

Freestanding Vending Range

**Covers Stentorfield Fusion, Optima,
Ventura, Riocca & Eclipse and
National Vendors Calico**

Instant, Freshbrew and B2C Models



OPERATOR'S MANUAL

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The following symbol is used throughout this Operator's Manual:



Safety First! Take care, risk of personal injury.

Introduction

This Operator's Manual provides a guide to the daily operation, basic maintenance tasks and operator accessible programming functions of the Stentorfield Fusion, Optima, Ventura, Riocca and Eclipse and the National Vendors Calico free-standing vending machines and indicates when the operator should call a qualified service engineer for assistance.

Note: This manual does not cover the operation of National Vendors Euro Drink and Euro Twin freestanding beverage vending machines.

Important Safeguards

When using the machine, always have this manual available for quick and easy reference and always follow these basic safety precautions:

1. Read all instructions before using the machine and ensure that anyone who will be involved with the cleaning or refilling of the machine also reads the instructions.
2. **Beware of Electricity:** There are dangerous voltages present within the machine. Before attempting any cleaning or maintenance, ensure that the machine is switched off and disconnected from the mains supply.
3. Certain operations during the cleaning and maintenance procedure require the machine to be connected to the electricity supply. These routines must be carried out separately to all other operations and only by trained personnel. Observation of safe working practices in accordance with current regulations is necessary at all times.
4. Do not operate the machine if any part is damaged, e.g. mains lead, until it has been checked by a qualified Service Technician.
5. Allow the machine to cool before handling or moving.
6. Never immerse the machine in water, or any other liquid and never clean it with a water jet.
7. If the machine should accidentally freeze up, call a Service Technician to check it before switching on.



ALWAYS DISCONNECT THE MACHINE FROM THE MAINS ELECTRICITY SUPPLY BEFORE CLEANING AND SERVICING.

This machine is for indoor use only and because it is a food machine, should be sited in a clean, hygienic area.

It is recommended that this equipment is serviced by a trained Service Technician.

Features

The National Vendors Calico and Stentorfield range of free-standing beverage vending machines from Crane Merchandising Systems, offer users a complete range of instant, freshbrew and bean to cup (B2C) hot drinks plus a selection of still and carbonated cold drinks.

The LCD display, which provides information regarding selection and pricing, enables the user to obtain a drink easily and quickly.

The Microprocessor Control System provides an automatic hot and cold flushing facility, fault condition messages and a key operated jug facility, ensuring complete reliability and flexibility.

Up to twelve independent drink prices are available. Alternative prices and free vend periods are available on all selections.

Full cost control is maintained via the audit facility. This provides precise information on drink counts.

It is the policy of Crane Merchandising Systems to continue developing its range of beverage equipment. The information presented within this document is for information only and may be changed without prior notice.

Crane Merchandising Systems accepts no responsibility for damage caused to the equipment through misinterpretation or misuse of the information contained in this manual.

The Stentorfield Fusion and Eclipse and the National Vendors Calico bean to cup (B2C) machines combine the convenience of a fully automatic beverage machine with bean to cup technology, offering the superior taste of freshly ground coffee and espresso based speciality drinks to satisfy today's discerning consumer.

Specifications

	<i>Calico/Fusion/Optima/Ventura</i>	<i>Riocca</i>	<i>Eclipse</i>
Height	1830 mm	1830 mm	1830 mm
Depth	775 mm	760 mm	760 mm
Width	660 mm	740 mm	915 mm
Weight	184 kg	210 kg	260 kg
Electrical Services (i) Voltage (ii) Current (iii) Frequency	220 - 240 Volts AC 13 Amp Fused 50 Hz		
Water Services (i) Pressure (ii) Stopcock	100 Kpa (1 Bar) - 800 Kpa (8 Bar) 15 mm BSP from rising main		
Cup Capacity	600		
Coin Mechanism	Coin mechanisms and cashless card systems can be fitted on request		

All weights and dimensions are approximate and are for guidance only.

Water Filter - where fitted

The National Vendors Calico and Stentorfield range of free-standing beverage vending machines may be fitted with an Everpure or Brita filter head and filter cartridge. To maintain optimum drink quality the cartridge should be replaced at approximately six monthly intervals, depending on the number of vends.

IMPORTANT: All bean to cup machines **must** be fitted with an approved water filter to maintain drink quality and machine performance. Please see page 6 “Connecting the Water Supply” for full details.

Installation Procedure

Important!

It is essential that personnel responsible for installing, commissioning and servicing Stentorfield and National Vendors machines understand the following:

1. The installation and commissioning of the machine should only be carried out by trained and authorised service engineers.
2. All water and electrical services must be correctly and safely connected.
3. All covers should be replaced correctly and securely and the machine left in a safe condition.
4. The machine is suitable for indoor use only, sited in an area with a recommended ambient temperature not below 10° C and not exceeding 30° C.
5. Prior to moving the machine to its location, ensure that there is sufficient access space available via passageways, stairs, lifts, etc. (Refer to Specifications Table).
6. The machine should be located near the appropriate water and electrical services as detailed in the specification table.
7. To ensure adequate ventilation, 100 - 150 mm (4 - 6 inches) clearance must be allowed between the back of the cabinet and the wall.
8. Open the cabinet door. Remove all transit packing and the installation kit from the machine. Check for visual signs of damage which may have occurred during transit.
9. If the machine is damaged or any parts are missing, you must contact the supplier immediately.
10. Ensure that the machine is levelled in both front to back and side to side planes using the adjustable levelling feet.

