

WaterMate® GWDD

“The Answer for Greywater Reuse”

www.watermate.co.nz

Installation and Operating Instructions



Congratulations, you are now the proud owner of a WaterMate!



INSTALLATION OF PUMP OPERATED WATERMATE GWDD

The WaterMate GWDD is specifically designed for Grey Water (Gray Water) reuse from the laundry, shower, and bath wastewater.

We recommend that you also check with your local Water Authority if an approval must be applied for to install this type of Seasonal Use Grey Water Diversion Device and if there is any restriction as to who is allowed to install this unit.

It is mandatory that the power circuit to the WaterMate GWDD is protected by a residual current circuit breaker, and we highly recommend a surge protection device be fitted as well.

CONNECTING YOUR UNIT

1. Position the unit near your 50mm (2") DWV greywater waste pipe, allowing approx 360 mm (14.2") from ground level to cut in point Inlet **A** and 214mm (8.4") from overflow point **C** If the unit is not preassembled remove the filters and all of the fittings from the unit, taking note of the order of the filters. Water should flow from inlet to outlet through the Black Green Blue Grey filters.
2. Sit the unit on a suitable concrete slab as a stable base making sure that the unit is level and the drain point **M** is accessible. Assemble and fit the drain assembly **M**. Ensure the backing nut is tight. The fitting on the drain has a 25mm (1") thread and plug provided and the outside diameter is suitable for 40mm (1.5") DWV pipe. This should be plumbed back to your waste pipe for ease of cleaning. The plumber can fit an inline valve here for easy flushing.
3. Now assemble the inlet basket **D**. Position the threaded elbow inside the basket to the lowest point with the female thread pointing outward. Fit the bulkhead adaptor **C** through the corresponding hole in the tank **R** into the inlet basket. Make sure it is tight and the gaskets are in place. The elbow should be facing down. Now thread the upper bulkhead adaptor **C** into the female thread diverter valve. Again, make sure it is tight and the gaskets are in place.
4. Fit the overflow stand pipe **E** to corresponding hole in the bottom of inlet basket. Make sure the pipe fits through the basket. It is possible to adjust the overflow level by moving this pipe up or down, but we advise that, the bottom end of the pipe reaches the lowest point of the basket. The inlet and overflow assembly should now be completed.
5. Now assemble the fittings and hose to the pump. First the 32mm (1 1/4") socket and hose barb are fitted to the top of the pump. Use multi grips to tighten the fittings on the pump. You will need warm water to make the hose flexible enough to fit over the barbs. Hands tighten the hose clamp on the pump end. Now fit the outlet barb **O** to the hose. This barb has several steps. Cut off the first section. The 32mm (1 1/4") hose fits the second step. Tighten the hose clamp on this section. The pump is now ready to be placed in the unit.
6. Carefully position the pump into the tank. Place the outlet adaptor **P** through the upper outlet in the tank. Tighten the locking nut. Now fit the level control box to the tank. The SS bracket is designed to fit between the two ribs of the tank wall. This has to be firmly in place. Make sure the probes aren't touching any part of the tank or the pump. The floats must move freely. Also inspect the floats for damage that may have occurred in transit.
7. Starting at the inlet basket end install the WATERMATE filter media in the tank. Starting with BLACK then GREEN. Make sure the filters slide all the way home to fit snug to the bottom of the unit.
8. Now install GREEN and BLUE filters. Again, make sure the filters slide all the way home to fit snug to the bottom of the unit.
9. Now you are ready to install the last two WaterMate filters in order, BLUE then GREY. Make sure all filters are correctly installed. There should be no gaps around any part of the filter. Note: the Grey filter is the largest filter and sits higher than all the other filters.
10. Now install the Stainless Steel anti distortion bracket across the middle lugs of the WaterMate GWDD.
11. Take the electric lead out through cut out in the tank.
12. Assemble the diverting valve **B** insert locator to the diverting valve inlet cover **S**. Now fit this inlet cover to the lid. The locator lugs clip to this assembly to the lid.
13. It is advisable as this point to flush the unit with clean water to check the operation of the pump. This will also ensure that no foreign material enters the drip system and that your unit is operating correctly.
14. Finally fit the WaterMate GWDD tank cover **Q** to the tank and lock it using the two Stainless steel clips provided.
15. The WaterMate GWDD unit can be buried and backfilled with clean loose sand up to the outside lip on the main container. Maximum burying depth is 400mm (15.7"). Make sure the lid is still accessible and that dirt or other material will not enter the unit or interfere with the bypass valve.

Your WaterMate GWDD unit is now ready for operation.

