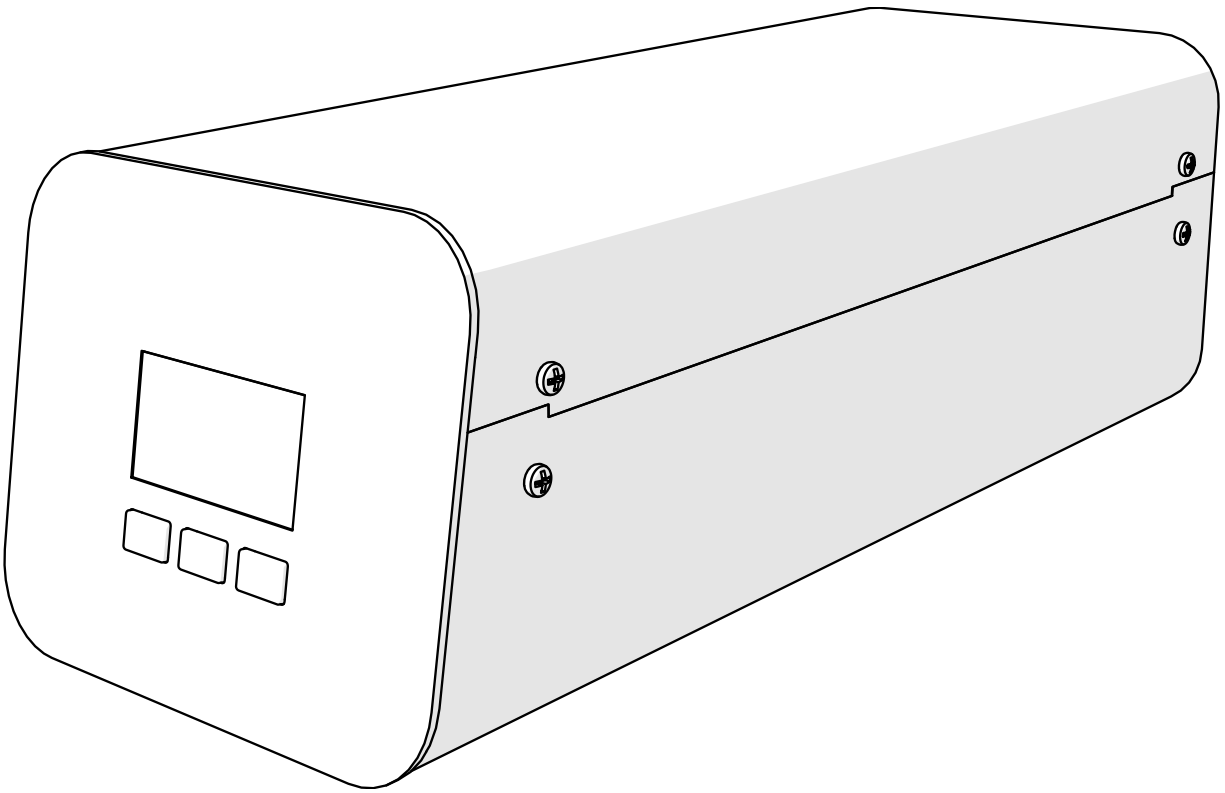
POUR'D Control Box
Service Manual



1000944#
1000944EU
1001944US

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CONTENTS:

1. INTRODUCTION

The information provided in this manual is intended to assist in the installation and maintenance of the Marco POUR'D Control Box. Please read the instructions carefully to prevent accidents and ensure an efficient installation.

This manual is not a substitute for any safety instructions or technical data affixed to the machine or its packaging. All information in this manual is current at the time of publication and is subject to change without notice.

Only technicians or service providers authorised by Marco should carry out installation and maintenance of these machines.

Marco accepts no responsibility for any damage or injury caused by incorrect or unreasonable installation and operation.

2. SAFETY INSTRUCTIONS

When using electrical appliances, basic safety precautions should always be followed to prevent the risk of fire, electric shock, burns, or other injuries or damages.

- **Read all operating and safety instructions carefully.**
- **This appliance must be placed/installed on a horizontal flat stable surface.**
- **The ambient temperatures this appliance should operate within are 5 °C - 35 °C.**
- **This appliance may be placed in self-service areas if attended to by trained personnel.**
- **Risk of flooding, the hose supplied with the boiler is non-toxic food quality tested to 190psi. However, a hose is not a permanent connection. It is, therefore, advisable to switch off boiler and close the stopcock valve when boiler is not in use, e.g. overnight etc.**
- **The utmost care has been taken in the manufacture and testing of this machine. Failure to install, maintain and / or operate this machine according to the manufacturer's instructions may result in conditions that can cause injury or damage to property. If in any doubt about the serviceability of the machine always contact the manufacturer or your own supplier for advice.**
- **This machine is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the machine by a person responsible for their safety.**
- **Children should be supervised to ensure that they do not play with the machine.**
- **In the event any wires are damaged, such wires can only be replaced by experts or professional after service staff from the manufacturer after service department or similar function departments.**
- **CAUTION - Risk of fire and electric shock. Only to be used with manufacturer's specified power cord set. Marco p/n 1501487 (USA), 1501488 (EU), 1501489 (UK/Ire).**
- **This appliance should not be installed in an area where a water jet could be used to clean it.**
- **Access to the service area of the appliance is restricted to persons having knowledge and practical experience of the appliance and the relevant safety and hygiene requirements.**

3. SPECIFICATIONS

Control Box:

		POUR'D 1000944#, 1000944EU, 1001944US
Performance	**Ratio** **Minimum Delivery**	12:1 up to 30:1 120ml
Electrical	**Mains Connection**	Earthed Mains Plug to IEC 230vac (UK – 3-Pin Plug, BS1363) (EU – CEE7 Schuko) (US (120v – NEMA 5-15)
	Rating	@230V 70W @120v 70W
Plumbing	**Fittings** **Required Pressure**	0.75" BSP (or 3/8" Compression for US versions) food grade inlet hose supplied. 0.1-1Mpa (14.5-145psi)
Dimensions	**Height** **Width** **Depth**	139.7mm (5.5 inch) 157.5mm (6.2 inch) 382.6mm (15.1inch)

4. INSTALLATION

4.1 Control Box Installation

Electrical Installation:

- Electrical specification: 70W-230VAC-50/60Hz
  70W-120VAC-50/60Hz
- A moulded IEC C19 CEE7 EU / NEMA 5-15, 15A/125V power cord is provided. This should be plugged into the IEC connection on the rear of the control box and plugged into a suitable power outlet.
- When installing the machine, always observe the local regulations and standards.

