

EVOLVE

Technical Manual



Part Number: 350090

westomatic
make it happen

CONTENTS:

1.Receiving your machine	3
2.External Features	4
3.Internal Features	5
4.Water Flow Diagram	6
5.Water Flow to Flavour Deck	7
6.Installation	8-12
7.Commissioning	13-14
8.How to make a drink	15-17
9.Ready?	18
10.Cleaning and Hygiene	19-22
11.Menu Programming Guide	23-36
12.Water & UV Filters	37-38
13.Control Processor & USB	39
14.Audit Loading / Reading	40-44
15.Firmware & Configurations	45-51
16.Spare Parts	52
17.Circuit Diagrams	53-54
Liability & Warranty	55
Technical Specifications	56
Certification	57

1. Receiving your Machine

- Westomatic will deliver your machine and assist with the initial installation and training.
- Your machine will already be set up to your specifications - taken from your order.
- When you receive your machine it's important that you check for any damage in transit - please report these directly to Westomatic HQ as soon as possible.
- The Evolve is intended to deliver drinks at $<5^{\circ}\text{C}$ into the customers own reusable bottle.
- The water is triple filtered using sediment, UV and 0.1 micron filters.
- Drink options include, but are not limited to Protein powders / BCAA's / Pre-Workout / Electrolytes / powdered Milkshakes.
- This Technical manual provides guidance to operate and clean your Evolve Nutrition Dispenser.



2. External Features

DIGITAL MEDIA SCREEN

LCD DISPLAY

ILLUMINATED DRINKS MENU

IR REMOTE CONTROL
FOR MEDIA SCREEN

HOVER SELECT BUTTONS 1, 2, 3, 4

CASHLESS BLANKING PLATE

LED LIT BOTTLE STATION

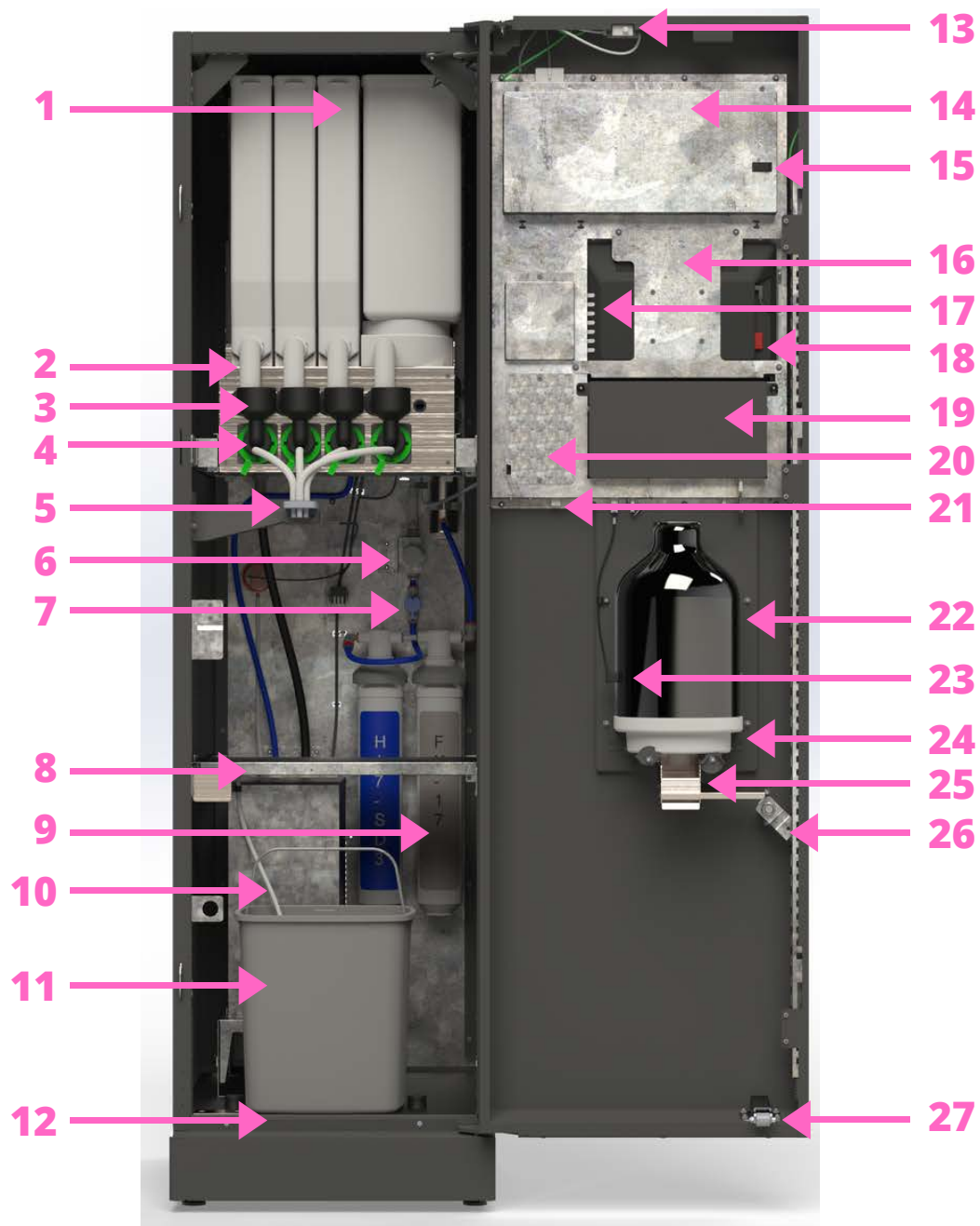
BOTTLE SENSOR

SECURITY T LOCK

REMOVABLE SIDE/FRONT KICK PLATES



3. Internal Features

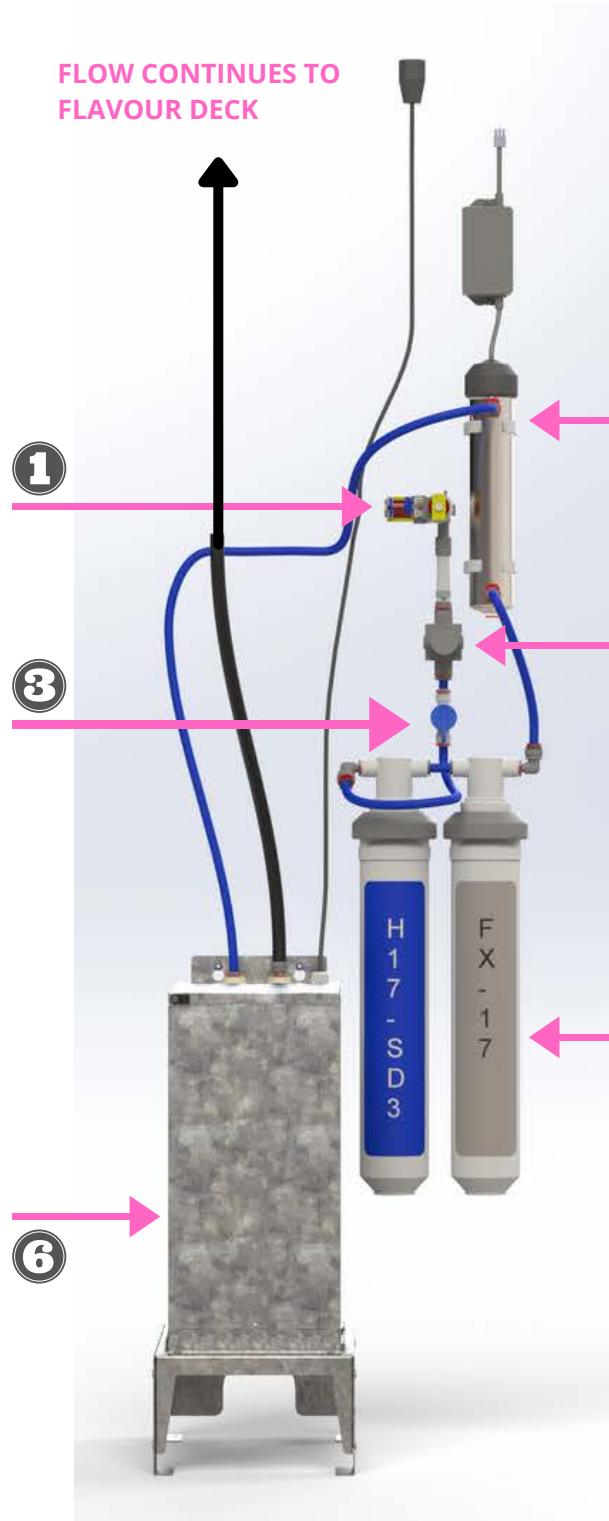


1	Flavour Canisters	13	Service Switch
2	Canister Chutes	14	VMC Cover Plate
3	Mixing Bowls	15	Flush Button
4	Mixer Motors	16	Digital Media Display
5	Dispense Head	17	Display Control Buttons
6	Pressure Regulator	18	Digital Media SD / USB Ports
7	Water Stop Valve	19	Illuminated Drinks Menu
8	Storage Shelf	20	Cashless Cover Plate
9	Water Filters	21	Audit USB / Config Port
10	Bucket Fill Sensor	22	Bottle Station
11	Waste Bucket	23	Bottle Sensor
12	Door Support	24	Drip Tray
		25	Wastewater Guide
		26	Security T Lock
		27	Door Level Guide

*Also included (but not shown) is a Spare Sanitising bucket and Hygiene kit

4. Water Flow Diagram

- WATER INLET:**
- 24VDC - Controls when water can enter machine.
 - Prevents continual mains water pressure within the machine
- STOP VALVE:**
- Allows you to manually turn off and isolate water supply.
 - Helps remove water and pressure from the system before changing the filters
 - Ensure water flush button is pressed to run water out of system
- WATER CHILLER:**
- Water chiller chills filtered mains water to deliver cold drinks between 3°C & 5°C.



- UV WATER FILTER:**
- Sterilises the water supply to remove any bacteria not removed by the water filters.
 - Purifies at rate of 1 gallon per minute

- PRESSURE REGULATOR:**
- Controls incoming water pressure to the required flow rate.
 - Clockwise to increase
 - Counter-clockwise to decrease

- WATER FILTER:**
- Dual water filter removes sediment / contaminants down to 5 microns.
 - Water filter (blue) must be fitted on the left

5. Water Flow to Flavour Deck

- SOLENOID VALVE:**
- Turns water on / off.
 - Allows flow to each individual flavour.

①

MIXING BOWLS:

- Powder is dispensed from canisters into bowl.
- Timed water dispense to assist mixing.
- Individual bowls to prevent cross - contamination.
- Easily removed for cleaning

②

③

- MIXER MOTOR:**
- 4 individual motors.
 - Single speed mixer motor to blend drink in the mixing bowl.

④

MIXER BASE & IMPELLOR:

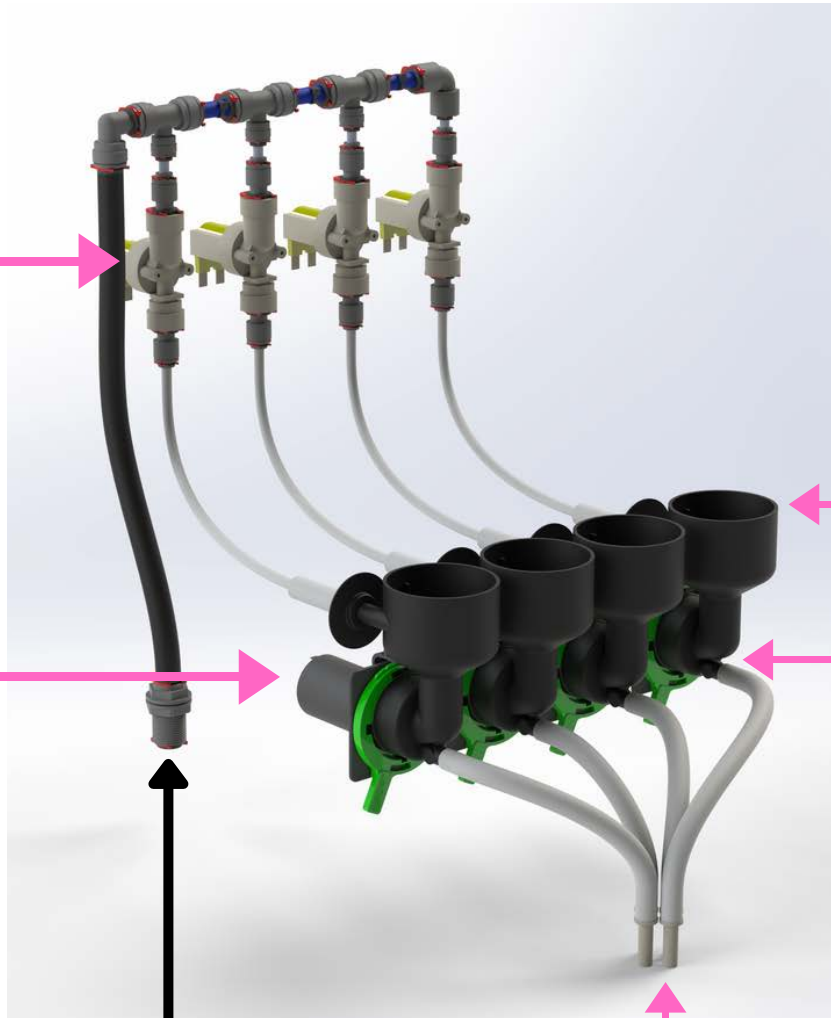
- Mixer base & seal ensures water does not leak.
- Impeller attached to mixer motor to blend the drink.
- Both can be easily removed for cleaning.

