



TWIN 10" & 20" JUMBO WATER FILTERS COMPLETE WITH UV SYSTEMS.

Model nos. "10BTWINUV55", "10BTWINUV90" and "20BTWINUV90"

INSTALLATION, MAINTENANCE & SERVICING MANUAL

PLEASE READ ALL INSTRUCTIONS PRIOR TO PROCEEDING WITH ANY WORK

These are TWIN 10" and 20" Jumbo Water filter packages complete with UV systems, mainly designed for treating rainwater. System for treating mains water is available with appropriate filter cartridges.

Please ask Wallace pumps.

These units includes Twin Filter housing of size ordered includes 1 X 20µ Pleated and 1 X 1µ Poly-Spun PP Filter cartridges and complete UV55 OR UV90 ultraviolet system as per order.

Before deciding to install the product, you must consult with your local respective authorities for regulations and any approval / permit that may need to be obtain before installation.

AFTER INSTALLATION, THE INSTALLER MUST HAND THIS MANUAL TO THE OWNER
FOR THE PROPER OPERATION AND MAINTENANCE OF THE UNIT

Failure to do so will result in the installer being made liable under the current legislation for any future claims resulting from any malfunction of unit &/or damage to property or person.

Congratulations on your purchase of 10" or 20" TWIN Jumbo water filter package complete with UV system. For this product to meet its expected lifetime please ensure it is installed by a qualified technician and follow these installation, servicing and maintenance instructions. For maintenance schedule refer "Section 8" "Care & Servicing of Unit". Please keep a record of by whom and when the maintenance /replacement was completed, that need to be provided to when asked for.



TWIN 10" JUMBO FILTERS WITH UV55 PACKAGE OR TWIN 10" JUMBO FILTERS WITH UV90 PACKAGE



WITH TRUE REVERSIBLE SS MOUNTING BRACKET DESIGN



TWIN 20" JUMBO FILTERS WITH UV90 PACKAGE

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Limitations: Wallace Pumps reserve the right to change these instructions & improve the product without prior notice.


1. CAUTION AND WARNINGS. READ & FOLLOW BEFORE INSTALLING THE UNIT

- Installation must be done by person licensed to do so & as per local rules & regulations.
- **Filter Housing & UV must be protected from Water Hammer, Rain, Heat, freezing & direct Sunlight.**
- Check regularly for any leakage &/or deterioration & replace when necessary.
- To avoid any water damage to property or person, product must be installed in a location with safe natural drain &/or provide suitable drain pan plumbed to safe drain. **This requirement is in principal with NZ building code E3/AS2 and G12.** Water damage is not covered under warranty.
- Do not use with microbiologically unsafe water or with water of unknown quality without adequate treatment & disinfection. Refer "Section 2: Design features" for detailed info on maximum concentration of impurities that should not exceed in water that is to be treated.
- To protect filter & UV housing, &/or filter cartridge, &/or fittings, taps, plumbing pipes & fittings within the dwelling, a pressure limiting valve (generally set for < 500 kPa pressure) must be installed on incoming water supply pipe before connecting to inlet of the unit.
- Use only on cold water of 4°C to 38°C temp only.
- Use PTFE thread seal tape only on all connections & do not overtighten. Do not use any pipe sealants. Use of pipe sealants will void warranty. Too much tape or over tightening or dropping product may cause it to split / break, which is not covered under warranty.
- Before installing filter housing sump to head "O" rings & sump threads must be lubricated with food grade silicon based lubricant & installed correctly to get proper sealing.
- Suitable backflow prevention must be installed where required as per local regulations.
- Do not use PVC pipe & fittings directly on the UV outlet at least for 1m length. Use metal or any approved material.
- To avoid UV radiation hazards, never operate UV lamp outside the UV chamber. Exposure of germicidal UV rays to eyes and skin are seriously harmful.
- Since the unit has 230V, electrical supply and unit has water inside, always disconnect power supply before doing any work to avoid risk of fatal electrical shock hazards.
- Power supply to unit MUST be from a dedicated power point rated for correct Amps & to be available within 1m from unit and via isolator, overload & Surge protector (surge protector is supplied with the unit) and through a residual current device (RCD) as per local regulations.
- Power supply & UV chamber must be connected to correct earthing / grounding system.
- Do not use power supply point used for other equipment. Do not use long extension cables or damaged/broken cables/wires to avoid damage to unit and electrical shock hazards. Any damage to Ballast or any part of system due to not following above requirement is NOT covered under warranty.
- **Do not connect the filtration system in water supply network, when dwelling's internal plumbing pipes & fittings are tested with very high pressure for any plumbing leaks.** It will damage the system which is not covered under warranty.

2. DESIGN FEATURES, TECHNICAL DETAILS & DIMENSIONS

Design features:-

- **Ultraviolet (UV) light treatment** is widely recognised & proven method of disinfection of water & has several advantages over other disinfection methods such as chlorination, ozonation etc. **UV light does not add anything to the water** such as undesirable colour, odour, taste or flavour nor does it generate harmful by-products. It adds only energy in the form of ultraviolet radiation. **It is fast, efficient, effective, economical and environment friendly system.**
- **Filter housing** Comply with  NSF/ANSI 42, 58. CSA B483.1 & all applicable requirements & with US  patent.

