

winterize pool by draining water from pump, filter, and all intake and return lines. Remove the cell, clean it and store it indoors.

A winterizing cap (R0621900) can be purchased to replace the cell during winterizing or cell maintenance. This will enable pool pump to circulate water with the cell out of the line.

During prolonged periods when the water will be less than 55°F (13°C), the unit should be turned off and a chlorine floater or erosion feeder should be used by putting a small number of tablets in either of these devices until the water temperature increases. Doing this will lengthen the cell life and provide better performance when water conditions are more optimal.

## Section 7. Troubleshooting

### WARNING

Always turn pump off prior to attempting service or repair. Your pump and filter system is operated under pressure and pressure must be released before you begin to avoid system damage or personal injury. Open the air relief valve on your pool filter to release the pressure in the system.

### 7.1 Problems and Corrective Action

| Problem             | Possible Cause   | Corrective Action  |
|---------------------|--|--|
| Low or no chlorine. | Low stabilizer (cyanuric acid) level in pool water (for outdoor pools only).   | Add stabilizer to maintain 30 - 50 ppm. Follow your pool professional's recommendations and check all local and federal regulations to ensure that the ideal range is suitable for your specific conditions. (see Table 2).  |
|                     | pH not within recommended range.   | Chlorine does not operate as well as a sanitizer if the pH is not within range. This can cause a higher chlorine demand. The ideal range for pH is 7.4 - 7.6 (Use muriatic acid to lower pH and soda ash to raise pH).   |
|                     | Insufficient operating hours of the unit.  | Increase the system operating time per day.  |
|                     | Chlorine output percentage set too low.  | Increase chlorine production by pressing the Output button (see Section 5.4).  |
|                     | Temporary loss of chlorine due to heavy organic load - rain, leaves, fertilizer or heavy bather load. Pets using pool. | Set chlorine production to 100% and set the pump and the cell to run for 24 hours. After 24 hours, recheck chlorine levels. If still too low, super chlorinate with alternate source to achieve Breakpoint Chlorination (BPC). Your local pool dealer can assist with this if you take to them a sample of your water. |
|                     | Low (less than 3,000 ppm) salt level in pool water.  | Use salinity test strips, a TDS/salinity meter, or another reliable method to test the salinity of the pool water. Once the existing salinity has been established, use Table 1 to determine the amount of salt to add to reach the desired level. Maintain a salinity level of 3,000 ppm.                             |
|                     | High nitrate level.  | Contact a pool professional.   |
|                     | Metals present in pool water.  | Contact a pool professional.   |

| Problem  | Possible Cause  | Corrective Action   |
|--|---|---|
|  | New pool water. Not shocked properly upon startup.  | Super chlorinate the pool.  |
|  | Clogged or dirty cell.  | Remove cell for inspection and clean if necessary (see Section 6.3).  |
| <b>Chlorine level too high. (above 7.0 PPM)</b>                                    | Chlorine output percentage set too high.  | Decrease chlorine production rate by pressing the Output button (see Section 5.4)   |
|  | Power pack and cell turned on too long.   | If chlorine output is set at the lowest setting and it consistently provides excessive chlorine levels, decrease operation time as much as necessary.   |
| <b>No display on LCD (screen is blank).</b>  | No power to unit.   | Check the connection to the pump timer (see Section 3.5).<br><br>Check if GFCI tripped.   |
| <b>Display says “No Flow”. Caused by insufficient water flow through the cell.</b> | Caused by insufficient water flow through the cell.<br><br><b>NOTE</b> When the Flow light is on, the chlorine output will be turned off.   | Check and clean the pump and skimmer baskets.   |
|  | Dirty filter.   | Clean the filter.   |
|  | Poor connection between cell and power pack   | Check for secure connection to power pack   |
|  | Closed valves.  | Check and correct all valve alignments.   |
|  | Pump fails to provide sufficient water flow.  | Check for correct operation of the pump.<br><br>Make sure pump is sized properly for required flow rate.  |
| <b>The display says “Lo Tmp/Lo Salt”.</b>  | Salt level is well below 2,500 ppm, depending on water temperature.   | Maintain a salinity level of 3,000 ppm - 3,500 ppm (see Section 4.6 or contact your local pool professional).   |
|  | Calcium buildup in the cell<br><br><b>NOTE</b> Salinity readings are taken after 5 minutes and at regular 5 minute intervals. The Salt warning will turn on when the salt level drops well below 2,500 ppm and it will remain on until the salt level is raised to 3,000 ppm or slightly above. | Clean the Cell  |
|  | Cell life expired.  | Replace the cell.   |
|  | A combination of low water temperature (35°-65°F / 2°-18°C) and lower salt levels (1,500 - 2,000 ppm).  | Check salt level in pool water. If level is between 3,000 - 3,500 ppm, no action is necessary. If salt levels are lower than 2,500 ppm, raise the salinity level to 3,000 - 3,500 ppm (see Section 4.6).<br><br><b>NOTE</b> Salt levels above 4,500 ppm may cause corrosion damage. |
| <b>Salt level too low.</b>   | Not enough salt added to pool.  | Add salt to pool until salinity returns to 3,000 ppm (see Section 4.6).   |
|  | Leak in pool.   | Repair pool.  |

| Problem                                   | Possible Cause   | Corrective Action  |
|---|--|--|
| <b>Salt level too high.</b>               | <p>Too much salt has been added to pool.</p> <p>Metal debris caught between plates or cell plates that may be touching.</p>  | <p>Verify salt levels by testing. Using the most reliable method available i.e. taking sample to pool dealer before taking any dilution action. Backwash or partially drain pool and dilute with fresh water until salinity returns to 3,000 ppm - 3,500 ppm.</p> <p>Remove any debris caught between plates by using a garden hose under moderate pressure. If plates are loose and touching, replace the cell.</p> |
| <b>Strong Chlorine odor.</b>              | <p>Presence of excess chloramines (combined chlorine).</p> <p>Chlorine is an oxidizer, which means that organic waste is being removed from the water into the air. Strong odors are a part of this process. If these odors persist longer than 12 hours, take a water sample to your local pool dealer.</p> | <p>Manually shock the pool (see Section 4.3).</p>  |
| <b>Cloudy water, slimy walls of pool.</b> | <p>Combined algae and bacteria growth.</p>   | <p>Brush down the affected walls and then manually shock the pool (see Section 4.3).</p>   |
| <b>Eye and/or skin irritation.</b>        | <p>Improper water balance.</p>   | <p>Balance the water to recommended levels in Section 4.4.</p>   |
|   | <p>High chloramine levels</p>  | <p>Raise production rate to 100% and run pump for 24 hours.<br/><b>DO NOT SWIM DURING THIS TIME</b></p>  |
| <b>Scale formation on pool equipment.</b> | <p>High calcium hardness.</p> <p>Incorrect pH causing minerals to come out of solution.</p>  | <p>Dilute pool with fresh water. Consult your pool professional regarding use of a sequestering agent.</p> <p>Adjust total alkalinity to 80 - 120 ppm (U.S.) or 100 - 120 (Canada). Then adjust pH to within the range 7.4 - 7.6 (see Section 4.4).</p>  |
|   | <p><b>NOTE</b> To clean the deposit (scale) on the cell, see Section 6.3.</p>  |  |