#### HYDRO-FORCE FLOWCLEAR CHLORINATOR, MODEL 58215

#### **CHLORINE GENERATOR**

# CONTROLS BACTERIA AND ALGAE In Swimming Pool Waters

#### **DOMESTIC**

A maximum of 27311 L of water can be treated with one Hydro-Force Flowclear Chlorinator. Maximum output of hypochlorous acid equivalent to 0.096 kg of free available chlorine per day.

For swimming pools, a range of 1-3 ppm of free chlorine must be maintained.

READ THE LABEL AND OPERATING MANUAL BEFORE USING
KEEP OUT OF REACH OF CHILDREN
REGISTRATION NO. 30383 PEST CONTROL PRODUCTS ACT

Registrant: Bestway Inflatables & Materials Corp.
NO. 3065 Cao An Road
Jiading, Shanghai, China 201812.

Agent: Bestway Inflatables North America 4-2679 Bristol Circle Winston Business Park Oakville, Ontario Canada L6H 6Z8 1-866-903-3986

**WARNING:** Operating Hydro-Force Flowclear Chlorinator without water flow through the cell can cause a build up of flammable gases which can result in FIRE OR EXPLOSION.

#### REPLACEMENT CELL FOR HYDRO-FORCE FLOWCLEAR CHLORINATOR MODEL 58215

Replacement cell for the chlorine generating device Hydro-Force Flowclear Chlorinator Model 58215. REGISTRATION NUMBER 30383 PEST CONTROL PRODUCTS ACT. This cell must only be used on this model of chlorine generating device.

Read the Label, the Installation Manual and Operation Manual of the chlorine generating device [Hydro-Force Flowclear Chlorinator Model 58215] before using.

Bestway Inflatables & Materials Corp 4-2679 Bristol Circle Winston Business Park Oakville, Ontario L6H 6Z8 Model: #58215

## 110-120V~60Hz, 1.5A

# Hydro-Force Flowclear Chlorinator<sup>TM</sup>

DO NOT RETURN TO YOUR RETAILER.

QUESTIONS, PROBLEMS, MISSING PARTS WITH THIS PRODUCT?

PLEASE CALL OUR AFTERSALES SERVICE DEPARTMENT 8:30AM TO 5:30PM MOUNTAIN STANDARD TIME (GMT-7) MONDAY THROUGH FRIDAY.

PHONE 1-866-903-3986

http://www.bestway-service.com

Email: <u>aftersales@bestway-northamerica.com</u>

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#### CONTROLS BACTERIA AND ALGAE

In

## **Swimming Pool Waters**

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# OWNER'S MANUAL

# Hydro-Force

# Flowclear Chlorinator<sup>TM</sup>

# 110-120V~60HZ, 1.5A

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#### SAFETY INSTRUCTIONS

When installing and using electrical equipment, basic safety precautions should always be followed:

#### IMPORTANT SAFETY INSTRUCTIONS READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

#### WARNING

WARNING: To reduce the risk of injury, do not permit children to operate this device.

WARNING: RISK OF ELECTRIC SHOCK-Connect only a grounding type receptacle protected by a ground-fault circuit-interrupter (GFCI). Contact a qualified electrician if you cannot verify that the receptacle is protected by GFCI.

WARNING: Do not bury the cord. Locate the cord to minimize abuse from lawn mowers, hedge trimmers and other equipment.

WARNING: If the supply cord is damaged, it must be replaced by the manufacturer, a service agent or similarly qualified persons in order to avoid a hazard.

WARNING: To reduce the risk of injury, replace damaged cords immediately.

WARNING: To reduce the risk of electric shock, do not use extension cords to connect the unit to the electric supply; provide a properly located outlet.

WARNING: Assembly and disassembly by adults only.

WARNING: This product shall be more than 2m away from the pool.

WARNING: The plug of this product shall be more than 3.5m away from the pool.

WARNING: Do not plug in or unplug this product while standing in water or when your hands are wet.

WARNING: Do not operate this product when the pool is occupied.

WARNING: Always unplug this product from the electrical outlet before removing, cleaning, servicing or making any adjustment to the product.

WARNING: This product is for use with storable pools only. Do not use with permanently-installed pools. A storable pool is constructed so that it is capable of being readily disassembled for storage and reassembled to its original integrity.

WARNING: This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by persons responsible for their safety. Children should be supervised at all times to ensure that they do not play with the appliance.

WARNING: For your safety, do not store or use gasoline, chemicals or other flammable liquids or vapors near this or any other appliance.

WARNING: It is necessary to have the plug accessible after installation of the appliance.

CAUTION: Do not subject the chlorinator to direct sunlight, water, or freezing conditions or excessively dusty, humid and corrosive environments, chemical fumes must also be avoided.