- **Filter housing** is made from **premium grade & FDA approved** material.
 - **Filter housing is with Double “O” ring design**, rugged **ribs & special threads** for better sealing, higher strength & durability. Comes complete with **pressure release button & spare spanner**.
 - **UV chamber is made of premium grade Stainless Steel material.**
 - Unit is supplied with **Non-Rusting heavy duty REVERSIBLE SS MOUNTING BRACKET**, which allows system to install with incoming water supply **from either right or left side just by turning unit in 180°**.
- 
- Can be fitted with standard **10” & 20” Jumbo filter cartridges**, in respective **10” & 20” Housings**.
 - This UV systems is mainly designed for treating rainwater. System for treating mains water is available with appropriate filter cartridges. Please ask Wallace pumps.
 - Do not use with **microbiologically unsafe water** or with **water of unknown quality** without **adequate treatment & disinfection**. This UV system is intended to use only with **visually clear water and not coloured, cloudy or water with impurities & turbidity**. This UV system is **NOT designed** to convert wastewater to microbiologically safe potable water.
 - **Water quality** to be treated **plays a major role in transmission of germicidal UV rays**. It must be ensured that the **water to be treated does not exceed** following **maximum concentration levels of impurities**.
 - Iron - less than < 0.3mg/L (<0.3ppm)
 - Manganese - less than < 0.05mg/L (<0.05ppm)
 - Hydrogen sulphide - less than < 0.05mg/L (<0.05ppm)
 - Suspended solids - less than < 10mg/L (<10ppm)
 - Turbidity - less than < 0.3mg/L (<1NTU)
 - Hardness - less than < 120mg/L (<120ppm)
 - Due to infrequent use of UV unit or due to not using system for a long period of time, **water coming out of unit may be warm**. This is an integral effect associated with UV systems. In such case **open tap** and **allow warm water to drain off** till normal temp water starts coming out of UV unit. **If system is not going to be used for a while** (e.g. going away for few days or holidays) &/or no one is going to be home, **switch off power supply & Turn off water supply to system**.
 - **2 year warranty for manufacturing defects on unit only & 1 year pro-rata warranty on UV lamp**, subject to correct installation & use as per instructions. Check with Wallace Pumps for full warranty condition. (**filter cartridges & consumable are not covered under warranty**)

Technical details:-

Inlet/Outlet Port Size	1” / 25mm
Max Pressure rating of Filter housing & UV chamber.	125psi / 860kPa.
Max Temperature rating of Filter housing & UV chamber.	4°C to 38°C.
Flow rate 10” jumbo housing only	60 – 70 lpm for 10” Jumbo & 100 -120lpm for 20”Jumbo
Flow rate 20” Jumbo housing only	
Average UV lamp life for both UV55 and UV90 models	10,000 to 13,000 hrs
Flow & UV dose for model UV55	90 lpm @ 16mj/cm2, 56 lpm @ 30mj/cm2 & 45 lpm @ 40mj/cm2.
Flow & UV dose for model UV90	170 lpm @ 16mj/cm2, 90 lpm @ 30mj/cm2 & 70 lpm @ 40mj/cm2.

Note: - Check limitations and ratings of pressure, temperature & flow rate of filter cartridges being used. It may be less than the filter housing as mentioned above.

Details of Filter cartridge & UV lamp supplied with unit for use on Rainwater and recommended for use on Mains water:-

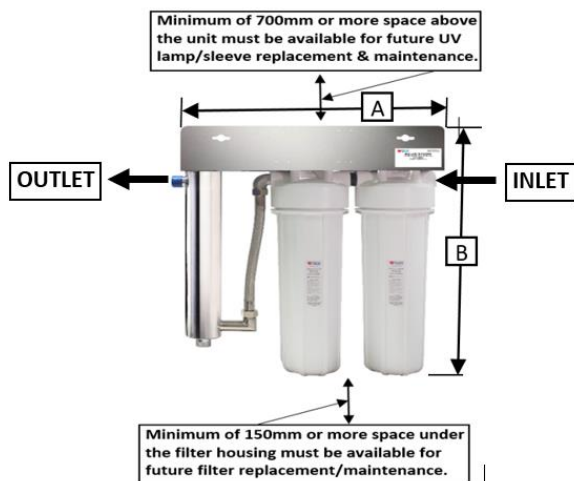
Note below filter cartridges & UV lamp supplied with unit for use to filter rainwater.

Refer details below for filter cartridges & UV lamp recommended in case unit is to use on mains water.

To maintain performance, standards and warranty, use genuine Wallace Filtration cartridge only.

Filter housing + UV model numbers	Cartridge type, UV lamp & model no. supplied for use on rainwater	Cartridge type, UV lamp & model recommended on mains water
TWIN 10" Jumbo + UV "10BTWINUV55" OR "10BTWINUV90"	1 st stage, 10", 20µ Pleated "10BPL20" 2 nd stage, 10", 1µ Poly Spun "10BPP01" "UVLAMP55" OR "UVLAMP90"	1 st stage, 10", 5µ Poly Spun "10BPP05" 2 nd stage, 10", 10µ Carbon "10BCTO" "UVLAMP55" OR "UVLAMP90"
TWIN 20" Jumbo + UV "20BTWINUV90"	1 st stage, 20", 20µ Pleated "20BPL20" 2 nd stage, 20", 1µ Poly Spun "20BPP01" "UVLAMP90"	1 st stage, 20", 5µ Poly Spun "20BPP05" 2 nd stage, 20", 10µ Carbon "20BCTO" "UVLAMP90"

Dimensions:-



Filter Housing + UV Size	A mm	B mm	Depth mm	Weight w/o water kg
TWIN 10" Jumbo + UV55	630	460	205	11.0 kg
TWIN 10" Jumbo + UV90	630	660	205	12.0 kg
TWIN 20" Jumbo + UV90	630	720	205	18.0 kg





PLEASE NOTE

A minimum of 150mm or more space under the unit & 700mm or more space above the unit must be available to facilitate future filter, lamp, sleeve replacement / maintenance.