⑤

DISPENSE TUBE & NOZZLE:

- Individual tubes ensure contamination free drink dispense.
- 4 separate nozzles fit into dispense head.
- Both can be easily removed for cleaning.

WATER FLOW FROM
CHILLER



6. Installation

1. COMMISSIONING WATER

- The Evolve is not suitable for outdoor use or for being jet washed in any way.
- Ensure there is a minimum of 100mm of free space behind the machine to allow for ventilation of chiller.
- The machine must be **switched off** before you begin.

1



2



- Connect hose to mains water supply / potable water.
- Min water pressure = 0.13-0.84 MPa / 1.4 - 8.4 Bar.
- Check filters and fit them to the machine
- NB. Sediment filter (blue) must be fitted on the left.

3



4



- Turn water on and **CHECK FOR LEAKS**
- Plug machine in and power on machine.
- Prime filters by flushing water through. Repeat until the water runs clear and all air is eliminated.

6. Installation

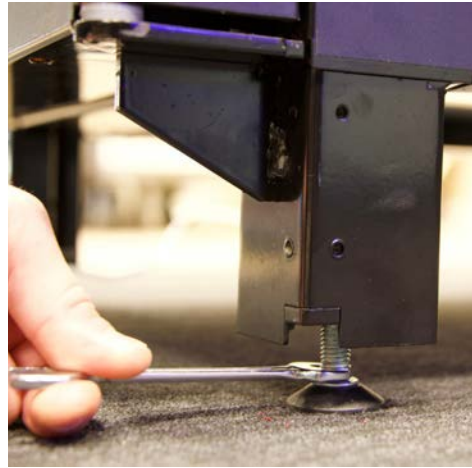
2. LEVELLING

- Locate the machine on a stable, level surface.
- You will need a spanner and a spirit level.
- Incorrect levelling can lead to misalignment and inconsistent bottle fill issues.

1



2



- Using the spanner adjust the foot bolts to raise or lower the machine.
- Ensure you check side to side and front to back to ensure machine is level in both planes.

3



4



6. Installation

3. FITTING THE PLINTHS

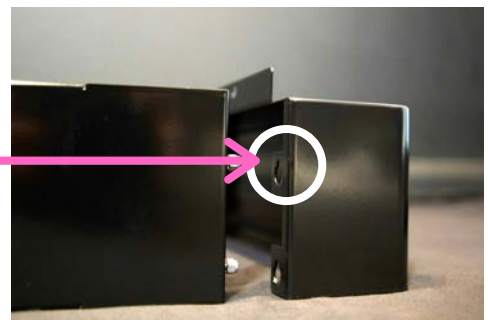
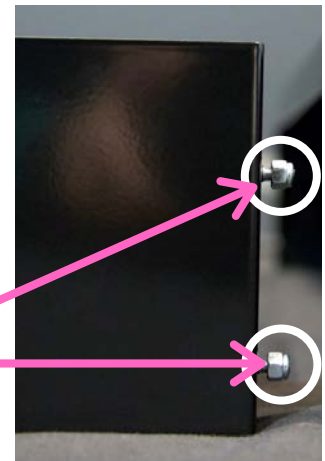
- The Evolve comes with 2x side plinths, and 1x front - these are packed up securely inside the machine for delivery.
- Locate the machine into place before fitting the plinths.
- The nuts will be pre-fitted - and must be facing the front (ensuring the bolts are closer to the bottom of each plinth).



Plinths will have nuts fitted

The nuts must be located closer to the bottom when fitting

The nuts fit into a keyhole connection with the front plinth

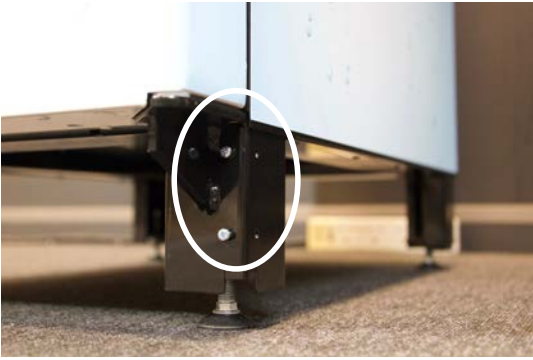


6. Installation

FIT SIDE PLINTHS

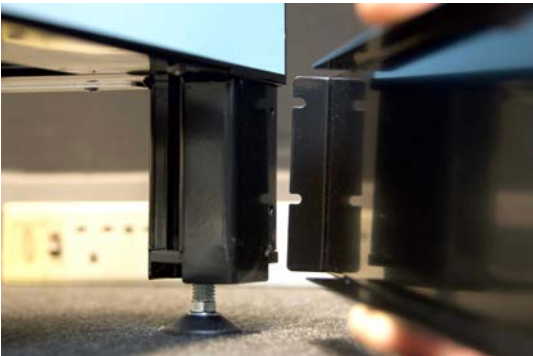
1. Remove the screws from the front legs of the machine.
2. Slide plinth into back first.
3. Fit the plinth to the front ensuring it lines up with holes
4. Replace screws & repeat on the other side.

1



Remove screws

2



Slide plinth into back of machine first

3



Fit plinth to front

4



Replace screws

5

Repeat steps on other side

6. Installation

FIT FRONT PLINTHS

1. Remove the countersink screws.
2. Fit front plinth on to the nuts on the side plinths.
3. Slide the front plinth up so it aligns with countersink.
4. Replace screws on both sides.

1



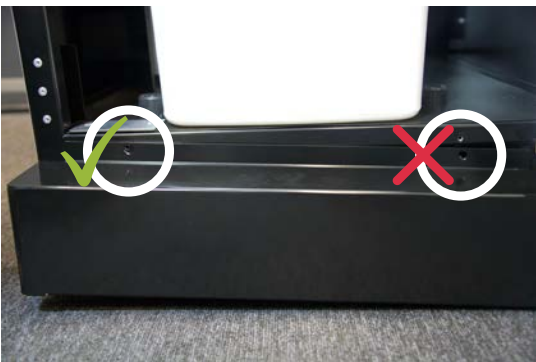
Remove countersink screws x2

3



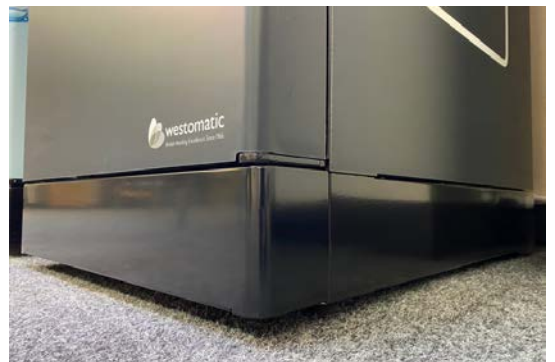
Replace screws x2

2



Ensure plinth and countersink align

4



Plinths fitted on both sides and front

7. Commissioning

1. INSERTING FLAVOUR DECALS

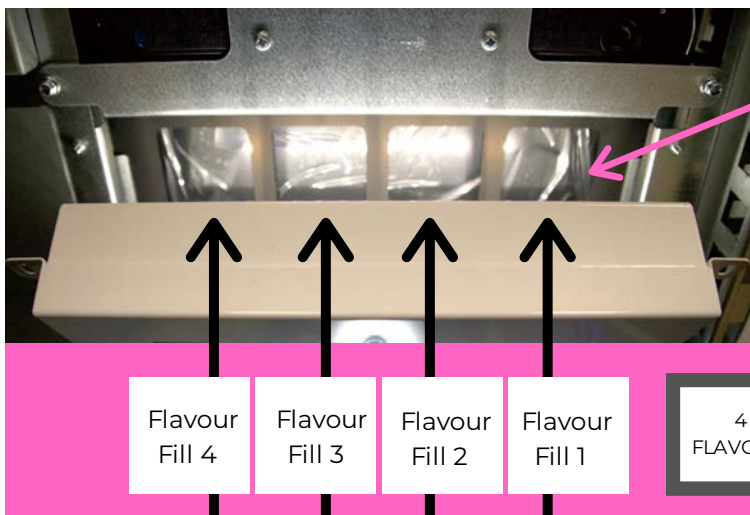
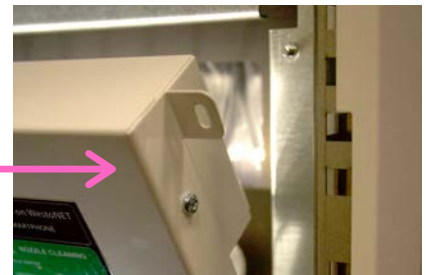
- Westomatic will fit the flavour decals that were specified during the order process.
- Each machine comes with a set of 12 different flavours.
- These are located in the welcome pack at the back of the machine.



Unscrew plastic nuts by hand



Lightbox is designed to tilt out - easy for fitting decals



Decals slide easily into Lightbox. Making sure front faces out.

Refit the lightbox and replace the plastic nuts.

4 x
FLAVOURS

7. Commissioning

2. SETTING UP DRINKS

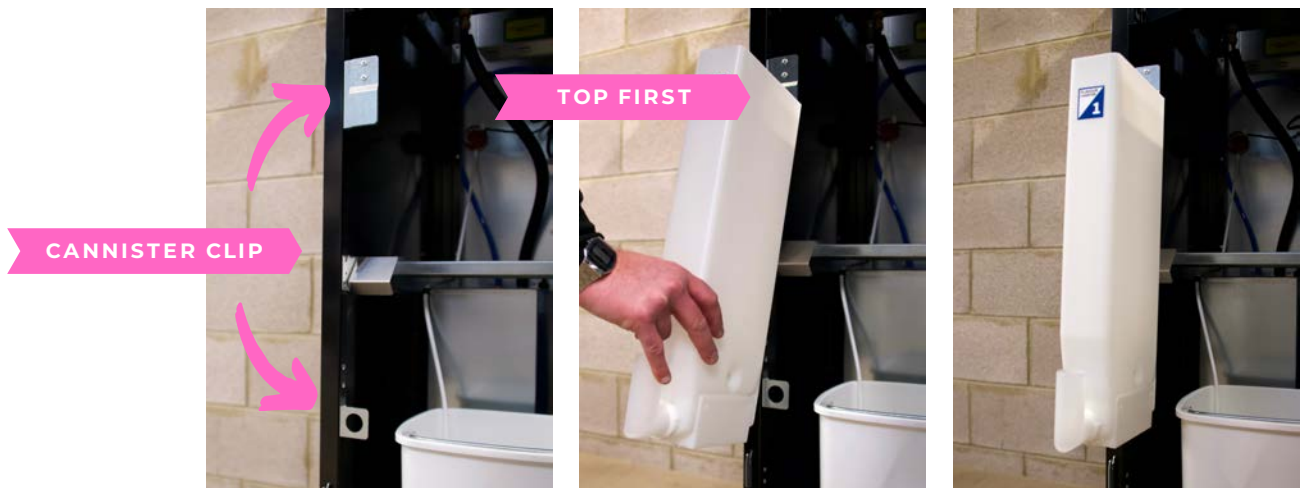
- Westomatic will pre-set the drink settings as per the order specification.
- Each machine comes with a set of 4 canisters, 3 regular size, and 1 large.
- The machine also has a handy clip to allow for easy filling.