Plumbing Installation:

To Mains water
Pressure required (limits): 0.1-1Mpa (14.5-145psi)

- Fit the water inlet connector 3/4" BSP female (3/4”G)x1/4” Pushfit fitting.
  For US versions use Hose Water Inlet 9/16”-24 UNEF.
- Turn on the water to flush any impurities, dust etc. from the inlet hose and water pipe. Allow several litres through.
  Connect the 1/4" hose to the water inlet of the POUR’D Control Box using the 3/4" BSPF fitting provided.
  For US versions connect the 9/16”-24 UNEF hose open end to the Control Box.
- After connecting to the font, turn on mains water and check for any leaks.

To Font

- Fit both water and concentrate outlet hoses from Control Box to Font.
- Long 1/4" Font Line for Concentrate
- Short 1/4" Font Line for Water

To Concentrate

- Fit barbed 5/16” - 3/8” connector to concentrate inlet.
- Connect 3/8” ID PVC hose to barbed connector
  (this can be replaced by a reducer and a LDPE 1/4" hose for syrups)

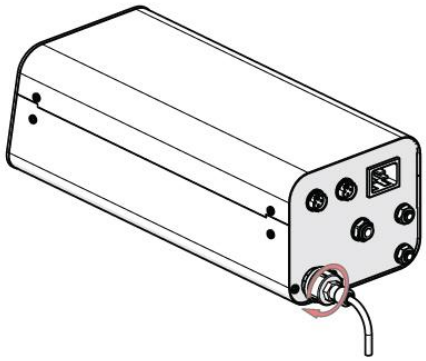
To Chiller (if available)

- Fit the water inlet connector 3/4" BSP female (3/4”G)x1/4” Pushfit fitting.
- Connect both machines through Hose LDPE 1/4"

NO DIRECT PLUMING FROM BOILER TO CONTROL BOX

4.1 POUR'D Control Box Installation (cont.)

1.



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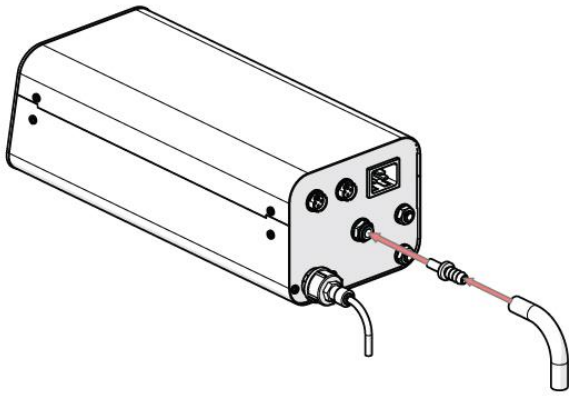

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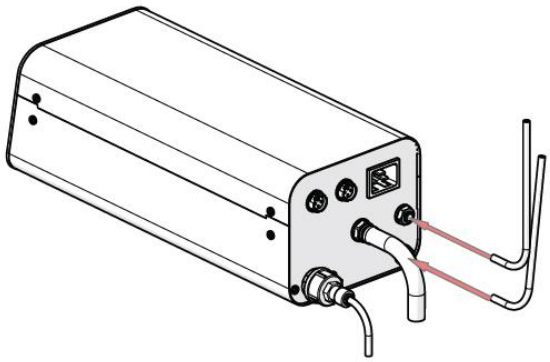

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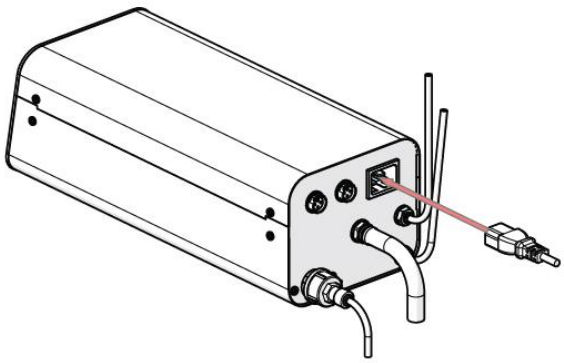

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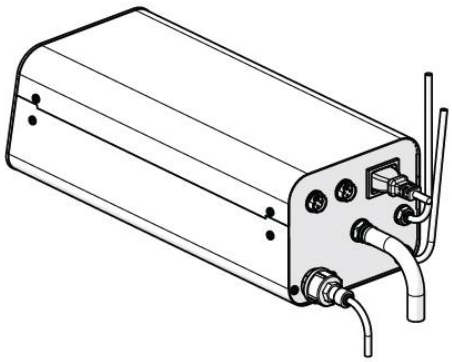
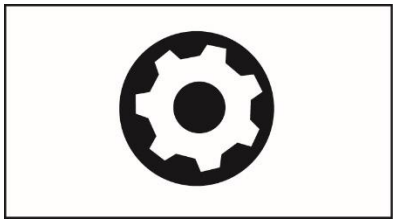


5. MENU NAVIGATION

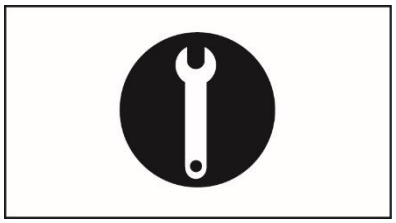
There are 3 menu 'levels' to the POUR'D settings.

Level 1 – User Settings



Enter by pressing all 3 buttons simultaneously.

Level 2 – Advanced Settings



Enter by pressing all 3 buttons simultaneously for > 3 <6 seconds.

5.1 LEVEL 1: User Settings

The screens displayed to the User depend on which machine type the software has been set to.

-Top row: Sets the desired mixing mode. (example, if there is a boiler, by selecting hot. Concentrate mixed with hot water will be dispensed.)

-Middle row: Sets the percentage of concentrate delivered for that drink.

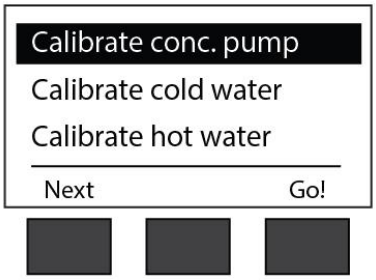
-Bottom row: Sets the overall dispense volume.

