

## Vol. 19 no.1 Autumn Edition 2019

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#### From the Director:

Our unique-in-the-industry "Lifetime Repair or Replace" Warranty often raises eyebrows and is often met with a degree of scepticism – too good to be true; why aren't others doing it? etc. – so some further explanation is required, and a recent warranty-related incident, which occurred right on Christmas, was the catalyst for this item. First of all it is a non-transferrable, conditional warranty, which applies only to the original owner, and that the unit has not been subjected to physical damage or similarly maltreated. Our "New Millennium" units have electrical registration for "Indoor or Protected Use" and, if mounted outdoors and/or exposed the elements, the warranty is most definitely null and void. By way of illustration, the pics below are an excellent example of what not to do if you wish to retain your warranty.

The first two pics clearly confirm part submersion in very muddy water. Note particularly the "tide mark" on the side of the enclosure in the Pic.2. Closer examination confirmed that the unit has actually been submerged to a level coincident with the three control knobs! The third pic confirms water ingress which has covered the two "hot" 240VAC PUMP and AUX power outlets, and, presumably, the cause of the blow supply fuse. (That is, after all, what the fuse is designed for.)

Suffice to say that this unit was definitely not covered by our warranty, but imbued with the Christmas spirit, we did sharpen our pencil just a tad for the replacement which was very definitely installed well above the high tide mark.





Pic:2

Pic:3

So, if your "*New Millennium*" ioniser is not in a protected or indoor location, we strongly recommend that it be moved indoors as evidence of water ingress will void the warranty. If in doubt, send the unit back and we'll assess it. If satisfied that it is in fact indoors and undamaged, we will reissue the Warranty.

#### **Pool Chemistry:**

I've lost count of the number of times that I've received a call from a customer concerned about the quality of the pool water, and many a time this is accompanied by the opening comment "*the pool shop says*…" Just a reminder that the water chemistry and testing of your pool is a very simple procedure which, with a basic 4 in 1 pool water test kit and a copper test kit, takes around 5 minutes once per week in peak season, and once per month in the off.

### **Offer:**

To encourage you to do your own testing "*in house*" we are offering a good quality 4 in 1 pool water test kit (TA, pH, acid demand, and oxidiser) and a simple copper test kit, for the sum of **\$44.00** *incl. GST*. Even if you have a good rapport with your local, I encourage you to keep your own testing in-house. It really is quite simple.

#### It must be the Ioniser:

By way of example, we recently received an email from a NZ customer who was concerned that her vinyl-lined pool had developed an unusual 'stain' on the bottom (see Pic:4) but, as is so often the case, her email was not supported by any water chemistry test numbers. Zilch. Without them, this makes it virtually impossible to offer anything other than generic advice. So, if you ever have the need to contact us for advice or recommendations, make sure that you have the latest water chemistry numbers close by.

As can be seen, the 'stain' had a characteristic shape and had all the hallmarks of a precipitate settling on the bottom of the pool – not a stain. When her local pool shop was contacted and was told that adding a 3 in 1 metals remover had apparently cleared the unsightly stain - *and that she was running an ioniser* – the response was "It was the ioniser". No ifs buts or maybes. No question about it.

Balderdash. If it *was* the ioniser, the <u>whole of the wetted vinyl liner – every sq. cm</u> - would have been so affected, not just a very distinctive ring on the bottom of the pool, which, coincidentally, just happened to be the shape of the sand bed under the liner. The 'whirlpool effect', a principle so commonly found in centrifugal filtration systems to concentrate suspended solids, was not even considered. The pool shop involved, in The Concourse in Auckland, has since been contacted to please explain the science to support their unequivocal claim, but, at the time of writing, we'd not received a reply. They will be receiving another call shortly. I'd very much like to have a dollar for every time I've heard ionisers being blamed for everything that ails a pool – even loss of water! Bizarre! And the perfect segue to the next item....





