AWARD POOLS GROUP

OWNERS HANDBOOK & WARRANTY DOCUMENT

CLEAR CARE

A50 / A100

Analogue

Mineral Management System

4000-5000 PPM Salt Level

Table of Contents

SAFETY

FOR YOUR SAFETY AND THE SAFETY OF OTHERS PLEASE READ BEFORE YOU OPERATE THIS CHLORINATOR

Do not operate the chlorinator unless you have read all WARNINGS and INSTRUCTIONS and understand all safety and operational procedures contained in this manual. Ensure that the chlorinator (Power Pack, Plumbing and Cell) has been installed by competent person to the instructions contained in this manual.

The Power Pack is to be installed according to AS/NA 3000:2000 and located outside pool Zone 2 area, not in direct sunlight, or in an area were the ambient temperature can reach above 40 degrees Celsius or directly onto metal fences or metal sheds. If installing on these surfaces make sure a timber backing of 400mm x 250mm x 8mm is between the metal surface and the chlorinator to avoid overheating and damage to internal components.

Servicing should only be attempted by trained Technicians. Dangerous voltages are present inside the chlorinator enclosure. Untrained personnel should not attempt to remove the cover of the power pack. Contact Award Pools for repair.

Keep this manual in a safe, convenient location and refer to it if any doubt exists over operational or safety matters.

SAFETY – TO PREVENT RISK OR INJURY TO YOURSELF AND OTHERS PLEASE OBSERVE THE FOLLOWING SAFETY INSTRUCTIONS.

Understand all safety and operational procedures contained in this manual and check the condition of the chlorinator and cell before use. Again, if in doubt contact your dealer before proceeding. DO NOT attempt to modify the chlorinator or installation in any way.

The chlorinator should not be operated by personnel (E.g. Operating time clock switches, adjusting the time clock, safety cut out, cleaning cells etc.) when the surrounding area is damp. In addition, personnel should not operate the unit with bare feet or wet hands. This will minimise the risk of electrocution in the event of a fault developing either in the chlorinator or the electric power wiring to the unit.

SAFETY – CELL CLEANING USES HYDROCHLORIC ACID. EXTREME CARE IS REQUIRED.

Cell cleaning maybe required. The use of Hydrochloric Acid or Cell Cleaning Solution, which is a highly corrosive chemical that needs to be handled with extreme care. Personnel performing cleaning should be equipped with safety goggles and acid resistant gloves as precaution.

Any spills should be immediately flushed with water. When diluting the acid, *ALWAYS ADD ACID TO WATER. NEVER THE REVERSE*! Doing so may cause a very violent chemical reaction. Take care when immersing the cell in the diluted acid solution or Cell Cleaning Solution to ensure that no acid / Cell Cleaning Solution splashes or spills occur. When finished wash gloves and used containers in water.

Please note that the edges of the cell electrodes can be extremely sharp. Avoid contact when cleaning as lacerations can occur.

SAFETY – IF IN ANY DOUBT ABOUT THE SAFETY OF THE UNIT OR IF THE UNIT MALFUNCTIONS THEN PLEASE FOLLOW THE FOLLOWING SAFETY INSTRUCTIONS.

Turn off the power to the unit at the power point, disconnect the power cord and call for service. Please note that dangerous voltages are always present inside the unit, irrespective of the setting of the front panel controls or time clock.

 SAFETY – STORAGE OF CHEMICALS

NEVER STORE CHLORINE & HYDROCHLORIC ACID IN THE SAME AREA!

They are both very active chemicals and can react, if accidentally mixed, with explosive results.

 SAFETY – ASPECTS TO BE CONSIDERED FOR SERVICING.

Servicing should only be attempted by trained Technicians. Dangerous voltages are present inside the chlorinator enclosure. Untrained personnel should not attempt to remove the cover of the power pack.

Servicing should be carried out with the power switched off and the chlorinator disconnected from the power point. Where it is absolutely necessary to power the unit for service then it shall be powered from the unearthed secondary of a safety isolation transformer or by means of an approved earth leakage detection unit.

