westomatic

British Vending Excellence Since 1966

Eco Encore & Solo Encore Technical Manual

CONTENTS

PART NUMBER: 350083
Issue Date: August 2005

1. SAFETY NOTICE

The machine is not suitable for use by unsupervised young children.

Installation and service activities, including replacement of the mains cable, on the Solo Encore machines, should only be undertaken by competent personnel authorised to do so by the machine supplier. Such persons should also be fully conversant with the potential dangers of working on live equipment.

Ensure the mains isolation switch (door switch) is operating correctly prior to any service activity.

Ensure the machine is isolated from the mains electrical supply prior to removing any of the machine protective cover panels.

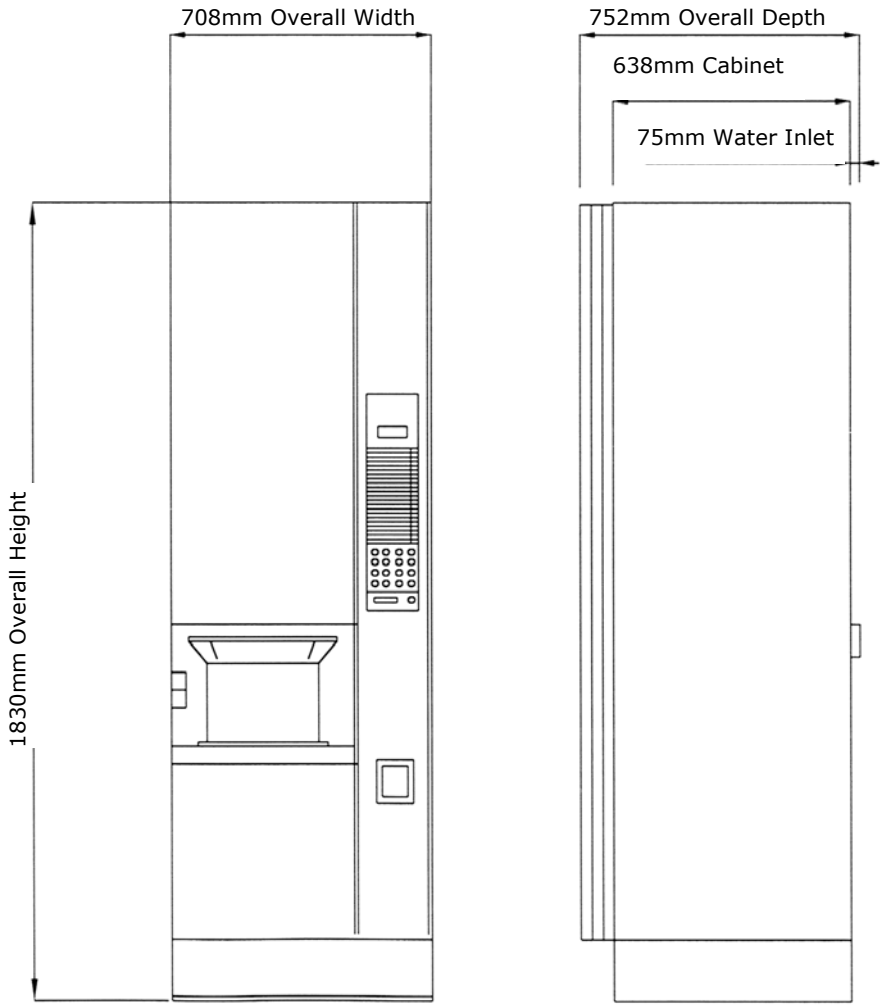
Working on live equipment should only be undertaken when there is no practical alternative and only by fully qualified engineers.

Precautions should always be taken by using insulated tools and insulated probes of test equipment.

Your machine must not be sited in an area where a water jet could be used for cleaning purposes.

2. SPECIFICATIONS

DIMENSIONS



WEIGHT/CUP CAPACITY (APPROXIMATE)

SOLO ENCORE	
Weight	192 kg (422.5 lbs) (FB HCC)
Cup Capacity	530 x 200ml (7 oz)

ELECTRICAL SERVICES

220/240V 50Hz 13-amp single-phase power supply.

WARNING

THIS EQUIPMENT MUST BE EARTHED

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

GREEN and YELLOW	EARTH
BLUE	NEUTRAL
BROWN	LIVE

As the colours of the wires in the mains lead of this equipment may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire, which is, coloured GREEN and YELLOW must be connected to the terminal in the plug, which is marked with the letter E or by the earth symbol ⏚ or coloured GREEN or GREEN and YELLOW.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK or BLUE.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED or BROWN.

WATER SERVICES

15 mm (1/2") mains water supply from a rising main
Minimum water pressure 1.40 Bar (20 psi)
Maximum water pressure 8.40 Bar (120 psi)

Reference should be made to the Model Water Bylaws 1986 Statutory Instrument (SI) No.1147.

NOISE LEVELS

The Solo Encore has been designed to work within a user-friendly environment and will therefore not exceed a noise level of 70dB.

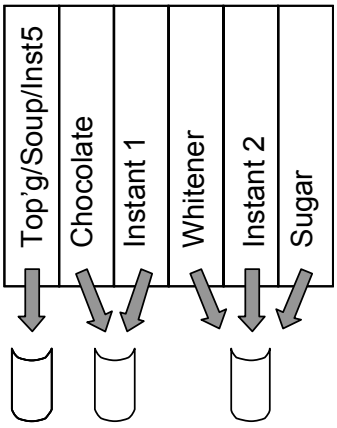
SOLO ENCORE CANISTERS LAYOUT

Always remove the ingredient canisters from the machine before filling.

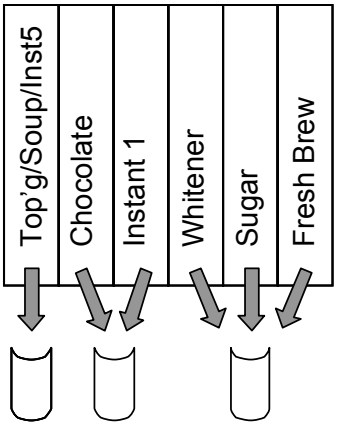
To prevent ingredient spillage, rotate dispense spouts to face up-wards.

Ensure the canisters are correctly configured for products being used - refer to the ‘Parts section’.

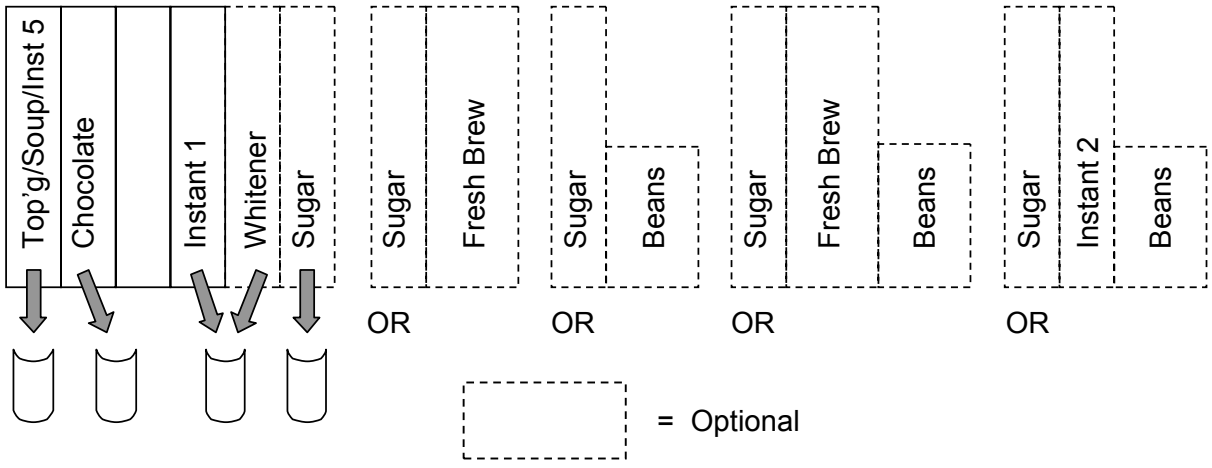
Solo Encore (EL) Instant



Solo Encore (EL) Instant/FB



Solo Encore (LX)



3. DRINK SELECTION CODES

Instant Selections (INST)

	Black	Black/Sugar	White	White/Sugar
Instant 1	10	11	12	13
Instant 2***	20	21	22	23
Instant 5	45	46	47	48
Espresso	14	15	16	17

Freshbrew Selections (FB)

Freshbrew	50	51	52	53
FB Espresso*	55	56	57	58

Bean to Cup Selections (BTC)

BTC Espresso*	55	56	57	58
BTC Coffee	60	61	62	63

Extra Selections

BTC/FB/INST				
BTC Double Espresso	81	82	83	84

	No Sugar	Sugar
Cappuccino	75	76
Café Latte	73	74

	No Extras
Chocolate	70
Creamichoc	71
Espresso Choc	77
Soup or Lemon Tea	80
Hot water**	90
Cup Only	88

Carbonated/Still Drink Selection

	Carbonated	Still
Water Only	98	99
Syrup 1	91	92
Syrup 2	93	94

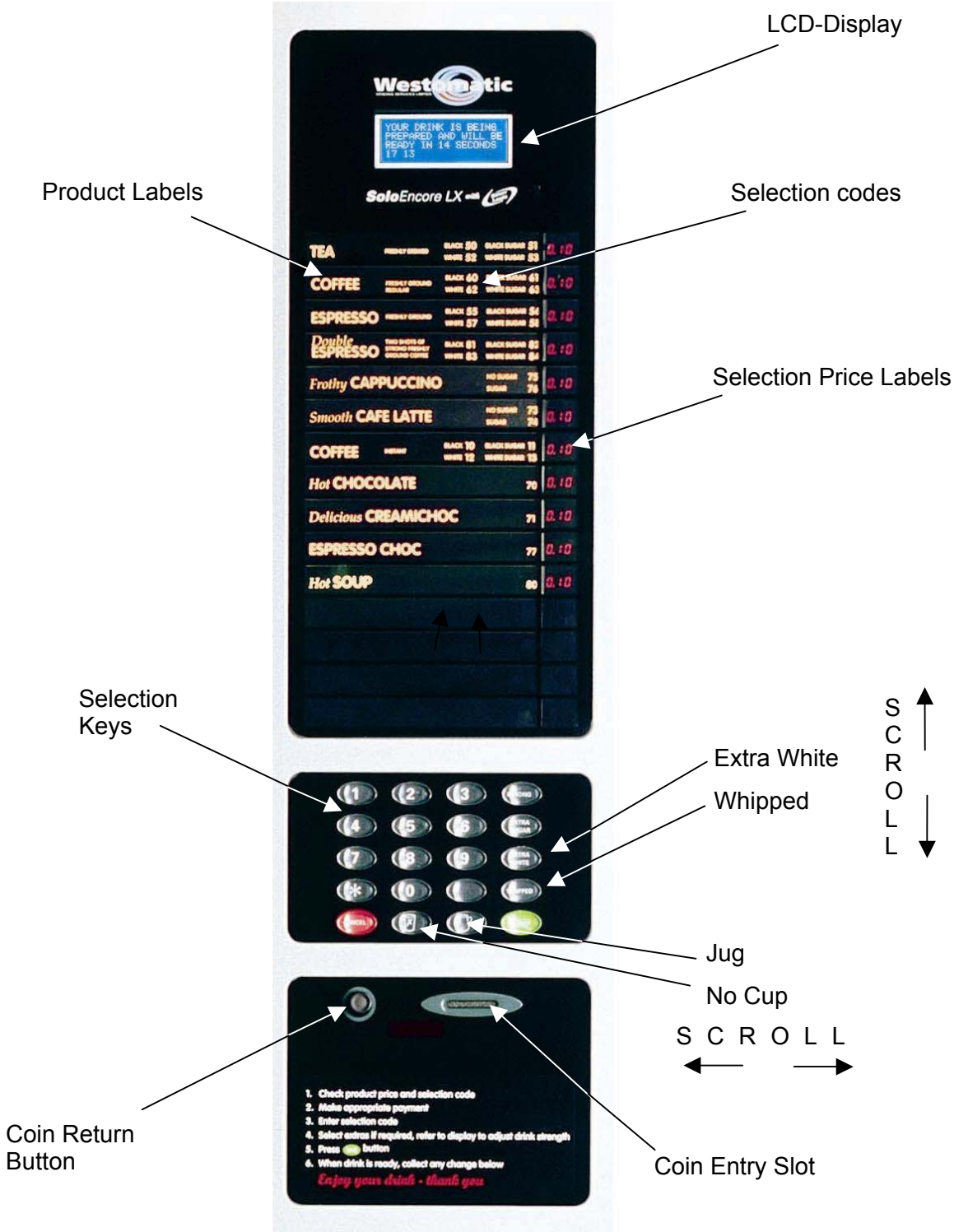
*** AVAILABLE AS AN ALTERNATIVE TO INSTANT ESPRESSO WHEN FRESHBREW/BEAN TO CUP COFFEE IS AVAILABLE.**

**** AVAILABLE AS AN OPTIONAL EXTRA**

***** NOT AVAILABLE ON FB MODELS**

4. EXTERNAL FEATURES

MENU PANEL - Multi Choice



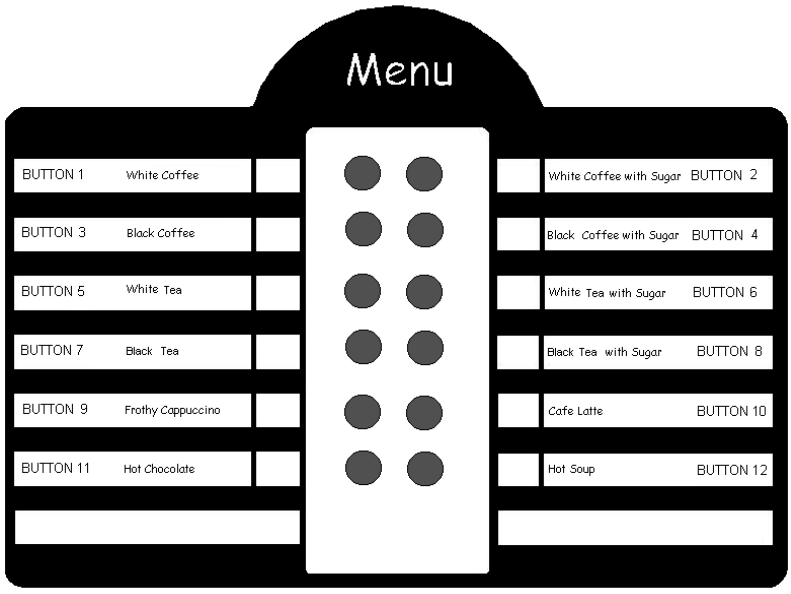
Scroll feature for use in 'Service Mode' to access data fields in programming addresses.

SINGLE CHOICE KEYPAD OPERATION

The Solo Encore Single Choice machine is programmed in the same manner as the multi choice version. The bottom two buttons on the single choice keypad act as 'Cancel' and 'Enter' or 'Shift' when in door open mode.

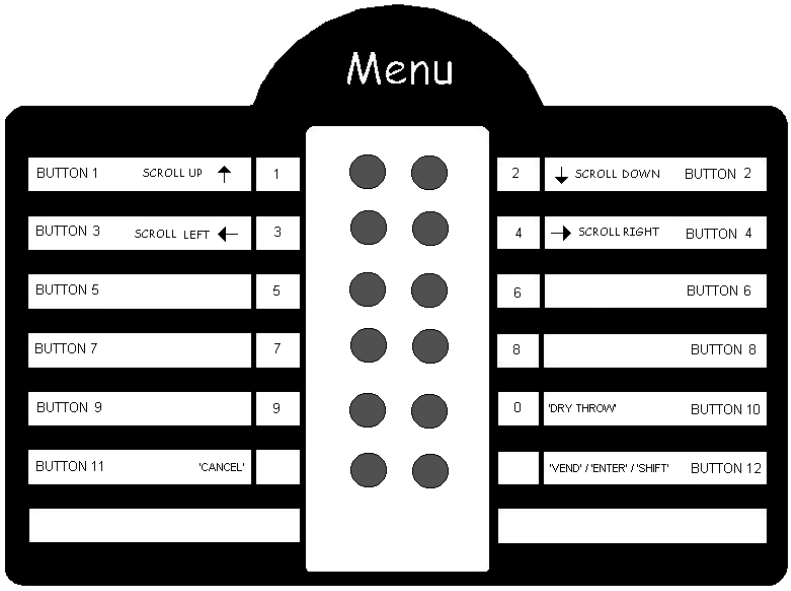
STANDARD DRINK CONFIGURATION.

The standard drink configuration set up for the single Choice menu panel:



PROGRAMMING MODE:

See diagram below for the button configuration in 'Door Open' mode.



TEST MODE:

To test a drink selection, press the button allocated for the drink selection while in test mode. For the drink selection set-up see addresses 160 to 171.

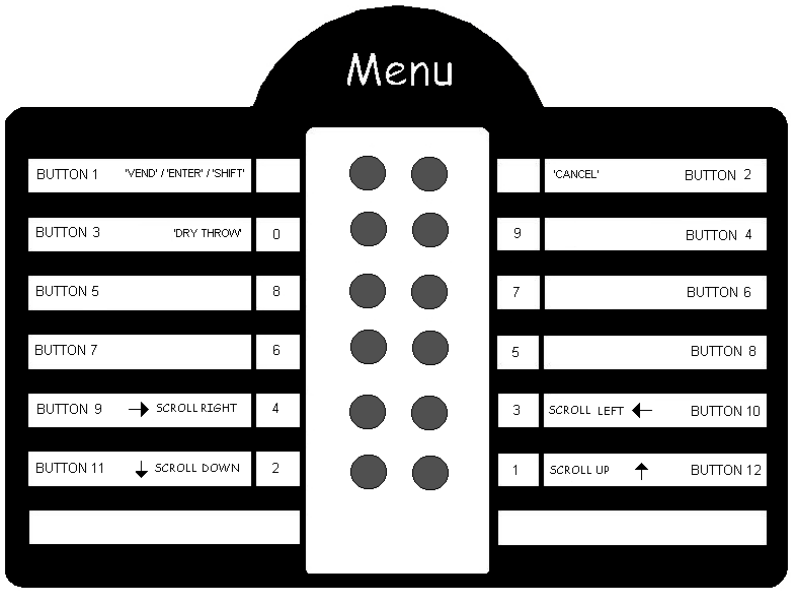
Note:

Button 11 (the cancel button) is not a testable option, while the door is open.

The machine must be in 'Door Closed' mode to test selection 11 or move the drink selection to another button for testing purposes only.

ALTERNATIVE KEYBOARD LAYOUT

When programming a new control board (Default is Multi-Choice) for an Encore EL Single Choice machine please note the functionality of the keypad changes.



5. INSTALLATION & COMMISSIONING

Warning: Before commencing any installation procedures, ensure that all machine site preparation has been completed correctly and that lifting equipment of the correct capacity is available.

We recommend that as much preparation is carried out as possible before installing the machine. A good guide for ensuring the site is properly assessed with the involvement of technical personnel is the AVA site survey which is available to all member companies from the AVA. Within the AVA survey, particular attention must be paid to the local Hazard Analysis evaluation. This will aid in assessing potential risks (such as water quality) when siting a machine in a particular environment. Pre-programming the machine before it arrives on site is also recommended for a fast, efficient and professional installation.

LOCATION

The machine is suitable for indoor use only, with an ambient temperature not below 10°C and not exceeding 30°C. Please note that the machine, particularly refrigerated models, will increase the ambient temperature in confined air spaces.

The machine should be located to allow access to the appropriate electrical and water services with at least 100mm (4") of free space between the rear of the cabinet and the wall to allow adequate ventilation.

NOTE:

On Cold Still and Carbonated machines the condenser fan assembly protrudes from the rear of the cabinet by 100mm (4").

LEVELLING

The machine should be levelled in both planes by adjustment of the four levelling feet. A spirit level should be used and placed on the cabinet roof. Incorrect levelling can result in coin acceptance problems, door misalignment and inconsistent cup dispense.

INSTALLATION PROCEDURE

1. CONNECT WATER SERVICES

Water filters are not fitted as standard. If, however, the machine has provision for a water filter, the filter will be packaged within the machine but not connected. Ensure the filter is fitted before turning on the mains water supply.

The machine should be connected to a 15mm (1/2") mains water supply from a rising main, or other suitable potable water supply, using B.S.P. fittings. There should be a minimum water pressure of 1.40 Bar (20 psi). Flush the line (several gallons) before connecting. The machine should be connected using the new armoured hose supplied. Ensure the seal is fitted. The seal is of a W.R.C. approved type - non-approved types should not be used.

SANITISATION

Whilst suitable steps are followed at Westomatic, which include a dosing system, providing a suitable microbiological condition, it is necessary that during installation the machine should be sanitised using a two-stage process.

Stage 1 biocide - for the removal of Biofilm build up
Stage 2 sanitise - neutralisation of bacteria

2. LOAD MACHINE WITH CUPS

1. Load ONE sleeve of cups into the carousel, avoiding the dispensing position.
2. After the machine is switched on, the carousel will rotate until the cups have dropped into the cup ring.
3. The remaining sleeves can then be filled.

Always ensure the carousel lid is fitted.
Overfilling of the carousel will prevent closure of the cup unit.

CUP UNITS

There are 2 different cup units for different sizes of cups. These are colour coded as follows.

Cup Peeler Colour	Cup Type	Cup Chute Identification
Red	200 ml (7 oz) tall	T
Grey	250 ml (9 oz)	S
Grey	200 ml (7 oz) squat	S

On no account should an attempt be made to turn the cup carousel by hand. If the carousel locator is damaged then cup jams will almost certainly occur.

3. COMMISSION BREWER UNIT (if fitted)

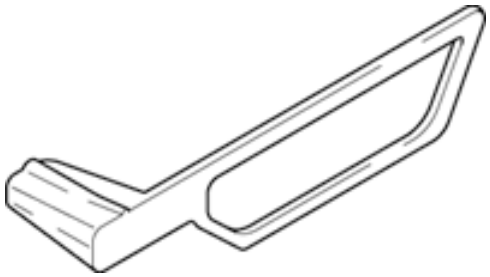
Ensure that the filter insert (tied to the filter platform for transport) is placed into the filter platform, checking for correct orientation.

A filter roll is supplied for the brewer fitted in the machine. This must be fitted as per the instructions on the Brewer itself to prevent sold out codes reporting when switching on the machine.

IMPORTANT: Only filter paper designed for use with the Westomatic® brewer should be used. The correct width of the paper is 10cm (100mm). Using an incompatible filter roll, i.e. Vendking, will result in malfunction of the brewer.

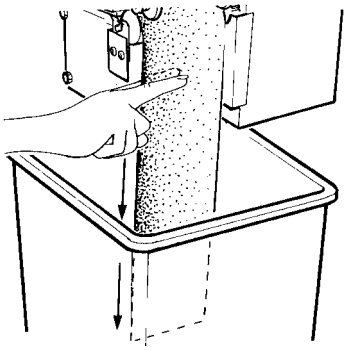
Ensure paper passes under the switch arm

FIG. A.



Pull the paper through the roller section and ensure a 300mm tail of paper is led into the brewer waste bucket (see figure. B).

FIG. B.



4. POWERING UP THE MACHINE

REMOVE 12.5A HEATER FUSE (AND 5A COOLER FUSE IF FITTED) AS A PRECAUTION AND THEN PULL OUT THE SERVICE SWITCH TO POWER UP THE MACHINE.

On powering-up the machine the boiler will begin to fill. Although the heater is protected by means of a low level switch, removal of the heater fuse, while not essential, is recommended as good practice.

If a hot drink selection is made during the initial heating period, the display will count down in seconds the total time before a hot drink maybe vended.

At Westomatic we carry out a fully functional test using water, which passes through a dosing system to provide a suitable microbiological condition. It is therefore advisable to allow the boiler to fill with water, switch your machine off and fully drain.

5. COMMISSIONING THE CARBONATOR UNIT (IF FITTED)

1. With the machine switched off
2. Connect the cylinder, ensuring that the interface washer between the cylinder and the regulator is in place and purge the carbonator bowl through the relief valve for approximately 2 seconds. Check that the gas regulator is set at 50 psi and adjust if necessary.
3. Switch machine on.
4. Enter ‘flush mode’ and flush the still then the carbonated water selections
5. Place the syrup dip-tubes into the product containers making sure that the correct flavours correspond to the machine selection panel.
6. Prime the syrups through the nozzles in ‘flush’ mode.

NOTE:

After commissioning, it will take the refrigeration system approximately 20 minutes to achieve operating temperature, dependant on ambient conditions.

6. COMMISSIONING THE CHILLER UNIT (IF FITTED)

The Chiller unit within the Solo Encore does not require an ice bath. To commission the Chiller unit simply enter into Flush mode and flush cold water through the system. For more information on ‘Flushing’ see ‘Using the External Keypad’ section.

7. SET-UP MACHINE OPTIONS

See ‘Programming’ section on machine set up to configure for payment system etc.

8. DRINK SET-UP OPTIONS

The machine will be programmed for the standard range of drink selections, you should however, verify that the programming settings meet the requirements of this installation.

9. INGREDIENT FILLING

All canisters require filling with fresh ingredients prior to machine usage. When filling canisters please refer to your 'OPERATORS HANDBOOK'.

10. INITIATING A DRY INGREDIENT THROW

To enable you to weigh products, the machine allows you to initiate an individual dry ingredient throw without water as follows:

In '**Service**' mode:-

1. Enter '474' - the Address number for 'Throw-Instant 1 Regular – The display will show the current throw time.
2. Press the Large cup key, or button '10' on the single choice keypad – the buzzer will sound for 5 seconds and then the ingredient will be dispensed for weighing.

After adjustment to the dispense time repeat Step 2.

11. ADJUSTMENT TO HOT DRINK LEVELS

All hot water dispense valves are factory adjusted to deliver water at a pre-determined rate of 1 fl. oz./second (for machines dispensing 6 fl. oz. drinks). This flow rate is essential to ensure a full bowl swirl ensuring that all of the product is effectively rinsed from the mixing bowl. The factory set timings of 5.0 seconds for single valve operation and 2.5 seconds for dual valve operations will therefore dispense 5 fl. oz. to mix and rinse product from the mixing bowls.

IMPORTANT: Because the hot water dispense valves have shared outputs, i.e. can operate for more than one selection, it is important not to increase selection in-cup levels by adjusting the flow rate of the dispense valve. All adjustments must be achieved by altering the dispense times.

12. PROGRAMME MACHINE

Finally, use the Programming Address Listing to check whether any further adjustments of the machine settings are necessary to meet the requirements of the particular installation.
In particular, check under the headings:

Machine Set-up
Drink Set-up
Prices
Throw Settings
Facilities (free vend, discount, jug facility, power saving)

13. FLUSH ALL DRINK OPTIONS

See ‘USING THE EXTERNAL KEYPAD’.

14. TEST VEND ALL SELECTIONS

See ‘USING THE EXTERNAL KEYPAD’.

6. HOW TO SET UP AND USE MACHINE FACILITIES

The Encore range of beverage machines is able to offer additional facilities to meet customer's needs and requirements.

LCD ADVERTISING MODE – (Addresses 028 & 029)

To enter 'advertising' mode the LCD must display DOOR OPEN, at this point enter into 'service' mode. To enable the Advertising message to be displayed, set Address 029 to 01.

To enter a new text message enter into Address 028 then press 'cancel', then '*' and then the EX White key to put the cursor onto the first page. When in the 'advertising' mode enter any message of up to a maximum of 120 characters (2 pages of 3 lines, 20 characters per line).

The advertised message that has been programmed will be displayed following the standby message/s. The numerical keypad allows a multitude of characters to be used when in the 'Advertising' mode. Pressing a numerical key will display the following characters: -

Button	Character
1	1 A B C Ä % &
2	2 D E F Ë ? `
3	3 G H I Ï ; :
4	4 J K L £ $
5	5 M N O Ö . ,
6	6 P Q R ' ( )
7	7 S T U Ü + /
8	8 V W X = - *
9	9 Y Z \
0	0 <Space>

Each press of the numerical key will cycle through the individual characters. If a key is not pressed for 1 second the displayed character will be printed to the LCD.

Additional Keys: -
Press No-cup key - Moves left,
Press Jug key - Moves right.
Press Extra white or Whipped key toggles between pages 1 & 2.
Press "enter" key then '1' clears the current page.
Press "enter" key then '2' clears all pages.

Press the cancel key exits & always saves changes

AUTOMATIC POWER SAVING FACILITIES

'Power saving' mode.
During 'power saving' mode, the water temperature is reduced to the Sleep Temperature set in Address 116. This lower temperature is then maintained until 'power saving' mode is terminated, i.e. the 'boiler sleep' signal is switched off.
The objective of this mode is:

- To reduce power consumption, and
- To reduce lime scale formation.

There are two methods of initiating 'power saving' mode:–

a) PROGRAMMED WORKING DAY – Address 47

The VMC can be programmed with the known working shift of any particular location by day, the shift start time and the duration. Upon the shift start time, the operating temperature is raised to its normal setting. All machines leave the factory with this facility programmed as inactive to accommodate locations, which permanently operate for 24 hours. This may need to be altered to suit particular locations.

b) AUTOMATIC POWER SAVING - Address 117

The VMC can be programmed with a delay time (in hours) after which, if the machine has not been used, the VMC will switch into 'power saving' mode. All machines that leave the factory have this facility programmed as inactive to Accommodate 24hr a day sites.

The objective of automatic power saving is to account for periods of time when perhaps the machine would normally be in use, but is not – for example Bank Holidays or shut-down periods of particular locations.

To terminate either of the above 'power saving' modes, when set, the user has simply to select a hot drink; the normal operating temperature will then be resumed. The external display will countdown from 250 seconds after which the machine will be ready to dispense hot drinks.

The automatic 'power saving' mode will also be terminated by the start time of a programmed working day.

NOTE:

Normal operation of cold drink selections is not affected by the 'power saving' mode.

SET-UP FREE VEND/SUPPLEMENTARY DISCOUNT PERIODS – Addresses 250 to 255

Up to six free vend OR six supplementary discount periods may be programmed although the two are mutually exclusive, i.e. if any free vend periods are programmed, the discount feature cannot be used, and vice versa.

FREE VEND PERIODS

During these periods, all drinks may be free vended, or, if required, a limited selection of drinks may be free vended.
The drinks available during a timed free vend period are determined by the "Set-up selection range".

Each active selection can be programmed to:-
a) Timed free vend available.
b) Timed free vend not available.

The content of each selection Address for the above options will vary dependant on the drink type. Refer to "Set-up Selection Range".

At the start of a free vend period, the processor will respond with an audible tone of 1 second duration. If all active selections are being free vended, the external display standby message will change to read FREE. If, however, any selection is to remain as a pay vend, the external display standby messages will not change.

DISCOUNT (SUPPLEMENTARY) PERIODS

If discount periods are required, the programming for the relevant timed periods is identical to that for timed free vend periods. The value of the discount is then to be programmed within Address 258.

JUG FACILITY/OPERATION – Not available on Single Choice Models

When active, (see Jug Facility programming) the jug facility can be used in 2 ways:-

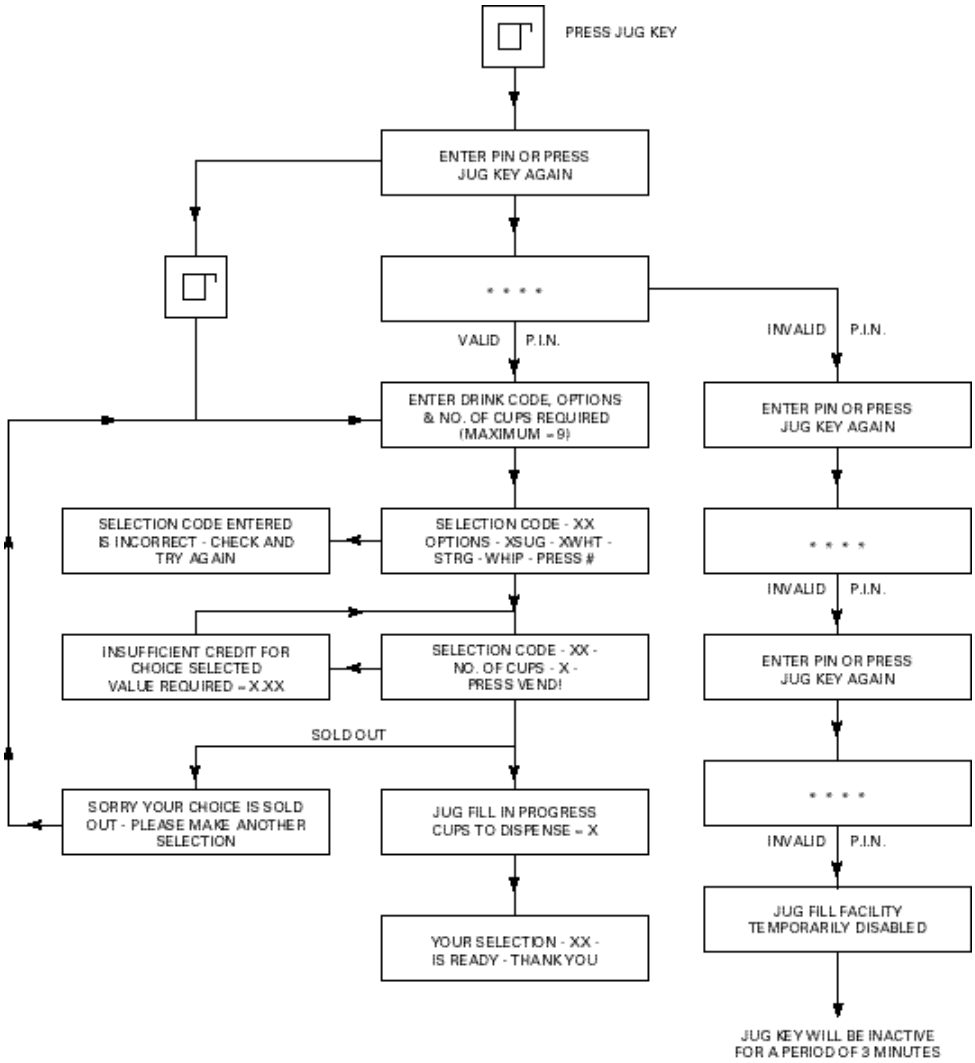
1. Press the ‘Jug’ key followed by a Personal Identification Number (PIN) to activate a 'free of charge' jug fill routine.
2. Pressing the ‘Jug’ key twice will activate a pay jug fill routine.

A maximum of six individual 4-digit PINs may be programmed within Addresses 238 to 243. Each PIN is individually audited for accounting purposes within audit report No. 1. To safeguard PINs, should 3 consecutive incorrect PINs be entered, the Jug key will become inactive for a 4-minute duration (PINs are not required for the jug facility if the machine is set to permanent free vend, or during a free vend period).

If required, a discount may be set-up for each drink selected during pay jug-fill routine, addresses 244 to 249. The value set in Address 260 (Jug discount) will be deducted from each vend requested.

See Flow Chart for jug fill operational routine and external display messages displayed. See also ‘Jug Facilities’ in ‘Programming’.

JUG FILL OPERATION FLOW CHART



NO-CUP FACILITY

The No-Cup key may be pressed before or during the selection of any product to facilitate use of the Customer's own cup/mug. If desired, a discount feature for this facility may be programmed within Address 259 (Discount for No-Cup option) - see Programming Commands section.
If there is not a requirement for the 'No-Cup' facility, the key may be disabled by programming Address 93 (No-Cup key) to 0.