To fill the canisters:

1. Lift the canister up from the front and rotate the chute round to prevent any spillage - and pull forward to remove.
2. Hook canister into filling clips.
3. Using the funnel provided slowly tip the product into the canister.
4. Replace canister ensuring motor coupling is fitted at the back, then click into place.
5. Rotate the chute back into place - it should be offset and flowing straight down.
6. Ensure mixing bowl is clean and clear of powder.
7. Repeat for all canisters, then press FLUSH to run a rinse cycle.

Canisters 1, 2 & 3 = 1.8kg
Canister 4 = 4kg



8. How to make a Drink

SETTING FLOW RATE

FACTORY DEFAULT SETTING = 500ML IN 23.5S
FLOW RATE = 21.33ML/S

BOTTLE FILL CALCULATION:

$$\frac{\text{BOTTLE SIZE}}{\text{FLOW RATE}} = \text{TIME IN SECONDS}$$

EG:
$$\frac{330\text{ML}}{21.33\text{ML/S}} = 15.47\text{S}$$

- For example for a 330ml drink - 15.47seconds is entered into the water throw time.

IMPORTANT:

*Water throw time should always be **greater** than protein throw time to ensure a well blended drink and to ensure bowls are clean and clear after powder dispense.*

8. How to make a Drink

ADJUST FLOW RATE

- Using a measuring jug or measured bottle fill dispense a bottle fill of a set amount, for example 500ml.
- Adjust the water pressure regulator to achieve correct volume.



- If the water pressure needs adjusting
- The Pressure Regulator is located at the back of the machine
- Pull cap on regulator out then turn



Clockwise = INCREASES Volume



Anti - Clockwise = DECREASES Volume

8. How to make a Drink

SETTING GRAM THROWS

PROTEIN SET UP:

- Protein recipe is water throw and flavour shot.
- Water throw is calculated using the equation previous.
- Flavour shot - each dry mix powder has a different flow rate so cannot be predetermined.
- Begin with a 5.0 second test throw time for the flavour.
- Collect the throw (remove canister chute from canister)
- Weigh content of the dry powder.

$$\frac{\text{WEIGHT OF POWDER (G)}}{\text{TEST TIME (S)}} = \text{GRAMS PER SEC}$$

FOR EXAMPLE:

- If Product recommendations suggest a gram throw of 30g, using the weight from the 5 second test throw, calculate the grams per second - and then work out how many seconds are required.
- So if 40g were thrown in 5 seconds = throw rate of 8g/s.

$$\text{EG: } \frac{40\text{G}}{5\text{S}} = 8\text{G/S}$$

- Using the formula below the throw time in seconds can be calculated:

$$\frac{\text{REQUIRED WEIGHT OF POWDER (G)}}{\text{GRAMS PER SECOND}} = \text{THROW TIME (S)}$$

$$\text{EG: } \frac{30\text{G}}{8\text{G/S}} = 3.75 \text{ SECONDS}$$

- Test the gram throw with the calculated time, and re-weigh the flavour shot.

9. Ready?



CHECK LIST:

IMPORTANT TO ENSURE MACHINE IS READY TO DISPENSE:

MACHINE IN LOCATION & LEVELLED

☐

PLINTHS FITTED

☐

POWER ON

☐

WATER ON

☐

WATER FILTERS FITTED & PRIMED

☐

UV FILTER FITTED

☐

CANISTERS FILLED - LIDS ON

☐

CANISTER CHUTES IN PLACE

☐

DRINK DISPENSE SET UP

☐

MIXING BOWLS CLEAN

☐

PIPES & NOZZLES FITTED

☐

WASTE BUCKET IN PLACE

☐

WASTE WEIGHT/TUBE IN BUCKET

☐

CLOSE DOOR/BOTTLE IN & DETECTED

☐

TEST ALL DRINKS

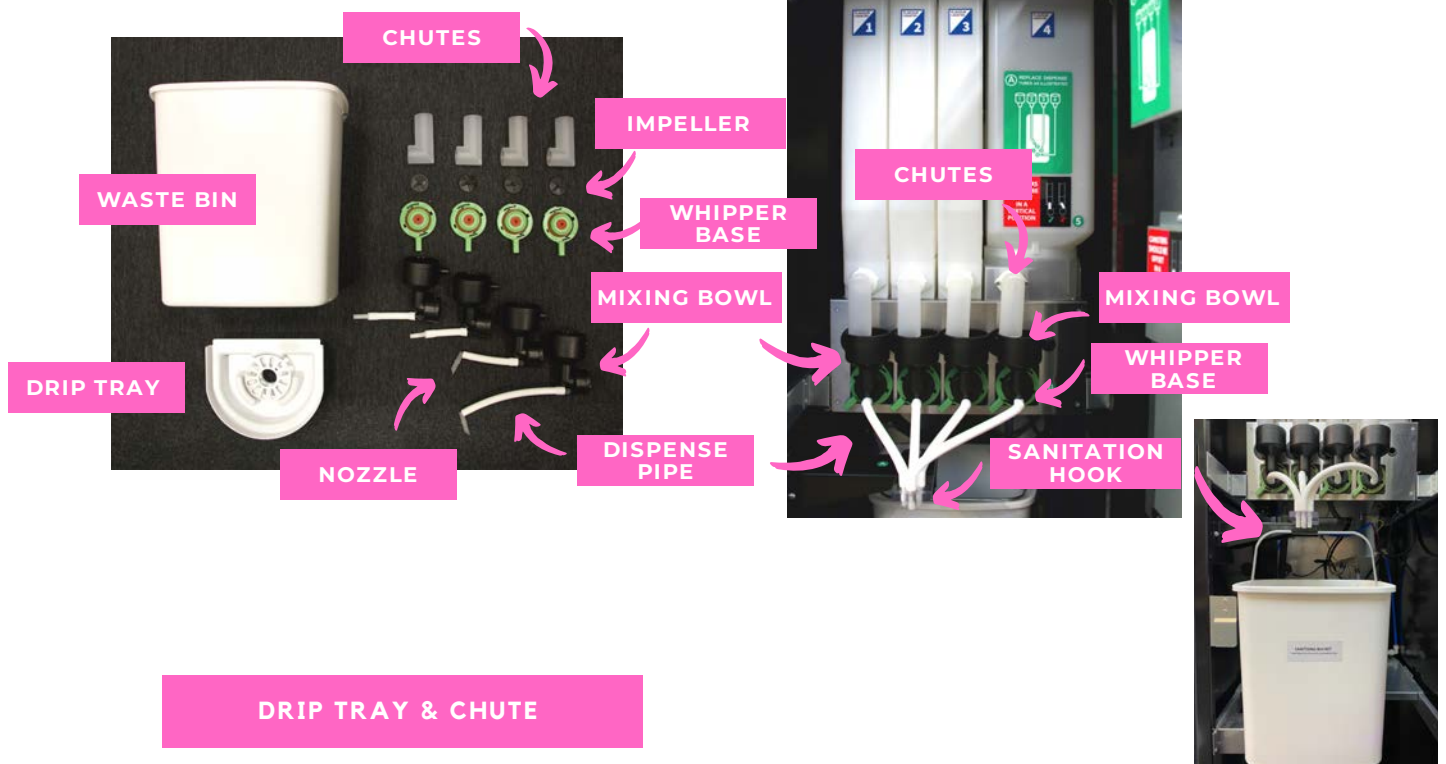
☐

10. Cleaning and Hygiene

CONTACT PARTS

- The Evolve has several contact parts that need to be maintained and replaced as the machine ages.
- We have supplied you with a Hygiene Kit that allows parts to be swapped out when cleaning - ensuring the machine has no 'downtime'.

HYGIENE KIT



DRIP TRAY & CHUTE



DRIP TRAY CHUTE IN FIRST

CLIP DRIP TRAY IN PLACE

WASTE BUCKET AND WEIGHT TUBING



10. Cleaning and Hygiene

1. DAILY CLEANING

WIPE DOWN ALL CONTACT PARTS /EMPTY WASTE BUCKET

1. BUCKET - empty and wipe (insert overflow weight)
2. DRIP TRAY/CHUTE - remove and clean
3. FLAVOUR DECK - wipe down
4. MIXING BOWLS - wipe clean (**important**)
5. IMPELLORS - wipe clean
6. BUCKET - place onto sanitation hook and FLUSH

ALSO CLEAN - FLOOR / BOTTLE DISPENSE AREA



10. Cleaning and Hygiene

2.WEEKLY CLEANING

REMOVE HYGIENE PARTS AND THOUROUGHLY CLEANSE

- 1.BUCKET - empty and wipe (insert overfill weight)
- 2.DRIP TRAY/CHUTE - remove and clean
- 3.FLAVOUR DECK - wipe down
- 4.NOZZLES - remove from dispense head & clean
- 5.CANISTER CHUTES - remove and clean
- 6.MIXING BOWLS - wipe clean (**important**)
- 7.WHIPPER BASE - twist to remove and clean
- 8.IMPELLORS - remove and clean
- 9.BUCKET - place onto sanitation hook and FLUSH
- 10.UV FILTER - check operational, flush - observe GREEN light

ALSO CLEAN - FLOOR / BOTTLE DISPENSE AREA

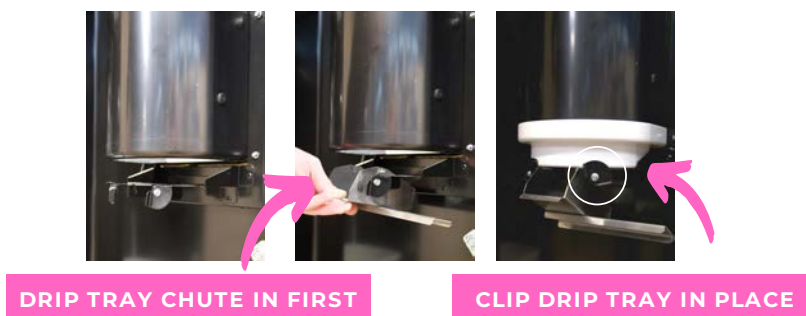


10. Cleaning and Hygiene

3.EVERY 6 MONTHS

YOUR SERVICE TECHNICIAN WILL NEED TO:

- 1.STERILISE - water lines (hydrogen peroxide or similar)
- 2.REPLACE - UV Lamp (6 months or 8000 hours)
- 3.REPLACE - water filters
- 4.STRIP DOWN & STERILISE - **all contact and hygiene parts**
- 5.CLEAN - flavour deck / bottle dispense area / bucket / floor



TEST ALL DRINKS & ADJUST IF NECESSARY

11. Menu Programming Guide

USING THE BUTTONS

BUTTON FUNCTIONS

- ① Button 1 = UP
- ② Button 2 = DOWN
- ③ Button 3 = CANCEL
- ④ Button 4 = ENTER

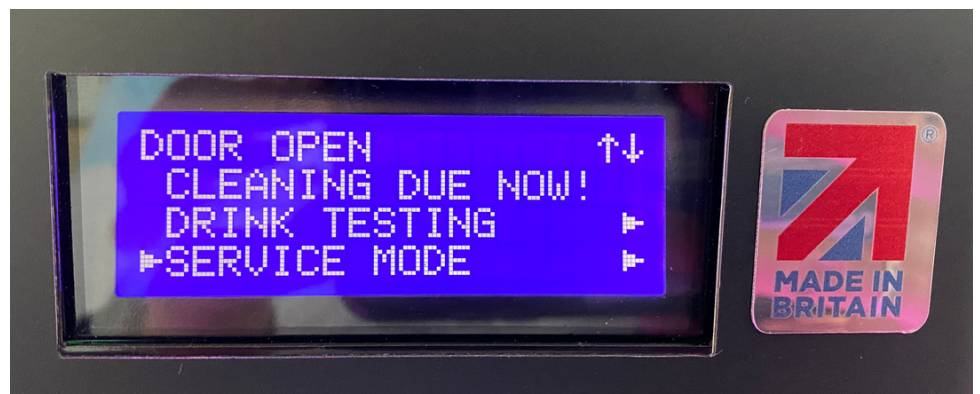


ENTERING SERVICE CODES

When needed to enter a passcode (Service Mode):