GRAVITY OPERATION OF WATERMATE GWDD UNIT

1. The assembly of the Gravity operated unit is exactly the same as the Pump operated unit. The difference is that the discharge point is now the same as the drain point in the pump system. It is not recommended to bury a gravity system.
2. Because you are not using a pump to produce the head pressure to move the water out of the WaterMate GWDD, it is critical that the location of the Gravity unit is of sufficient height to operate the drip system. Generally 1 metre (40 inch) is the absolute minimum head required. Please refer to manufactures recommendations as this will differ between products.
3. Connect a length of 25mm (1") lilac pipe from the point **M** to your dripper system. Using a larger pipe will mean less friction loss. This is critical for the efficient operation of a gravity system.
4. Fit a bypass tee and two inline vales to this pipe before it connects to the drip system
Both valves are located on the downstream sides of the tee.
By opening one valve and closing the other, this will allow you to flush out any left over sludge after you clean the filters. The drain flush line can be plumbed back to your sewerage system.

TROUBLE SHOOTING

Water does not flow into the unit	Check the diverting valve, reset to correct position.
The unit is full but the pump is not operating	Check if pump is connected to the power source and check if power is available. The pump should automatically start when water reaches the higher float switch. If the pump does not start, clean the top float switch and test again. Make sure neither float is jamming. If it still doesn't operate, then call a licensed service agent.
The pump cannot maintain the rate of Inflowing water.	A correctly designed irrigation system should allow the outflow to be equal to the inflow. Are you using the correct main line and drip tube? And do you have enough drip tube connected. Also check for kinks or blockages in pipe work from unit. If you intend to irrigate sloped area, please consult an irrigation specialist to adjust your irrigation equipment and lay-out accordingly.
The pump section is empty while the water level is high on inlet side	Service and clean the filter media to maintain Flow.
Grey Residual is building up around the pump	Check the filter media, make sure it is seated correctly and that there are no voids under the filter mats which will cause bypass around the filters. Your unit could need servicing.
Offensive odours are released from your unit	Thoroughly clean the unit and the filter media. Make sure No non dissolving substances have entered the unit. IE fats and oil.

WARNINGS AND PRECAUTIONS FOR GREYWATER REUSE

- Do not connect your WaterMate GWDD to your kitchen sink, dishwasher or a toilet system.
- When washing items such as soiled nappies, please switch your diversion valve to divert direct to the sewerage system.
- Do not distribute grey water from your WaterMate GWDD unit via sprinklers or allow for airborne dispersion.
- Only irrigate when necessary and switch unit to divert when raining.
- Do not let diverted greywater to run off to neighbouring properties.
- Do not leave unit unattended when carrying out maintenance or when the cover is removed.
- In case of extended periods of non-operation, it is advised to complete a service and clean of the unit to avoid the possibility of drying out the sludge on the filters.

MAINTENANCE OF YOUR WATERMATE GWDD

Your WaterMate GWDD has been designed for minimum maintenance.

Due to the high flow capabilities of the 3 dimensional WATERMATE filters you should only need to clean your unit after approximately 40,000 litres (10,500 gallons) of flow through.

Depending of the number of occupants and the amount of water flowing through your unit the cleaning cycle will be between 120 — 180 days.

Your WATERMATE filters still will keep working even up to maximum capacity.

Some heavy load situations may require servicing your unit on a more frequent basis.

If you are considering not using your unit for an extended period of time such as a few months. Please carry out a full service and clean before decommissioning.

This will keep your WaterMate GWDD in optimum condition.

When servicing and cleaning your unit please we recommend that you wear protective rubber gloves and avoid skin contact as much as possible.

1. Turn the diverting valve **B** to the bypass position. This will prevent greywater entering the unit.

2. Remove the Stainless Steel clips from the unit. Then remove the lid.
3. You can now access the WATERMATE filter media.
4. For PUMP OPERATED UNITS it is advised to drain the unit via the drain fitting **M**.
5. For GRAVITY OPERATED UNITS you need to open your drain valve on the bypass tee.
6. If you don't have this installed remove the pipe from the bottom fitting **M** and fit a temporary drain away from the unit. Sediment will now be directed away from your irrigation system.
7. Rinse the pump and flow switches (both high and low level flow switches) with clean water. **Caution** Do not spray water onto the Electrical control box.
8. Remove the WATERMATE filter media one at a time taking note of colour order. Black, Green, Blue, Grey.
9. Gently tap the filter on a raised flat surface; this will cause the grey sediment to be displaced.
10. Dispose of waste in compost heap or in a plastic bag in the garbage.
11. Rinse each filter until you are happy that they are clean.
12. Drain or sponge out the remaining residual in the very bottom of the WaterMate GWDD tank.
13. **WARNING: DO NOT PUMP THE GREY RESIDUAL THROUGH YOUR IRRIGATION SYSTEM.**
14. Reinstall the WaterMate filters to the tank in colour order Black, Green, Blue, Grey.
15. For Pump systems close the drain fitting **M** and then reinstall the pump.
16. For Gravity systems turn your drain valve to off and remove your temporary drain and reconnect your irrigation system.
17. Refit the tank cover **Q** and refit the retaining clips to cover.
18. Finally turn diverting valve **B** to operate position allowing the water to be diverted into your unit.
19. Your unit is now serviced and ready for operation.