SETTING UP THE SUMMER TIME SHIFT - Address 042

0 = British Summer Time inactive
1 = Automatic set up on the last Sunday of March/October

VEND KEY/OPERATION

The 'Vend' key may be programmed to be used in one of two ways:-
1. The 'Vend' key must be pressed to activate the vend cycle.
2. If the 'Vend' key is not pressed, following a 5-second time out, the vend cycle will automatically be activated.

See Address 48 in Programming Commands section for full details.

7. USING THE EXTERNAL KEYPAD

The Solo Encore keypad can be used to access and control the different service functions. When the vending machine door is open and the power is 'on', the LCD will display the message

****DOOR OPEN*****
***ENCORE* = *(*SOFTWARE)**

To enter the different modes of control (Flush, Audit, Test and Service mode) simply use the 'Cancel' key to scroll through each of the modes and the Vend key to select.

Press	**Mode Entered**
First	Flush Mode
Second	Audit Mode
Third	Test Mode
Fourth	Service Mode

****FLUSH MODE****

Caution: Hot water is dispensed during 'Flush' cycles. Take care to ensure the waste bucket is positioned beneath the dispense head and that hands are kept clear.

To enter 'Flush' mode, press the 'Cancel' button once. When in 'Flush' mode the keypad will become active allowing the user to initiate flush cycles. Pressing the different keys will execute the following cycles:-

Key	**Function**
1	Flush water station 1 & whipper 1
2	Flush water station 2 & whipper 2
3	Flush water station 3 & whipper 3
4	Flush water station 4 & whipper 4
5	Flush Brewer 1 or Inst 2
6	Flush Bean to Cup
7	Cycles through the following actions:- 1st press Hot water flush 2nd press Still cold water flush 3rd press Carbonated water
9	Dispense arm
0	Cup drop
Cancel	Cancels the mode of operation and returns the machine to standby

Press '*' key followed by:

Flush Syrups	
Key 1	Flush syrup 1
Key 2	Flush syrup 2

Note: To flush the syrups on a single choice Solo Encore, enter flush mode, press the 'vend/shift' key (three stars will be displayed on the bottom right of the LCD), then press button 1 for syrup 1 or button 2 for syrup 2.

AUDIT MODE

To enter 'Audit' mode, press the 'Cancel' button twice.

AUDIT FACILITIES VIA THE EXTERNAL DISPLAY

Key	Function
1	All Tot = 000000 (Total vends taken)
	All Val = 000000 (Total cost of drinks)
(Second press key 1)	Still Tot = 000000 (Total cost of still water drinks)
	Carb Tot = 000000 (Total cost of carbonated drinks)
(Third press key 1)	Hot Tot = 000000 (Total cost of all Hot drinks)
	Cup Only = 000000 (Total cost of cup only vends)
(Fourth press key 1)	+Cup Tot = 000000 (Total cost of all vends with cup)

- Additional pressing of key 1 will display further audit breakdown –

2	Simm Audit
3	Audit facilities options – see below:

Note: Still, Carb, Hot, Cup Only and +Cup totals are only displayed when the selection is programmed as active.

AUDIT FACILITIES

The Audit reports available from your machine are:-

Audit 1 = Vend totals and cash totals.
Audit 2 = Settings for Addresses 1 - 817.
Audit 3 = Power interruptions, sold out events and out of order events.
Audit 9 = MDB Coin mechanism change tube levels and coin configuration
(See specimen copies of Audit 1 and 9 reports on following pages.)

Audit 1 report can be accessed via:-

1 = LCD display
2 = Westomatic printer
3 = SIMM card

To obtain audit reports via external display see above.
To obtain audit reports via a printer:

1. Switch machine off.
2. Connect the printer to the printer socket.
3. Switch machine on and wait for BLEEP response from controller.
4. Press keys '1', '2', '3' or '9'.
5. If Audit 2 is required enter '2' followed by the Address number at which the audit is to commence and press 'Vend/Accept' key.
6. When the print is complete, switch machine off and disconnect printer.

NOTE: To abort the report, press the 'Cancel' key. To clear the audit, in 'Service Mode' enter address 23 and press the vend key.

SPECIMEN AUDIT REPORT

---- ---- ---- ----- ----- Date of issue and Software number
Audit Report - No 0044 Increments on closing door after having taken an audit

Time: 14:32
Date: Mon 07/01/04 Time, date & location of print
Last Print: 05/01/04
Site Id: 123456

Door Open/Close

	Time	Date	
Open	09:18	05/04	Oldest open/close of machine door
Close	09:21	05/04	
Open	10:21	06/04	
Close	10:27	06/04	
Open	10:33	07/04	
Close	10:35	07/04	
Open	12:55	08/04	
Close	13.00	08/04	
Open	13:09	09/04	
Close	13.15	09/04	
Open	15:30	10/04	Latest open/close of machine door – the audit will record
Close	15:35	10/04	the last 15 door open/close events

Vend totals by type

	Total	Int	
			Total = Total number of vends, Int = Total number of vends since the last print taken
Pay	000929	0084	Total No. of drinks taken that are priced from 0p to 999p.
Free	000003	0000	Total No. of drinks taken from permanent free vend machines, or in programmed free vend periods and/or using free PIN periods.
Test	000002	0001	Total No. of drinks taken in ‘test’ mode.
Key	000000	0000	Total No. of drinks taken using a free vend keyswitch
Card	000000	0000	Total No. of drinks taken using single price debit card (e.g.Digicard)
.JPIN	000000	0000	Total No. of drinks taken using Jug PINs.
Gtot	000000	0000	Grand Total of all drinks

Sales Value Summary
Cash Taken Value

	Total	Int	
Std	0095.34	0008.34	Value of drinks purchased at standard selling price
Jug	0000.00	0000.00	Value of drinks dispensed in jug, including standard pay and supplementary discount and jug discount if discounted price is greater than 0p. If 0p, jug vends are treated as free vends with No Cup.

Cash In Box

Total	Int
0056.60	0056.60

On Account

Free	0000.00	0000.00	Value of drinks (at standard selling price) that have been Free vended, either by permanent free or free vend periods, or free vend by PIN, and/or drinks at 0p, and if discounted to 0p.
Key	000000	0000	Value of drinks taken (at standard selling price) when a free vend keyswitch is switched on.
Card	0000.00	0000.00	Value of drinks (at standard selling price) taken using single price debit card (e.g. Digicard).
Test	000002	0001	Total No. of drinks taken in 'test' mode.
PnJ1	0000.00	0000.00	
PnJ2	0000.00	0000.00	
PnJ3	0000.00	0000.00	
PnJ4	0000.00	0000.00	
PnJ5	0000.00	0000.00	
PnJ6	0000.00	0000.00	
TotJ	0000.00	0000.00	Total value of jug vends taken by PIN (at standard selling price), i.e. column totals.

Discount Total			
	Total	Int	
Tot	0000.00	0000.00	Total value of discount deducted for No Cup discount Supplementary discount and Jug discount where the drink price was discounted to greater than 0p. If a drink is discounted to 0p it is treated and accounted for as a free vend. NB: Only 1 discount mode can be activated at any one time.

Drink Prices	
Ins1	0.12
Espr	0.12
Choc	0.10
Crea	0.10
EChoc	0.10
Soup	0.12
HWat	0.10
Stil	0.12
Carb	0.15
Sy1s	0.10
Sy2s	0.10
Sy1c	0.10
Sy2c	0.10

Discount Values	
Supp	0.00
Ncup	0.00
Jug	0.00

Drink Totals			
Hot			
Ins1	000008	0001	
Espr	000000	0000	
Choc	000000	0000	
Crea	000037	0014	
EChoc	000001	0000	Total numbers of drink types taken in any mode of
Soup	000045	0018	operation, i.e. Pay, Free, Supplementary

HWat	000017	0009	discount, Card, Key, Jug and Test.

Cold

Stil	000010	0000	- Cold water.
Carb	000035	0005	- Carbonated water.
Sy1s	000025	0005	
Sy2s	000010	0010	
Sy1c	000010	0010	
Sy2c	000010	0010	

Other Extras

Ncup	000010	0000	Total No. of drinks taken when pressing 'No Cup' key and All jug vends taken in pay mode even if discounted to 0p, and test vends taken with no cup.
StRg	000004	0002	
ExSu	000001	0000	
ExWh	000022	0008	
Whip	000052	0018	Total No. of options selected.
Cups	000000	0000	

JUG TOTALS BY PIN

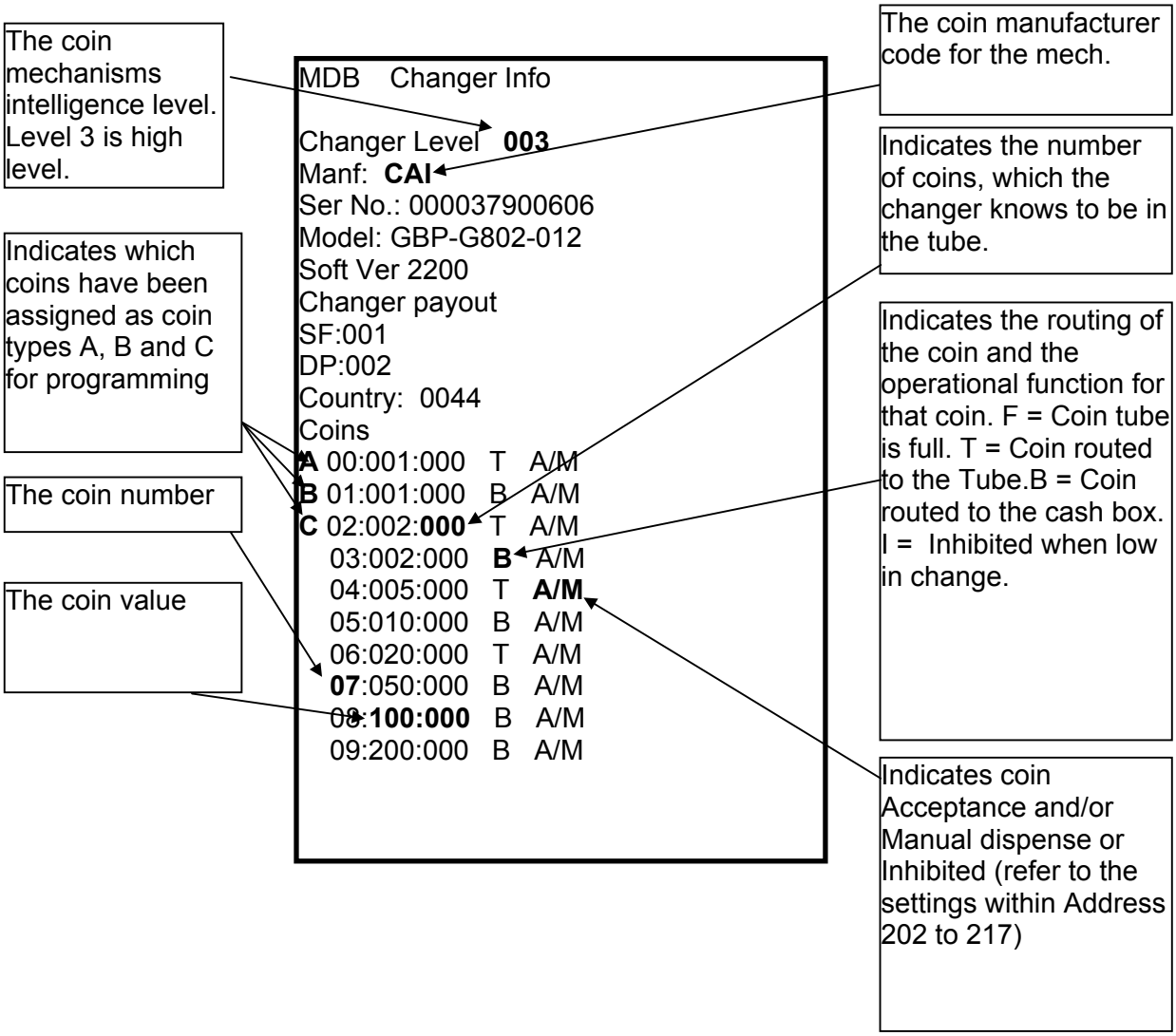
PinJ1	000001	0000	
PinJ2	000000	0000	
PinJ3	000000	0000	Total No. of jug vends taken using the 6 available PINs.
PinJ4	000000	0000	
PinJ5	000000	0000	
PinJ6	000000	0000	
TOTJ	000000	0000...	Total of above columns.

Discount

	Total	Int
Supp	000000	0000

SPECIMEN AUDIT PRINT 9

All the relevant coin information set on the machine and within the MDB coin mechanism can be viewed by printing an Audit 9 report.



TEST MODE

To enter ‘Test’ mode, press the ‘Cancel’ button three times. In ‘Test’ mode the LCD will display:

TEST SELECTION
MAKE YOUR DRINK
SELECTION

Indicating that ‘Test’ mode has been accessed.

In ‘Test’ mode, entering the appropriate selection code and options, followed by the ‘Vend’ key, will dispense the relevant drink. In ‘test’ mode, no credit is required.

Pressing the ‘Cancel’ key will cancel the mode of control and advance to ‘Service Mode’.

8. PROGRAMMING

SERVICE MODE

When you receive your machine no security access is necessary to undertake any programming tasks. However, a facility exists to incorporate a security code to inhibit unauthorised access to 'Service' mode - the mode necessary for programming. Refer to Programming Commands section - Address 007.

TO ACCESS SERVICE MODE - WITHOUT SECURITY ACCESS

1. Switch on machine
2. Press the 'Cancel' key four times. The external display will show . . .

```
** SERVICE MODE **
ADDRESS = . . .
DATA      =
TIME
```

NOTE:

If a security code has been set-up and the 'service' mode key is pressed without first entering the security number, a two-second error bleep will be sounded by the controller.

TO ACCESS SERVICE MODE - REQUIRING SECURITY ACCESS

1. Switch on machine.
2. Enter your six-digit security code number.
3. Press the 'Vend' key.
4. Press the 'Cancel' key four times to access 'service' mode.

PROGRAMMING PROCEDURE

To set the price of Instant 1:

In '**Service**' mode:-

1. Type Address e.g. 471 – Display will display current price
2. Press the 'Vend' key – Price data will flash
3. Type new address parameter e.g. 20
4. Press the 'Vend' key
5. Press the 'Cancel' key twice to display

```
SAVING SETTING
 PLEASE WAIT
```

9. MACHINE SET-UP ADDRESSES

ADD	FUNCTION	DEFAULT	COMMENT
	GENERAL SETTINGS		
1	MACHINE TYPE	3	1 = ENCORE INSTANT - SINGLE CHOICE 2 = ENCORE FB - SINGLE CHOICE 3 = ENCORE LX INSTANT - MULTI CHOICE 4 = ENCORE LX FB - MULTI CHOICE 5 = ENCORE LX BTC - MULTI CHOICE 6 = ENCORE LX FB BTC - MULTI CHOICE 7 = ENCORE ACCOLADE FB 8 = ENCORE ACCOLADE INST
3	LANGUAGE	0	0 = ENGLISH 1 = FINNISH 2 = GERMAN 3 = FLEMISH / BELGIAN 4 = FLEMISH 5 = BELGIAN 6 = DUTCH 7 = SPANISH 8 = FRENCH 9 = NORWEGIAN 10= RUSSIAN
11	LAST DRINK SELECTION	N/A	
12	SINGLE CHOICE KEYPAD LAYOUT	0	0 = ORIGINAL ISSUE 001 1 = CURRENT ISSUE 002
20	LOAD FIRMWARE	N/A	
21	LOAD/READ CONFIGURATION	N/A	
22	LOAD/READ AUDIT	N/A	
23	CLEAR ALL AUDITS	N/A	
24	DISPLAY FAULT LOG	N/A	
25	CLEAR FAULT LOG	N/A	
27	FORCE DOOR OPEN	N/A	
28	ENABLE ADVERT EDITOR	0	SCROLL TO SELECT 0 = DISABLE / 1 = ENABLE
29	ENABLE ADVERTISING DISPLAY	0	
30	FACTORY DEFAULTS	N/A	
31	BOARD DEFAULTS	N/A	
32	TRIAC TESTING	N/A	
40	MDB RECIEVER TIMEOUT	100	
41	ENABLE IRDA INTERFACE	0	0 = DISABLED 1 = ENABLED 2 = DDCMP VIA RS232 PORT (TELEMETRY)
42	ENABLE BRITISH SUMMERTIME	1	0 = DISABLED 1 = ENABLED
43	MASTER WATER VALVE TIMEOUT	180	TIME IN SECONDS
44	COLD WATER SYSTEM	0	0 = CARBONATOR (WITH ICE BATH) 1 = DGB CARBONATOR 2 = ESCOWA CHILLER UNIT 3 = NO COLD WATER VALVE
46	DISPLAY EXTRAS MODE	1	0 = NOW PRESS VEND 1 = BAR TYPE 2 = 4 CHARACTER NAME 3 = 4 CHARACTER "WHIP" ONLY
	SET WORKING DAYS - DAYS	1234567	0 = ALL DAYS, 1-7 = SELECTIVE DAYS
47	START TIME	00:00	
	DURATION	24	

ADD	FUNCTION	DEFAULT	COMMENT
48	VEND DELAY	5	TIME IN SECONDS, 0 = AUTO VEND FEATURE DISABLED.
51	JUG AVAILABLE	0	0 = DISABLED 1 = ENABLED
52	MAX NUMBER CUPS PER JUG	7	
53	CHANGE WATER FILTER WARNING	20000	0 - DISABLED
66	UV FILTER SETUP	0	0 = DISABLED, 1 = ENABLED
67	UV FILTER INHIBIT	20000	0 - DISABLED
75	M.D.H. ARM MOVMENT STALL TIMEOUT	5	MOVING DISPENSE HEAD, ARM MOVMENT STALL TIMEOUT
76	M.D.H. ARM HOME START DELAY	1	MOVING DISPENSE HEAD, DELAY TIME AFTER VEND
77	M.D.H. NOMINATED CONTROL TRIAC	0	MOVING DISPENSE HEAD, OUTPUT: 0 = OFF 1 = 22 - HOT WATER OR MDH *(OUTPUT SKT 11, PIN 12)* 2 = 28 - SYRUP 2 OR MDH *(OUTPUT SKT 12, PIN 6)* 3 = 30 - GRINDER PUMP OR MDH *(OUTPUT SKT 12, PIN 8)*
78	M.D.H. SENSOR SWITCH INVERT	1	MOVING DISPENSE HEAD, 0= NC, 1 = NO
	CUP SETTINGS		
90	CUP SETUP	1	0 = PERMANENT NO CUP 1 = CUP DROP ACTIVE
91	SET UP CUP SENSOR	0	0 = DISABLED 1 = ENABLED & WILL WARN OF NO CUP DETECTION & WILL NOT VEND A DRINK 2 = ENABLED & WILL WARN OF NO CUP DETECTION, WILL VEND A DINK ON THE SECOND VEND PRESS WITHIN 10 SECONDS
92	CUP SENSOR OPERATION	0	0 = DISABLED, VEND WILL NOT ABORT 1 = ENABLED WILL ABORT VEND IMMEDIATELY. WILL EMPTY BREWER IF FRESHBREW DRINK 2 = ENABLED, WILL ABORT IMMEDIATELY, THEN RINSE THE BOWLS FOR 2 SECONDS, ALSO EMPTY THE BREWER IF A FRESHBREW DRINK
93	NO CUP KEY DISABLE	1	0 = CUP DISABLED 1 = CUP ENABLED 2 = AUTO NO CUP DETECTION
94	DEFAULT CUP SIZE	0	0 = REGULAR, 1 = LARGE
95	FB DRINK QUICK VEND ENABLE	0	0 = DISABLED, 1 = ENABLED
96	BTC DRINK QUICK VEND ENABLE	0	0 = DISABLED, 1 = ENABLED
98	MAX BOWL RINSE TIME	2.0	
100	CAROUSEL TIMEOUT	120	
101	PEELER MOTOR - TIMEOUT	9.0	
102	PEELER CUP EMPTY LEVEL	3	SETS THE LEVEL OF CUPS REMAINING IN THE PEELER AFTER THE CAROUSEL START TO LOAD, BEFORE VENDS ARE INHIBITED
	BOILER SETTINGS		
115	BOILER OPERATING TEMPERATURE	80	BOILER NORMAL TEMPERATURE SETTING
116	BOILER SLEEP TEMPERATURE	60	BOILER SLEEP TEMPERATURE SETTING
117	AUTO SLEEP DELAY	0	INACTIVITY TIME AFTER WHICH THE BOILER GOES TO SLEEP.
118	BOILER TEMPERATURE CURRENT READING	N/A	*READ ONLY*
119	BOILER TEMPERATURE OVERFLOW READING	N/A	*READ ONLY*
120	BOILER TEMPERATURE MAXIMUM READING	N/A	*READ ONLY*
121	BOILER FILL TIMEOUT	180	
122	BOILER TEMP EXCEED TIMEOUT	120	
123	BOILER HEAT ON TIMEOUT	900	
124	BOILER CALIBRATION	N/A	

ADD	FUNCTION	DEFAULT	COMMENT
125	RESET BOILER CALIBRATION	N/A	
126	BOILER TEMPERATURE OVERFLOW TRIP TEMP	N/A	*READ ONLY*
	BREWER 1 SETTINGS		
130	BREWER 1 ANTI SPLUTTER DELAY	2.0	
131	INVERT BREWER 1 HOME SWITCH SIGNAL	1	0 = NORMAL 1 = INVERTED
132	BREWER 1 PISTON SEAL/HOME TIMEOUT	15	
133	FRESHBREW SETTINGS - BREWER PULSE	0.5	PISTON PULSED DURING THE PUSH SEQUENCE
	GRINDER SETTINGS		
140	GRINDER DOSE SWITCH TIMEOUT	0	18 SECONDS RECOMMENDED
141	WATER ROUTING SETUP	2	0 = NORMAL BTC WATER ROUTING (DISABLED) 1 = BTC WATER ROUTING ALL MAIN BTC SELECTIONS 2 = ESPRESSO ONLY BTC WATER ROUTING. NORMAL ROUTING TO ALL OTHER BTC DRINKS
142	BLACK ONLY % SCALE FACTOR	100	
143	BLACK + SUGAR % SCALE FACTOR	100	
144	WHITE ONLY % SCALE FACTOR	100	
145	GRINDER PISTON SEAL/HOME TIMEOUT	15	
146	RECIRC WATER FOR ESPRESSO	10.0	
147	RECIRC WATER FOR ALL OTHER BTC	10.0	
148	RECIRC VALVE INVERT TRIAC OUTPUT	0	0 = NORMAL, 1 = RECIRC VALVE TRIAC LOGIC INVERTED
	SINGLE SELECTION - BUTTONS		
160	SINGLE SELECTION BUTTON 1 DRINK CODE	12	
161	SINGLE SELECTION BUTTON 2 DRINK CODE	13	
162	SINGLE SELECTION BUTTON 3 DRINK CODE	10	
163	SINGLE SELECTION BUTTON 4 DRINK CODE	11	
164	SINGLE SELECTION BUTTON 5 DRINK CODE	22	
165	SINGLE SELECTION BUTTON 6 DRINK CODE	23	
166	SINGLE SELECTION BUTTON 7 DRINK CODE	20	
167	SINGLE SELECTION BUTTON 8 DRINK CODE	21	
168	SINGLE SELECTION BUTTON 9 DRINK CODE	75	
169	SINGLE SELECTION BUTTON 10 DRINK CODE	73	
170	SINGLE SELECTION BUTTON 11 DRINK CODE	70	
171	SINGLE SELECTION BUTTON 12 DRINK CODE	80	
193	SINGLE SELECTION - PIN ACCESS BUTTON	0	
194	SINGLE SELECTION - PIN ACCESS MAPPING	1	

ADD	FUNCTION	DEFAULT	COMMENT
	PAYMENT SETTINGS		
200	PAYMENT SYSTEM	5	0 = PERMANENT FREE VEND (NO PAYMENT SYSTEM) 3 = SINGLE PRICE CARD SYSTEM 4 = MDB CASHLESS ONLY WITH CARD INSERTION REQUIRED FOR ALL DRINK INCLUDING ZERO PRICED 5 = MDB PAYMENT SYSTEM
201	COIN SET	0	0 = 1,2,5,10,20,50P & £1COINS 1 = 1,2,5,10,20,50P, £1 & £2 COINS. 2 = 5,10,20,50P & £1 COINS 3 = ENTER CREDIT CARD 5 = 5,10,20,50CT & 1 EURO COINS 6 = 5,10,20,50CT & 1 & 2 EURO COINS 7 = $1 ONLY COINAGE 8 = $1 & $2 COINAGE
202	CHANGER COIN TYPE 0	2	**COIN TYPES** 00 = INHIBIT COIN ACCEPTANCE AND MANUAL DISPENSE 01 = COIN ACCEPTANCE, NO MANUAL DISPENSE. 11 = COIN ACCEPTANCE, NO MANUAL DISPENSE BUT INHIBIT WHEN IN LOW CHANGE. 02 = COIN ACCEPTANCE, AND MANUAL DISPENSE. 03 = TOKEN ACCEPTANCE 12 = COIN ACCEPTANCE, AND MANUAL DISPENSE BUT INHIBIT WHEN IN LOW CHANGE. **BILL TYPES** 00 = DISABLED 01 = ACCEPT BUT NO MANUAL ESCROW 02 = ACCEPT WITH MANUAL ESCROW 11 = ACCEPT BUT NO MANUAL ESCROW, DISABLED IF LOW CHANGE 12 = ACCEPT MANUAL ESCROW, DISABLED IF LOW CHANGE
203	CHANGER COIN TYPE 1	2	
204	CHANGER COIN TYPE 2	2	
205	CHANGER COIN TYPE 3	2	
206	CHANGER COIN TYPE 4	2	
207	CHANGER COIN TYPE 5	2	
208	CHANGER COIN TYPE 6	2	
209	CHANGER COIN TYPE 7	2	
210	CHANGER COIN TYPE 8	2	
211	CHANGER COIN TYPE 9	2	
212	CHANGER COIN TYPE 10	2	
213	CHANGER COIN TYPE 11	2	
214	CHANGER COIN TYPE 12	2	
215	CHANGER COIN TYPE 13	2	
216	CHANGER COIN TYPE 14	2	
217	CHANGER COIN TYPE 15	2	
218	TUBE A ASSIGNMENTS	0	00 = COIN A, THE LOWEST COIN DENOMINATION: 01 = COIN B, THE SECOND LOWEST COIN DENOMINATION: 02 = COIN C, THE THIRD LOWEST COIN DENOMINATION; 03 = THE FOURTH LOWEST COIN DENOMINATION: WHICH HAS BEEN ASSIGNED TO A TUBE BY THE COIN MECHANISM.
219	TUBE B ASSIGNMENTS	1	
220	TUBE C ASSIGNMENTS	2	
221	TUBE A LOW SETTING	3	NUMBER COINS IN TUBE = LOW CHANGE
222	TUBE B LOW SETTING	3	NUMBER COINS IN TUBE = LOW CHANGE
223	TUBE C LOW SETTING	3	NUMBER COINS IN TUBE = LOW CHANGE
224	CHANGER EXACT CHANGE EQUATION	5	TUBE LOW CONDITIONS FOR EXACT CHANGE 0 = A OR B & C 1 = A & B & C 2 = A & B 3 = A & B OR C 4 = A 5 = A OR B 6 = A & B OR C 7 = A & C 8 = A OR C 9 = B & C 10 = B 11 = B OR C 12 = C

ADD	FUNCTION	DEFAULT	COMMENT
225	EXACT CHANGE MESSAGE DISPLAY	0	0 =ALTERNATE, 1 = PERMANENT WHEN APPLICABLE.
226	MAXIMUM CREDIT	200	MAXIMUM CREDIT ALLOWED
227	MAXIMUM PAYOUT	200	MAXIMUM CHANGE PAYOUT PERMITTED
228	SINGLE/MULTI VEND	0	0 = SINGLE VEND, 1 = MULTI-VEND
229	FORCE VEND	0	0 = PERMITS CHANGE WITHOUT VEND 1 = INHIBIT CHANGE WITHOUT VEND
230	ESCROW (INSTANT CREDIT TO CARD)	0	0 = DISABLED, 1 = CREDIT CARD WITH CASH INSTANTLY
231	IMMEDIATE CUP DEDUCTION	0	0 = DISABLED, 1 = DEDUCT COST OF CUP AS SOON AS IT IS DISPENSED
236	USE PIN ALWAYS FOR JUG VEND	0	0 = PIN NOT REQUIRED 1 = PIN REQUIRED, ONLY APPLICABLE WHEN 200 = 0 (FREE VEND)
237	PIN FREE VEND PERIOD	0	0 = PIN DISABLED, 1 = 30 SECS, 2 = 60 SECS ETC
238	FREE VEND PIN 1	0	0 = INACTIVE
239	FREE VEND PIN 2	0	0 = INACTIVE
240	FREE VEND PIN 3	0	0 = INACTIVE
241	FREE VEND PIN 4	0	0 = INACTIVE
242	FREE VEND PIN 5	0	0 = INACTIVE
243	FREE VEND PIN 6	0	0 = INACTIVE
244	DISCOUNT VEND PIN 1	0	0 = INACTIVE
245	DISCOUNT VEND PIN 2	0	0 = INACTIVE
246	DISCOUNT VEND PIN 3	0	0 = INACTIVE
247	DISCOUNT. VEND PIN 4	0	0 = INACTIVE
248	DISCOUNT VEND PIN 5	0	0 = INACTIVE
249	DISCOUNT. VEND PIN 6	0	0 = INACTIVE
250	FREE. VEND PERIOD 1	0 00:00 00:00	0 = ALL DAYS 1-7 = SELECTIVE DAYS START TIME
251	FREE. VEND PERIOD 2	0 00:00 00:00	0 = ALL DAYS 1-7 = SELECTIVE DAYS START TIME
252	FREE. VEND PERIOD 3	0 00:00 00:00	0 = ALL DAYS 1-7 = SELECTIVE DAYS START TIME
253	FREE. VEND PERIOD 4	0 00:00 00:00	0 = ALL DAYS 1-7 = SELECTIVE DAYS START TIME
254	FREE. VEND PERIOD 5	0 00:00 00:00	0 = ALL DAYS 1-7 = SELECTIVE DAYS START TIME
255	FREE. VEND PERIOD 6	0 00:00 00:00	0 = ALL DAYS 1-7 = SELECTIVE DAYS START TIME
256		0	0 = DISABLED, 1 = ENABLED
257		2	
258	DISCOUNT FOR SUPP. PERIOD	0.00	DISCOUNT FOR SUPPLEMENTARY PERIOD
259	NO CUP DISCOUNT	0.00	0 = DISABLED
260	JUG DISCOUNT	0.00	
262	STRONG DRINK PRICE INCREASE	0.00	
263	EXTRA WHITE PRICE INCREASE	0.00	
264	EXTRA SUGAR PRICE INCREASE	0.00	
265	CUP & VEND AUDIT MODE	0	0 = ORIGINAL DISCOUNTED NO CUP AUDIT & PRICING 1 = NEW CUP CHARGEABLE AUDIT & PRICING 2 = ORIGINAL DISCOUNTED NO CUP AUDIT & PRICING, BUT WITH DISCOUNT DURING TIMED FREE VEND 3 = NEW CUP CHARGEABLE AUDIT & PRICING, BUT WITH DISCOUNT DURING TIMED FREE VEND (ALSO SEE ADDRESS 259)

ADD	FUNCTION	DEFAULT	COMMENT
	FLUSH SETTINGS		
340	INSTANTS - WATER	5.0	
341	INSTANTS - WHIPPER	3.0	
342	BREWER - WATER	5.0	
343	BREWER - WHIPPER	3.0	
344	BREWER - BREW TIME	1.0	
345	BREWER - PISTON TIME	2.0	
346	GRINDER - WATER	22.0	
347	GRINDER - HOME DELAY	3.0	
348	GRINDER - WHIPPER	0.0	
349	HOT/COLD - WATER	5.0	
350	SYRUPS	5.0	

10. PROGRAMMING COMMANDS

This section explains each of the programming Addresses. The Addresses are in numerical order. Use the Address list in the previous section to identify which Address you require. Use this section to find explanations and instructions on each of the Addresses. See Section '7. PROGRAMMING' to access 'service' mode,

Note:

When all programming parameters have been set, press the 'Cancel' key to save changes. The LCD will display 'SAVING SETTINGS PLEASE WAIT….'

MACHINE TYPE – Address 1

This address sets the configuration of the machine, it is important to ensure that this address relates to the physical configuration of the machine to ensure trouble free vending.

1 = Encore Instant – Single Choice
2 = Encore FB – Single Choice
3 = Encore LX Instant – Multi Choice
4 = Encore LX FB – Multi Choice
5 = Encore LX BTC – Multi Choice
6 = Encore LX FB BTC – Multi Choice
7 = Encore Accolade FB
8 = Encore Accolade INST

LANGUAGE – Address 3

The content of this Address determines the language of messages displayed via the LCD.

0 = English
1 = Finnish
2 = German
3 = Flemish/Belgian
4 = Flemish
5 = Belgian
6 = Dutch
7 = Spanish
8 = French
9 = Norwegian
10 = Russian

REAL TIME CLOCK – Address 4

Example: To alter the time and date on the LCD to 3pm November 3:

Enter 'Service' mode:

1. Enter address 004 – the address to change the time and date
2. Press the 'Vend' key
3. Enter the current time, '15.00'
4. Press the 'Vend' key

REAL TIME CLOCK – Address 4 (Cont.)

5. Enter the date ’03.11.04’
6. Press the ‘Vend’ key

ENABLE CLOCK DISPLAY – Address 6

0 = Disabled
1 = Enabled

USER LEVEL SECURITY – Address 7

This address allows a security number to be entered to restrict access to ‘Service’ mode. To gain access to service mode when a security code has been enabled, enter the security code when in ‘DOOR OPEN’ mode. This address maybe used in conjunction with address 256 – price address protect. If address 256 is set to 1, access to the price addresses is available without first entering the security code. To turn off the security code, enter ‘0’ in address 7.

NOTE:

Record security numbers in a safe place, loss of a security number will prevent access to ‘Service’ mode.

DISPLAY/SET SERIAL NUMBER – Address 8
DISPLAY/SET ASSET NUMBER – Address 9
DISPLAY/SET SITE NUMBER – Address 10

The Solo Encore allows for 3 individual machine specific ‘serial’ numbers to be recorded to identify what the configuration of the machine is (serial number), where the machine is located (asset number) and which area it is located in (site number).

NOTE:

The machines serial number may only be entered once; this number cannot be changed.

LAST DRINK SELECTION – Address 11

If, in the unlikely event a problem is encountered on your machine, this address maybe accessed to determine which drink sent the machine ‘out of order’.

ROTATE KEYPAD BUTTON SELECTION (SINGLE CHOICE) – Address 12

If, in the unlikely event the processor board needs to be replaced on a single choice model, the replacement board (factory default is multi-choice) will need to be configured for the single choice keypad, set value to 1 to enable correct button mapping. Note: Address 1 will have to be set to a single choice option prior to changing the value in this address.

LOAD/READ CONFIGURATION – Address 21

7. Open door and operate door switch (power up)
8. Insert SIMM Card
9. Press the ‘Cancel’ button four times to enter “Service Mode”
10. Enter address 021 and press enter (Vend button)
11. Use Whipped/Extra White button to scroll up and down

(Copy)

12. Select READ CONFIG and press enter (Vend button)
13. Accept default AUTO SELECT file name by pressing enter again
14. Confirm the action by pressing Enter
15. Display shows READING…
16. When finished the display returns to the initial 021 setting
17. Operate door switch (power down)
18. Remove SIMM Card and Close door

(Clone) Follow same procedure except at 021 address…

6. Select LOAD CONFIG and press enter (Vend button)
7. Use scroll buttons (Whipped/Extra White) to pick the appropriate file to load into the machine
8. Press the 'Vend' key to accept and confirm action
9. Display shows WRITING …
10. When finished the display returns to the initial 021 setting

Use the 'Cancel' key to scroll back to 'DOOR OPEN' message to ensure new settings are saved to the CPU.