- Button 1 = 1
- Button 2 = 2
- Button 3 = 3
- Button 4 = 4

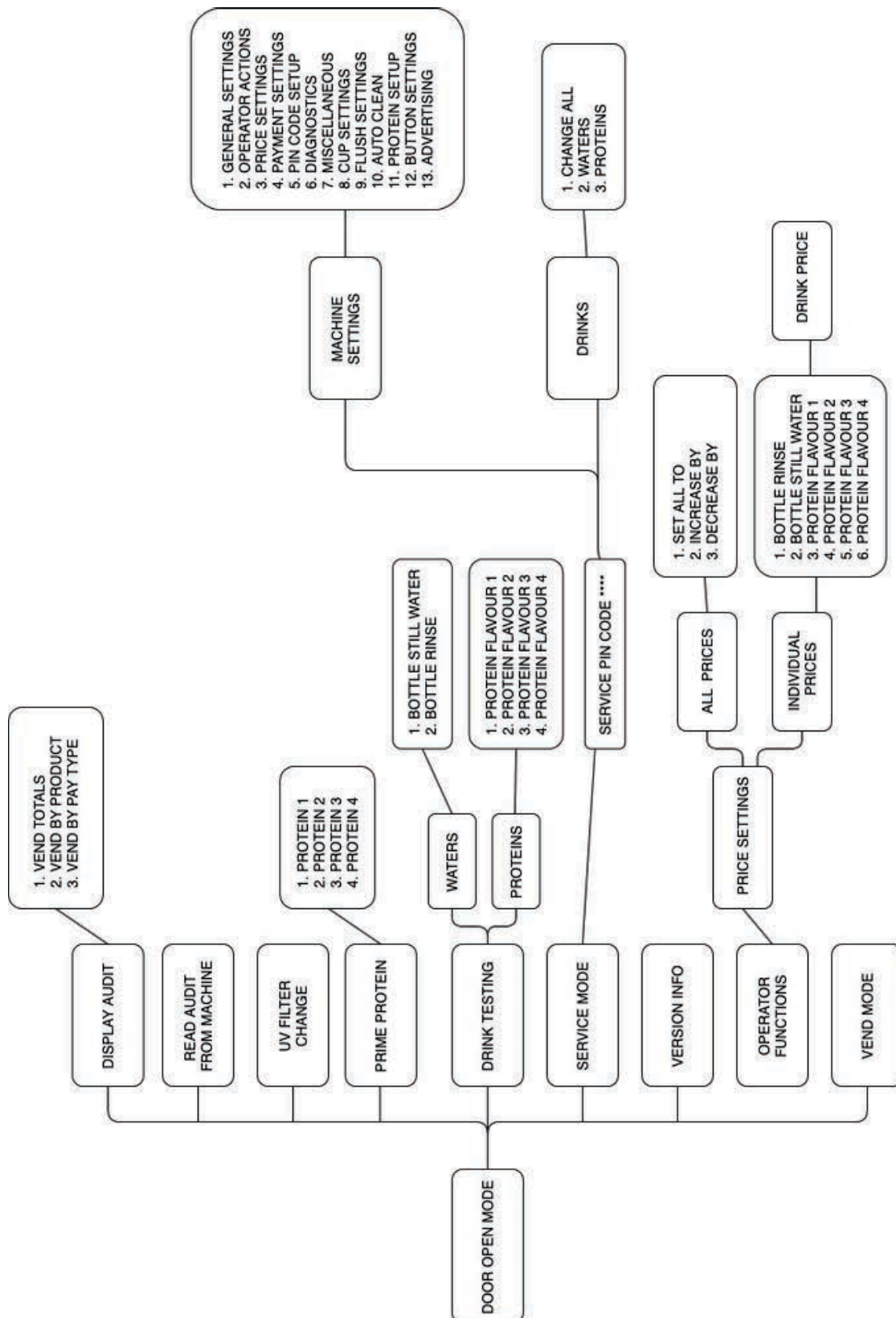
LCD MENU PROGRAMMING



11. Menu Programming Guide

DOOR OPEN MODE

- This menu is accessed by opening the door.



11. Menu Programming Guide

DOOR OPEN MODE

DISPLAY AUDIT:

- *Vend Totals* - total of ALL vends & date of last audit
- *Vend by Product* - shows vends by drink type & total revenue
- *Vend by Pay type* - shows vends by payment type - paid /free vend / test vends & total revenue for each.

READ AUDIT FROM MACHINE:

- Allows an Audit to be downloaded onto a formatted USB stick.

UV FILTER CHANGE:

- The UV Filter removes 99.99% of bacteria from the water
- When the UV filter has been changed, the counter must be reset to ensure the machine will keep dispensing.

PRIME PROTEIN:

- When replacing a flavour you need to prime the product in the canister so its ready to dispense.
- This brings the product so it's ready to dispense a full shot.

DRINK TESTING:

- Split into water and proteins
- Used to test drinks and verify throw times and bottle fill levels.
- Water options are not set up on the Evolve as standard.

11. Menu Programming Guide

DOOR OPEN MODE

SERVICE MODE:

- Used to gain access to machine settings and drink recipes.
- Needs a code to access and only available for engineers / trained technicians.

VERSION INFO:

- Displays current software - from time to time Westomatic will need to run software upgrades to ensure machine functions optimally.

OPERATOR FUNCTIONS:

- The operator can access this function to change Drink Prices.
- Other functions can be configured and added into this area by an engineer in Service Mode.

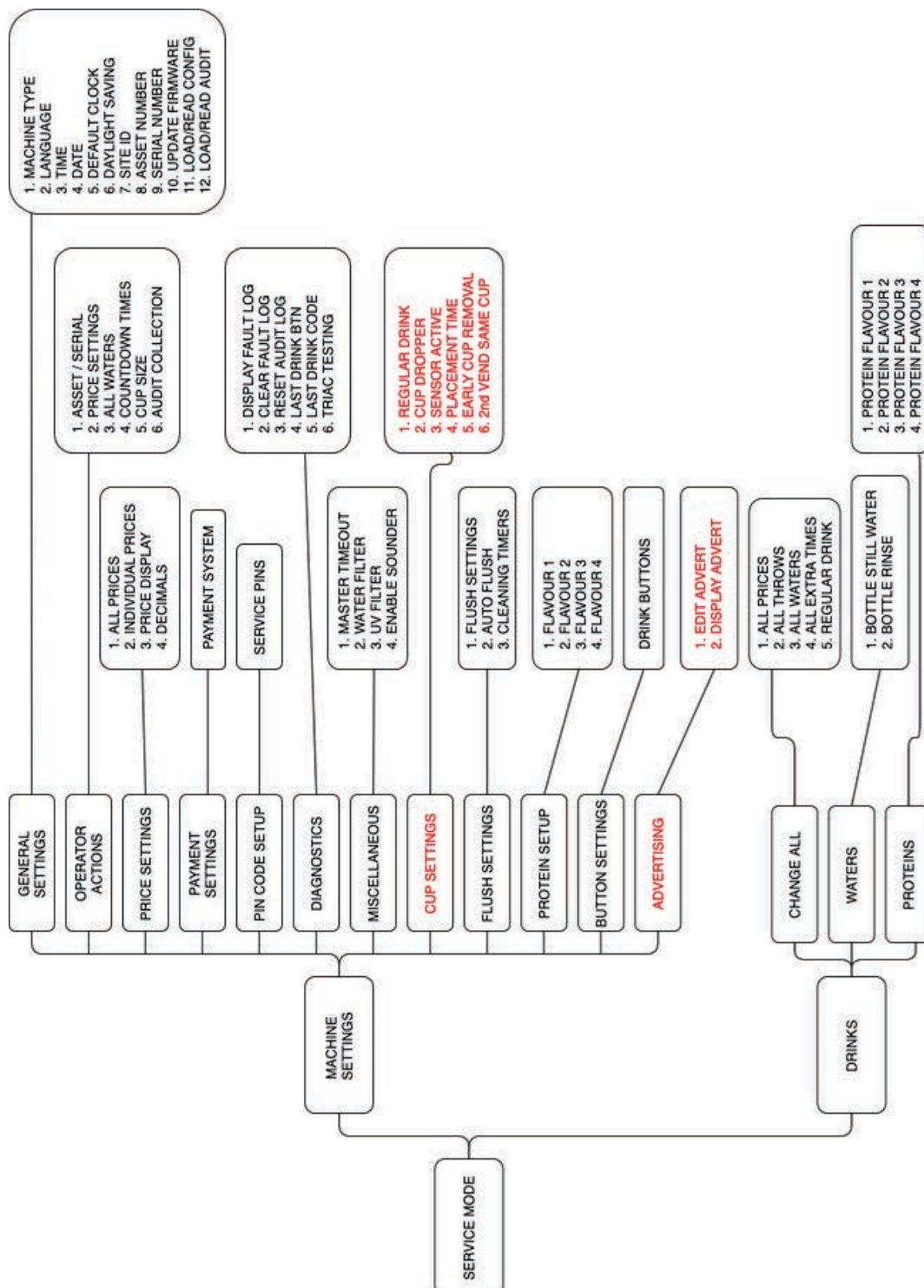
VEND MODE:

- Allows you to use the machine as if the door was closed.
- Useful for checking the inner workings of the machine.
- Pushing the Door switch will revert back to door open mode.

11. Menu Programming Guide

SERVICE MODE

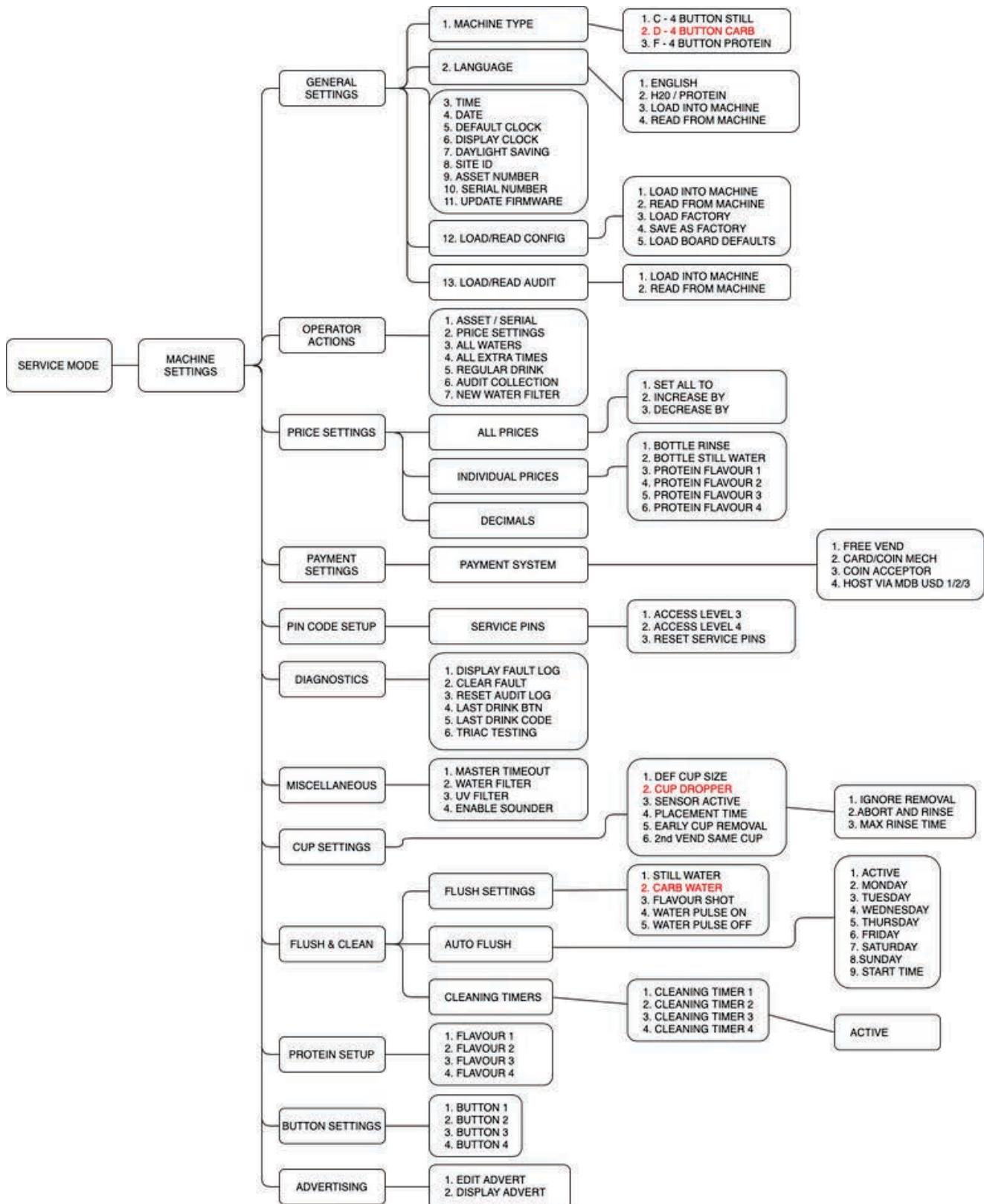
- This menu is accessed by entering service mode from the door open menu.
- Access Key 3211 (using hover select buttons 3, 2, 1)
- This is split into Machine Settings and Drink Settings



11. Menu Programming Guide

SERVICE MODE - MACHINE SETTINGS

- All menu parameters required to control the machine - allowing for customisation.