Please note weight of filter housing will be more when filled with water, than mentioned above.

3. LIST OF ITEMS SUPPLIED & ITEMS TO BE ARRANGED BY INSTALLER / OTHERS.

Following items are supplied in the box. Please check & confirm before starting any installation:-

- 1 X TWIN 10" OR 20" Jumbo housings with UV model (as ordered), installed on REVERSIBLE Stainless Steel bracket. 1 X 20µ Pleated and 1 X 1µ Poly-Spun PP Filter cartridges supplied loose. 20µ Pleated cartridge to be installed as 1st stage filter in the first housing from water supply and 1µ Poly-Spun PP cartridge to be installed as 2nd stage filter in the second housing.
- This unit to be mounted on wall or similar strong surface, by installer / user with appropriate size & type of heavy duty screws/ fasteners (to be arranged by installer/others).
- 1 X Plastic Spanner that may require to install or uninstall filter housing sump to/from filter head.
- 1 X 1" (25mm) BSPf PVC Isolating ball valve + 1 X 1" (25mm) plastic nipple. This Isolating ball valve with nipple **must be installed** on the inlet to TWIN filter housing for isolating water supply, that is required during replacing the filter cartridge &/or during maintenance. 
- Plug-In type surge protector. This **must be installed** in the power supply point & power to Ballast **must be given** via this surge protector. This surge protector is **NOT suitable for outside mounting**. This must be protected from rain, moisture, sunlight. 
- Power supply cord with appropriate plug to supply 230V power from surge protector to Ballast.
- Quartz Sleeve with suitable "O" rings and washers, already inserted in the UV reactor chamber.
- Suitable size & type of spring attached to top gland nut for installing at bottom of quartz sleeve under the UV lamp, as shown here. 
- A Suitable spacer inside the top gland nut. This to go on top of UV sleeve inside the top gland nut for protecting sleeve movement due to water pressure inside chamber. **DO NOT REMOVE THIS SPACER**. This Spacer **MUST** be installed in the Top Gland Nut over the top of sleeve. Any damage to sleeve due to not using this spacer is not covered under warranty. 
- Correct size and type of UV lamp is packed in a separate cardboard tube, in the box.
- High quality Ballast unit mounted on the SS bracket with cable & plug to connect to UV lamp.

Additional items & details (to be arranged by installer / others) that are required for correct installation and operation of the unit:-

- **A suitable pressure limiting valve (generally set for < 500 kPa pressure).** This must be installed on incoming water supply pipe before connecting to inlet of filter housing to **protect filter housing &/or filter cartridge, &/or fittings, taps, plumbing pipes & fittings within the dwelling.**
- **To avoid water damage to property or person, location of installation of this water filter must be such that it has safe natural drain &/or a suitable drain pan plumbed to safe drain must be provided. This requirement is in principal with NZ building code E3/AS2 and G12. Any water damage to property or person is not covered under warranty.**
- **2 X Approx. 800 kPa range water pressure gauges.** These to be installed on **Inlet and outlet of the filter system** to see & record incoming & outgoing pressure. This will help in ensuring that system is not subjected to unsuitable high pressure & also when to replace the filter cartridges.
- **A suitable isolating valve (by installer/user) is recommended to install on the outlet of the unit.**
- **A dedicated 230V, 1Ph Power supply point rated for 10 amps with isolator, overload, residual current device (RCD),** as per local regulations to be made available within **1m distance** from unit. **A surge protector is supplied with package. This MUST be used to give power supply to Ballast.**
- **Good quality PTFE thread seal tape** to connect inlet & outlet piping to the housing. Do not overtighten. **Do not use pipe sealants on joints it will void warranty. Too much tape or over tightening or dropping the product may split / break it, which is not covered under warranty.**
- **Heavy duty screws/fasteners to fix mounting bracket to wall or similar surface.** While selecting screws / fasteners please note **weight of filter/UV housing will be more when filled with water.**
- **Suitable cover to protect filter housings & UV from Rain, Heat, freezing & direct Sunlight.**
- **Correct size & type of back flow prevention device** that may be required to install on the inlet of the filter housing, as per local rules and regulations.
- **Necessary arrangement to be made to avoid Water Hammer.** Water hammer may damage filter housing and / or UV chamber and / or filter cartridge **which is not covered under warranty.**

4. INSTRUCTIONS FOR NEW INSTALLATION

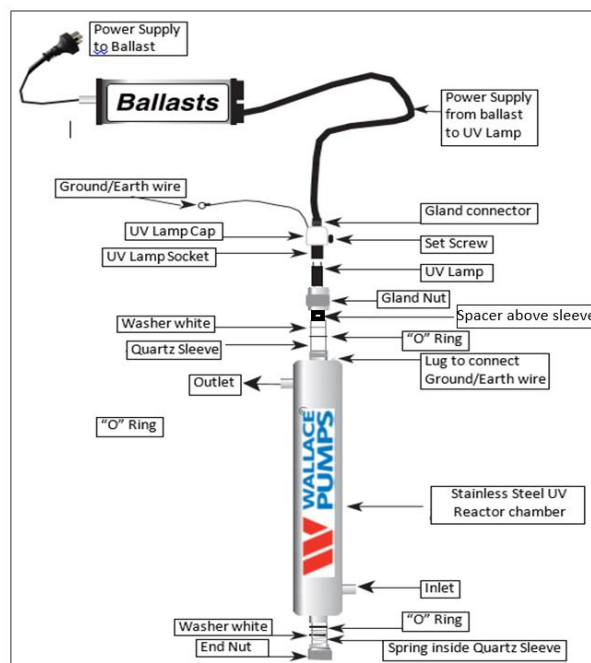
Instructions for installing filter cartridges:-