Press **'NEXT'** to cycle through each value shown on the screen.
Press **+ or –** to adjust a value.

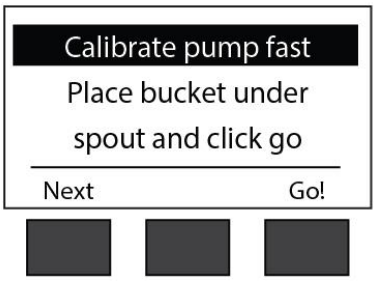
5.2 LEVEL 2: Advanced Settings

(Hold all 3 buttons simultaneously for >3 <6 seconds)
For calibration you will need a container and a scale

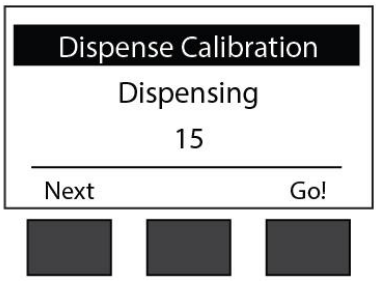
5.2.1 Calibration Concentrate Pump



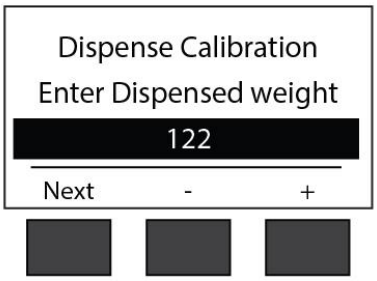
1.Press Go! To enter Concentrate Pump calibration



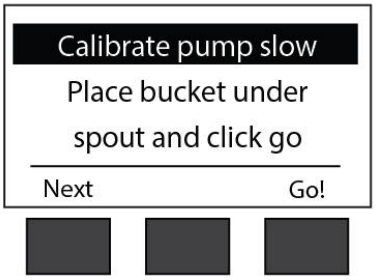
2.It's a two-stage calibration.
First FAST speed mode



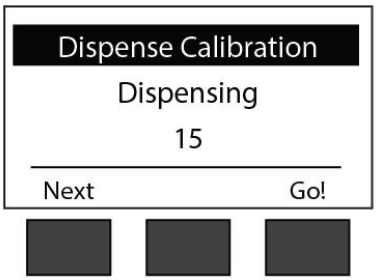
3.Press Go! To start dispensing



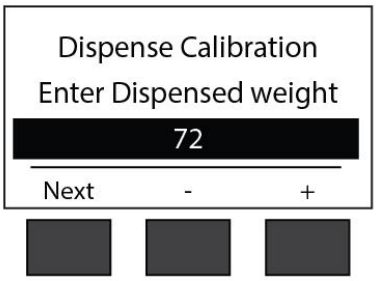
4.Use "+" or "-" write the result and press next.



5.Second SLOW speed mode
Click Go! When ready.

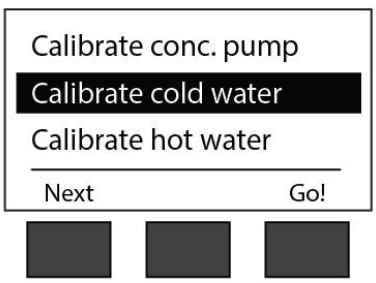


6.Press Go! To start dispensing

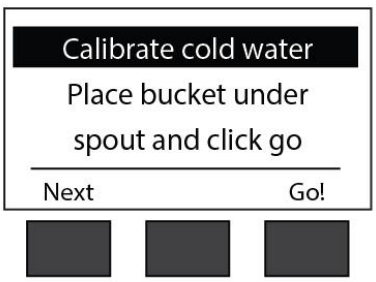


7.Use "+" or "-" to write the Result and press next

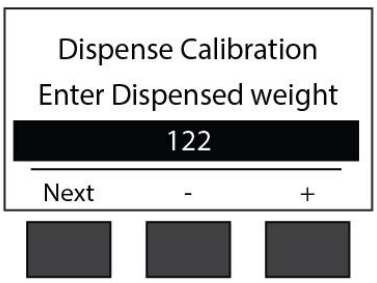
5.2.2 Calibration Cold Water



1.On stage calibration
Click Go! When ready.

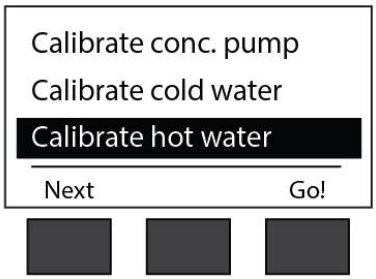


2.Press Go! To start dispensing

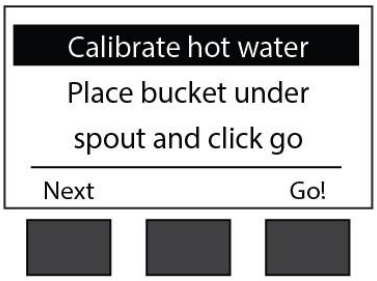


3.Use "+" or "-" to write the Result and press next

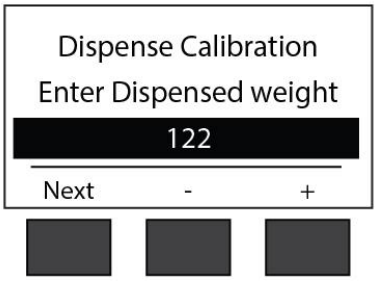
Calibration Hot Water (IF THERE IS A BOILER)



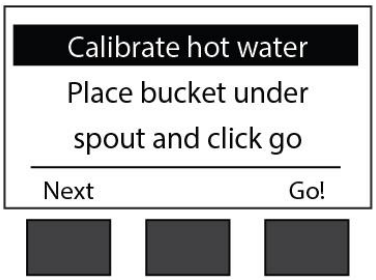
1.Two stage calibration
Click Go! When ready.



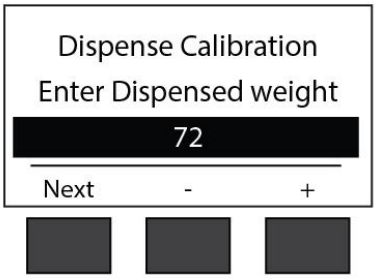
2.Press Go! To start dispensing



3.Use "+" or "-" to write the result and press next



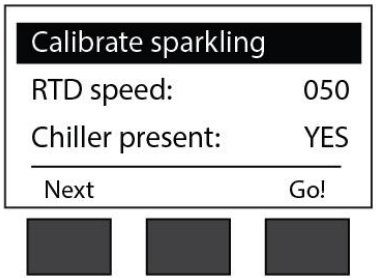
4.Second stage calibration
Click Go! When ready.