Connecting the Water Supply

1. The machine should be situated within 1 metre of a drinking water supply from a rising main, terminating with a W.R.C. approved 15mm compression stop tap.
2. The water supply should comply with both the Statutory Instrument No.1147 - "Water, England and Wales" and The Water Supply (Water Quality) Regulations 1989. Water pressure at the stop tap must be within the limits 1 - 8 Bar (100 Kpa - 800 Kpa).
3. Connect the flexi-hose supplied with the machine to the stop tap. Ensure that the seal supplied is fitted correctly. Flush the system via the stop tap (several gallons) before connecting the water supply to the machine.
4. Connect the flexi-hose to the inlet valve located on the rear of the machine. Ensure that the seal is correctly fitted. Ensure that all water supply fittings are tight.
5. **B2C Machines:** Fusion, Eclipse and Calico bean to cup machines **must** be connected to the water supply via a water filter. This filter must be of food grade quality and able to remove temporary hardness (scale), heavy metals (lead, copper, iron, cadmium), chlorine and any organic pollutant's/dischlorouration. Crane Merchandising Systems recommend and supply the **Brita AquaQuell Compact** water filter for its bean to cup vending machines.

Note! If the machine is connected to the water supply and used without a water filter as specified above, the warranty will be void.

 **BRITA**[®]
it's clear from the taste

6. Turn on the water supply at the stop tap and check for leaks. Prime the water filter (where fitted) following the instructions supplied by the filter manufacturer.

Connecting the Electricity Supply



Safety First! THE MACHINE MUST BE EARTHED. ON NO ACCOUNT SHOULD IT BE EARTHED TO THE WATER SUPPLY PIPE

The machine must be connected to a 240 Volt 50Hz 13 amp fused switched socket outlet, installed to the latest edition of the IEE regulations, using a 3 pin BS approved 13 amp fused plug.

Important: If the mains lead becomes damaged in any way it must be replaced by a special lead available from the manufacturer.

Daily Cleaning and Re-filling - All Machines

The quality of all drink selections produced by Stentorfield and National Vendors machines can only be maintained if the machines are cleaned regularly following the schedule outlined. Before carrying out the daily cleaning procedure described on the following pages, it is recommended that you have the following materials to hand:

- Bactericidal Cleaner
- Liquid De-Staining Agent
- Brewer Cleaning Tablets - B2C Machines only
- Cleaning Cloths
- Paper Towels
- Small Brush
- Two Large Buckets
- Disposable Gloves

Bactericidal Cleaner

This can either be a liquid or powder agent which should be dissolved in clean water in accordance with the instructions on the product packaging. The solution should be used for cleaning machine components and wiping surfaces during the cleaning operation. Items and surfaces cleaned with this solution must be rinsed in clean water and dried thoroughly to remove traces of the solution.

Liquid De-Staining Agent - Brewer Units

Crane Merchandising Systems recommend the use of a liquid de-staining product for cleaning brewer units. The product **must** be used in accordance with the instructions supplied with the product following all health and safety guidelines.

Brewer Cleaning Tablets - Bean to Cup Brewer

Crane Merchandising Systems recommends that the brewer cleaning tablets supplied with the machine are used exclusively for cleaning the bean to cup brewer. These are available from your machine supplier in packs of 100.

It is necessary to carry out the cleaning and maintenance procedure outlined on the following pages on a regular basis, either at the end of the day or at the start of the day before the machine is in constant use.



1. Fill a cleaning bucket with hot water. Open the front door of the machine.

Rotate canister outlets to upright position. Remove the ingredient canisters. **DO NOT PLACE THEM ON THE FLOOR.**

With a clean, damp sanitised cloth, remove any ingredient on the exterior of the canisters, paying particular attention to the area around the canister outlets.



2. Remove mixing bowls and steam hoods (a).

Instant, Freshbrew & Eclipse B2C - Remove the dispense pipes (b) from the dispense head.

Remove the knurled nut securing the plastic dispense head. Clean the dispense head and dry thoroughly before refitting to machine.

Calico & Fusion B2C - Remove dispense pipes (b) and metal dispense spouts from dispense head.



3. Remove the extract tray(s) from the machine. Using a dry brush, clean the area under the extract tray.

Clean the extract tray(s). Dry and refit to machine.

Wipe the canister shelf and the upper interior of the machine with a clean, damp sanitised cloth.



4. Remove the complete whipper unit including the whipper base as shown. Split the whipper unit into its separate parts - whipper base, mixing chamber and impeller.

Clean all of the mixing system components thoroughly in the sanitiser solution. Ensure solution is diluted according to the manufacturers instructions

Rinse all components with clean water before refitting to machine.

5. Refit the whipper bases. Rotate the base anti-clockwise to lock into position as shown.

Refit the impeller's. Line up the dot on the impeller with the flat on the motor shaft.

Refit mixing chambers, mixing bowls and steam hoods.

Refit the dispense pipes to mixing chamber outlets.



6. **(i) Instant, Freshbrew & Eclipse B2C**

Reconnect the dispense pipes to the dispense head.

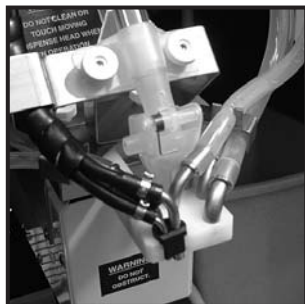
Ensure that the dispense pipes are refitted onto their correct positions in the dispense head as shown.



- (ii) Calico & Fusion B2C**

Feed the dispense pipes complete with dispense spouts through the locating holes in the dispense head.