The chlorinator is a prescribed item under NSW LAW AND CANNOT BE MODIFIED IN ANY WAY.

As part of servicing, the following safety checks need to be performed on the chlorinator:

- The interior of the unit has not been modified or tempered with in any way.
- There is adequate separation between mains and extra low voltage parts.
- All insulating panels are in place and terminal connections are tight.
- Earth pin of power cord to all external metals parts of the chlorinator to have a resistance value not exceeding 0.1ohm.
- Megger power cord active and neutral at 500 V D.C. to all external metal work and output cell terminals in turn. Resistance value not to be less than 2 meg ohms.
- Visually ensure that all parts of the unit are in good condition.
- Insulation on power cords in good condition and any corrosion on the pins of the power cord plug to be rectified.

Place a sticker on the underside of the unit identifying the company that carried out the service, date of service, safety check carried out and the signature of the service technician that carried out the work.

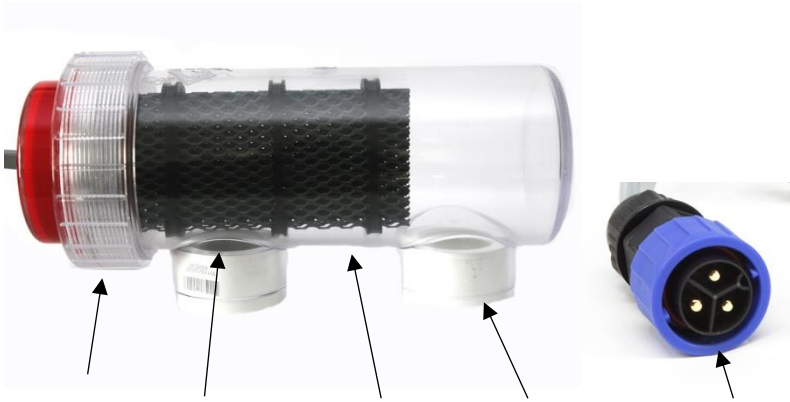
IDENTIFICATION DETAILS

POWER PACK

FRONT OF POWER PACK

BASE OF POWER PACK

CELL & CELL PLUG



Screw Cap Electrode Cell Housing Reducing Bush Cell Plug

LOCATION AND INSTALLATION

To ensure compliance with regulations, safety in operation and long-term reliability please observe the following:

- Unit to be installed by qualified personnel.
- Power Pack to be installed according to AS/NZ 3000:2000 and located outside pool Zone 2 area.
- Warranty is void if unit is installed in direct sunlight or enclosed in a hot area with inadequate ventilation provided around the Power Pack. In locations were ambient temperature can reach above 40°C Degrees are not suitable unless there is very good ventilation. If this is not provided damage to internal components may occur i.e. Triacs.

  THIS DAMAGE WILL NOT COVER BY WARRANTY.
- Protection to be provided from inclement weather.
- Pool Chemicals (i.e. Salt, Acid, Buffer, Chlorine, Stabilizer) are not to be stored in the same enclosed area that the Chlorinator Power Pack is mounted. (i.e. Filter Boxes, Garden Sheds) as the fumes from these products can damage the unit and this is not covered under warranty

1. POOL WATER PREPARATION

a. Measure the pool size in litres to determine salt level requirements.
b. Refer to salt requirements chart (refer page 16). Add 4 kgs. of **refined Pool Salt** per 1000 litres of water in shallow end of pool.
c. Connect vacuum hose and place vacuum head in deepest part of pool and run for 24 hours to dissolve in salt.
d. **THE SALT MUST BE DISSOLVED COMPLETELY BEFORE THE CHLORINATOR IS TURNED ON.**
This should take (24 hours in summer – 72 hours in winter).

