

user manual

EvoBoost

contents

contents

introduction	3
Overview	3
1. safety	4
2. description	5
3. contents of packaging	6
4. dimensions and specifications	6
5. installation	7
5.1 Site surveys and installation requirements	7
5.2 Installation for up to 3x EvoClean dispensers	8
6. set up	11
7. operation	12
8. maintenance	12
9. troubleshooting	14
10. spares and repair	15
11. warranty	16
12. decommissioning and disposing	16
13. electrical approvals	16
14. water approvals	17
15. WEEE - waste electrical & electronic equipment	17

introduction

Please look at and read these instructions carefully before starting installation and operation. Keep the Installation and User Manual for future reference.

Remove all packaging and check the EvoBoost for damage or missing parts, against the Contents of Packaging, before starting installation.

Any alterations made to the EvoBoost and fittings will invalidate the Warranty.

Overview

The EvoBoost is a sleek booster tank that compliments OPL installs. The system is designed to mitigate poor water pressure and flow that can impact the performance of Laundry Chemical dispensers. With the EvoBoost installed, chemical delivery will be consistent and extremely accurate, leading to predictable laundry results.

1. safety



Safety Precautions

THANK YOU FOR YOUR INTEREST IN OUR PRODUCTS.
TO AVOID SERIOUS PERSONAL INJURY AND PROPERTY DAMAGE:



WARNING

- please use this equipment carefully and observe all warnings and cautions as detailed within this manual before installation or operation of this equipment.
- all electrical work should be carried out by a qualified Electrician, in accordance with local and national regulations.
- isolate **power & water** supply to this equipment before connection / disconnection of water connections and / or maintenance on this unit and / or dispensers supplied by this unit.
- ensure all plumbing is installed correctly before turning on power & water to the unit.
- to avoid damage to the unit, ensure dispensers connected to the EvoBoost are not used whilst the water supply is isolated.
- the EvoBoost should be operated within the correct voltage range as listed in the Manual.
- the installer and user are responsible for ensuring the installation and operation of this unit are in accordance with this Installation and User Manual and local and national regulations.
- the unit should only be used within the following temperature range: 5-40°C / 41-104°F.
- the unit is only to be installed and used indoors.
- means for connection of the appliance from the supply mains must be incorporated within the fixed wiring in accordance with the wiring rules.
- if the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid a hazard.
- this unit is not to be used in an ATEX environment.
- ensure unit overflow is connected to a drain point

WEAR

- the appropriate protective clothing and eye wear when installing and operating this equipment or when handling or dispensing chemicals or other materials or when working in the vicinity of all chemicals, filling or emptying equipment or changing metering tips.

ALWAYS

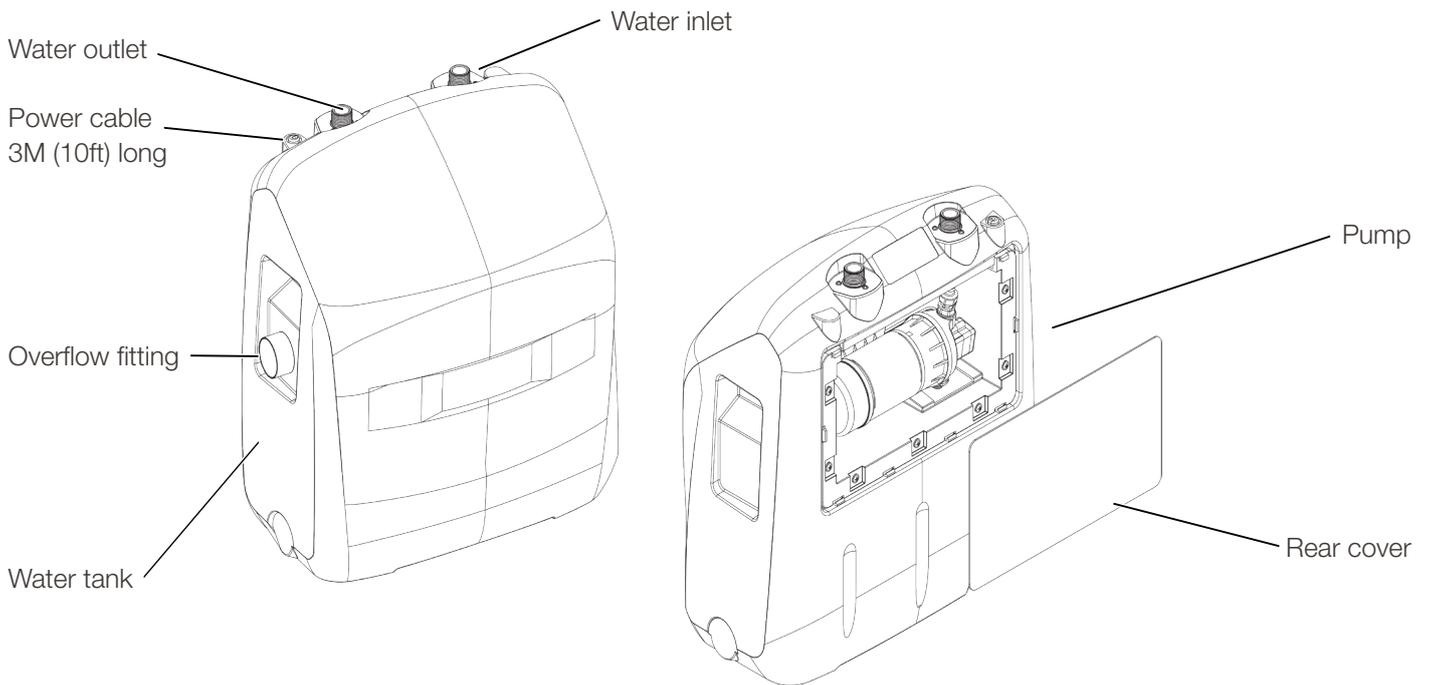
- read and follow all safety instructions in safety data sheets (SDS) for all chemicals.
- observe safety and handling instructions of the chemical manufacturer.
- dilute and dispense chemicals in accordance with manufacturer's instructions.
- direct discharge away from you or other persons and into approved containers.
- regularly inspect equipment and keep equipment clean and properly maintained.

NEVER

- mix incompatible chemicals that pose hazards.

**This unit is designed to be used with temperatures of 5-40°C / 41-104°F
Water pressures must be between 1 bar (14.5 psi) and 6 bar (87 psi)**

2. description



The EvoBoost is designed to supply laundry dispensers (max. 3 low flow EvoClean's) with 2.5 bar (35 psi) consistently. With the EvoBoost installed, chemical delivery will be consistent and extremely accurate, leading to predictable laundry results. The key features of the unit are as follows:

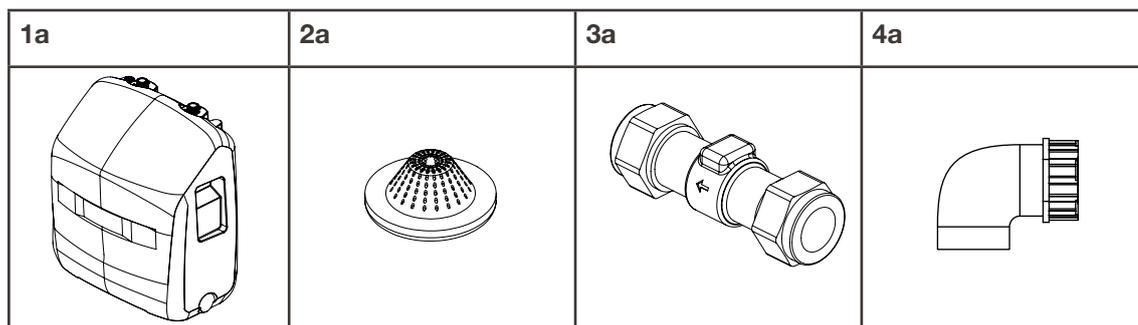
- The EvoBoost is equipped with a powerful and reliable electric diaphragm pump in either 230VAC or 115 VAC versions with a flow rate of 6.1 LPM (1.6 GPM).
- The EvoBoost is small and compact and specifically designed for OPL applications. It is designed to sit neatly on the floor near the chemical containers and has a clean aesthetic.
- The air gap on the water inlet of the EvoBoost provides a physical air break between the incoming potable water supply and the main water reservoir.
- Although it has been designed for a laundry use case, the EvoBoost is versatile and flexible to be used with any venturi dispenser
- The EvoBoost pump will run when a valve on the dispenser opens until the pressure reaches 5.5 bar (80 psi), at which point, the integrated pressure switch turns it off.