Ensure that the dispense spouts are located into their correct positions in the dispense head as shown.



7. Check the ingredient canisters and refill if required.

Refit the canisters into the machine from left to right, turning the outlets to their correct positions. Ensure that the canisters are refitted correctly.

Weekly: Empty and wash the ingredient canisters. Dry thoroughly, refill and refit into the machine.



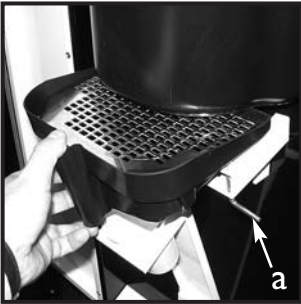


8. Remove the waste water bucket from the machine. Empty and clean.

Check the syrup levels in the syrup containers.
Replace syrup containers if necessary.

Clean the base, sides and back of the machine.

Replace the waste water bucket ensuring that the level detector and overflow pipes are located correctly in the bucket.

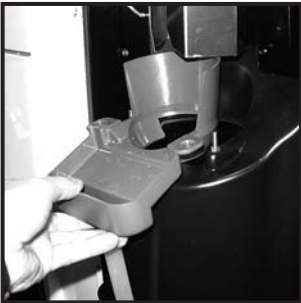


9. Pull down the spring loaded pin (a) and remove the drip tray located in the door.

Clean the drip tray and the area around the cup station.

Wipe down the interior of the door and cup station.

Replace the drip tray ensuring that the drip tube is located correctly at the rear of the tray.



10. Undo the knurled nuts and remove the cup throat complete with drain pipe.

Clean and reassemble.

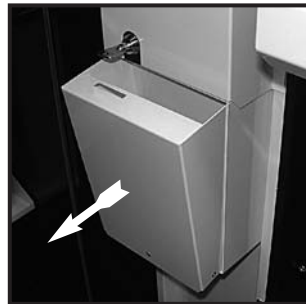


11. Check the levels of the cups in the cup stack. Where necessary, raise bracket and carefully tilt cup stack assembly forward as shown.

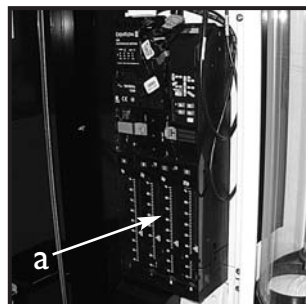
Remove the lid and refill the cup stack. **DO NOT TOUCH THE CUPS WITH YOUR HANDS.** Allow the cups to drop into the cup stack directly from the packaging.

Replace lid and return cup stack assembly to operating position.

12. Un-lock the cashbox (where fitted); remove and empty.
Refit the cashbox to the machine, turning the lock to secure.



13. Remove coin mechanism cover (where fitted).
Check the coin tubes (a) and refill as required.



14. Switch **on** the power to the machine using the safety key provided.

Proceed as follows:-

- (i) Press the **Flush** switch (switch no.3). Check that all of the mixing stations are water tight.

Note: This operation will also flush the bean to cup brewer fitted to B2C machines.

- (ii) Press the **Cup Test Switch** (switch no. 7) and check that the cups drop correctly.
- (iii) Press the **Park Head** switch (switch no. 9) to ensure that dispense pipes are fitted correctly. Press the switch again to return the dispense head to its parked position.
- (iv) Using the **Service** switch (switch no. 6), test vend each drink selection.
- (v) Press the **View Counters** switch (switch no. 5) and record the audit information.
- (vi) After replacing a syrup container, press the relevant **Syrup Prime** switch (switches 8, 10 and 12) to operate the syrup pump for that station, enabling it to be primed, ready for use.



Remove the safety key and close the door. Clean and buff the outside of the machine.

Freshbrew Tea/Coffee Brewer Cleaning Procedure

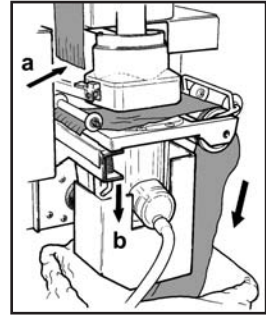
At least twice a week the brewer unit(s) must be removed from freshbrew machines and cleaned.



Safety First! Never clean or service the brewer unit while it is in motion as fingers may become trapped in the mechanism.

Referring to the diagram, proceed as follows:-

1. Open the front door of the machine. Remove the paper/waste ingredient guard.
2. Switch **on** the power using the door switch safety key.
3. Press and release the paper feed switch to index the brewer to its fully open position.
4. When the brewer reaches its fully open position, remove the safety key to switch **off** the power.
5. Tear the filter paper above the brewer (a). Remove the used paper from the brewer unit.
6. Remove the brewer dispense pipe from the dispense head.
7. Pull down the brewer release pin (b) and carefully lift the brewer unit up and clear of its locating bracket. Thoroughly clean the external surfaces of the brewer.
8. With the brewer unit removed, clean the area surrounding its locating bracket. Refit brewer to machine and refit the outlet pipe to the dispense head.
9. Switch **on** the power to the machine using the safety key. The brewer chamber will return to its closed position.
10. Referring to the instructions supplied with the product, pour the recommended amount of de-staining fluid directly into the top of the brewer chamber. Flush the brewer using the brewer flush facility a minimum four times.
11. Press and release the paper feed switch to index the brewer to its fully open position. Remove the safety key to switch **off** the power to the machine.
12. Feed the filter paper through the paper feed mechanism. Switch **on** the power to the machine using the safety key. Filter paper will index automatically and the brewer chamber will return to its closed position. Refit the brewer guard.
13. Remove the brewer waste bucket and empty its contents. Clean waste bucket and refit into machine.
14. If the machine is fitted with a second brewer unit, repeat the above operation.
15. Remove the safety key and close the door.