At this time, it is good practice to service your irrigation system.

Turn on the drain valves at the end of your irrigation lines and remove any sediment that may have accumulated in the pipes. Check for any leaks or damage to the irrigation pipework.

PUMP OPERATION OF YOUR WATERMATE GWDD

The Aqua2use GWDD unit is unique in that it comes with an electronic pump control (EPC). This pump control not only starts and stops the pump via the float level; it also is programmed to override the function of the high float switches at least once per day. This will ensure it will have little or no residual remaining in the unit. The EPC also avoids the use of an external clock which will easily be disrupted by temporary shutdown of electrical supply.

No electrician is required and only one standard 10amp outlet is needed to be connected to operate the unit. All government departments are pushing for low or no residual water in Grey Water (Gray Water) Diverters. Your Aqua2use GWDD meets or exceeds these requirements.

Pump Performance Table:

- Maximum flow of 130 lpm (34 gpm) at 1 metre head. (3-foot head)
- Rated flow of 65 lpm (24gpm) at 5 metres head. (16-foot head)
- Maximum current 1.2amps 240 volt. (2.5amps 115 volt): Cable length 4M (13 feet)
- Warranty is 12 months replacement, on condition that pump is returned to the factory for inspection.
- All pumps have a serial number. This allows for tracking of sales and warranty claims. • Make sure you keep your proof of purchase for any claims that may arise.

To start the WaterMate GWDD

- Direct the diverting valve **B** to allow grey water (gray water) to divert into the unit. •
- Connect the power plug to 240V/50Hz or 115V/60Hz (**pay attention to power specification which indicated in the colour box**) power supply with surge protection.
- Note: This circuit must be protected by a residual circuit breaker and or by a Ground Fault interrupter "GFI" breaker. Your pump should need no further attention other than periodic cleaning along with the WaterMate filter mats.

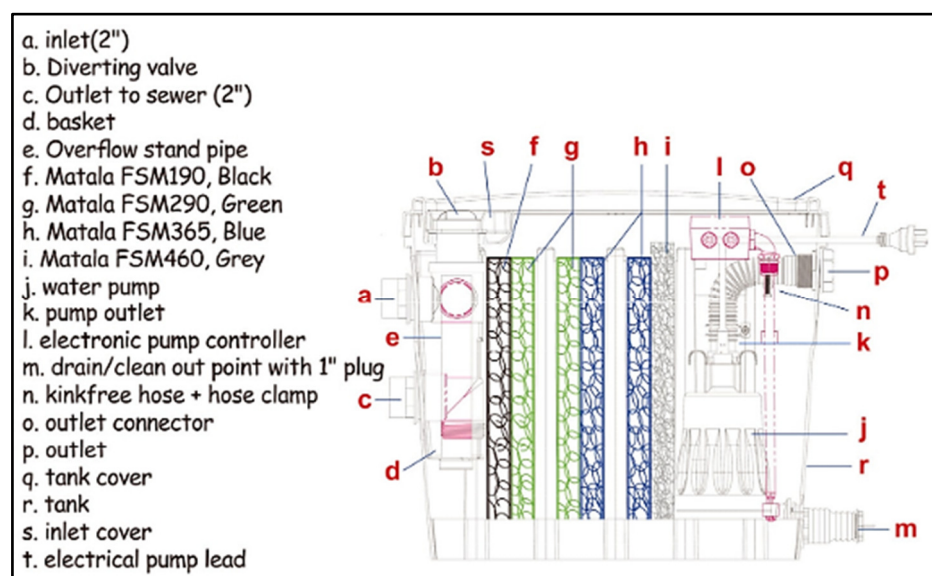
GRAVITY OPERATION OF THE WATERMATE UG-GWDD

To start up the unit:

Direct the diverting valve **B** to allow grey water (gray water) to divert into the unit.

Ensure you have positioned the unit with enough height (head) to operate the irrigation system. Minimum requirements will have to be calculated out on site. Grey water (Gray water) will flow through the filters and out to your distribution system from the outlet **M**.

WaterMate GWDD Components



Warranty

- Allflow Ltd. Warrant this unit for a period of 12 months from the date of purchase.
- On condition that all faulty parts or pump are returned to the manufacturer.
- Parts or pumps will be replaced or repaired upon inspection if deemed to be faulty if inside the warranty period and the fault was not caused by misuse.
- Incorrect installation or operation of your unit is not covered by warranty.
- Damages incurred to persons or property by incorrect operation or installation of your unit is not covered by this warranty.
- Warranty commences from date of purchase please provide proof of purchase with all warranty claims.

MANUFACTURED BY:

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Taiwan

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