

General Operating Guidelines

Thank you for choosing the Garden ResQ Grey Water Diverter. These units are designed and manufactured in South Africa for both the local and export markets. **These units are designed to automatically pump waste water from your bathroom directly onto your garden and lawns as you shower or bath.** This no mess solution removes the need for unsightly and cumbersome diversion hoses sprawling from laundry windows and doors and replaces the hard work of bucketing out your bath and shower water. Unhealthy storage tanks are now also a thing of the past (**GREY WATER CANNOT be stored for more than 24hrs**)

The performance of these units are determined by the way in which they are installed and maintained and it is important that both you and your plumber refer to all sections of this document prior to the installation and operation of the unit.

Mandatory Requirements:

- ALL ELECTRICAL INSTALLATIONS THAT WILL SUPPLY POWER TO THE GARDEN RESQ UNIT MUST BE INSTALLED BY A LICENCED ELECTRICIAN AS PER SOUTH AFRICAN LAW.
- THE GARDEN RESQ UNITS HAVE BEEN FITTED WITH A WATERPROOF 220V PUMP FOR YOUR PERSONAL SAFTEY, HOWEVER FOR ADDED PROTECTION PLEASE ENSURE THE ELECTRICAL OUTLET TO WHICH THE UNIT IS CONNECTED IS ALSO PROTECTED BY AN RCD (RESIDUAL CURRENT DEVICE).
- PLEASE CHECK WITH YOUR LOCAL COUNCIL OR WATER AUTHORITY FOR GREY WATER UTILISATION REQUIREMENTS IN YOUR AREA.
- SOME MUNICIPALITIES HAVE SPECIFIC MINIMUM SET BACK GUIDELINES FOR GREY WATER IRRIGATION. PLEASE OBSERVE THESE QUIDELINES BELOW.
- **GREY WATER MUST NEVER BE STORED FOR LONGER THAN 24 HOURS.** THE GARDEN RESQ UNITS ARE DESIGNED TO EVACUATE ALL BUT APPROX. 20 LITRES OF GREY WATER. THIS IS NORMAL AND PREVENTS THE NEXT BATCH OF HOT WATER TO BE COOLED BEFORE IRRIGATING THE GARDEN

Installation of the Garden ResQ Grey Water Diversion Unit:

- Your licensed plumber will be able to advise on the best location for the unit based on the most appropriate access to your plumbing. The position will also need to be easily accessible to facilitate the cleaning and maintenance of the units filter system.
- Ideally the unit should be placed on a well drained level surface, such as a large paver or single layer of bricks
- An external weatherproof power point will need to be accessible to the unit
- Detailed installation instructions are available on our website as well as in each unit.

Installation of Irrigation:

Your Garden ResQ unit has the facility on the side of the unit to enable the direct connection of a 20mm Polyprop pipe. (black irrigation pipe).

The water output from your Garden ResQ unit will vary depending on the length and height of the irrigation pipes above the unit, including the number of elbow connections connected to the length of irrigation pipe. It will be important to ensure the output volume is equal to or marginally less than the input to ensure minimal grey water is returned to the sewer via the overflow outlet. Please utilise "free flow" type connections/elbows at all times as these do not restrict the water flow.

When considering where to place your PYRAMID SPRINKLER in your garden, Garden ResQ recommends the following set backs are adhered to as these either meet or exceed most authority's requirements.

- 0.5 metres from closed fence boundaries
- 0.5 metres from paths, driveways and carports
- 1.2 metres from open boundaries
- 1.0 metres from buildings
- 6.0 metres from subsoil drains connected to storm water
- 50 metres from bore holes intended for human consumption
- 100 metres from potential public water supplies – dams, rivers etc
- 100 metres from wetlands and other water dependant ecosystems

System Operation:

After installation of both the unit and the connection of your irrigation pipe, you unit should now be ready for fully automated operation.

To ensure all components have been installed and configured correctly please complete the following procedure;

- Turn the Garden ResQ unit on at the power point
- Ensure that all plumbing is securely connected in order to direct the flow of grey water into the unit
- Turn the water on in either the bath or shower once connected to the Garden ResQ device to enable a flow of water into the unit
- Observe the functioning of the float switch. The float switch will trigger the pump when it is above the horizontal position and before any water exits the overflow pipe. The pump is configured to continue operating until the float switch passes the horizontal position and hangs downward. The unit will deactivate when a predetermined amount of water still remains in the unit. This is to allow for very hot water that may enter the unit to cool. Hot water will damage the pump, float switch housing – and your garden
- Congratulations. If the unit operates as indicated above, you are now ready to fully automate the irrigation of your garden with grey water.
- This unit was designed for use with a subsurface irrigation system or the 'pyramid' type garden sprayer. Please do not connect this unit to a micro mist or pop-up type irrigation systems as you may damage the pump. Grey water WILL also block your micro mist sprayers – regardless of what you have been told.