Cleaning and Re-Filling Procedure - Bean to Cup Machines

Rinsing the Brewer

Rinsing the brewer unit fitted to bean to cup machines daily will help to maintain optimum drink quality and also increase the working life of the brewer. The brewer is rinsed automatically when the **Flush** switch is activated during the daily cleaning and refilling of the machine described on page 11.

Cleaning the Brewer

Bean to cup machines are fitted with a counter which records the number of drinks vended through the bean to cup brewer. After 800 drinks have been vended, the machine will bleep twice and LCD on the front of the machine will display the following message for three seconds:

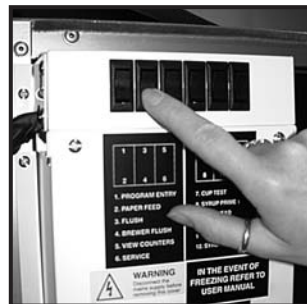
**PLEASE CLEAN
B2C MODULE**

The machine will continue to operate as normal, but should the machine reach 1000 vends without the brewer being cleaned, the machine will disable the B2C module and display the message:

**B2C MODULE
REQUIRES CLEANING**

Proceed as follows:-

1. Insert the door switch safety key.
Press the **Brewer Flush** switch (4) located in the switch panel on the rear of the door as shown.
2. The cleaning sequence lasts for approximately 10 - 15 minutes, during which time the machine will rinse the brewer three times.



During this cycle the LCD will display the message:

**B2C MODULE
SELF CLEANING**

3. Once the rinse cycle has been completed the LCD will display the message:

**PLEASE INSERT TABLET
AND PRESS NORMAL KEY**

4. Push one cleaning tablet out of the blister pack and insert it into the cleaning tube as shown.

Press the **Normal** key on the keypad to restart the cleaning cycle.

The display reverts to the "B2C module self cleaning" message. At the end of the cleaning cycle the machine returns to standby.



5. Remove the door switch safety key to switch **off** the power to the machine.

Carefully remove the brewer waste bucket assembly from the machine. Remove the stainless steel coffee grounds container and empty the contents. Empty the water waste from the plastic container.

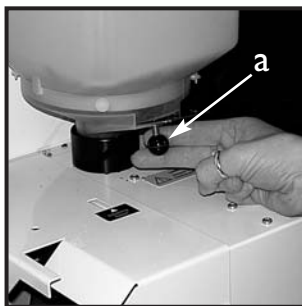
Wash the waste bucket components thoroughly and where necessary, sanitise using the diluted sanitiser solution. Dry using a clean, dry cloth before refitting into the machine.



6. If necessary refill the fresh coffee beans canister. Close the outlet slide (a) to seal the canister exit before removing the canister from the module.

Remove the canister lid. To aid filling, hang the canister on the rear of the door utilising the keyhole slots provided. **DO NOT** place the canister on the floor. Refill canister with fresh coffee beans.

Replace the canister lid to the canister. Refit canister to the module. Ensure that the outlet slide is opened to ensure correct operation.

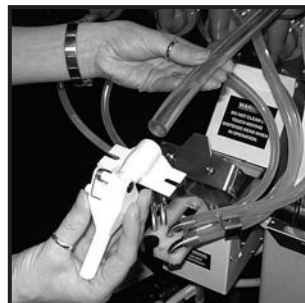


The following procedure applies to Calico and Fusion bean to cup machines only.

7. Undo the two knurled nuts and remove the sugar dispense chute from the dispense head area.

Clean the chute assembly thoroughly in the diluted bactericidal solution. Rinse the component with clean water and dry before refitting to machine.

IMPORTANT: Sugar chute must be dried thoroughly before refitting to machine.



8. Check and if required refill the stick dispenser chute.

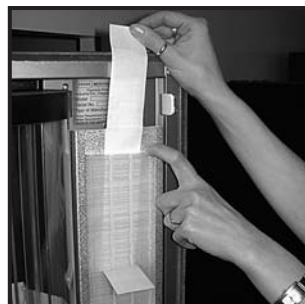
Remove the stirrer weight as shown before refilling the chute.



9. Insert stirrer pack with wrapper into the top of the chute.

Tear the wrapper and remove as shown. Add further stirrer packs as required.

Replace the stirrer weight to ensure correct operation.



10. Close the front door to return the machine to standby mode.

Replacing the CO₂ Bottle - Where Fitted

For machines fitted with a carbonator unit, it will be necessary to regularly check and if required, change the CO₂ gas bottle. This will ensure that carbonated vends are always delivered at optimum quality.



Safety First!

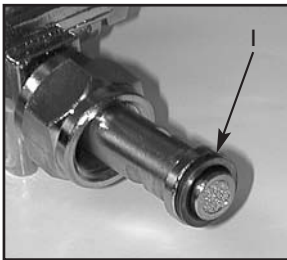
The CO₂ bottle is filled with a gas at a pressure of 800 Psi and must be stored upright and away from sources of heat. In the event of a leak, ventilate the area in the vicinity of the bottle to remove all traces of gas and contact your supplier.

When the gas bottle requires changing, proceed as follows:



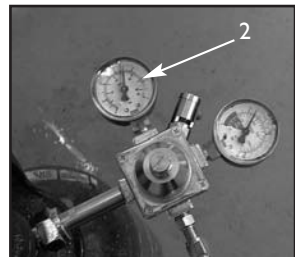
Safety First! The cylinder may be heavy. Always follow the correct procedure when lifting heavy objects.