WARNING: The chlorinator must be installed in an outdoor location. This unit is not intended for indoors use.

CAUTION: For continued protection against possible electric shock this unit is to be mounted to the base in accordance with the installation instructions.

NOTE: Please examine equipment before use. Notify Bestway at the customer service address listed on this manual for any damaged or missing parts at the time of purchase. Verify that the equipment components represent the models that you intended to purchase.

#### SAVE THESE INSTRUCTIONS

#### INTRODUCTION

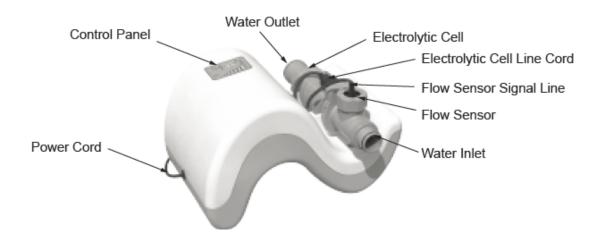
MPORTANT NOTICE: The filter pump attached to the chlorinator can run for a maximum of 8 hrs/day. The chlorinator should not be on when the filter pump is not working.

Common salt (sodium chloride) is made up of two elements, sodium and chloride. During the installation of your chlorinator, a measured quantity of salt is dissolved in the pool water to create a mild saline solution. As part of the daily filtration cycle, the pool water is passed through the chlorinator's electrolytic cell to produce chlorine which is dissolved instantly in the water. In simple, non-technical terms, the chlorine instantly starts to destroy bacteria, algae and oxidized other organic materials.

#### Electrolytic Cell (with Titanium Plates)

The electrolytic cell contains bipolar titanium electrodes which perform the electrolysis and produce chlorine when energized with DC current. Chlorine is generated as pool water containing salt passes through the cell. The chlorine production can be varied by changing the number of hours the chlorinator is on each day. The chlorinator automatically reverses the cell electrode titanium plates every twenty hours to clean the cell. This process does not interrupt the chlorine production.

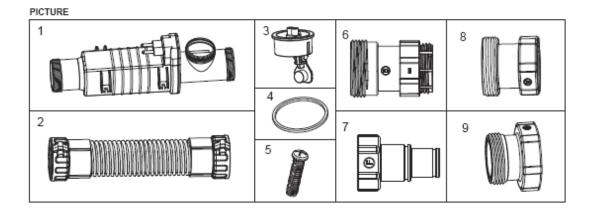
When replacing the cell, only use replacement cells having a label that clearly states that it is a replacement cell for the chlorine generating device Hydro-Force Flowclear Chlorinator Model 58215, REGISTRATION NUMBER 30383, PEST CONTROL PRODUCTS ACT.

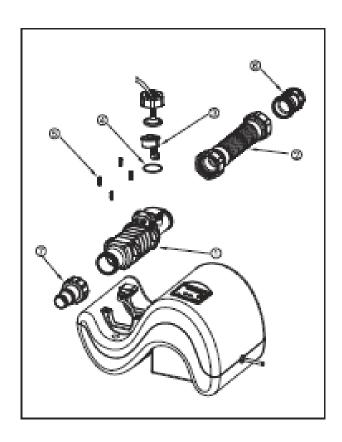


- Flow Sensor The flow sensor protects the electrolytic cell and assures that will always be adequate water flowing through the cell. When the water flow drops below the minimum flow rate, the electrolytic cell will automatically shut down to protect the titanium plates and no chlorine will be produced.
- Control Panel The chlorinator includes a electronic control panel with buttons and LED indicators to control the chlorinator and produce chlorine at the defined operating hours. The chlorinator also measures the different parameters such as salt level and water flow. If any deviation from the norm occurs then a LED indicator will light to indicate the problem.

# **SPECIFICATIONS**

Rated Voltage:	110-120V AC
Electrolytic Cell Working Voltage:	24V DC
Amperage:	1.5A
Maximum Chlorine Output/hour:	11.95 grams/hour
Minimum Flow Rate:	2650~15140 L/h (700~4000 gallons/hour)
Recommended Salt Level:	4500ppm (parts per million)
Water temperature:	5°C-35°C
Ambient temperature:	5°C-40°C





# PARTS REFERENCE

Before assembly, take a few minutes to become familiar with all the parts.

NOTE: Drawings for illustration purpose only. May not reflect actual product. Not to scale.