LOAD/READ AUDIT – Address 22

11. Open door and operate door switch (power up)
12. Insert SIMM Card
13. Press the 'Cancel' button four times to enter "Service Mode"
14. Enter address 022 and press enter (Vend button)
15. Use Whipped/Extra White button to scroll up and down

(Copy)

16. Select READ AUDIT and press enter (Vend button)
17. Accept default AUTO SELECT file name by pressing enter again
18. Confirm the action by pressing Enter
19. Display shows READING…
20. When finished the display returns to the initial 022 setting
21. Operate door switch (power down)
22. Remove SIMM Card and Close door

(Clone) Follow same procedure except at 022 address…

6. Select LOAD AUDIT and press enter (Vend button)
7. Use scroll buttons (Whipped/Extra White) to pick the appropriate file to load into the machine
8. Press the 'Vend' key to accept and confirm action
9. Display shows WRITING …
10. When finished the display returns to the initial 022 setting

Use the 'Cancel' key to scroll back to 'DOOR OPEN' message to ensure new settings are saved to the CPU.

CLEAR AUDIT – Address 23

This provision exists to zero all audit parameters (vend totals and cash values). Once executed the information cannot be retrieved.

To perform an audit reset:
Enter 'Service' mode:

1. Enter address 023
2. Press the 'Vend' key
3. The LCD will display 'accept/cancel'
4. Press the 'Vend' key to clear the audit or the cancel key to cancel the operation.

DISPLAY FAULT LOG – Address 24

Entering this address will display the last 99 error codes that have occurred on the machine. To remove unwanted error codes, a fault log clear (address 25) should be performed following any fault correction.

CLEAR FAULT LOG – Address 25

To remove unwanted error codes from the fault log:
Enter 'Service' mode:

1. Enter address 25
2. Press the 'Vend' key
3. The LCD will display 'accept/cancel'
4. Press the 'Vend' key to clear the audit or the cancel key to cancel the operation.

IRDA INTERFACE – Address 41

0 = Irda Interface off
1 = Irda Interface on
2 = DDCMP Via RS232 Port (Telemetry)

ENABLE SUMMERTIME – Address 42

0 = Manual set up using Extra white key
1 = Automatic set up on the last Sunday of March/October

To set manually:

1. 1. Enter Service mode,
2. Change the time and day if required,
3. Press the Extra White key to Enable BST,
4. Scroll back to 'Door Open' to Save.
5. Press 'Cancel' to SAVE. 'SAVE' will be flashing on the Display.

COLD WATER SYSTEM – Address 44

0 = Carbonator (with ice bath)
1 = DGB Carbonator
2 = ESCOWA Chiller Unit
3 = No Refrigerated Unit

DISPLAY EXTRAS – Address 46

Following a drink selection, the LCD is able to prompt the user for additional information on strength, sweetness and whether to whip the drink or not:

0 = Now Press Vend
1 = Bar Type
2 = 4 Character Name
3 = 4 Character “WHIP” Only

SET WORKING DAYS – Address 47

The VMC can be programmed with the known working shift of any particular location by day, the shift start time and the duration. Upon the shift start time, the operating temperature is raised to its normal setting. All machines leave the factory with this facility programmed as inactive to accommodate locations, which permanently operate for 24 hours. This may need to be altered to suit particular locations.

VEND KEY SET-UP – Address 48

To activate or de-activate automatic vend if Vend key not pushed within 5 second time out period:
0 = No time-out - ‘Vend’ key must be pressed.
1 = Automatic 5 second time-out.

JUG AVAILABLE – Address 51

0 = Not Available
1 = Available

MAX NUMBER CUPS PER JUG – Address 52

Maximum number of cups per jug selection = 7, this maybe altered accordingly.

CHANGE WATER FILTER WARNING – Address 53

This facility exists as a prompt to check the condition of the water filter (if fitted) upon completion of a pre-determined number of vends. The Address has a programmable range of 0-9999 (this must then be multiplied by x10). The facility is inactive if set to zero. A message of "FILTER" is displayed, at power-up only, on the external display upon completion of the total number of vends. The message will continue to be displayed for 5 seconds at power up only until an additional 1000 vends have been taken.

UV FILTER SETUP – Address 66

To enable or disable UV filter inhibit, Address 67
0 = Disabled
1 = Enabled

UV FILTER INHIBIT – Address 67

Sets the value for the number of vends allowed before the 'Change UV Lamp' is displayed, i.e. 20000 = 20,000 vends.
0 = Disabled

CUP SETUP – Address 90

0 = Permanent No Cup
1 = Cup Drop Active
2 = Hot Cups Only, No Cup for Cold Drinks

SETUP CUP SENSOR – Address 91

0 = Disabled
1 = Enabled & Will warn of no cup detection & will not vend a drink
2 = Enabled & will warn of no cup detection, will vend a drink on the second press of the 'Vend' key within 10 seconds

MOVING DISPENSE HEAD, ARM MOVMENT STALL TIMEOUT – Address 75

The time set within this address determines the delay period from the start of the vend before activating an alarm, error code 30, indicating the arm has stalled, jammed or failed to be detected by either switch.
5 = 5 Seconds (Default)

MOVING DISPENSE HEAD, DELAY TIME AFTER VEND – Address 76

This address sets a time delay after the vend has completed before allowing the arm to be returned to the 'home ' position.
1 = 1 Seconds (Default)

MOVING DISPENSE HEAD, NOMINATED CONTROL TRIAC – Address 77

0 = Off
1 = 22 (SKT 11-12 Output, reserved for Hot Water)
2 = 28 (SKT 12-6 Output, reserved for Syrup 2)
3 = 30 (SKT 12-8 Output, reserved for Grinder Pump)
(See connector outputs – Chapter 23)

MOVING DISPENSE HEAD, SENSOR SWITCH INVERT – Address 78

0 = NC - Normally Closed
1 = NO - Normally Open (Default)

CUP SENSOR OPERATION – Address 92

0 = Disabled, vend will not abort
1 = Enabled and will abort vend immediately. Will empty brewer if freshbrew drink has been taken
2 = Enabled, will abort vend immediately then rinse the bowls for 2 seconds. It will also empty the brewer is a freshbrew drink has been taken

NO CUP KEY DISABLED – Address 93

0 = Disabled
1 = Cup Enabled
2 = Automatic No Cup Detection

DEFAULT CUP SIZE – Address 94

The Solo Encore default throw times allow the machine to be set-up to deliver either 7oz or 9oz drinks.

0 = Regular 7oz
1 = Large 9oz

FB DRINK QUICK VEND – Address 95

Setting this address to '1' will enable Freshbrew vends to be dispensed 3 seconds faster by commencing the brewer cycle at the time of 'Cup Drop", as opposed to "Cup Delivery". However, should a cup 'jam' condition be experienced, credit (when applicable) will be deducted and the brewer will continue to dispense the selected product. Setting this address to '0' will disable the quick vend option.

BTC DRINK QUICK VEND – Address 96

Setting this address to '1' will enable Bean to Cup vends to be dispensed 3 seconds faster by commencing the grind cycle at the time of 'Cup Drop", as opposed to "Cup Delivery". However, should a cup 'jam' condition be experienced, credit (when applicable) will be deducted and the brewer will continue to dispense the selected product. Setting this address to '0' will disable the quick vend option.

MAX BOWL RINSE TIME – Address 98

If the cup sensor (address 92) is activated and a cup is removed during a vend cycle, the mixing bowl will rinse the remaining ingredients for the duration set within this address.

BOILER OPERATING TEMPERATURE – Address 115

Provides an indication of the water temperature at the dispense position into the mixing bowl. It is recommended that the contents of this Address should remain at the default setting of 80^{o}C for Instant machines, 85^{o}C for Freshbrew machines and 92^{o}C for Bean to Cup.

BOILER SLEEP TEMPERATURE – Address 116

It is recommended that the contents of this Address should remain at the default setting and should only be altered if advised to do so by the machine supplier.

AUTO SLEEP DELAY – Address 117

This is the amount of time, set in hours, before the boiler will go into 'sleep' mode (power save!) following a vend cycle.

BOILER TEMPERATURE READING – Address 118

This address displays the temperature of the boiler.

BOILER TEMPERATURE OVERFLOW READING – Address 119

If the Solo Encore boiler overfills and an error code '57' is displayed, this address will display the actual temperature of the water that has passed through the overflow pipe. This will help in determining weather the fault had been caused by the boiler overheating, the machine being tilted, or the boiler switches not registering when the boiler should be full.

BOILER TEMPERATURE MAXIMUM READING – Address 120

This address will display the highest temperature that the boiler has reached prior to an error code being displayed and should be used in conjunction with address 119.

BOILER FILL TIMEOUT – Address 121

The time set within this address determines the amount of time the machine 'calls' for water before switching off if the boiler has not registered as being full.

BOILER TEMPERATURE EXCEED TIMEOUT – Address 122

The time set within this address determines how long the boiler can exceed the operating temperature before highlighting a fault.

Note: The boiler will fluctuate around 2^{o}C of the operating temperature.

BOILER HEAT ON TIMEOUT – Address 123

The time set within this address determines how long the processor will sustain an output to the boiler relay before switching it 'off' if the boiler has not reached its operating temperature.

BOILER TEMPERATURE OVERFLOW TRIP TEMPERATURE – Address 126

Displays the overflow temperature at time of peak during an Error 57 event.

FRESHBREW ANTI SPLUTTER DELAY – Address 130

The downward stroke of the brewer piston places the brewer cylinder under pressure. To relieve this pressure, preventing the last of the brewed liquid splashing out of the mixing bowl or cup, the brewer motor is stopped for 1.5 seconds. During this pause the remaining liquid is dispensed into the mixing bowl or cup by means of the 'relieving pressure'. This stop position is the 'Anti-Splutter Delay'.

Example: To adjust the ASD timing of Brewer 1 from 3.5 to 3.2 seconds.

Enter 'Service' mode:

1. Enter address '130' - the Address number of Freshbrew 1 ASD.
2. Press the 'Vend' key - the current delay time will be displayed - in this example 3.5.
3. Enter '3.2' - the new required time of 3.2 seconds.
4. Press the 'Vend' key to confirm the new setting.

NOTE: Refer to 'Fresh Brew - vend sequence' flow chart on page 59 for a full understanding.

FRESHBREW SETTINGS – BREWER PULSE – Address 133

This feature allows the piston to be pulsed during the 'push' sequence of the freshbrew brewer.

Data [1] = Pulse On time in 0.1seconds (0.5sec's)
Data [2] = Pulse Off time in 0.1 seconds (1.0sec's)
(The piston pulse is enabled as default)

Example: PISTON PULSE ENABLED
With the piston pulse enabled the recommended 'Piston Push times' are as follows:

FB Tea/ Coffee With Piston Pulse Enabled Address 694	Black	Black Sugar	White	White & Sugar
7oz Piston Push time in Sec's	9.2	8.0	7.8	7.0
9oz Piston Push time in Sec's	10.8	9.2	9.1	9.0

Note:

Minor adjustments may be required to the settings listed above according the flow rate for the brewer valve.
If at the end of the piston push liquid is still being dispensed increase the piston push time for each selection 0.2sec – 0.5sec until the 'splutter' is reduced.
If during the piston push air is dispensed reduce the piston push time for each selection 0.2sec – 0.5sec until the 'splutter' is reduced.

GRINDER DOSING SWITCH – Address 140

The time set within this address determines how long the grinder will grind the beans into the dosing switch. If the dosing switch has not registered as being full before this time elapses, the LCD will register the beans as being sold out.

WATER ROUTING SETUP – Address 141

0 = Normal BTC Water Routing (Disabled)
1 = BTC Water Routing, All main selections
2 = Espresso Only BTC Water Routing, Normal routing to all other BTC drinks

See section 13 'Setting the fluid levels for 'Continental Style Coffee'

Addresses 142, 143, 144, 146, 147 and 148

See section 13 'Setting the fluid levels for 'Continental Style Coffee'

SINGLE SELECTION BUTTON DRINK CODE – Addresses 160 –171

There are 12 configurable buttons on the Solo Encore single choice model and each button maybe programmed with a specific drink code, for a full list of drink codes and drink types, refer to the 'DRINK SELECTION CODES' section.

Example: To set button 1, the upper left button to deliver a black tea with sugar:

Enter 'Service' mode
Enter address '160', the address for button 1
Press the 'Vend' key
Enter '51' the selection code for freshbrew tea, black with sugar
Press the 'Vend' key

PAYMENT SYSTEM – Address 200

0 = Permanent Free Vend (No payment system)
3 = Single Price Card System
4 = MDB Cashless Only (with card insertion – all drink selections)
5 = MDB Payment System

If setting to 'Permanent Free Vend' (0), the selling prices do not need to be set to zero. A coin mechanism is not required (or needs to be fitted) for this facility is be used. If setting to 'MDB Cashless Only' (4), a card must be inserted for all drinks including those with zero prices.

COIN SET – Address 201

The content of this Address should be programmed to suit the coin acceptance group as programmed within the coin mechanism, or altered to suit a card payment system only. The coin/card acceptance group is displayed via the LCD as a standby, second page instruction.

0 = 1, 2, 5, 10, 20, 50p, 1 pound
1 = 1, 2, 5, 10, 20, 50p, 1 pound and 2 pound coins
2 = 5, 10, 20, 50p and 1 pound coins
3 = Enter credit card
5 = 5, 10, 20, 50CT & 1.00 euro coins
6 = 5, 10, 20, 50CT, 1.00 & 2.00 euro coins.

NOTE:

The content of this Address should only be programmed to 3 if Address 200 (Payment System) is also set to 3.

CHANGER COIN TYPE - Addresses 202 - 217

These addresses relate to coin numbers 00 through to 15, which represent coin values determined by the coin mechanism.

00 = Inhibit coin acceptance and manual dispense
01 = Coin acceptance, no manual dispense
11 = Coin acceptance, no manual dispense but will inhibit in low change
02 = Coin acceptance, and manual dispense
12 = Coin acceptance, and manual dispense but will inhibit in low change
03 = Token acceptance

COIN A TO C ASSIGNMENTS - MDB Addresses 218 – 223

The contents of these Address numbers will automatically be set by the processor after communicating with the coin mechanism. The Coins A, B and C will always be identified as the three lowest coin denominations.

These Addresses will only require altering if there is a requirement to identify coins A, B and C as coins which are not the three lowest coin denominations.

The content of these Addresses assigns a value to each of the coins labelled as A, B or C, which are used in all the MDB programming Addresses.

00 = Coin A, the lowest coin denomination which has been assigned to a tube by the coin mechanism.
01 = Coin B, the second lowest coin denomination which has been assigned to a tube by the coin mechanism.
02 = Coin C, the third lowest coin denomination which has been assigned to a tube by the coin mechanism.
03 = the fourth lowest coin denomination which has been assigned to a tube by the coin mechanism.

This is only a relevant Address when using four tube coin mechanisms.

The following are examples of the programming required for low change conditions.

COIN A TO C ASSIGNMENTS - MDB Addresses 218 – 223 (Cont.)

Example: An MDB coin mechanism is fitted with a 5, 10, 20, 50p validator.

To set a low change condition when the 5p tube drops below 10 coins or the 10p tube drops below 8 coins, the following needs to be set.

Address 218 to 5 (Coins A and B, Default setting)
Address 219 to 10 (Low level for coin A)
Address 220 to 8 (Low level for coin B)
Address 221 to 0 (Identifies coin A as the lowest coin denomination, default setting 5p)
Address 223 to 1 (Identifies coin B as the second lowest coin denomination, default 10p)

NOTE:

Some MDB coin mechanisms do not have the facility to count the number of coins allocated to the tubes. These mechanisms rely upon high and low level sensors within each tube.

In order for the exact change equation to function correctly the tube low levels, in Addresses 351 to 353, will need to be set below the number of coins at which the low level sensor operates.

EXACT CHANGE EQUATION – Address 224

Specifies when "use exact change only" is displayed i.e., when certain coin tubes reach the low settings.

0 = A or (B and C)
1 = A and B and C
2 = A and B
3 = A and (B or C)
4 = A
5 = A or B
6 = A or B or C
7 = A and C
8 = A or C
9 = B and C
10 = B
11 = B or C
12 = C

EXACT CHANGE MESSAGE DISPLAY – Address 225

0 = Alternate
1 = Permanent when applicable

MAXIMUM CREDIT - MDB Address 226 (Default setting = 0200)

The maximum value of credit accepted as a multiple of the lowest value coin accepted.

MAXIMUM PAYOUT - MDB Address 227 (Default setting = 0200)

Maximum value of change able to be dispensed. If the value exceeds this figure more vends will be required before change is given.

SINGLE/MULTI VEND – Address 228

0 = Single vend
1 = Multi vend

FORCE VEND – Address 229

0 = Permit change without vend
1 = Inhibit change without vend

INSTANT CREDIT TO CARD – Address 230

0 = Press reject lever to assign cash to card
1 = Credit card with cash automatically

PIN FREE/DISCOUNT VEND PERIOD TIMING – Address 237

This facility enables random free/discount vends, for a pre-programmed period duration, to be initiated via a personal identification number. Access to this facility is gained by pressing the '0' key on the external keypad three times. Four flashing question marks on the LCD prompt insertion of a valid PIN (PINs are programmed within Addresses 238 - 243 Free Vend PINs and Addresses 244 to 249 Discount PINs). Upon acceptance, all selections set-up as 'timed free vend available' will switch to free/discount vend for the duration set. The free period duration is programmable in 30-second increments from 0001 - 9999. Address content examples:-

0 = Inactive
1 = 30 second free duration
2 = 60 second free duration
10 = 5 minute free duration (10 x 30 seconds)

The discount value for 'discount' vend PINs is programmed within Address 258.

NOTE:

Should 3 consecutive invalid PINs be inserted, the processor will abort the routine, and the LCD will report 'PIN facility temporarily disabled'. The facility will remain disabled for a period of four minutes.

FREE VEND PIN NUMBERS – Addresses 238 – 243

Up to 6 four-digit pin numbers maybe entered to allow the machine to switch into free vend – also see addresses 250 to 255

DISCOUNT VEND PIN NUMBERS – Addresses 244 – 249

Up to 6 four-digit pin numbers maybe entered to allow the machine to switch into discount vend – also see addresses 250 to 255 and address 258.

SET-UP FREE VEND/SUPPLEMENTARY DISCOUNT PERIODS – Addresses 250 to 255

Up to six free vend OR six supplementary discount periods may be programmed although the two are mutually exclusive, i.e. if any free vend periods are programmed, the discount feature cannot be used, and vice versa.

FREE VEND PERIODS

During these periods, all drinks may be free vended, or, if required, a limited selection of drinks may be free vended.
The drinks available during a timed free vend period are determined by the "Set-up selection range", refer to section 9 'Drink selection set-up addresses'.

Each active selection can be programmed to:-

1. Timed free vend available.
2. Timed free vend not available.

The content of each selection Address for the above options will vary dependant on the drink type. Refer to section 9 'Drink selection set-up addresses'.

FREE VEND PERIODS (CONTINUED)
At the start of a free vend period, the processor will respond with an audible tone of 1 second duration. If all active selections are being free vended, the external display standby message will change to read FREE. If, however, any selection is to remain as a pay vend, the external display standby messages will not change.

PROGRAMMING FREE VEND PERIODS

When programming free vend periods, if the duration of the period is less than 24 hours, the individual day numbers of which the period is to be active are to be programmed (Sunday = Day 1 to Saturday = Day 7, 0 = all days). If, however, the period duration is greater than 24 hours, i.e. to cover a weekend, only the day on which the period is to start should be programmed. The duration of the period is also to be programmed in hours and minutes. The maximum duration time = 99 hours 99 minutes.

Example 1: A free vend period is required from 10.00 a.m. to 11.30 a.m. on Monday to Friday only.

Enter 'Service' mode:-

1. Enter Address 250 = Free vend period No. 1.
2. Press the 'Vend' key.
3. Enter '23456' - the day numbers of Monday, Tuesday, Wednesday, Thursday and Friday.
4. Press the 'Vend' key.
5. Enter '1000' = the start time of 10.00 a.m.
6. Press the 'Vend' key.
7. Enter '130' - the duration time of 1 hour 30 minutes.
8. Press the 'Vend' key.

Example 2: A free vend period is required from 5.30 p.m. on Friday to 9.00 a.m. on Monday.

Enter 'Service' mode:-

1. Enter Address 251 = Free vend period No. 2.
2. Press the 'Vend' key.
3. Enter '6' - the start day number for Friday.
4. Press the 'Vend' key.
5. Enter '1730' - the start time of 5.30 p.m.
6. Press the 'Vend' key.
7. Enter '6330' - the duration time of 63 hours 30 minutes.
8. Press the 'Vend' key.

To cancel a free vend period

Enter 'Service' mode:-

1. Enter Address number of relevant period to cancel (250 to 255).
2. Press the 'Vend' key.
3. Enter '0'.
4. Press the 'Vend' key.
5. Enter '0'.
6. Press the 'Vend' key.
7. Enter '0'.
8. Press the 'Vend' key.

DISCOUNT (SUPPLEMENTARY) PERIODS

If discount periods are required, the programming for the relevant timed periods is identical to that for timed free vend periods. The value of the discount is then to be programmed within Address 258.

PRICE ADDRESS PROTECT – Address 256

If a security code is active to protect access to Service Mode (See 'User level security' - Address 007'), it is possible to include or exclude access to the price setting Addresses. If unprotected, for example, access to adjust vend selling prices is possible without requiring the knowledge of the security code number.

0 = Price Addresses Protected by security code.
1 = Price Addresses Not protected by security code.

DECIMAL POINT POSITION – Address 257

This facility exists for differing currencies. The default value is 02, i.e. 2 decimal places. This address does not require alteration for British currency.

DISCOUNT FOR SUPP. PERIOD – Address 258

The value set within this address determines the amount by which the standard price is discounted – see also addresses 250 to 255.

NO CUP DISCOUNT / CHARGE FOR CUP – Address 259

This facility enables the value entered to be deducted from a vend when the 'No Cup' key is pressed, or when detecting a 'No Cup' vend requirement when address 265 is set to 0.
With address 265 set to 1 the value entered in address 259 will be the charge for a cup dispensed.

JUG DISCOUNT – Address 260

Range of discount available = 1 to 9.99. The value set within this address will determine the discount per cup, i.e. if address 260 = 2 and it takes 5 cups to fill a jug; the total discount will equal 10. This facility is not applicable during a timed supplementary period.

0 = No discount for jug-fill vends.

PRICE INCREASE FOR STRONG DRINKS - Address 262

The content of this Address enables a price increase on selecting a Strong drink. The default setting of 0 disables the feature. Any other parameter will set the price increment, that is the value to be added to the selling price of the regular selection, e.g. a value of 2 will increase the selling price by 2, when a strong drink is selected. The pricing for a strong drink shall be initiated by pressing the 'Strong' key on the keypad, up to a maximum of three times.

PRICE INCREASE FOR EXTRA WHITE SELECTIONS - Address 263

The content of this Address enables a price increase on selecting the Extra White option. The default setting of 0 disables the feature. Any other parameter will set the price increment, that is the value to be added to the selling price of the regular selection. The pricing for extra milk shall be initiated by pressing the 'Extra White' key on the keypad, up to a maximum of three times.

PRICE INCREASE FOR EXTRA SUGAR SELECTIONS - Address 264

The content of this Address enables a price increase on selecting the Extra Sugar option. The feature is disabled (by default) when set to 0. Any other parameter will set the price increment, that is the value to be added to the selling price of the regular selection. The pricing for extra sugar shall be initiated by pressing the 'Extra Sugar' key on the keypad, up to a maximum of three times.

CUP & VEND AUDIT MODE - Address 265

The content of this address enables the method to 'charge for a cup' or 'discount for cup' to be audited and price controlled accordingly.
0 = Discount for No-cup in audit & pricing (default)
1 = Charge for cup in audit & pricing.
Note: An audit reset will need to be preformed if a change is made to this address.

INSTANT WATER FLUSH LEVEL – Address 340

The value entered within this address, in seconds, will determine the amount of time the water valve will be initiated for on all instant selections during a flush cycle.

INSTANT WHIPPER FLUSH TIME – Address 341

The value entered within this address, in seconds, will determine the amount of time the Instant whipper motors are switched on for during a flush cycle.

BREWER WATER FLUSH LEVEL – Address 342

The value entered within this address, in seconds, will determine the amount of time the Brewer water valve will be initiated for during a flush cycle.

BREWER WHIPPER FLUSH TIME – Address 343

The value entered within this address, in seconds, will determine the amount of time the Fresh Brew whipper motor is switched on for during a flush cycle.

BREWER SOAK TIME – Address 344

The value entered within this address, in seconds, will determine the amount of time the Brewer retains water within the brewing cylinder during a flush cycle.

GRINDER WATER FLUSH LEVEL – Address 346

The value entered within this address, in seconds, will determine the amount of time the Grinder water valve will be initiated for during a flush cycle.

GRINDER HOME - FLUSH TIME DELAY – Address 347

The value entered within this address, in seconds, will determine the amount of time the Grinder cylinder is sealed for before rotating to its homed position. The delay is initiated once the water into the cylinder has stopped flowing.

GRINDER WHIPPER FLUSH TIME – Address 348

The value entered within this address, in seconds, will determine the amount of time the Grinder whipper motor is switched on for during a flush cycle.

HOT/COLD WATER FLUSH LEVEL – Address 349

The value entered within this address, in seconds, will determine the amount of time the water valve will be initiated for on the Hot Water (if fitted) and cold-water selections during a flush cycle.

SYRUP FLUSH LEVEL – Address 350

The value entered within this address, in seconds, will determine the amount of time the Syrup pumps will be initiated for on all individual syrup selections during a flush cycle.

11. DRINKS SETUP

DRINK SELECTION SET UP CONTENTS

TABLE OF FIELD PARAMETERS

The Solo Encore provides the ability to fully configure your drink for optimum taste. A selection of the addresses within the Solo Encore have 'multiple parameters', this provides the user with the ability to set timings for specific drinks and also allows the drinks to be 'pulsed' for a fuller flavour.

Listed below is a table outlining the data field parameters and over the page are two examples of how to use the parameters within your programming.

Keys	Description	Data Field [1]	Data Field [2]	Data Field [3]	Data Field [4]	Data Field [5]	Data Field [6]	Data Field [7]	Data Field [8]	Comments
Prices	Used for Price entries	Regular Price	Large Price							All price addresses have 2 data fields
Set-up	Used for Drink Set up	Basic Set-up	Extended Set-up	Countdown Extra Time (Sec) – Black Only	Countdown Extra Time (Sec) - Black + Sugar	Countdown Extra Time (Sec) – White Only	Countdown Extra Time (Sec) - White + Sugar			Used for setting individual drink selections. All main set up addresses have 3 data fields
Throws	Used for Editing Normal Drink throws	Regular Throw	Throw Delay	Large Throw	Pulse on time	Pulse off time				Used for setting individual throw times. All throw addresses have 3 data fields Pulse fields are limited to a maximum value of 5.0 seconds
Piston Time	Used for FB Piston push	Black Only	Black + Sugar	White Only	White + Sugar	Large Black only	Large Black + Sugar	Large White Only	Large White + Sugar	Used for setting individual piston push times (ASD) for different drink additions. All Piston addresses have 8 data fields
Extra Water	Used for Individual water Top-ups	Black Only	Black + Sugar	White Only	White + Sugar	Large Black Only	Large Black + Sugar	Large White Only	Large White + Sugar	Used for adding extra top up water for different drink additions. All Extra water addresses have 8 data fields
Syrup Topping	Used to set syrup topping throw	Regular throw	Throw Delay	Large Throw	Pulse, On Time	Pulse, Off Time	Syrup Source			Used for setting Syrup throw times. All Syrup throw addresses have 6 data fields Pulse fields are limited to a maximum value of 5.0 Seconds
Payment Type	Used to set up payment systems	Coin Type	Bill Type							Used for setting different payment devices for configuring coins or notes for validator's or mech's. Addresses 202-217

Note: Data fields 4 and 5 (Pulse time on and off) are active on Bean to Cup models as standard. The purpose of pulsing a water solenoid valve and/or an ingredient/whipper motor is to provide a continual body of flavour throughout the process of vending the drink. To ensure trouble free vending the pulse on and pulse off times should be set the same and must not fall below 5 seconds.

Example 1:
This example contains the method used to set-up the 'Bean to Cup' Espresso, selection codes 55-58, using the data fields.

Enter 'Service Mode'.

1. Enter Address 750 (FB Espresso Set Up address)
2. Press the 'vend' key, the display will change to show the current data field that can be edited and the value that is currently set in that field. i.e.

The display will read:

Service Mode
Address 750
Data [1] 1

Data field [3] **= Extra count down time**
The extra count down time is a value that is added onto the standard count on the display.
Only adjust if nessasary

3. Press the 'vend' key to change the parameter. The value within **Data [1]** will start to'flash'.
4. Set the value to '1' (1=Active, No Whip Option, Time Free Vend)
5. Press the 'vend' key

The display will read:

Service Mode
Address 750
Data [2] 4

Data field [3] **= Extra count down time**
The extra count down time is a value that is added onto the standard count on the display.
Only adjust if nessasary

6. Press the 'vend' key to change the parameter. The value within Data [2] will start to 'flash'.
7. Set the value to '4' (4=Bean to Cup)
8. Press the 'Vend' key

The display will read:

Service Mode
Address 750
Data [3] 5

Data field [3] **= Extra count down time**
The extra count down time is a value that is added onto the standard count on the display.
Only adjust if nessasary

9. Press the 'vend' key to change the parameter. The value within Data [3] will start to 'flash'.
10. The value you set within this field will determine how many seconds 'more' then the default vend time the counter will display (the time taken to deliver the drink). If the default time for the vend is 50 seconds and a value of 5 is set within this address the total vend time will be 55 seconds.

Press the 'vend' key to save all new settings, cancel to exit service mode
Or
Press the 'cancel' key at anytime to exit service mode without saving any changes.

Example 2:

All ingredient throws are able to be changed and are controlled by means of time. Those that are controlled at increments of 0.1 of a second will be displayed showing a decimal point. Those displayed without a decimal point are adjustable in 1 second increments.

Example:
To increase the throw duration of Instant 1 main water, from 5.0 to 5.2.
In **'Service'** mode

1. Enter address '474' – Throw – Inst 1 Main Water
2. Press the 'Vend' key - the timing will flash (05.0).
3. Enter 05.2
4. Press the 'Vend' key

NOTE:

Procedure for Initiating a Dry Ingredient Throw:
To enable you to weigh products, the machine allows you to initiate an individual dry ingredient throw without water as follows:
In 'Service' mode:-

1. Select the appropriate Address number.
2. Press the 'BLANK'. This will activate a dry ingredient dispense after a 5 second delay, allowing the product to be weighed. After adjustment to the dispense time repeat Step 2.

If an address relating to a water throw is selected, only the water will be dispensed.