2. MOUNTING THE POWER PACK

a. Screw the mounting bracket to wall or post with slots facing upwards, a minimum 1.2 meters off the ground & within 1.5 meters of the power outlet and within 1.5 meters of the filter's return to Pool Line
b. Place back of Power Pack to mounting bracket and slot into place.

NOTE: ***DO NOT MOUNT IN DIRECT SUNLIGHT or DIRECTLY ONTO METAL FENCE OR METAL SHED. IF THIS IS THE ONLY PLACE THEN A PIECE OF TIMBER BOARD 400MM x 250MM x 8MM SHOULD BE MOUNTED TO THE METAL AND THEN MOUNT POWER PACK TO THE TIMBER. FAILURE TO DO THIS WILL VOID WARRANTY OF UNIT.***

3. INSTALLATION OF THE CELL

Determine Filter Return to Pool Line.

a. Cell Housing must be in a horizontal position with inlet and outlet sockets facing downwards as per diagram (refer page 9).
b. Cell must be installed after the heater (where fitted) and Solar Systems (refer page 9). Pool cleaner pump motors that draw water from the return to pool line should be fitted after the Cell for correct pool chlorination.
c. **CAUTION:** It is very important that no gas generated from the Cell can find its way back into the Filter, Pump, Heater, Solar Systems or Spa Blowers.
d. When position of the Cell Housing has been decided, turn off the Pump/Filter and CLOSE OFF VALVES if required.
e. If the Return to pool line is 40mm pipe, use 50-40mm reducing bushes provided. If it is 50mm pipe, glue pipe directly into the inlet & outlet ports on the cell housing.

4. POWER PACK / CELL CONNECTION

a. The Cell is supplied ready to connect to the Power Pack. Under the Power Pack on the right side is the Cell Connection Point. Aline the white arrows on the cell plug and connection point on the Power Pack and push in until the outer blue locking ring "clicks" this will indicate that the cell is plugged in correctly. To test pull on grey cell lead and plug should not come out.

b. To disconnect cell twist outer blue locking ring anti clockwise and pull down at the same time and the cell will disconnect.

NOTE: ***THE UNIT MAY MALFUNCTION AND CAUSE MAJOR DAMAGE IF THE CELL PLUG IS INCORRECTLY PLUGGED IN AND WILL VOID ALL WARRANTY OF CELL & POWER PACK.***

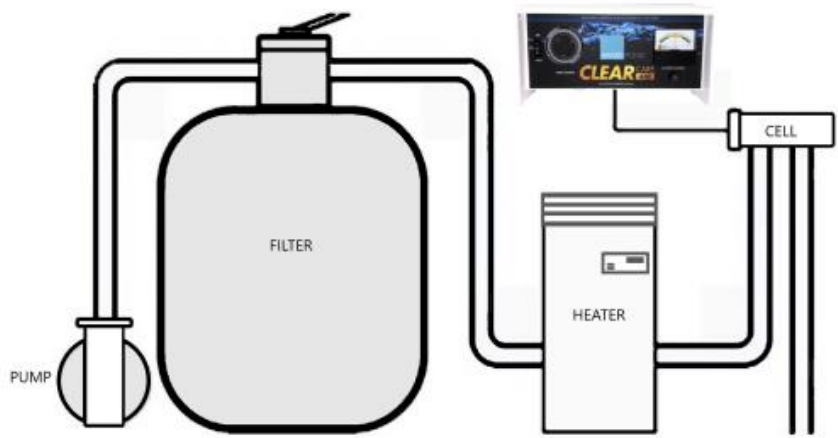
5. PUMP / CHLORINATOR LEAD CONNECTION

a) Insert only one Pump Plug into 3 pin power socket underneath the Power Pack.

b) Make sure Power switch on the unit is in the "OFF" position first then insert Chlorinator Power Lead into a power point.

