Presented by:

POOLSCAPE

PREVIOUSLY Sundance Pools

SEA SALT®

THE CLEAR SOLUTION FOR A HEALTHIER POOL

C-SALT OPERATION AND MAINTENANCE MANUAL FOR STANDARD & AUTO SELF CLEANING MODELS

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1. FORWARD

Congratulations on purchasing the new C-Salt pool sanitising system. If operated and maintained in accordance with this manual, your C-Salt system will give you many years of trouble free operation.

We ask you to take some time to read this owners manual and familiarise yourself with its contents. Please contact your dealer should you require any further assistance.

Important: *To ensure equipment longevity, always try to position out of direct sunlight. The installation of this power supply must comply with the electrical and safety requirements of the relevant local authorities.*

Due to our commitment to continuous improvement and development, the manufactures of C-Salt reserve the right to alter performance and / or specifications at any time without prior notice.

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2. SYSTEM DESCRIPTION

The C-Salt system comprises two components...

2.1 The Controller

Usually mounted on a wall or stand adjacent to the filtration system, the controller must always be mounted vertically and at a higher level than the cell.

The controller function indicators are as follows:

2.1.1 Power On (Green light) -
Your C-Salt is receiving power.

2.1.2 Output Select (Rotary switch) -
This is manually adjustable to cater for seasonal differences, varying bather loads, local weather conditions etc. see suggested setting procedure at the end of this manual.

2.1.3 Salt Test (Rotary switch) and salt concentration indicators. Selecting the salt test position will indicate the current salt concentration level. This should always be maintained between 0.5 - 0.7% for best performance.

2.1.4 Cell light - The following conditions will cause the cell light to illuminate under normal operating conditions .

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1. "Output Select" at the "Off" position.

2. If the cell light remains on permanently, check salt level.

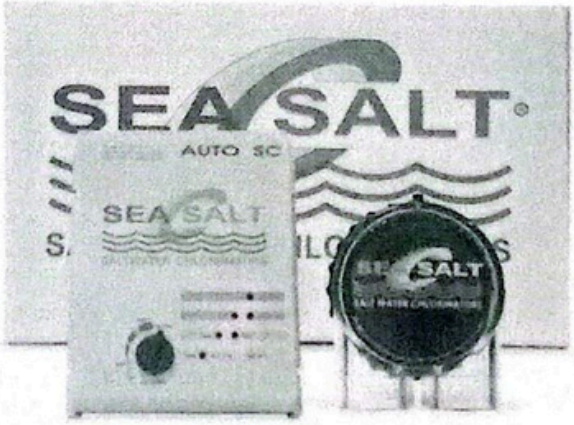
3. The cell cables are disconnected or loose.

4. On self cleaning units the red cell light will remain on for between one and two minutes before reverting to operating function.

If the cell light illuminates under conditions other than described in condition 1 and 2, 3 or 4 contact your dealer.

NOTE : There are no user serviceable components in your C-Salt system. In the event of failure please contact your dealer.





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2.2 The Cell

This is where salt in your pool is converted into chlorine. It must always be installed in the vertical position and be the **last** piece of equipment in the pool return line.

Salt concentration and scale build-up both influence electrode wear and tear. Correct salt levels will help ensure long and trouble free operation. To this end your C-Salt is equipped with an instant salt test function which greatly simplifies the monitoring of salt levels.

NOTE: For accurate readings, ensure that electrode scale build-up is not excessive before performing the salt test function.

NOTE: On self cleaning models no scale build-up should occur.

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3. CELL MAINTENANCE AND CLEANING

The lid / electrode assembly has been designed for easy removal and cleaning. To prevent leaks developing keep mating surfaces free from sand / dirt and ensure 'O' ring and mating surfaces are always well lubricated. Use silicon based grease.

Scale deposits will form in the cell over a period of time, mostly on the cathodes. Some build-up is not detrimental, but excessive build-up, particularly to the extent where the coating bridges the electrode gap,must be avoided. Excessive build-up may damage your cell and will reduce its efficiency, so ensure you clean the electrodes before this condition is reached.