DRINK SET-UP ADDRESSES

ADD	FUNCTION	[1]	[2]	[3]	COMMENT
	SINGLE CUP				
400	SET-UP DRINK CODE 88 + 89	0			0 = DISABLED 3 = 88 ACTIVE, WITH CUP VEND DETECTION 6 = 88 ACTIVE, WITHOUT CUP VEND
401	SINGLE CUP - PRICE	0.02	0.25	x	
	HOT WATER				
402	SET-UP DRINK CODE 90	0	4		0 = DISABLED 1 = ACTIVE, TIMED FREE VEND 2 = ACTIVE, NO CUP, TIMED FREE VEND 11 = ACTIVE, NO TIMED FREE VEND 12 = ACTIVE, NO CUP, NO TIMED FREE VEND
403	HOT WATER - PRICE	0.02	0.25	x	
406	THROW - HOT WATER, MAIN WATER	8.0	0.0	11.0	WATER STATION 6
	STILL WATER				
408	SET-UP DRINK CODE 99	0	0	0	0 = DISABLED 1 = ACTIVE, TIMED FREE VEND 2 = ACTIVE, NO CUP, TIMED FREE VEND 11 = ACTIVE, NO TIMED FREE VEND 12 = ACTIVE, NO CUP, NO TIMED FREE VEND
409	STILL WATER - PRICE	0.02	0.25	x	
412	THROW - STILL WATER	6.0	0.0	9.0	STILL WATER VALVE
	CARBONATED WATER				
414	SET-UP DRINK CODE 98	0	0	0	0 = DISABLED 1 = ACTIVE, TIMED FREE VEND 2 = ACTIVE, NO CUP, TIMED FREE VEND 11 = ACTIVE, NO TIMED FREE VEND 12 = ACTIVE, NO CUP, NO TIMED FREE VEND
415	CARBONATED WATER - PRICE	0.02	0.25	x	
418	THROW - CARBONATED WATER	6.0	0.0	9.0	CARBONATED WATER VALVE
	SYRUP 1				
420	SET-UP DRINK CODE 91 + 92	0	0	0	0 = DISABLED 1 = ACTIVE, STILL ONLY COLD, TIMED FREE VEND 3 = ACTIVE, CARBONATED ONLY, TIMED FREE VEND 4 = ACTIVE, CARBONATED & STILL COLD, TIMED FREE VEND 11 = ACTIVE, STILL ONLY COLD, NO TIMED FREE VEND 13 = ACTIVE, CARBONATED ONLY, NO TIMED FREE VEND 14 = ACTIVE, CARBONATED & STILL COLD, NO TIMED FREE VEND
421	SYRUP 1 - PRICE	0.15	0.25	x	
424	THROW - SYRUP 1, SYRUP	3.0	1.0	4.5	SYRUP PUMP 1
425	THROW - SYRUP 1, CARBONATED WATER	5.0	0.0	7.5	CARBONATED WATER VALVE
426	THROW - SYRUP 1, STILL WATER	5.0	0.0	7.5	STILL WATER VALVE
427	THROW - SYRUP 1, HOT WATER	5.0	0.0	7.5	WATER STATION 6
428	THROW - SYRUP 1, TOP-UP WATER	0.0	0.0	0.0	STILL WATER VALVE

ADD	FUNCTION	[1]	[2]	[3]	COMMENT
	SYRUP 2				
430	SET-UP DRINK CODE 93 + 94	0	0	0	0 = DISABLED 1 = ACTIVE, STILL ONLY COLD, TIMED FREE VEND 3 = ACTIVE, CARBONATED ONLY, TIMED FREE VEND 4 = ACTIVE, CARBONATED & STILL COLD, TIMED FREE VEND 11 = ACTIVE, STILL ONLY COLD, NO TIMED FREE VEND 13 = ACTIVE, CARBONATED ONLY, NO TIMED FREE VEND 14 = ACTIVE, CARBONATED & STILL COLD, NO TIMED FREE VEND
431	SYRUP 2 - PRICE	0.15	0.25	x	
434	THROW - SYRUP 2, SYRUP	3.0	1.0	4.5	SYRUP PUMP 2
435	THROW - SYRUP 2, CARBONATED WATER	5.0	0.0	7.5	CARBONATED WATER VALVE
436	THROW - SYRUP 2, STILL WATER	5.0	0.0	7.5	STILL WATER VALVE
437	THROW - SYRUP 2, HOT WATER	5.0	0.0	7.5	WATER STATION 6
438	THROW - SYRUP 2, TOP-UP WATER	0.0	0.0	0.0	STILL WATER VALVE
	INSTANT 1				
470	SET-UP DRINK CODE 10-13	2	6	6	0 = DISABLED 1 = ACTIVE, NO WHIP OPTION, TIMED FREE VEND 2 = ACTIVE, WITH WHIP OPTION, TIMED FREE VEND 3 = PERMANENTLY WHIPPED, TIMED FREE VEND 11 = ACTIVE, NO WHIP OPTION, NO TIMED FREE VEND 12 = ACTIVE, WITH WHIP OPTION, NO TIMED FREE VEND 13 = PERMANENTLY WHIPPED, NO TIMED FREE VEND
471	INSTANT 1 - PRICE	0.15	0.25	x	
474	THROW - INSTANT 1, REGULAR	0.8	1.7	1.0	INGREDIENT MOTOR 3
475	THROW - INSTANT 1, STRONG	1.0	1.7	1.2	INGREDIENT MOTOR 3
476	THROW - INSTANT 1, MAIN WATER	5.7	0.0	7.0	WATER STATION 2 or 3(LX model)
477	THROW - INSTANT 1, MAIN WHIPPER	6.2	0.0	7.5	WHIPPER 2 or 3(LX model)
478	THROW - INSTANT 1, WHITENER	0.8	0.6	0.9	INGREDIENT MOTOR 4
479	THROW - INSTANT 1, EXTRA WHITENER	1.0	0.6	1.1	INGREDIENT MOTOR 4
480	THROW - INSTANT 1, WHITE WATER	x	x	x	WATER STATION 2 or 3(LX model)
481	THROW - INSTANT 1, WHITE WHIPPER	x	x	x	WHIPPER 2 or 3(LX model)
482	THROW - INSTANT 1 SUGAR	1.0	0.5	1.1	INGREDIENT MOTOR 5
483	THROW - INSTANT 1, EXTRA SUGAR	1.2	0.5	1.3	INGREDIENT MOTOR 5
484	THROW - INSTANT 1, SUGAR WATER	3.3	0.0	4.2	WATER STATION 3 or 4(LX model)
485	THROW - INSTANT 1, SUGAR WHIPPER	3.8	0.3	4.7	WHIPPER 3 or 4(LX model)
486	THROW - INSTANT 1, TOP-UP WATER	0.0	2.5	0.0	WATER STATION 2 or 3(LX model)
	INSTANT 2				
490	SET-UP DRINK CODE 20-23	1	6	6	0 = DISABLED 1 = ACTIVE, NO WHIP OPTION, TIMED FREE VEND 2 = ACTIVE, WITH WHIP OPTION, TIMED FREE VEND 3 = PERMANENTLY WHIPPED, TIMED FREE VEND 4 = ACTIVE, ALL EXTRAS DISABLED, TIMED FREE VEND. 5 = ACTIVE, NO EXTRA STRENGTH Or WHITNER & NO WHIP, T.F.V 11 = ACTIVE, NO WHIP OPTION, NO TIMED FREE VEND ACTIVE, WITH WHIP OPTION, NO TIMED FREE VEND 13 = PERMANENTLY WHIPPED, NO TIMED FREE VEND 14 = ACTIVE, ALL EXTRAS DISABLED, NO TIMED FREE VEND 15 = ACTIVE, NO EXTRA STRENGTH Or WHITNER & NO WHIP, NO T.F.V {T.*F.V = TIMED FREE VEND*}
491	INSTANT 2 - PRICE	0.15	0.25	x	
494	THROW - INSTANT 2, REGULAR	0.9	0.4	1.0	INGREDIENT MOTOR 6
495	THROW - INSTANT 2, STRONG	1.1	0.4	1.2	INGREDIENT MOTOR 6
496	THROW - INSTANT 2, MAIN WATER	6.5	0.0	8.0	WATER STATION 3 or 4(LX model)
497	THROW - INSTANT 2, MAIN WHIPPER	7.0	0.0	8.5	WHIPPER 3 or 4(LX model)
498	THROW - INSTANT 2, WHITENER	0.8	0.2	0.9	INGREDIENT MOTOR 4

ADD	FUNCTION	[1]	[2]	[3]	COMMENT
	INSTANT 2 (Cont.)				
499	THROW - INSTANT 2, EXTRA WHITENER	1.0	0.2	1.1	INGREDIENT MOTOR 4
500	THROW - INSTANT 2, WHITE WATER	2.7	0.0	3.4	WATER STATION 2 or 3(LX model)
501	THROW - INSTANT 2, WHITE WHIPPER	3.2	0.0	3.9	WHIPPER 2 or 3(LX model)
502	THROW - INSTANT 2 SUGAR	1.0	0.2	1.1	INGREDIENT MOTOR 5
503	THROW - INSTANT 2, EXTRA SUGAR	1.2	0.2	1.3	INGREDIENT MOTOR 5
504	THROW - INSTANT 2, SUGAR WATER	x	x	x	WATER STATION 3 or 4(LX model)
505	THROW - INSTANT 2, SUGAR WHIPPER	x	x	x	WHIPPER 3 or 4(LX model)
506	THROW - INSTANT 2, TOP-UP WATER	0.0	1.5	0.0	WATER STATION 3 or 4(LX model)
	INSTANT 5 (SOUP/COLD POWDER)				
550	SET-UP DRINK CODE 80, 45-48	5	6	6	0 = DISABLED 1 = INSTANT 5 ACTIVE, NO WHIP, TIMED FREE VEND 2 = INSTANT 5 ACTIVE, WITH WHIP OPTION, TIMED FREE VEND 3 = INSTANT 5 ACTIVE, PERM WHIP, TIMED FREE VEND 4 = SOUP ACTIVE, NO WHIP, TIMED FREE VEND 5 = SOUP ACTIVE, PERM WHIP, TIMED FREE VEND 6 = COLD SOUP ACTIVE, NO WHIP, TIMED FREE VEND 7 = COLD SOUP ACTIVE, PERM WHIP, TIMED FREE VEND 8 = TOPPING MODULE 11 = INSTANT 5 ACTIVE, NO WHIP, NO TIMED FREE VEND 12 = INSTANT 5 ACTIVE, WITH WHIP OPTION, NO TIMED FREE VEND 13 = INSTANT 5 ACTIVE, PERM WHIP, NO TIMED FREE VEND 14 = SOUP ACTIVE, NO WHIP, NO TIMED FREE VEND 15 = SOUP ACTIVE, PERM WHIP, NO TIMED FREE VEND 16 = COLD SOUP ACTIVE, NO WHIP, NO TIMED FREE VEND 17 = COLD SOUP ACTIVE, PERM WHIP, NO TIMED FREE VEND
551	INSTANT 5/SOUP - PRICE	0.15	0.25	x	
554	THROW - INSTANT 5	0.9	0.4	1.0	INGREDIENT MOTOR 1
	THROW - SOUP	1.8	1.5	2.2	
	THROW - COLD POWDER	1.8	1.5	2.2	
555	THROW - INSTANT 5, STRONG	1.1	0.4	1.2	INGREDIENT MOTOR 1
556	THROW - INSTANT 5 MAIN WATER	3.8	0.0	5.1	WATER STATION 1 OR STILL WATER
	THROW - SOUP, MAIN WATER	9.0	0.0	11.7	(COLD POWDER)
	THROW - COLD POWDER MAIN WATER	9.0	0.0	11.7	
557	THROW - INSTANT 5 MAIN WHIPPER	4.3	0.0	6.5	WHIPPER 1
	THROW - SOUP, MAIN WHIPPER	10.5	0.0	12.5	
	THROW - COLD POWDER MAIN WHIPPER	10.5	0.0	12.5	
558	THROW - INSTANT 5, WHITENER	0.8	0.2	0.9	INGREDIENT MOTOR 4
559	THROW - INSTANT 5, EXTRA WHITENER	1.0	0.2	1.1	INGREDIENT MOTOR 4
560	THROW - INSTANT 5, WHITE WATER	2.7	0.0	3.4	WATER STATION 2 or 3(LX model)
561	THROW - INSTANT 5, WHITE WHIPPER	3.3	0	3.9	WHIPPER 2 or 3(LX model)
562	THROW - INSTANT 5, SUGAR	1.0	0.2	1.1	INGREDIENT MOTOR 5
563	THROW - INSTANT 5, EXTRA SUGAR	1.2	0.2	1.3	INGREDIENT MOTOR 5
564	THROW - INSTANT 5, SUGAR WATER	2.8	0.0	3.2	WATER STATION 3 or 4(LX model)
565	THROW - INSTANT 5, SUGAR WHIPPER	3.3	0	3.7	WHIPPER 3 or 4(LX model)
566	THROW - INSTANT 5, TOP-UP WATER	0.0	1.5	0.0	WATER STATION 1

ADD	FUNCTION	[1]	[2]	[3]	COMMENT
	INSTANT ESPRESSO				
570	SET-UP DRINK CODE 14-17	3	6	6	0 = DISABLED 1 = ACTIVE, NO WHIP OPTION, TIMED FREE VEND 2 = ACTIVE, WITH WHIP OPTION, TIMED FREE VEND 3 = PERMANENTLY WHIPPED, TIMED FREE VEND 1 = ACTIVE, NO WHIP OPTION, NO TIMED FREE VEND 12 = ACTIVE, WITH WHIP OPTION, NO TIMED FREE VEND 13 = PERMANENTLY WHIPPED, NO TIMED FREE VEND
571	INSTANT ESPRESSO - PRICE	0.15	0.25	x	
574	THROW - ESPRESSO, REGULAR	1.0	0.5	1.2	INGREDIENT MOTOR 3
575	THROW - ESPRESSO, STRONG	1.2	0.2	1.3	INGREDIENT MOTOR 3
576	THROW - ESPRESSO, MAIN WATER	2.6	0.0	3.4	WATER STATION 2 or 3(LX model)
577	THROW - ESPRESSO, MAIN WHIPPER	3.2	0.0	3.9	WHIPPER 2 or 3(LX model)
578	THROW - ESPRESSO, WHITENER	0.7	0.2	0.8	INGREDIENT MOTOR 4
579	THROW - ESPRESSO, EXTRA WHITENER	0.8	0.2	0.9	INGREDIENT MOTOR 4
580	THROW - ESPRESSO, WHITE WATER	x	x	x	WATER STATION 2 or 3(LX model)
581	THROW - ESPRESSO, WHITE WHIPPER	x	x	x	WHIPPER 2 or 3(LX model)
582	THROW - ESPRESSO, SUGAR	0.6	0.2	0.7	INGREDIENT MOTOR 5
583	THROW - ESPRESSO, EXTRA SUGAR	0.8	0.2	0.9	INGREDIENT MOTOR 5
584	THROW - ESPRESSO, SUGAR WATER	1.7	0.0	2.2	WATER STATION 3 or 4(LX model)
585	THROW - ESPRESSO, SUGAR WHIPPER	2.2	0	2.7	WHIPPER 3 or 4(LX model)
586	THROW - ESPRESSO, TOP-UP WATER	0.0	1.5	0.0	WATER STATION 2 or 3(LX model)
	ESPRESSO CHOC				
590	SET-UP DRINK CODE	3	9	9	0 = DISABLED 1 = ACTIVE, NO WHIP OPTION, TIMED FREE VEND 2 = ACTIVE, WITH WHIP OPTION, TIMED FREE VEND 3 = PERMANENTLY WHIPPED, TIMED FREE VEND 11 = ACTIVE, NO WHIP OPTION, NO TIMED FREE VEND 12 = ACTIVE, WITH WHIP OPTION, NO TIMED FREE VEND 13 = PERMANENTLY WHIPPED, NO TIMED FREE VEND
591	ESPRESSOCHOC - PRICE	0.15	0.25	x	
594	THROW - ESPRESSOCHOC, COFFEE	0.8	2.5	1.0	INGREDIENT MOTOR 3
595	THROW - ESPRESSOCHOC, COFFEE WATER	2.0	2.0	2.7	WATER STATION 2 or 3(LX model)
596	THROW - ESPRESSOCHOC, COFFEE WHIPPER	2.5	2.0	2.5	WHIPPER 2 or 3(LX model)
597	THROW - ESPRESSOCHOC, CHOCOLATE	1.9	0.6	2.4	INGREDIENT MOTOR 2
598	THROW - ESPRESSOCHOC, CHOC WATER	3.0	0.0	4.0	WATER STATION 1 or 2(LX model)
599	THROW - ESPRESSOCHOC, CHOC WHIPPER	5.0	0.0	5.0	WHIPPER 1 or 2(LX model)
600	THROW - ESPRESSOCHOC, TOPPING	1.7	5.6	2.4	INGREDIENT MOTOR 1 or 4(None topping canister)
601	THROW - ESPRESSOCHOC, TOPPING WATER	3.3	5.0	4.0	WATER STATION 1 or 4(None topping canister)
602	THROW - ESPRESSOCHOC, TOPPING WHIPPER	3.8	4.2	4.8	WHIPPER 1 or 4(None topping canister)
603	THROW - ESPRESSOCHOC, SUGAR	0.0	0.0	0.0	INGREDIENT MOTOR 5
604	THROW - ESPRESSOCHOC, EXTRA SUGAR	0.0	0.0	0.0	INGREDIENT MOTOR 5
605	THROW - ESPRESSOCHOC, SUGAR WATER	0.0	0.0	0.0	WATER STATION 3 or 4(LX model)
606	THROW - ESPRESSOCHOC, SUGAR WHIPPER	0.0	0.0	0.0	WHIPPER 3 or 4(LX model)
607	THROW - ESPRESSOCHOC, TOP UP WATER	0.0	1.0	0.0	CHOC SPRINKLER
608	THROW - ESPRESSOCHOC, CHOC SPRINKLER	0.0	0.0	0.0	CHOC SPRINKLER
609	THROW - ESPRESSOCHOC, SYRUP TOP	x	x	x	SYRUP 1,2 OR 3

ADD	FUNCTION	[1]	[2]	[3]	COMMENT
	CREAMI CHOC				
615	SET-UP DRINK CODE 71 + (72 + syrup)	3	9	9	0 = DISABLED 1 = ACTIVE, NO WHIP OPTION, TIMED FREE VEND 2 = ACTIVE, WITH WHIP OPTION, TIMED FREE VEND 3 = PERMANENTLY WHIPPED, TIMED FREE VEND 11 = ACTIVE, NO WHIP OPTION, NO TIMED FREE VEND 12 = ACTIVE, WITH WHIP OPTION, NO TIMED FREE VEND 13 = PERMANENTLY WHIPPED, NO TIMED FREE VEND
616	CREAMICHOC - PRICE	0.15	0.25	x	
619	THROW - CREAMICHOC CHOCOLATE	2.4	2.0	2.8	INGREDIENT MOTOR 2
620	THROW - CREAMICHOC CHOC WATER	4.5	1.0	5.5	WATER STATION 1 or 2(LX model)
621	THROW - CREAMICHOC CHOC WHIP	4.5	1.0	5.8	WHIPPER 1 or 2(LX model)
622	THROW - CREAMICHOC TOPPING	1.8	1.0	2.2	INGREDIENT MOTOR 1 or 4(None topping canister)
623	THROW - CREAMICHOC TOPPING WATER	4.0	0.0	5.5	WATER STATION 1 or 4(None topping canister)
624	THROW - CREAMICHOC TOPPING WHIPPER	5.0	0.5	5.5	WHIPPER 1 or 4(None topping canister)
625	THROW - CREAMICHOC, SUGAR	0.0	0.0	0.0	INGREDIENT MOTOR 5
626	THROW - CREAMICHOC, EXTRA SUGAR	0.0	0.0	0.0	INGREDIENT MOTOR 5
627	THROW - CREAMICHOC, SUGAR WATER	0.0	0.0	0.0	WATER STATION 3 or 4(LX model)
628	THROW - CREAMICHOC, SUGAR WHIPPER	0.0	0.0	0.0	WHIPPER 3 or 4(LX model)
629	THROW - CREAMICHOC, TOP UP WATER	0.0	1.0	0.0	WATER STATION 1 or 2(LX model)
	CHOCOLATE				
635	SET-UP DRINK CODE 70	3	9	9	0 = DISABLED 1 = ACTIVE, NO WHIP OPTION, TIMED FREE VEND 2 = ACTIVE, WITH WHIP OPTION, TIMED FREE VEND 3 = PERMANENTLY WHIPPED, TIMED FREE VEND 11 = ACTIVE, NO WHIP OPTION, NO TIMED FREE VEND 12 = ACTIVE, WITH WHIP OPTION, NO TIMED FREE VEND 13 = PERMANENTLY WHIPPED, NO TIMED FREE VEND
636	CHOCOLATE - PRICE	0.15	0.25	x	
639	THROW - CHOCOLATE, MAIN INGREDIENT	2.9	2.0	3.4	INGREDIENT MOTOR 2
640	THROW - CHOCOLATE, MAIN WATER	8.8	0.0	11.0	WATER STATION 1 or 2(LX model)
641	THROW - CHOCOLATE, MAIN WHIPPER	8.9	0.0	12	WHIPPER 1 or 2(LX model)
642	THROW - CHOCOLATE, SUGAR	0.0	0.0	0.0	INGREDIENT MOTOR 5
643	THROW - CHOCOLATE, EXTRA SUGAR	0.0	0.0	0.0	INGREDIENT MOTOR 5
644	THROW - CHOCOLATE, SUGAR WATER	0.0	0.0	0.0	WATER STATION 3 or 4(LX model)
645	THROW - CHOCOLATE, SUGAR WHIPPER	0.0	0.0	0.0	WHIPPER 3 or 4(LX model)
646	THROW - CHOCOLATE, TOPUP WATER	0.0	1.5	0.0	WATER STATION 1 or 2(LX model)

Refer to ‘TABLE OF FIELD PARAMETERS’ (page 52) for 1 - 3 value identifiers.

Freshbrew & BTC Drinks

ADD	FUNCTION	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	COMMENT
	FRESHBREW TEA / COFFEE									
675	SETUP DRINK CODE 50-53	0	2	12	12	12	12			[MAIN SETUP] 0 = DISABLED 1 = ACTIVE, NO WHIP OPTION, TIMED FREE VEND 2 = ACTIVE, WITH WHIP OPTION, TIMED FREE VEND 3 = PERMANENTLY WHIPPED, TIMED FREE VEND 11 = ACTIVE, NO WHIP OPTION, NO TIMED FREE VEND 12 = ACTIVE, WITH WHIP OPTION, NO TIMED FREE VEND 13 = PERMANENTLY WHIPPED, NO TIMED FREE VEND [EXT SETUP - Data field 2] 2 = Freshbrew Tea 8 = Freshbrew Coffee Extra count down time- Data field 3]
676	FRESHBREW- PRICE	0.15	0.25	x	x	x	x	x	x	
679	THROW -TEA, REGULAR	0.7	0.7	0.9	0	0	x	x	x	INGREDIENT MOTOR 6
	THROW – COFFEE, REGULAR	3.0	0.7	3.4	0	0	x	x	x	
680	THROW – TEA, STRONG	0.9	0.7	1.1	0	0	x	x	x	INGREDIENT MOTOR 6
	THROW – COFFEE, STRONG	3.2	0.7	3.6	0	0	x	x	x	
681	THROW –TEA, MAIN WATER	5.2	0.0	7.0	0	0	x	x	x	WATER STATION 4
	THROW – COFFEE, MAIN WATER	5.2	0.0	7.0	0	0	x	x	x	
682	THROW -TEA MAIN WHIPPER	2.0	0.0	0.0	0	0	x	x	x	NONE
	THROW – COFFEE, MAIN WHIPPER	2.0	1.0	3.2	0	0	x	x	x	
683	THROW -TEA WHITENER	0.3	3.2	0.4	0	0	x	x	x	INGREDIENT MOTOR 4
	THROW - COFFEE WHITENER	0.8	3.2	0.9	0	0	x	x	x	
684	THROW – TEA, EXTRA WHITENER	0.5	3.2	0.6	0	0	x	x	x	INGREDIENT MOTOR 4
	THROW – COFFEE, EXTRA WHITENER	1.0	3.2	1.1	0	0	x	x	x	
685	THROW - TEA, WHITE WATER	2.0	2.8	2.0	0	0	x	x	x	WATER STATION 2 or 3(LX model)
	THROW - COFFEE, WHITE WATER	2.0	2.8	2.0	0	0	x	x	x	
686	THROW – TEA, WHITE WHIPPER	0.0	0.0	0.0	0	0	x	x	x	WHIPPER 2 or 3(LX model)
	THROW - COFFEE, WHITE WHIPPER	1.4	3.0	2.5	0	0	x	x	x	
687	THROW - TEA. SUGAR	1.0	2.2	1.1	0	0	x	x	x	INGREDIENT MOTOR 5
	THROW - COFFEE. SUGAR	1.0	2.2	1.1	0	0	x	x	x	
688	THROW – TEA, EXTRA SUGAR	1.2	2.2	1.3	0	0	x	x	x	INGREDIENT MOTOR 5
	THROW - COFFEE. EXTRA SUGAR	1.2	2.2	1.3	0	0	x	x	x	
689	THROW - TEA, SUGAR WATER	1.0	1.5	1.2	0	0	0	x	x	WATER STATION 3 or 4(LX model)
	THROW - COFFEE, SUGAR WATER	1.0	1.5	1.2	0	0	0	x	x	
690	THROW - TEA, SUGAR WHIPPER	0.0	0.0	0.0	0	0	0	x	x	WHIPPER 3 or 4(LX model)
	THROW - COFFEE, SUGAR WHIPPER	0.0	0.0	0.0	0	0	0	x	x	
691	THROW - TEA, TOPUP WATER	1.0	4.5	1.0	0	0	0	x	x	WATER STATION 3 or 4(LX model)
	THROW - COFFEE, TOPUP WATER	1.0	4.5	1.0	0	0	0	x	x	
693	THROW - TEA, BREW TIME	2.0	x	x	0	0	0	x	x	
	THROW - COFFEE, BREW TIME	5.0	x	x	0	0	0	x	x	
694	THROW – TEA, PISTON PUSH TIME	9.2	8.0	7.8	7.0	11	9	9	9.0	
	THROW - COFFEE, PISTON PUSH TIME	9.2	8.0	7.8	7.0	11	9	9	9.0	

ADD	FUNCTION	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	COMMENT
	BTC REGULAR COFFEE									
700	SETUP DRINK CODE 60-63	0	16	16	16	16				[MAIN SETUP] 0 = DISABLED 1 = ACTIVE, NO WHIP OPTION, TIMED FREE VEND 2 = ACTIVE, WITH WHIP OPTION, TIMED FREE VEND 3 = PERMANENTLY WHIPPED, TIMED FREE VEND 11 = ACTIVE, NO WHIP OPTION, NO TIMED FREE VEND 12 = ACTIVE, WITH WHIP OPTION, NO TIMED FREE VEND 13 = PERMANENTLY WHIPPED, NO TIMED FREE VEND [Extra count down time- Data field 3]
701	BTC - PRICE	0.15	0.25	x	x	x	x	x	x	
704	THROW - BTC, REGULAR	4.5	0	4.5	0	0	x	x	x	INGREDIENT MOTOR 6
706	THROW - BTC, MAIN WATER	22.0	0.0	26.0	0.0	0.0	x	x	x	WATER STATION 4
707	THROW - BTC, MAIN WHIPPER	0.0	0.0	0.0	0.0	0.0	x	x	x	NONE
708	THROW - BTC, WHITENER	0.7	5.0	1.0	0.0	0.0	x	x	x	INGREDIENT MOTOR 4
709	THROW - BTC, EXTRA WHITENER	0.9	5.0	1.1	0.0	0.0	x	x	x	INGREDIENT MOTOR 4
710	THROW - BTC, WHITE WATER	2.2	4.5	2.8	0.0	0.0	x	x	x	WATER STATION 2 or 3(LX model)
711	THROW - BTC, WHITE WHIPPER	2.1	4.8	2.6	0.0	0.0	x	x	x	WHIPPER 2 or 3(LX model)
712	THROW - BTC, SUGAR	1.0	0.2	1.1	0.0	0.0	x	x	x	INGREDIENT MOTOR 5
713	THROW - BTC, EXTRA SUGAR	1.1	0.2	1.2	0.0	0.0	x	x	x	INGREDIENT MOTOR 5
714	THROW - BTC, SUGAR WATER	1.7	0.0	2.5	0.0	0.0	x	x	x	WATER STATION 3 or 4(LX model)
715	THROW - BTC, SUGAR WHIPPER	2.2	0.0	3.0	0.0	0.0	x	x	x	WHIPPER 3 or 4(LX model)
717	THROW - BTC, EXTRA WATER	7.5	2.5	3.5	0.0	12.0	5.0	7.0	0.0	
718	THROW - BTC, HOME DELAY TIME	4.0	x	x	x	x	x	x	x	
	FB/BTC ESPRESSO									
750	SETUP DRINK CODE 55-58	0	0	16	16	16	16			[MAIN SETUP] 0 = DISABLED 1 = ACTIVE, NO WHIP OPTION, TIMED FREE VEND 2 = ACTIVE, WITH WHIP OPTION, TIMED FREE VEND 3 = PERMANENTLY WHIPPED, TIMED FREE VEND 11 = ACTIVE, NO WHIP OPTION, NO TIMED FREE VEND 12 = ACTIVE, WITH WHIP OPTION, NO TIMED FREE VEND 13 = PERMANENTLY WHIPPED, NO TIMED FREE VEND [EXT SETUP - Data field 2] 2 = FB 4 = BTC [Extra count down time- Data field 3]
751	FB/BTC ESPRESSO - PRICE	0.15	0.25	x	x	x	x	x	x	
754	THROW - FB ESPRESSO, REGULAR THROW - BTC ESPRESSO, REGULAR	3.0 4.5	0.0 0.0	3.4 4.5	0.0 0.0	0.0 0.0	x x	x x	x x	INGREDIENT MOTOR 6
755	THROW - FB ESPRESSO, STRONG	3.2	0.0	3.6	0.0	0.0	x	x	x	INGREDIENT MOTOR 6
756	THROW - FB ESPRESSO, MAIN WATER THROW - BTC ESPRESSO, MAIN WATER	2.7 6.9	0.0 0.0	3.8 10.0	0.5 0.0	0.5 0.0	x x	x x	x x	WATER STATION 4
757	THROW - FB ESPRESSO, MAIN WHIPPER THROW - BTC ESPRESSO, MAIN WHIPPER	2.0 0.0	3.0 0.0	3.4 0.0	0.0 0.0	0.0 0.0	x x	x x	x x	NONE

ADD	FUNCTION	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	COMMENT
	FB/BTC ESPRESSO (Cont.)									
758	THROW - FB ESPRESSO, WHITENER THROW - BTC ESPRESSO, WHITENER	0.2 0.2	0.5 0.0	0.3 0.3	0.0 0.0	0.0 0.0	x x	x x	x x	INGREDIENT MOTOR 4
759	THROW - FB ESPRESSO, EXTRA WHITENER THROW - BTC ESPRESSO, EXTRA WHITENER	0.3 0.3	0.5 0.0	0.4 0.4	0.0 0.0	0.0 0.0	x x	x x	x x	INGREDIENT MOTOR 4
760	THROW - FB ESPRESSO, WHITE WATER THROW - BTC ESPRESSO, WHITE WATER	0.8 0.8	0.0 0.0	1.3 1.3	0.0 0.0	0.0 0.0	x x	x x	x x	WATER STATION 2 or 3(LX model)
761	THROW - FB ESPRESSO, WHITE WHIPPER THROW - BTC ESPRESSO, WHITE WHIPPER	1.3 1.2	2.0 0.0	1.8 1.3	0.0 0.0	0.0 0.0	x x	x x	x x	WHIPPER 2 or 3(LX model)
762	THROW - FB ESPRESSO, SUGAR THROW - BTC ESPRESSO, SUGAR	0.4 0.4	2.2 0.1	0.5 0.5	0.0 0.0	0.0 0.0	x x	x x	x x	INGREDIENT MOTOR 5
763	THROW - FB ESPRESSO, EXTRA SUGAR THROW - BTC ESPRESSO, EXTRA SUGAR	0.5 0.5	2.2 0.1	0.6 0.6	0.0	0.0	x x	x x	x x	INGREDIENT MOTOR 5
764	THROW - FB ESPRESSO, SUGAR WATER THROW - BTC ESPRESSO, SUGAR WATER	0.8 0.8	2.2 0.0	0.9 1.3	0.0 0.0	0.0 0.0	x x	x x	x x	WATER STATION 3 or 4(LX model)
765	THROW - FB ESPRESSO, SUGAR WHIPPER THROW - BTC ESPRESSO, SUGAR WHIPPER	0.0 0.8	0.0 0.0	0.0 1.3	0.0 0.0	0.0 0.0	x x	x x	x x	WHIPPER 3 or 4(LX model)
766	THROW - FB ESPRESSO, TOPUP WATER	0.5	5.0	0.5	0	0	0	0	0	WATER STATION 3 or 4(LX model)
767	THROW - BTC ESPRESSO, EXTRA WATER	4.0	2.5	3.0	5.0	2.4	2	0	0	
768	THROW - FB ESPRESSO, BREW TIME THROW - BTC ESPRESSO, HOME DELAY TIME	5.0 3.0	x x	x x	x x	x x	x x	x x	x x	
769	THROW - FB ESPRESSO, PISTON PUSH TIME	6.2	6.2	6.1	6.2	7.5	7.2	6.9	6.9	
	DOUBLE INST/FB/BTC ESPRESSO									
773	SETUP DRINK CODE 80-83	3	0	4	4	4	4			[MAIN SETUP] 0 = DISABLED 1 = ACTIVE, NO WHIP OPTION, TIMED FREE VEND 2 = ACTIVE, WITH WHIP OPTION, TIMED FREE VEND 3 = PERMANENTLY WHIPPED, TIMED FREE VEND 11 = ACTIVE, NO WHIP OPTION, NO TIMED FREE VEND 12 = ACTIVE, WITH WHIP OPTION, NO TIMED FREE VEND 13 = PERMANENTLY WHIPPED, NO TIMED FREE VEND [EXT SETUP - Data field 2] 0 = INST 2 = FB 4 = BTC [Extra count down time- Data field 3]
774	DOUBLE FB/BTC - PRICE	0.15	0.25	x	x	x	x	x	x	

ADD	FUNCTION	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	COMMENT
	INST/FB/BTC CAPPUCCINO									
775	SETUP (STANDARD) DRINK CODE 75-76 SETUP (CHOC-SPRINKLER) DRINK CODE 78-79	3	0	8	8					[MAIN SETUP] 0 = DISABLED 1 = ACTIVE, NO WHIP OPTION, TIMED FREE VEND 2 = ACTIVE, WITH WHIP OPTION, TIMED FREE VEND 3 = PERMANENTLY WHIPPED, TIMED FREE VEND 11 = ACTIVE, NO WHIP OPTION, NO TIMED FREE VEND 12 = ACTIVE, WITH WHIP OPTION, NO TIMED FREE VEND 13 = PERMANENTLY WHIPPED, NO TIMED FREE VEND [EXT SETUP - Data field 2] 0 = INST 2 = FB 4 = BTC [Extra count down time- Data field 3]
776	INST/FB/BTC CAPPUCCINO - PRICE	0.15	0.25	x	x	x	x	x	x	
779	THROW - INST CAPPUCCINO, REGULAR	1.0	8.5	1.2	0.0	0.0	x	x	x	INGREDIENT MOTOR 6
	THROW - FB CAPPUCCINO, REGULAR	3.0	0.0	3.2	0.0	0.0	x	x	x	
	THROW - BTC CAPPUCCINO, REGULAR	4.5	0.0	4.5	0.0	0.0	x	x	x	
780	THROW - INST CAPPUCCINO, MAIN WATER	3.2	8.0	3.2	0.0	0.0	x	x	x	WATER STATION 4
	THROW - FB CAPPUCCINO, MAIN WATER	2.5	0.0	3.5	0.0	0.0	x	x	x	
	THROW - BTC CAPPUCCINO, MAIN WATER	7.0	10.0	11.0	0.0	0.0	x	x	x	
781	THROW - INST CAPPUCCINO, MAIN WHIPPER	3.9	8.2	4.4	0.0	0.0	x	x	x	NONE
	THROW - FB CAPPUCCINO, MAIN WHIPPER	2.0	3.5	2.0	0.5	0.5	x	x	x	
	THROW - BTC CAPPUCCINO, MAIN WHIPPER	0.0	0.0	0.0	0.0	0.0	x	x	x	
782	THROW - INST CAPPUCCINO, WHITENER	2.8	0.5	3.0	0.0	0.0	x	x	x	INGREDIENT MOTOR 4
	THROW - FB CAPPUCCINO, WHITENER	2.8	0.5	3.0	0.0	0.0	x	x	x	
	THROW - BTC CAPPUCCINO, WHITENER	2.8	1.0	3.0	0.0	0.0	x	x	x	
783	THROW - INST CAPPUCCINO, WHITE WATER	4.0	0.0	6.0	0.0	0.0	x	x	x	WATER STATION 2 or 3(LX model)
	THROW - FB CAPPUCCINO, WHITE WATER	4.0	0.0	5.0	0.0	0.0	x	x	x	
	THROW - BTC CAPPUCCINO, WHITE WATER	4.5	0.0	5.0	0.0	0.0	x	x	x	
784	THROW - INST CAPPUCCINO, WHITE WHIPPER	4.5	0.2	6.5	0.0	0.0	x	x	x	WHIPPER 2 or 3(LX model)
	THROW - FB CAPPUCCINO, WHITE WHIPPER	4.5	0.2	6.5	0.0	0.0	x	x	x	
	THROW - BTC CAPPUCCINO, WHITE WHIPPER	6.0	0.5	7.0	0.0	0.0	x	x	x	
785	THROW - INST CAPPUCCINO, SUGAR	1.0	1.0	1.1	0.0	0.0	x	x	x	INGREDIENT MOTOR 5
	THROW - FB CAPPUCCINO, SUGAR	1.0	1.0	1.1	0.0	0.0	x	x	x	
	THROW - BTC CAPPUCCINO, SUGAR	1.0	1.0	1.1	0.0	0.0	x	x	x	
786	THROW - INST CAPPUCCINO, EXTRA SUGAR	1.2	1.0	1.3	0.0	0.0	x	x	x	INGREDIENT MOTOR 5
	THROW - FB CAPPUCCINO, EXTRA SUGAR	1.2	1.0	1.3	0.0	0.0	x	x	x	
	THROW - BTC CAPPUCCINO, EXTRA SUGAR	1.1	1.0	1.2	0.0	0.0	x	x	x	
787	THROW - INST CAPPUCCINO, SUGAR WATER	1.7	0.8	2.0	0.0	0.0	x	x	x	WATER STATION 3 or 4(LX model)
	THROW - FB CAPPUCCINO, SUGAR WATER	1.2	0.8	1.3	0.0	0.0	x	x	x	
	THROW - BTC CAPPUCCINO, SUGAR WATER	2.0	0.5	2.5	0.0	0.0	x	x	x	

