

## **Dragonfly M-18**

### **Instructions on maintenance and filter changing procedures**

#### **What needs cleaning and when?**

There are only a couple of areas in which users should monitor to ensure that the Dragonfly is maintained properly to get the maximum life out of the filter cartridges and the Dragonfly unit itself.

Depending on how dusty the environment is in which the Dragonfly is installed, will ultimately determine the frequency of cleaning that is needed of the air filters and collection tank.

It is recommended that a weekly clean of both the collection tank and the air filter is conducted to ensure that dust particles don't make their way into the collection tank and eventually in the filters.

If the area is exceptionally dusty (carpeted areas especially) you may need to increase the number of times you clean the air filter due to the increased dust in the air.

The collection tank will require cleaning on a weekly basis, again, the frequency of cleaning depends on how dusty the environment is and how clean the air filter is kept.

**NOTE: If these cleaning procedures are not maintained, dust will end up in the collection tank and eventually end up in the water filters. This will greatly reduce the lifespan of the cartridges and in turn increase the maintenance costs with more frequent filter changes needed. Filters are rated to last at least 6 months and have lasted over 50% longer when maintenance had been conducted weekly on both the air filter and collection tank.**

**Another side affect of not conducting regular cleaning is that the water may develop a bad smell even stagnant smell and is impossible to remove from the system once developed without conducting a full filter change and a full sterilisation of the machine to remove the odour.**

**Both of these situations can be avoided by conducting cleaning on a weekly basis. Ultimately, if the user wants to get the most out of their filters they need to maintain a weekly cleaning program to ensure that the filter life is not shortened unnecessarily. The replacement of exhausted filters is at the users expense.+-**

#### **How do I clean the air filter and the collection tank?**

**To clean the air filter you need to do the following:**

The air filter is located on the left side of the Dragonfly. Simply grab the handle and slide it out. It can be washed under a tap and rubbed clean with your hands or a soft cloth. Do not

use a scrubbing brush as you may damage the filter. Tap the air filter gently to shake loose most of the water and then place it back into the side of the unit (wet is fine).

**To clean the collection tank you need to do the following:**

(This is easiest if the tank is nearly empty. So dispense all of the water that you may need to consume or chill for the next day to lighten the weight of the tank before you begin this process)

Slide out the collection tank about 10cm, then lift the lid and slide the tank out around 10cm more. Then slightly tilt the collection tank back towards the machine so that the back bottom corner drops out of the front. Then simply manoeuvre the tank under the float and hoses that are attached to the lid (The original user manual suggests that you disconnect all of the hoses and wiring prior to removing the collection tank, however, this method is much easier and quicker).

Tip out this water (do not drink this water as it may not have been filtered) and rinse the container out in the sink, wiping the inside of the container clean to remove the film which may have built up. You should also clean the lid, pipes, float and sensors as they will get a slimy film on them after time.

To put the tank back into the machine you simply do the reverse process.

Slide the tank under the pipes and float and slide the collection tank back into position until it clicks into place. Ensure that you have not accidentally disconnected any of the pipes in the process, if you have simply reconnect them correctly as they will allow water to spill out and may damage the surrounding furnishings.

The Dragonfly will conduct a recirculation every 4 hours of the water through its filters and UV lamp, if there are any disconnected hoses inside the Dragonfly, water will escape out onto your bench or floor and may cause damage to surrounding furnishings if not remedied immediately. As stated in the M18 warranty terms and conditions disclaimer of liability, URWater will not be liable for any damage caused as a result of the use of the machine. So to avoid this situation ever occurring, we ask that you carefully check all of the hose connections whenever conducting cleaning or a filter change.

**If you are planning to go away for a period of time and wish to turn off the Dragonfly you should conduct the following procedure:**

Remove the collection tank as previously described. Also disconnect all of the hoses on the lid of the collection tank. Empty and clean the collection tank as previously described.

The filters are now connected by three more hoses. Disconnect the blue and yellow hoses which come from the back of the machine. Disconnect the red hose which leads up into the UV lamp on the right side of the machine. You then take hold of the grey cradle which the three filters sit in and slide it out at 45 degrees to the left (back towards where the collection tank was). It will be locked in and may just require a firm pull to unlock it. Sometimes it may make it easier to disconnect the pipes if you unlock the cartridge slide first.

The three cartridges should slide easily out of the front of the machine. Leave the maze of pipe work connected to the top of the cartridges and place them into the fridge until you return. This will inhibit the growth of bacteria in your cartridges whilst they are not in use.