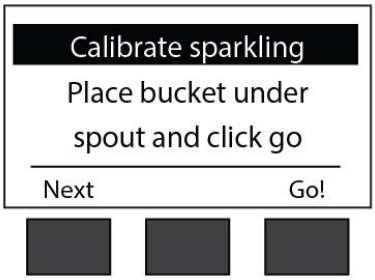
5.Use "+" or "-" to write the result and press next.

The difference between both dispense, is time.
POUR'D will adjust itself to have the correct amount delivered.
This way the length of the hot water line isn't an issue.

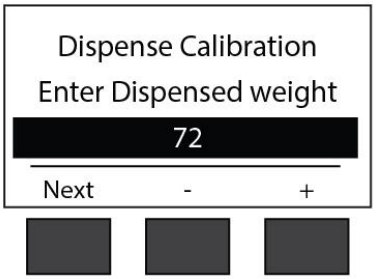
5.2.4 Calibration Sparkling Water (IF THERE IS A CHILLER)



1.One stage calibration
Click Go! When ready.

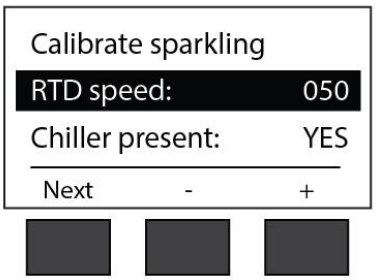


2.Press Go! To start dispensing



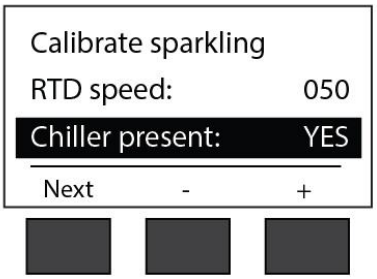
3.Use "+" or "-" to write the Result and press next

5.2.5 Concentrate Pump Speed



Pump speed comes preset to 50% as is the ideal speed for this product.

5.2.6 Chiller presence



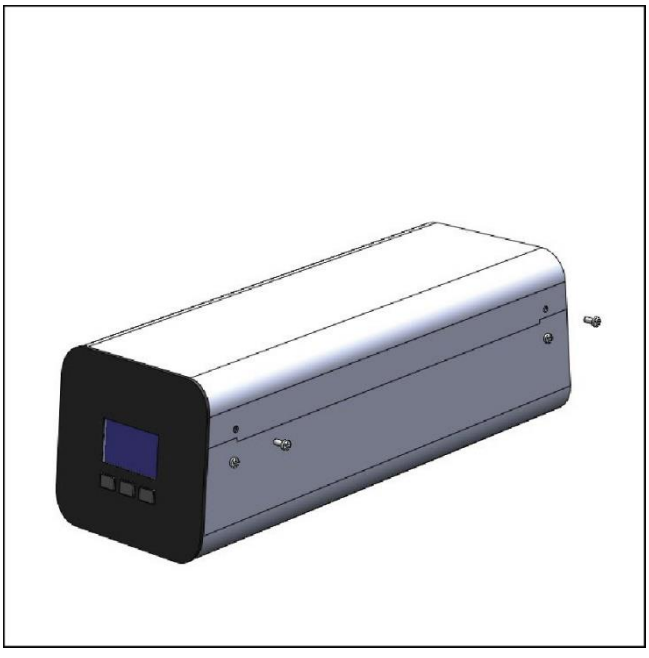
Chiller needs to be activated to be able to dispense cold and sparkling water

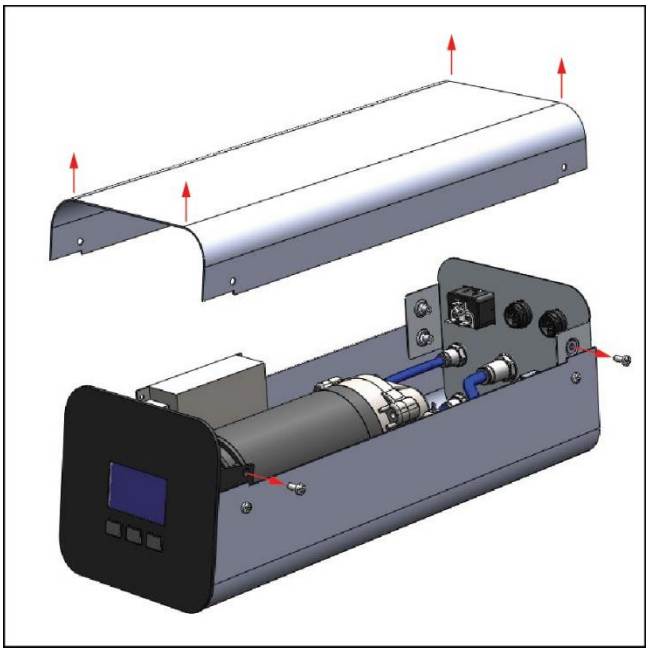
6. ROUTINE MAINTAINENCE/INTERNAL ACCESS

Maintenance should be carried out by Marco approved technicians only.

6.1 Top Lid Removal:

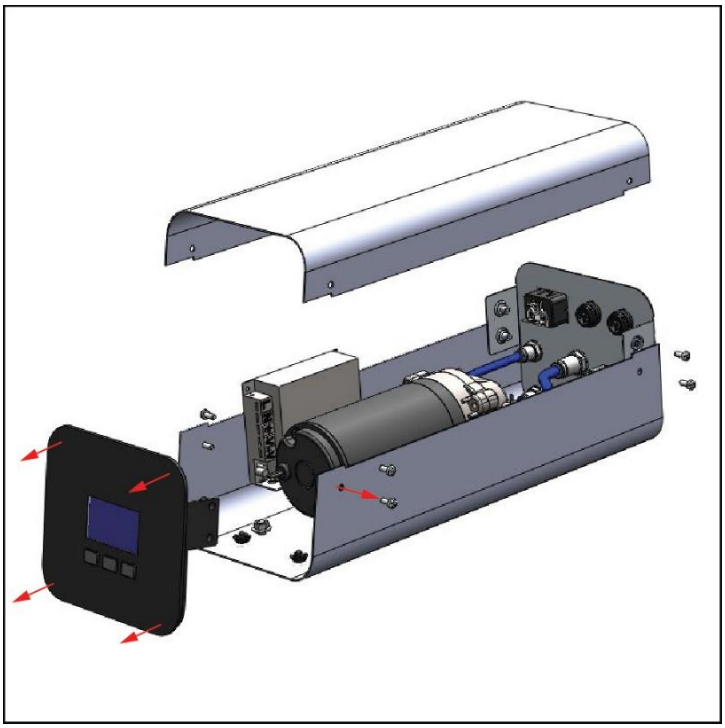
1. Remove the Top Sides screws from the sides.
2. Pull the Top up