Maintenance:

The Garden ResQ unit requires very little maintenance; however adherence to the following guidelines will ensure trouble free operation.

The only maintainable component of the Garden ResQ unit is the filter, all other components do not require any maintenance.

GardenResQ recommends the following maintenance regime;

- When first installed, check the filter **every third day for the first week**. By checking the filter regularly when first installed you will soon be able to establish the level of debris that collects on the filter brush.
- Thereafter, the filter will need to be cleaned **every 7-10 days**. It can be cleaned by simply removing the filter brush from the basket and hosing it down. The basket debris may be disposed of in your rubbish bin. Please remember that additional houseguests will increase the volume of water through the unit and therefore will also increase the regularity of maintenance.
- In addition to the cleaning of the filters, you will notice a build up of general scale and soap scum on the inside of grey water sump, pump and on the float switch. **On a monthly basis**, the sump area should be cleaned with your fresh water hose and an adjustable sprayer. By spraying a concentrated spay within the unit and sidewalls, all grime will be

removed thanks to the non-stick property of our products. **DO NOT SPRAY A CONCENTRATED WATER JET ON THE PUMP.** This action will force water into the seals and damage the pump electronics. Let the hose run into the unit to flush it. The pump will activate and send this fine debris to your garden. This fine debris will not be noticeable or harm your garden in any way. Should you however not wish this debris to be used in the garden, switch off the power to the unit and let the debris overflow to the sewer. This will take a few minutes but will flush your unit. To assist with the cleaning process, you may put three to four cups of white vinegar into the water for an hour before flushing. Vinegar is an excellent ecological friendly cleaning product that will help sterilise your unit and keep it in pristine condition.

- Garden ResQ also recommends that the general appearance and external components be cleaned on an as needed basis to maximise the general appearance and life of the product.

Trouble Shooting:

Issue	Resolution
Water is not entering the GardenResQ unit	Check the plumbing into the unit. If a diverter valve is connected ensure that is in the correct position to divert water into the unit. If it is and water is not entering the unit, contact your plumber as it is likely that you have a broken pipe.
Water is entering the unit, however the pump is not operating.	Check that the power is on, and that the unit is plugged in. Check the float switch and ensure it is clean and free from debris that may be preventing it from operating effectively. On the Maxi, you may be required to shorten the travel on the float switch. This is done by reducing the float switch cable length travel by one or two centimetres at the securing ties. DO NOT CUT THIS CABLE
The pump is working correctly, however a large volume of water is exiting the unit via the return to sewer outlet	Remove the sprayer/sprinkler connection to your irrigation and allow the water flow freely from the unit or irrigation pipe. If the water flows freely the irrigation pipe may contain blockages and should be checked. Please also ensure that your filter is clean

Unit Technical Specifications

Pump *	Power consumption (Watts)	Approx Flow (l/min) @ 30cm head	Shut Off Head Height
Garden ResQ MAXI	400	180	7.5m
Garden ResQ MAXI PRO	750/900	170	9.0m

Please remember that these heads exclude the irrigation pipe length. i.e water flow is reduced for every metre of 20 mm irrigation pipe used and surface terrain.

Common Sense Use of Grey Water Around The home

- Ensure grey water does not contaminate any source of drinking water. Extreme care must be taken to ensure there is no cross-connection between the grey water reuse system and the drinking water supply
- Direct grey water to sewer during periods of wet weather.
- Do not divert kitchen wastewater - it has a high concentration of contaminants not readily broken down by soil organisms. E.g. Animal fats
- Only utilise grey water from the shower, bath, hand basin and washing machine.
- Never divert grey water that could have gross faecal contamination – for example, water used to launder soiled nappies/diapers.
- Always wash your hands after gardening or handling the Garden ResQ grey water diversion unit
- Do not irrigate vegetable gardens supplying food crops that are eaten raw or undercooked, as this could pose a health risk.
- Never store grey water for longer than 24 hours
- Do not allow grey water to pool or stagnate, as this will attract unwanted insects (e.g. mosquitoes) and rodents, which can transmit disease.
- Never allow grey water to be discharged beyond your property boundaries. This may create environmental and public health risks.
- Never allow grey water to discharge to a storm water drain or waterway, as it may be harmful to aquatic life because of the soaps and detergents.
- Never drink grey water or allow pets, children or animals to drink or have access to it. This is critical for a family with toddlers and small children
- Reduce fertiliser use when irrigating with grey water.