Part Number	Description	Inlet Fitting	Outlet Fitting	Voltage
EVB1561115VG	EvoBoost 115v	3/4 GH, Female	3/4 GH, Male	115 VAC
EVB1561230VB	EvoBoost 230v	3/4 BSP, Male	3/4 BSP, Male	230 VAC

3. contents of packaging

Packaging contains:

Item	Description	EVB1561230VB	EVB1561115VG
1a	EvoBoost	1x	1x
2a	Strainer Washer	1x	1x
3a	15mm Double Check Valve	1x	
4a	Waste Pipe Elbow	1x	1x



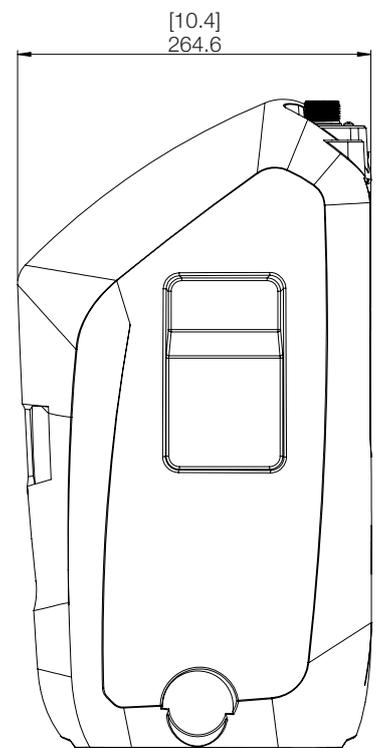
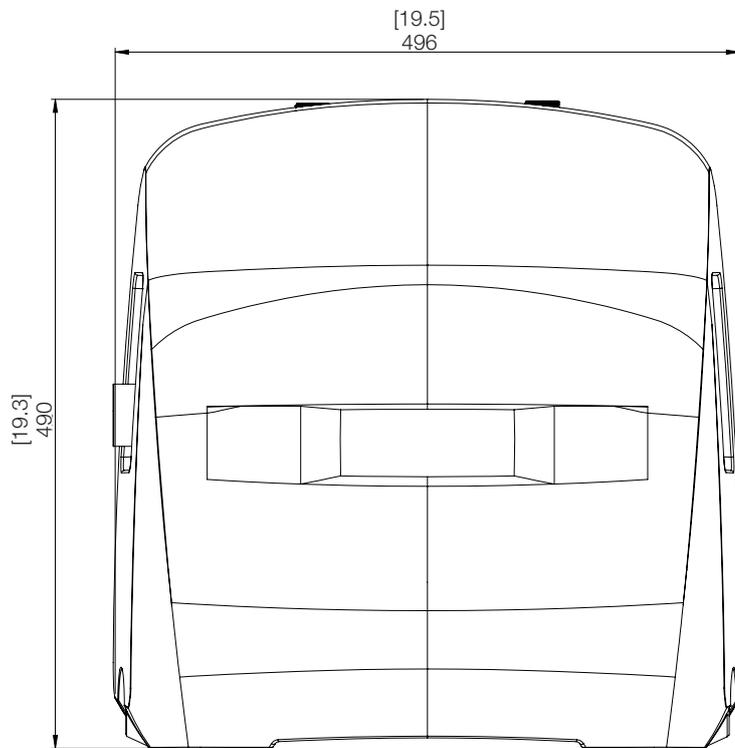
- For installation kits and spare parts please see page 17

4. dimensions & specifications

Model	Power	Current (Amps)	Appliance Class	Operating temperature (°C/°F)	Inlet Pressure	Outlet Pressure	Inlet Flow	Outlet Flow	Package weight (kg/lbs)	
									Gross	Net
EVB1561115VG	115 V/AC	0.6	Class I	5-40°C 41-104°F	Min. 1 Bar (14.5 psi) Max. 6 Bar (87 psi)	5.5 Bar (80 psi)	6 LPM 1.6 GPM	7.1 LPM 1.9 GPM	8kg 17.6lbs	6.2kg 13.7lbs
EVB1561230VB	230 V/AC	0.4	Class I							

NOTE: Back pressure on the outlet of the pump is not to exceed 4.8 bar (70 psi) dynamic.

CAUTION: The duty cycle of the pump must not exceed 50% max with a 2-minute maximum run time per cycle. Running the pump at or near its max duty cycle will shorten the life of the pump.



5. installation

5.1 Site services and installation requirements

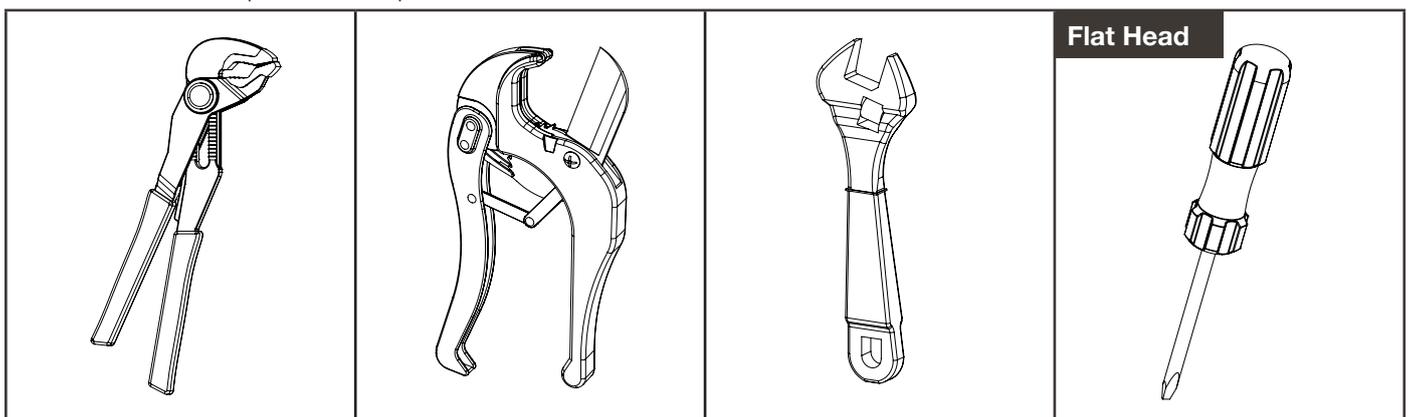
Safety

- Please read section 1 – Safety, carefully, prior to installation, to ensure all precautions have been adhered to.
- The unit must be installed by a trained Engineer.
- Any electrical work must be carried out by a trained electrician according to applicable electrical codes & regulations.
- Ensure all plumbing is installed in accordance with applicable codes & regulations.
- Ensure overflow on unit is connected to a drain point

Prior to installation, complete a site survey to ensure that the proposed site meets the following requirements:

- Ensure the flooring to mount the EvoBoost is of solid construction, stable, level and can accommodate the weight of the product when filled with water (~26kg/57lbs).
- There is a 115 / 230V mains supply available within 3 meters (10ft) of the installation location.
- There is a mains water supply available within 2 meters (6.5ft) of the installation location and can provide a minimum Inlet flow of 6Lpm (1.6 GPM) at 1 Bar (14.5 psi) pressure. Water pressure shall not exceed 6 bar (87 psi).
- There is sufficient room for installation of the EvoBoost.
- EvoClean units are / can be installed as per the dimensional requirements listed in the installation section in this manual
- There is a drain point near the EvoBoost to allow for the overflow to be connected.

The tools that are required to complete the installation are:



5.2 Installation for up to 3x EvoClean dispensers

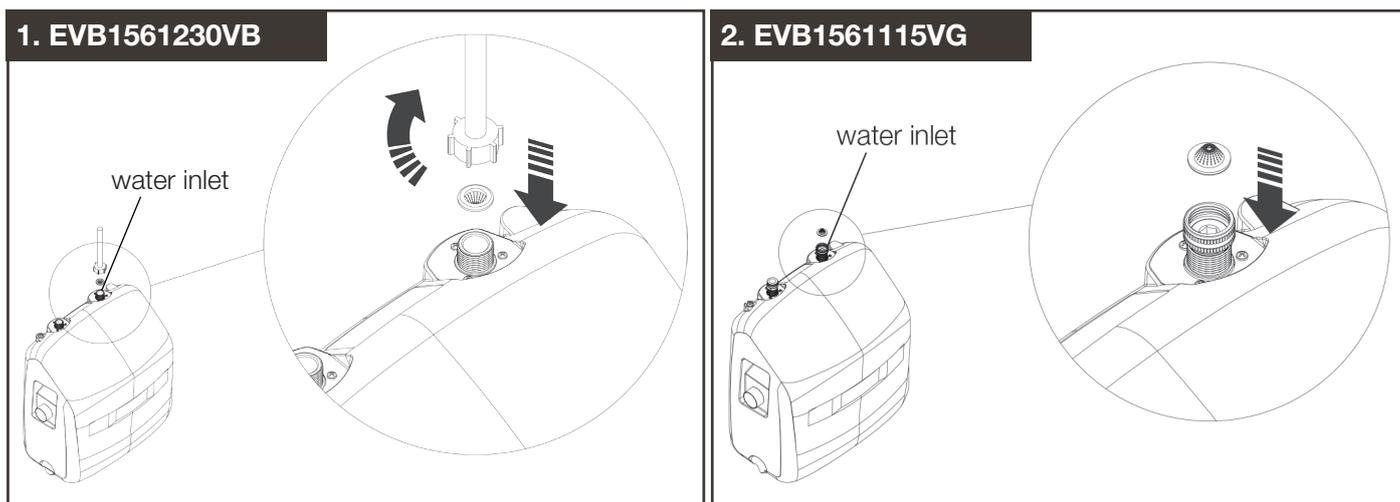
The following installation suggestions outline the method of connecting the EvoBoost to the mains water supply & up to 3 x EvoClean units.