REF. NO.	PARTS NO.	DESCRIPTION	QTY.
1	P6488	Electrolytic Cell	1
2	P6369	Connecting Hose	1 (50cm)
3	P6489	Flow Sensor	1
4	P6371	Washer	1
5	P6372	Screw	1
6	P6375	Adaptor E (For connection to filter pumps with 1-1/4in. (32mm) hose size:)	1
7	P6376	Adaptor F (For connection to filter pumps with 1-1/4in. (32mm) hose size:)	1
8	F6H184	Adaptor A	1
9	F0F1104	Adaptor B	1

	Minimum	Ideal	Maximum
Free chlorine	1 ppm	1-3 ppm	3 ppm
Combined chlorine	0 ppm	0 ppm	0.2 ppm
pH	7.2	7.4-7.6	7.8
Total alkalinity	100 ppm	100-120 ppm	120 ppm
Calcium hardness	150 ppm	200-300 ppm	300 ppm
Stabilizer (Cyanuric acid)	10 ppm	30-50 ppm	150 ppm

#### POOL WATER CHEMISTRY

Minimum Ideal Maximum Optimum Pool Water Chemistry Conditions It is recommended that the following pool water chemistry conditions be checked daily and maintained. This will help to protect pool users, pool related equipment and surfaces in and around the pool. These values are important to maintaining the pool equipment in proper operating condition and preventing corrosion or other problems. The chlorinator is warranted to operate properly only if these conditions are met. For more information, please consult with your local swimming pool dealer for water treatment.

- Free Chlorine is the chlorine residual present in pool water.
- Combined Chlorine is formed by the reaction of free chlorine with ammonia wastes.

NOTE: If combined chlorine is too high, it will result in sharp chlorinous odour and eye irritation.

• pH - A value that indicates how acidic or basic a solution is.

NOTE: If pH is too low, it will result in corroded metals, eye & skin irritation and destruction of total alkalinity. If pH is too high, it will result in scale formation, cloudy water, eye & skin irritation and poor chlorine efficiency.

• Total Alkalinity indicates the degree of the water's resistance to change in pH. It determines the speed and ease of pH change, so always adjust total alkalinity before adjusting the pH level.

NOTE: If total alkalinity is too low, it will result in corroded metals, eye & skin irritation. Low alkalinity will cause the pH to be unstable. Any chemical added to the water will have an effect on pH. If total alkalinity is too high, it will result in scale formation, cloudy water, eye & skin irritation and poor chlorine efficiency.

• Calcium Hardness refers to the amount of calcium and magnesium dissolved in the water.

NOTE: If calcium hardness is too high, it will result in scale formation and cloudy water.

• Stabilizer (Cyanuric Acid) - Stabilizers extend the life of chlorine for outdoor swimming pools.

## What Type of Salt to Use?

The purer the salt, the better the life and performance of the chlorinator. Use only sodium chloride (NaCl) salt that is at least 99.8% pure. It is also acceptable to use water conditioning salt pellets (the compressed

forms of evaporated salt), but it will take longer time for them to dissolve. Do not use iodized or yellow (yellow prussiate of soda) colored salt. Consult your salt supplier.

#### Optimum Salt Level

The ideal salt level in the pool water is between 4000~5000ppm (parts per million) and the optimum salt level in the pool water is 4500ppm (parts per million). A too low salt level will reduce the efficiency of the chlorinator and result in low chlorine production. A high salt level may begin to generate a salty taste to your pool water. Too high of a salt level may damage the power supply and cause corrosion to pool metal fixtures and accessories. The following table shows the quantity of salt to use. The salt in the pool is constantly recycled. Salt loss is due only to pool water physically removed from the pool. Salt is not lost due to evaporation.

#### How to Add or Remove Salt?

#### Adding Salt

- 1. Switch on the filter to circulate the pool water.
- 2. Keep the chlorinator "OFF".
- 3. Determine the amount of salt according to the following table.
- 4. Evenly and slowly pour in the salt around the inside perimeter of the pool. To avoid clogging the filter, do not add salt through the skimmer.
- 5. Brush the pool bottom to speed up the dissolving process. Do not allow salt to pile up on the pool bottom. Run the filter 24 hours to dissolve salt completely.
- 6. After 24 hours, refer the OPERATION INSTURCTION section to check water flow status. If the water flow status is normal, you can set the chlorinator to the desired operating time.

#### Removing Salt

If too much salt has been added, the Red LED salt level light will light up. You need to lower the salt concentration. The only way to lower the salt concentration is to partially drain the pool and refill with fresh water. Drain and refill approximately 20% of the pool's water until the Red LED salt level light disappears with the Green LED salt level light on.

## Determining Pool Volume

Type of Pool	Gallons (pool size in feet)	Cubic Meters (pool size in meters)
Rectangular	Length x Width x Average Depth x 7.5	Length x Width x Average Depth
Circular	Length x Width x Average Depth x 5.9	Length x Width x Average Depth x 0.79
Oval	Length x Width x Average Depth x 6.0	Length x Width x Average Depth x 0.80

Table 1. Bestway Pools Salt

This table shows the Quantity of salt needed to achieve the desired 4500ppm salt level and quantity of salt needed to maintain this level if it drops below this desired salt level.

