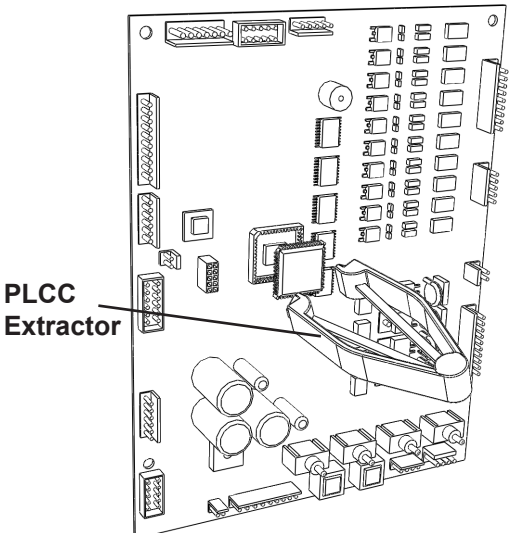
Removing

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 from 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 even with the top of the socket;
4. Replace remaining parts in the reverse order;
5. Plug the machine in and turn on the unit;
6. At start-up, the LCD will indicate the microchip version #;
7. Test the new features outlined in the documentation supplied with the new microcontroller.



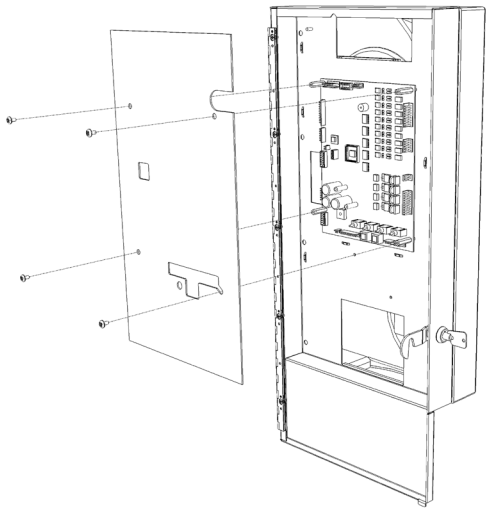


10.5 Main Board

Like all electronic main boards, they are very sensitive 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 senistive 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**: J11, J12, J18, J27, J2, J19, J3, J6, J16,
   - J24, J8, J22
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 screen 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.

11 Troubleshooting

There are two type of service messages : Warnings and Errors. Warnings will temporaly disable some features while errors will put the coffee brewer out of order.

11.1 Warning message list

Filter paper roll empty

The coffee brewer is out of filter paper. All drinks using the coffee brewer will be temporarly removed from the selection screen. Hot water and soluble only drinks will still be offered. Install a new filter paper roll to remove this warning. Advance tech info : the status of the filter paper detection switch can be monitored thru green LED DS14 on the main controler board.

Rinse will be required soon

The number of drinks served is equal to the ‘rince at’ parameter in the service ‘system’ tab (see section 6.7.1). All drinks will still be dispensed. The warning will be displayed on the screen until you enter service mode and do an auto rince cycle. Service mode, ‘service tab’. See section 6.2 for details.

Waste bin full

The number of coffee drinks served is equal to the ‘Waste bin max’ parameter in the service ‘system’ tab (see section 6.7.1). All drinks using the coffee brewer will be temporarly removed from the selection screen. Hot water and soluble only drinks will still be offered. You have to empty the waste bin and reset the vend count. To reset the waste bin count, go into service mode and into ‘service’ tab and press the ‘Reset waste bin’ button see section 6.2.

Bill value too high

The maximum value for bills inserted is $10.00 if a bill is inserted with a higher value it will be returned to the customer.

Not enough coins, returning bill

When a bill is inserted the same value of coins must be available for change in the coin changer tubes. If not enought coins, the bill will be returned. There is an exception for $1.00 bills. No need for change in the coin acceptor tube to accept the $1.00 bills.

11.2 Error message list

Lost communication with coffee machine controller.

The link between the computer system and coffee brewer is broken.

The coffee brewer might be out of power while the computer system is ok.
Check overflow cup, must be empty.
Check 5A and 15A circuit breakers on back of the unit.

At last check electrical link between Main controler pcb connector J14 and computer system COM1. See section 4.7 for more details.

Broken link between main controller and thermostat.

The link between the thermostat and coffee brewer is broken. Thermostat pcb is located on the back of the coffee brewer. Check the cable between the thermostat (J1) and the coffee brewer main controller (J12).

Water temp. sensor defective. (open contacts).

The water temperature sensor is defective or unplugged on the thermostat board. See section 7.4.1 for more information.

Water temp. sensor defective. (Short circuit).

The water temperature sensor is defective (short circuit). See section 7.4.1 for more information.

Brewer home position switch error.

The coffee brewer failed to detect the home position of the brewer assembly. The following parts might be defective :

Brewer motor
Brewer cam and/or pin
Brewer home position switch

Remove coffee brewer assembly from the coffee machine. Press the 'activate Brewer' button on screen. The brewer motor will be activated and will stop running until the brewer home switch hits the hole in the cam. You will then see if the motor and switch are working properly.

The status of the brewer home switch can be monitored thru DS13 green LED on the main controller PCB. At home position (open contact) DS13 is off.

There is water in the drip tray overflow.

Check for any water in the overflow drip tray. Make sure no water is touching the two probe wires. The status of the overflow tray probes can be monitored thru DS18 green LED. When the tray is dry, DS18 is off.

11.2 Error message list (continued)

Low water level in tank.

The water tank tank failed to fill to maximum within the required time. The water inlet valve is de-activated as a safety.

Maximum filling time is 4 minutes when you power ON the coffee brewer.
Maximum filling time is 1 minute after the first tank fill.