NOTE: ***THE UNIT HAS A 10 AMP PUMP SOCKET SO DO NOT PLUG MORE THAN ONE PUMP INTO SOCKET. THE USE OF SOLAR CONTROLLERS, POWER BOARDS & DOUBLE ADAPTORS THROUGH THE UNIT MAY DRAW MORE THAN 10 AMPS WITH TWO PUMPS. THIS CAN CAUSE MAJOR DAMAGE TO THE PUMP SOCKET AND WILL NOT BE COVERED BY WARRANTY.***

INSTALLATION DIAGRAM



NOTE: ***WATER MAY FLOW EITHER WAY THROUGH INLET/OUTLET PORTS ON THE CELL HOUSING. (CELL MAY BE REVERSED AS SHOWN IN DIAGRAM). GAS AND ELECTRIC HEATERS REQUIRE CELL INSTALLED MINIMUM OF 1 METRE FROM HEATER OUTLET.***

CHECK LIST BEFORE TURNING ON.

1. Pool Salt must be dissolved. **(minimum 4000ppm)**
2. Allow solvent cement to set before applying pressure (allow 24 hours).
3. Electrode is in Cell Housing with Locking Ring tight.
4. Suction Pool Cleaners are disconnected (For first Start Up only)
5. Skimmer Box & Pump baskets clean
6. Valves reopened.

OPERATION / START UP PROCEDURE

1. Turn on Mains Power supply.
2. Set Time Clock and operating times.
3. Set *Pump Switch* to "On" position.
4. Adjust *Chlorine Level Knob* to normal green sector after starting up pool pump and this has run for 2 minutes by turning control knob clockwise until chlorine monitor/gauge needle reaches the area of the green section. This could be on the right or left of the monitor/gauge depending on which polarity the unit is on.

NOTE: ***DON'T CONTINUE TURNING KNOB SO THAT NEEDLE GOES INTO THE RED SECTION OR THIS WILL CAUSE DAMAGE TO THE UNIT WHICH WILL NOT BE COVERED BY WARRANTY.***

5. Once the unit has been set, switch *Pump Switch* to "Auto" position.
6. Pump and Chlorinator will commence operation when the time-clock setting reaches "ON" positions that have been set on time clock.
   NOTE: You may notice dim blue flashing within the chlorinator during operation at night. This indicates normal operation.

SETTING THE TIMER

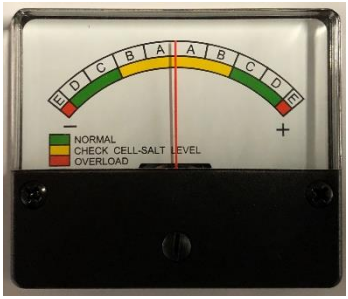
This 24-hour timer controls the Pump / Filter and Chlorinator which is switched ON and OFF by the position of the coloured tappets (White or Yellow depending on age of unit). The chlorinator / pump is ON when the white triangle points to the tappets that have been pushed to the outer perimeter of the time face and OFF when the white triangle points to the tappets that are closer to the numbers on the timer face. Each tappet represents 15 minutes.

The tappets are simply pushed towards the outer perimeter of the timer face to program the desired chlorination time periods. (The white triangle is located at the 2 o'clock position and should be pointing to current time.)

"AUTO" - for normal operation.
"ON" - for continuous running (overrides timer).
"OFF" - Pump / Chlorinator will cease to operate.

NOTE: ***IF UNCLEAR REGARDING SETTING TIMER CONTACT AWARD POOLS.***

UNDERSTANDING THE CHLORINE MONITOR



The Chlorine Monitor presents a visual indication of the chlorine production of your Clear Care Chlorinator. Because this is an Analogue Meter and is connected to the cell wires it gives a TRUE reading of chlorine production. If the Meter is in the Green Sections while on it is producing Chlorine

Allow at least 7 DAYS on your pumping program for the pool and cell to "settle in" before placing reliance on the monitor as certain slow chemical changes take place in the initial salt charging.

This Chlorine Monitor is the "CENTRE ZERO" type. For no output to the cell the needle needs to be in the vertical, CENTRE position. The meter alternates between the (+) and (-) positions for each alternate output cycle indicating the polarity of the cell. The cycle time is around 3 hours and the units monitor will move from one side to the other. The unit produces chlorine on both sides.