**When you return from your time away and wish to start making Pure water from the air, you do the following:**

Take the cradle of filters out of the fridge and slide onto black strip in bottom right corner at 45 degrees. Prior to pushing it back fully, you may find it easier to connect the red, yellow and blue pipes as well as checking the other connectors on the filters to ensure that they are correctly connected. Once you have done that, push it back until it clicks into place. (During this process the collection tank must be removed from the Dragonfly)

Once the filters have been secured, attach the green, red and blue hoses to the lid of the collection tank and also the water level sensor wiring. Then fill the collection tank  $\frac{3}{4}$  full and place back into the machine in the reverse order of when you took it out.

Now with the door of the Dragonfly open turn on the machine with the switch on the back and check that the green LED has come on at the front. On the inside of the door above and to the left of the water level viewing glass, there is an activator switch which is triggered when the door is closed. What you need to do is lift it up with your finger and the Dragonfly should start pumping water back through its filters for around 4 minutes (This may not happen if the collection tank is not at least  $\frac{3}{4}$  full of water or if the pipes in the collection tank are obstructing the floats on the level sensor. If the bottom float is being held down, the Dragonfly will think that the tank is empty). During this time you should be looking inside at the hose connections, looking for water beading or spraying out of any connection. If you see water coming out, simply release the door switch (this will stop the machine from pumping out any more water) and correctly connect the hose, wipe up any water which may have come out so that you don't mistake it for another leak. Then reactivate the door switch again until the pumping stops.

Once this test is complete you can remove the collection tank and empty the tap water out and place it back into the machine and let the Dragonfly make water from the air.

**REPLACING FILTER CARTRIDGES**

Each replacement cartridge set comes complete with a page of easy to follow instructions and 4 chlorine tablets which are used to clean your system prior to changing the cartridges. As detailed previously, remove the collection tank and the cradle of filters from the Dragonfly. For ease of re-assembly, try to disconnect the hoses on top of the filters and lay them out so as to make it easy to replicate when you swap the filters over.

Turn off the Dragonfly at the back of the machine.

Remove the old cartridges and replace with all three of the new cartridges. Reconnect the hoses as follows:

- Cartridge 1 intake is connected to the yellow hose that comes from the back of the machine
- Cartridge 1 outlet is connected to a bridged connection with blue tap on it, to Cartridge 3 intake.
- Cartridge 3 outlet is then connected to Cartridge 2 inlet.
- Cartridge 2 outlet is connected to the red hose which leads up into the UV Lamp on the right side of the machine.

NOTE: The connection of hoses is different on the earlier model machines. The difference is that Cartridge 1 intake and outlet hoses are opposite i.e. water goes into the cartridge in the outlet connection and out of the cartridge from the inlet connection. They have since rectified this confusing configuration on the new/ replacement filters.

If you have a digital camera you may wish to take a couple of pictures so that you can easily refer to them if you are unsure about reconnecting the hoses properly.

Follow the instructions laid out in the Cartridge replacement guide which is included in the replacement cartridge pack. This guide has pictures which make it relatively easy to follow.

### **SOME OTHER TIPS FOR USERS**

To help reduce power consumption, it is best to conduct cleaning at a time when the temperature and humidity are high or if it is used in a business, it is best to conduct cleaning at the end of the working day to allow the Dragonfly to fill up prior to the start of the next day. Early morning and late afternoon are usually the best times to make water from the air (around 3pm is usually the low point in the daily humidity cycle). Doing this will allow the Dragonfly to operate during the optimum water production periods and limit the time needed for the unit to run, thus reducing power consumption.

As part of the water making process, the Dragonfly requires to power a fan and also a compressor. If you require absolute silence in an area, the Dragonfly will not be suited as it will generate a small amount of noise whilst making water. If you require absolute silence to sleep, you can always turn off the Dragonfly at night when you go to bed and turn it back on first thing in the morning. It is not recommended that the machine be left off for longer than 12 hours straight. In this case you would be best to take the water out of the machine first thing each morning to allow the Dragonfly to make water during the day.

If you prefer to drink cold water, we recommend that you take the water out of the Dragonfly at peak water production periods and place the water in the fridge in a covered or sealed container.

To help the Dragonfly make the most amount of water possible each day, it is recommended that fresh air be allowed to circulate in the room in which the Dragonfly is installed (open security window or door). If the room is too small and there is no fresh air, the Dragonfly water production rates will be lowered.