1. Open the cabinet door. Lift the empty cylinder c/w regulator out of the machine.
2. Shut off the gas supply from the bottle as shown in the photograph (right).
3. Carefully undo the locknut using the spanner supplied and remove the regulator from the empty bottle.



4. Ensure that the seal (I) is seated correctly. If the seal has been damaged, fit a new seal (part no. ME02914000). Re-fit the regulator to the new gas bottle.
5. Tighten the locknut. Carefully lift the new cylinder into the machine ensuring that the gas supply pipe is not trapped or obstructed in any way.

6. Turn on the gas supply from the bottle. Ensure that the regulator (2) is indicating a gas pressure of 35 Psi.
7. Close the door to restore power to the machine. Test vend the carbonated drinks to ensure that the carbonator is working correctly.



Operator Functions and Programming

Programming Mode

To access the Programming Mode you need to enter a sequence of key strokes on the keypad located on the front of the machine. The time between each keystroke must be less than 5 seconds otherwise the machine will return to standby mode.

Programming mode utilises the front panel keypad in order to enter values and commands. The keypad layout is illustrated below.



During programming the keys are used as follows:

0-9 Keys	Used for entering data
'C' Key	Used for correcting data
'Blank' Key	For moving to a higher programme level
▲ (Strong)	For indexing up in a programme, or incrementing data
▼ (Mild)	For indexing down in a programme, or entering data
'Normal' Key	For entering data in a programme, or moving to a lower programme

N.B. In the following programming section, the 'normal' key will be referred to as the access key, the 'strong' key as the up (▲) key and the 'mild' key as the down (▼) key.

Accessing the Programming Mode

1. Press the program entry switch, mounted in the switch panel located inside the top of the door, followed by the Operator's Access Code - selection button 1 followed by 7. Code entry errors may be erased using the cancel (C) key.
2. With the correct code entered the title of the first sub-program will be displayed on the LCD. The LCD will display the message:



**DRINK PRICE
SUB PROGRAM**

3. To step through the sub-programs, press either the up (▲) or down (▼) keys.
4. To access a displayed sub-program, press the access (normal) key.
5. When a parameter is displayed that requires changing, press the access key. Numerical data can now be changed in one of two ways:
 - (a) Pressing the up (▲) or down (▼) keys increases or decreases the number on each key press.
 - (b) Keying in the actual digits of the number required. Using this method, the new number will be displayed in place of the current parameter.
6. Once the correct number has been entered, press the access key to overwrite the previous parameter with the new value. to retain the previous parameter press either the 'blank' or cancel (C) key.

Note: It is not possible to vend a drink whilst in Programming Mode.

Function Switches

National Vendors Calico and the Stentorfield range of free-standing beverage vending machines are fitted with 6, two position rocker switches, mounted in a panel inside the top of the door.

These switches are used for the following functions:



Program Entry Switch

This switch allows the operator to access the operator's program. Once pressed, enter the Operator's Access Code (selection button 1 followed by 7) from the keypad.

Paper Feed Switch (Freshbrew Models)

This switch allows the operator to feed a new paper roll through the coffee brewer. When the switch is pressed and released, the brewer will index to its fully open position and stop. The operator can then safely feed the filter paper through the brewer's paper feed mechanism. Pressing and releasing the paper feed switch again will cause the filter paper to index automatically and the brewer chamber will return to its closed position.

Flush Switch

1. The flush sequence operates automatically and rinses the complete water system. Before the sequence begins, the system waits until the water is at the correct temperature determined by the thermostat. During the entire sequence, the LCD displays the message:

**SORRY NOT IN USE
SELF CLEANING**

2. In order to guarantee the highest standards of cleanliness, the boiler fill valve is disabled, ensuring that the water used in the sequence is delivered at the optimum temperature to kill any micro-organisms. Each hot water valve and the corresponding whipper is switched on in sequence for a pre-set flush time. The brewer module fitted to bean to cup machines is also rinsed automatically during the flush sequence.
3. Once the flush cycle is complete, the boiler refills and when the water is at the correct temperature, the machine returns to standby mode, ready to vend.
4. To flush the machine:
 - a. Open the front door of the machine and insert the safety key.

Caution: Ensure that the waste water bucket is empty (and in place) and keep hands away from the dispense head whilst the flushing cycle is in operation.

- b. Press and release the flush switch.
- c. Empty the waste water bucket when complete. Refit bucket into machine.

Brewer Flush Switch (Freshbrew Models)

1. The brewer flush switch allows the brewer to be flushed independently. In order to guarantee the highest standards of cleanliness, the boiler fill valve is disabled, ensuring that the water used is delivered at the optimum temperature to kill any micro-organisms.
2. The brewer unit is filled with hot water and then operated through four complete brew cycles.
3. Once the flush cycle is complete, the boiler refills and when the water is at the correct temperature, the machine returns to standby mode, ready to vend.
4. To flush the machine:
 - a. Open the front door of the machine and insert the safety key.

Caution: Ensure that the waste water bucket is empty (and in place) and keep hands away from the dispense head whilst the flushing cycle is in operation.

- b. Press and release the brewer flush switch.
- c. Empty the waste water bucket when complete. Refit bucket into machine.