ADD	FUNCTION	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	COMMENT
	INST/FB/BTC CAPPUCCINO (Cont.)									
788	THROW - INST CAPPUCCINO, SUGAR WHIPPER	1.8	0.8	2.1	0.0	0.0	x	x	x	WHIPPER 3 or 4(LX model)
	THROW - FB CAPPUCCINO, SUGAR WHIPPER	1.8	0.8	2.1	0.0	0.0	x	x	x	
	THROW - BTC CAPPUCCINO, SUGAR WHIPPER	1.8	0.8	2.1	0.0	0.0	x	x	x	
789	THROW - INST CAPPUCCINO, CHOCOLATE	0.0	0.0	0.0	0.0	0.0	x	x	x	INGREDIENT MOTOR 2
	THROW - FB CAPPUCCINO, CHOCOLATE	0.0	0.0	0.0	0.0	0.0	x	x	x	
	THROW - BTC CAPPUCCINO, CHOCOLATE	0.0	0.0	0.0	0.0	0.0	x	x	x	
790	THROW - INST CAPPUCCINO, CHOCOLATA WATER	0.0	0.0	0.0	0.0	0.0	x	x	x	WATER STATION 1 or 2(LX model)
	THROW - FB CAPPUCCINO, CHOCOLATE WATER	0.0	0.0	0.0	0.0	0.0	x	x	x	
	THROW - BTC CAPPUCCINO, CHOCOLATE WATER	0.0	0.0	0.0	0.0	0.0	x	x	x	
791	THROW - INST CAPPUCCINO, CHOCOLATE WHIPPER	0.0	0.0	0.0	0.0	0.0	x	x	x	WHIPPER 1 or 2(LX model)
	THROW - FB CAPPUCCINO, CHOCOLATE WHIPPER	0.0	0.0	0.0	0.0	0.0	x	x	x	
	THROW - BTC CAPPUCCINO, CHOCOLATE WHIPPER	0.0	0.0	0.0	0.0	0.0	x	x	x	
792	THROW - INST CAPPUCCINO, TOPUP WATER	0.0	1.5	0.0	0.0	0.0	x	x	x	WATER STATION 3 or 4(LX model)
	THROW - FB CAPPUCCINO, TOPUP WATER	0.5	4.5	0.5	0.0	0.0	x	x	x	
793	THROW - BTC CAPPUCCINO, EXTRA WATER	x	x	5.0	x	x	x	5.0	x	
794	THROW - FB CAPPUCCINO, BREW TIME	3.0	x	x	x	x	x	x	x	
	THROW - BTC CAPPUCCINO, HOME DELAY TIME	14.0	x	x	x	x	x	x	x	
795	THROW - FB CAPPUCCINO, PISTON PUSH TIME	6.4	5.8	x	x	6.6	6.2	x	x	
	INST/FB/BTC CAFÉ LATTE									
800	SETUP DRINK CODE 73-74	3	0	10	10					[MAIN SETUP] 0 = DISABLED 1 = ACTIVE, NO WHIP OPTION, TIMED FREE VEND 2 = ACTIVE, WITH WHIP OPTION, TIMED FREE VEND 3 = PERMANENTLY WHIPPED, TIMED FREE VEND 11 = ACTIVE, NO WHIP OPTION, NO TIMED FREE VEND 12 = ACTIVE, WITH WHIP OPTION, NO TIMED FREE VEND 13 = PERMANENTLY WHIPPED, NO TIMED FREE VEND [EXT SETUP - Data field 2] 0 = INST 2 = FB 4 = BTC [Extra count down time- Data field 3]
801	INST/FB/BTC C'LATTE - PRICE	0.15	0.25	x	x	x	x	x	x	
804	THROW - INST C'LATTE, REGULAR	0.9	0.4	1.2	0.0	0.0	x	x	x	INGREDIENT MOTOR 6
	THROW - FB C'LATTE, REGULAR	3.0	0.0	3.2	0.0	0.0	x	x	x	
	THROW - BTC C'LATTE, REGULAR	4.5	0.0	4.5	0.0	0.0	x	x	x	
805	THROW - INST C'LATTE, MAIN WATER	3.2	0.0	3.2	0.0	0.0	x	x	x	WATER STATION 4
	THROW - FB C'LATTE, MAIN WATER	2.5	0.0	3.5	0.5	0.5	x	x	x	
	THROW - BTC C'LATTE, MAIN WATER	7.0	0.0	11.0	0.0	0.0	x	x	x	

ADD	FUNCTION	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	COMMENT
	INST/FB/BTC CAFÉ LATTE (Cont.)									
806	THROW - INST C'LATTE, MAIN WHIPPER	3.5	0.2	3.7	0.0	0.0	x	x	x	NONE
	THROW - FB C'LATTE, MAIN WHIPPER	2.0	3.5	2.0	0.0	0.0	x	x	x	
	THROW - BTC C'LATTE, MAIN WHIPPER	0.0	0.0	0.0	0.0	0.0	x	x	x	
807	THROW - INST C'LATTE, WHITENER	3.0	4.2	3.5	0.0	0.0	x	x	x	INGREDIENT MOTOR 4
	THROW - FB C'LATTE, WHITENER	2.8	10.5	3.5	0.0	0.0	x	x	x	
	THROW - BTC C'LATTE, WHITENER	2.8	17.5	3.5	0.0	0.0	x	x	x	
808	THROW - INST C'LATTE, WHITE WATER	4.0	3.8	6.0	0.0	0.0	x	x	x	WATER STATION 2 or 3(LX model)
	THROW - FB C'LATTE, WHITE WATER	4.0	9.8	5.0	0.5	0.5	x	x	x	
	THROW - BTC C'LATTE, WHITE WATER	4.5	16.5	5.0	0.5	0.5	x	x	x	
809	THROW - INST C'LATTE, WHITE WHIPPER	3.8	4.0	5.8	0.0	0.0	x	x	x	WHIPPER 2 or 3(LX model)
	THROW - FB C'LATTE, WHITE WHIPPER	4.5	9.8	6.5	0.0	0.0	x	x	x	
	THROW - BTC C'LATTE, WHITE WHIPPER	5.5	16.5	6.5	0.0	0.0	x	x	x	
810	THROW - INST C'LATTE, SUGAR	1.0	0.8	1.1	0.0	0.0	x	x	x	INGREDIENT MOTOR 5
	THROW - FB C'LATTE, SUGAR	1.0	1.2	1.1	0.0	0.0	x	x	x	
	THROW - BTC C'LATTE, SUGAR	1.0	1.0	1.1	0.0	0.0	x	x	x	
811	THROW - INST C'LATTE, EXTRA SUGAR	1.2	0.8	1.3	0.0	0.0	x	x	x	INGREDIENT MOTOR 5
	THROW - FB C'LATTE, EXTRA SUGAR	1.2	1.2	1.3	0.0	0.0	x	x	x	
	THROW - BTC C'LATTE, EXTRA SUGAR	1.1	1.0	1.2	0.0	0.0	x	x	x	
812	THROW - INST C'LATTE, SUGAR WATER	1.7	0.8	2.0	0.0	0.0	x	x	x	WATER STATION 3 or 4(LX model)
	THROW - FB C'LATTE, SUGAR WATER	1.2	1.0	1.4	0.0	0.0	x	x	x	
	THROW - BTC C'LATTE, SUGAR WATER	2.0	0.5	2.5	0.0	0.0	x	x	x	
813	THROW - INST C'LATTE, SUGAR WHIPPER	1.8	0.8	2.1	0.0	0.0	x	x	x	WHIPPER 3 or 4(LX model)
	THROW - FB C'LATTE, SUGAR WHIPPER	1.8	0.8	2.1	0.0	0.0	x	x	x	
	THROW - BTC C'LATTE, SUGAR WHIPPER	2.0	0.5	3.0	0.0	0.0	x	x	x	
814	THROW - INST C'LATTE, TOPUP WATER	0.0	1.5	0.0	0.0	0.0	x	x	x	WATER STATION 3 or 4(LX model)
	THROW - FB C'LATTE, TOPUP WATER	0.5	4	0.5	0.0	0.0	x	x	x	
815	THROW - BTC C'LATTE, EXTRA WATER	x	x	5.0	x	x	X	5.0	x	
816	THROW - FB C'LATTE, BREW TIME	5.0	x	x	x	x	x	x	x	
	THROW - BTC C'LATTE, HOME DELAY TIME	4.0	x	x	x	x	x	x	x	
817	THROW - FB C'LATTE, PISTON PUSH TIME	6.4	5.8	x	X	6.6	6.2	x	x	

Refer to ‘TABLE OF FIELD PARAMETERS’ (page 52) for 1 to 8 value identifiers.

12. QUICK REFERENCE ADDRESSES

Drink Pricing Addresses

Description	Drink Code	Address	Price Regular*	Price Large*
SINGLE CUP	88 + 89	401	0.02	0.25
HOT WATER	90	403	0.02	0.25
STILL WATER	99	409	0.02	0.25
CARBONATED WATER	98	415	0.02	0.25
SYRUP 1	91+ 92	421	0.15	0.25
SYRUP 2	93	431	0.15	0.25
INSTANT 1	10 - 13	471	0.15	0.25
INSTANT 2	20 - 23	491	0.15	0.25
INSTANT 5/SOUP	80, 45 - 48	551	0.15	0.25
INSTANT ESPRESSO	14 - 17	571	0.15	0.25
ESPRESSOCHOC	77	591	0.15	0.25
CREAMICHOC	71 + 72	616	0.15	0.25
CHOCOLATE	70	636	0.15	0.25
FRESHBREW	50 - 53	676	0.15	0.25
BTC REGULAR	60 - 63	701	0.15	0.25
FB/BTC ESPRESSO	55 - 58	751	0.15	0.25
DOUBLE FB/BTC ESPRESSO	81 - 83	774	0.15	0.25
INST/FB/BTC CAPPUCCINO	75 + 76, 78 +79	776	0.15	0.25
INST/FB/BTC C'LATTE	74 + 75	801	0.15	0.25

*Software default value

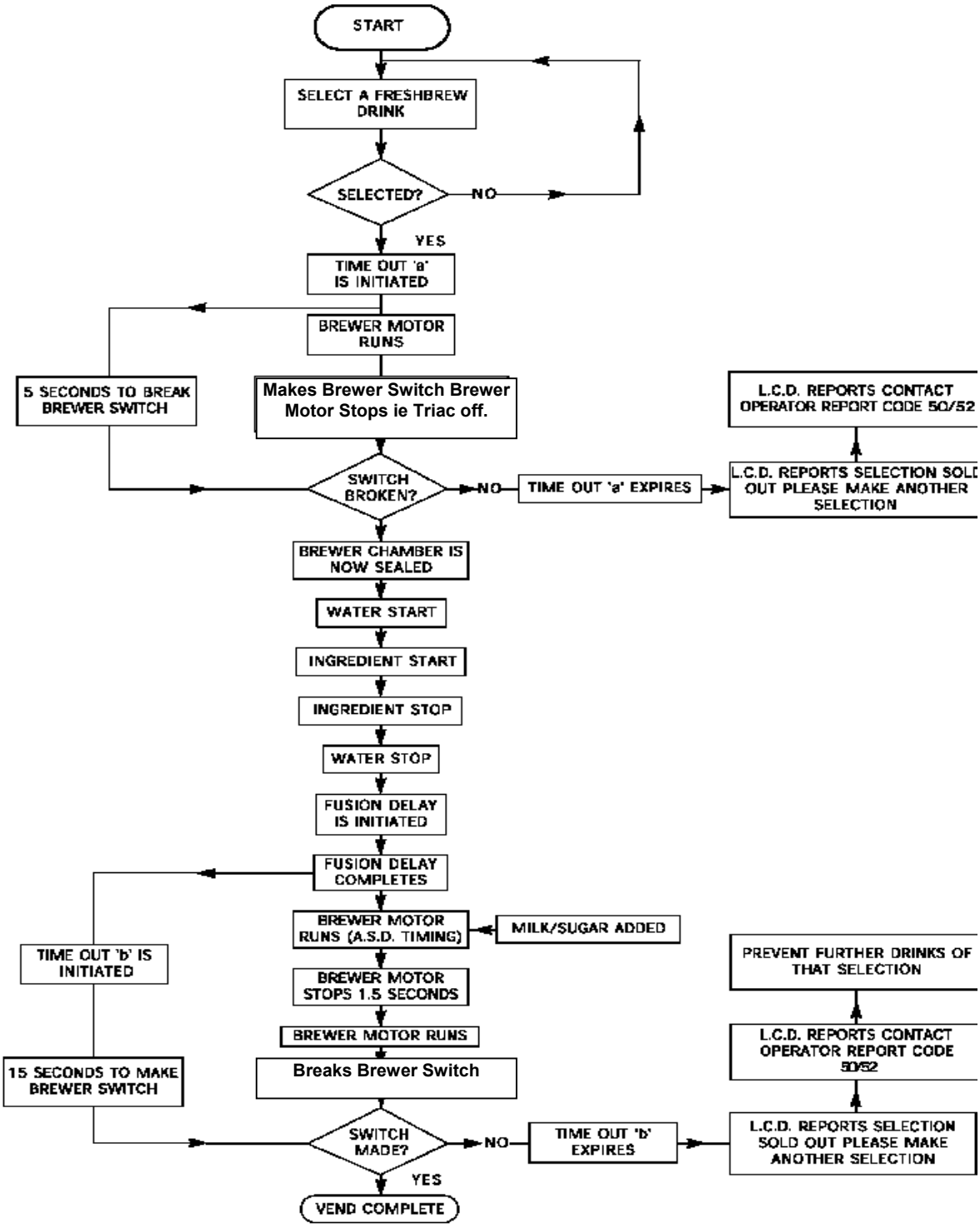
Drink Set-up Addresses

Description	Drink Code	Address	Default Value	Default Setting
SINGLE CUP	88 + 89	400	0	DISABLED
HOT WATER	90	402	0	DISABLED
STILL WATER	99	408	0	DISABLED
CARBONATED WATER	98	414	0	DISABLED
SYRUP 1	91+ 92	420	0	DISABLED
SYRUP 2	93	430	0	DISABLED
INSTANT 1	10 - 13	470	2	ACTIVE, WITH WHIP OPTION, TIMED FREE VEND
INSTANT 2	20 - 23	490	1	ACTIVE, NO WHIP OPTION, TIMED FREE VEND
INSTANT 5/SOUP	80, 45 - 48	550	5	SOUP ACTIVE, PERM WHIP, TIMED FREE VEND
INSTANT ESPRESSO	14 - 17	570	3	PERMANENTLY WHIPPED, TIMED FREE VEND
ESPRESSOCHOC	77	590	3	PERMANENTLY WHIPPED, TIMED FREE VEND
CREAMICHOC	71 + 72	615	3	PERMANENTLY WHIPPED, TIMED FREE VEND
CHOCOLATE	70	635	3	PERMANENTLY WHIPPED, TIMED FREE VEND
FRESHBREW	50 - 53	675	0	DISABLED
BTC REGULAR	60 - 63	700	0	DISABLED
FB/BTC ESPRESSO	55 - 58	750	0	DISABLED
DOUBLE FB/BTC ESPRESSO	81 - 83	773	3	PERMANENTLY WHIPPED, TIMED FREE VEND
INST/FB/BTC CAPPUCCINO	75 + 76, 78 +79	775	3	PERMANENTLY WHIPPED, TIMED FREE VEND
INST/FB/BTC C'LATTE	74 + 75	800	3	PERMANENTLY WHIPPED, TIMED FREE VEND

Note: Machine Type 3 - Encore LX Instant – Multi Choice ONLY.

13. FRESHBREW BREWER UNIT

FRESH BREW VEND SEQUENCE FLOW CHART



FAULT FINDING - FRESH BREW UNIT

Warning: Care should be taken when working on live equipment; 240Vac is present at the brewer station.

PROBLEM	CAUSE	SOLUTION
WET FILTER PAPER (LEAKING) During water delivery.	Funnel/extractor not properly located.	Re-locate correctly.
	Damaged cylinder-sealing edge.	Replace cylinder.
	Damaged/faulty cylinder seal.	Replace seal
	Filter platform not located correctly (4 screw heads).	Check for damage, if OK, re-locate correctly.
During down-stroke of piston.	Damaged cylinder-sealing edge.	Replace cylinder.
	Damaged/faulty cylinder seal.	Replace seal.
	Filter platform not located correctly (4 screw heads).	Check for damage, if OK, re-locate correctly.
When filter platform drops/paper drives.	Damaged/worn piston seal.	Replace piston seal.
	Too much water in cylinder.	Check/adjust water volume.
	Damaged/worn inner wall of cylinder.	Replace cylinder.
	Stainless steel delivery nozzle choked with tannin	Replace nozzle or clear tannin.
	Silicon delivery tube obstructed/pinched.	Check and clear obstruction.
	ASD timing set too late.	Adjust ASD time to occur earlier to expel all water.
PAPER DRIVE FAILURE	Incorrect type of filter paper (Cylinder fills with ingredient).	Replace with correct paper type i.e. 100mm wide.
	'O' ring/s damaged or missing from drive roller.	Replace 'o' ring/s.

FAULT FINDING - FRESH BREW UNIT (CONTINUED)

PROBLEM	CAUSE	SOLUTION
PAPER DRIVE FAILURE (CONTINUED)	Cam follower not dropping far enough to engage drive.	Check and clear build- up of ingredient from underside.
	Filter roll not turning freely.	Check for interference and clear.
	Filters insert incorrectly located/missing.	Re-locate/replace filter insert.
SPLASHING/SPLUTTERING OVER MIXING BOWL	ASD timing set too early or too late	Adjust timing of ASD correctly.
INTERMITTENT SPLASHING/SPLUTTERING OVER MIXING BOWL.	Stainless steel delivery nozzle choked with tannin.	Replace nozzle or clear tannin
	Excess tannin on cylinder wall/piston seal (sticky).	Clean away all tannin.
	Silicon delivery tube obstructed/pinched.	Check and clear obstruction.
DRIVE GEARS JUMP/ DISENGAGE	Tooth missing from gear/s.	Check the gear train, replace gear/s.
	Motor/bracket fixings loose.	Re-secure fixings as required.
	Gear/cam shaft shear pin damaged or missing	Check the 3 pins, replace as required.
MOTOR STALLS DURING DOWN-STROKE OF PISTON.	Filter platform not located correctly (possibly sitting-up at one corner).	Ensure platform is correctly locked by all four fixings.
	Too much ingredient in cylinder.	See "Paper Drive Failure" above.
	Silicon delivery tube obstructed/pinched.	Check and clear obstruction.
	Gear teeth contaminated with ingredient.	Clean gear train.
	Filter platform not correctly located (4 screw heads).	Check for damage, if OK, re-locate correctly.

FAULT FINDING - FRESH BREW UNIT (CONTINUED)

PROBLEM	CAUSE	SOLUTION
MOTOR STARTS/STOPS IN WRONG POSITION	Motor home switch not operating correctly.	Check, adjust or replace as necessary.
	Poor continuity of input signal from home switch.	Check continuity and connections between brewer home switch and CPU.
	Poor continuity of output signal to brewer motor.	Check continuity and connections between brewer motor and CPU
MOTOR DOES NOT START	No output from CPU board (240Vac)	Check output signal, replace CPU board if required.
	Loss of continuity between CPU board and brewer motor.	Check and repair fault.
	Thermal fuse in motor coil has blown.	Check for cause and replace brewer motor.
	Motor coil has failed open circuit.	Replace brewer motor.
FILTER PLATFORM FAILS TO RISE FULLY	Cam not turning, pin has sheared	Replace shear pin
	Cam follower bearing collapsed/missing.	Replace bearing.
	Filter insert incorrectly located, sandwiched between cylinder and platform.	Release piston and cylinder and re-locate filter insert.
FILTER PLATFORM FAILS TO FALL FREELY	Cam follower pillars dirty/sticky.	Clean pillars and guide bores in bearing blocks
	Cam follower pillars misaligned.	Slacken-off re-align and secure fixing screws,
	Return springs have become weak.	Replace return springs (4 off).

14. BEAN TO CUP DRINKS SETUP

The following section provides an in depth guide for setting up the bean to cup (BTC) system for the Solo Encore.

Step 1 – Drink Quality

It is Important to note, prior to any set-up or adjustments to the machine to achieve the delivery of good bean to cup coffee, you must ensure that, **FRESH BEAN ARE USED, WE RECOMMEND BEANS BE CHANGED EVERY 3-4 DAYS.**

If you change the type of beans (product brand or roast type) during regular operation the brewer will need to be adjusted.

Step 2 - Setting Flow Rates and Volumes

Set the Water Valves from the Boiler

Confirm all the water valves are set correctly to 0.6fl/oz or 17.7ml per second by following the instructions below, before continuing with any other part of the set up.

VOLUME MATRIX

This matrix shows the volume of water you should expect to see if the machine is set at 0.6 fl/oz or 17.7ml per every second display on the machine.

Water Flow Rate = 0.6 fl/oz or 17,7ml Per sec.			Water Flow Rate = 0.6 fl/oz or 17,7ml Per sec.			Water Flow Rate = 0.6 fl/oz or 17,7ml Per sec.		
Time in Seconds	Water Volume in fl/oz	Water Volume in ml	Time in Seconds	Water Volume in fl/oz	Water Volume in ml	Time in Seconds	Water Volume in fl/oz	Water Volume in ml
1.0	0.6	17.7	9.0	5.4	159.3	17.0	10.2	300.9
2.0	1.2	35.4	10.0	6.0	177.0	18.0	10.8	318.6
3.0	1.8	53.1	11.0	6.6	194.7	19.0	11.4	336.3
4.0	2.4	70.8	12.0	7.2	212.4	20.0	12.0	354.0
5.0	3.0	88.5	13.0	7.8	230.1	21.0	12.6	371.7
6.0	3.6	106.2	14.0	8.4	247.8	22.0	13.2	389.4
7.0	4.2	123.9	15.0	9.0	265.5	23.0	13.8	407.1
8.0	4.8	141.6	16.0	9.6	283.2	24.0	14.4	424.8

The easiest method of measuring the amount of water going into the BTC brewer is to:

1. Enter service mode address 706 (value shown should be around 22 sec).

2. **Caution: Take care the water dispensed will be very hot.**

3. Have a measuring jug or at least two cups ready to collect and measure the volume of water dispensed.

4. Press the ‘blank’ key on the keypad.

5. Increase or decrease the amount of water by carefully adjusting the mains water regulator for the BTC unit, (positioned under the Freshbrew unit) until the minimum 10.0 fl/oz or 295ml of water is dispensed for a 15 second throw time. (This should equal around three turns of the regulator).

Step 3 - Setting Water Volumes

Setting the BTC water flow rate

For all BTC machines to help achieve good quality drinks at least 10.0 fl/oz or 295ml of water is required, this equates to a 22 second throw time set within address 706.

To achieve the recommended flow rate of water through the grinder, adjust the water regulator for the grinder, this is located on the right hand side of the water inlet assembly.

Checking the Water Volume Dispensed from the Boiler Valves

Please note that this procedure is particularly important if the valves have been changed or de-scaled.

Example: for VALVE 1

1. In service mode enter address = 556:
2. Look at the throw time within the address (9 seconds)
3. Have measuring jug or a 7oz squat cup ready
4. Press the blank key on the keypad (alarm will sound for 5 seconds)
5. Water will be dispensed
6. Volume should be 5.4fl/oz or 159.3ml
7. If the volume is incorrect adjust the thumb adjuster on the water delivery valve – turn clockwise to increase water volume, anti-clockwise to decrease
8. Check again until the volume is correct

Repeat this process for each valve as follows:

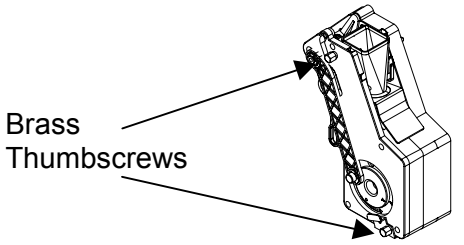
VALVE 2 – address 640 (9 seconds), 5.4fl/oz or 159.3ml
VALVE 3 – address 476 (5.7 seconds), 3.4fl/oz or 100.89ml
VALVE 4 – address 483 (3.3 seconds), 1.9fl/oz or 58.41ml
VALVE 5 – address 681 (4.5 seconds), 2.7fl/oz or 796.5ml

Step 4 – Weigh Ingredients

1. Remove bean to cup cover plate – see Brewer Assembly Plate

2. Remove the freshbrew canister to gain better access to the BTC system, to avoid unnecessary mess, turn the delivery chute upwards.

3. Unscrew, but do not completely remove, the brass thumbscrews on the brewer allowing the brewer to drop downwards to the rest position



BTC Brewer

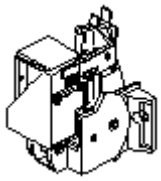
4. In service mode enter address 754

5. Weigh a cup and tare/zero the scales

6. Press the blank key on the keypad (alarm will sound for 5 seconds)

7. During this time, hold cup under doser unit, the grinder will be active until the switch is activated and dry dispense into the cup

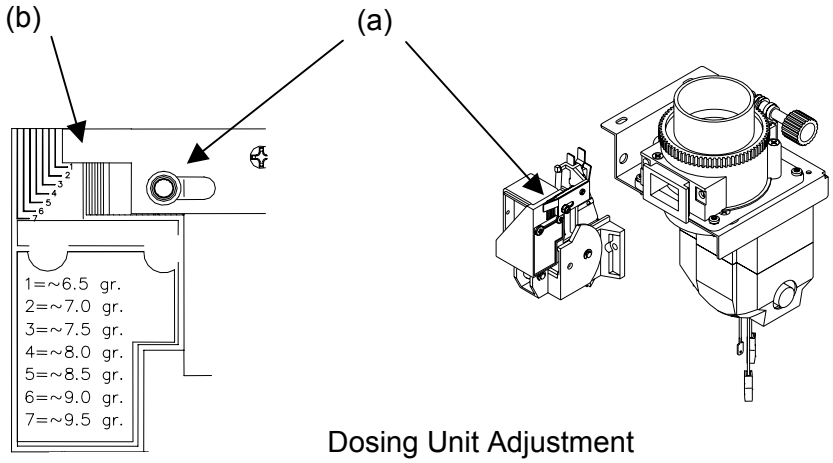
Dosing unit



8. Weigh the cup again (recommended gram throw 6.5 - 7.5 grams)

Step 5 – Ingredient Throw Adjustment

1. If this is incorrect, unscrew the stopping nut (a) and let (b) slide along to the notch corresponding to the desired dosage (recommended gram throw 6.5 - 7.5 grams). Tighten stopping nut (a).



Dosing Unit Adjustment

2. Repeat points 6 – 8 & Step 5.1 until the correct gram throw is achieved.

3. To replace the brewer ensure that the two arrows are aligned. Place hand over brewer, hold so that it is back from the positioning holes and slide forwards into position. Tighten thumbscrews (only need to be finger tight).

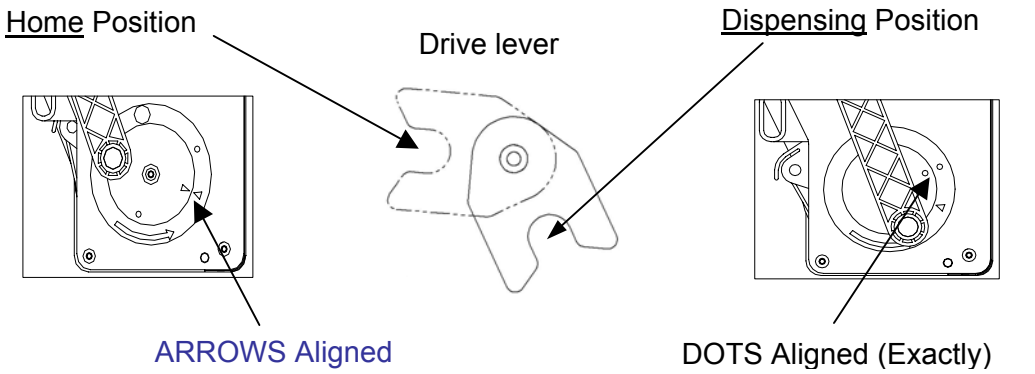
4. See details of the correct home position in Step 6 - Brewer Alignment

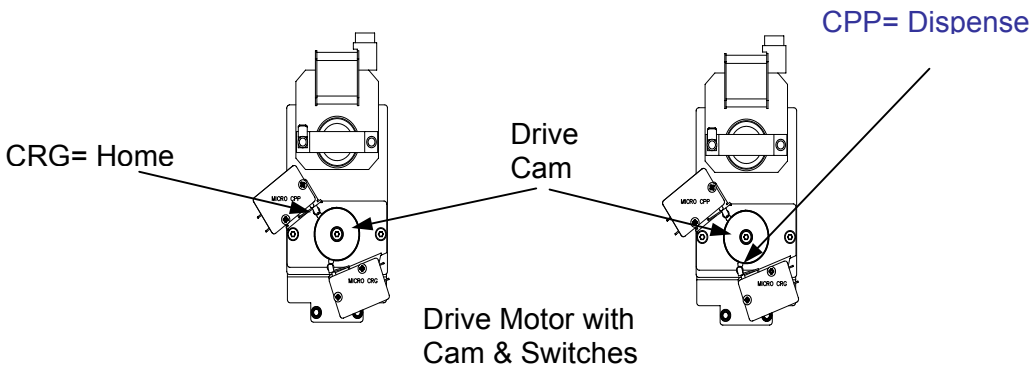
Step 6 – Brewer Alignment

IMPORTANT NOTE

ENSURE ARROWS COMPLETELY ALIGNED BEFORE PROGRESSING ANY FURTHER. BE READY TO TURN OFF THE MACHINE IF THE DOTS ARE NOT ALINGED DURING THE VEND

See details below:





1. If the Dots on the brewer are not aligned, adjust the drive cam at the back of the brewer mounting bracket, until the dots are aligned correctly and the brewer 'locks' into the dispense position.
2. Check the home position of the brewer – the arrows should approximately line up (+/- 5mm).
3. If the arrows on the brewer are not aligned within this tolerance, the homing switch may need to be adjusted slightly, loosen the two fixing screws make the necessary adjustment and tighten the two fixing screws.

4. Recycle the power to activate the home cycle.

5. Only continue once the positions for 'dispense' and 'home' are aligned.

6. Ensure that fresh beans are being used

7. Have cup ready and **BE READY AT ALL TIMES TO TURN OFF THE MACHINE POWER SHOULD THE MACHINE GO OVER PRESSURE**

Pressure Gauge

Step 7 – Adjusting Pressure

1. Enter test mode and take 1 BTC espresso drink (selection code 55)

2. Check that the dots on the brewer line up **EXACTLY** during the vend cycle. The alignment of the dots is imperative to ensure that the brewer is not damaged and will withstand the pressure while dispensing a BTC beverage.

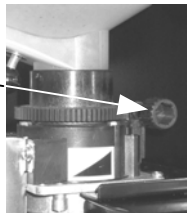
3. Take 2 further BTC espresso drinks, observing the pressure gauge on the second vend

4. The pressure gauge should rise to within the green area (8-11 bar)

5. If the pressure is incorrect, turn the thumbscrew on the right hand side of the grinder as follows:

    - Clockwise to obtain a finer grind = Increase the pressure
    - Anti clockwise to obtain a coarser grind = Reduce the pressure.

Grinder Thumbscrew



BTC Grinder

6. See Quick Reference Table (below) for more details on perfecting Bean to cup drink quality.

7. Take 3 Black BTC espresso selections (55), observing the pressure gauge on the third vend

8. Continue to adjust by ½ turns. In each case watch the pressure on the third vend until pressure is correct

IMPORTANT NOTE: If the brand/variety of beans is changed, the pressure may also change. Please follow the above procedure to ensure that the pressure is correct.

Step 8 – Drink & Cup Fluid Levels

The following fluid levels are recommended for a standard in 7oz & 9oz cups.

Section	Drink Selection		Drink Volume in fl/oz	
			7oz Cup	9oz Cup
4.1	Espresso's	55 - 58	2.0 - 2.5	3.0 - 3.5
	D/ Espresso's	81- 84	4.0 - 4.5	5.0 - 5.5
4.2	Americano's	60 - 63	5.0 - 5.5	7.0 - 7.5
4.3	Cappucino's	75 -76	5.0 - 5.5	7.0 - 7.5
4.4	Café Latte 's	73 - 74	5.0 - 5.5	7.0 - 7.5

Only start setting the fluid levels for the BTC drinks after fresh beans have been placed into the BTC hopper.

Set the levels for BTC Espresso (1st Drink selection to check)

1. Note: BTC water routing should be enabled as standard for BTC Espresso & Double Espresso selections only.

2. In service mode set Address 141 = 2

3. In test mode take selection 58 (BTC Espresso coffee with sugar and whitener) and measure the fluid level.

4. Set the required fluid level by adjusting the main water throw time for that selection= Address 756.

5. Adjust the value in this address until the required fluid level has been achieved (2 - 2.5fl/oz for Espresso).

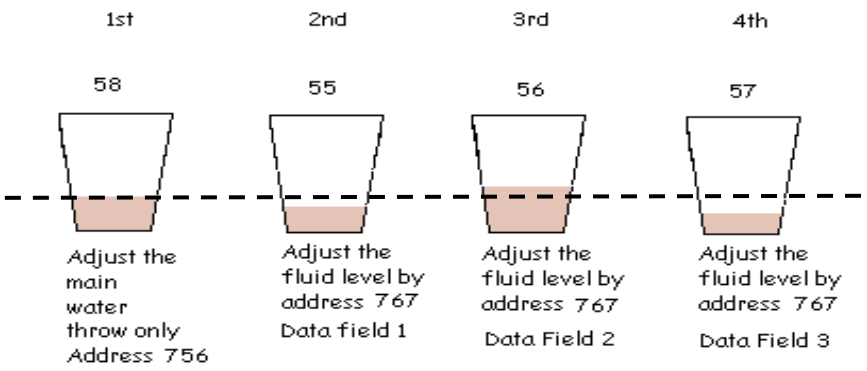
6. Once the base level has been set start checking **ALL** the other drinks options for that selection.

7. Take x1 of each of the BTC Espresso selections (with and without whitener and sugar) in test mode and ensure that the fluid levels are acceptable. 58, 55, 56 & 57

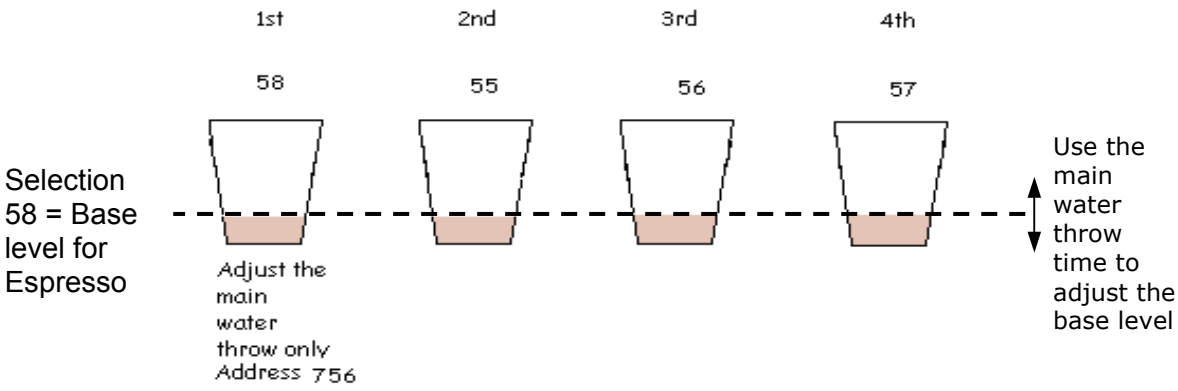
8. If the fluid levels vary across the drink 'options', then adjust the levels by using the allocated address for that selection. See details in the example below:

e.g. set the selection fluid levels in the following order:

Selection 58 = Base level for Espresso



Once the same fluid level has been achieved across the drink selection, the main water throw will adjust each selection evenly.



Espresso Selections 55,56,57 & 58 & Double Espresso Selections 81, 82, 83 & 84 Should Now Be Set.

Set the levels for BTC Americano's

Now check the volume for all Americano selections 60 – 63. If adjustment is required enter address 706 and increase or decrease the value until the required volume is dispensed.
Americano Selections 60, 61, 62 & 63 Should Now Be Set.

Set the levels for BTC Cappuccino

Now check the volume for all Cappuccino selections 75 & 76. If adjustment is required enter address 792 and increase or decrease the value until the required volume is dispensed.
Cappuccino Selections 75 & 76 Should Now Be Set.