On Standard models:
Cleaning frequency will vary from pool to pool but initially should be monitored on a weekly basis until an acceptable cleaning cycle is arrived at. In fibreglass pools this should usually be once every 2 - 3 months. In gunite / plastered pools usually once every 4-8 weeks.

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3.1 Cell Cleaning Procedure

If there is a build-up of dirt on the exterior of the cell wash this off with some warm soapy water and a soft cloth before servicing the unit.

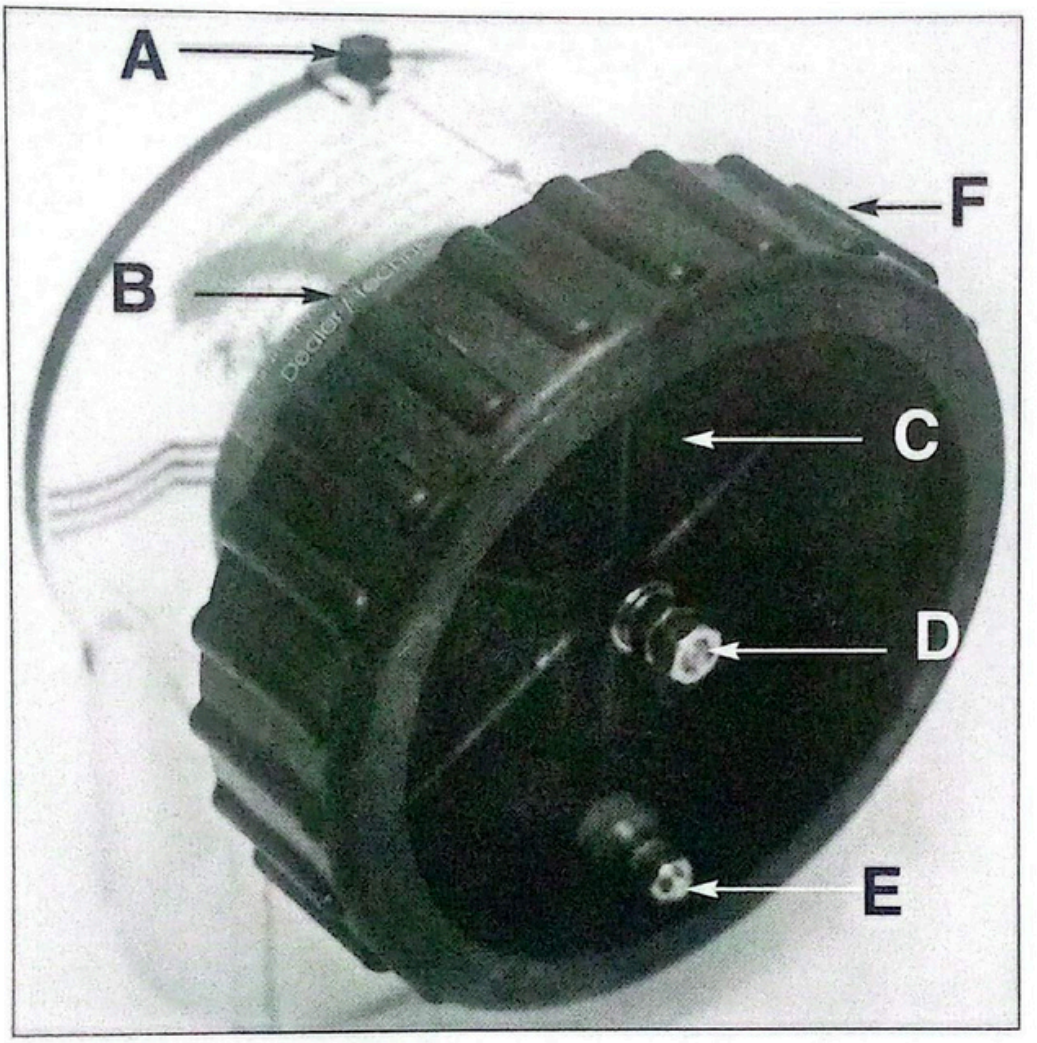
3.1.1 Turn off the pump and controller.