When the Chlorine Control knob is turned to maximum (clockwise) the following Needle should be:

3000 ppm	=	B SECTION	SALT LOW NOT RECOMMENED
4000ppm	=	C SECTION	RECOMMENDED POSITON
5000ppm	=	D SECTION	RECOMMENDED POSITON
Above 5000ppm	=	E SECTION	SALT HIGH NOT RECOMMENED

There will be some variance in needle position due to temperature of water and age of the Electrode.

If your Salt level is above 5000ppm and water temperature is above 25' Degrees and the needle is only reaching B section this is an indicator that the Electrode may need to be replaced.

The Award Pools "Clear Care" chlorinator is available in 2 Models to suit the capacity of your pool. This capacity is related to details on the label fixed to the front of the Power Pack.

A50 for pools approximately 50,000 litre Capacity.

A100 for pools approximately 100,000 litre Capacity.

Each level is divided into coloured areas. YELLOW GREEN RED (see colour coding in lower left-hand corner of meter) and the monitor needle position will vary according to the condition of your pool and cell. i.e. Salt Content, Pool Water Temperature position of Chlorine Control Knob and the condition of the cell (age of cell & Cleanliness of Cell) which is an electrolytic generator of chlorine.

The letters A to E, at the top of the scale of the monitor are a further reference relating to the indicator needle position within a coloured sector.

A summary of the above information will be indicated as in the following:

YELLOW -AB
1. Calcium deposit on cell electrodes and or
2. Salt level below 3500 ppm has lowered (page 13 and or
3. Very low pool temperature.

GREEN - CD at 4000ppm – 5000ppm Normal operation

RED - E High output from your chlorinator due to
1. Higher water temperature (heated pool) and or
2. Salt level over 5000 ppm.
3. Running Unit in this Level will cause damage to Transformer, Triacs, and internal wiring and will void warranty.

NOTE*: *THE CHLORINE MONITOR IS FACTORY CALIBRATED AT 25 DEGREES CELSIUS WATER TEMPERATURE. HIGHER TEMPERATURES WILL INCREASE NEEDLE SETTING INTO RED SECTOR.

GENERAL INFORMATION ON WATER CARE

A basic knowledge of pool-care fundamentals will allow some insight in to the function of the various pieces of equipment and chemicals used in and around your pool.

The four fundamental requirements in maintaining a pool or any body of water are:

1. Adequate Filtration
2. Sufficient Chlorination
3. Proper pH control.
4. Chlorine Stabiliser i.e. Isocyanuric Acid (Except Indoor Pools)

FILTRATION

It is necessary to pass water through a filter to remove the debris. A powerful pool pump with normal filter pressures) will pump approximately 10,000 litres an hour. Normal pool practice demands that the entire pool capacity passes through the filter at least one and a half times (1½) per day. This is normally achieved in a six to ten-hour filtration cycle to remove 60% of the debris in the water. The longer the filtration cycle the better the clarity and polish in the water. However, if the pool is not being used i.e. winter Excessive filtration & Chlorination causes excessive chlorine levels. And this causes cell wear and reduces cell life.

CHLORINATION

Chlorine is required to react with the debris, removing stains by oxidation and to sterilize the water of harmful bacteria. Chlorine residual, or reserve, is required depending on bather loading. Normally if 1 ppm of chlorine is introduced, then one and one half (1½) filtration cycles of the pool water will leave the water in a clean clear condition.

Clear Pool water is achieved only with Good Filtration, Chlorination & Correct Water Chemistry i.e. pH balance (7.2 – 7.6).

PH

The acid/alkaline balance of water is measured using the pH scale. PH 14 is alkaline, 0 is acid and 7 is neutral. PH control is the third essential element to good pool care. Within the pH range of 7.0 to 8.0 chlorine will work as a bleach and sterilizer and the precipitates formed will be at their maximum size. A pH above 8.0 is too alkaline and will cause skin rashes and below 7.0 will sting sensitive tissue due to acidity. The pH range for the all Chlorinators is 7.2 to 7.6.