- Location of installation of filter must have **safe natural drain &/or provide suitable drain pan plumbed to safe drain. This requirement is in principal with NZ building code E3/AS2 and G12. Any water damage to property / person is not covered under warranty.**
- **Remove carefully both filter sumps from the heads of Twin filter housings. 1 X 20µ Pleated and 1 X 1µ Poly-Spun PP Filter cartridges supplied loose in the box. Keep these items in safe place.**
- **Fix the SS bracket of the unit to the wall or similar strong surface with appropriate size & type of heavy duty screws/ fasteners (these to be arranged by installer/others). Please note weight of filter/UV housing will be more when filled with water.**
- **A minimum of 150mm or more space under the unit and a minimum of 700mm or more space above the unit must be available** to facilitate future filter cartridges, UV lamp & sleeve replacement.
- **Before connecting inlet pipe to the filter housing head, ensure that water coming out of the inlet pipe is clean and without any burrs or debris or slag bits of plastic or any other material.**
- **Female threads on Inlet & outlet ports of filter housing are 1" (25mm) tapered threads.** Use suitable approved pipes and fittings to connect to inlet & outlet of the filter housing.
- **Use PTFE thread seal tape only to connect inlet & outlet piping & fittings to the housing. Do not use pipe sealants on joints it will void warranty. Too much tape or over tightening or dropping product may cause it to split / break, which is not covered under warranty.**
- **If using pipe & brazed fittings, allow joint to cool before connecting to the unit.**
- **1 X 1" (25mm) BSP PVC Isolating ball valve + 1 X 1" (25mm) plastic nipple, (supplied with unit) must be installed on the inlet to TWIN filter housing for isolating water supply, that is required during replacing the filter cartridge &/or during maintenance.**
- **Install a suitable isolating valve (to be arranged by installer/user) on the outlet of the unit.**

- **Install suitable pressure limiting valve (generally set to < 500 kPa pressure),** to protect over pressure damage to filter housing &/or filter cartridge, &/or taps & plumbing in the dwelling.
- **Install correct size & type of back flow prevention device** that may be required as per local rules and regulations.
- **Install water pressure gauges (around 800kPa range) on inlet and outlet** of the system. This will help in ensuring that system is not subjected to unsuitable high pressure and also when to replace the filter cartridges.
- **Provide proper pipe supports to all pipes and fittings** connected to **the unit** so that there is **no extra strain or load on the filter housing & UV.** Any damage to filter housing &/or UV due to **non-provision of proper pipe support is not covered under warranty.**
- Ensure that the **filter sump is clean and without any debris.** If necessary **clean the sump with soap and warm water and rinse thoroughly.**
- Check the **lubrication on the sump "O" rings & threads on head & sump.** If necessary **lubricate with food grade silicon based lubricant** before installing sump on the head.
- Remove all packaging from **new filter cartridges, (1 X 20µ Pleated and 1 X 1µ Poly-Spun PP)** supplied with the unit. **20µ Pleated cartridge** need to be installed in the **First Housing as stage 1 filter** and **1µ Poly-Spun PP cartridge** need to be installed in the **Second Housing as stage 2 filter.** **Follow the procedure detailed below for installing these filter cartridges in the housing.** Make a note of **installation date.** This will be handy to know when to replace next filter cartridges.
- **While installing the 2 filter cartridges (20µ Pleated & 1µ Poly-Spun PP)** in the respective filter housing, **ensure that the cartridges is properly seated over spigot in the base of the sump bowl.**
- Hold sump bowl upright while screwing **correctly onto filter housing head.** **Ensure that the spigot in the housing head is located centrally on the cartridge** to make a proper sealing.
- **Hand tight the sump into the housing head** until firm & **ensure no leak. DO NOT OVER TIGHTEN,** it may **damage or split the filter housing head.** Such **damage is not covered under warranty.**
- Open nearest tap on the outlet side of the unit and **allow water to flow for 2 minutes to purge air from system.** Once **steady flow of water starts coming out** shut the tap and stop water.
- Once all pipes, fittings are full of water without any air in system, **check for all joints for any leak.** If any leak is found, **fix the leak before re-using filter system.**
- If water via filter is **not used for more than 2 to 3 days,** flush system for **10 minutes before using the filtered water.** If filter system is **not used for more than 2 to 3 weeks,** it is strongly recommended to **replace the filter cartridge,** to get clean filtered water.