A range of installation kits can be purchased to assist with a quick, neat & professional installation, that achieve the 3 options listed below. Details of kits are listed within the manual; please contact your local sales representative for further information.

- Please ensure the distances between the EvoClean dispensers and EvoBoost unit are adhered to, in order to maintain correct operation.
- Minimum pipe internal diameter should be 8mm. Anything smaller may affect function & wash results.
- Ensure all plumbing connections are tightened sufficiently / sealed correctly, to ensure there are no leaks.
- Ensure there are no kinks in the water delivery hoses. This will affect function & wash results and reduce the life of the pump in the EvoBoost.
- Ensure all plumbing is connected before switching on the EvoBoost unit
- Ensure both the EvoBoost & EvoClean units are isolated (power & water) and de-pressurised before servicing or maintaining either unit.

Setting up the EvoBoost:

- Position the EvoBoost in the desired location for install.
- Ensure the strainer washer is fitted to the INLET side of the EvoBoost (as illustrated)
⚠ NOTE: STRAINER WASHER MUST BE FITTED IN ORDER FOR THE PRODUCT TO WORK EFFECTIVELY.



- Ensure the waste pipe elbow is fitted to the OVERFLOW OUTLET on the side of the EvoBoost (as illustrated in the recommended setup diagrams)

Setup of the EvoClean dispensers:

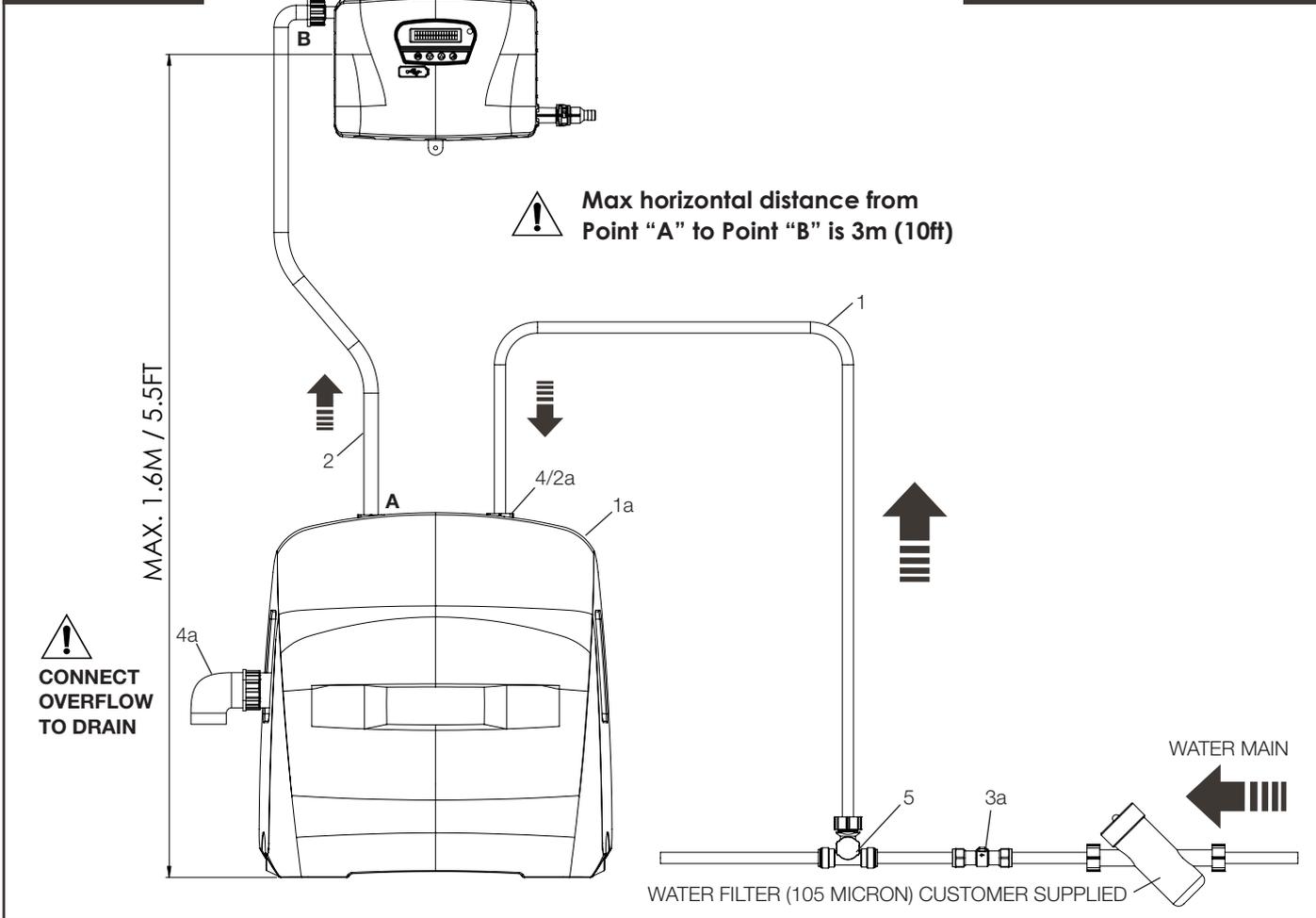
The EvoClean setup should be followed in the 'EvoClean Installation and Operation manual', this gives a more comprehensive setup of the system. Install the EvoClean units in accordance with the dimensional information given below in relation to distances from the EvoBoost.

Installation of EvoBoost plumbing:

- Connect the EvoBoost in accordance with the diagram below, adhering to the dimensions indicated.
- A serviceable water filter (approx. 105 micron) (not provided) should be used on the incoming mains supply.
- Each numbered item in next image is referenced from table "contents of packaging".

