



SALT CHLORINATOR HINTS

CELL CLEANING

From time to time it will become necessary to clean calcium and other deposits that will form on the chlorinator electrolytic cell plates. Cleaning maintenance of the cells will vary from one pool to the next depending on water conditions and calcium build up rate on the electrodes.

It must be understood that proper maintenance of the electrodes is essential for optimum chlorine production, and longevity of cell life. We recommend that the chlorinator cells be cleaned on a regular and specified maintenance and cleaning program.

Cleaning of the cells is a very easy task. First mix a solution of **one (1) part Hydrochloric Acid to ten (10) parts of water**. You should make sufficient to be able to immerse the cell completely but not the cell head or brass connectors. For safety please remember to add the pool acid to the required amount of water, not the water to the acid. Ensure that your container is deep enough to immerse the entire electrode plates within the solution.

Immerse the cell plates into the pre mixed water/acid solution, where a chemical reaction occurs, causing the liquid in the container to bubble. This is a normal reaction as the calcium deposits are being cleaned from the electrode plates. It should take approximately eight to ten minutes for this process to be completed and the cells should then be cleansed of all deposits. If not, you may repeat the above step one more time, but not more than twice in the one cleaning session.

DO NOT use any brushes, harsh scrubbing and chemical cleaners or attempt to scrape off the deposits as this can damage the electrode special coating and reduce cell life.

After cleaning, rinse the electrode bundle in fresh water. Dry and clean the brass terminal posts and buff them to remove all traces of dirt and build up. Please ensure that the terminals are firmly tightened before reinstalling your cell. Failure to do so may result in the overheating of the cell connectors on both the cell cap and the lead causing damage to your cell.

REMEMBER a clean electrolytic cell will extend the cell life as well as producing maximum chlorine without the necessity of running the power supply at continually higher settings. By keeping your cell in a clean state at all times you are effectively safe guarding your investment and maximizing the cell life of your salt water chlorinator.

CELL LIFE

Chlorinator cells have a normal life expectancy of between 5 and 7 years. Two major factors affecting cell life are the length of daily operating time and the output setting. If a typical chlorinator had its daily operating time reduced by 30% and the output reduced by 30% the life of the cell would be double, however this could cause a pool to go green. To achieve acceptable daily operating times and output settings output requires selection of a big enough chlorinator compared to the pool size. To obtain maximum cell life, and best power supply reliability it is better to up size on the chlorinator rather than to down size due to cost of the chlorinator.

CELL ELECTRICAL CONNECTIONS

The electrical connections to the cell **must never** be reversed otherwise the cell can be damaged. If the electrical connections to the cell are to be removed note the correct connection before removal.

Due to the high current draw of chlorinator cells it is important that the electrical connections to the cell are clean and in good condition. Dirty or poor electrical connection to the cell will result in overheating of the connections and subsequent damage to the cell head. It is recommended that when fitting a replacement cell the electrical connections are replaced with new connectors which are crimped and soldered.

WATER SALT LEVELS

Most chlorinators operate with 0.25% to 0.7% salt in the pool water. A chlorinator cell can operate with greater than 0.7% however care must be taken to ensure the power supply is not overloaded and to adjust the chlorinator output to where the manufactures have recommended it.

POOL WATER pH

One of the most important factors influencing the effectiveness of a chlorinator is the water pH. Ideally pool water should be maintained with a pH of 7.2 to 7.6 to achieve maximum effectiveness of the chlorinator. Operation of all chlorinators slowly increases the pH as the water becomes alkaline. With a pH of 8.0 the chlorinator is only approximately 25% effective compared to its performance at a pH of 7.2. Incorrect pH is the most common cause for pool water quality problems and perceived inability of the chlorinator to maintain good water quality.