Instructions for installing the UV system including quartz sleeve and UV lamp:-

Refer drawing below of UV system to understand all parts & their position:-



- **Weather protected Power supply point** for the unit **must be available within 1m from unit**. It should be from a **dedicated power point rated for correct Amps** and **via isolator, overload & Surge protector (surge protector is supplied with the unit)** and through a **residual current device (RCD)** as per local regulations.
- To **avoid damage to unit** and any **electrical shock** hazards, **do not use extension cable on power supply** or **damaged / broken cables / wires**. Use of such things will also **void the warranty**.
- **Before handling Quartz sleeve or UV lamp**, use **clean soft gloves or cloth** to hold sleeve or lamp. **Avoid any dirt, marks or stains on sleeve & UV lamp** to avoid restriction of UV rays transmission to water. For **any stains or marks on sleeve & / or UV lamp**, clean with **alcohol based cleaner**.
- **Quartz sleeve with "O" rings & white washers** on both ends of sleeve are **already installed** on the **open end of sleeve which is at top & closed end of sleeve which is at the bottom**.

- **Unscrew gland nut at the top**. You will find a **spring attached to cello tape & a separate spacer**. **Remove these carefully & keep safe**. Remove tape on the nut.



- **Unscrew bottom end nut & ensure that both open & closed end of quartz sleeve are sticking out** of UV chamber with correct & similar length and the **"O" rings and washers are correctly positioned on both end of the sleeve**. If not positioned correctly use fingers to position it correct.



- **Screw back carefully the bottom end nut** back in its place. **Hand tight only**. **Do not use excessive force or spanner** it may damage the quartz sleeve which is not covered under warranty.



- Take the spring removed earlier from top gland nut & was kept e place. **Insert this spring in quartz sleeve from top open end**. Ensure it is correctly sitting at bottom of sleeve.



- **Before screwing back the top nut** ensure that the **small round tube like spacer**, which was kept safe on side is inserted in the top nut. Then **Screw back carefully the top end nut** back in its place. **Hand tight only**. **Do not use excessive force or spanner** it may damage the quartz sleeve which is not covered under warranty.



- **Remove UV lamp carefully**, supplied in the box inside a cardboard tube. Ensure **connecting pins on lamp & UV lamp itself is not damaged** while removing from cardboard tube. Any damage to **UV lamp is not covered under warranty**. Insert carefully **UV lamp** in the **Quartz sleeve** through the **opening on the top nut**. It will rest on the spring at the bottom of the quartz sleeve.



- **Undo the gland nut on the cable** going through the cover dome shape cap. Pull the power cable with socket from inside the dome cap with sufficient length which need to connect to pins on the UV lamp.



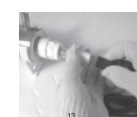
- For **UV55 model**, UV lamp has **4 straight pins** and the Socket is corresponding to suit the pins as shown here.



- For **UV90 model**, UV lamp has **4 staggered / offset pins** and the Socket is corresponding **with guides** to suit the pins as shown here.



- Ensure that there is no moisture on the UV lamp pins and on the socket. **Carefully insert the UV Lamp pins** into the **corresponding socket holes**.



- You may use **Dielectric Non Conductive Grease** as lubricant. **Do not use excessive force or any tool**. It may damage the pins on the UV lamp or the UV lamp itself. **Such damage is not covered under warranty**.



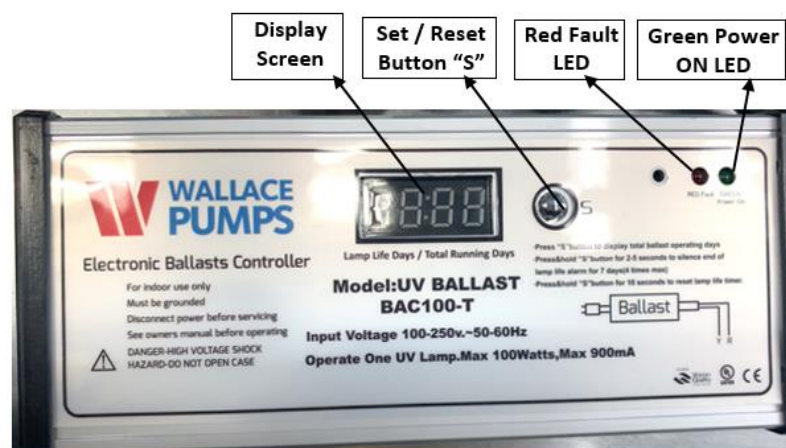
Ref photos here for assembly of lamp pins on socket.

- **Install the cover dome cap on the top gland nut by pushing it fully on it. Then screw the set- screw tightly on the gland nut to secure the dome cap correctly.**
- **Pull out any loose cable inside the dome cap fully out. Do not pull too much otherwise the UV lamp pins may come out from socket. Then screw back the cable gland nut fully tight to avoid any moisture going inside.**
- **Fix the earth wire from power supply cable to the grounding lug provided on top of the UV chamber. Securely fasten it with the nut provided. This earth/ground connection MUST be carried out for safety and to protect from any electrical shock hazards.**