View Counters Switch

1. Internal counters monitor the numbers of vends of each drink type, the number of jug vends and free vends of each of the ingredients used.
2. To view the counters:
 - a. Open the front door of the machine and insert the safety key.
 - b. Press and release the view counters switch.
 - c. Step through the list using the ▲ and ▼ keys on the front panel.
 - d. When complete, press the 'Blank' or cancel (C) key to return to standby mode.

Service Switch

Pressing the service switch allows the operator to make one free test vend using the keypad on the front of the machine to ensure that the machine is operating correctly.

Drinks vended using the service switch are recorded in the vend counters.

Cup Test Switch

This switch allows the operator to test the operation of the cup drop unit after refilling the cup stack. When the switch is pressed the cup drop solenoid is operated and a cup dropped into the cup catcher. This ensures that the mechanism is working correctly

Syrup Prime Switches (Still/Carbonated Machines)

These switches (numbered 8, 10 and 12) allow the operator to prime the syrup selections. After replacing a syrup container, press the relevant syrup prime switch to operate the syrup pump for that station, enabling it to be primed ready for use.

Park Head Switch

When this switch is pressed, the dispense head moves to its fully extended (dispensing) position. Press the switch again to return the dispense head to its correct parked position.

Reset Counters Switch

This switch allows the operator to reset the vend counters to zero. To reset the counters proceed as follows:

1. Press the Program entry switch followed by the Operator's Access Code (selection button 1 followed by 7) from the keypad.
2. Press the reset counters switch. When the switch is pressed the machine will give an intermittent bleep and flash the following message on the display:

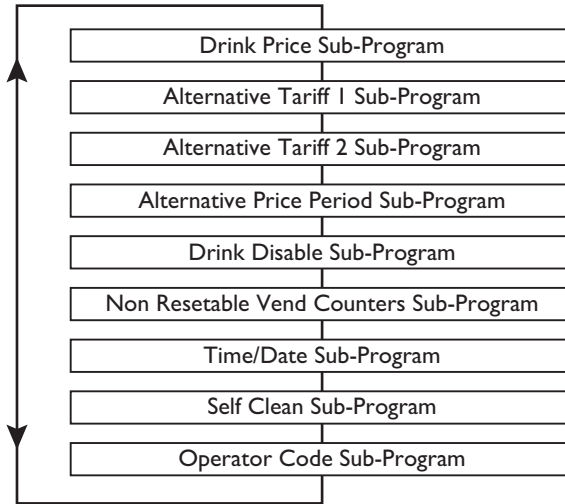


COUNTERS RESET

3. Press the cancel (C) key to clear the display and return to standby mode.

Sub Programs

The nine sub programs within the Operator's Program are shown in the following diagram.



To access a sub program within the Operator's Program, enter the programming mode as described previously. To step through the sub programs, press either the up (▲) or down (▼) keys. To enter a displayed sub program, press the access key.

Drink Price Sub-Program (Default = 10)

1. The drink price sub-program allows the normal tariff prices to be individually set for each drink.
2. Upon entry into this sub-program, the name of the first drink (Coffee) is displayed, followed by its price. The LCD will display the following message:

**COFFEE
PRICE = 10**

3. To alter the drink price, press the access key. The LCD will display the following message:

**COFFEE
PRICE > 10**

4. The = symbol changes to a > symbol indicating that it is now possible for new data to be entered. Key in the new price using the keypad and when correct press access to overwrite the old data.
5. The prices for other drinks can now be set following the sequence described in the previous “**Programming Mode**” section.
6. On certain machines a **cup discount** price can also be set within this sub program, providing that the feature has been enabled within the Engineers Program. With the cup discount feature enabled, the operator may set a discount price against drink selections.

When a customer presses the “No Cup” button before selecting a drink, the drink will be dispensed into the customers own cup. The price set for cup discount is then subtracted from the price of the drink selected and change/credit given accordingly.

Alternative Tariff 1 Sub-Program (Default = 15)

This sub-program works in exactly the same way as the drink price sub program and has the same appearance. The prices set in this program will be in force during tariff 1 periods.

Alternative Tariff 2 Sub-Program (Default = 20)

This is identical to the alternative tariff 1 sub-program except that the prices set here will be in force during tariff 2 periods.

Alternative Price Period Sub-Program

This sub-program enables the times to be specified when each of the above tariffs should be in force. There is a four level tariff structure available:

1. Normal Tariff:

This relates to prices set in the drink price sub-program and in force when no alternative price period is currently applicable.

2. Tariff 1:

Prices set in the tariff 1 price sub-program.

3. Tariff 2:

Prices set in the tariff 2 price sub-program.

4. Tariff 0:

Sets the machine into free vend.

The machine is factory set to the normal tariff, with no alternative prices available. To change the tariff period, proceed as follows:-

1. On entry into the sub-program the display will show the message:

**P1 = 00:00 - 00:00
TARIFF - EVERY DAY**

2. This is an empty price period. To enter a price period (e.g. 10:30 - 15:45, Tariff 2, Weekends), press access. The display will now read:

START > 00:00

Note: The arrow symbol (>) indicates that it is possible to update the display.

3. Enter the correct start time in hours and minutes using buttons 0 - 9 on the keypad.

Note: To correct any entry errors, press cancel to delete the last digit entered. Pressing cancel with no digits displayed will exit to the Operator's program.