11. Menu Programming Guide

SERVICE MODE - MACHINE SETTINGS

GENERAL SETTINGS:

- Allows changes to various aspects of the machine such as time and date.
- *Machine Type* - set to 4 Button Protein as standard.
- *Language* - allows certain language packages to be uploaded to the machine.
- *Time* - setting the time.
- *Date* - setting the date.
- *Default Clock* - sets time and date back to 00.
- *Daylight Savings* - sets to Automatic British Summer Time changes.
- *Site ID* - can be assigned to all machines on the same site - useful for auditing.
- *Asset Number* - is a machine reference number created by customer - useful for keeping track of service records etc.
- *Serial Number* - unique machine reference number assigned to the VMC of each machine control board at the time of manufacture at the Westomatic factory. The same serial number will also be visible on the serial plate located on the inside of the machine. The machine serial number will be required when requesting parts covered under the Westomatic Warranty agreement. **NOTE:** Once set the serial number cannot be erased or modified.
- *Update Firmware* - allows user to upload new firmware as and when it become available.

11. Menu Programming Guide

SERVICE MODE - MACHINE SETTINGS

- *Load / Read Config* - useful to download settings like keeping a backup. Also to load configuration settings onto the machine. It is possible to set the current customer settings to be the default factory settings. Loading board defaults sets the machine to Westomatic drink default settings - **this is not recommended.**
- *Load / Read Audit* - IMPORTANT - If the VMC board needs to be replaced all audit data will be lost - its useful to create a backup. This section allows Audit data to be read and reloaded onto a replacement board.

OPERATOR ACTIONS:

- Allows certain operator functions to be added to the Door Open menu (Operator Functions - currently only price settings there)
- *Asset / Serial Number* - gives access to this information
- *Price Settings* - operator can change price settings from door open mode
- *All Waters* - allows water levels across all drinks to be changed by %
- *All Extra Times* - all drinks include time to displace liquid - the valve closes but water remains in the system and drains outside normal vend time - extra times can be allowed at end of each vend to allow for drainage.

11. Menu Programming Guide

SERVICE MODE - MACHINE SETTINGS

- *Regular Drink - NOT USED*
- *Audit Collection* - allows operator to collect audit data
- *New Water Filter* - allows operator to replace and reset the filter settings.

PRICE SETTINGS:

- This menu will allow the user to set the pricing structure for a payment system if fitted. It is possible to price all drinks as one price or priced individually. Price increases can also be carried out as a percentage increase or decrease of either a generic price or an individual price.

PAYMENT SETTINGS:

- Allows user to set up payment system requirements.
- The machine can be set to free-vend or to accept a card reader.

PIN CODE SETTINGS:

- Allows service codes to be set up - this machine can set level 3 and 4 service codes for different levels of access to settings
- This is where you are able to reset service pin codes too

DIAGNOSTICS:

- A fault log records all events on the machine with a time and date stamp.

11. Menu Programming Guide

SERVICE MODE - MACHINE SETTINGS

- *Display Fault Log* - all the events on the machine since the last time the log had been cleared.
- *Clear Fault* - clears all events on the machine.
- *Reset Audit Log* - resets audit logs (do after download).
- *Last Drink BTN* - can read the last drink button pressed. This information can help with diagnostics.
- *Last Drink Code* - NOT USED.
- *Triac Testing* - Allows testing of TRIACS for power related diagnostics.

MISCELLANEOUS:

- Allows users to set timeouts for machine and water valve.
- *Master Timeout* - water valve timeout.
- *Water Filter* - water filter drink counter.
- *UV Filter* - UV Filter drink counter.
- *Enable Sounder* - enables / disables sound alerts.

CUP SETTINGS:

- Bottle settings and bottle sensor adjustments.
- *Def Cup Size* - NOT USED.
- *Cup Dropper* - NOT USED.
- *Sensor Active* - used to enable or disable the bottle sensor to allow customers to use their own bottle.
- *Placement Time* - time between placing the bottle and pressing the drink selection button.

11. Menu Programming Guide

SERVICE MODE - MACHINE SETTINGS

- *Early Cup Removal* - instructs the VMC as to what you would like the machine to do when the customer removes the bottle before the end of a vend. Options include Ignore / Abort & Rinse / Max Rinse Time.
- *2nd Vend Same Cup* - NOT USED

FLUSH & CLEAN:

- Allow the user to set up the flush times for each drink
- *Flush Settings* - max time settings can be altered based on the drink type - Still water / flavour shot / water pulse on / water pulse off.
- *Auto Flush* - this can be set to up to 3 times per day, but is inactive as a default. Flushes each mixing bowl separately.
- *Cleaning Timers* - a timer can be set after a period of inactivity per flavour - for example Drink 1 has no activity for 1 hour - a timer can be set to flush the mixing bowl.

PROTEIN SETUP:

- This function allows customer to count the number of drinks per flavour / canister.

BUTTON SETTINGS:

- These settings are pre-programmed for each drink settings.

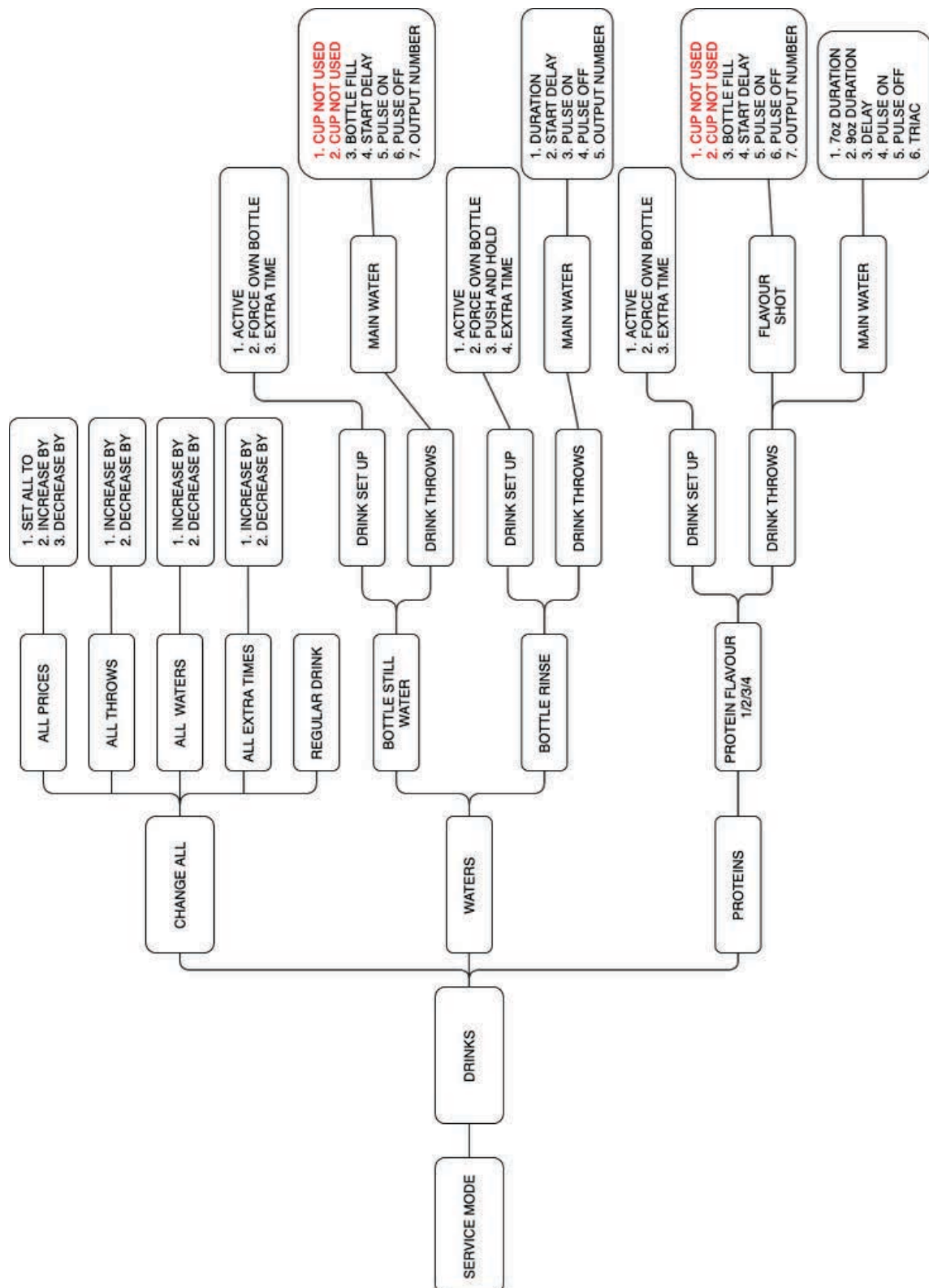
ADVERTISING:

- Allows users to place a small text advert on the LCD screen.
- Better used via USB.

11. Menu Programming Guide

SERVICE MODE - DRINKS SETTINGS

- This is where all the drinks recipes are stored. Each drink can be individually configured to give the correct drink ratio of water to powder.



11. Menu Programming Guide

SERVICE MODE - DRINKS SETTINGS

CHANGE ALL:

- Changes all options instead of individually.
- *All Prices* - options to set all to / increase by / decrease by %.
- *All Throws* - options to increase by / decrease by %.
- *All Waters* - options to increase by / decrease by %.
- *All Extra Times* - options to increase by / decrease by %.
- *Regular Drink* - NOT USED.

WATERS:

- This is used to change the default water only drinks.
- The Evolve is setup with 4 flavour choices, a water only drink is not available as standard.
- *Bottle Still Water* - NOT USED
- *Bottle Rinse* - NOT USED

PROTEINS:

- This is used to change the default water and powdered drinks
- *Protein Flavour 1/2/3/4* -allows selection of each drink individually.
- *Drink Set Up* - where you can enable a drink for use and allow extra time at the end of a vend to allow final drips to enter the bottle. Force own bottle is set as standard, and extra time allows for the final drops.
- *Drink Throws* - enables the set up of the flavour shot and water to make a drink.

