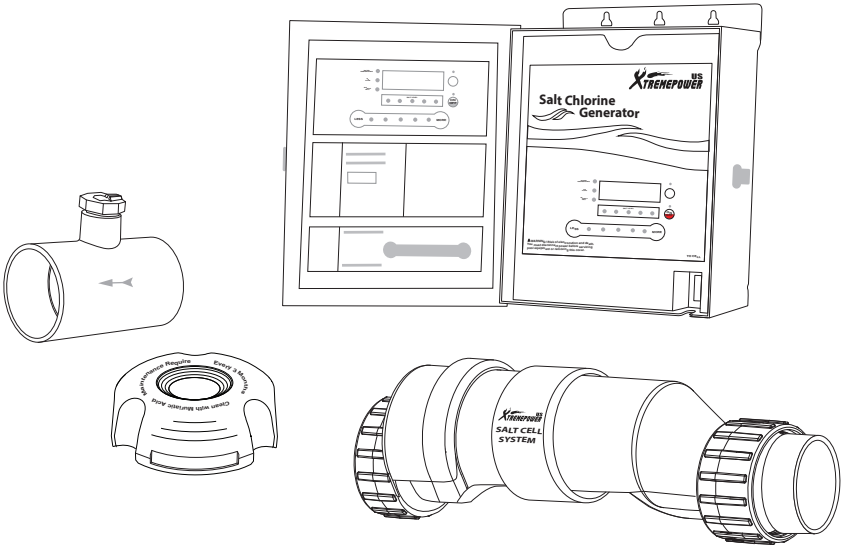
POOL SALT CHLORINE GENERATOR SYSTEM

SKU **90151** / 15,000 GALLONS
SKU **90152** / 25,000 GALLONS
SKU **90153** / 40,000 GALLONS



ASSEMBLY AND USER'S GUIDE

90151

⚠ DANGER

Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in serious injury. Save all warnings and instructions for future reference.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

CUSTOMER SERVICE

If you have any questions about ordering our pool pumps and replacement parts or other products, please feel free to contact us using the following contact information:

Customer Service and Technical Support

Phone: (909) 628-0880
Email: customer@xtremepowerusa.com
Hours of Operation: Monday – Friday, 9AM – 4PM (CST)

IMPORTANT SAFETY INSTRUCTIONS

This guide provides instructions for installing and using the Chlorine Salt Cell System. If you have any questions about the equipment, please contact XtremepowerUS.

This guide contains important information about safely installing and operating this product. After installation, make sure to share this information with the owner/operator or leave it with them for their reference.

Legends and Symbols

When you come across the safety-alert symbol on your equipment or in this manual, pay attention to the following signal words and remain vigilant about the potential for personal injury.

DANGER **DANGER:** Ignoring these hazards can result in death, severe personal injury, or significant property damage.

WARNING **WARNING:** Indicates potential hazards that can result in severe personal injury, death, or significant property damage. Ignoring these warnings presents a real danger.

CAUTION **CAUTION:** Indicates potential hazards that can result in minor or moderate personal injury, property damage, or actions that are unpredictable and unsafe. Ignoring these cautions presents a potential hazard.

NOTE **NOTICE:** This label indicates important special instructions that are not directly related to hazards.

USE OF NON-XTREMEPOWERUS REPLACEMENT PARTS VOIDS WARRANTY

ATTENTION INSTALLER: This manual contains vital information regarding the installation, operation, and safe use of this product. It is essential to provide this manual to the end user of the product. Failure to read and follow all instructions could lead to severe injuries.

DANGER Failure to comply with all instructions and warnings may lead to severe bodily injury or even death. For optimal safety and functionality, it is advisable to have the product installed and serviced by a certified service professional. Prior to using this product, installers, operators, and owners must carefully review these warnings and all instructions provided in the owner's manual. It is essential to leave these warnings and the owner's manual with the owner for their reference and safety.

WARNING For safety reasons, children should not be allowed to use this product. Packing materials and plastic bags are not toys. Keep them away from children to prevent the risk of suffocation.

GENERAL SAFETY INFORMATION

⚠ DANGER

- **Risk of Electrocution:** Never handle the pump or filter while standing in water or with wet hands. Disconnect all power sources before servicing or cleaning the equipment.
- **Ground-Fault Circuit Interrupter (GFCI):** Ensure the salt chlorinator is properly grounded and connected to a GFCI-protected circuit.
- **Explosion or Fire Hazard:** Do not install the salt cell near flammable chemicals, gasoline, or other ignition sources. Do not mix salt with other pool chemicals directly in the water, as this may create hazardous reactions.
- **Chemical Burn Hazard:** Chlorine generated by the salt system is a strong oxidizer. Avoid direct skin or eye contact with chlorine gas or concentrated water near the salt cell. In case of contact, flush with water immediately for 15 minutes and seek medical attention if irritation persists.

⚠ WARNING

- **Improper Installation:** Always install the salt cell downstream of the pool heater and pump to prevent damage. Follow the manufacturer's instructions for placement and plumbing connections.
- **Over-Chlorination Hazard:** Overuse of the system can lead to excessively high chlorine levels, which may damage pool equipment, surfaces, and pose health risks. Test pool water weekly to maintain chlorine and pH levels within safe limits.
- **Salt Levels:** Maintaining the correct salt concentration (2,500–3,500 ppm) is critical for efficient operation. Too much salt can corrode metal parts, while too little may cause system failure. Do not add salt directly into the skimmer or main drain—this can damage the equipment.
- **Winterizing:** If temperatures drop below freezing, turn off and drain the salt cell system to prevent damage.