- **Do not connect power supply to UV lamp yet till following steps are carried out to check for any leak in the joints.**
- Before connecting the outlet pipe from the UV outlet to plumbing in the dwelling, **allow water to flow for 2 minutes to purge air from system. Once steady flow of water starts coming stop water.**
- Once all pipes, fittings, filters and UV chamber are full of water without any air in system, **check for all joints for any leak. If any leak is found, fix the leak before commissioning the system.**
- **Once checked and ensured that there is no leak from any joints and water coming out of UV outlet is clean without any dirt, solids and with steady flow without any air, connect the outlet pipe from UV to the plumbing network in the dwelling.**
- **Ensure that the Ballast unit end of power supply cable plug is correctly & fully pushed in the Ballast unit power supply socket. Ensure that the NZ standard 3 Pin plug of Power supply cable is properly pushed into the Surge Protector and surge protector is pushed in the power supply point socket.**
- **Switch ON the power supply to Ballast unit. Green light on the Ballast Unit will lit and power will now be supplied to UV lamp. UV lamp is now powered on & active. Do not open Top or Bottom metal nuts on UV chamber or delivery pipe connection to dwelling's plumbing. This will directly exposure to UV rays. UV rays are harmful to eye, skin and serious injury may happen if exposed.**
- Refer further Ballast setting information & details on the next point.
- If system is not going to be used for more than a day or if going away on holiday or if no one is home, then switched off the power supply and shut the isolating valve on the inlet water supply line to protect the system from damage.
- **UV system is designed for continuous operation. Frequent switching ON/OFF will reduce UV radiation and may damage UV lamp or Ballast and will reduce service life. Such damage is not covered under warranty.**

Ballast Unit Setting Instructions and details:-



When UV system is installed correctly and power supply is given to Ballast controller: - Green LED light will lit. It will keep lit ON when system is operating as normal.

Default screen display shows: - Remaining UV Lamp life days (countdown from 365 to 0 day)

At End of UV Lamp Life after 365 days (when display on screen is "0" days) following will happen: -

- Red LED light will start flashing.
- Buzzer sound continue to sound ON for 1 sec and OFF for 5 sec.

To set differed alarm mode to get 7 days' time to replace UV Lamp with new one: -

- By pressing "S" Set / Reset button for 5 sec the system will go back to differed alarm mode. Display screen will show "7" days. This will give user 7 days to change the UV lamp. This differed mode can be set for max 4 times only. After that the Red LED will keep flashing and buzzer will keep sounding 1 Sec ON and 5 Sec OFF.

For Re-setting Ballast after replacing old UV lamp with new or at any time, follow as below: -

- Press and hold "S" button till display is "rSET". Keep holding "S" button till display reads "365" & you hear an audible tone. Release "S" button. Ballast is now Re-set for next "365" days.

If UV Lamp fails or has any other issue before its life span of 365 days, following will happen: -

- Screen display of remaining Lamp life days will freeze.
- Red LED light will start flashing.
- Buzzer sound continue to sound ON for 1 sec and OFF for 1 sec.
- System will remain in this state till UV lamp is replaced or any other issue is rectified.

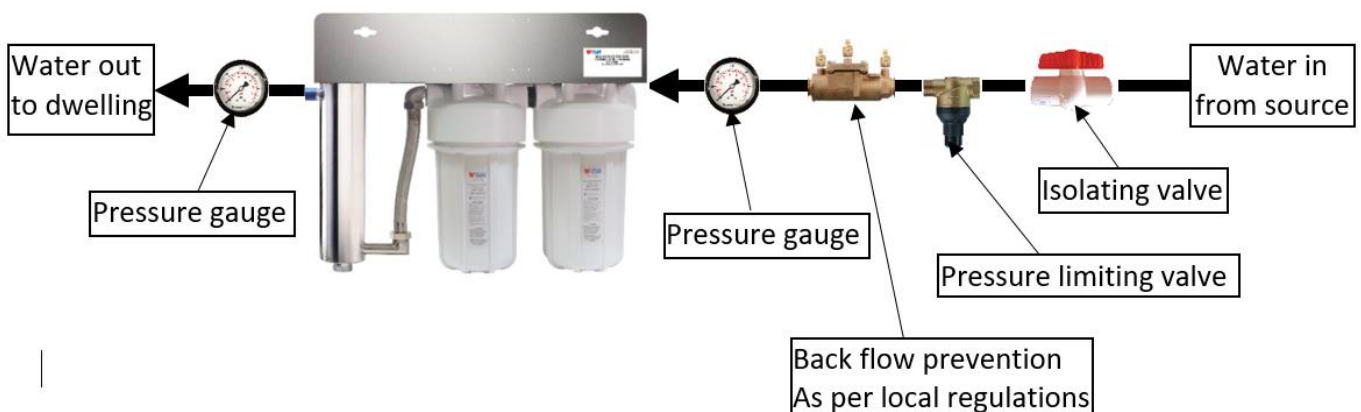
If electronic Ballast unit fails or has any issues within it, following will happen: -

- Screen display will become BLACK SCREEN.

To find out total running days of Ballast Controller (not the remaining UV Lamp life days):-

- Press "S" Set/Reset button for less than 2 sec to see running days of ballast controller.
- Pressing "S" button again or after 10 sec the display will go back to default setting of "Remaining UV Lamp Life days"

Based on above installation instructions the filter + UV system should look as below:-



5. GUIDE FOR FILTER CARTRIDGE & UV LAMP REPLACEMENT

Filter cartridges & UV Lamp supplied with unit for use on Rainwater & recommended for Mains water:-

Note below filter cartridges & UV lamp supplied with unit for use to filter rainwater.

Refer details below for filter cartridges & UV lamp recommended in case unit is to use on mains water.

To maintain performance, standards and warranty, use genuine Wallace Filtration cartridge only.