3.1.2 Loosen air bleed valve at the top of the housing and allow cell to drain.

3.1.3 Leave cell cables connected unless it is desired to remove the lid and electrodes to an alternative location for cleaning.

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CELL



A - AIR BLEED VALVE

B - ELECTRODE DISCS

C - LID

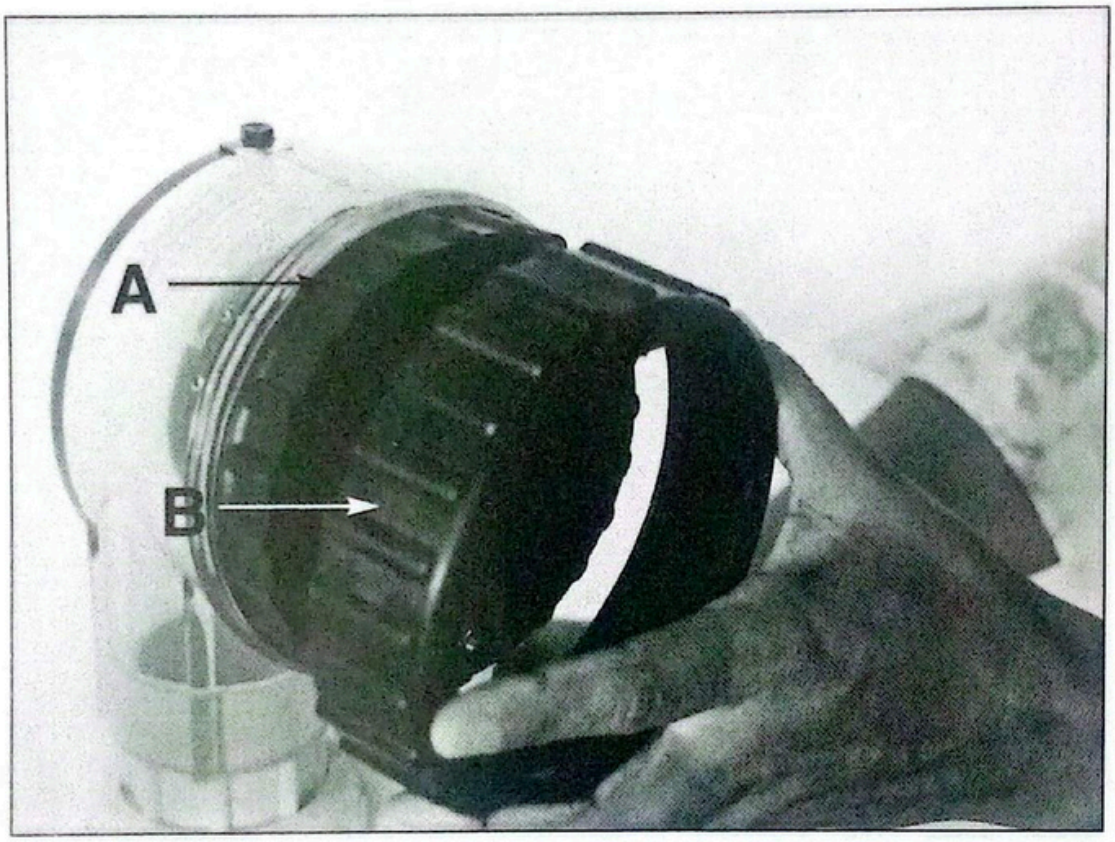
D - POWER CONNECTOR (NEGATIVE)

E - POWER CONNECTOR (POSITIVE)

F - LOCKING RING

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3.1.4 Rotate the locking ring anti-clockwise until mechanism is freed. Carefully break the seal and remove lid/electrode assembly.