Set the levels for BTC Café Latte

Now check the volume for all Café Latte selections 73 & 74. If adjustment is required enter address 815 and increase or decrease the value until the required volume is dispensed.
Café Latte Selections 73 & 74 Should Now Be Set.

Replace the bean to cup cover plate and the freshbrew canister, ensuring that the filter paper for the freshbrew is positioned correctly.

Perfecting BTC Drink Quality

Please check the following table when you are installing & setting up the BTC brewer, this will help aid in obtaining good quality bean to cup drinks.

Quick Reference Table

Note: The following notes may vary depending on the brand of beans being used:		
BEAN TO CUP PRODUCT	**GRINDER SET UP**	**ACTIONS**
Excessive Water through the beans	Grind too course Possibly 2-8 bar	Turn grinder adjuster 'A' clockwise
Fast coffee flow rate into cup		Turn 'A' clockwise
Weak coffee		Turn 'A' clockwise, increase the throw time
Pale, Thin crema		Turn 'A' clockwise, increase the throw time
Solid bean plug but coffee waste spilling during the home to dispense position		Turn 'A' clockwise, decrease bean throw time to reduce bean waste
Good flow of water through the beans	**Medium grind** **8-11 bar**	**No action required**
Steady coffee flow of water into the cup		
Good strength coffee **Creamy – Golden Crema**		
Good bean plug with no waste during the home to dispense position		
Less water through the beans creating short drink levels	Grind too fine Possibly 11-15 bar	Turn grinder adjuster 'A' anti-clockwise
Slow coffee flow rate into the cup		Turn 'A' anti-clockwise
Strong coffee		Turn 'A' anti-clockwise
Brown crema		Turn 'A' anti-clockwise
Wet bean plug wit no waste during the home to dispense position		Increase bean throw time to form a more solid plug of waste
The brewer forced under too much pressure		Turn 'A' anti-clockwise &/or reduce the amount of product

Routine BTC System Cleaning Instructions

1. Perform a flush cycle until water runs clear (button 6)

2. Brush outside of brewer with dry brush

3. Wash bean hopper and ensure it is <u>completely dry</u> before replacing

After 20,000 BTC vends, remove brewer and soak thoroughly

15. CARBONATED WATER

Warning: Care should be taken when working on live equipment; 240Vac is present in the carbonator.

TECHNICAL SPECIFICATION

DIMENSIONS (External)	
Height:	640mm
Width:	245mm
Depth:	290mm

ELECTRICAL

Supply Voltage:	220/240 volts 50Hz
Run Current:	0.9 amps
Start Current:	3.1 amps

REFRIGERATION SYSTEM

Condenser Fan:	120mm integrated box fan
Refrigeration Control:	Electro mechanical, gas filled
Refrigerant Type:	R134-75g
Insulation Type:	In situ polyurethane

PRODUCT SYSTEM

Syrup:	Peristaltic Pump

THERMOSTAT

Type:	Electro mechanical, gas filled
Range:	Cut out +0.5^{0}C
	Cut in +2.72^{0}C

CARBONATOR

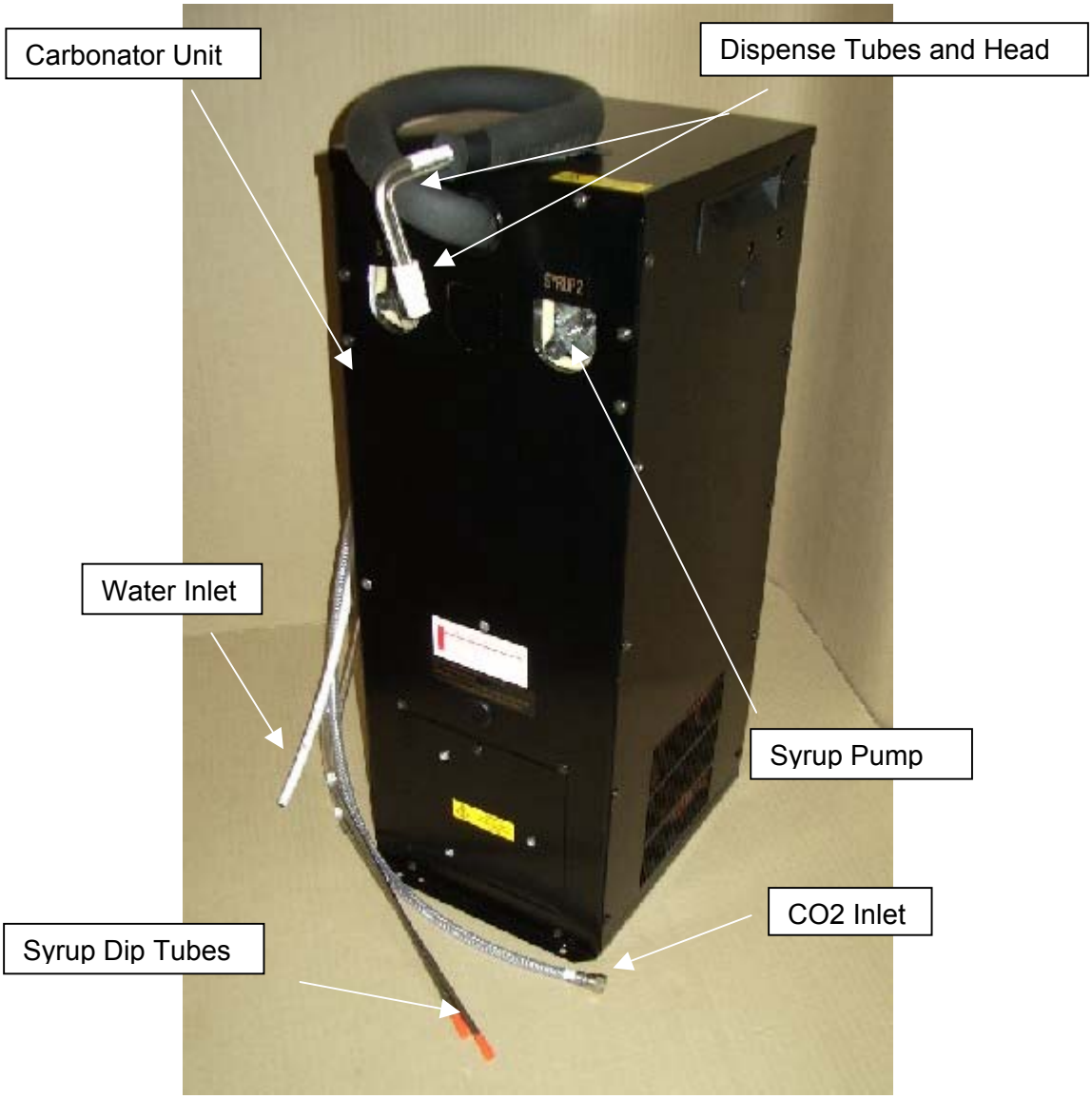
Dimensions:	209mm x 63.5mm Dia.
Working Capacity:	0.35litres
CO^2 Supply:	50psi
Level Control:	Electronic probe

COMPRESSOR

Displacement:	4.0cc
Recovery at 10^{0}C:	420 Watts
Start Current:	6A
Power Consumption at 10^{0}C:	219w
Voltage Range:	198/264 volts 50Hz
Start Winding (at 25^{0}C):	19.48ohm
Run Winding (at 20^{0}C):	18.76ohm
Locked Rotor Current:	5.6amp

DGB - COBOLT CARBONATOR UNIT

IDENTIFICATION DIAGRAM



Note:
For information on wiring schematic, internal layouts and flow diagrams refer the foldout at the back of this manual.

FAULT FINDING - CARBONATOR

PROBLEM	CAUSE	SOLUTION
EXCESS FOBBING/ OVERFLOWING CUP CARBONATED DRINK	Too much product for size of cup.	Adjust dispense time
	CO2 pressure too high.	Reset CO2 Regulator 50psi.
	Too much syrup.	Reset drink strength. Dispense tube dirty. Clean with 'Sanitiser'.
	Temperature too high.	Check the airflow over the unit condenser and clean if necessary, or carry out 'fridge check (see REFRIGERATION SYSTEM TEST PROCEDURE).
LOW LEVEL IN THE CUP [CARBONATED DRINKS]	CO2 cylinder empty.	Change cylinder.
	CO2 regulator faulty.	Check and replace if unable to reset to 50psi
	Dispense time too short	Reset dispense times - nominally 5.0 seconds for carbonated water & 3.0 seconds syrup.
	Carbonator not filling correctly.	(See POOR CARBONATION)
LOW LEVEL IN THE CUP [STILL DRINKS]	Insufficient water pressure.	Check mains water supply - minimum 20psi. Check filter cartridge (if fitted), replace if necessary.
	Water pump not working.	Check that pump works on dispense of drink. Check electrical connections to carbonator PCB control box
	Pump working - pressure low.	Fit gauge to discharge and check dead head pressure (125psi).
	Intermittent freezing.	(See REFRIGERATION SYSTEM TEST PROCEDURE)

FAULT FINDING - CARBONATOR (CONTINUED)

PROBLEM	CAUSE	SOLUTION
DRINK TOO WEAK	Syrup pump not pumping.	Check the electrical supply to the pump while vending a drink. If the pump is operating but not pumping, check rollers for movement and ensure Autoprene tubing is not constricted.
	Incorrect syrup throw time.	Check machine settings and reset as required
	Out of syrup.	Check syrup levels.
POOR CARBONATION	CO2 cylinder almost empty	Check and replace.
	CO2 regulator set too low	Reset to 50 psi.
	Temperature too high.	Check that fridge unit is running. Check airflow over condenser. Clean if necessary, or carry out 'fridge check'
	Water pump not working.	Check that pump operates on dispense of drink. Check connections to carbonator PCB control box.
	Pump working - pressure low.	Fit gauge to discharge and check dead head pressure (125psi).
	Carbonator overfilling.	Check that both connections are made on probe. Check or change circuit board.
	Ingress of air.	Purge carbonator bowl.
NO WATER BEING DISPENSED	Water supply.	Check water supply to the machine or from filter cartridge (if fitted) to unit.
	Pump not working.	Replace.
	Freeze up or intermittent freezing.	Check the state of the ice bank probe, change, if necessary Check or change the complete PCB control box.

FAULT FINDING - CARBONATOR (CONTINUED)

PROBLEM	CAUSE	SOLUTION
	Carbonator vessel failing to fill.	Confirm operation of water pump by taking still vend. If the pump is not working check pump. Unplug the Level Probe connector from the main loom within the deck area, take carbonated vend, pump should run continuously for 15 seconds, if not a PCB malfunction is likely.
	CO2 cylinder empty.	Check and replace.
PARTIAL LOSS OF CHARGE	This is evident by a large build up of ice on bottom bank coils.	Return to Westomatic full for two or three ice inspection/service.

REFRIGERATION SYSTEM FAULT DIAGNOSIS AND TEST PROCEDURES

If the refrigeration unit appears to have failed, the following procedure should be carried out. Ensure the condenser is clean, that there are no obstructions to air flow, and that no excessively high ambient condition exists (maximum 32°C)

CAUTION

Before changing any electrical component, the machine must be isolated from the mains electrical supply.

SYMPTOM: SYSTEM NOT COOLING

Firstly: - Determine if the compressor and fan are running. It is sometimes difficult to assess if the compressor is running due to noise made by the fan. Use the shaft of a screwdriver to listen to the motor by placing the handle against your ear and place the other end against the compressor housing.

If both fan and compressor are running, this could indicate a loss of refrigerant or a blockage in the system. In either case the refrigerant base unit should be replaced.

If neither fan nor compressor is running, then: -

1.0 Check 240V is available at the input to the refrigeration unit (thermostat) for additional wiring information see schematic wiring diagram.
1.1 Switch on main power.

Should both the fan and compressor fail to start, check if there is a 240V output from the thermostat, if there is, check the fan/compressor electrical components. If there is no 240V output, replace the thermostat.

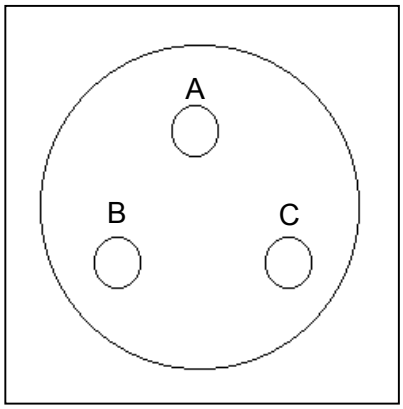
If compressor only is running and fan is stationary, then: -

2.0 At the compressor check that 240V is available to the fan.
Check continuity from the compressor to the fan. For additional wiring information a schematic wiring diagram.
2.1 Check the blade for free rotation.
2.2 Change the motor.

If the compressor remains stationary whilst the fan is running, then: -

3.0 Check that the wiring is correct and power is available to the compressor.

3.1 Check the compressor windings as follows: - Remove the overload and thermal trip unit and test for continuity across the main windings, pins A and C. A reading of 19.48 Ohms should be achieved. Test for continuity across the start windings, pins A and B. A reading of 18.76 Ohms should be achieved.
Test all three pins for leakage to Earth.
Failure of any of the above tests indicates a defective compressor and the Compressor Windings unit should be returned for repair.



Pin Labelling for Compressor Windings

3.2 If the compressor windings are proved correct the fault lie within the overload/thermal trip/PTC assembly. If the compressor has failed on over-temperature the unit should be allowed to cool for 15-20 minutes prior to reconnecting power supplies.

SYMPTOM: FAILURE TO DISPENSE STILL OR CARBONATED WATER

A further symptom is that CO2 gas may splutter from the dispense nozzle during carbonated vends.

1.0 A possible cause could be either the failure of the thermostat or partial lose of refrigerant charge.

SPARES INSTALLATION GUIDE

Carbonator Pump

Location: On carbonator - Fixed to the heat exchanger on the shelf.

1. Isolate the unit at the mains power supply.
2. Turn off the mains water supply to the cabinet.
3. Remove the cover from the unit.
4. Disconnect the water pump from the control box
5. Remove the inlet and outlet 'Speedfit' connections from the pump.
6. Remove the 4 M4 nuts securing the pump to the bracket.
7. Lift the pump clear of the unit.
8. Installation is a reversal of the removal procedure.

Solenoid Valve

Location: On carbonator - Affixed to the control block at the front of the top back

1. Isolate the unit at the mains power supply
2. Turn off the mains water supply to the cabinet.
3. Turn off the CO2 supply at the bottle.
4. Remove the lid from the unit.
5. Release the pressure from the carbonator bowl via the pressure relief valve.
6. Remove the electrical connections from the faulty solenoid.
7. Remove the 14mm retaining nut.
8. Remove the solenoid valve.
9. Install new solenoid to control block.
10. Reconnect the electrical connections to the solenoid.
11. Reconnect the water supply to the unit.
12. Reconnect the CO2 supply to the unit.
13. Check the unit for any leaks.
14. Refit the cover to the unit.
15. Turn on the unit at the mains power supply.

Condenser Fan Motor

Location: Fitted on the bracket under the shelf of the carbonator

1. Isolate the unit at the mains power supply.
2. Remove the two screws holding the fan bracket in position in the fan pod.
3. Remove the fan.
4. Disconnect the electrical connections to the fan
5. Installation is a reversal of the removal process.

NOTE:

The assembly can only be installed in one way as the bracket holes are offset; this is to guarantee that the airflow is in the correct direction.

SPARES INSTALLATION GUIDE (CONTINUED)

Syrup Pump

Location: Fixed to the syrup pump bracket on the front cover of the carbonator unit

1. Isolate the mains at the power supply.
2. Remove the lid.
3. Disconnect the syrup tubes from the syrup pump.
4. Remove the pump from the syrup pump bracket by undoing the 2 fixing screws (these can be undone by pocking long Posi-screwdriver through the holes on the back panel).
5. Disconnect the electrical connection to the pump.
6. Lift the pump clear of the unit.
7. Installation is the reversal of the removal process.

Thermostat

Location: Fixed to the left on the back pane of the carbonator unit

1. Isolate the mains at the power supply.
2. Remove the thermostat.
3. Remove the thermostat phil from the heat exchanger phil pocket
4. Installation is the reversal of the removal process.

16. CHILLED WATER

Warning

Care should be taken when working on live equipment; 240Vac is present on the machines cold water system.

The refrigeration unit within your machine utilises flash technology and therefore does not house an ice bath, for purification purposes two filters maybe fitted within the inline water supply. The first filter removes odour, hard water elements and organic pollutants. The second, a single UV filter (40 volt supply, 240Vac output taken from the cold inlet valve) removes bacteria from within the water supply.

Technical Specification

Refrigeration capacity	28 – 30 L/t
Width	232mm
Depth	284mm
Height	310mm
Power	230Vac, 50Hz
Current consumption	270W
Weight	19Kg
Syrups	x2 peristaltic wvs part number 100054120
Output solenoid	154218

CHILLER UNIT – TROUBLESHOOTING

Warning:
Care should be taken when working on live equipment; 240Vac is present at the Chiller unit.

PROBLEM	CAUSE	SOLUTION
NO WATER IS DISPENSED DURING A VEND	No output to valves	The Cold water inlet valve is operated via SKT12/1 from the CPU and splits off to the dispense valve located on the top of the fridge. Check for 240Vac output when taking a cold drink.
LOW WATER LEVEL IN CUP	Low mains water supply	Increase the water flow rate to the fridge by adjusting the Water regulator.
	Programmed Incorrectly	Increase the flow time via address 412.
WATER RUNNING WARM	Thermostat Open circuit	Check that 240Vac from the PSU is reaching the thermostat. Check the output of the thermostat is also at 240Vac. If there is no voltage at the output replace the thermostat.
	Compressor not running	Check 240Vac to the compressor. Replace the unit if there is voltage to the compressor and it is not running.
	Compressor running But not chilling	Loss of gas within the compressor Change the unit.

17. NESTLE ACCOLADE

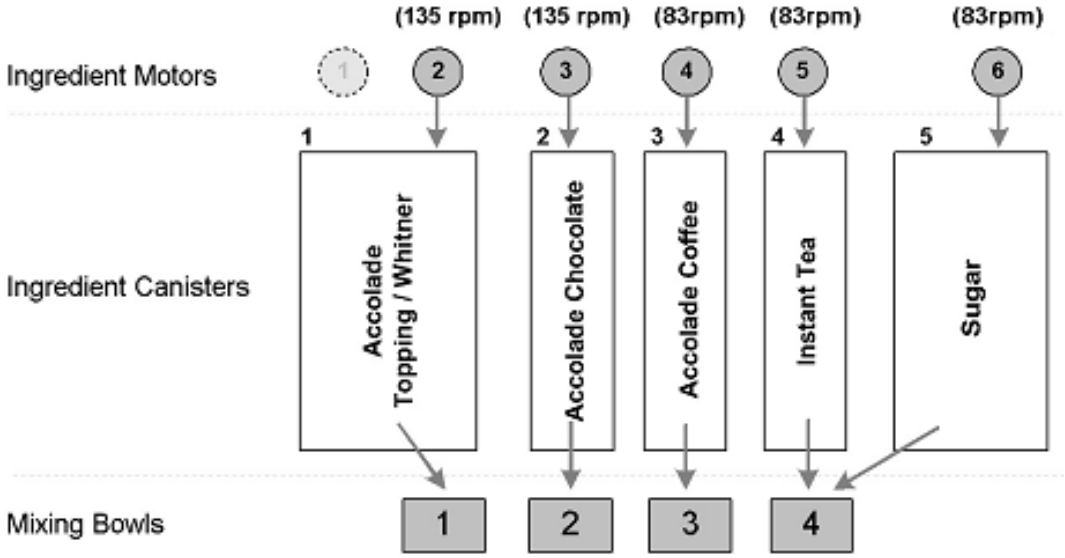
The following information applies to Nestle Accolade branded Encore beverage machines only.
Westomatic Encore branded Nestle Accolade machines should be used in conjunction with Nestle Accolade Approved Ingredient Only.

Water Valves

Please note the water valves on the Nestle Accolade Encore are set to **0.5 fl/oz** or **14.7ml** per second. If you change or recondition any of the water valves, ensure the above flow rate is reset.

Machine Configuration - INSTANT ACCOLADE

Motor, Bowls & Canister Layout



Note: Ingredient motor position 1 is not use for Accolade.

Canisters/Motor/Chute configuration:

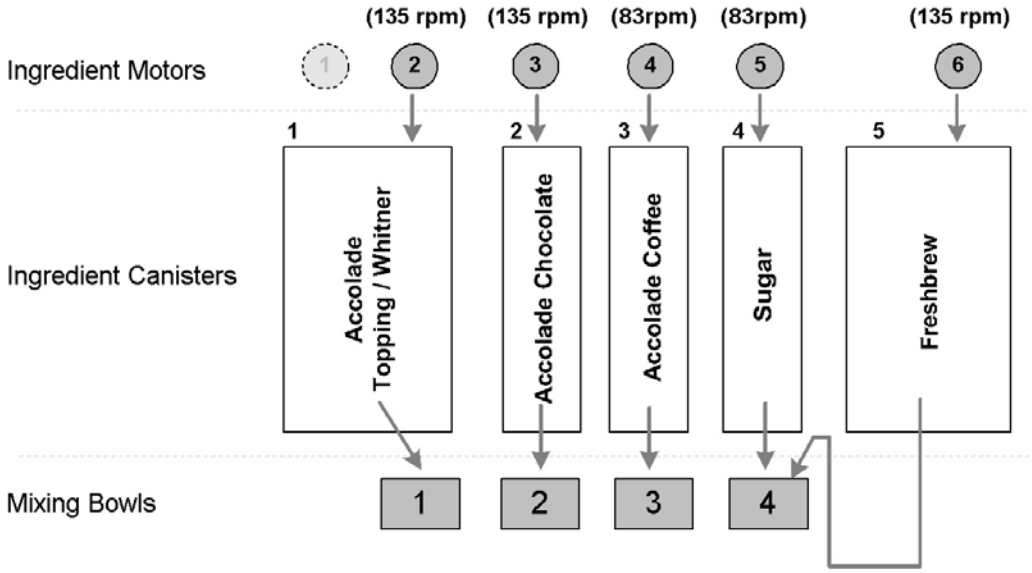
No	Product Canister	Ingredient Motor	Chute Type
1	Topping / Whitener Canister	Motor 2	Long R/H
2	Chocolate Canister	Motor 3	Long R/H
3	Coffee / Instant 1 Canister	Motor 4	Long R/H
4	Tea / Instant 2 Chute	Motor 5	Normal R/H
5	Sugar Chute	Motor 6	Long R/H

Parts Specification:

	Canister Size	Part No	Chute Type	Part No
Canister 1	135 x 430	161411	Long R/H	161220
Canister 2	65 x 460	161410	Long R/H	161220
Canister 3	65 x 460	161410	Long R/H	161220
Canister 4	65 x 460	161410	Normal R/H.....	161302
Canister 5	65 x 460	161410	Long R/H	161220

Machine Configuration - FRESHBREW ACCOLADE

Motor Bowls & Canister Layout



Note: Ingredient motor position 1 is not use for Accolade.

Canisters/Motor/Chute configuration:

No	Product Canister	Ingredient Motor	Chute Type
1	Topping / Whitener Canister	Motor 2	Long R/H
2	Chocolate Canister	Motor 3	Long R/H
3	Coffee / Instant 1 Canister	Motor 4	Long R/H
4	Sugar Canister	Motor 5	Normal R/H
5	Freshbrew Canister	Motor 6	Normal R/H

Parts Specification:

	Canister Size	Part No	Chute Type	Part No
Canister 1	135 x 430	161411	Long R/H	161220
Canister 2	65 x 460	161410	Long R/H	161220
Canister 3	65 x 460	161410	Long R/H	161220
Canister 4	65 x 460	161410	Normal R/H.....	161302
Canister 5	135 x 430	161411	Normal R/H.....	161302

Note: The following parts are used on both Instant and Freshbrew Accolades.

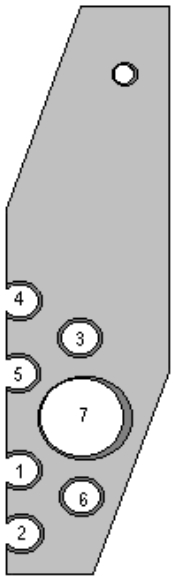
	Part No	Motors	Part No
Whipper Base	160121	83 rpm	161416
Whipper Impellor	160119	135 rpm	161417
Whipper Chamber.....	160120		
Pillar Clip-on Base	100060058		

Outlet Weirs

Outlet Weirs are supplied on all canisters Part no 161415

IMPORTANT INFORMATION

To help with the presentation of the drinks selections dispensed, after cleaning ensure the dispense outlets are correctly positioned in the dispense head as follows:



Bowl 1 ⟶ Position 1

Bowl 2 ⟶ Position 2

Bowl 3 ⟶ Position 5

Bowl 4 ⟶ Position 4

Drink Selections

Selection	Drink Code		
BLACK COFFEE	No Sugar **10**	1 Sugar **11**	2 Sugar **12**
WHITE COFFEE	No Sugar **15**	1 Sugar **16**	2 Sugar **17**
EXTRA WHITE COFFEE	No Sugar **18**	1 Sugar **19**	2 Sugar **20**
ESPRESSO	No Sugar **21**	1 Sugar **22**	2 Sugar **23**
LATTE	No Sugar **25**	1 Sugar **26**	2 Sugar **27**
CAPPUCCINO	No Sugar **30**	1 Sugar **31**	2 Sugar **32**
MOCHA (ESPRESSOCHOC)	No Sugar **35**	1 Sugar **36**	2 Sugar **37**
CREAMY CHOCOLATE (Hot chocolate)	No Sugar **40**		
EXTRA CREAMY CHOCOLATE (Creamichoc)	No Sugar **45**		
BLACK TEA	No Sugar **50**	1 Sugar **51**	2 Sugar **52**
WHITE TEA	No Sugar **53**	1 Sugar **54**	2 Sugar **55**

Extra Options

Extra option selections are <u>Not Available</u> with Accolade.

Drink Set-up

Main Set-up & Drink Codes	Address	Ingredient	Regular 7oz 130rpm	Delay	Large 9oz130rpm	Pulse On	Pulse Off
			Time in Seconds				
ASD	130		3.0		3.0		
PISTON PUSH PULSE	133		0.5, 1.0		0.5, 1.0		
Coffee							
	474	Coffee	1.2	1.0	1.6		
10 - 12 Black	476	Water	3.2	0.0	3.8		
15 - 17 White	477	Main Whipper	2.0	0.5	2.0		
18 - 20 Ex White	478	White	1.0	0.5	1.4		
	479	Ex White	1.3	0.5	1.9		
	480	White Water	5.5	0.0	6.0		
	482	Sugar	1.0	0.5	1.3		
	483	Ex Sugar	2.0	0.5	2.5		
	484	Sugar Water	2.8	0.0	4.6		
	485	Sugar Whipper	2.0	0.3	2.5		
		Water Volume	6.25fl.oz/184.7ml		7.5fl.oz /221ml		
Espresso							
	574	Coffee	1.2	0.8	1.2		
21 - 23 Black	576	Water	3.5	0.0	3.5		
	577	Main Whipper	5.0	0.2	5.0		
	582	Sugar	0.6	0.2	0.6		
	583	Ex-Sugar	1.0	0.2	1.0		
	584	Sugar Water	1.7	0.0	1.7		
		Water Volume	2.75fl.oz/ 74ml		2.75fl.oz / 74ml		
Cappuccino							
	779	Coffee	1.3	11.5	1.7		
30 - 32	780	Water	2.7	11.0	3.0		
	781	Coffee Whip	2.0	11.0	3.5		
	782	Topping	2.6	0.6	3.5		
	783	Topping Water	5.5	0.0	7.0		
	784	Topping Whip	7.0	0.0	9.0		
	785	Sugar	1.0	0.5	1.3		
	786	Ex Sugar	2.0	0.5	2.5		
	787	Sugar Water	1.7	0.5	2.0	787 = 0.5	787 = 0.5
	788	Sugar Whipper					
	792	Top-up Water	0.0	0.0	0.0		
		Water Volume	4.75fl.oz/ 140ml		6.25fl.oz / 184ml		
Cafe Latte							
	804	Coffee	1.2	0.2	1.6		
25 - 27	805	Water	1.8	0.0	2.5		
	806	Coffee Whip	2.5	0.2	3.0		
	807	Topping	4.2	0.8	5.8		
	808	Topping Water	7.0	0.0	8.5		
	809	Topping Whip	3.8	0.0	4.5		
	810	Sugar	1.0	0.5	1.3		
	811	Ex Sugar	2.0	0.5	2.5		
	812	Sugar Water	1.7	0.5	1.9	812 = 0.5	812 = 0.5
	813	Sugar Whipper	1.8	0.2	2.1		
		Water Volume	5.0fl.oz/ 147ml		6.75fl.oz / 199ml		

Main Set-up & Drink Codes	Address	Ingredient	Regular 7oz 130rpm	Delay	Large 9oz130rpm	Pulse On	Pulse Off
Espresso Choc (Mocha)							
	594	Coffee	0.6	1.0	0.9		
35 - 37	595	Water	2.5	0.5	2.5		
	596	Coffee Whip	2.0	0.8	2.0		
	597	Choc	2.3	0.8	3.0	0.5	0.8
	598	Choc Water	5.0	0.0	6.7	2.0	0.7
	599	Choc Whipper	5.5	0.0	7.2		
	600	Topping	0.3	0.5	0.4		
	601	Topping Water	2.0	0.0	2.5		
	602	Topping Whip	1.5	0.0	2.0		
	603	Sugar	1.0	0.4	1.3		
	604	Ex-Sugar	2.0	0.4	2.5		
	605	Sugar Water	1.6	0.0	1.7		
	606	Sugar Whipper	1.6	0.5	2.2		
		Water Volume	6.0fl.oz / 177ml		7.25fl/oz / 214ml		
CreamiChoc							
	619	Choc	2.8	1.0	3.7	0.5	0.8
45	620	Choc Water	7.0	0.0	10.0	2.0	0.5
	621	Choc Whipper	7.0	0.5	12.0		
	622	Topping	0.8	0.5	1.0		
	623	Topping Water	3.5	0.0	3.2	2.2	2.0
	624	Topping Whip	2.5	0.0	2.5		
	625	Sugar	0	0	0		
	626	Ex-Sugar	0	0	0		
	627	Sugar Water	0	0	0		
	628	Sugar Whipper	0	0	0		
		Water Volume	6.0fl.oz /177ml		7.25fl/oz /214ml		
Chocolate							
	639	Choc	2.9	1.0	3.7	0.5	0.8
40	640	Choc Water	10.5	0.0	12.8		
	641	Choc Whipper	9.2	0.0	12.0		
	642	Sugar	0	0	0		
	643	Ex-Sugar	0	0	0		
	644	Sugar Water	0	0	0		
	645	Sugar Whipper	0	0	0		
	-	Water Volume	6.0fl.oz /177ml		7.25fl/oz/214ml		
Leaf Tea							
	679	Tea	0.7	0.7	0.9		
50 - 52 Black	681	Main Water	6.0	0.0	7.0		
53 - 55 White	683	Whitener	0.6	3.8	0.8		
	685	Whitener Water	3.0	2.8	3.9		
	686	Whitener Whipper	0.0	0.0	0.0		
	687	Sugar	1.0	3.5	1.3		
	688	Ex-Sugar	2.0	3.5	2.5		
	689	Sugar Water	3.0	8.0	3.0		
	690	Sugar Whip	0.0	0.0	0.0		
	691	Top-up Water	0.0	4.0	1.0		
	694	ASD times	10.2, 7.8, 8.1, 6.0		12.2, 9.0, 8.0, 7.2		
	-	Water Volume	6.25fl.oz /184.7ml		7.5fl.oz /221ml		
Instant Tea							
	494	Tea	0.9	0.7	1.2		
50 - 52 Black	496	Main Water	9.0	0.0	11.5		
53 - 55 White	498	Whitener	0.6	4.0	0.8		
	500	Whitener Water	3.7	3.0	3.7		
	501	Whitener Whipper	0.5	3.8	0.5		
	502	Sugar	1.0	2.8	1.3		
	503	Ex Sugar	2.0	2.8	2.5		
		Water Volume	6.25fl.oz /184.7ml		7.5fl.oz /221ml		

18. MOVING DISPENSE HEAD (MDH)

Feature Benefits

The moving dispense head has been designed to improve the delivery of product into cup and reduced splashing, this is achieved by shorting the distance between the dispense tubes and top of the cup.

Address Codes

Addresses below to enable MDH set-up

ADD	FUNCTION	DEFAULT	COMMENT
75	M.D.H. ARM MOVMENT STALL TIMEOUT	5	MOVING DISPENSE HEAD, ARM MOVMENT STALL TIMEOUT
76	M.D.H. ARM HOME START DELAY	4	MOVING DISPENSE HEAD, DELAY TIME AFTER VEND
77	M.D.H. NOMINATED CONTROL TRIAC	0	MOVING DISPENSE HEAD, OUTPUT: 0 = OFF 1 = 22 - HOT WATER OR MDH *(OUTPUT SKT 11, PIN 12)** 2 = 28 - SYRUP 2 OR MDH *(OUTPUT SKT 12, PIN 6)** 3 = 30 - GRINDER PUMP OR MDH *(OUTPUT SKT 12, PIN 8)**
78	M.D.H. SENSOR SWITCH INVERT	1	MOVING DISPENSE HEAD, 0= NC, 1 = NO

*See connector outputs – Chapter 23

Input assignment for home switch = 1 (spare input 1) and for dispense switch = 2 (spare input 2)

Testing the Arm

To enable a test cycle for the moving dispense head to be carried out, switch to Flush Mode and select 'Key 9', press once to move the arm to dispense position, press Key 9 again to move the arm back to the home position.

Error Code

Code 30 - Dispense Arm Jam, will be displayed in the event the arm fails to move, becomes jammed or not correctly sensed by either the home or dispense switches during the vend cycle sequence.

Figure1 shows the layout of the parts of the moving dispense head, for part numbers refer to the plate section at the back of the manual

Note: The moving dispense head is not compatible with the FB or BTC 'Quick Vend' facility. Therefore ensure the quick vend options addresses 095 & 096 are set to 0

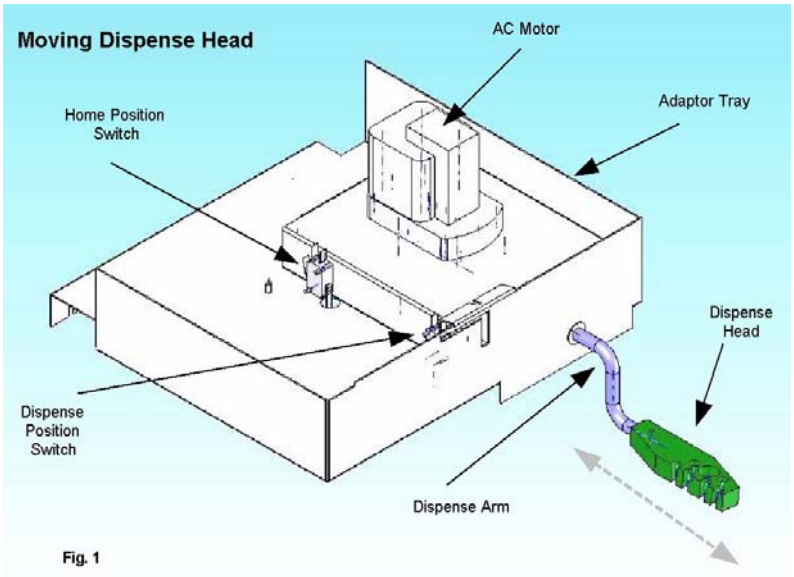


Fig. 1

The moving dispense head feature introduced August 2005 will only operate with software version 3.30 or later

19. MICROPROCESSOR SYSTEM & SIMM LOGIC

Changing a control board

If it is necessary to change the CPU control board all audit data will be lost, if it is possible, retrieve audit data using either the SIMM card or by taking prints 1 and 2. Audit report one will provide you with the sales data, and audit report two will provide all Address settings that are to be reprogrammed into the new CPU processor board once it has been fitted.