4. With the start time entered press access. Enter the finish time as described above and press the access key. The display will now show:

**PERIOD 10:30 - 15:45
TARIFF > 0**

5. To set the tariff period, enter a number between 0 and 2 (or use the up (▲) or down (▼) keys) followed by access. The message will change to:

**PERIOD 10:30 - 15:45
TARIFF 2 > EVERYDAY**

6. Using the up (▲) and down (▼) keys, index the day setting between "Every day", "Weekdays" and "Weekends". When the required day setting is displayed, press the access key to complete the price period data entry. The message on the display will read:

**PERIOD 10:30 - 15:45
TARIFF 2 EVERYDAY**

7. There are a maximum of ten possible price periods available. To enter another price period, use the up (▲) or down (▼) keys to view the periods until an empty

period is displayed. The new period is entered in the same way as described previously.

8. If the start time is entered as being a later time than the finish time, the period will not be accepted by the machine. If periods overlap, the first overlapping period in the list will be the one in force until it has finished. To delete a period, continue as if that period were to be re-programmed, and when the display is requesting the start time to be entered, press cancel.

Drink Disable Sub-Program

This sub-program allows drinks to be either enabled or disabled. The following example illustrates the sequence required to disable the chocolate selection.

1. Enter the drink disable sub-program and scroll up or down using the appropriate arrow key until the message on the LCD display reads:



**CHOCOLATE
= ENABLED**

2. Press the access key. The message on the display will now read:




**CHOCOLATE
> DISABLED**

3. Press the access key again. The drink is now disabled.

Vend Counters Sub-Program

1. When the vend counters sub-program is entered, the first drink counter is displayed:



**COFFEE
1372**

2. The up (▲) and down (▼) keys enable the counters for each drink to be viewed, and values noted, but they cannot be altered using the keypad. These counters can only be reset by using the 'reset counters' switch (see page 21).
3. There is one vend counter for each drink, plus counters for jug vends, free vends, total vends and total sales value. The total sales data is displayed in units of 1 penny.

Time/Date Sub-Program

The machine maintains a record of the current time and date in 24-hour format. The date is programmed for leap-year roll-over and should not require adjustment.

To set the time and date, proceed as follows:

1. The Time/Date sub-program displays the time, date and day of the week. The up (▲) and down (▼) keys are used for viewing the three different messages.
2. To view the time, enter the time/date sub-program. The display will show the message:

TIME = XX:XX

where xx:xx is the current time.

3. To change the time shown, press the access key. The display will now show:

**TIME = XX:XX
SET TIME > 00:00**

4. Enter the correct time in hours and minutes using buttons 0 - 9 on the keypad.
5. When correct, press access. The time is now set. To view the date, press the up or down key until the display reads:

DATE = XX:XX:XX

where xx:xx:xx is the current date.

6. To change the date, press the access key. The display will now show:

**DATE = XX:XX:XX
SET DATE > 00:00:00**

7. Enter the correct date using the sequence day, month, year using buttons 0 - 9 on the keypad.
8. When correct, press access. The date is now set.

9. To view the day, press the up or down key until the display reads:

DAY = XXXXXXXXX

where xxxxxxxxx is the current day of the week.

10. To change the day, press the access key. The display will now show:

**DAY = XXXXXXXXX
> XXXXXXXXX**

11. Use the up or down arrow keys until the required day is displayed. Press the access key. The time, date and day are now programmed.

Self Clean Sub Program

1. This sub program allows the operator to define two periods during a day when the machine will automatically flush through the water system. This operation is described fully on page 19.
2. Depending upon the flush setting which will have been pre-programmed in the machines Engineers Program, the machine will have been set to flush hot system only, cold system only or complete water system.
3. Auto flush periods can be programmed by the operator to occur everyday, weekdays, weekends or never.
4. To enter auto flush periods, enter the self clean sub program and follow the sequence for setting an alternative price period described on pages 23 - 25.

Operator Code Sub-Program (Default 17)

Entry into the Operator code sub-program enables the operator code to be changed. This code may be of any length up to seven digits. Enter a new code at the prompt and when correct press the access key.

Problem Solving

In the unlikely event of the machine developing a problem, details are given in the table below on how to deal with common faults that can be easily remedied by the operator.



Safety First! Should the remedy described in the table not cure the problem, or the fault is not listed, **DO NOT ATTEMPT TO CURE THE FAULT YOURSELF.** Contact your machine supplier for assistance.

Fault	Possible Cause	Remedy
Waste bucket overflowing	Level sensor incorrectly located in bucket	Ensure sensor is placed correctly
Incorrect drinks dispensed	Ingredient canisters located incorrectly	Refit canisters into their correct positions
Leaking from dispense area	Mixing bowls/chambers fitted incorrectly	Refit correctly and ensure that all mixing stations are water tight
Low water showing on LCD display	Water supply turned off	Ensure water supply is turned on at stop-tap
Blank LCD display	Electricity supply turned off	Ensure electricity supply is turned on at the mains
Cups jamming	Incorrect cup size	Remove cups from cup turret and replace with correct size cups
Carbonated drinks not "fizzy"	CO ₂ gas bottle empty	Check and if necessary replace following the procedure outlined on page 16
No change given from change-giver (where fitted)	(i) Coin tubes jamming (ii) Coin tubes empty or below pre-set level	Clear coin tubes and check for blockage Check and refill coin tubes where necessary
Tea/Coffee brewer unit jamming	(i) Incorrect paper fitted (ii) Filter paper loaded incorrectly (iii) Paper fouling on brewer guard	Remove and fit correct 90mm filter paper Reload paper and ensure that it feeds correctly Adjust brewer guard. DO NOT REMOVE

Error Messages - B2C Models Only

The table below lists common error messages that may be encountered by the operator and offers solutions for curing them.