A - LID / ELECTRODE ASSEMBLY

B - LOCKING RING

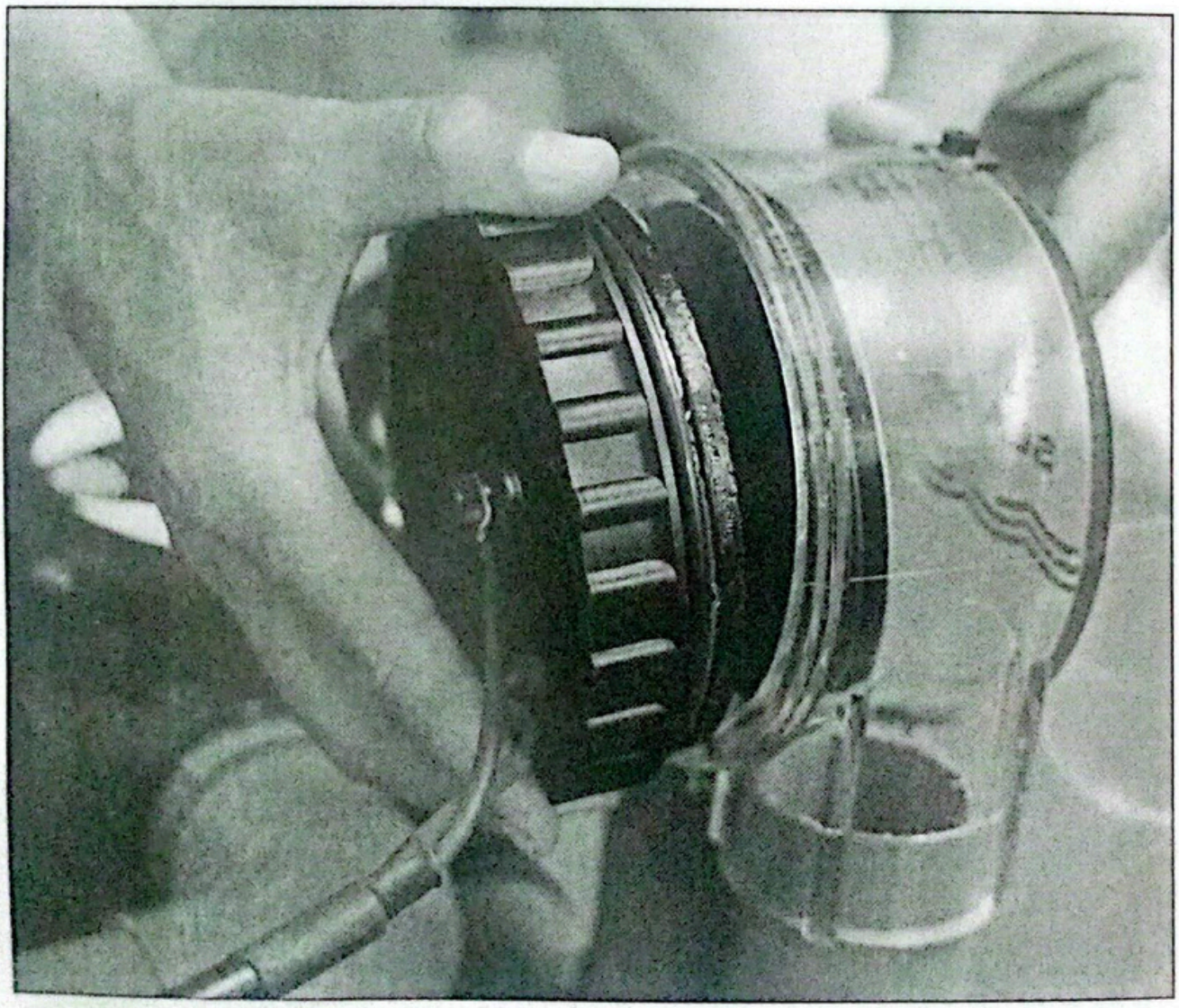
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3.1.5 Tighten air bleed valve. Finger tight is OK, do not use a spanner.

NOTE: The lid sealing ring may exhibit high friction until it is moved fractionally whereafter it will slide away easily. Once you have unscrewed the locking ring (ie. pt 3.1.4 above) carefully prise the lid open at one point only until the seal is 'broken'.

If the seal is too tight, insert a screwdriver or similar into the locating hole at the top of the black cell lid & lever the lid open.