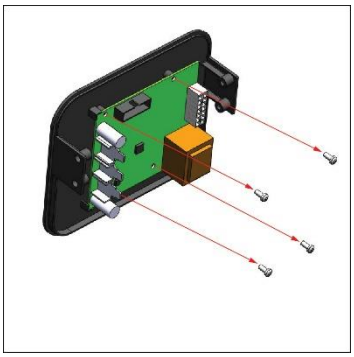




6.2 PCB Replacement:

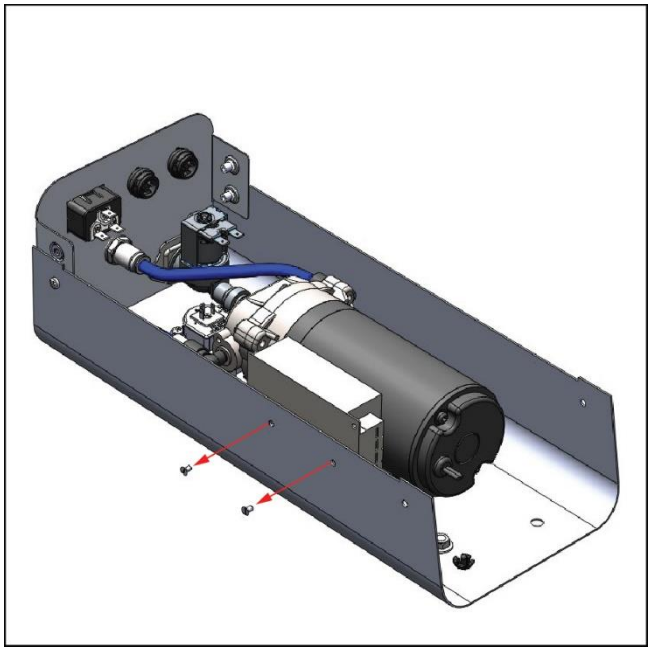
1. Remove the 2 Low Front screws.
2. Pull the front fascia panel and disconnect the wiring.
3. Remove 4 screws to release PCB from Front Fascia panel.

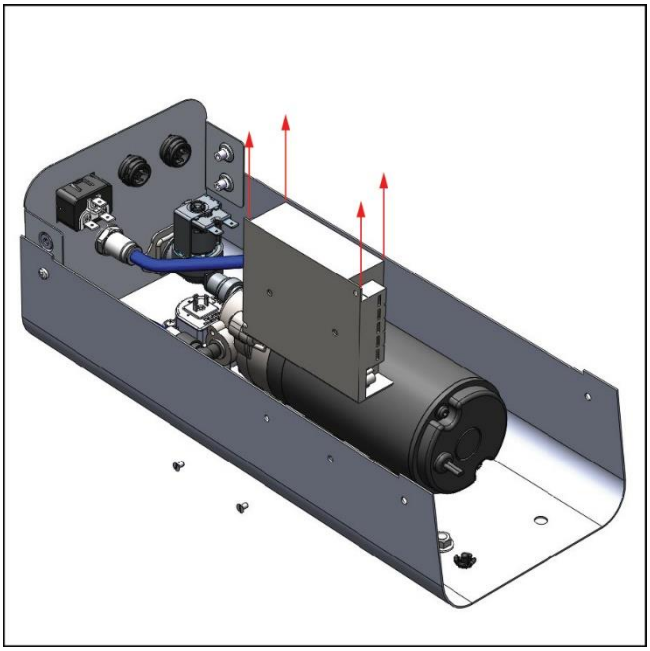




6.3 Power Supply Removal:

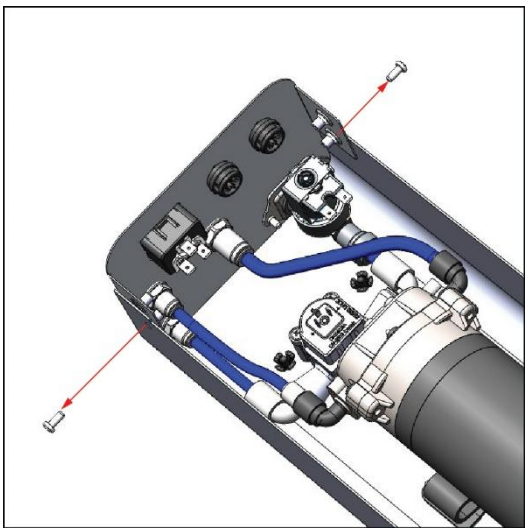
1. Remove two side screws
2. Unplug
3. Pull Power Supply up