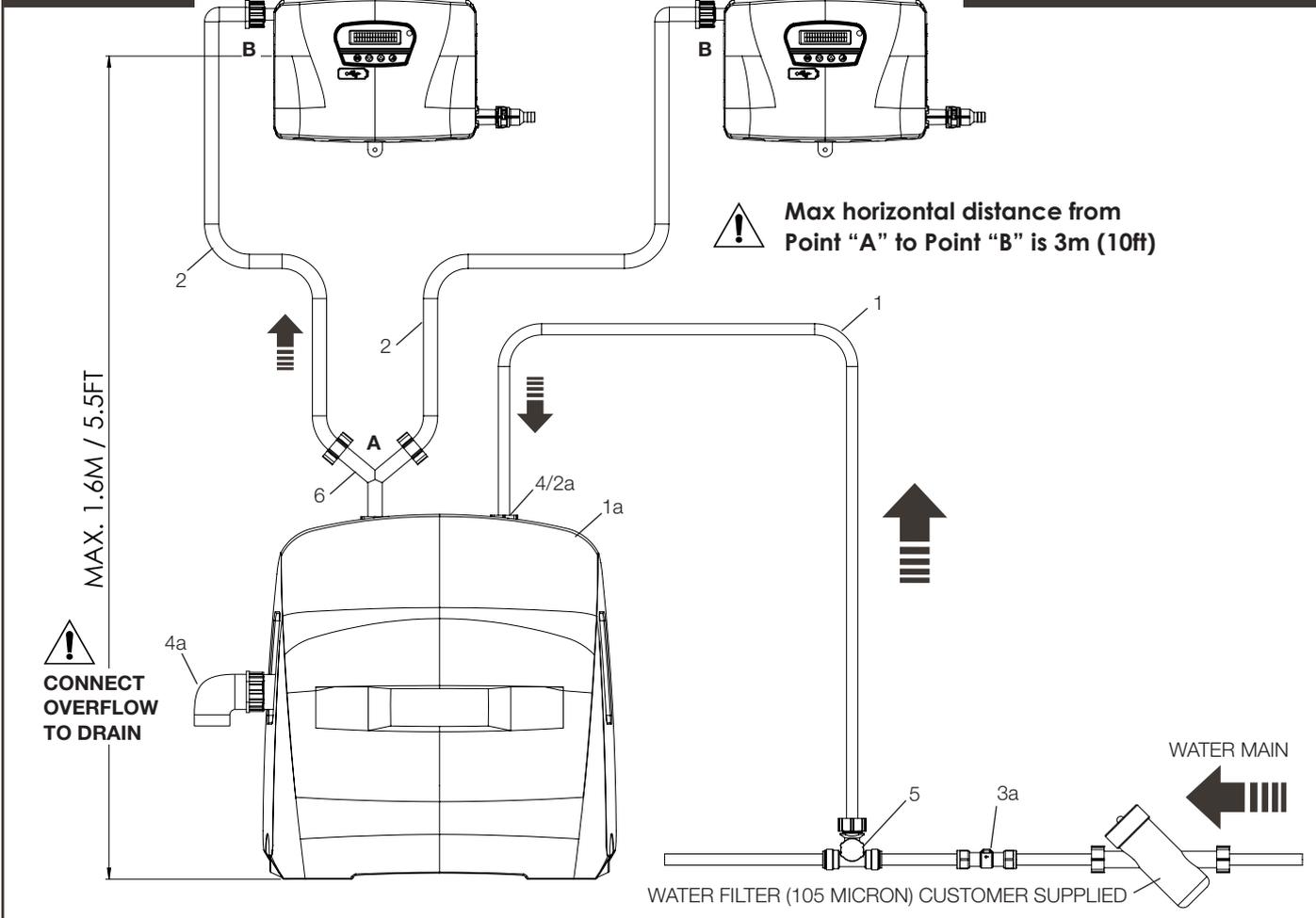
1x EvoClean

EVB1561230VB 230V BSP



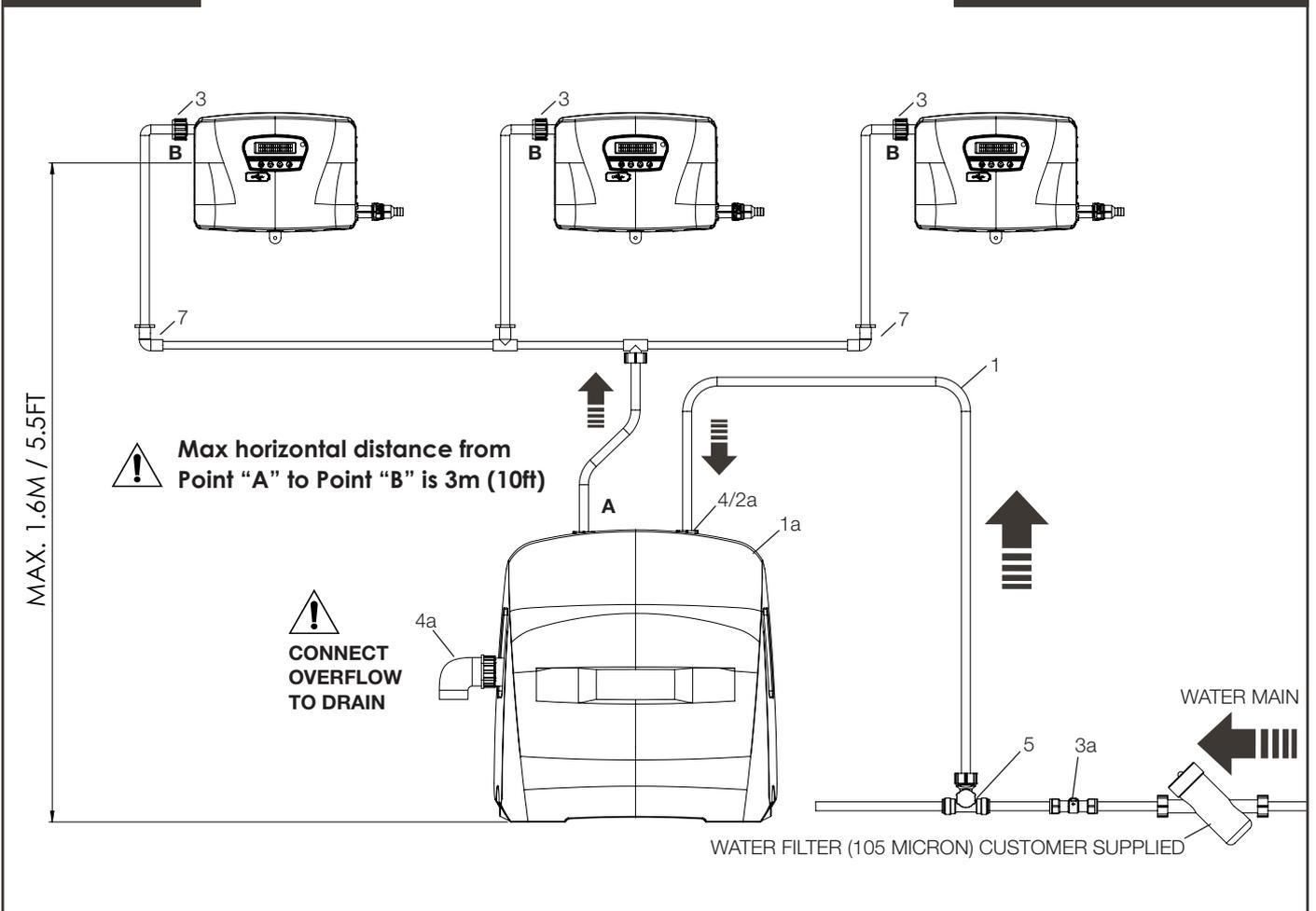
2x EvoClean

EVB1561230VB 230V BSP



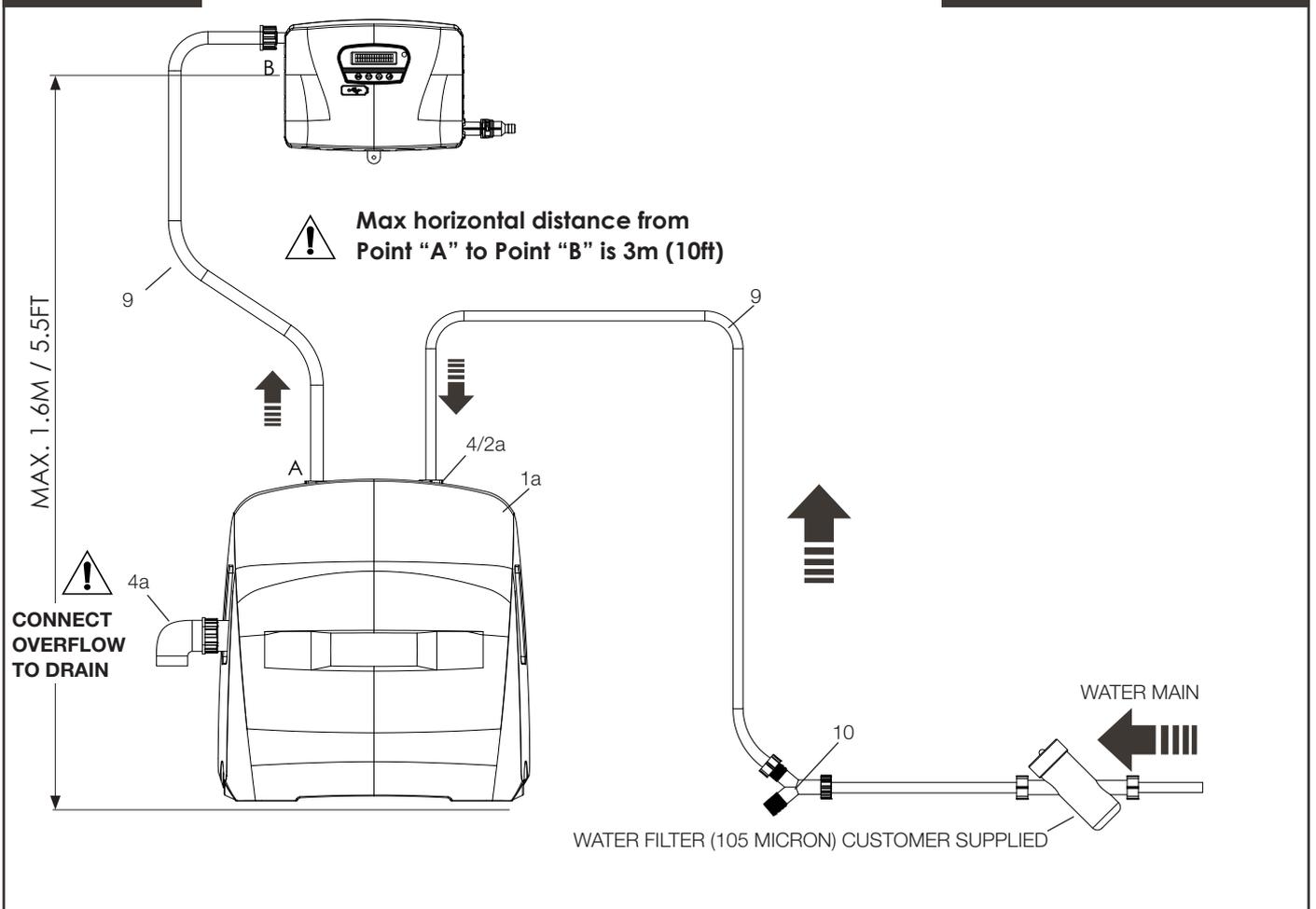
3x EvoClean

EVB1561230VB 230V BSP



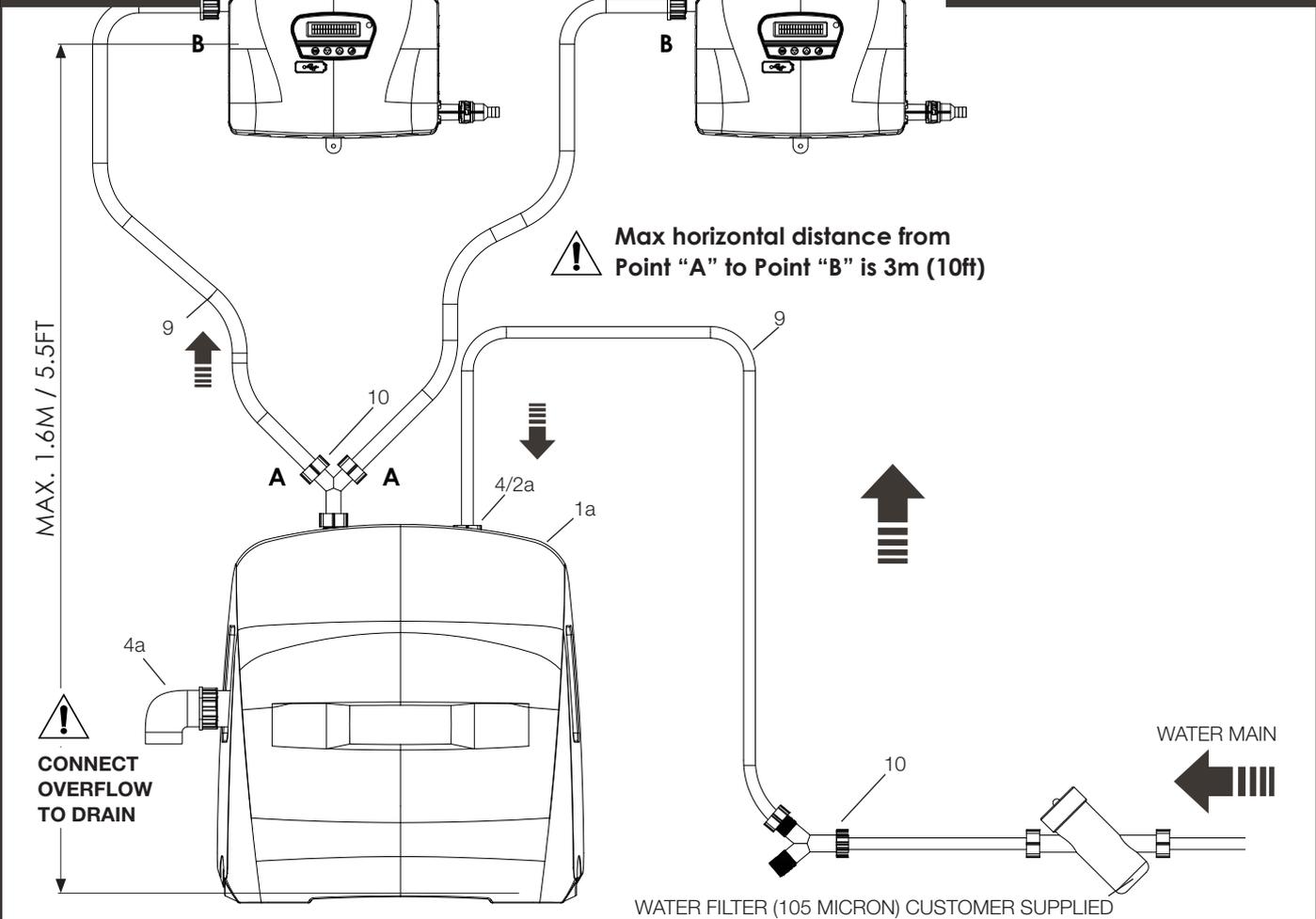
1 x EvoClean

EVB1561115VG 115V GHV



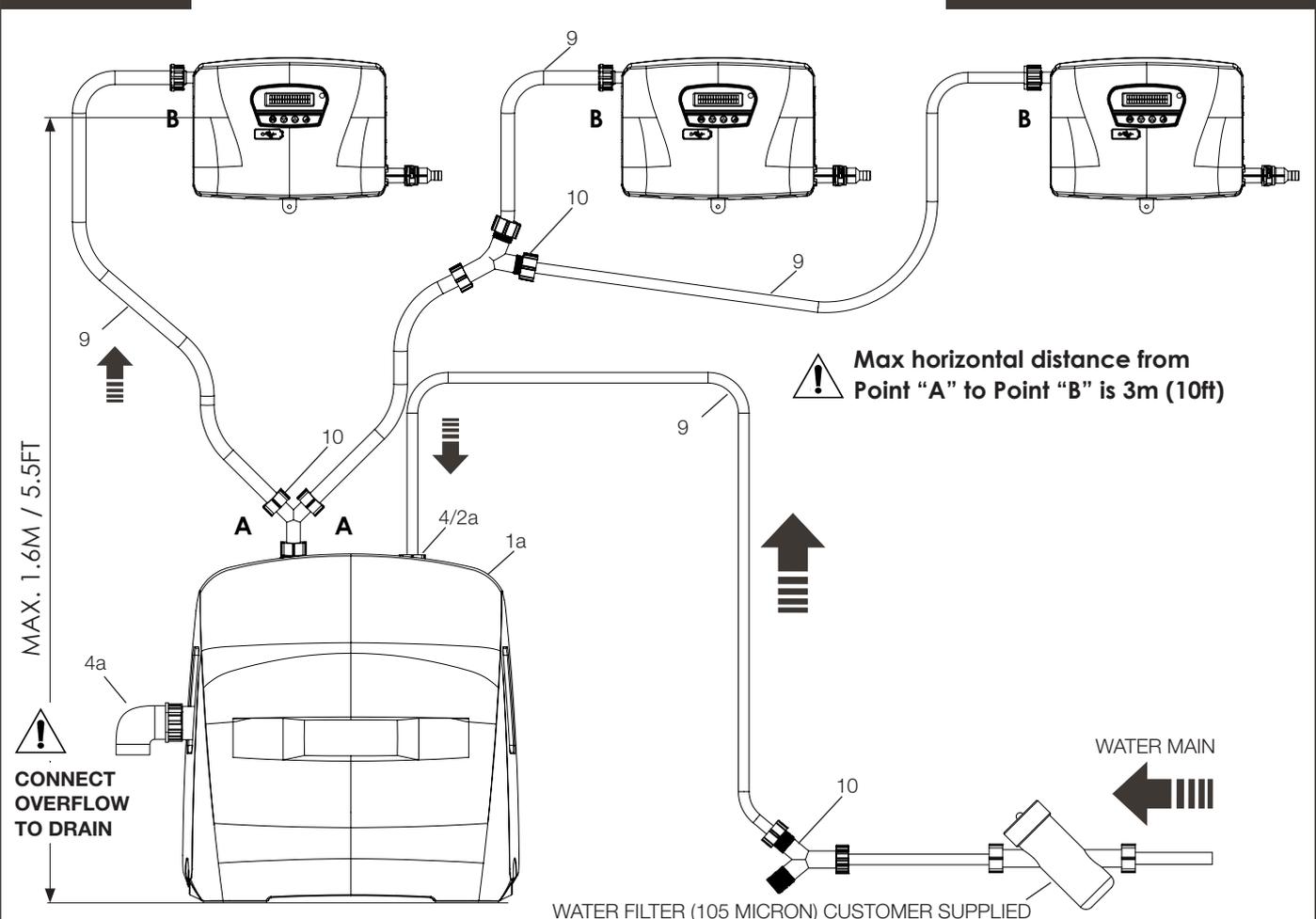
2x EvoClean

EVB1561115VG 115V GHV



3x EvoClean

EVB1561115VG 115V GHV



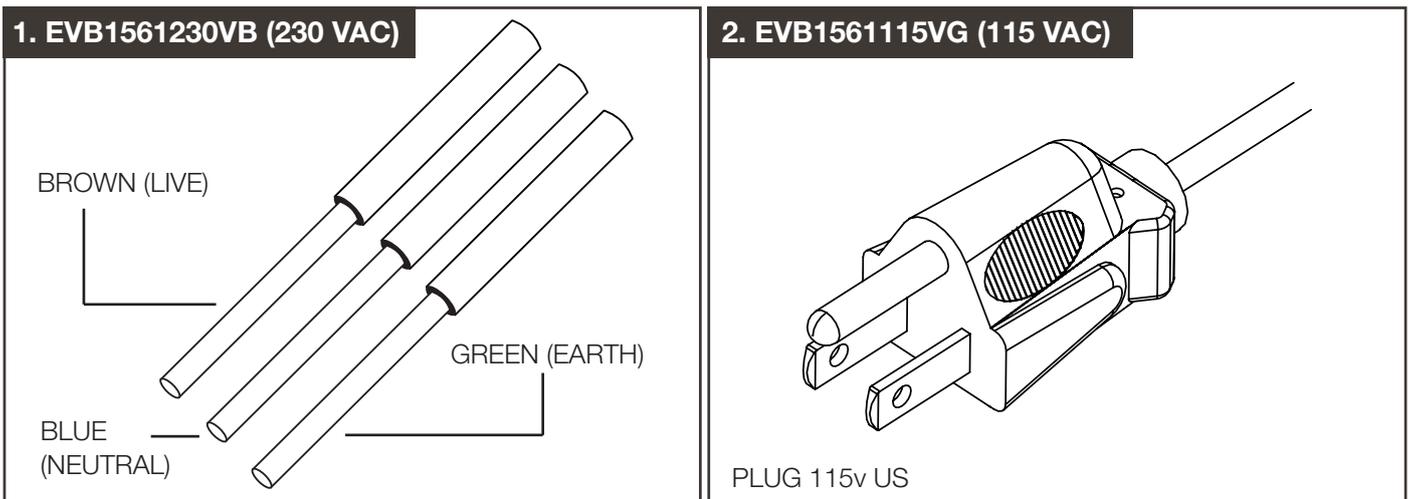
5.3 Electrical connection



- All electrical work should be carried out by a qualified Electrician, in accordance with local and national regulations.
- Isolate **power & water** supply to this equipment before connection / disconnection of water connections and / or maintenance on this unit and / or dispensers supplied by this unit.
- To avoid damage to the unit, ensure dispensers connected to the EvoBoost are not used whilst the water supply is isolated.
- The EvoBoost should be operated within the correct voltage range as listed in the Manual.
- Means for connection of the appliance from the supply mains must be incorporated within the fixed wiring in accordance with the wiring rules.
- The installer and user are responsible for ensuring the installation and operation of the EvoBoost & EvoClean units are in accordance with this Installation and User Manual (and EvoClean manual) and local and national regulations.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid a hazard.