## **FREQUENTLY ASKED QUESTIONS**

### **Why won't water dispense when I press the button?**

#### **POSSIBLE CAUSES OF THIS INCLUDE:**

- Dragonfly is turned off. (Check to see if the green LED on the front is illuminated)
- Collection tank is empty (except for about the last inch. Bottom float is at bottom of sensor rod)

- Plastic piping inside collection tank may be holding down the bottom float and making the Dragonfly think that it is empty.
- You have only just turned the power back on for the Dragonfly and the collection tank is less than  $\frac{3}{4}$  full (Middle float needs to be activated to allow water to be dispensed after being turned on)
- If you have only just turned the Dragonfly back on and the tank is over  $\frac{3}{4}$  full, it will run through a pumping process for around 5 minutes before it will allow you to take water out.
- Door activator switch has not been triggered. This is located on the inside of the door above and to the left of the water level viewing glass. Hold this up to activate switch. This switch will be activated when the door is closed properly. Can be taped up with sticky tape.
- Faulty dispenser module. A simple bypass test by a URWater rep will determine if this is the fault.

### **Why isn't the Dragonfly making any water?**

#### **POSSIBLE CAUSES OF THIS INCLUDE:**

- Dragonfly is turned off. (Check to see if the green LED on the front is illuminated)
- Door has not been closed correctly or door activator switch has not been activated.
- Temperature or humidity levels are too low (This may occur during the winter months)
- The air intake on the left side of the machine is obstructed.
- The exhaust air is being directed back towards the air intake (This can occur if a shelf is located too close to the top of the machine which will direct the dry air back into the air intake on the side)
- The Dragonfly is not in a well ventilated area (Large open rooms or windows or doors open will allow fresh air containing moisture to be captured for water extraction)
- The fan has been running for some time but the air coming out of the top of the machine is still cool and not warm (This could indicate that there is a problem with refrigerant levels in the compressor. Contact URWater)

### **Why is the water dispensing rate slow?**

#### **POSSIBLE CAUSES OF THIS INCLUDE:**

- Your filters could be nearing their expiry date (6 months) Contact URWater to arrange delivery or installation of a replacement filter set.
- If your filters are less than 6 months old, you may have inadvertently shortened their life span by not maintaining a clean collection tank. The Dragonfly draws the drinking water from this tank and any debris or dust that makes its way into it will be removed from the water by the filters, thus reducing the expected life of the cartridges.
- An air lock has been created in the cartridges. To correct this simply open the door and you will see a blue tap at the top of the filters. Turn this tap horizontal and allow air to escape back into the collection tank. Turn the tap back to the vertical position before trying to dispense water. The air lock situation could be caused by a poorly joined connection. **Check the red pipe** that connects to the top of the lid and also the yellow pipe that connects to cartridge 1. If they are not connected properly they

will suck in air and continue to generate air locks. Another connection to check is the red pipe work on the underside of the lid. If this has come loose, the pump will draw air from in the top of the collection tank and not water.

- The blue tap just mentioned, could be in the wrong position. Make sure that it is at 90 degrees to the pipe and not horizontal to the pipe.

**Why does the Dragonfly beep continuously whilst dispensing water?**

**POSSIBLE CAUSES OF THIS INCLUDE:**

- This sound is the alarm which indicates that the UV Lamp is due to be changed. Your UV Lamp could be nearing its 12 month life span and is due for replacement. Contact URWater to arrange for delivery or installation of a replacement Lamp. **NOTE:** Discounts apply for the return or swapping of the exhausted, undamaged, UV Lamp housing.
- The UV Ballast could be faulty if the alarm sounds after only a couple of months (contact URWater for service advice) or
- The starter bulb has blown in the UV lamp (contact URWater for service advice)

**Why can't I close the door fully?**

**POSSIBLE CAUSES OF THIS INCLUDE:**

- The collection tank may not be fully pushed in. Look into the back of the machine to see that the tank is up against the back wall.
- The UV lamp may have dropped out of its housing through transit and will obstruct the top door hinge. To correct this, simply reach in above the filter with your fingers and push the black plastic ring upwards until it locks in. This ring can be seen on the right side above the filter cartridges.
- The piping between the front two filters (which has the blue tap on it) may be obstructing the door from fully closing. You can rotate the filters slightly (making sure that you do not disconnect any pipes) to make more room for the door to close.

**If after conducting troubleshooting as detailed, you are still unable to rectify a fault, please contact URWater on 07 3277 7700 for service advice.**