Error Message	Cause	Remedy
Out of beans. Please refill	Bean canister is empty	Fill the fresh beans container
Please clean B2C module	800 drinks have been vended through the brewer	Clean the brewer as described on pages 13 and 14
B2C module requires cleaning	1000 drinks have been vended through the brewer	Clean the brewer as described on pages 13 and 14
Water shortage Contact service	Water shortage to module. Machine disabled	Contact your service provider
B2C module failure Contact service	Module is unable to position brewer correctly. B2C module disabled	Contact your service provider

Machine Leaking

Should the machine develop a leak, switch off the mains water supply at the stop-tap and if safe to do so, switch off the mains electricity supply. Contact your machine supplier for further assistance.



Safety First! Do not attempt to repair the machine yourself.

De-Commissioning the Machine

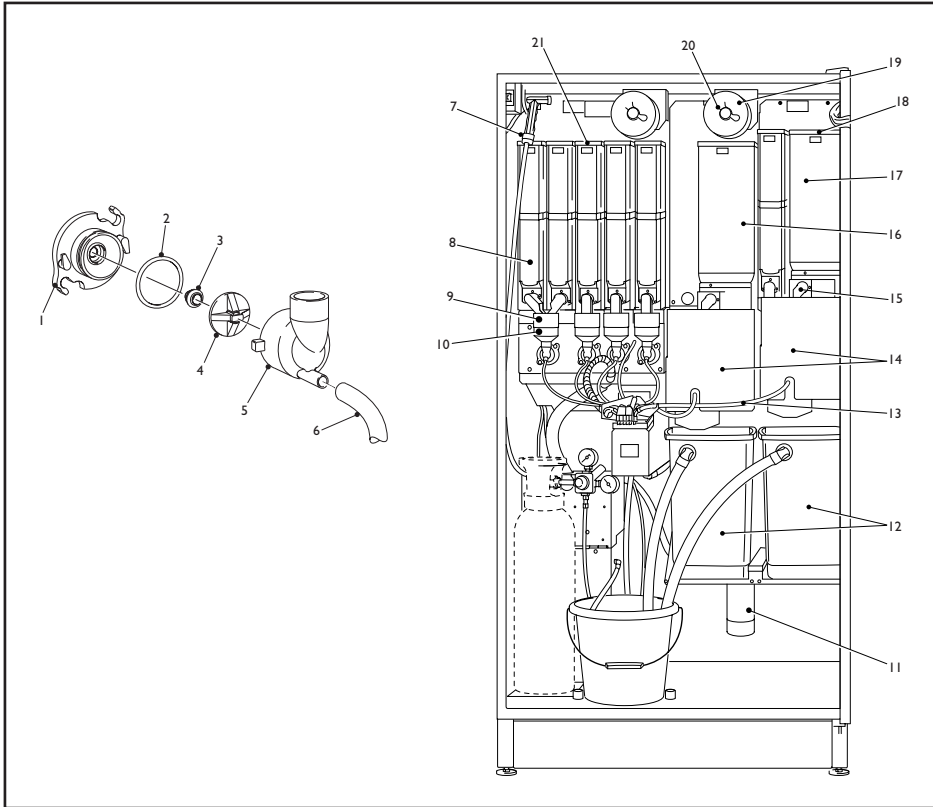
Should the machine need to be shut down for short periods, for example over a long weekend, no special treatment is required. The machine should be thoroughly cleaned before the site is closed down and on return it is advisable to vend each drink type to ensure correct operation and to “freshen up” the machine.

If the machine is to be moved or transported, remove all ingredients and thoroughly clean the machine. If a coin module is fitted, remove any cash from the coin tubes and cash box. Disconnect all electricity and water supplies.

The machine should be transported upright at all times. Contact the supplier of the machine for assistance.

Recommended Spares List

The spares items listed below are available from your machine supplier.



Ref. No.	Part No.	Item Description
1	PL01971000	Whipper Base
2	SI01295000	O Ring Seal
3	SI01986000	Seal
4	PL01970000	Impeller
5	PL02275000	Mixing Chamber
6	SI04345960	Silicon Pipe
7	HO03674001	Spray Hose Assembly
8	(i) PL02145000	Canister - No Agitator
	(ii) PL01105000	Canister c/w Agitator
9	PL01966000	Steam Trap
10	PL01967000	Mixing Bowl

Ref. No.	Part No.	Item Description
11	(i) WF03273000	Everpure Water Filter - Where Fitted
	(ii) WF04910000	Brita Water Filter - Where Fitted
12	WO04971000	Freshbrew Waste Bucket Assembly
13	SI01171960	8mm Silicon Pipe
14	MT05093000	Brewer Guard - Freshbrew Machines only
15	(i) PL01128000	Canister Chute
	(ii) PL01441000	Canister Chute - LH
	(iii) PL01442000	Canister Chute - RH
16	PL01848000	Freshbrew Tea Canister - Square
17	PL01923000	Freshbrew Coffee Canister - Square
18	PL02712000	Canister Lid - Square
19	WF01176000	Filter Paper Roll
20	ME01849000	Retaining Clip
21	PL04407000	Canister Lid - Rectangular

The following list of spares items are for machines fitted with a bean to cup module and are not illustrated.

Part No.	Item Description
ZC08861000	Cleaning Tablets
MT08620000	Coffee Waste Container
WO08625000	Waste Bucket
PL08678000	Coffee Beans Canister
*WF04910000	Brita 'AquaQuell' Compact Water Filter

* Crane Merchandising Systems recommend and supplies the Brita AquaQuell compact water filter for its bean to cup vending machines.

Notes



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