Pool Size (Bestway Above Ground pools)		Water Capacity (Calculated at 90% for Frame Pool and 80% For Fast Set & Oval Pool)		Salt Needed for Startup 4.5g/L (4500ppm)		Salt Needed when Low Salt Detected (Red LED Salt Level Indicator Lights up)	
		Gallons	Liters	Lbs	Kgs	Lbs	Kgs
	457cm × 122cm (15' × 48")	3648	13807	135	60	25	10
	549cm × 107cm (18' × 42")	5046	19100	190	85	35	15
Fast Set™ Pools	549cm × 122cm (18' × 48")	5596	21182	210	95	35	15
	549cm × 132cm (18' × 52")	6034	22837	225	105	40	20
	457cm × 122cm (15' × 48")	4231	16015	160	70	30	15
Steel Pro™	549cm × 107cm (18" × 42")	4949	18733	185	85	35	15
Frame Pools	549cm × 122cm (18" × 48")	6092	23062	230	100	40	20
	549cm × 132cm (18" × 52")	6889	26000	260	115	45	20
	549cm × 274cm × 122cm (18' × 9' × 48")	3881	14689	145	65	25	10
Rectangular Frame Pools	671cm × 396cm × 132cm (22' × 13' × 52")	7159	27059	270	120	50	20
	732cm × 366cm × 132cm (24' × 12' × 52")	7207	27283	270	120	50	20
	549cm × 366cm × 122cm (18' × 12' × 48")	4390	16623	165	75	30	15
Oval Fast Set™	610cm × 366cm × 122cm (20' × 12' × 48")	5111	19347	190	85	35	15
Pools	732cm × 366cm × 122cm (24' × 12' × 48")	6166	23339	230	105	40	20
	853cm × 366cm × 122cm (28' × 12' × 48")	7215	27311	270	125	50	20

Table 2. Bestway Pools Operating Time

This table shows the Operating time needed for normal use of the chlorinator with pools.

Pool Size (Bestway Above Ground pools)		Water Capacity (Calculated at 90% for Frame Pool and 80% For Fast Set & Oval Pool)		Operating Time (hours) at different ambient/air temperatures			
-		Gallons	Liters	10-19°C (50-66°F)	20-28°C (68-82°F)	29-36°C (84-97°F)	37-42°C (99-108°F)
	457cm × 122cm (15' × 48")	3648	13807	2	3	3	4
Fast Set™	549cm × 107cm (18' × 42")	5046	19100	3	4	5	5
Pools	549cm × 122cm (18' × 48")	5596	21182	3	4	5	6
	549cm × 132cm (18' × 52")	6034	22837	3	5	5	6
	457cm × 122cm (15' × 48")	4231	16015	2	3	4	4
Steel Pro™	549cm × 107cm (18' × 42")	4949	18733	3	4	4	5
Frame Pools	549cm × 122cm (18' × 48")	6092	23062	3	5	5	6
	549cm × 132cm (18' × 52")	6889	26000	4	5	6	7
	549cm × 274cm × 122cm (18' × 9' × 48")	3881	14689	2	3	4	4
Rectangular Frame Pools	671cm × 396cm × 132cm (22' × 13' × 52")	7159	27059	4	6	6	7
	732cm × 366cm × 132cm (24" × 12" × 52")	7207	27283	4	6	6	7
	549cm × 366cm × 122cm (18' × 12' × 48")	4390	16623	2	3	4	4
Oval Fast Set™	610cm × 366cm × 122cm (20' × 12' × 48")	5111	19347	3	4	5	5
Pools	732cm × 366cm × 122cm (24" × 12" × 48")	6166	23339	3	5	6	6
	853cm × 366cm × 122cm (28' × 12' × 48")	7215	27311	4	5	7	7

Table 3. Non-Bestway Pools Salt

Water Capacity (Calculated at 90% for Frame Pool and 80% For Fast Set & Oval Pool)		Salt Needed for Startup		Salt Needed when Low Salt Detected (Red LED Salt Level Indicator Lights up)	
Gallons	Liters	Lbs	Kgs	Lbs	Kgs
2000	7500	75	35	15	6
4000	15000	150	70	25	10
6000	22500	225	100	40	20
8000	30000	300	135	55	25
10000	37500	370	170	65	30
12000	45500	450	205	80	35
14000	53000	525	240	95	40

Table 4. Salt Calculation for Pools

Sait Need	led for Startup	Sait Needed when Low Sait Detected (Red LED Sait Level Indicator Lights up)		
Lbs	Кдв	Lbs Kgs		
Water Capacity (Gallons) x 0.0375	Water Capacity (Liters) x 0.0045	Water Capacity (Gallons) x 0.0067	Water Capacity (Liters) x 0.0008	