The Langelier Index calculation table (below) can be used to check the water balance of a pool. Readings of pH, water temperature (TF), calcium hardness (HF) and total alkalinity (AF) are needed. These readings are used to obtain the corresponding factor readings from the table (below) and then, to perform the Langelier Index calculation.

For example, if pool water had the following values; pH 7.4, temperature 24°C, calcium hardness 100 ppm, and total alkalinity 200 ppm, then the Langelier Index calculation would be worked out as follows:

Start with pH	+7.4
Add TF	+0.6
Add HF	+1.6
Add AF	+2.3
Subtract (K=12.1)	-12.1
Langelier Index =	0.2

If the result is between -0.2 and +0.2, then the pool water is in balance.
If the result is lower than -0.2, then the pool water is corrosive.
If the result is higher than +0.2, then the pool water is scale-forming

LANGELIER INDEX CALCULATION TABLE					
Pool Water Temperature	Temp Factor	Calcium Hardness	Hardness Factor	Total Alkalinity	Alkalinity Factor
(°C)	(TF)	$CaC0_3$	HF	$C0_3$	AF
0	0.0	5	0.3	5	0.7
3	0.1	25	1.0	25	1.4
8	0.2	50	1.3	50	1.7
12	0.3	75	1.5	75	1.9
15	0.4	100	1.6	100	2.0
19	0.5	150	1.8	150	2.2
24	0.6	200	1.9	200	2.3
29	0.7	300	2.1	300	2.5
34	0.8	400	2.2	400	2.6
40	0.9	800	2.5	800	2.9

The pool water passing over the cell should always be in balance relating to the Langlier Index for a pH of 7.2 to 7.6.

NOTE: CONTINUAL RUNNING OF THE UNIT WITH A PH HIGHER THAN 7.8 AND FREE CHLORINE OF >5.00PPM WILL CASUE CELL DAMAGE AND VOID ALL CELL WARRANTY.

CONCLUSIONS

It follows then that your pool must have an adequate circulation, chlorination and filtration systems and the pH should be in the correct range.
The use of Chlorine Stabilizer (isocyanuric acid) in hot weather is essential to help keep a residual of chlorine in the pool.

If your chemical balance is incorrect or if your Skimmer Box & Pump Baskets are blocked or your variable pump speed is set to low this will cause slow water flow over the cell and cause calcium to build up on your cell. The Chlorinator will turn off (your pump will keep running but there will be NO Chlorination so your pool will go Green & Cloudy. Then please perform the following:

1. Clean the cell – refer page 15.
2. Clean Skimmer Box & Pump Baskets
3. Backwash Pool
4. Adjust Variable Pump Speed to increase water flow
5. Add Lo-Chlor Scale Eliminator.
6. Set the chlorine level control (in the GREEN section)– refer page 12-13.
7. **IF CHLORINE IS LOW AND CHLORINE MONITOR IS IN THE YELLOW SECTION TURN CHLORINE CONTROL KNOB AND MOVE NEEDLE TO GREEN SECTION. DON'T TURN CHLORINE CONTROL KNOB SO CHLORINE MONITOR IS IN RED SECTION IF CHLORINE IS LOW.**

IMPORTANT: To ensure maximum auto-cleaning efficiency you must ensure you operate your equipment as follows:

DO NOT TURN OFF POWER TO THE UNIT.

a) Minimise the frequency of adjustments of the chlorine level.
b) If you need to add chlorine during peak bathing periods or high-water temperatures, use liquid chlorine **ONLY.**

MAINTENANCE

Before performing pool maintenance, vacuuming etc. Ensure *that the timer is not, and will not,* be supplying power to the chlorinator during maintenance period (refer setting of timer – page 10.