Filter housing + UV model numbers	Cartridge type, UV lamp & model no. supplied for use on rainwater	Cartridge type, UV lamp & model recommended on mains water
TWIN 10" Jumbo + UV "10BTWINUV55" OR "10BTWINUV90"	1 st stage, 10", 20µ Pleated "10BPL20" 2 nd stage, 10", 1µ Poly Spun "10BPP01" "UVLAMP55" OR "UVLAMP90"	1 st stage, 10", 5µ Poly Spun "10BPP05" 2 nd stage, 10", 10µ Carbon "10BCTO" "UVLAMP55" OR "UVLAMP90"
TWIN 20" Jumbo + UV "20BTWINUV90"	1 st stage, 20", 20µ Pleated "20BPL20" 2 nd stage, 20", 1µ Poly Spun "20BPP01" "UVLAMP90"	1 st stage, 20", 5µ Poly Spun "20BPP05" 2 nd stage, 20", 10µ Carbon "20BCTO" "UVLAMP90"

- **Filter cartridge eventually will get blocked** due to sediment, dirt, silt, fines, rust and organics etc. present in water being filtered. **Blocked Cartridge will also reduce water pressure in house.**
- **Time within which the filter cartridge will get blocked depends on the quality of water, type & percentage of substance present in water and type and size of filter cartridge** being used.
- **Filter cartridge must be replaced, if water pressure in house is reduced &/OR a substantial differential pressure drop is recorded in pressure gauges installed on inlet & outlet of filter housing &/OR within 6 months from date of installation of last new filter, whichever is earlier.**
- To get desired UV treatment, **UV lamp must be replaced within its recommended life of 1 year.**

6. INSTRUCTIONS FOR REPLACING OLD FILTER CARTRIDGE, UV LAMP & QUARTZ SLEEVE.

Instructions for replacing old filter cartridges:-

- **Switch off Power supply** from main power supply point. **Remove 3 Pin plug** of power supply cable from surge protector unit. **Ensure that the 3 pin plug do not get wet with water or any moisture.** Before doing any work, wait for sufficient time for UV lamp and Quartz sleeve to cool down.

From this point follow instructions on Page nos. 5 and 6 to replace old filter cartridges with new one.

Instructions for replacing UV Lamp and/or UV Sleeve:-

- **Switch off Power supply** from main power supply point. **Remove 3 Pin plug** of power supply cable from surge protector unit. **Ensure that the 3 pin plug do not get wet with water or any moisture.** Wait for sufficient time for cool down UV lamp and Quartz sleeve.
- Get **correct size and type of UV Lamp &/or UV sleeve** which is to **replace old one** from the unit.
- **Turn off water supply** going in filter housing **by shutting off isolating valve** installed on filter inlet.
- **Open any tap downstream (outlet side) of UV** and allow **pressurised water to release.** Press **red pressure release button** on the housing to **release any pressure in the housing.**
- **Turn off the Isolating valve** (recommended to install by installer/owner) **on the delivery side** of unit
- **Undo the earth wire of power supply cable** from the **grounding lug on top of the UV chamber.**
- **Undo the cable land nut on top of dome cap. Unscrew the set- screw** on dome cap. While pushing the cable inside remove dome cap from the gland nut exposing the connection between UV lamp pins and socket.



- **Carefully unscrew gland nut at the top and keep it on side.** Be careful there is a **small spacer** inside the gland nut. **Make sure you keep it safe.**



- Carefully remove lamp from the lamp socket by gently pulling it out. Keep the cable with socket and dome cap on side. Ensure **no water or moisture enters the socket holes**. This will **damage the new lamp** which is not covered under warranty.



From this point follow instructions on Page nos. 7, 8 and 9 to replace old UV lamp with new one.

From this point follow instructions below to replace old Quartz Sleeve with new one or to clean the Quartz sleeve periodically.

- **Quartz Sleeve outer surface may get stains, deposits from the water being treated. This outer surface MUST BE CLEAN to get correct UV treatment. Please check every 2 to 3 month and clean or replace the Quartz sleeve to get correct UV treatment of water.**
- After **unscrewing the top gland nut**, you will find Quartz sleeve's top end with "O" ring & white washer on it. Carefully remove the "O" ring and white washer and keep safe. If it is **damaged or distorted** replace with new one.
- Before unscrewing **bottom end nut**. **BE CAREFUL!!! The entire UV reactor chamber will be full of water** and it will come out of the bottom gland nut. Suitable arrangement to be made to collect water coming out of UV reactor chamber and to be put in suitable drain. Water damage to property or person is not covered under warranty.
- **Unscrew bottom nut**. Collect water from chamber and dispose of. Carefully remove "O" ring and white washer at the bottom end of Sleeve and keep safe. If it is **damaged or distorted** replace with new one. Careful Quartz Sleeve may slide out & get damaged
- Carefully remove Quartz Sleeve from the UV reactor chamber. If it is stained or dirty or had deposit, clean with alcohol base cleaner. If damaged replace with new one.
- Remove spring from the Quartz Sleeve. If good re-use or replace with new one.
- After inserting back the cleaned or new Quartz sleeve in reactor chamber ensure that **both open & closed end of quartz sleeve are sticking out of UV chamber with correct & similar length**. Install "O" rings and washers (either old one if good or new one). Ensure that these are **correctly positioned on both end of the sleeve**.



From this point follow instructions on Page nos. 7, 8 and 9 to complete installation of lamp and entire UV system.

7. PROTECTION AGAINST WATER FLOODING & DAMAGE.

- To avoid any water damage to property or person, product must be installed in a location protected from Water Hammer, Rain, Heat, freezing & direct Sunlight. The location of product must have safe natural drain to drain away any water spillage and/or provide suitable drain pan plumbed to safe drain. **This requirement is in principal with NZ building code E3/AS2 and G12.** Water damage to property or person is not covered under warranty.
- Check regularly for any leakage and/or any deterioration of any joints or filter housing or UV system and replace/repair when necessary.