Table 5. Non-Bestway Pools Operating Time

Water	Capacity	Operating Time (hours) at different ambient/air temperatures			
Gallons	Liters	10-19°C (50-66°F)	20-28°C (68-82°F)	29-36°C (84-97°F)	37-42°C (99-108°F)
2000	7500	1	2	2	2
4000	15000	2	3	4	4
6000	22500	3	5	5	6
8000	30000	4	6	7	8
10000	37500	5	8	9	10
12000	45500	6	9	11	12
14000	53000	7	11	13	14

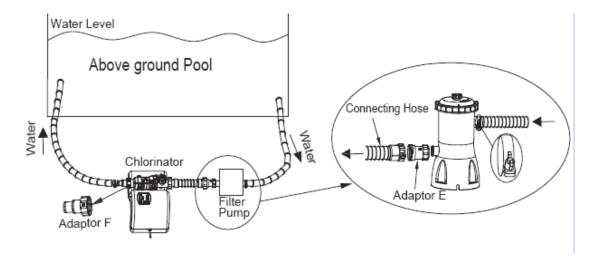
#### INSTALLATION INSTRUCTIONS

NOTE: The preferred installation is that the chlorinator installed as the last piece of pool equipment in the return line to the pool. This will extend the life of the titanium plates and maintain its performance

- 1. Assemble the aboveground pool and its filter pump or sand filter per their manuals.
- 2. Take out the chlorinator and its accessories from the package.
- 3. Install the chlorinator in the return line to the pool after the filter pump or the sand filter.
- 4. Connect the connecting hose to the inlet of the chlorinator.

For connection to filter pumps with 32mm (1-1/4in.) hose size:

- 1. If your aboveground pool is filled with water, remove the debris screens from the inside of the pool and insert the stopper plugs in the pool's inlet and outlet valves before the chlorinator installation, which will prevent water from flowing out of the pool. Jump to step2 directly if your pool is empty.
- 2. Connect the adaptor F to the electrolytic cell outlet and screw the threaded locking ring into position.
- 3. Disconnect the water return (to the pool) hose from the filter pump connection, and connect this hose to the adaptor F with a hose clamp.
- 4. Connect the adaptor E to the filter pump outlet screw the threaded locking Filter ring into position.
- 5. Connect the connecting hose to the adaptor E and screw the threaded locking ring into position. 6. Remove the stopper plugs and insert the debris screens to allow water to flow



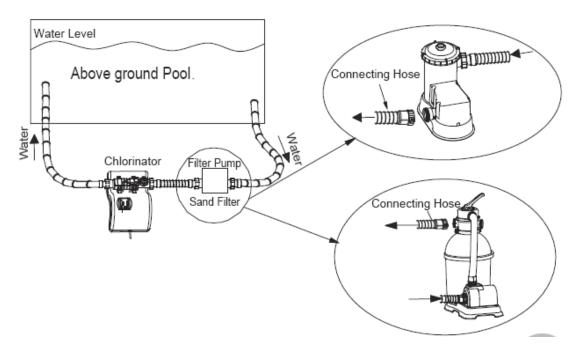
For connection to filter pumps / sand filters with 38mm (1-1/2in.) hose size, and 3028 L (800 gallons) (pump capacity) sand filters:

1. If your aboveground pool is filled with water, close the connection valves before the chlorinator installation, which will prevent water from flowing out of the pool. Jump to step 2 directly if your pool is empty.

NOTE: For 3028 L (800 gallons) (pump capacity) sand filters, remove the debris screens from the inside of the pool and insert the stopper plugs in the pool's inlet and outlet valves before the chlorinator installation.

- 2. Disconnect the water return (to the pool) hose from the filter pump or sand filter connection, and connect this hose to the electrolytic cell outlet and screw the threaded locking ring into position.
- 3. Connect the connecting hose to the filter pump or sand filter outlet and screw the threaded locking ring into position.
- 4. Open the connection valves (or remove the stopper plugs and insert the debris screens) to allow water to flow.

NOTE: Do not use the remaining/unused adaptors for any other purpose.

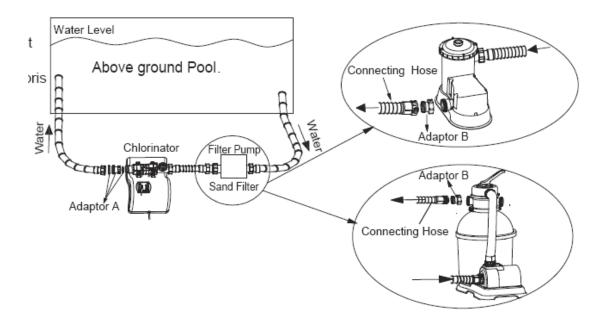


If you can't connect your chlorinator to the filter pump / sand filter, follow below instructions.