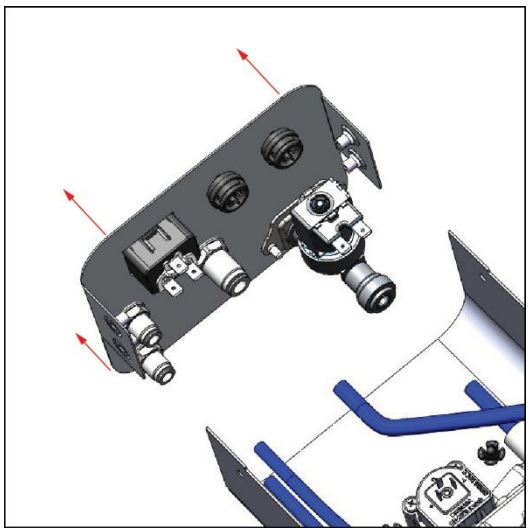


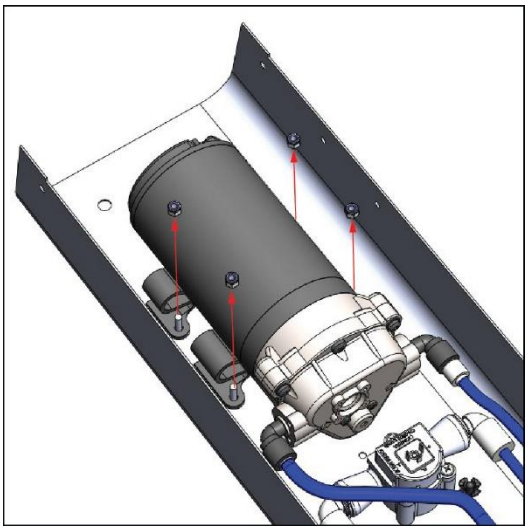


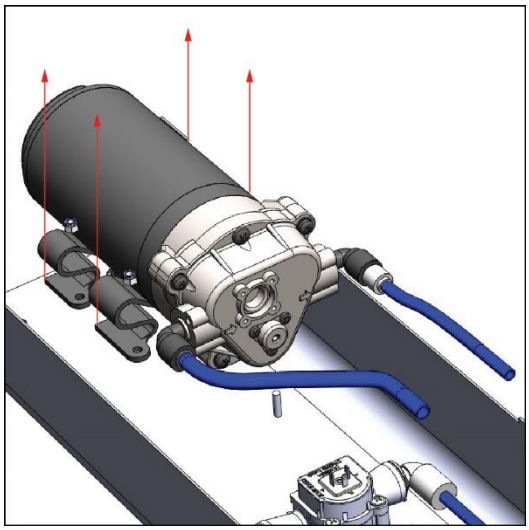
6.4 Pump Removal:

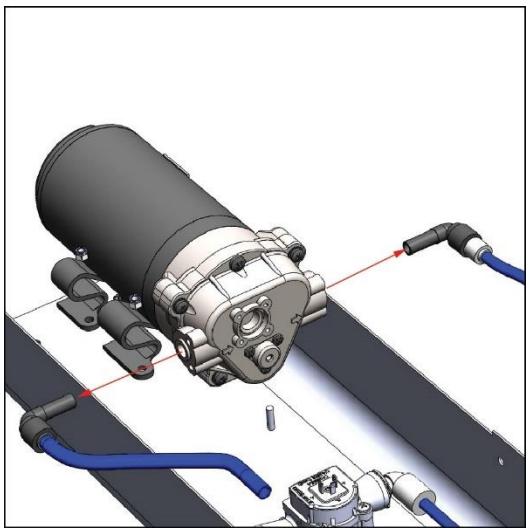
1. Remove the screws holding the Back Panel.
2. Careful disconnect all houses going to the pump and flowmeter.
3. Pull the Back Panel out
4. Remove 4 nuts that holds the pump in place
5. Pull the pump up
6. Remove both elbows push fit connectors.





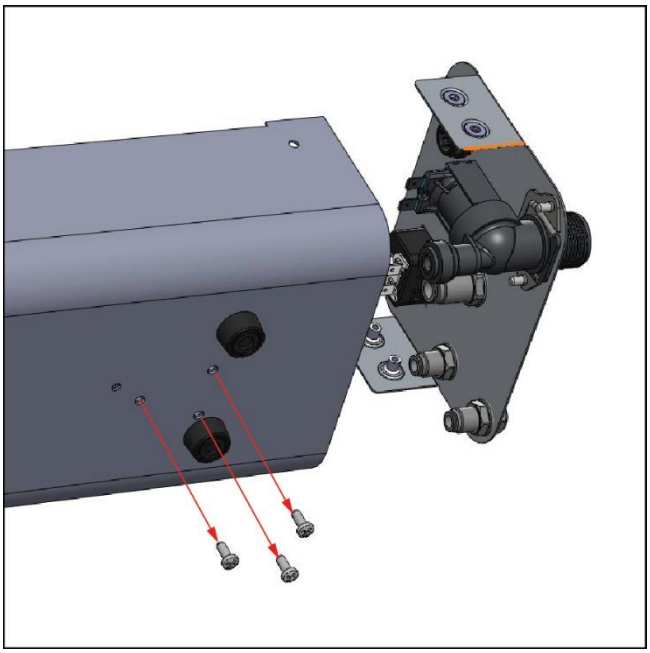


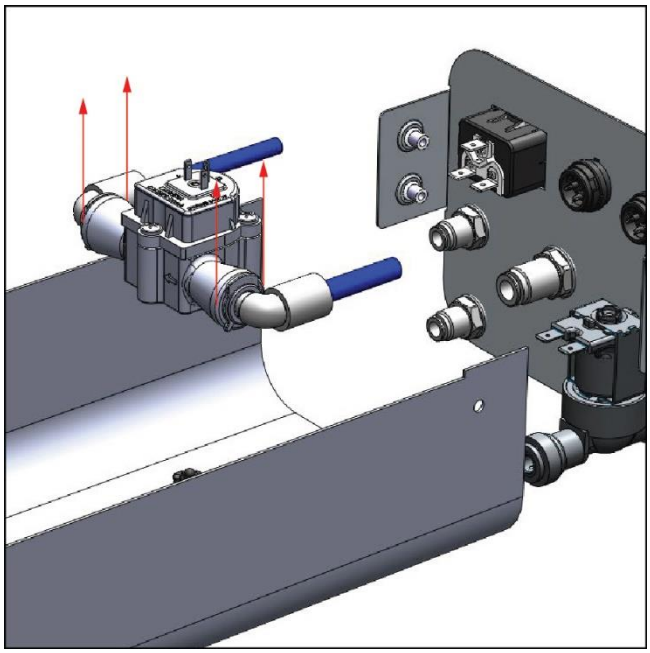


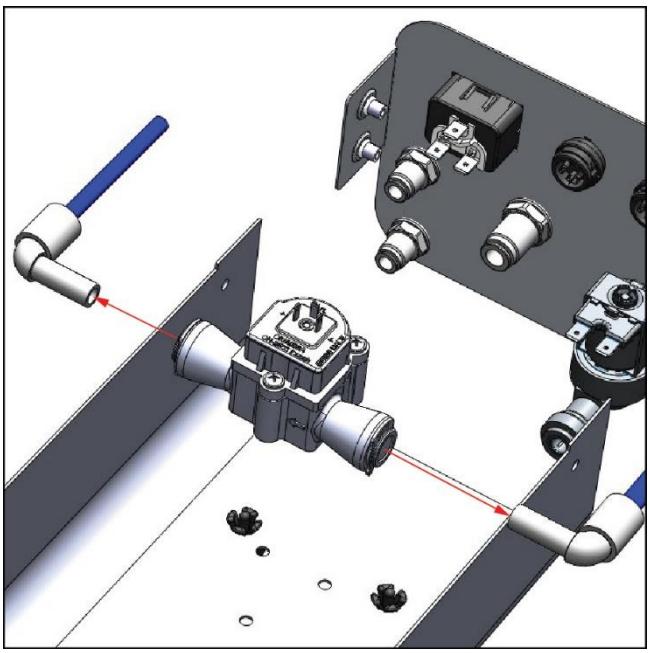


6.5 Flowmeter Removal:

1. Turn the machine upside down and remove the three screws.
2. Flow meter will be loose and ready to remove
3. Remove both elbow connectors.