Note: It is a legal requirement to allow disconnection of the appliance from the supply after installation. The disconnection may be achieved by having the plug accessible or by incorporating a switch in the fixed wiring in accordance with the wiring rules.

Connecting the mains power supply



6. set up

EvoBoost

Plumbing and power has been correctly connected according to the installation section. Once this is complete:

- Open the isolation valve connecting the EvoBoost to the water main.
- Allow the EvoBoost water reservoir to fill (this can take up to 15 minutes depending on water inlet flow).
- Check for leaks in the system plumbing on the inlet side of the unit.
- Turn on the power to the EvoBoost. The pump will activate, and you will hear it running.
- With a pressure gauge, check the delivery pressure on the EvoBoost when the valve on the destination device is open. The water pressure during delivery must be below 4.8 bar (70 psi) or there is too much backpressure for the pump to operate properly.
- The plumbing between the EvoBoost and EvoClean will pressurise until the pressure switch on the pump cuts out.
- Check for leaks in the system plumbing between the EvoBoost and EvoClean.
- Using the 'prime chemicals' feature on the EvoClean, operate the flush valve for approximately 30 seconds to flush through any trapped air in the system.
- Repeat this process with all EvoClean units in the system (up to 3).

EvoClean

The EvoClean setup should be followed in the 'EvoClean Installation and Operation manual', this gives a more comprehensive setup of the system. Once the EvoClean unit has been programmed correctly, the following quick start steps can be taken:

- Prime each chemical to the top of each chemical pickup tube.
- Calibrate each chemical to ensure that the dosage is accurate.

7. operation

Operating the EvoClean dispensers

Once the EvoBoost has been setup (as per setup section), the EvoClean units will be ready to operate in a wash cycle. The EvoBoost will automatically run every time the EvoClean operates, through use of a built-in pressure switch. The EvoBoost will shut off automatically once the EvoClean unit stops dosing.

8. maintenance



ENSURE BOTH THE EVOBOOST & THE EVOCLEAN UNITS ARE ISOLATED (POWER & WATER) AND DE-PRESSURISED BEFORE SERVICING OR MAINTAINING EITHER UNIT.

Every 3 Months

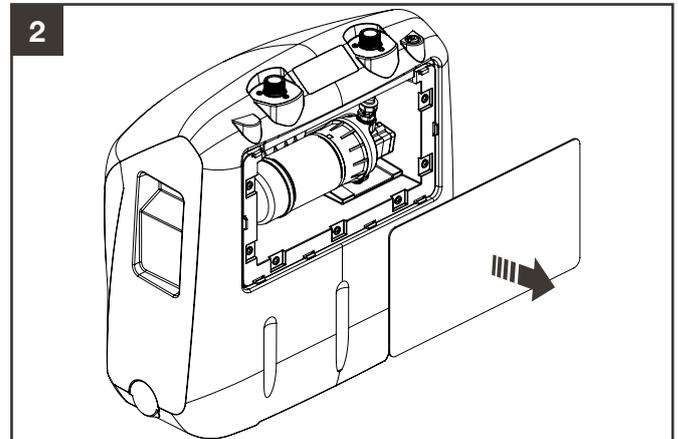
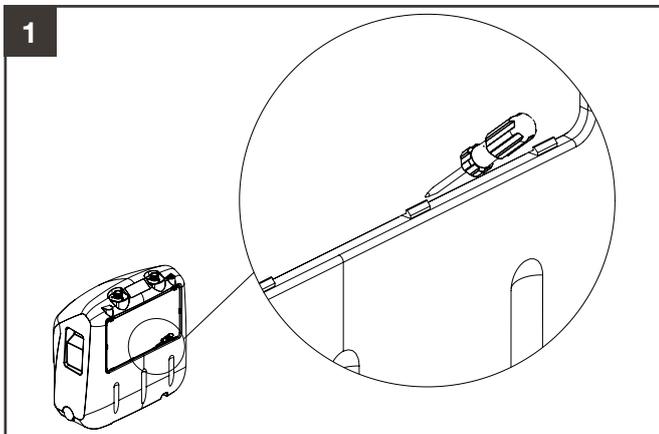
- Verify that the pump is running smoothly without constant interruption.
- Check inlet & outlet plumbing to ensure not leaks have formed.
- Clean the unit with a damp cloth and remove dust, lint and dirt.

Every 6 Months

Clean the pump pickup tube & use a cleaning tablet to clean the inside of the tank:

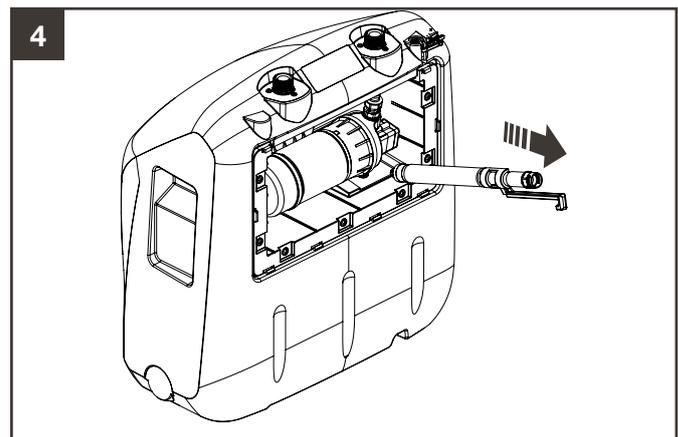
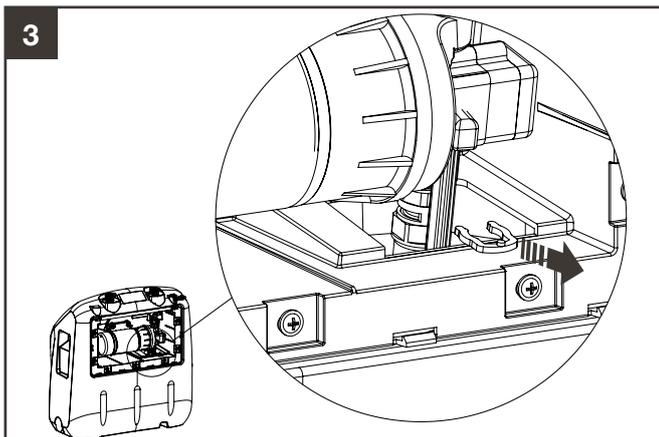
Remove Rear cover using flathead screwdriver to CAREFULLY pry the lower clips open.