1. If your aboveground pool is filled with water, close the connection valves before the chlorinator installation, which will prevent water from flowing out of the pool. Jump to step 2 directly if your pool is empty.

NOTE: For 3028 L (800 gallons) (pump capacity) sand filters, remove the debris screens from the inside of the pool and insert the stopper plugs in the pool's inlet and outlet valves before the chlorinator installation.

- 2. Connect the adaptor A to the electrolytic cell outlet and screw the threaded locking ring into position.
- 3. Disconnect the water return (to the pool) hose from the filter pump / sand filter connection, and connect this hose to the adaptor A by screwing the threaded locking ring into position.
- 4. Connect the adaptor B to the filter pump / sand filter outlet and screw the threaded locking ring into position.
- 5. Connect the connecting hose to the adaptor B and screw the threaded locking ring into position. 6. Open the connection valves (or remove the stopper plugs and insert the debris screens) to allow water to flow.



#### **OPERATION INSTRUCTIONS**

NOTE: After the salt is dissolved, but before operating the chlorinator be sure that:

- The filter pump/sand filter and the chlorinator are connected to a grounding type receptacle protected by a ground-fault circuit-interrupter (GFCI).
- The filter pump/sand filter operates several minutes before operating the chlorinator. This removes air pockets and debris in the water hoses.
- No air is trapped in any of the hoses. Follow the filter pump/sand filter manual to release any trapped air
- 1. After running the filter for 24 hours to dissolve salt completely, unplug the filter and plug the chlorinator into the electrical outlet. At the same time, the LED light above the On-Off button displays red. After pressing the On-Off Button, the LED light above this button displays green. At the same time, the flow status LED indicator displays red, which is normal.
- 2. Turn off the chlorinator and plug the filter into the electrical outlet. After turning on the chlorinator again, the LED light above the On-Off button turns green. Press and hold both the buttons together for 3 seconds until you hear a long "beep" to unlock the keypad time buttons.
- 3. Determine the operating time according to Table 2 or Table 5. Press button or button to increase or decrease the operating time from 2 hours to 12 hours. At the same time the corresponding operating time LED lights will flash. After you set the proper operating time, press and hold both the

and buttons together for 3 seconds until you hear a long "beep" to re-lock the keypad time buttons. At the same time the operating time LED lights will stop flashing. Then the salt level and water

flow will be checked and the corresponding LED indicators will be displayed. The unit will now operate for the operating time you set at the same time each day.

NOTE: The default operating time is 2 hours.

NOTE: The chlorinator will not operate if the filter pump/sand filter is not operating.

NOTE: With locking the time buttons into this setting, you will have prevented unauthorized changing of the operating time.

NOTE: If you forget to re-lock the keypad time buttons, the unit will automatically lock the keypad time buttons 5 seconds later and you will hear a long "beep".

- 4. Operating time can be reset if necessary. Follow step 2 to 4.
- 5. The operating time LED lights will disappear one after the other when the unit operates. The operating time LED lights show the remaining hours in the daily operating cycle.
- 6. All the LED indicator lights will disappear except that the light above the On-Off Button displays yellow when the chlorinating cycle ends. The unit automatically goes in to a power saving mode and will automatically turn itself back on in 24 hours to continue its daily chlorine production. Press any button to view the last status of the LED lights.

IMPORTANT: Check the expiry date of the test kit as test results may be inaccurate if used after that date. Do not operate the chlorinator while the pool is in use or occupied.

- Always use a test trip to test the chlorine level before entering or using the pool. If the chlorine level is too high, wait until the chlorine level drops below 3ppm before using the pool or operating the chlorinator.
- Heavy pool usage and higher temperatures may require higher chlorine output (longer operating time) to maintain proper free available chlorine residuals.
- If a power outage occurs or the power cord is unplugged then the chlorinator operating time will have to be reset.

#### CONTROL PANEL

#### On-Off Button

This button turns the Chlorinator on and off.

- Red: The chlorinator is electrified after plugging the power cord into the electrical outlet.
- Green: The chlorinator is starting to work after pressing this button.
- Green flashing: Something unfavourable happens, such as high salt level, low flow, etc., and no chlorine is being produced.
- Yellow: The chlorinating cycle end and the unit automatically goes in to a power saving mode.

NOTE: When something unfavourable happens, make sure to unplug the chlorinator before dealing with the matter.