8. CARE AND SERVICING OF YOUR UNIT

Regular Servicing:-

WARNING!!! :- Ensure isolation and disconnection of water supply and power supply to the unit before and whilst carrying out any servicing, repairs or maintenance work on the unit.

For this product to meet its expected lifetime please ensure it is installed by a qualified installer authorised to install the product. Following servicing & maintenance schedule must be followed. A record of “by whom and when” the servicing / maintenance was completed to be kept and that need to be provided to us when asked for.

- a) The **unit must be serviced at regular intervals** by qualified and authorised technician who understands the product’s operation and maintenance.
- b) The **maximum interval between each service should be 6 months or less**
- c) All **record of “what work was done”, “who did it” and “when it was done”** during servicing / maintenance must be kept and provided when asked for.

Following (minimum but not limited to) servicing / maintenance work must be done by qualified person once in 6 months or earlier and records must be kept and provided when asked for.

- **Check and record that unit is installed under cover protecting from Water Hammer, Rain, Heat, freezing & direct Sunlight.**
- **Check and record for water pressure entering the unit and exiting the unit before doing any work.**
- **Check and record any deterioration/leak in any pipe joints, fittings & unit & repair/replace it.**
- **Record type & size of any filter cartridge that is replaced & record incoming & outgoing water pressure after the replacement.**
- **Check that interior of the filter sump is without any sludge or muck & building. Clean with soap and warm water and rinse thoroughly, if necessary.**
- **Check for any damage or breakage to “O” rings/seals over a time and replace it with new one.**
- **Keep record of any part that was changed / replaced and why.**
- **Check for any damage or staining of Quartz Sleeve every 2 to 3 months and clean the sleeve or replace if necessary**
- **Check on Ballast display and record number of days that has lapsed from the date of installation of UV lamp. If Lamp is damaged or not connected replace or fixed the system and keep record.**
- **Ensure that the entire system is installed under weatherproof location and is operating correctly. Any action required to correct the system operation must be carried out and recorded.**

Modifications or Repairs:-

Wallace Pumps does not warrant for any damage to the unit or any other property caused by any un-authorised modifications/repairs in contravention with the Company's instructions or by use of material /fittings not supplied by Wallace Pumps. Where a claim arises, please contact installer for rectification.

9. WARRANTY AND LIMITATIONS

INSTALLER & OWNER OF UNIT, MUST READ BELOW & UNDERSTAND WARRANTY CONDITIONS.

The Installer/owner MUST read details below and make themselves clear that this is the correct product for application. Installer also must make sure that the Owner of this product is well aware of product’s design capacity and limitations and Warranty conditions. Failure to do so will result in the installer being made liable under the current legislation for any future claims resulting due to use of this product.

- This product must be used **mainly for domestic use only & must be within its design capacity.**
- This product **must be protected from Water Hammer, Rain, Heat, freezing & direct Sunlight.**

- **It must be checked regularly for any leakage &/or deterioration & replace when necessary.**
- **To avoid any water damage to property or person, product must be installed in a location with safe natural drain &/or provide suitable drain pan plumbed to safe drain. This requirement is in principal with NZ building code E3/AS2 and G12. Water damage to property or person is not covered under warranty.**
- **If a 230V, 50Hz, 1Ph power supply to unit is supplied it must be **via isolator, overload & surge protector** and through a **residual current device (RCD)** as per local regulations. Children & persons with reduced physical, sensory or mental capabilities, or lack of experience & knowledge, cannot use the product unless they have been given supervision or instructions concerning use of the product by a person responsible for their safety.**
- **In the event of “Water pressure in unit higher than unit’s capability” or “Mechanical failure” or “Power failure” or “Any pipe or valve or fitting leakage/blockage” or “Any Ingress of water / moisture in the electrical/electronic part of unit” or any other reason in addition to ones specified above, there is a chance that the unit may malfunction and/or overflow, which is not covered under warranty. To avoid such overflow & damage to any property or person and for health and safety reasons, all necessary steps outlined in above manual must be followed. Wallace pumps is in no way liable for any damages that may occurred due to flooding and / or malfunction of product.**

Copy of this page signed by installer & Owner and proof of purchase is required to process any warranty claim.

WARRANTY CONDITIONS:-

The purchaser and / or installer must ensure full compliance with all applicable regulations.

Wallace Pumps does not warrant for any damage to the unit or any other property caused by poor quality installation, workmanship or installations in contravention with the Company's instructions, or by failure of materials or fittings not supplied by the Company. The Company does not accept any liability resulting from flooding &/or damage to any property or person due not following instructions specified in this document or from safety breaches. The installer / user must take the necessary steps to guard against such occurrences.

Subject to the above and where the unit has been installed, operated and maintained in accordance with local plumbing and electrical regulations and this instruction manual, especially servicing & records as per clause 8 of this manual, Wallace Pumps warrants the unit for a period of 2 year warranty for manufacturing defects in material only, subject to correct installation & use as per instructions.

Filter cartridges & any consumable are not covered under warranty. Above Warranty is on the basis of return of manufacturing defect unit to our distributor's or service agent's premises, freight paid.

Contact Wallace Pumps for a list of names and addresses of service agents.

For any legitimate warranty claims, Wallace pumps at their discretion reserves rights to either Repair or Replace or Refund for product as full & final settlement of any such warranty claim. Refer Wallace Pump’s full warranty terms & conditions.