Remove rear cover



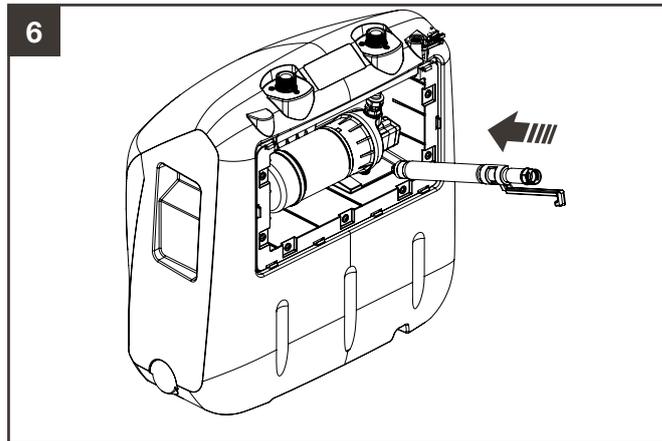
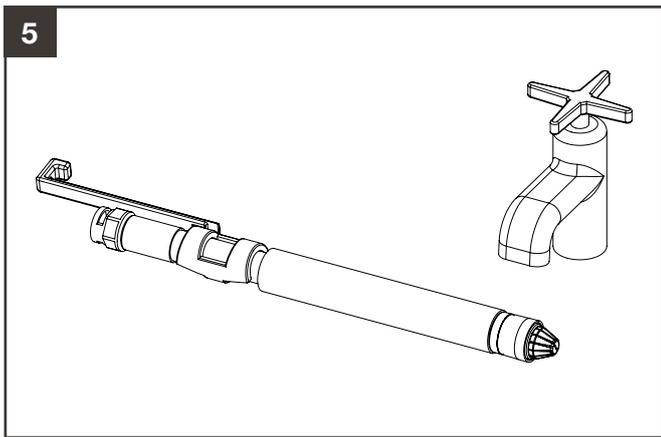
Remove securing clip for pickup tube

Remove hose using handle **WARNING TAKE CARE NOT TO DROP THE PICKUP HOSE INTO THE WATER TANK**



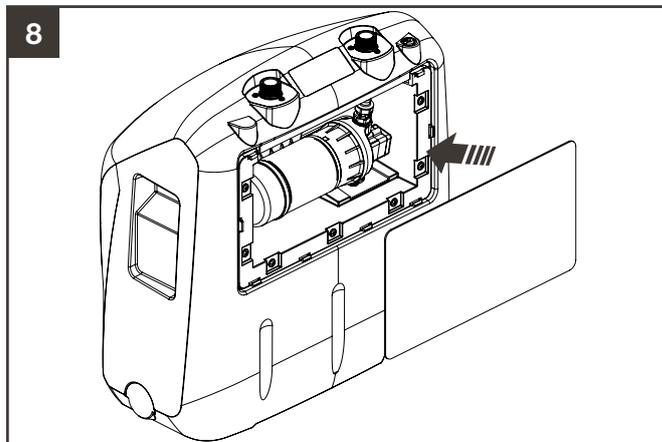
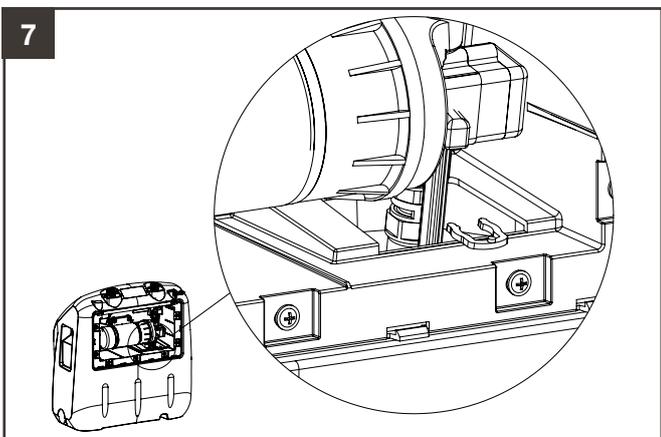
Clean pickup tube, removing any film, particles, dirt that may have built up.

Clean inside of tank and lower the pickup tube back into the tank **WARNING TAKE CARE NOT TO DROP THE PICKUP HOSE INTO THE WATER TANK**

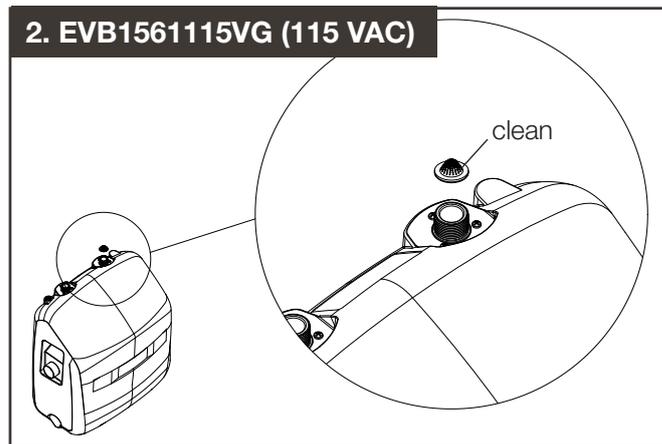
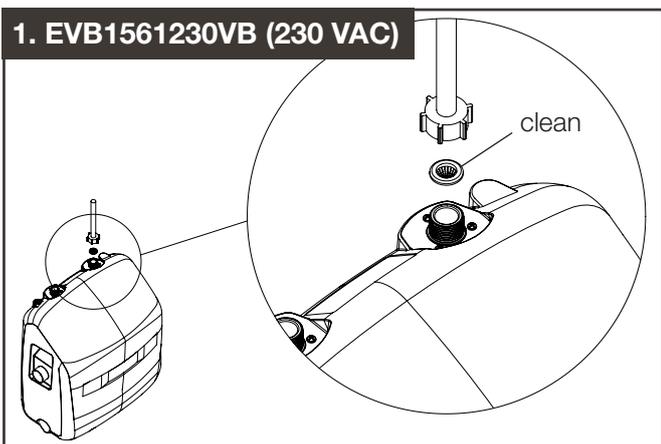


Replace securing clip back onto pickup tube **WARNING TAKE CARE NOT TO DROP THE SECURING CLIP INTO THE WATER TANK**

Replace rear cover



Clean the inlet strainer washer on the EvoBoost:



9. troubleshooting

Error	Possible Cause	Possible Resolution
<ul style="list-style-type: none"> Pump running is much louder than usual 	<ul style="list-style-type: none"> Pump pickup tube possibly blocked 	<ul style="list-style-type: none"> Follow maintenance procedure for cleaning pickup tube & cleaning tank
<ul style="list-style-type: none"> Pump running intermittently 	<ul style="list-style-type: none"> Excess backpressure in the system (>4.8bar/70 psi) is causing the pump to cut out. 	<ul style="list-style-type: none"> Check installation meets the requirements outlined in the 'installation' section of the manual Check hoses are not kinked or there aren't restrictions in the installation pipework Clean the strainer washer on the water inlet to the EvoClean. This may have become blocked
<ul style="list-style-type: none"> Excess vibration 	<ul style="list-style-type: none"> Hose vibration touching another surface and amplifying sound 	<ul style="list-style-type: none"> Ensure outlet pipework & hoses are secured correctly to a solid surface and are not touching other equipment
<ul style="list-style-type: none"> EvoClean not delivering chemical or inadequate flushing 	<ul style="list-style-type: none"> EvoBoost not connected to power source or not turned on Tank has run out of water 	<ul style="list-style-type: none"> Check EvoBoost unit is connected correctly to the mains power supply Ensure water supply to EvoBoost is on and there is sufficient flow and pressure (see specification) Inlet strainer washer to EvoBoost may have blocked. Clean inlet strainer washer as per 'Maintenance' section of the manual
<ul style="list-style-type: none"> Pump not switching off 	<ul style="list-style-type: none"> Water tank has run dry 	<ul style="list-style-type: none"> Ensure water supply to EvoBoost is on and there is sufficient flow and pressure (see specification)
<ul style="list-style-type: none"> Tank overflowing 	<ul style="list-style-type: none"> Float valve has become blocked due to incorrect filtering of water 	<ul style="list-style-type: none"> Isolate incoming water and electricity supply and contact your local sales representative
<ul style="list-style-type: none"> Pump not priming on start up 	<ul style="list-style-type: none"> Air lock in system 	<ul style="list-style-type: none"> Disconnect hose from the Evoclean unit and route the hose to container on floor (the container must be the same level as the EvoBoost unit). Turn the pump on until the water runs through into the container. The hose can then be reconnected to the Evoclean unit.