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3.1.6 The recommended cleaning solution is made up using 10 -12 parts water to 1 part pool acid (HCl). Never use a solution strength greater than 10:1. Always add the acid to the water and never the other way round. Stir thoroughly before immersing electrodes.

Immerse the electrode assembly (ensuring that only the electrode discs are submerged) in the solution for 5 -15 minutes until clean. If scale deposits still remain, leave in the solution for longer or mix a fresh solution. Do not strengthen the solution with more acid and never mechanically brush or scrape the electrodes or they may be irreparably damaged.

NOTE: For auto self cleaning models the above procedure should only be necessary once a year to remove body fats, suntan lotion, etc. that may accumulate on the electrode discs. It is also advisable to re-grease the 'O' ring periodically.

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3.1.7 Replacement of the lid is a direct reversal of the removal procedure. Always ensure lid is replaced with the locating hole in line with the arrow on the top of the housing and ensure that the RED and BLACK colour coded connectors are placed in their matching colour coded terminal posts, if they have been removed.

NOTE: Auto self cleaning models have BLACK cell cables and may be connected to either terminal.

Important: *Cleanliness is required when servicing the cell. While the cell is closed the sealing surfaces will usually stay clean and uncontaminated. It is important to prevent contamination whenever the cell is opened, as contaminants can score the inside of the housing causing the seal to leak.*

We recommend that whenever the cell is opened, especially in dirty and dusty conditions, that you take suitable measures to protect the housing from dirt.

Probably the quickest and easiest way to do this is to cover the open end with a piece of Gladwrap or similar.

Before refitting the lid always ensure that the 'O ring' recess and 'O'ring are clean and adequately lubricated. A light smear of silicone paste on the 'O' ring every 2 - 3 months will keep the rubber conditioned

and protected and ensure the integrity of the seal.

Also apply a light smear of silicone paste to the inside of the clear housing where the 'O' ring contacts, before fitting the lid.

If the inside of the housing becomes contaminated, clean as follows:

Gently wipe the inside of the housing with a soft cloth to remove contaminant.

If necessary make up a cleaning solution by filling a mug with hot water and adding a liberal squirt of Sunlight, or other dish-washing liquid. Use an old toothbrush or any soft-brush and thoroughly clean the inside of the housing until all traces of dirt and grease / paste have been removed. Thereafter wipe dry with a clean soft cloth. Whenever the housing has been cleaned and dried, smear a coating of silicone paste around the inside of the housing before fitting the lid.

NOTE: Superficial scratches may be removed from the cell housing by polishing out with 'Silvo' or 'Brasso' .

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4. DETERMINING SALT REQUIREMENTS

4.1 Charging a new pool

Initial amount of salt required

$$Salt\ (kg) = PoolVol(litres) * \frac{0.7}{100}$$

Example: Pool volume = 25 000 litres
Salt requirement is..

$$= 25000 * \frac{0.7}{100} = 175kg$$

4.2 When fitting C-Salt to an existing pool

It is recommended that a water analysis is done prior to adding salt. Ensure the water is correctly balanced before proceeding.

4.3 Correcting the salt level

$$Salt\ (kg) = \frac{Pool\ Vol(l) * (des.\ conc - indconc)}{100}$$

Where: des.conc = desired concentration
indconc = indicated concentration

Example: Salt test function = 0.4 %
Desired concentration 0.7 %
Pool Volume 25 000 litres
Salt required in kg is

$$Salt\ (kg) = \frac{25000 * (0.7 - 0.4)}{100} = 75kg$$

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5. ADDING SALT

Add your desired, calculated, quantity of salt as follows:

Prior to introduction of salt, ensure automatic pool cleaner is disconnected.

Allow approximately 24 hours for salt to dissolve.

Turn the chlorinator on ONLY once salt is dissolved.

Perform the salt test function to verify if the desired concentration level has been achieved.

IMPORTANT: *For gunite pools add salt as per contractor/pool builder recommendations.*

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6. RECOMMENDED FILTRATION CYCLES

All pools:

	Summer	Winter
Early morning - Mid morning	05h00 - 10h00	05h00 - 08h00
Late afternoon - Early evening	14h00 - 19h00	14h00 - 17h00

Filtration cycles may be increased or decreased as required.