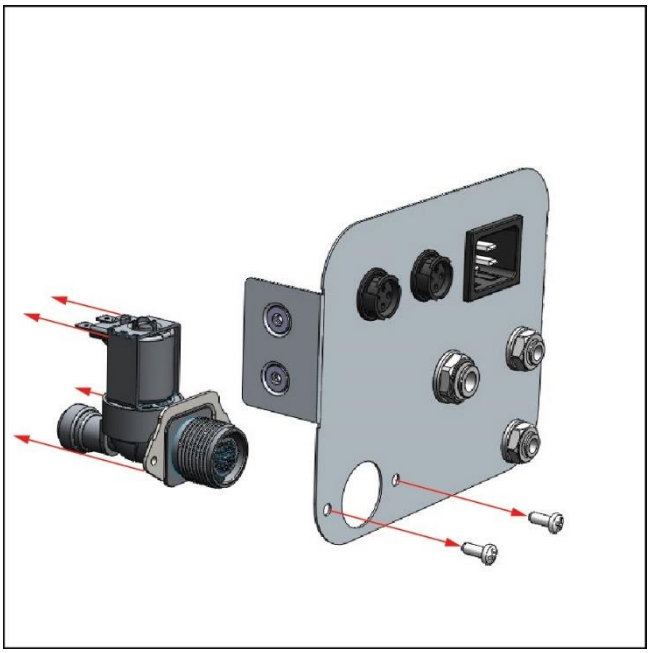






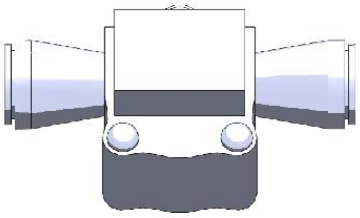
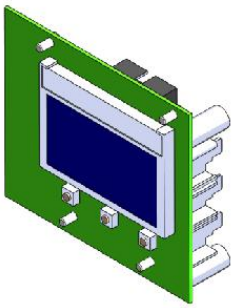
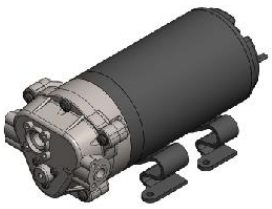
6.6 Solenoid Valve Replacement