10. spares & accessories

Install kits

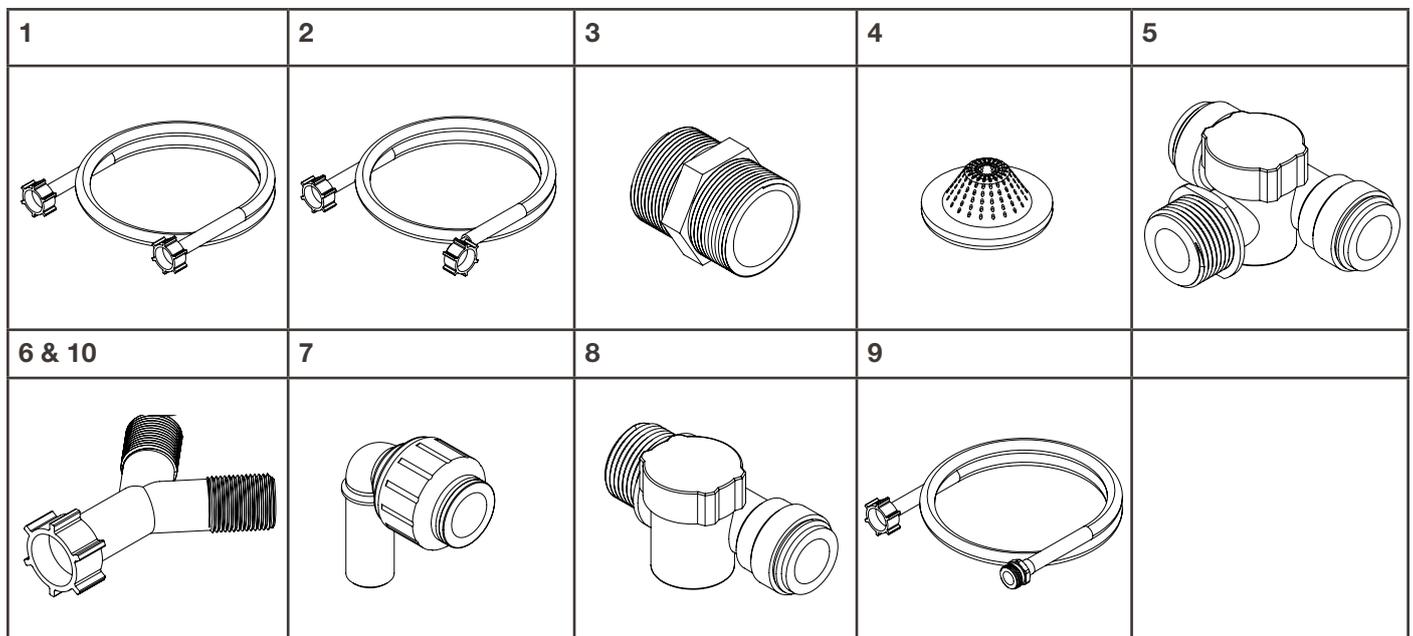
Install kits are available for both 115V and 230V versions, reference the table below against the part images:

Install kit for X number of EvoClean Dispensers

230v BSP Version

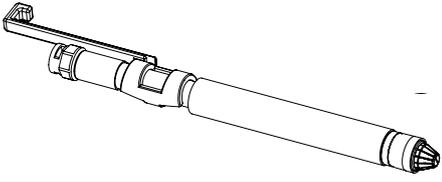
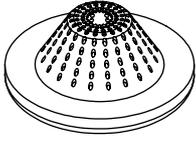
115v GH Version

Description	1x EvoClean	2x EvoClean	3x EvoClean	1x EvoClean	2x EvoClean	3x EvoClean
	HYD10099195	HYD10099196	HYD10099197	HYD10099188	HYD10099189	HYD10099190
1 3/4 BSP Water Hose, Straight	1x	1x	2x	-	-	-
2 3/4 BSP Water Hose, 90° Elbow	1x	2x	3x	-	-	-
3 3/4 BSP Nipple	1x	2x	3x	-	-	-
4 Strainer Washer	1x	1x	1x	1x	1x	1x
5 3/4 BSP x 15mm, Tee, Valve	1x	1x	3x	-	-	-
6 3/4 BSP, Y-Piece Adaptor	-	1x	-	-	-	-
7 15mm, Adaptor Elbow	-	-	2x	-	-	-
8 3/4 BSP x 15mm, Straight, Valve	-	-	2x	-	-	-
9 Hose, 3-8 ID	-	-	-	2x	3x	5x
10 Brass Y-Piece Adaptor	-	-	-	1x	2x	3x



Maintenance kit

The following maintenance kit is available, which allows the correct maintenance regime to be followed as detailed in this manual:

1x pickup tube assembly	1x washer strainer
	

11. warranty

Seller warrants solely to **Buyer** the Products will be free from defects in material and workmanship under normal use and service for a period of one year from the date of completion of manufacture. This limited warranty does not apply to (a) hoses; (b) and products that have a normal life shorter than one year; or (c) failure in performance or damage caused by chemicals, abrasive materials, corrosion, lightning, improper voltage supply, physical abuse, mishandling or misapplication. In the event the Products are altered or repaired by **Buyer** without **Seller's** prior written approval, all warranties will be void. **No other warranty, oral, express or implied, including any warranty of merchantability or fitness for any particular purpose, is made for these products, and all other warranties are hereby expressly excluded.**

Seller's sole obligation under this warranty will be, at **Seller's** option, to repair or replace F.O.B. **Seller's** facility in Cincinnati, Ohio or Bracknell, England any Products found to be other than as warranted.

Limitation of Liability

Seller's warranty obligations and Buyer's remedies are solely and exclusively as stated herein. Seller shall have no other liability, direct or indirect, of any kind, including liability for special, incidental, or consequential damages or for any other claims for damage or loss resulting from any cause whatsoever, whether based on negligence, strict liability, breach of contract or breach of warranty.

12. decommissioning and disposal

Hydro products are manufactured from materials which can be recycled. Dispose of Hydro products in accordance with the current local regulations.

- All electrical connections have been removed and disposed of according to local regulations
- Any hazard Warning signs have been removed or totally defaced
- Safe for disposal sign attached appropriately to each of the listed items.
- The items have been left in a condition such that it is safe for lay personnel or contractor to remove it without need for precautions against exposure to any electrical supply or other agents.

13. electrical approvals

Compliance to standards and test data / EC declaration of conformity
This EvoBoost complies with the following EU directives;

2014/35/EU

Conforms with the safety objectives of the low voltage directive and its amending directives.

2014/30/EU

Conforms with the essential requirements of the electromagnetic compatibility directive and its amending directives.

14. Water Approvals

Hydro Systems EvoBoost has certified UK WRAS Approval. Certificate Number: 1908742

This product has been tested and found to comply with the requirements of the Water Supply (Water Fittings) Regulations 1999 for England and Wales, the Water Byelaws 2014, Scotland and the Water Regulations Northern Ireland.

This product is certified as suitable for backflow prevention against fluid category 4, with a maximum working pressure 6.0 bar and has been certified for cold water use only.

15. WEEE - Waste Electrical and Electronic Equipment

WEEE Regulations apply to companies who Manufacture & Distribute electrical or electronic equipment. (EEE)

The WEEE Regulations apply to importers, producers, retailers and users of EEE, and to businesses that treat or recover WEEE. The Low Level Alarm unit is a product placed onto market POST 13.08.05, therefore called 'future WEEE'. As a producer Hydro Systems Europe have the option to take responsibility for the EEE placed on the market. If Hydro Systems Europe chooses to receive WEEE they must make sure that it is disposed of in an environmentally sound way, including the treatment, reuse, recovery and recycling of the components where appropriate.

Responsibility as a producer of EEE

Hydro Systems Europe, as a producer of EEE, are registered with a producer compliance scheme who register them with the relevant environmental regulator.

Through the regulator they become part of an approved producer compliance scheme (PCS). The PCS supply a unique and permanent producer registration number.

If disposal is outsourced it (the product) must be taken to an appropriately licensed site (approved authorised treatment facility - AATF) where it can be treated safely.



Hydro Systems Company

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