SIMM Card

Located on the CPU, the SIMM card read/writer provides an easy method for auditing, up and downloading of machine parameters and upgrading of software.

LOAD/READ CONFIGURATION – Address 21

1. Open door and operate door switch (power up)
2. Insert SIMM Card
3. Press the 'Cancel' button four times to enter "Service Mode"
4. Enter address 021 and press enter (Vend button)
5. Use Whipped/Extra White button to scroll up and down

(Copy)

6. Select READ CONFIG and press enter (Vend button)
7. Accept default AUTO SELECT file name by pressing enter again
8. Confirm the action by pressing Enter
9. Display shows READING…
10. When finished the display returns to the initial 021 setting
11. Operate door switch (power down)
12. Remove SIMM Card and Close door

(Clone) Follow same procedure except at 021 address…

13. Select LOAD CONFIG and press enter (Vend button)
14. Use scroll buttons (Whipped/Extra White) to pick the appropriate file to load into the machine
15. Press the 'Vend' key to accept and confirm action
16. Display shows WRITING …
17. When finished the display returns to the initial 021 setting

Use the 'Cancel' key to scroll back to 'DOOR OPEN' message to ensure new settings are saved to the CPU.

LOAD/READ AUDIT – Address 22

1. Open door and operate door switch (power up)
2. Insert SIMM Card
3. Press the 'Cancel' button four times to enter "Service Mode"
4. Enter address 022 and press enter (Vend button)
5. Use Whipped/Extra White button to scroll up and down

(Copy)

6. Select READ AUDIT and press enter (Vend button)
7. Accept default AUTO SELECT file name by pressing enter again
8. Confirm the action by pressing Enter
9. Display shows READING…
10. When finished the display returns to the initial 022 setting
11. Operate door switch (power down)
12. Remove SIMM Card and Close door

(Clone) Follow same procedure except at 022 address…

13. Select LOAD AUDIT and press enter (Vend button)
14. Use scroll buttons (Whipped/Extra White) to pick the appropriate file to load into the machine
15. Press the 'Vend' key to accept and confirm action
16. Display shows WRITING …
17. When finished the display returns to the initial 022 setting

Use the 'Cancel' key to scroll back to 'DOOR OPEN' message to ensure new settings are saved to the CPU.

19. ERROR CODES

EXTERNAL DISPLAY REPORT CODES (OUT OF ORDER AND SOLD OUT)

CODE DESCRIPTION

PROCESSOR CONTROL ERRORS

04..... CANT FIND FILE – *ONLY REPORTED WHEN USING A SIMM CARD, IF DISPLAYED TRY A DIFFERENT SIMM CARD*
08..... MEMORY PROGRAM ERROR – *CHANGE PROCESSOR BOARD*
09..... MEMORY VERIFY ERROR – *CHANGE PROCESSOR BOARD*
10..... MEMORY ERASE ERROR – *CHANGE PROCESSOR BOARD*
11..... FILE READ ERROR – *ONLY REPORTED WHEN USING A SIMM CARD, IF DISPLAYED TRY A DIFFERENT SIMM CARD*

GENERAL

11..... CUPS SOLD OUT
12..... WASTE BUCKET FULL
13..... WATER LEVEL LOW IN BOILER
14..... CIRCUIT FAILURE/MASTER CURRENT SENSE
16..... CUP JAM (5 CONSECUTIVE CUP JAMS)
19..... KEY STUCK
20 WATER FAILSAFE
30..... Dispense arm jam
50..... BREWER 1 JAMMED
51..... BREWER 1 FILTER PAPER SOLD OUT
57..... OVER TEMPERATURE TRIP
58..... UNDER TEMPERATURE TRIP
59..... PROBE FAILURE
60..... GRINDER TIMEOUT
61..... GRINDER JAMMED
81..... NO COIN MECH. CASHLESS OR BILL ACCEPTOR
91..... LOSS OF 32V
92..... LOSS OF 12V
94..... TRIAC CURRENT FAILURE
98..... I/O MODULE IN BIOS MODE
99..... NO I/O MODULE DETECTED

20. FAULT FINDING

Warning: Care should be taken when working on live equipment; 240Vac is present throughout the machine. To enable faultfinding to be carried out on this machine the engineer will require a voltmeter.

The following causes should be treated as a ‘first line’ checks only and not be considered as the sole causes of reported faults.

Cold water in boiler
Check Temperature setting (address 115)
Check 12A boiler heater fuse
Check state of boiler float/element cut out switch.
Check operation of the boiler relay.
Check Thermistor probes.

Cold Drinks warm
Check 5A cooler fuse.
Check water bath is full and that the agitator is running.
Refer to refrigeration system test procedures section.

Machine accepts money but no response from external keypad
Check state of external keypad loom
Keypad key may be stuck down, if so, following a power interruption, fault 19 will be reported.

Access to ‘service’ mode is prohibited (error bleep is sounded when ‘service’ mode switch is pressed).
A security code number has been programmed and therefore must first be entered to gain access.

Selection entered does not vend.
Set-up option for selected drink is programmed as inactive - Refer to SET-UP SELETION RANGE.

NOTE:
When fault finding on a particular error code, ensure each step is followed in numerical order.

How to use this section

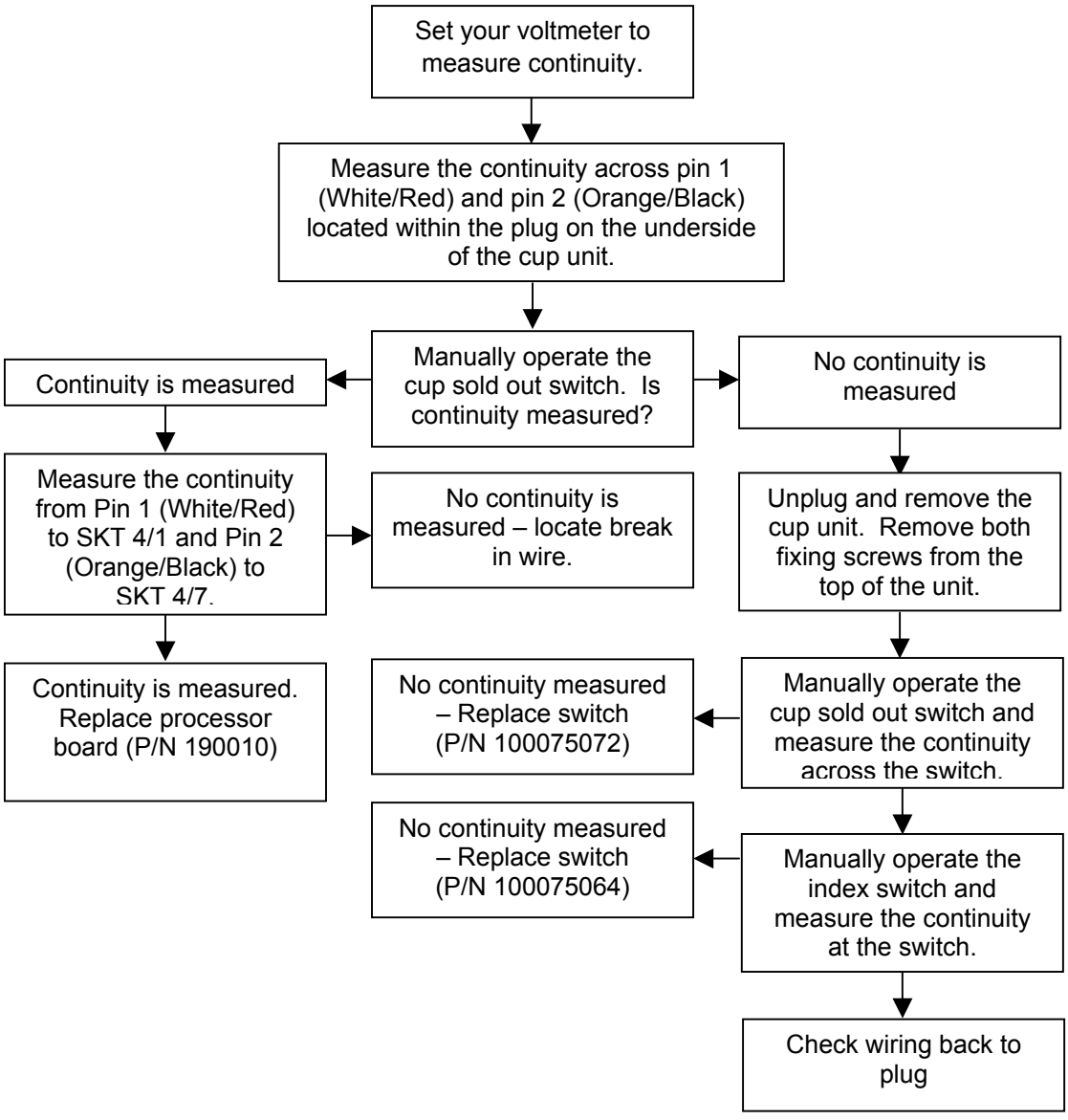
Check the error code that is displayed on your machine and look-up the corresponding error code below. Check each of the numbered operations to identify the problem being encountered and then use the flow chart to rectify the fault.

Error code 11 - Cups sold out

1. Check to ensure there are cups present within the motorised cup unit.

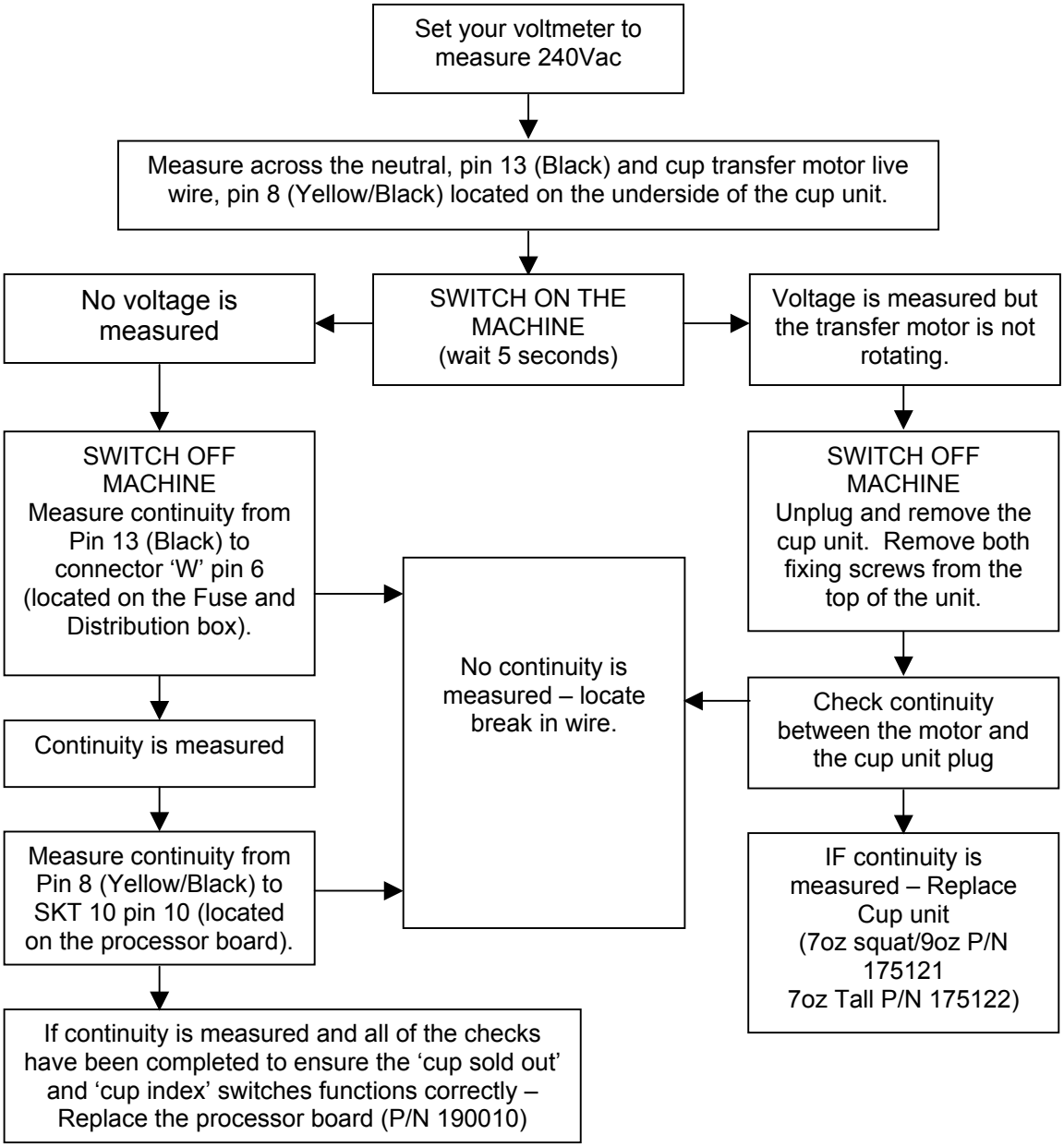
2. Check operation of cup sense switch
   With machine switched off

Remove cups from motorized cup unit to expose the 'cup sold out' switch.



3. Cups are recognised by processor but are not transferring into position:

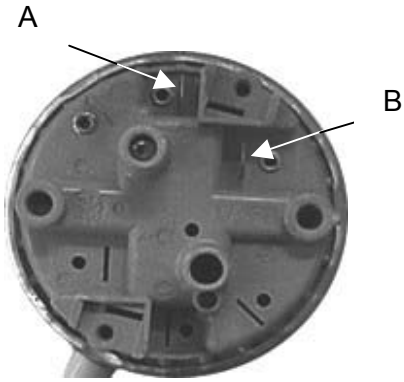
With the machine switched off remove all of the cups from the cup turret.

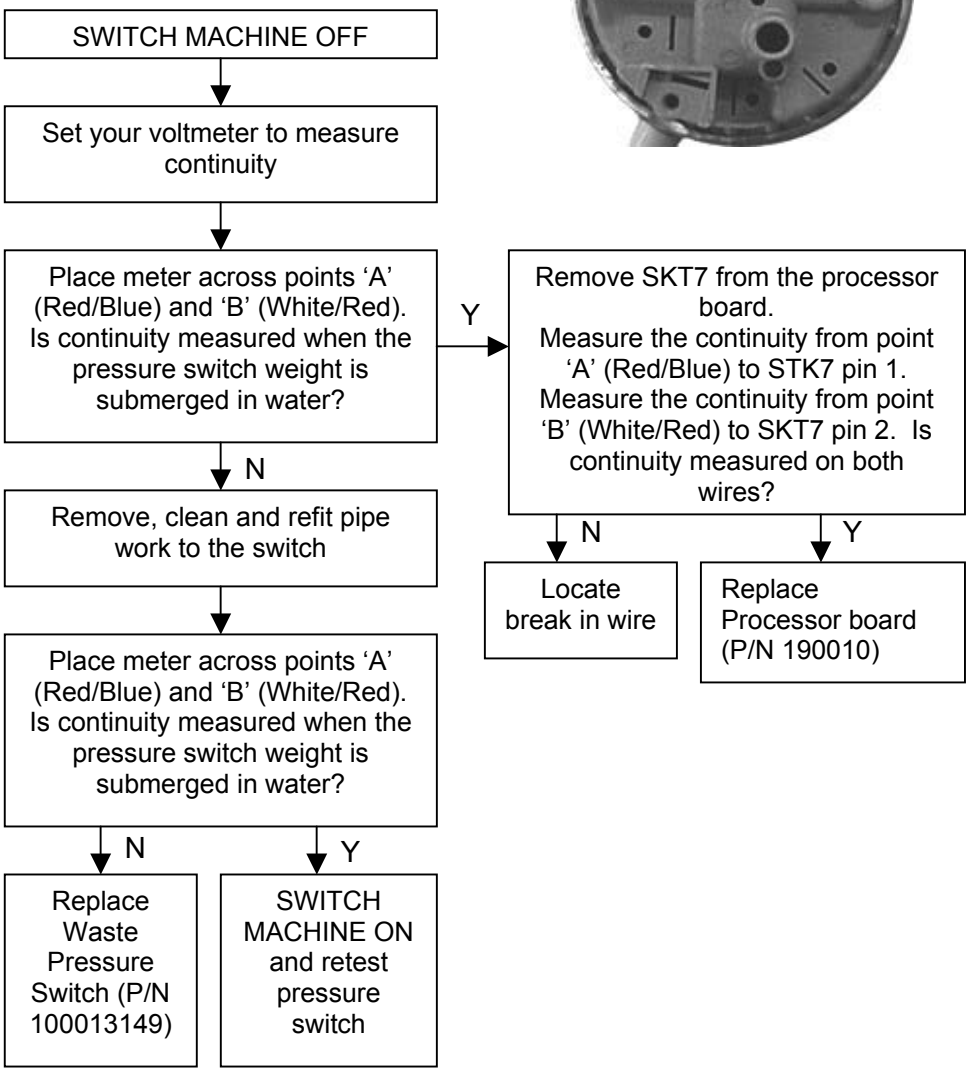


Error code 12 - Waste bucket full.

1. Check to ensure that the waste bucket is empty.

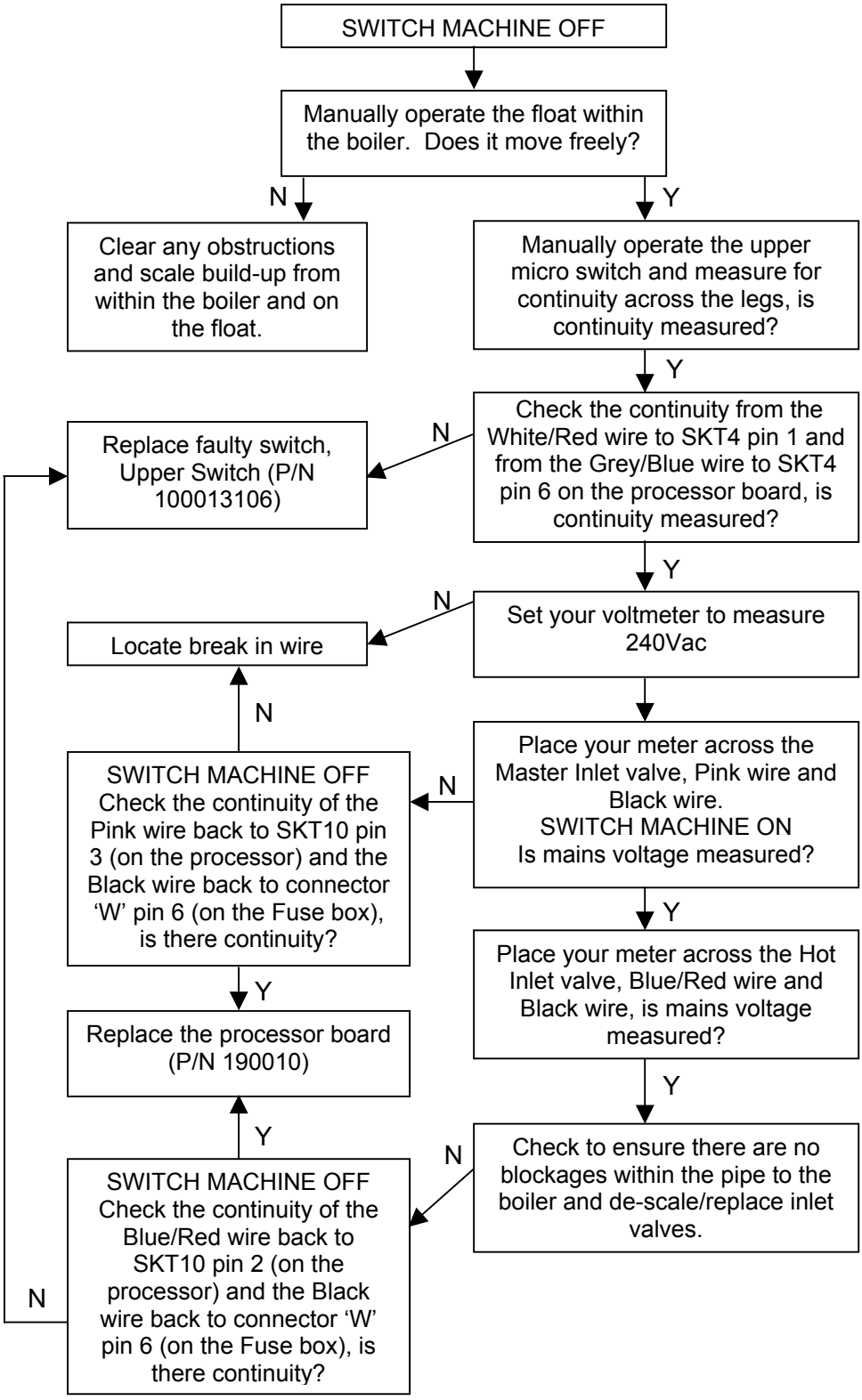
2. Check operation of waste pressure switch





Error code 13 - Water level low in boiler.

The boiler has not registered as being full for the duration of 3 minutes, the mains water input to the machine has been confirmed as being switched on and water is present to the rear of the machine.



Error code 14 - Triac failure/ master current sense.

Check if any outputs switch on when the machine is powered-up. If so, replace the processor board. If no outputs switch on, this would indicate a faulty component driven from SKT 10, 11 or 12.

Error code 19 - Key stuck.

1. Disconnect external keypad and power up the machine, if fault disappears then check the key pad/loom, replace keypad.

2. If fault persists then replace the Processor board.

Error code 20 - Water Failsafe.

Caused by the operation of the Water inlet valves outside of a vend cycle or the result of a water leak within the machine. Interrupting power will rectify the problem and clear down the fault code.

Error code 23 - Fuse blown on Processor Board.

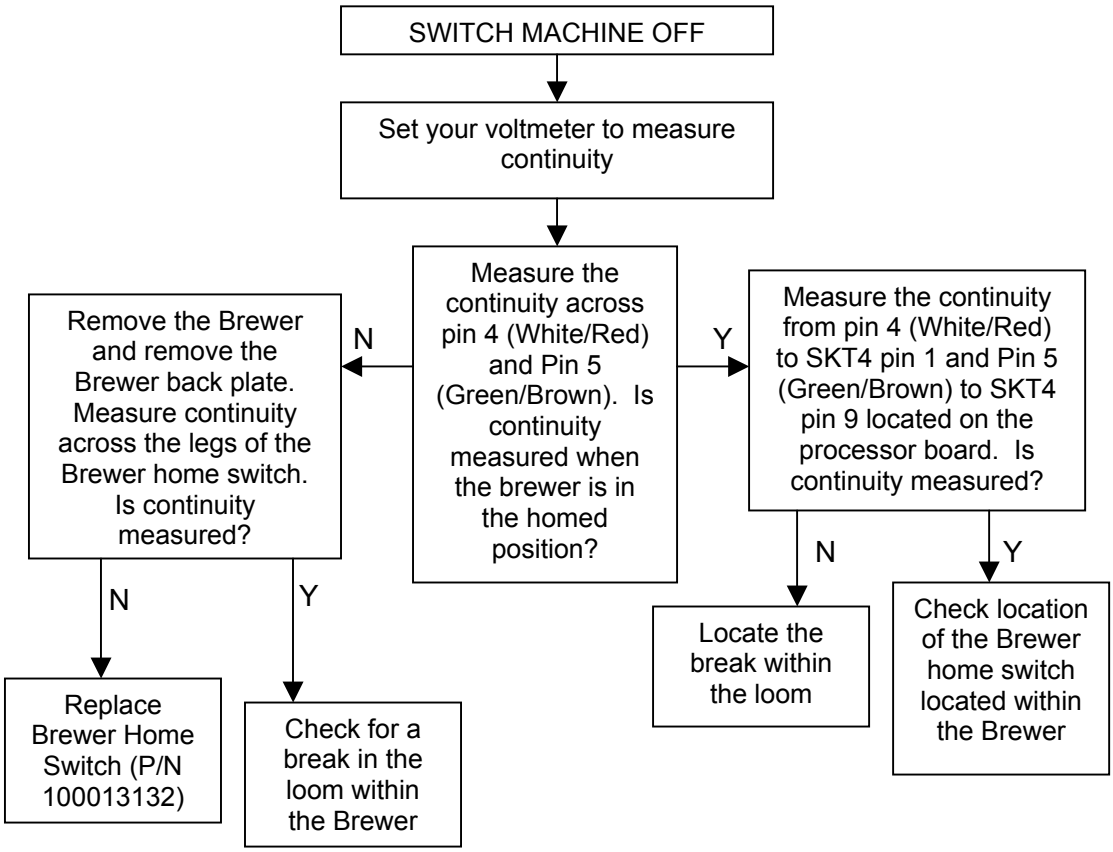
1 Check /replace Fuse 1 (1.0A) and/or Fuse 2 (6.3A) on processor board.

2. Check that triacs being used have an output.

Error code 30 – Dispense arm Jam.

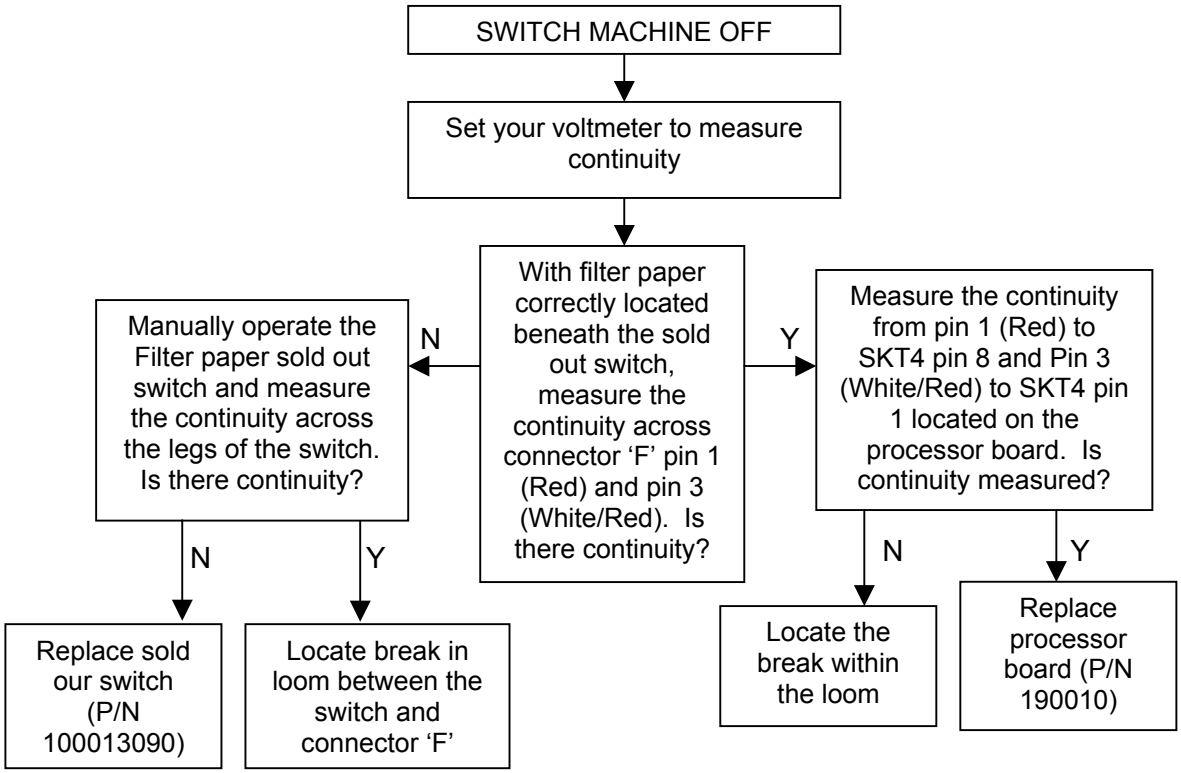
This error will be displayed in the event the arm fails to move or be sensed by either the home or dispense switches during the vend cycle.

Error code 50 - Brewer 1 Jam.



Error code 51 - Brewer Paper Sold Out

If Brewer paper is present and is located correctly, follow the flow chart below:



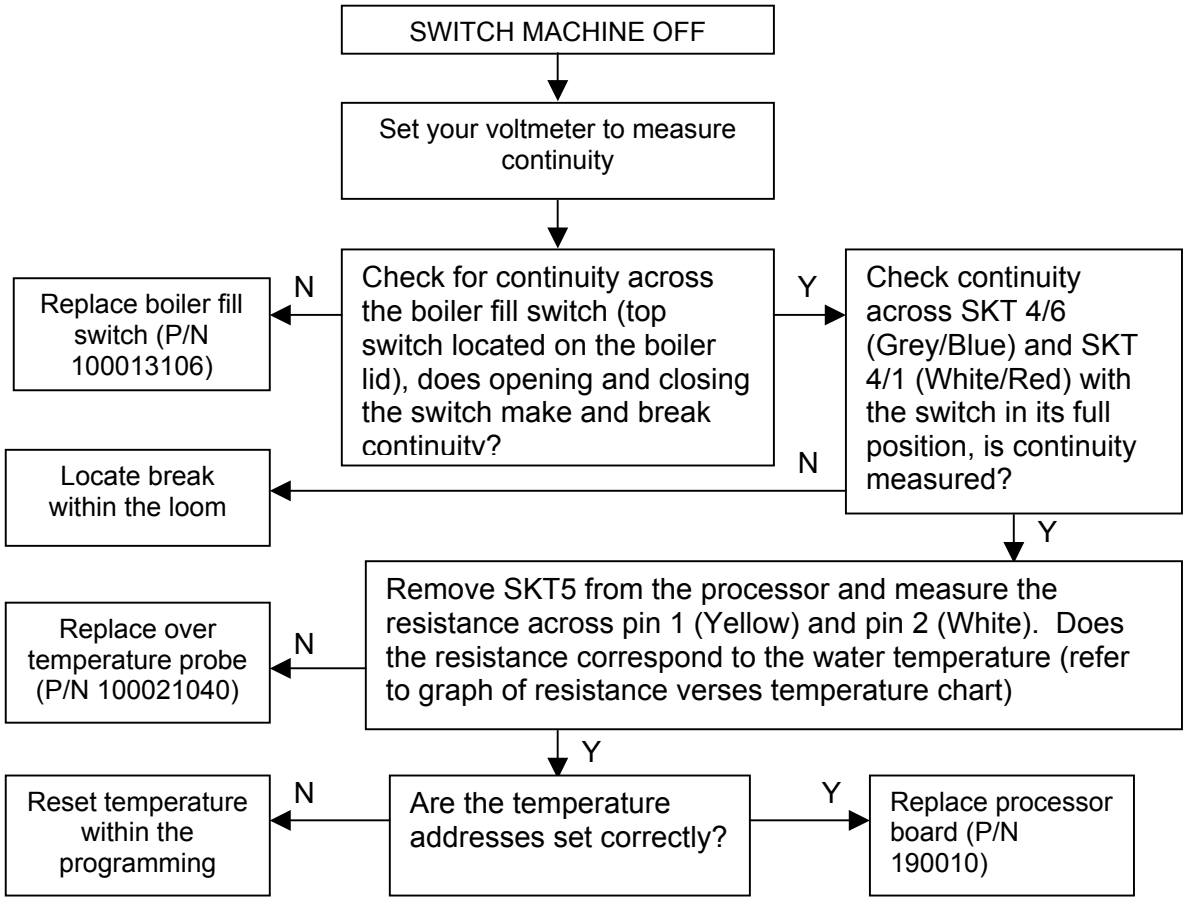
Error code 54 Cups sold out.

This error is displayed when there are no cups in the cup carrousel, refill with new cups.

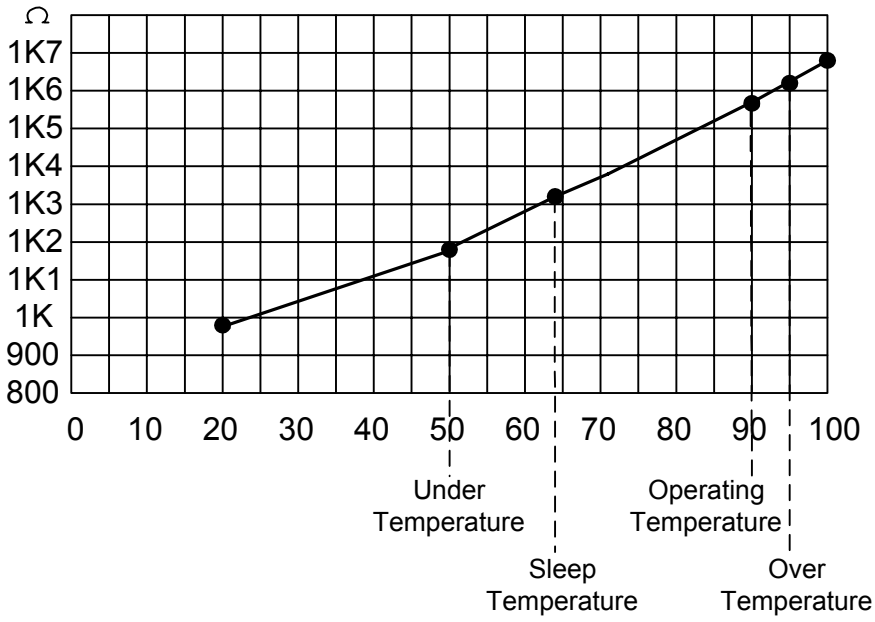
Error code 56 Grinder timeout fault.

This error is displayed if the dosing unit switch does not see a signal within the time set (18 seconds)

Error code 57 - Over Temperature Trip.