#### **Size Really Does Matter:**

With over 2 decades of experience with swimming pool ionisers - both ours and others - I am constantly puzzled as to why some pool owners choose to take water samples to a local pool shop for testing at all, particularly so as most pool shops plead ignorance of ionisers - or are less than welcoming when the owner makes known that they have one. But they're still quite happy to produce a highly detailed computer analysis of a sample, and sell you a armful of chemicals, many of which have no place in a low chemical fresh water pool. But far more importantly, as the dosage rates of chemicals prescribed are directly proportional to the **TRV**\* of water, it really is quite important that

### \* Total Recirculating Volume of water in the pool, pipework, filter, heaters etc.

the actual volume of water is known, and not based on best guesses. Unless the inflow was logged by water meter at the initial or subsequent refills, the chances of getting anywhere near close to the actual volume – *and therefore the correct dosage rates* - are pretty slim indeed, especially so in free form pools with dished bottoms.

For example, some years ago, whilst visiting a pool in NE Victoria, the pool owner was quite adamant that his large rectangular in-ground pool was 220,000 litres. "*No question about it, mate.*" But experience and gut feeling told me that it was a great deal smaller. So, out came the measuring gear which confirmed the volume of the shell was only 175,000 litres. Add to that approximately 2% for the water contained in filters, pipework, solar heating etc, and it still only came to 178,500 litres – or 41,500 litres less than his claim – *and a volume of water greater than many domestic backyard pools*!

And as the dosage rates of prescribed chemicals was based on a pool 41,500 litres greater than actual, the risk of over-dosing was very real indeed. For example, the result of acid dosing to lower the pH a pool thought to be 220,000 Litres doesn't bear thinking about.

### Flowcells:

After a decade or so with our old universal flowcells – and a modicum of dissatisfaction with our supplier - we have decided that it was time for change, and all we had to do was revisit the style of flowcell which was employed on the ionisation project of Fijian resort's pools complex some years ago.

**Pic:5** below clearly shows the two versions of the new design. Both the 40-mm and 50-mm versions share the same bodies, electrodes, spacers, hardware, locking ring, and the all-important clear windows, which allow "anytime" monitoring of both electrodes. We also offer the option of a "built-in" directional flow indicator (not shown this pic.) All items are in stock and ready to go with very little difference in the pricing of the old units.



**Pic:5** *(With the exception of the slip-fit sockets, both are identical.)* 

## **Assessing Electrode Condition:**

And whilst on the subject of assessing the condition of your electrodes, check out **Pic:6** below. The coppery coloured piece with the screw thread exposed is in fact a close-up of what's left of an electrode at the very end of its useful life. If allowed to burn away even further, the risk is that the terminal stud will no longer keep the water seal in place (the round black rubber washer) and it will fall out when you least expect it.

And if it happens to pop out whilst the pump is running – and there's nobody home – Murphy's Law - an awful lot of water under pressure can be pumped through a 6 mm hole in a very short time. Not so much of a problem outdoors, but if your flowcell is indoors, you'll very quickly be calling your insurance company. This is one of the reasons why we stress the importance of inspecting your electrodes regularly.

As a "*Rule of Thumb*" once the electrodes have burnt away to the size of the round rubber seal, call us for another pair, We have plenty in stock. Check yours now!



Pic:6

## **Chlorine:**

If you had any doubts about the inherent dangers of "chlorine" it was recently reported in a popular trade magazine, and in the daily press, that failure to evacuate an indoor pool prior to super-chlorination" subsequent to a "Code Brown Alert" (faeces in the water) resulted in the hospitalisation of 6 people, one of which was a baby which was admitted to intensive care. Fortunately, all survived.

Whilst the use of chlorine to address this situation is standard practice, it is very nasty stuff, and allowing people to remain in close proximity –particularly so in poorly ventilated indoor pools - is not a good idea. Yes, it does have its uses, but this is yet another reason for installing an Aquavic non-chlorine "New Millennium" pool algaecide and sanitising system in your pool. Contact our Head Office or Agents for details.

# And Finally:

With some minor exceptions, the only chemicals that should be anywhere near your ionised pool are: Baking soda, brickie's acid or dry acid, and in season, your oxidiser of choice (which can be low doses of any of the chlorines (except stabilised chlorine)) non-chlorine oxidiser such as Purex Oxy Boost or hydrogen peroxide. Adding salt to establish conductivity is a once-only exercise. An ionised pool does not require regular doses. Leave that for the salt chlorinator people.



The Director.