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7. INITIAL SETTINGS - ALL POOL SIZES

7.1 Pools 10 000 litre - 40 000 litre Compact Mini up to 5g Cl/hr

Set the output select to High.

7.2 Pools > 45 000 litre < 90 000 litre Model CS - 3 up to 10g Cl/hr

Set the output select to High.

7.3 Pools > 90 000 litre < 135 000 litre Model CS - 5 up to 15g Cl/hr

Set the output select to High.

Adjustment procedure for all pools is as follows:

Monitor your pool Cl levels at the above initial settings for the first week i.e. take Cl readings early in the morning and ensure that the levels are consistently between 0,6 and 1.5ppm during this period.

If you are not maintaining the recommended residual levels at the suggested initial setting, adjust the 'output select' up or down until the required residual levels are being achieved.

NOTE: We prefer to operate C-Salt pools without stabiliser, however, should you find it difficult to achieve adequate sanitising of your pool at the above recommended settings, stabiliser may be required in this instance. Please consult your dealer for further information.

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8. SPECIFICATIONS - ALL MODELS

8.1 Controller

AC supply:	230 VAC / 115 VAC internally selected 50/60 Hz
Supply fuse (230 VAG):	250 VAC 3.15 A delayed action
Output voltage (CS Mini; CS3; CS5):	4 - 7.5 VDC

	Mini	CS-3	CS-5
Continuous AC current at full load:	0.25 A	0.5 A	0.6 A
Output power at full load:	33W	75W	113W
Output current limit:	5A	10A	15A

8.2 Cell

The cell is not designed as a pressure vessel. Usual operating pressure (typical SA pool installation) is 0.1 - 0.2 bar.

NOTE: As the cell must always be installed as the last piece of equipment on the pool return line, no high discharge pressures are expected.

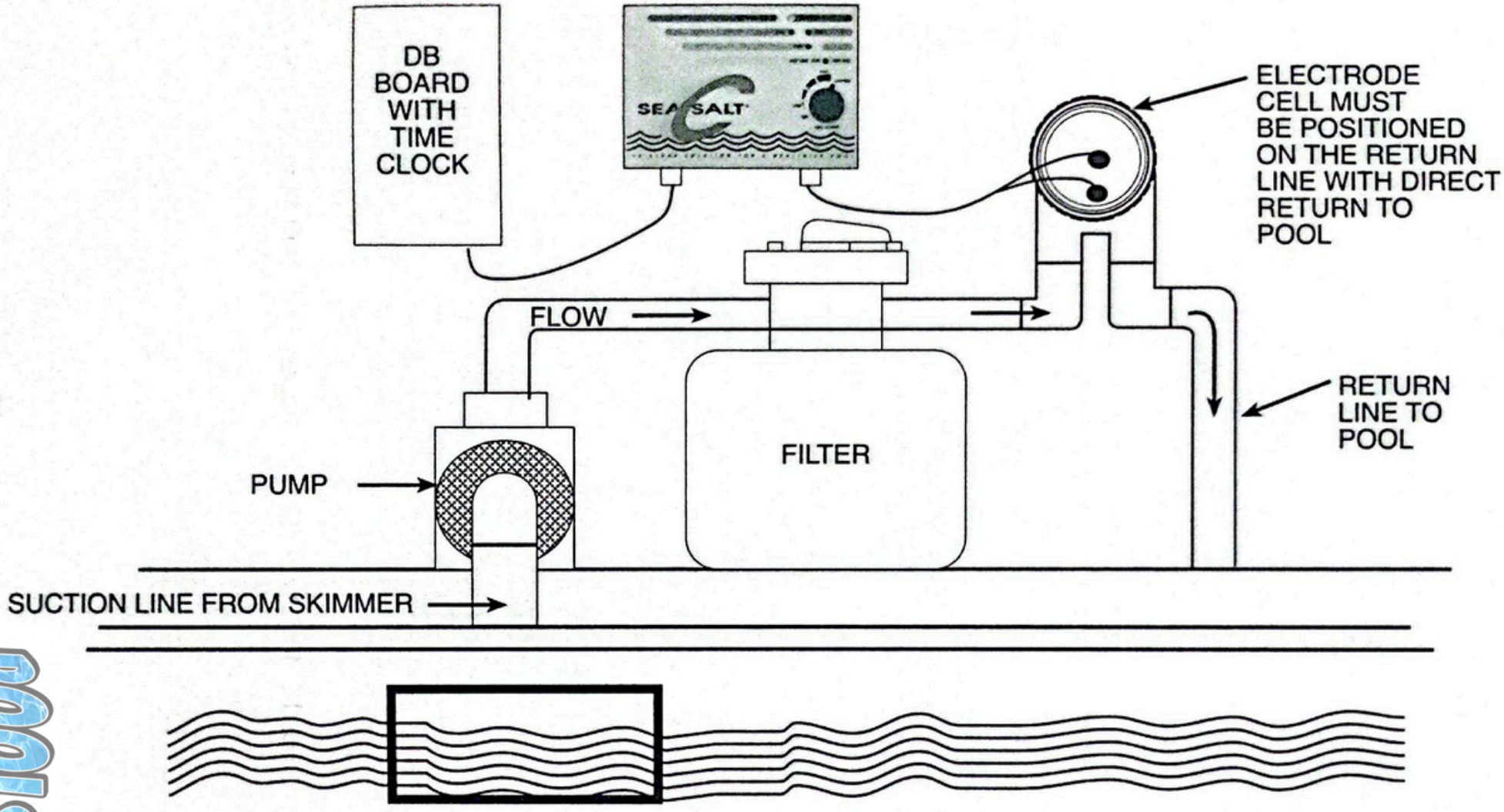
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9. DESIRED WATER BALANCE