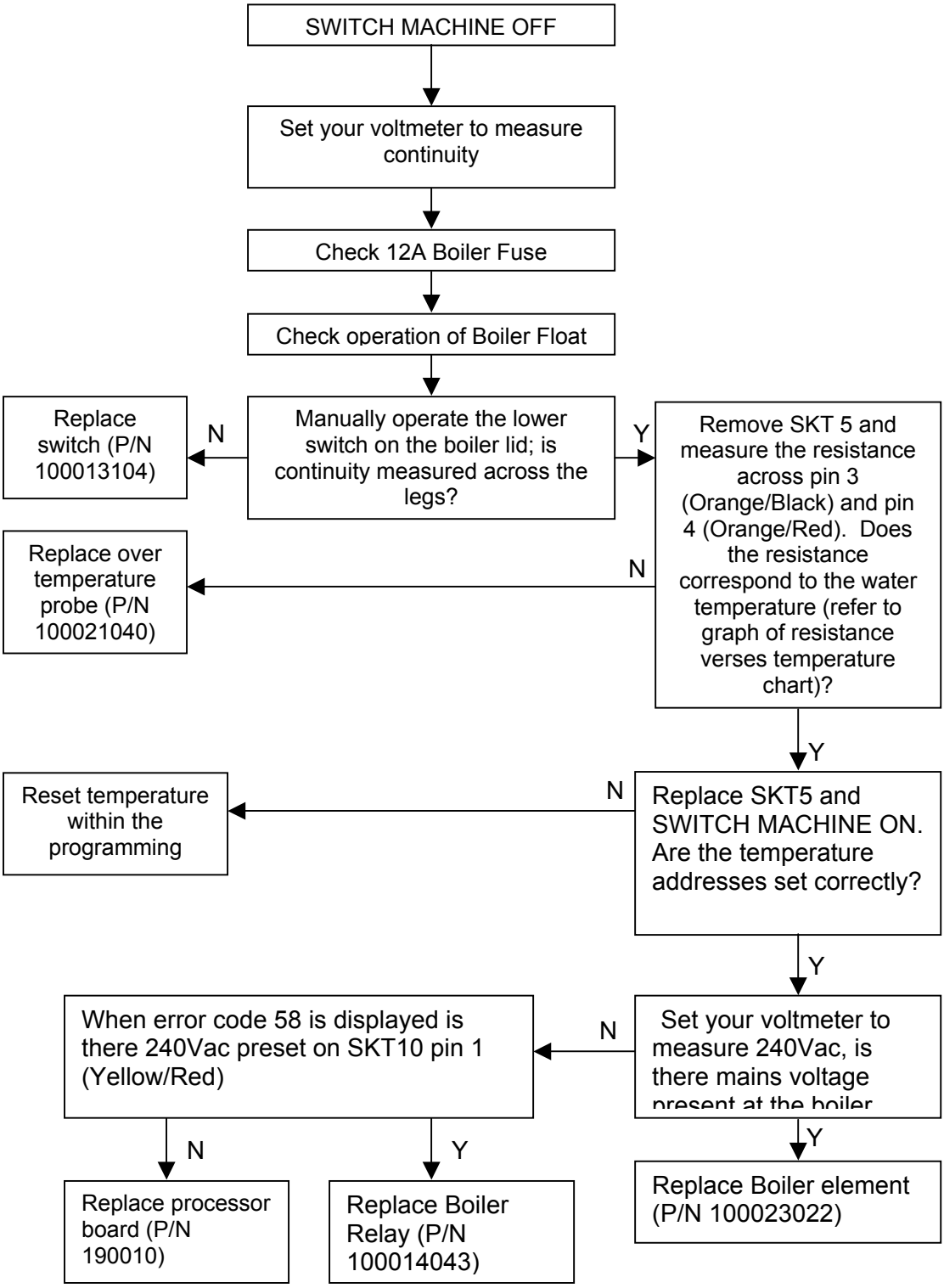


GRAPH OF RESISTANCE VERSUS TEMPERATURE



NOTE: ALLOW 3°C DIFFERENTIAL BETWEEN BOILER TEMPERATURE AND WATER TEMPERATURE AT MIXING BOWL

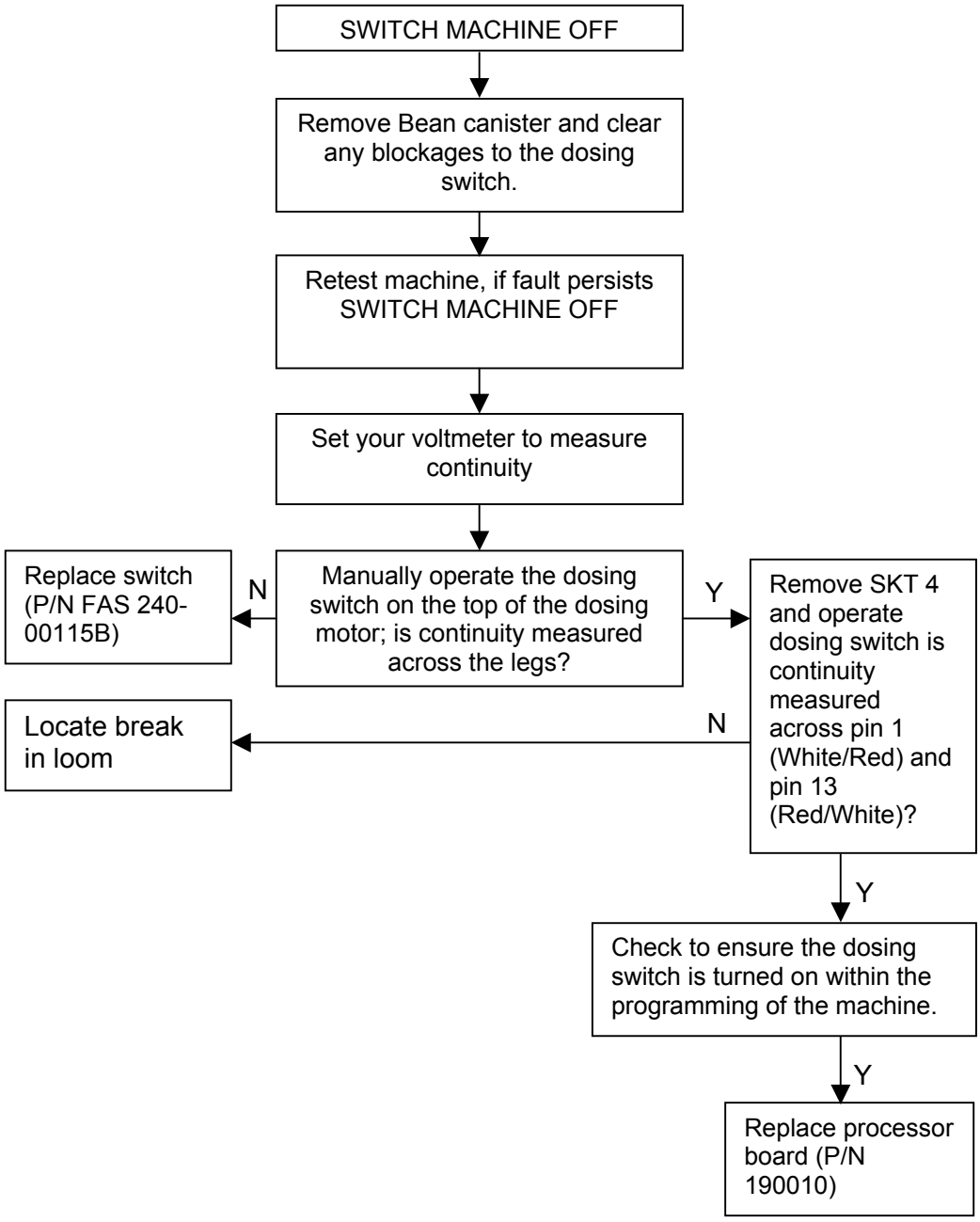
Error code 58 - Under Temperature Trip.



Error code 59 - Thermistor Probe Fault.

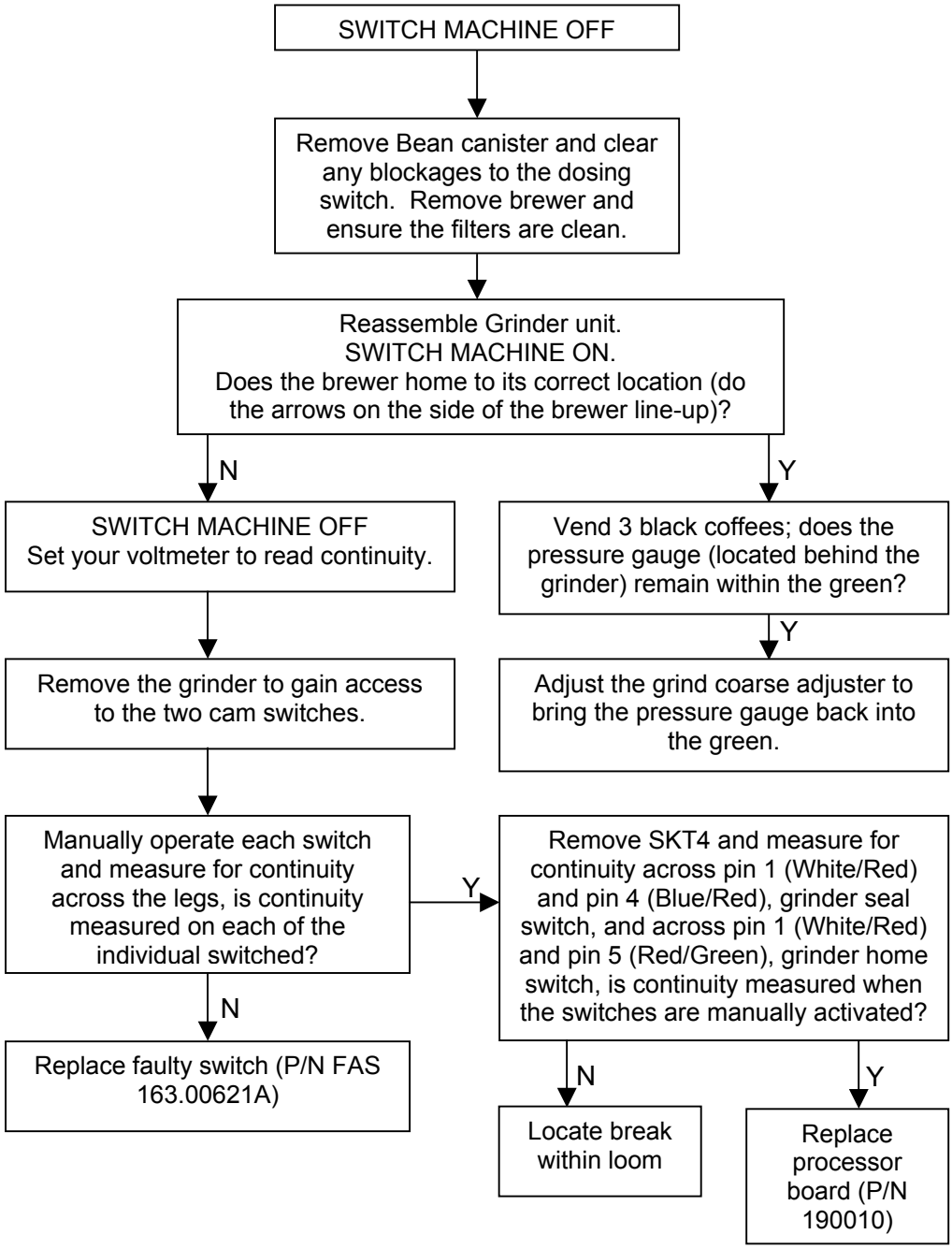
With the machine switched off remove SKT 7 from the processor board, using the 'graph of resistance versus temperature' chart measure the resistance across pins 1 and 2 (over temperature probe) and across pins 3 and 4 (operating temperature probe). If the resistance falls out side 900 ohms to 1K6 ohms replace the relevant probe (P/N 100021040), if the resistances are within the parameters replace the processor board (P/N 190010).

Error code 60 – Grinder Timeout



For additional information, see section 13. BREWER, GRINDER AND DOSING SWITCH

Error code 61 – Grinder Jam



For additional information, see 13. BREWER, GRINDER AND DOSING SWITCH

Error code 92 – Loss of 12V

Check and replace FS4, located on the CPU board.

Error code 94 – Triac Current Failure

If a circuit within the machine becomes open circuit i.e. a motor or valve fail, error code 94 will be displayed. Check address 011 (last selection recall) to determine which motors/valves have been activated.

21. MACHINE MAINTENANCE

RECOMMENDED SIX-MONTHLY ROUTINE MAINTENANCE PROCEDURES FOR THE SOLO ENCORE

1. Authorised personnel only should undertake the portable appliance earth continuity and insulation tests on the Solo Encore.

2. Check change date of water filter (if fitted) - replace if necessary.

3. Remove boiler and check for scale. De-scale or replace boiler as necessary.

4. Check dispense valves for scale/leaks. Fit valve repair kits or replace valves as necessary.

5. Check whipper seals and replace (these are only recommended for six months use).

6. Freshbrew models:-
   Remove brewer piston.
   Clean and check seal - replace if necessary.
   Ensure screw-securing seal is secure.
   Remove and clean brewer cylinder.
   Check seating face for signs of damage - replace if necessary.
   Remove filter platform assembly. Remove and clean filter insert.
   Clean and check cylinder seal - replace or invert if necessary.
   Ensure free movement of paper feed spacers and paper drive rollers.

   Remove and clean brewer extraction system.
   Remove and clean paper drive roller assembly.
   Check security of brewer motor and brewer switch.
   Remove and clean the Freshbrew dispense nozzles and tubing.
   Re-assemble unit and test for correct operations.

7. Coffee Grinder:
   Remove and clean piston assembly.
   Remove and clean bean canister, grind coarse adjuster and grinding teeth.
   To ensure trouble-free vending all of the brewer ‘O’ rings/seals should be replaced every 6 months and the grinder teeth should be replaced every 100,000 vends.
   Remove and clean dispense tubes.
   Re-assemble unit and test for correct operation.

8. Clean complete extraction system including removal and cleaning of extractor fan motor assembly and Tubing.

9. Cup unit:-
   Check cup housing assembly adjustments and security of components and fixings. Check operation of cup drop and delivery.
   Check for correct operation and adjustment of cup transfer.

10. Chiller/carbonator unit:-
    Clean condenser grilles.

Check water/ice bath levels - replenish if necessary.
Check for CO2 leaks (carbonator units only).
Check for correct operation of unit and its components; including correct product dispense volumes and temperatures.

11. Coin mechanism:
    Clean validator.
    Strip and clean coin separator (where applicable).
    Check operation of exact change indication.
    Check programming of mechanism is correct for its requirements.
    Coin test mechanism checking change payout of each available coin.

12. General:
    Check all fuses are of the correct value.
    Check security of loom connectors and machine components.
    Check for any faulty/damaged wiring - correct as necessary.

    Test vend each main selection checking:-
    a) Correct dispense of ingredients and waters.
    b) That leaks do not occur during dispense.
    c) That brewer mechanism operates correctly - check and adjust ASD timings if necessary.
    d) Correct in-cup product volumes.
    e) Correct product water temperatures.
    Test selections with door closed, checking:-
    a) Correct cup delivery.
    b) Correct dispense of product into cup.

13. Perform Safety Electrical Tests as specified within SAFETY ELECTRICAL TESTING section.

14. The mains electrical supply is to be checked for correct polarity, presence of earth and correct voltage.

15. Check operation of double pole safety switch.

SAFETY ELECTRICAL TESTING

All machines, supplied from the manufacturer, are electrically safety tested prior to leaving the factory, meeting the requirements of BS3456 Part 102/Section 102/71 1991 Electrical Recommendations.

Tests carried out are as follows:-

1. Earth continuity test - various points, i.e. 25 Amps flows around the earth paths - maximum resistance 0.1 ohms.

2. Insulation test - via mains cable, i.e. 500Vdc applied between live/neutral (bonded together) to earth. Resistance must be greater than 2 M.ohms.

Each machine will have a "TESTED FOR ELECTRICAL SAFETY" label adjacent to the mains lead entry into rear of machine.

MANUACTURERS RECOMMENDATIONS

It is recommended that the above tests are carried out on a six-monthly basis, the results being recorded so that any degradation of electrical integrity is highlighted.

NOTE:

FLASH TESTING IS CARRIED OUT DURING THE DESIGN STAGE AND DUE TO IMPRACTICALITIES AND POSSIBLE SAFETY HAZARDS IT IS NOT RECOMMENDED THAT THIS TEST IS CARRIED OUT ON SITE.

Whilst Westomatic Vending Services Limited takes great care during manufacture and testing to ensure the electrical safety of machines, no guarantee to this effect can be given after the equipment has been despatched from its premises.

23. PARTS ORDER PROCESS

Extensive parts holding means that Westomatic are able to offer a next day despatch service to anywhere in the UK mainland with orders received before 3:30pm.

When placing a parts order, please ensure:

You telephone: +44 (0) 1626 323100, selecting menu 2.
You have the part number of the required item available.
You know your company order number.

When ordering a part via Fax:

Fax: +44 (0) 1626 332727.
Clearly state the part number of the required item.
Clearly state your company order number.

Important Information

When placing an order for a warranty fridge unit or processor board, please contact your Technical Partner for an authorisation code.
When obtaining an authorisation code for a warranty fridge or processor board, please state the item serial number, machine serial number and the nature of the fault.

SOLO ENCORE
BTC SFB HC

COLOUR CODE

N - BROWN
O - ORANGE
R - RED
V - VIOLET
G - GREEN
W - WHITE
A - GREY
B - BLACK
U - BLUE
C - COMMON
Y - YELLOW
P - PINK

OPTION

KEY

COMP = COMPRESSOR
M = MOTOR
S = SOLENOID
W = WHIPPER
SV = SOLENOID VALVE
P = PUMP
F = FAN
B2C = BEAN TO CUP

ISSUE DATE 08.01.04

Loom Part Numbers and Identification

Cabinet loom, part number 190036
Switch loom, part number 190037
Multi Choice Keypad loom, part number 248313
MDB loom, part number 248315

SEE PSU CONTROL BOARD SOLO
MENU LIGHTS
HEATER RELAY
ELEMENT CUT-OUT SWITCH
BOILER FLOAT
HEATER RELAY
EXTRACT FAN
NEON
ELEMENT
OVER TEMP. SENSOR
OPERATING TEMP. SENSOR
MDB RX/TX & POWER SUPPLY 35Vdc
KEYPAD
CARB WATER DISPENSE
STILL WATER DISPENSE
SYRUP PUMP 2
SYRUP PUMP 1
CONDENSER FAN
COMPRESSOR
TEMPERATURE REGULATOR
LIVE
EARTH
Co2 WAT
STILL WAT
SYR 2
SYR 1
ESCOWA CHILLER
LED DIPLAY INFRA RED
SKT3
SKT4/11 FV key switch
SKT4/12 Card input switch
SKT4/16
SKT4/14
CUP SENSOR
SOLO ENCORE PROCESSOR BOARD
UV
WASTE PRESSURE SWITCH
BOILER FILL SWITCH
DOOR OPEN
FB1 PAPER
CUP BOX
PEELER MOTOR CUP HOME SWITCH
TRANS-FER MOTOR 1
CUP DROP 1
Index Switch
PB1
Cup Switch
COLD INLET
HOT INLET
B2C INLET
MASTER INLET
B2C PUMP
BREWER MOTOR 1
TOPPING/ SOUP WATER
TOPPING/ SOUP ING 1
TOPPING/ SOUP WHIPPER 1
CHOC WATER
CHOC ING 2
CHOC WHIPPER 2
INST 1/ WHITENER WATER
INST 1 ING 3
CHOC WHIPPER 2
WHITENER ING 4
INSTANT 1/ WHITENER WHIPPER 3
SUGAR WATER
SUGAR ING 5
FB 1 ING 6
SUGAR WHIPPER 4
HOT WATER
INSTANT 2 ING 6
CAM SWITCH UNIT
GRINDER
DOSING SWITCH/ MOTOR
BREWER MOTOR
BEAN TO CUP BREWER UNIT
REC/BREWER VALVE

FUSE 1 - 5V 2.5A ISOLATED SUPPLY (IF BLOWN ERROR CODE 23 IS DISPLAYED)
FUSE 2 - 240V 6.3A TRIAC SUPPLY (IF BLOWN ERROR CODE 23 IS DISPLAYED)
FUSE 3 - 5V 5A POWER SUPPLY (IF BLOWN THE LCD WILL NOT ILLUMINATE)
FUSE 4 - 12V 2.5A POWER SUPPLY (IF BLOWN ERROR CODE 92 IS DISPLAYED)

SOLO ENCORE
BTC SFB HCC

COLOUR CODE

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OPTION

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ISSUE DATE 08.01.04

Loom Part Numbers and Identification

Cabinet loom, part number 190036
Switch loom, part number 190037
Multi Choice Keypad loom, part number 248313
MDB loom, part number 248315

Refer to DGB - Cobalt Carbonator Schematic Wiring & Flow Diagram

SOLO ENCORE PROCESSOR BOARD

FUSE 1 - 5V 2.5A ISOLATED SUPPLY (IF BLOWN ERROR CODE 23 IS DISPLAYED)
FUSE 2 - 240V 6.3A TRIAC SUPPLY (IF BLOWN ERROR CODE 23 IS DISPLAYED)
FUSE 3 - 5V 5A POWER SUPPLY (IF BLOWN THE LCD WILL NOT ILLUMINATE)
FUSE 4 - 12V 2.5A POWER SUPPLY (IF BLOWN ERROR CODE 92 IS DISPLAYED)

SOLO ENCORE
PSU CONTROL BOARD

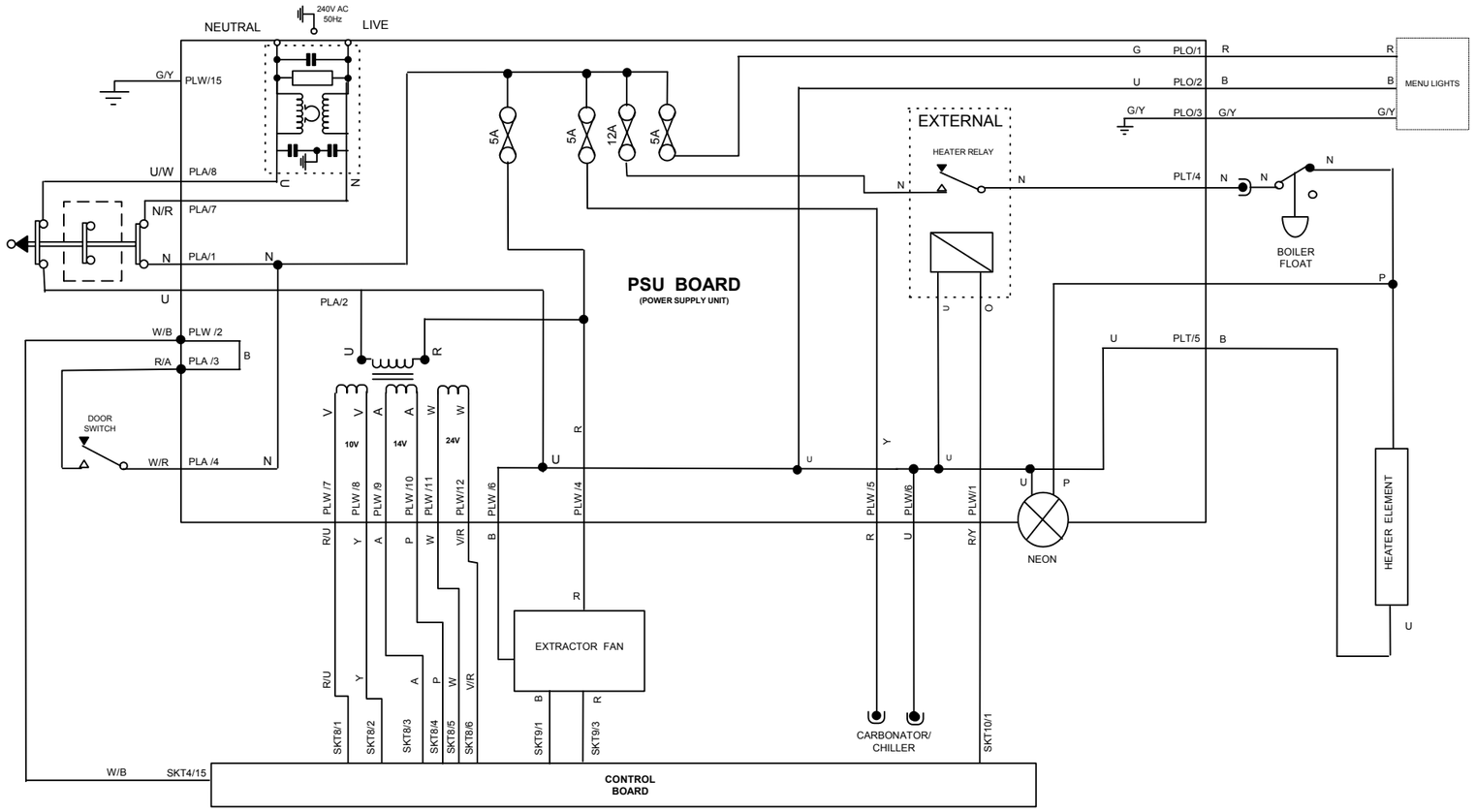
COLOUR CODE

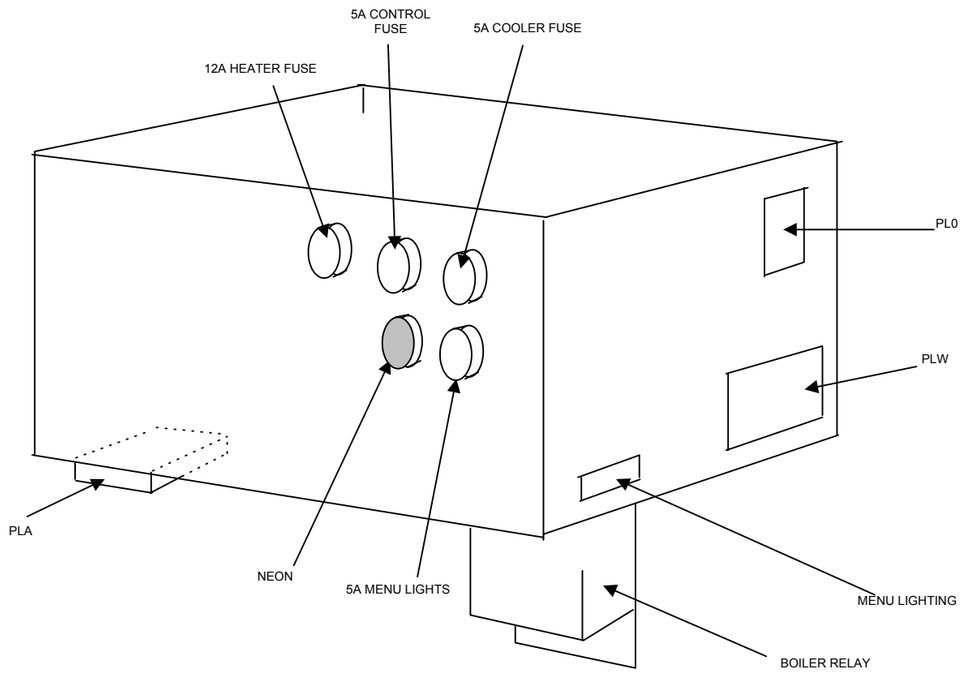
N	- BROWN
O	- ORANGE
R	- RED
V	- VIOLET
G	- GREEN
W	- WHITE
A	- GREY
B	- BLACK
U	- BLUE
C	- COMMON
P	- PINK
Y	- YELLOW

KEY

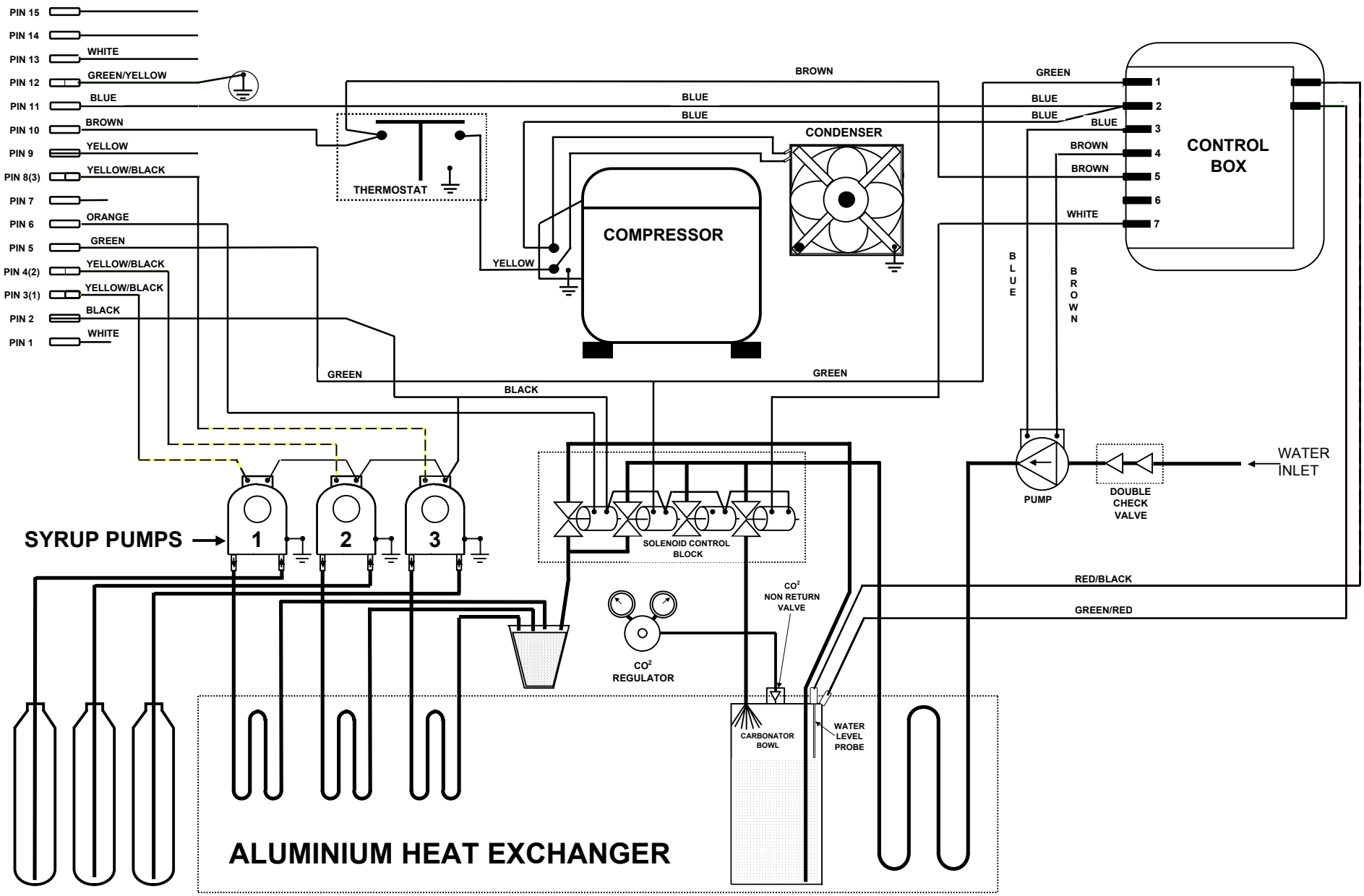
COMP	= COMPRESSOR
M	= MOTOR
S	= SOLENOID
W	= WHIPPER
SV	= SOLENOID VALVE
P	= PUMP
F	= FAN

ISSUE DATE 08.01.04





COBALT CARBONATOR SCHEMATIC WIRING AND FLOW DIAGRAM



8 STEP GUIDE

TO PRODUCING PERFECT BEAN TO CUP BEVERAGES

1 ENSURE FRESH BEANS ARE BEING USED

Beans should be changed every 3-4 days
(NOTE: Brewer set-up will need adjustment if type of beans are changed)

2 CHECK WATER FLOW RATE INTO BREWER - IN SERVICE MODE

Solo Encore LX – **address 706**
Riviera Ultima/Espresso Café – **address 109**
Value should be approximately **22 seconds for 7oz**
30 seconds for 9oz

3 CHECK WATER VOLUME

Press blank/large cup key – water will be dispensed.
Check volume >10.0fl/oz (295ml) for a 22 second vend.
If incorrect, refer to manual to adjust BTC water regulator.

WARNING: WATER WILL BE HOT

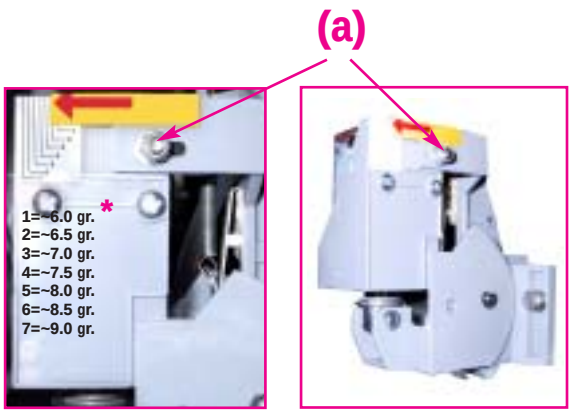
4 CHECK GROUND COFFEE WEIGHT USING SCALES

(Loosen screws to drop brewer)
Solo Encore LX – **address 754**
Riviera Ultima/Espresso Café – **address 290.**
Press blank/large cup key – ingredient will be dispensed from dosing unit and should be between 6.5 & 7.5 grams

Dosing Unit

5 ADJUST DOSER IF REQUIRED

If gram throw is incorrect, loosen thumbscrew (a) and slide to desired position. Tighten (a). Repeat step **4**.



*NOTE: These figures are approximate and for guidance purposes only

6 CHECK WATER PRESSURE INTO BREWER

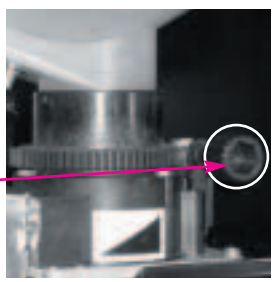
Ensure arrows are aligned and replace brewer
In test mode, take 3 x selection 55 (espresso)
BE READY TO TURN MACHINE OFF IF DOTS ARE NOT ALIGNED DURING VEND CYCLE
On the third vend check the pressure gauge, which should rise between points X & Y (the green area)
(NOTE: Refer to manual if dots not aligned)

Arrows aligned (+/- 5mm)

Dots exactly aligned during vend cycle

7 ADJUSTING PRESSURE ON THE PRESSURE GAUGE

If the pressure is outside the recommended green area, adjust dial 'A' on right hand side of grinder.
REMEMBER
Adjust Clockwise = finer grind = increased pressure.
Adjust Anti-clockwise = coarser grind = reduced pressure.
Run another x 3 vends
Check pressure again on third espresso vend.
Continue adjusting grinder until ideal pressure is achieved



8 CHECK FLUID LEVELS

Check each drink variation and ensure drink levels are acceptable. If they are not correct, please refer to manual.

Drink Selection	Codes	Recommeneded Drink Volume (fl/oz) 7oz cup	9oz cup
Espresso	55-58	2.0 - 2.5	3.0 - 3.5
Double Espresso	81-84	4.0 - 5.0	5.0 - 5.5
Americano	60-63	5.0 - 5.5	7.0 - 7.5
Cappuccino	75-76 / 78 -79	5.0 - 5.5	7.0 - 7.5
Café Latte	73-74	5.0 - 5.5	7.0 - 7.5

PERFECTING BEAN TO CUP DRINK QUALITY

Note: **The following points may vary depending on the coffee beans being used.**

BEAN TO CUP PRODUCT	GRINDER SET UP	ACTIONS
Bean to cup drink levels too high	Grind too coarse (Possibly between 2-8 bar)	Turn grinder adjuster 'A'* clockwise
Fast coffee flow rate into cup		Turn 'A'* clockwise
Weak under-extracted coffee		Turn 'A'* clockwise, increases the throw time
Poor, thin crema		Turn 'A'* clockwise, increases the throw time
Solid bean plug but coffee waste spilling over front of the brewer		Turn 'A'* clockwise, decrease bean throw time to reduce bean waste
Good flow of water through the beans	**Medium grind Between 8-11 bar**	**No action required**
Steady coffee flow rate into cup		
Good strength coffee, creamy golden crema		
Good bean plug with no waste spilling over the brewer in the home to dispense position		
Bean to cup drink levels too low	Grind too fine (Possibly between 11-15 bar)	Turn grinder adjuster 'A'* anti-clockwise
Slow coffee flow rate into the cup		Turn 'A'* anti-clockwise
Strong over-extracted coffee		Turn 'A'* anti-clockwise
'Muddy' coloured crema produced		Turn 'A'* anti-clockwise
Wet bean plug with no waste during the home to dispense position		Increase bean throw time to form a more solid plug of waste
The brewer forced under too much pressure		Turn 'A'* anti-clockwise &/or reduce the amount of product.

*** See point 7 overleaf**

ROUTINE BEAN TO CUP SYSTEM CLEANING INSTRUCTIONS

- Perform a flush cycle until water runs clear (button 6)
- Brush outside of brewer with dry brush
- Wash bean hopper and ensure that it is completely dry before replacing
- After 20,000 bean-to-cup vends, remove brewer and soak thoroughly