11. Menu Programming Guide

SERVICE MODE - DRINKS SETTINGS

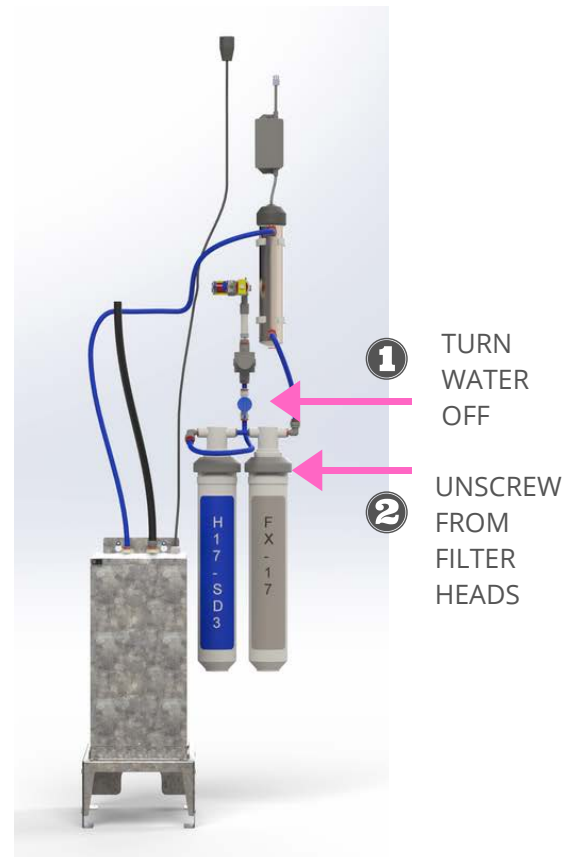
- *Flavour Shot* - allows changes to settings of dispense of the flavour shot. For the Evolve - Cup settings are not used.
- *Bottle Fill* - the flavour shot to fill the bottle.
- *Start Delay* - refers to how much time between the start of the drink production and the dispense of the flavour shot.
- *Pulse On / Off* - allows pulsing during the dispense of flavour shot.
- *Output number* - set as default on the VMC - no need to change.
- *Main Water* - allows changes to settings of dispense of the water. For the Evolve - Cup settings are not used.
- *Delay* - delay time of main water valve opening.
- *Pulse On / Off* - allows pulsing of water on and off.
- *Triac* - the defined output for the water throw. Triac 5 is output 5 , it is available so you can change the output as required should the output become damaged and not working.

12. Water & UV Filters

CHANGING WATER FILTERS

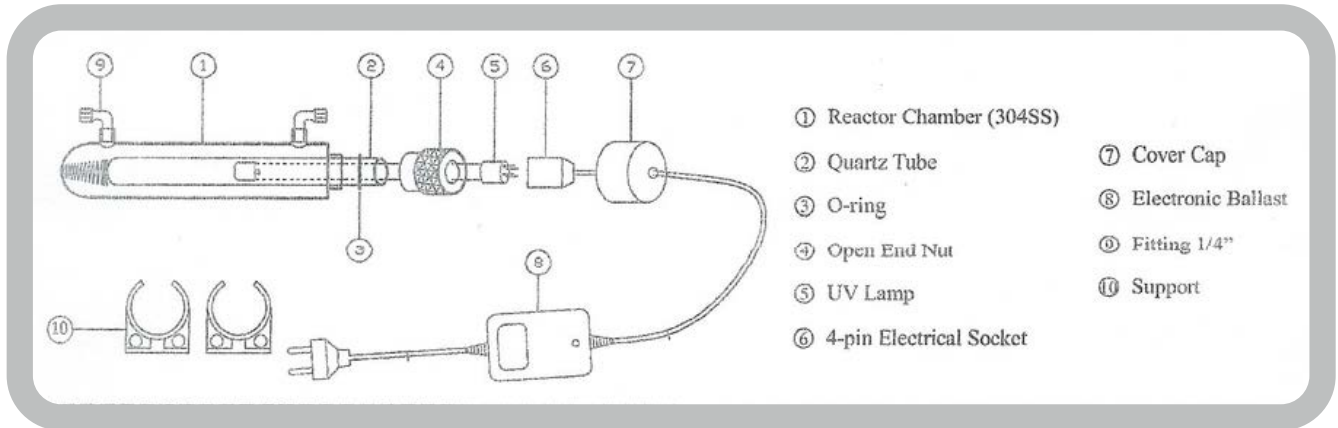
CHANGE WATER FILTERS:

1. Turn water off at the Internal Isolation Tap and Flush any water from the Filter, using the flush button.
2. Power OFF the machine.
3. Disconnect Water filters by unscrewing from filter heads:
4. Micro-plastics - BLUE
5. Sediment - WHITE
6. Install new filters.
7. Slowly turn on the water isolation tap.
8. Connect the power and Switch machine on.
9. Prime the filters - by pressing the Flush button until the water runs smoothly (probably 3 or 4 times). CHECK FOR LEAKS.
10. Test All Drinks.



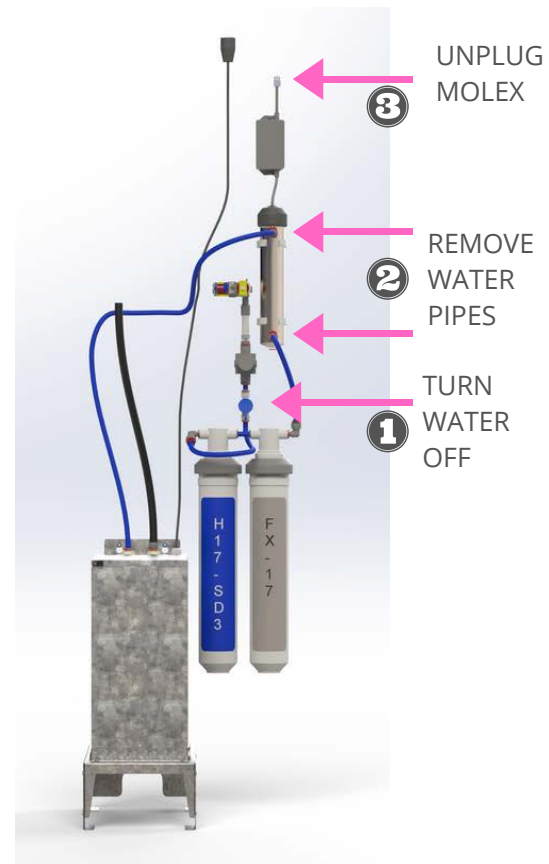
12. Water & UV Filters

CHANGING UV FILTERS



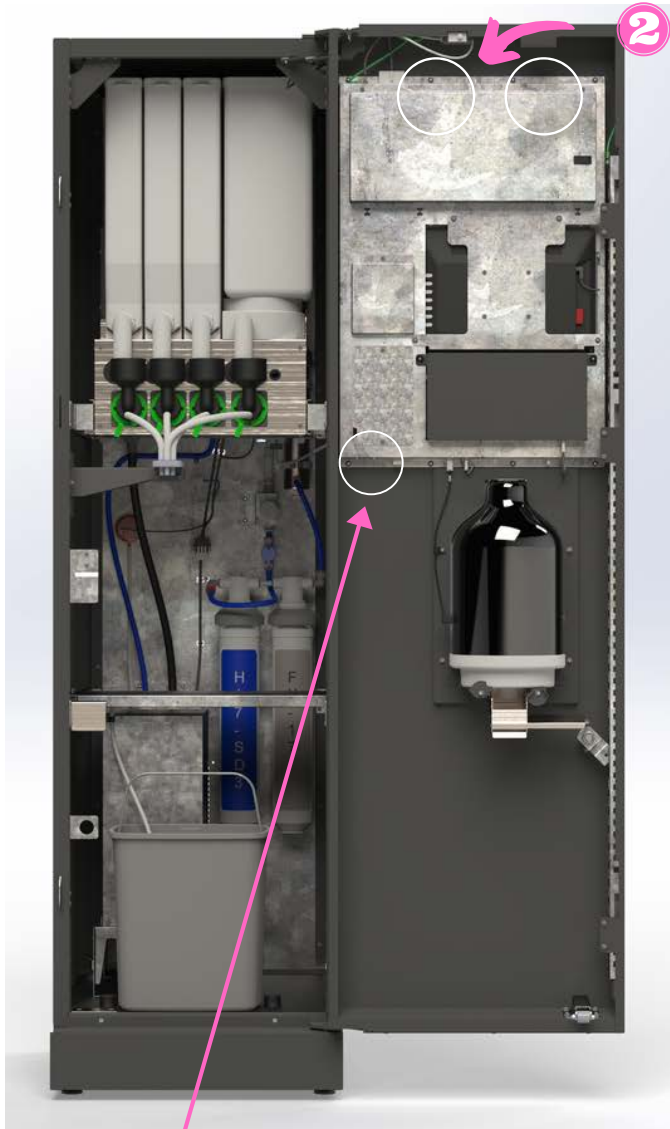
CHANGE UV FILTER:

1. Turn water off at the Internal Isolation Tap and Flush any water from the Filter, using the flush button.
2. Power OFF the machine.
3. Disconnect UV filter - remove filter from water in pipes, and disconnect the molex.
4. Install new filter and re-fit water pipes and reconnect molex.
5. Once all plumbing connections are fitted - slowly turn on the water via the isolation tap.
6. Connect the power to start up.
7. Flush water several times to clear any air or dust - CHECK FOR LEAKS.
8. Reset UV Filter on machine - Service Mode - Miscellaneous - UV Filter - Changed ACCEPT
9. Test All Drinks.

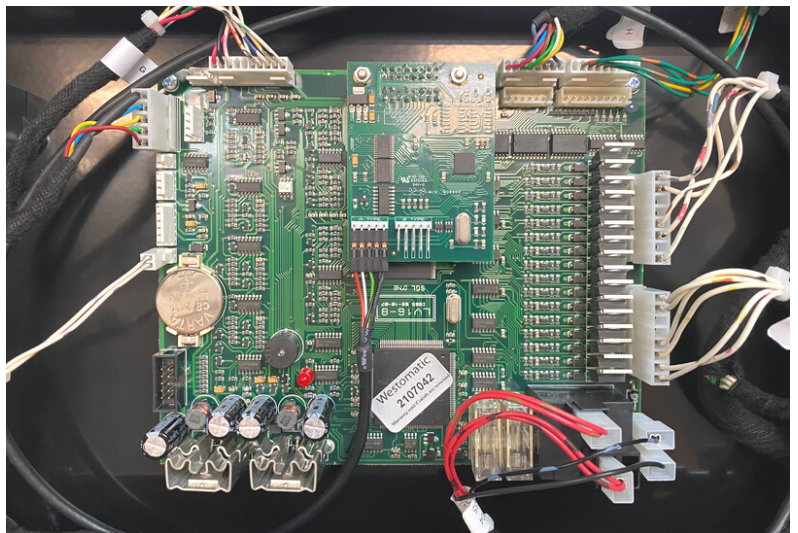
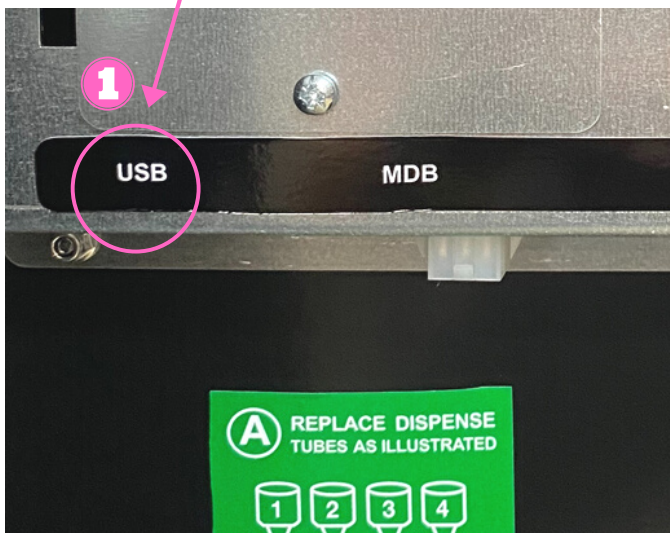


13. Control Processor & USB

ACCESSING THE BOARD



1. There is a USB port located on the inside of the door (near the bottle station) - that allows a USB memory stick to be easily plugged in.
2. Should you need access to the PCB board itself - there are 2 screws on the housing that remove the cover plate.
3. If changing the board - ensure any config/audit settings are downloaded FIRST as the information will be lost when a VMC is replaced.



14. Audit Loading / Reading

AUDIT INFORMATION

IMPORTANT -

- Once the Audit has been Reset / Uploaded to USB, the information cannot be retrieved again on the machine display.
- All 'interim' counters will reset to zero ready for the next audit.