	Fibre Glass/ Tiled/ Vinyl	Gunite/ Marble Plaster
Free chlorine residual	0.6 - 1.5ppm	1.0 - 2.0ppm
Combined chlorine	0	0
pH	6.8 - 7.0	7.0 - 7.2
Total Alkalinity	90 - 110	90- 110
Calcium Hardness	per manufacturer	200 - 400
Stabiliser	not usually reqd.	may be reqd.
Salt concentration	0.7 %	0.7 %

NOTE: The chemical ranges listed above are the industry standards for residential pools. Your pool manufacturer may recommend alternative levels. New Pool Technology recommend lower levels of total alkalinity in fibreglass pools for improved pH stability e.g. 50 - 70ppm.

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WARRANTY DETAILS

New Pool Technology cc warrants to the original purchaser of the SEA SALT Power Supply and SEA SALT Cell that if any component (other than those excluded from Warranty) prove to be defective or if faulty workmanship be proven within a period of 12 months from date of purchase, that the defect will be repaired or replaced free of charge.

All units deemed to be defective shall be returned freight or postage paid to New Pool Technology cc or to the authorised Distributor and shall be accompanied by proof of date of purchase. The manufacturer accepts no responsibility other than repair or replacement of defective parts.

This Warranty DOES NOT COVER failure due to accidental damage, abuse, misuse, negligence, damage during freight, non-compliance with installation instructions, installation to a power supply other than specified and Acts of God.

This Warranty also DOES NOT COVER unauthorised alterations or modifications nor to any work performed by unauthorised technicians.

The manufacturer reserves the right to refuse a warranty claim if in its opinion the claim is not justified. If a repair is effected outside the manufacturer's or authorised technician's premises, a normal service fee, travelling time and motor vehicle costs is applicable.

This Warranty applies only to the original purchaser and is not transferable.

WARRANTY IS SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

1. The warranty does not include failure caused by results of accident, negligence, failure to comply with the maintenance instruction, abuse or misuse, water damage to electrical or electronic components, or incorrect installation or connection to a supply other than 230/240 volts.

2. The ELECTROLYTIC cell is specifically excluded from warranty if operated in acidic conditions or salinity levels other than those specified by the manufacturer.

WARRANTY EXCLUSIONS: Fuses, Fuse Wire and Logic Diodes.
Warranty is on Parts and Labour.

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Model: CS - MINI SC

Serial #: NPT 20066

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