#### Salt Level Status LED Indicators

The product can automatically checks the salt level of pool water and displays the levels as follows when it is operating:

• Red: High salt. The pool water salt level is too high. The chlorinator is shut down and no chlorine is being produced. Pool water needs to be drained and refill until the Red LED salt level light disappears with the Green LED salt level light on.

NOTE: At the same time you will hear a consecutive "beep". 30 minutes later, the unit automatically goes in to a power saving mode.

- Green: Good salt. The pool water salt level is optimum and chlorine is being produced.
- Yellow: Low salt. The pool water salt level is very low. The chlorinator is shut down. Chlorine will not be produced until additional salt is added.

NOTE: At the same time you will hear a consecutive "beep". 30 minutes later, the unit automatically goes in to a power saving mode.

#### Flow Status LED Indicator

This light indicates the status of water flowing through the electrolytic cell.

- Green: Sufficient water flow to produce chlorine.
- Red: Insufficient or no water flow through the electrolytic cell. No chlorine will be produced.

NOTE: At the same time you will hear a consecutive "beep". 30 minutes later, the unit automatically goes in to a power saving mode.

## **Operating Time LED Indicators**

As a bar graph to show in 2 hours increments from bottom to top, the six

LED indicators display the operating time of the chlorinator – more Green Lights mean more operating time.

- 2 (hours) 1 Green Light On The chlorinator will keep operating or 2 hours.
- 4 (hours) 2 Green Lights On The chlorinator will keep operating for 4 hours.
- 6 (hours) 3 Green Lights On The chlorinator will keep operating for 6 hours.
- 8 (hours) 4 Green Lights On The chlorinator will keep operating for 8 hours.
- 10 (hours) 5 Green Lights On The chlorinator will keep operating for 10 hours.
- 12 (hours) 6 Green Lights On The chlorinator will keep operating for 12 hours.

#### More and Less Time Buttons

The More and Less buttons control the operating time of the chlorinator.

- More: Increases the operating time of the chlorinator in 2 hours increments. For example, the operating time display is showing 2 (hours). After pressing the More button, the 4 (hours) indicator light will also light up. Then the chlorinator will now keep operating for 4 hours.
- Less: Decreases the operating time of the chlorinator in 2 hours decrements. For example, the operating time display is showing 4 (hours). After pressing the Less button, the 4 (hours) indicator light will disappear with the 2 (hours) indicator light still on. Then the chlorinator will now keep operating for 2 hours.

#### **MAINTENANCE**

CAUTION: You must ensure the chlorinator is unplugged before any maintenance begins or severe risk of injury or death exists.

#### Flow Sensor Cleaning

- 1. Unscrew the locked nut of the flow sensor counter-clockwise and disconnect the flow sensor signal line. Then remove them from the flow sensor.
- 2. If deposits and debris are found on the surface of the flow sensor, then use a garden hose to clean it thoroughly.(See Fig. 1)
- 3. If the deposits can not be removed after step 2, use a plastic brush (do not use a metal brush) to clean the flow sensor if necessary.
- 4. After the flow sensor has been inspected and cleaned, reinstall the flow sensor signal line and the locked nut tightening the flow sensor back into its position. Do not over tighten.

#### Electrolytic Cell Cleaning

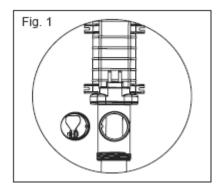
The electrolytic cell has a self-cleaning feature that reduces scale buildup on the titanium plates of cell. In most cases, this self-cleaning function will keep the cell working at optimum efficiency. If the pool water is hard (high mineral content), the cell may need periodic manual cleaning. To extend the life and performance of the electrolytic cell, it is recommended that you should inspect the electrolytic cell every 3 months and clean it if necessary. Follow the cleaning instructions below.

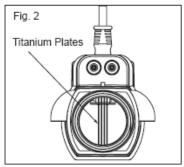
- 1. Turn off the chlorinator and unplug the power cord from the electrical outlet.
- 2. To prevent water from escaping the pool, remove the debris screens from the inside of the pool and insert the stopper plugs in the pool's inlet and outlet valves or close the connection valves.
- 3. Unplug the electrolytic cell line cord.
- 4. Disconnect the connecting hose from the electrolytic cell.

- 5. Disconnect the adaptor from the chlorinator outlet. Look inside the electrolytic cell inspecting for scale formation (light colored crusty or flaky deposits) on the titanium plates. If no deposits and debris are visible, reinstall the adaptor and connecting hose. (See Fig. 2)
- 6. If deposits and debris are found on the titanium plates, use a high pressure garden hose and try to flush them out. Only flush from the direction of water inlet to avoid damaging the flow sensor. Do not use any metal tool because this will scratch the coating off the plates.