EVOLVE DRINK CODES:

FLAVOUR 1	AUDIT DRINK CODE = D92
FLAVOUR 2	AUDIT DRINK CODE = D94
FLAVOUR 3	AUDIT DRINK CODE = D96
FLAVOUR 4	AUDIT DRINK CODE = D05

AUDIT EXAMPLE INFORMATION:

VEND TOTALS	VENDS BY PRODUCT	VENDS BY PAY TYPE
Example :	Example :	Example :
Installed 00/00/00	BOTTLE RINSE	PAID
Vends 0	Vends 0	Vends 0
Value 0.00	Value 0.00	Value 0.00
Last audit 00/00/00	PROTEIN FLAVOUR 1	FREE
Vends 0	Vends 0	Vends 0
Value 0.00	Value 0.00	Value 0.00
	PROTEIN FLAVOUR 2	TEST
	Vends 0	Vends 0
	Value 0.00	Value 0.00
	PROTEIN FLAVOUR 3	
	Vends 0	
	Value 0.00	
	PROTEIN FLAVOUR 4	
	Vends 0	
	Value 0.00	
	ETC..... Continue for All Drink Selections	

14. Audit Loading / Reading

READING AUDIT FROM MACHINE

- A formatted USB stick is required as per:



- Its **VERY IMPORTANT** that the file structure, and format is exactly the same as the above - including the capital letters.
- Open the machine door and insert the formatted USB stick into the USB port.
- The machine will recognise the insertion of the USB by beeping twice.
- From *LOAD/READ AUDIT* select *READ FROM MACHINE - ENTER*.
- The display will show:

```
READ FROM MACHINE
► AUTO SELECT
SELECT FILE
```

- Selecting **AUTO SELECT** will automatically create a new, sequential audit filename which when read/saved to the USB will contain all the audit data present at the time of saving.
- If *AUTO SELECT* is confirmed display will show:

```
READ FROM MACHINE
FILE: - A0000001.TXT
ACCEPT OR CANCEL?
```

14. Audit Loading / Reading

READING AUDIT FROM MACHINE

- Pressing ENTER to accept:

READ FROM MACHINE
FILE: - A0000001.TXT
READING...

- When the audit file has been read, the machine will beep and return to *LOAD/READ AUDIT* sub-menu.
- Exit back to *DOOR OPEN MODE*, remove USB and close the door.
- If SELECT FILE is confirmed , the following will display:

SELECT FILE
▶ A0000001.TXT
A0000002.TXT

- Scroll to the appropriate file, ENTER to accept & overwrite the existing file selected:

READ FROM MACHINE
FILE: - A0000001.TXT
ACCEPT OR CANCEL?

- Press *ENTER*:

READ FROM MACHINE
FILE: - A0000001.TXT
READING...

- When the audit file has been read, the machine will beep and return to *LOAD/READ AUDIT* sub-menu.
- Exit back to *DOOR OPEN MODE*, remove USB and close the door.

14. Audit Loading / Reading

LOADING AUDIT INTO REPLACEMENT CONTROL BOARD

- From the same USB used to retrieve the audit data with the following file structure:



- Its **VERY IMPORTANT** that the file structure, and format is exactly the same as the above - including the capital letters.
- Open the machine door and insert the formatted USB stick into the USB port.
- The machine will recognise the insertion of the USB by beeping twice.
- From *LOAD/READ AUDIT* select *LOAD INTO MACHINE - ENTER*.
- The display will show:

```
SELECT FILE
▶ A0000001.TXT
A0000002.TXT
```

- Scroll to pick the appropriate file - *ENTER*.

```
LOAD INTO MACHINE
FILE: - A0000001.TXT
ACCEPT OR CANCEL?
```

- Press ENTER:

```
LOAD INTO MACHINE
FILE: - A0000001.TXT
LOADING...
```

14. Audit Loading / Reading

LOADING AUDIT FROM MACHINE

- When the audit file has been read, the machine will beep and return to LOAD/READ AUDIT sub-menu.
- Exit back to DOOR OPEN MODE (ensures changes are saved).
- **SWITCH OFF** the machine - remove USB - **SWITCH ON** machine and close door.

15. Firmware & Configurations

UPLOADING NEW FIRMWARE

Occasionally new firmware becomes available and should be loaded into the machine.

- A formatted USB stick is required as per:



- Its **VERY IMPORTANT** that the file structure, and format is exactly the same as the above - including the capital letters.
- **Any Firmware Update provided must be copied into the Firmware folder.**
- Before update, read config & audit files and make note of the file numbers saved.
- Open the machine door and insert the formatted USB stick into the USB port.
- The machine will recognise the insertion of the USB by beeping twice.
- From *GENERAL SETTINGS* select *UPDATE FIRMWARE - ENTER*.
- The display will show all available firmware files:

UPDATE FIRMWARE
▶ AZURE V 03.06.0000

- Scroll to select the file to load, and *ENTER*.

15. Firmware & Configurations

UPLOADING NEW FIRMWARE

- The display will show:

FOUND USB MEMORY
AZURE.FMW
LOADING...XX%*

- The firmware upload will take approx 60 seconds after which the machine will automatically reboot.

15. Firmware & Configurations

LOADING / READING CONFIG

Occasionally it may also be necessary to change the machines configuration settings and save them to a USB stick, or to transfer these settings to another machine.

- A formatted USB stick is required as per:



- Its **VERY IMPORTANT** that the file structure, and format is exactly the same as the above - including the capital letters.

LOAD INTO MACHINE:

- Open the machine door and insert the formatted USB stick into the USB port.
- The machine will recognise the insertion of the USB by beeping twice.
- From LOAD/READ CONFIG select *LOAD INTO MACHINE - ENTER*

SELECT FILE

► AZUR_XYZ.CFG

- Scroll to select the file to load, and *ENTER*.
- The display will show:

LOAD INTO MACHINE
FILE: - AZUR_XYZ.CFG
ACCEPT OR CANCEL?

15. Firmware & Configurations

LOADING / READING CONFIG

- Pressing *ENTER* to accept will show:

LOAD INTO MACHINE
FILE: - AZUR_XYZ.CFG
LOADING...

- When config upload is complete the machine will emit a beep.
- Exit out of the *LOAD/READ CONFIG* back to *DOOR OPEN MODE* (This saves the settings)
- SWITCH OFF** Machine - remove the USB - **SWITCH ON** machine, and close the door.

READ FROM MACHINE:

- Open the machine door and insert the formatted USB stick into the USB port.
- The machine will recognise the insertion of the USB by beeping twice.
- From *LOAD/READ CONFIG* select *READ FROM MACHINE* - *ENTER*

READ FROM MACHINE
► AUTO SELECT
SELECT FILE

- Selecting *AUTO SELECT* - will cause the machine to automatically create a new, sequential config filename which when read/saved to the USB will contain all the config settings.

READ FROM MACHINE
FILE: - AZUR_XYZ.CFG
ACCEPT OR CANCEL?

15. Firmware & Configurations

LOADING / READING CONFIG

- Pressing *ENTER* to accept will show:

READ FROM MACHINE
FILE: - AZUR_XYZ.CFG
READING...

- When config upload is complete the machine will emit a beep.
- Exit out of the *LOAD/READ CONFIG* back to *DOOR OPEN MODE* (This saves the settings)
- Remove the USB and close the door.
- If *SELECT FILE* is confirmed - The display will show all available config files:

SELECT FILE
▶ AZUR_XYZ.CFG
AZUR_ABC.CFG
AZUR_DEF.CFG

- Scroll to select the appropriate file, *ENTER*:

READ FROM MACHINE
FILE: - AZUR_XYZ.CFG
ACCEPT OR CANCEL?

- Select *ENTER*:

READ FROM MACHINE
FILE: - AZUR_XYZ.CFG
READING...

15. Firmware & Configurations

LOADING / READING CONFIG

- When config upload is complete the machine will emit a beep.
- Exit out of the LOAD/READ CONFIG back to DOOR OPEN MODE (This saves the settings)
- Remove the USB and close the door.

15. Firmware & Configurations

LOADING / READING CONFIG

SAVE AS FACTORY:

- This function allows the user to overwrite the Westomatic factory default config settings - WVS cannot accept responsibility for any machine malfunction/drink quality due to changing the settings.
- From *LOAD/READ CONFIG* sub menu select *SAVE AS FACTORY - ENTER*:

SAVE AS FACTORY
ACCEPT/CANCEL

- Press *ENTER*:

SAVE AS FACTORY
ARE YOU SURE?

- Press *ENTER*:

SAVE AS FACTORY
BUSY

- Pressing *ENTER* will cause the default factory config settings to be overwritten by the new user config settings
- The machine will automatically re-boot and revert to *DOOR OPEN MODE*.

16. Spare Parts

USEFUL SPARE PARTS

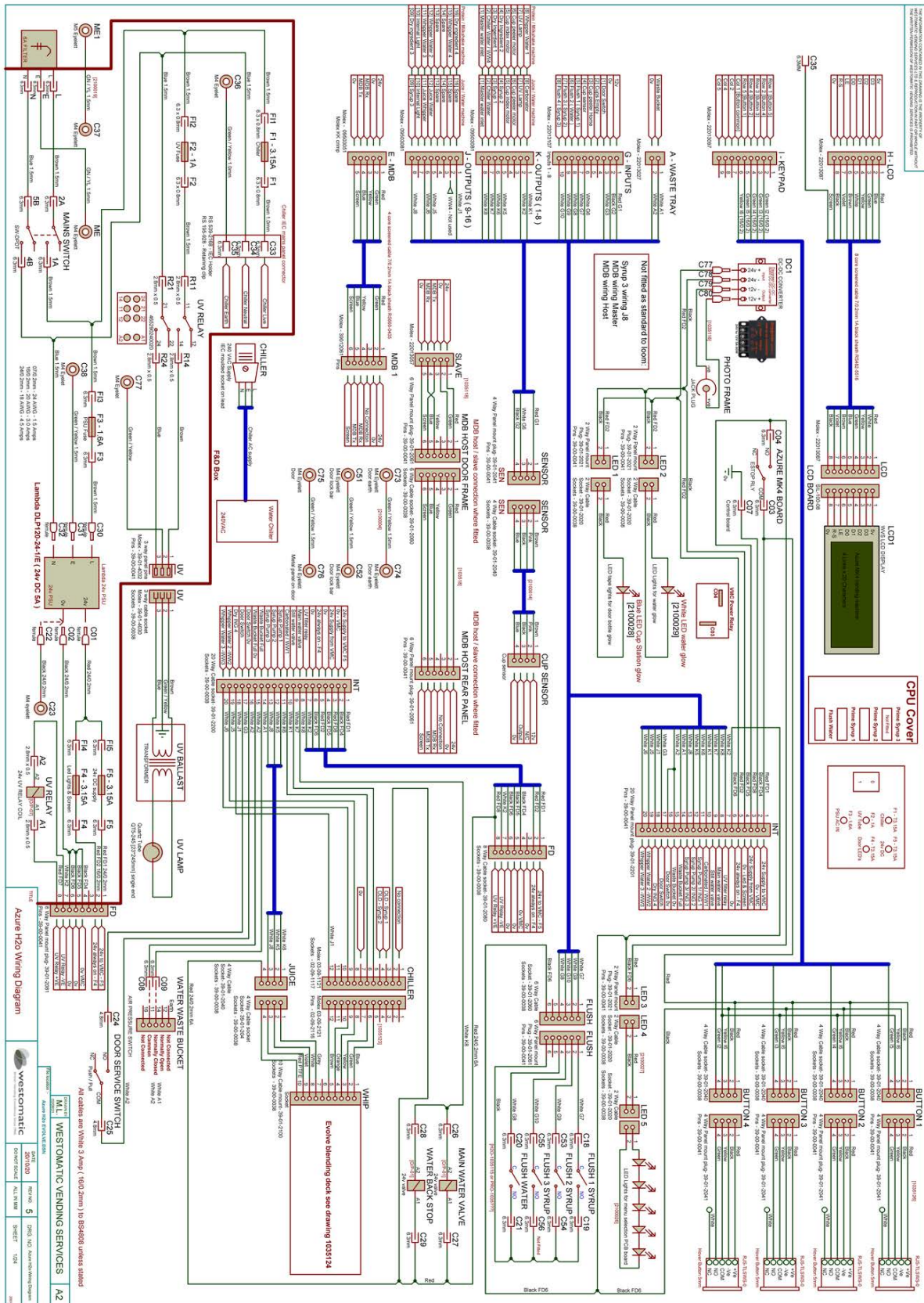
DESCRIPTION	PART NUMBER
SOLENOID VALVE ASSEMBLY	201791
BOTTLE SENSOR ASSEMBLY	2100014
FUSE & DISTRIBUTION BOX	2100017
FUSE – T3.15AMP 32 x 6.3 HBC	1025002
FUSE – T1.00AMP 32 x 6.3 HBC	1025011
FUSE – T1.60AMP 32 X 6.3 HBC	1025015
FUSE – T2.50AMP 32 x 6.3 HBC	100012075
HOVER SELECT BUTTON	2100045
EVOLVE CPU, PCB WITH EVOLVE SOFTWARE	1042017
HIGH SPEED USB INTERFACE – IO BOARD	1042018
12" WIDESCREEN DIGITAL SCREEN	1042048
4GB SD MEMORY CARD	1042035
LCD DISPLAY	1042002
UV FILTER KIT (NEW STYLE)	2100047
EVOLVE – WATER FILTER (MICROPLASTICS)	1024023
EVOLVE – WATER FILTER (SEDIMENT)	1024024
WATER REGULATOR 0-8 BAR	1047001
HOSE INLET (1.5m)	1029032
EVOLVE HYGIENE KIT	2100039
TUBING – 8mm x 2mm	1029012
NOZZLE – (SPOUT) DISPENSE TUBE	1044002
CANISTER – SMALL	1012003
CANISTER – LARGE	1012044
BUCKET 15L WASTE	1039001
BOWL & CHAMBER – BLACK	1054038
MOTOR PINION	1054018
WHIPPER MOTOR 13000RPM	1040018
WHIPPER IMPELLOR - BLACK	1054040
WHIPPER BASE LONG LEVER – GREEN	1054041
EVOLVE LOCK & 2 KEYS	2100011
EVOLVE KEY X1	1034020
EVOLVE – WVS STANDARD DECALS	1027132C
NO TOUCH STICKER	1037685
CASHLESS BLANKING PLATE	1037596