1. Turn the *Chlorine Level Control* to minimum – off – position, fully anticlockwise. (Chlorine Monitor should be in Vertical Position when fully turned down)
2. To turn power off to the pump, turn the *Pump Switch* to the "OFF" position.

After completion of maintenance.

1. Turn the Pump Switch from the "OFF" position to the "ON" position run for 2 minutes.
2. Readjust the Chlorine Level Control to normal GREEN Sector
3. Then turn the Pump Switch from "ON" position back to "AUTO" position.
4. The unit is now back to its normal operating mode.

BACKWASHING FILTER

The chlorinator Chlorine Level Control must be turned to the minimum position when backwashing (manually) for long periods or when vacuuming to waste.

POWER PACK

Provided the Power Pack is installed as instructed, no maintenance is required. However, it should be kept clean and inspected regularly for spiders, ants etc.

CELL

All our cells use only the highest quality De Nora electrode material
Manufactured in U.S.A.
At the beginning of each summer and at the end of the swimming season you should remove the Electrode from cell housing and clean if there is any calcium build-up on the plates.

1. If higher than normal calcium levels are present in the pool water, electrodes may require manual cleaning on occasions.

    a) Switch off the filtration and Chlorinator and close valves – leave mains power on.
    b) Unscrew cap in an anti-clockwise direction.
    c) Remove electrode from Cell Housing and soak electrodes in hot water and detergent.
    d) If ineffective, mix one part of Hydrochloric Acid to 15 parts of water. (Add acid to water) or Cell Cleaning Solution. Immerse cell until clean and then remove immediately, don't let cell sit in solution without any calcium on it as minimal time in the solution is best for long cell life. Rinse in fresh water after cleaning before returning to housing.
    e) If you are having to clean your cell more frequently than every 3 months your water balance may not be correct. Your Chlorinator cell life may be reduced from frequent cleaning and is not covered under warranty.
    f) Insert electrode back into Cell housing, ensuring locating lug is at top of cell, and O-ring is in place and tighten screw cap in a clockwise direction
    g) Lubricate "O" ring using only silicon grease if required.
    h) DO NOT USE VASELINE
    i) Open valves turn on filtration and chlorinator.

ADDING SALT

Use only refined pool salt. The Chlorinator is designed to run at 4,000 ppm – lower than 3,500ppm and higher than 5000ppm will cause problems with your chlorinator and may void electrode warranty.

1. **SALT SHOULD NEVER BE ADDED UNLESS A WATER TEST IS PERFORMED**
2. Determine salt requirements.
3. Ensure that the Chlorine Control knob is turned to the minimum – OFF – position fully, anticlockwise.
4. Add salt into the shallow end of the pool.
5. Brush in salt to dissolve.
6. Re-adjust the Chlorine Level Control to normal GREEN Sector.
7. For best results test your pool water weekly. And tested by Pool Shop every 4-6 weeks. You may find that it will require a bag of Salt every 2nd Pool Shop water Test. On average a 50000L Swimming Pool will use 5 to 7, 20kg Bags of Salt in a year.
8. SALT LEVELS OF SWIMMING POOL WATER ARE NORMALLY TESTED WITH A CONDUCTIVEITY METER / SALT METER AND THERE CAN BE VARANCE OF +/- 500PPM WHEN TESTING.

SALT CHART

Parts per million Salt

	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500
5000	2.5	5	7.5	10	12.5	15	17.5	20	22.5	25	27.5
10,000	5	10	15	20	25	30	35	40	45	50	55
15,000	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5
20,000	10	20	30	40	50	60	70	80	90	100	110
25,000	12.5	25	37.5	50	62.5	75	87.5	100	112.5	125	137.5
30,000	15	30	45	60	75	90	105	120	135	150	165
40,000	20	40	60	80	100	120	140	160	180	200	220
45,000	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5
50,000	25	50	75	100	125	150	175	200	225	250	275
*60,000	30	60	90	120	150	180	210	240	**270**	300	330
65,000	32.5	65	97.5	130	162.5	195	227.5	260	292.5	325	357.5
70,000	35	70	105	140	175	210	245	280	315	350	385
75,000	37.5	75	112.5	150	187.5	225	262.5	300	337.5	375	412.5
80,000	40	80	120	160	200	240	280	320	360	400	460

Kilograms of Salt

WARRANTY

For a period of 36 months from the date of purchase the manufacture warrants to the original purchaser that the CLEAR CARE CHLORINATION UNIT shall be free from defects in materials and workmanship. This warranty covers DOMESTIC USE ONLY.