NOTE: A buildup on the cell indicates that there is an unusually high calcium level in the pool. If this is not corrected, you have to frequently check and clean the cell. To avoid this, always keep your pool chemistry at the recommended levels. See "Pool Water Chemistry" for reference.

- 7. If flushing does not remove the deposits on the plates then disconnect the cell from the base by removing the 4 mounting screws. Disconnect the flow sensor from the top of the cell and unplug the electrolytic cell line cord. Soak the cell in a vinegar solution (condiment) for 2-3 hours and flush with high pressure water from the garden hose.
- 8. Reinstall the electrolytic cell reversing steps 3, 4, 5 & 6. (Reset the operating time of the chlorinator) When replacing the cell, only use replacement cells having a label that clearly states that it is a replacement cell for the chlorine generating device. Hydro-Force Flowclear Chlorinator Model 58215, REGISTRATION NUMBER 30383, PEST CONTROL PRODUCTS ACT.





#### **STORAGE**

- 1. Unplug the power cord from the electrical outlet.
- 2. After all water is drained from the pool, disconnect the chlorinator from the hoses.
- 3. Air-dry the chlorinator before storage. It is recommended to visually inspect and clean the electrolytic cell at this time.
- 4. It is recommended you store the chlorinator in its original package in a warm dry place.

## BESTWAY TEST STRIPS (Included in the package)

Test Strips can test the "Free Chlorine", "PH" and "Total Alkalinity" levels at the same time.

Use as follows.

- 1. Dip one strip into water, no more than 46cm (18") below the water surface and remove immediately.
- 2. Hold strip level for 15 seconds to avoid reactant dripping from one tests pad to another. NOTE: Do not shake off excess water.

3. Compare results immediately lining up the 3 test pads to easy color match chart on the bottle.

NOTICE TO USER: This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product."

#### TROUBLESHOOTING

Bestway strives to provide the best trouble-free chlorinator on the market. If you experience any problem, do not hesitate to contact your authorized dealer or us.

Here are some helpful tips to help you to diagnose and rectify common sources of trouble.

Problems	Probable Causes	Solutions
Insufficient chlorine	Insufficient operating time; Insufficient salt level in pool water; Chlorine loss due to intense sunlight exposure; The bather load has increased; Clogged or dirty electrolytic cell	Increase the operating time per day. See "Operation Instructions"; Test the salt level with test strip, and adjust as needed. See "Pool Water Chemistry"; Use pool cover when the pool is not in use and/or when the unit is operating; Increase the operating time per day. See "Operation Instructions"; Inspect the cell and clean it if necessary. Refer to Maintenance part.
White flakes in the water	Excessive calcium hardness is present in pool water	Drain about 20 to 25% of the pool Water and add fresh water to decrease the calcium hardness.  Visually inspect the electrolytic cell for scale buildup and clean the electrolytic cell if necessary
No LED display	No power supply; LED failure	Check for power cord loose or not connected properly; Contact Bestway Service Center for replacement
No LED display except that the LED above the On-Off Button displays red	The chlorinator goes in to a power saving mode	Press any button to view the status of the LED lights

## **Limited BESTWAY® Manufacturer's Warranty**

The product you have purchased comes accompanied with a limited warranty. At Bestway® we stand firmly behind our quality guarantee and assure, through a replacement warranty, your product will be free from manufacturer's defects.

To enact a claim, please simply fill out this warranty card and return it to us along with:

1) Your purchase receipt

2) Electrolytic cell to be sent by post to the address of the after-sales center contacted. For details please refer to your country according to the information you find on the back cover of this manual.

Bestway® is not responsible for any economic loss due to water or chemical costs. Bestway® will not replace any products deemed to have been neglected or having been used beyond the owner's manual guidelines.

#### TO: BESTWAY® SERVICE DEPARTMENT

#### **DATE**

#### **Customer Code Number**

FAX/E-MAIL/TEL: Please refer to your country according to the information you find on the back cover.

Please provide your address details in full. Note: Incomplete address details will result in delayed shipments
Information required
Name:
Address:
Zipcode:
City:
Country:
Telephone:
Mobile:
E-MAIL:
Fax:
Please clearly write your item code:
Item code:
Description of problems
Control panel shows the failure which cannot be solved

Control panel shows the failure which cannot be solved

Chlorinator not working

Missing Parts - Please use the code for the missing part, this can be found in the owner's manual.

Others, please describe

For request of spare parts, consumer has to send us also the page of the manual with a cross near the missing or faulty part.

You have to send a copy of your purchase receipt together with this fax.

In order to best assist you, we request all information you provide is complete and accurate.

YOU CAN ALSO VISIT OUR WEB SITE: www.bestway-service.com

1-855-838-3888

http://www.bestway-service.com

E-mail: aftersales@bestway-northamerica.com