ORDER DIRECT FROM WESTOMATIC:

 +44 (0) 1626 323100

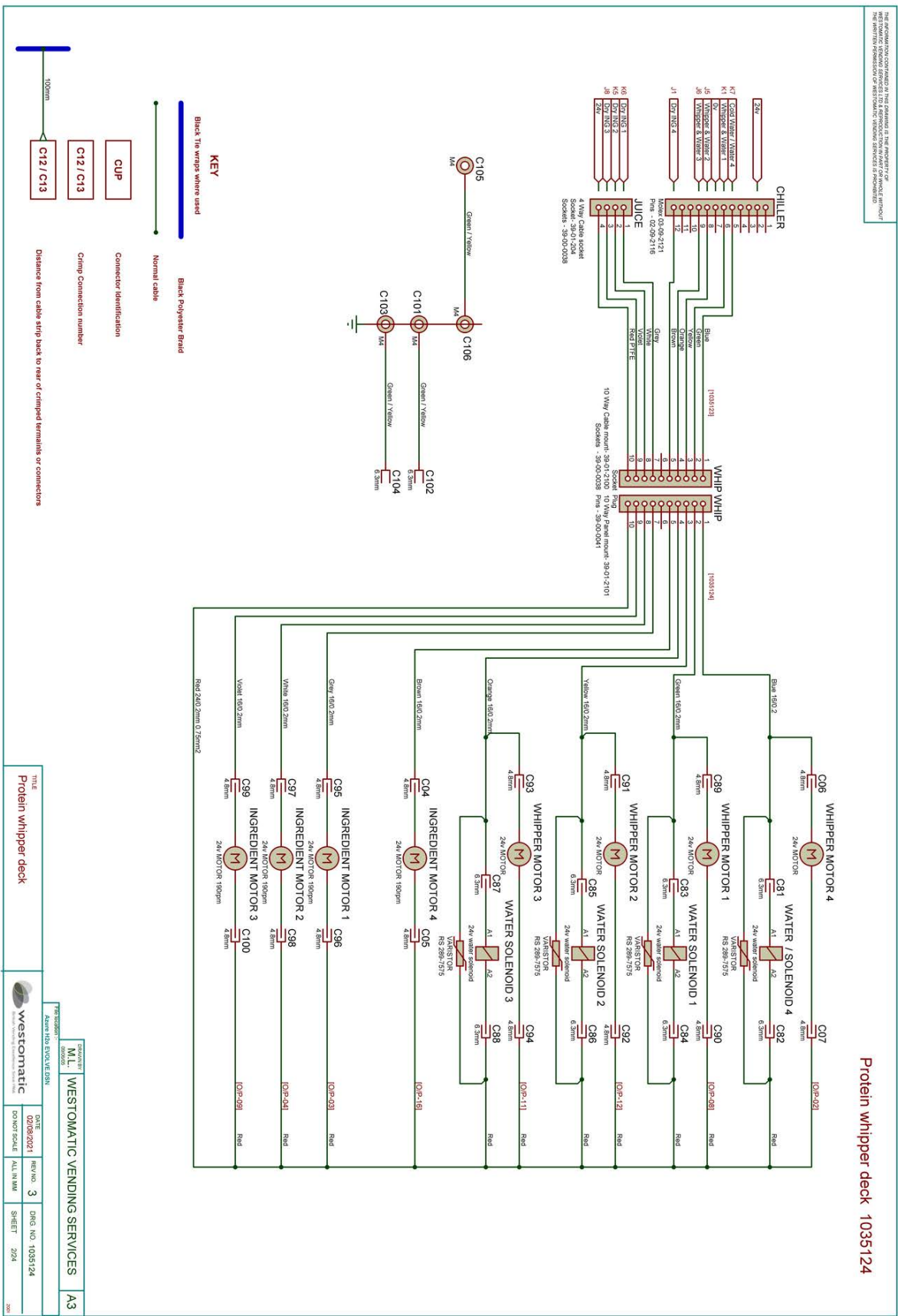
 support@westomatic.com

MAIN CIRCUIT DIAGRAM



17. Circuit Diagrams

CIRCUIT DIAGRAM TO FLAVOUR DECK



Liability & Warranty

LIABILITY

- All details and indications for the operation, maintenance and cleaning of this Evolve Nutrition dispenser have been made under consideration of our knowledge and experiences collected up to now.
- Westomatic Vending Services Ltd. reserves the right to make technical changes to this machine type without notice as a result of continuous product development.
- Text translations are made to the best of Westomatic Vending Services Ltd.'s knowledge. However, we exclude any liability for translation errors. The English version of the operation instructions shall prevail for warranty purposes.
- It is advised that the user manual instructions must be carefully read before machine installation or operation is started. Westomatic Vending Services Ltd. does not bear any liability for any damages or disturbances resulting from non-observance of the User Manual or Operator Instructions.
- It is strictly forbidden to make this user manual or the operator instructions accessible to any third party. Non-observance will result in a claim for damages.

SPARE PARTS

- Only genuine, original Westomatic Vending Services Ltd. spare parts should be used when servicing the machine.
- Part Sales telephone: **+44 (0) 1626 323100** or email **support@westomatic.com**

ATTENTION!

Faulty or defective non-Westomatic spare parts may lead to incorrect machine operation or damage. In the case where non-Westomatic spare parts are used, all obligations of Westomatic Vending Services Ltd. such as warranties, service contracts etc. are void without prior notice & agreement.

WARRANTY

- A **THREE YEAR** warranty on parts only is offered on new, free-standing machines, from the date of invoice, subject to our warranty procedures having been followed.
- This **EXCLUDES** all plastic whipper components, delivery hoses, outlet nozzles (which we recommend are changed every 6 months) & all other parts with a sales value of less than £15.
- All parts claimed under our Warranty Terms must be returned to our Head Office - Units 7-8 Block 4 Forde Court, Forde Road, Newton Abbot, Devon, TQ12 4BT - for Repair / Replacement or Credit at our discretion **within 30 DAYS** of notifying us of a claim.
- A **FIVE YEAR** warranty is offered as standard for companies who have achieved Westomatic Diamond Distributor status .

Technical Specifications

MACHINE SPECIFICATIONS

GENERAL:	WEIGHT:	101kg
	DIMENSIONS:	(H)1825 x (W)500 x (D)700 mm (inc Door)
	NOISE:	70dB (will not exceed)
ELECTRICAL:	VOLTAGE:	230 - 240 Volts AC
	CURRENT:	12
	POWER:	0.5 Kilowatts
	FREQUENCY:	50Hz
	INTERNAL:	24 Vdc (internal components) / 12 Vdc (digital media)
	FREQUENCY:	50Hz
	INTERNAL MOTOR:	24Vdc
	WATER INGRESS PROTECTION:	IPX0
WATER:	SUPPLY:	15mm BSP from rising main
	MIN PRESSURE:	138 kpa / 20 p.s.i / 1.38 Bar
	MAX PRESSURE:	828 kpa / 120 p.s.i / 8.28 Bar)
	STANDING:	100 - 125 kpa / 14.5 -18.1 p.s.i / 1.00 - 1.25 Bar
	DISPENSE PHASE:	140 (watt/hour)
	PER LITRE:	30 - 43 (watt/hour/litre)
	IDLE PHASE:	41.39 (watt/hour)
REFRIGERATION:	REFRIGERANT TYPE:	R290 / R600a
	REFRIGERATION MANUFACTURER:	Booth Dry Core

REFRIGERATION UPADATE

The Evolve uses a flash chiller unit supplied by Booth Dispensers.

In line with EU phasing out the use of hydrofluorocarbons (HFC's) and moving towards gases that have zero Ozone Depleting Potential (ODP). Hydrocarbons are now being used instead due to their Zero ODP, and all Booth Chiller units will now be gassed using R290 (Propane) or R600a (Isobutane). These are an environmentally friendly, non-toxic, non-ozone depleting replacement for HFC's.

Booth's 'Dry Core' Technology uses an aluminium heat exchange to give superior recovery times and is ideal for repeated dispensing of cold water.

FUSE RATINGS

FUSE	CIRCUIT DESCRIPTION	6.3 x 32MM CERAMIC FUSES
F1	Chiller Supply	T 3.15 AMP
F2	U.V Filter	T 1.00 AMP
F3	Power Supply	T 1.60 AMP
F4	Door LED Lights & Screen	T 3.15 AMP
F5	24Vdc Supply	T 3.15 AMP

Certification



(EC Machinery Directive 89/392/EEC) as amended...

Declaration of Conformity

This is to certify that the:

EVOLVE Vending Machine

Comprising the following models.

Payment System
Non-Payment System

Manufactured by:

Westomatic Vending Services Ltd, Units 7-8 Block 4 Forde Court, Forde Road, Brunel Industrial Estate,
Newton Abbot, Devon, TQ12 4BT
Tel. 01626 323100 - Fax 01626 332828

Conforms to the protection requirements of council Low Voltage Directive 73/23/EEC as amended 93/68/EEC relating to Electromagnetic Compatibility, by application of:

EMC Test Standards:

EN 55014-1:2000 + A1:2001 + A2:2002 :

Conducted emissions (0.15MHz-30MHz)

Discontinuous conducted emissions Disturbance Power (30MHz-300MHz)

EN 55014-2:1997 + A1:2001 (Category II)

ESD, EFT/Bursts, Surges, Conducted immunity (0.15MHz-230MHz), Dips and interruptions

EN 61000-3-2:2000

Mains harmonics

EN 61000-3-3:1995 + A1:2001

Voltage fluctuations

EMF Test Standards:

EN 50366:2003

Electromagnetic fields.

Electrical Safety Test Standards:

EN 60335-1:2002 + A1:2004 + A11:2004 + A12:2006

Household and similar electrical appliances - Safety - Part 1 - General requirements

EN 60335-2-75:2004 + A1:2005

Household and similar electrical appliances - Safety - Part 2-75 - Particular requirements for commercial dispensing appliances and vending machines

Supplementary Information :

- [A] : Included mains filtering.
- [B] : Product to be installed in accordance with manufactured instructions.
- [C] : Class of protection against electrical shock. : Class I

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive and Standards. For and on behalf of Westomatic Vending Services, March 2008.

Richard Brinsley