The Cell carries an additional 36 month *pro rata replacement warranty. Commercial installations are for 12 months ONLY on Power Pack and Cell with no pro rata provision on the Cell. The Warranty shall be void if the unit's case or cabinet be opened or altered or modified during this period. If a defect should occur the unit must be returned to **manufacture or place of purchase** and PROOF OF PURCHASE presented.

Purchases sole and exclusively remedy in the event of defect is expressly limited to correction of the defect by adjustment, repair or replacement at the manufacturers' election and sole expense, except there shall be no obligation to repair items which by their nature are expendable. Such items include electrodes and rectifier devices.

The manufacture shall not be liable for loss of profits or benefits, indirect, special, consequential, or other similar damages arising out of any breach of warranty of otherwise.

PLEASE NOTE: ***LABOUR AND OR SERVICE CALLS ARE NOT INCLUDED IN THIS WARRANTY.***
No replacement parts will be supplied prior to the return of any faulty parts. Freight on returns is the responsibility of the purchaser.

If a Warranty claim is lodged for a replacement cell in the first Three years before a cell can be supplied the old cell must be returned to manufacture with a minimum of 8 water tests over a 12-month period with no greater time between tests than 2 months. If this cannot be provided a cell can be purchased at the 37 months pro rata price.

WARRANTIES SHALL BE VOID IF THE FOLLOWING ARE DEEMED TO APPLY OR HAVE NOT BEEN ADHERED TO:

1. Damage Due to freight.
2. No warranty is applicable without proof of purchase.
3. If correct installation is not adhered to as outlined in the installation procedures.
4. Only one pool pump must be plugged into Power Pack.
5. Cell Lead is Plugged in incorrectly. It is the owner's responsibility to ensure correct plugging at the time of installation.
6. Water balance of pool water falls outside the guidelines set out Owner's Manual.
7. Cell shows signs of excessive acid or too strong a concentration of acid is used in washing of the anodes of the cell or incorrect PH and Chlorine Levels.
8. Cell anode electrodes are engulfed in deposits and the owner fails to remove such deposits.
9. The pool size exceeds the rated Cell size or salt levels are less than 3500 p.p.m.
10. Acts of God (i.e. storms, lighting strikes, floods, etc)
11. Damage by foreign objects (i.e. insects, frogs, spiders, etc)
12. The manufacturer reserves the right to refuse a warranty claim if in its opinion the claim cannot be justified.

AT THE TIME OF INSTALATION PLEASE RECORD THE FOLLOWING:

NAME OF PURCHASER: _____

ADDRESS OF INSTALL: _____

DATE OF INSTALL: DAY_____, MONTH_____, YEAR_____

SIZE OF POOL: _____ LITERS

NAME / COMPANY OF INSTALLER: _____

SERVICE – CHECK LIST

Remember

BEFORE PICKING UP THE TELEPHONE

HAVE YOU COMPLETED THE FOLLOWING CHECK LIST?

1. Is my pH correct? **(7.2 – 7.6)**
2. Is my salt level correct? **(4000 – 5000ppm)**
3. Are my electrodes clean (Cell)?
4. Am I running the chlorinator long enough?
5. Have I added stabilizer? **(60 -80ppm)**
6. Have I read my instructions correctly?

Should your Pump Motor fail, or other problems do not allow you to operate your Chlorinator in the normal manner, Sodium Hypo chlorite (liquid chlorine) may be added to keep the pool sterile until the malfunction is corrected.