Check water supply line for proper pressure. If you are using a waterline filter, it might be worn out and needs to be replaced.

Press button on screen to restart the tank filling process.

Water tank not full. Please wait while filling. 1 to 3 minutes.

This message will be on screen after powering ON the coffee brewer until water tank gets full.

Water temperature not high enough.

The TOTAL LITE will stop dispensing drinks if actual water temperature is below the 'Warming up' temperature in the service menu, 'system' tab. To disable this feature set the warming up temperature to 0.

Annex 1 Full maintenance schedule

PLEASE NOTE :

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

MAINTENANCE DONE BY THE OPERATOR

Daily Maintenance

- □ Verify product inventory
- □ Fill all canisters
- □ Empty the waste basket
- □ Perform a rince cycle
- □ Clean the machine and tidy area
- □ Empty Bill & Coin Box (if applicable)
- □ Clean the drip tray

MAINTENANCE DONE BY AUTHORIZED SERVICE PROVIDER

Weekly Maintenance

- □ Verify filter paper level
- □ Sanitize brew group with hot water cycle
- □ Sanitize soluble mixing bowl with hot water cycle
- □ Capture data from software
- □ Verify overflow cup
- □ Verify overflow tray

Monthly Maintenance

- □ Clean brewer assembly with commercial Urn Cleaner
  - Turn off Product Switch on inside of machine
  - Brush away any loose coffe on the brew group - remove filter paper
  - Clear ground coffee chute and plug with a paper towel
  - Sprinkle Urn Cleaner into the brew funnel directly onto the screen
  - Run a tall coffee cycle (make sure Product Switch is OFF)'-
  - When the water mixes up with Urn Cleaner, stir around with a small paintbrush
  - When the piston lowers to the half-way point, turn off the machine
  - Allow the cylinder to soak for several minutes
  - Turn the machine back on - place cup under spout
  - Run several more Tall coffe cycles until water dispenses clear
  - Turn Product Switch on - remove paper towel from coffee chute
- □ Clean coffee canisters
- □ Clean coffee bean hopper and chute
- □ Clean stainless coffee chute

Preventive Maintenance Schedule at different cycles

5,000 cycles :
- □ Clean brewer assembly with commercial use Urn Cleaner

10,000 cycles :
- □ Check and replace outlet valves
- □ Check and replace water filter

25,000 cycles :
- □ Replace brew group via replacement program
- □ Replace whipping motor(s)

50,000 cycles :
- □ De-lime water tank and outlet valves

100,000 cycles or every 2 years :
- □ Replace grinder burrs
- □ Replace water tank float and switches (float and heater)

AS NEEDED :

The following parts should be checked on a regular basis and cleaned and sanitized as needed :
- □ Fan
- □ Brew chamber
- □ Whipper and mixing bowl
- □ Waste bin
- □ Canisters

Annex 2 Monthly maintenance schedule

PLEASE NOTE :

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

MAINTENANCE DONE BY AUTHORIZED SERVICE PROVIDER

Monthly Maintenance

- □ Verify filter paper level
- □ Sanitize brew group with hot water cycle
- □ Sanitize soluble mixing bowl with hot water cycle
- □ Capture data from software
- □ Verify overflow cup
- □ Verify overflow tray
- □ Clean brewer assembly with commercial Urn Cleaner
  - Turn off Product Switch on inside of machine
  - Brush away any loose coffe on the brew group - remove filter paper
  - Clear ground coffee chute and plug with a paper towel
  - Sprinkle Urn Cleaner into the brew funnel directly onto the screen
  - Run a tall coffee cycle (make sure Product Switch is OFF)'-
  - When the water mixes up with Urn Cleaner, stir around with a small paintbrush
  - When the piston lowers to the half-way point, turn off the machine
  - Allow the cylinder to soak for several minutes
  - Turn the machine back on - place cup under spout
  - Run several more Tall coffe cycles until water dispenses clear
  - Turn Product Switch on - remove paper towel from coffee chute
- □ Clean coffee canisters
- □ Clean coffee bean hopper and chute
- □ Clean stainless coffee chute

Check, clean and sanitize as needed :

- □ Fan
- □ Brew chamber
- □ Whipper and mixing bowl
- □ Waste bin
- □ Canisters

Preventive Maintenance Schedule at different cycles

5,000 cycles :

- □ Clean brewer assembly with commercial use Urn Cleaner

10,000 cycles :

- □ Check and replace outlet valves
- □ Check and replace water filter

25,000 cycles :

- □ Replace brew group via replacement program
- □ Replace whipping motor(s)

50,000 cycles :

- □ De-lime water tank and outlet valves

100,000 cycles or every 2 years :

- □ Replace grinder burrs
- □ Replace water tank float and switches (float and heater)

Annex 3 Weekly maintenance schedule

PLEASE NOTE :

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

MAINTENANCE DONE BY AUTHORIZED SERVICE PROVIDER

Weekly Maintenance

- □ Verify filter paper level
- □ Sanitize brew group with hot water cycle
- □ Sanitize soluble mixing bowl with hot water cycle
- □ Capture data from software
- □ Verify overflow cup
- □ Verify overflow tray

Check, clean and sanitize as needed :

- □ Fan
- □ Brew chamber
- □ Whipper and mixing bowl
- □ Waste bin
- □ Canisters

Preventive Maintenance Schedule at different cycles

5,000 cycles :

- □ Clean brewer assembly with commercial use Urn Cleaner

10,000 cycles :

- □ Check and replace outlet valves
- □ Check and replace water filter

25,000 cycles :

- □ Replace brew group via replacement program
- □ Replace whipping motor(s)

50,000 cycles :

- □ De-lime water tank and outlet valves

100,000 cycles or every 2 years :

- □ Replace grinder burrs
- □ Replace water tank float and switches (float and heater)