1. Remove screws holding the solenoid to the Rear Panel.
2. Solenoid is free to be replaced.



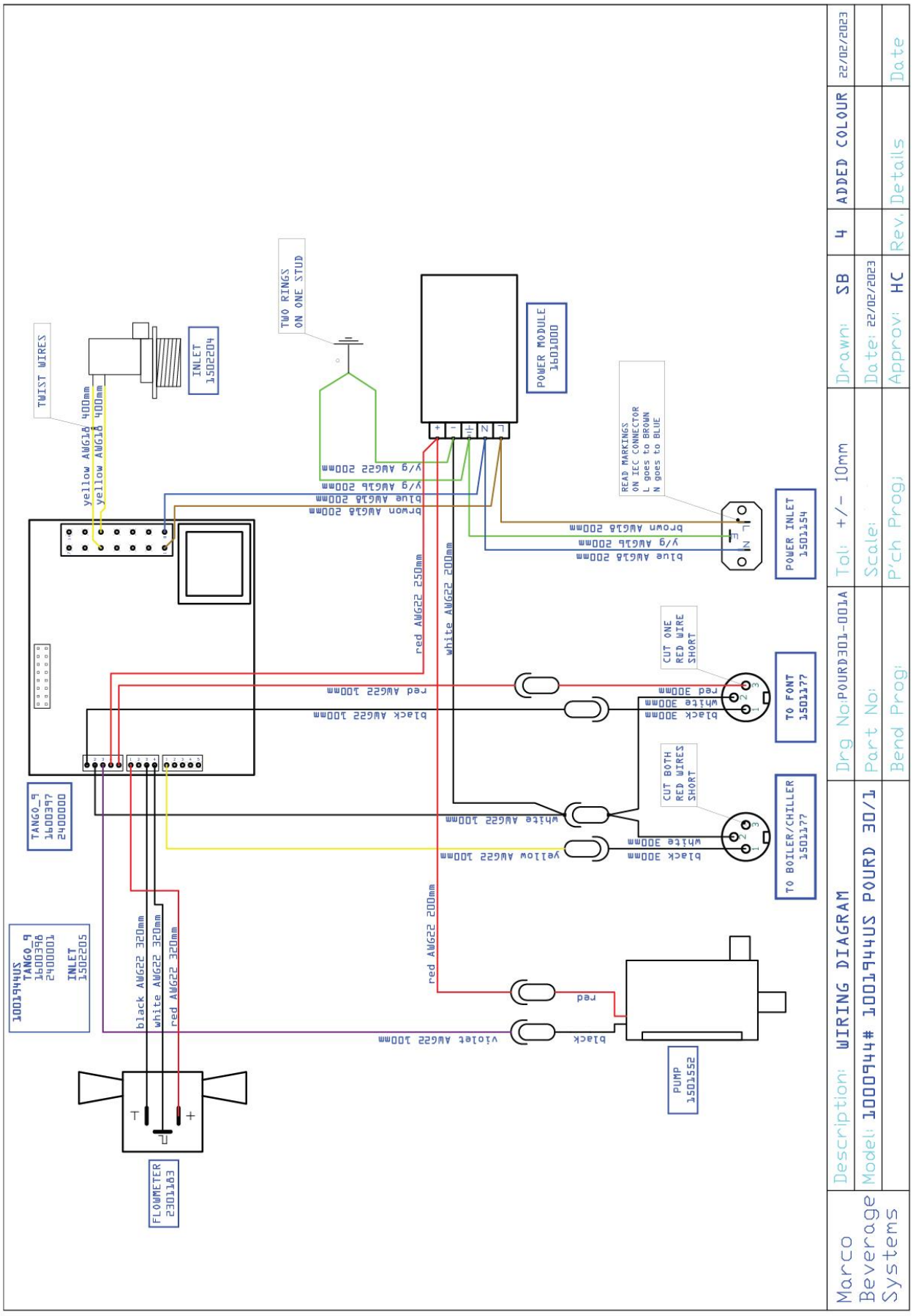
7. DIAGNOSTICS

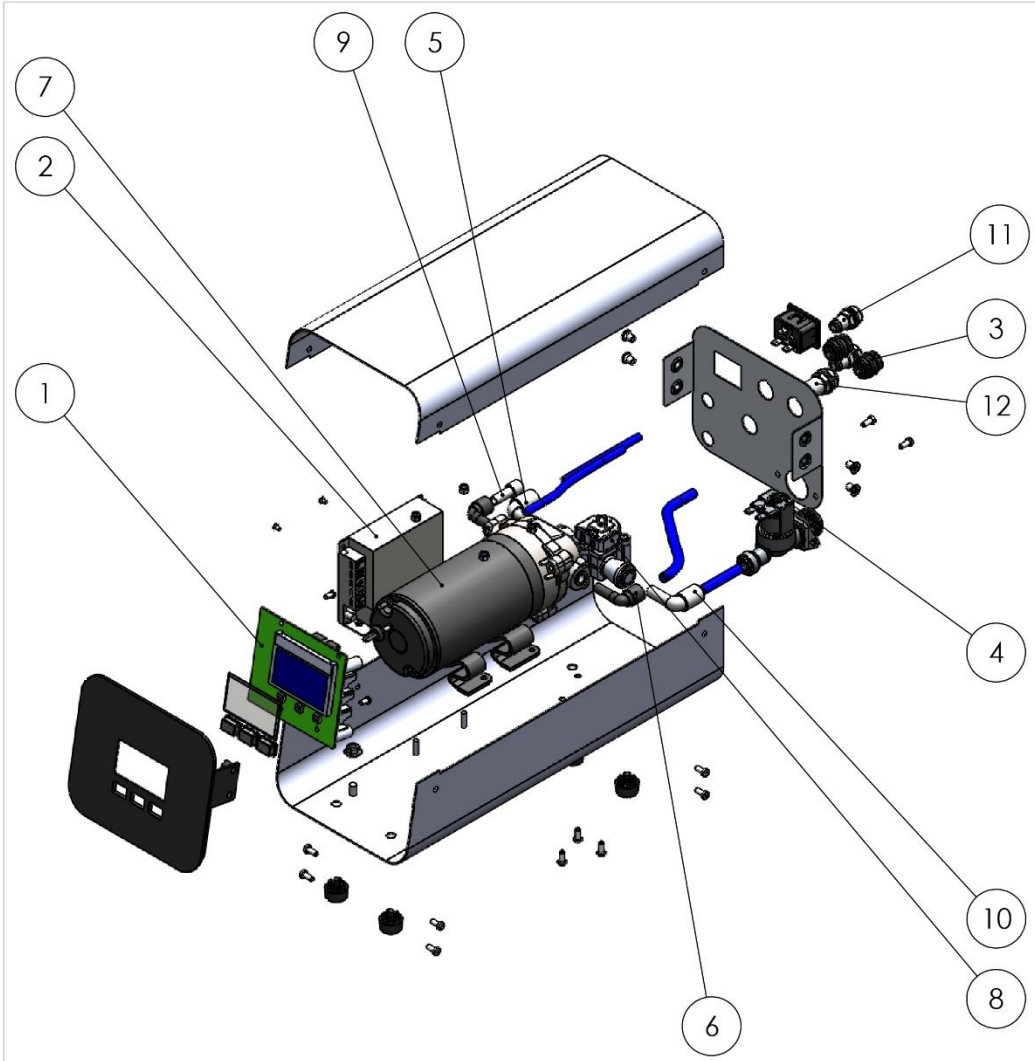
TROUBLESHOOTING

	Reported Issue	Component	Check
1.	Not dispensing water	Valve Inlet Solenoid 5/16" Push fit (230V-1502204/120V-1502205) 	Check power supply from PCB/230V ok. If 230V from PCB replace inlet Solenoid
2.	Inaccurate water volumes	Digimesa Flow Meter (2301183) 	Recalibrate the machine as per manual If issue persists check power supply from PCB/230V ok. If 230V from PCB replace Flow Meter
3.	Not dispensing water	PCB Tango_9 230V / 110V (100397/100398 	Check power supply from 230V ok. Check power between PCB and components/ If components not receiving power, replace PCB
4.	Inaccurate volume or Not dispensing concentrate	Diaphram Pump (1501552) 	-Inaccurate Volume Recalibrate the machine as per manual If issue persists check power supply from PCB/230V ok. If 230V from PCB replace Pump -Not dispensing If issue persists check power supply from PCB/230V ok. If 230V from PCB replace Pump

8. ELECTRICAL SCHEMATICS

Wiring Diagram





ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	1600397 / 1600398	POUR'D PCB 240V / POUR'D PCB 110V	1
2	1601000	Power Supply 24V Dc	1
3	1501177	Harness SP9 Boiler Lead 3 core DIN	2
4	1502196/1502198	Valve Inlet Solenoid - 1/4" push fit Hydralectric EV118/FSW	1
5	1400774	3/8" - 1/4" stem to push fit elbow	1
6	1400832	Elbow Tube-toTube Adaptor, 8mm PM220808E	2
7	1501552	Aquatec CDP 5800 Pump	1
8	2301183	Flow Meter	1
9	1400839	Reducer 5/16 to 1/4 JG PI061008S	1
10	1400777	3/8" - 5/16" stem to push fit elbow	1
11	1400436	Bulkhead Connector 1/4" (Legris)	2
12	1400437	Bulkhead Connector 5/16" (Legris)	1
13	1501488	EU Plug	
14	1501489	UK Plug	
15	1501506	US Plug	

marco	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES: LINEAR: +/-0.2mm ANGULAR: +/-0.5°	DESCRIPTION:	1000944 Pour'D Spare Parts List	DRAWN BY	SB		03/03/2023	
		DWG NO.:		APPROVED BY	TM		09-03-2023	
		MATERIAL:		REVISION		CO:	878	SCALE:1:20