⚠ CAUTION

- **Grounding Requirement:** A green-colored screw is located inside the wiring compartment on the back panel. This must be connected to a proper grounding system in the electric supply panel using a continuous copper wire of the correct size.
- **Bonding Requirement:** For US models: One bonding lug is located on the external surface. For Canadian models: Two bonding lugs are required. To reduce the risk of electric shock, connect the local bonding grid using 8 AWG (US) or 6 AWG (Canada) insulated or bare copper conductors.
- **Field-Installed Metal Components:** Any metal components (e.g., rails) within 10 feet (3 meters) of the pool, spa, or hot tub must be bonded to the grounding bus with copper conductors not smaller than 8 AWG (US) or 6 AWG (Canada).
- **Proper Maintenance:** Clean the salt cell every 3–6 months to prevent calcium buildup and ensure optimal performance. Use a manufacturer-approved salt cell cleaning solution to avoid damaging internal components.
- **Water Chemistry Balance:** Ensure pH is maintained between 7.2–7.6 and alkalinity between 80–120 ppm to prevent scale buildup inside the salt cell.
- **Ventilation Requirement:** Install the power supply unit in a well-ventilated, shaded area to prevent overheating.
- **Avoid Overtightening:** Do not overtighten salt cell unions or fittings, as this may cause cracks or leaks, failure or injury.

IMPORTANT SAFETY INSTRUCTIONS

NOTE

- **Pre-Use Inspection:** Ensure all assembly are properly secured before every use. Conduct routine checks to verify continued safety and reliability.
- **Salt Type:** Use only high-purity pool-grade salt (sodium chloride, NaCl) for best results. Avoid using rock salt or iodized table salt.
- **System Alerts & Troubleshooting:** If the salt system displays a warning light or error code, refer to the user manual for troubleshooting steps.
- **Power Supply Protection:** Install a surge protector to safeguard the system from voltage fluctuations and power surges.
- **Monitor Cell Lifespan:** Most salt cells lifespan depending on usage and maintenance. Plan for replacement when chlorine production decreases.
- **Instruction Retention:** Retain these instructions for future reference to ensure safe and proper assembly, maintenance, and operation.
- **Winterizing:** If temperatures drop below freezing, drain and store the Salt Cell indoors.
- **Starting:** Ensure proper water flow through the Salt Cell before turning on the power.

WARNING

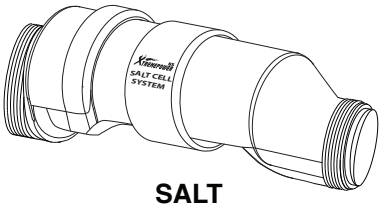
- **Code Compliance:** Adhere to all state and local codes regarding pool construction, installation, and operation. Failure to comply may result in unsafe conditions.
- **Chemical Hazard:** Do not store chemicals near the pool. Chemical spills and fumes can weaken the pool structure, leading to potential failures.
- **Children's Safety:** Do not allow children to operate or use the sand filter. Position equipment to prevent it from being used as access to the pool by young children.
- **Entrapment Risk:** Ensure all plugs used for pressure testing or winterization are removed from suction outlets to prevent suction entrapment.

SUCTION ENTRAPMENT HAZARD

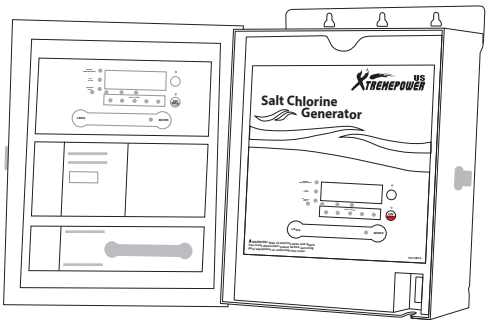
NOTE

- **Proper Maintenance:** Regularly inspect and replace worn or damaged components, such as clamps, gauges, and o-rings, to maintain safe operation.
- **Grounding Requirement:** Ensure the control panel is properly grounded before connecting to other equipments to prevent hazards.

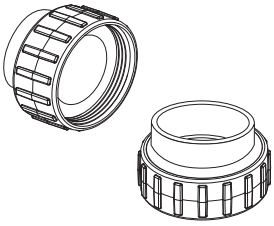
PACKAGE CONTENTS



SALT CHLORINATOR
1 PC(S)



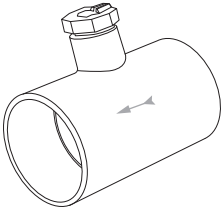
ELECTRIC CONTROL BOX
1 PC(S)



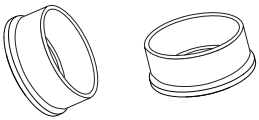
JOIN NUT
2 PC(S)

CLEANING BASE
1 PC(S)

INSTRUCTION MANUAL



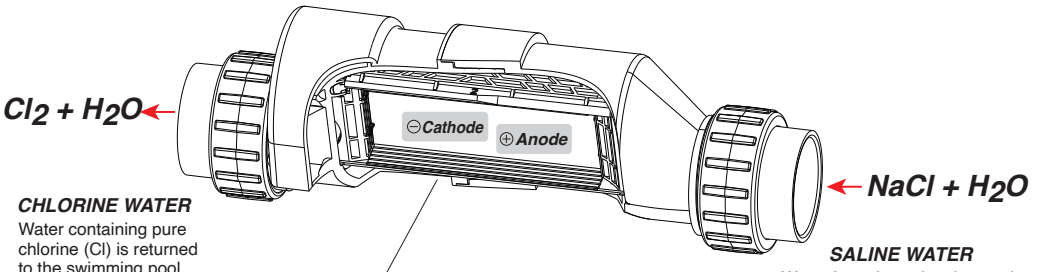
FLOW SWITCH WITH TEE
1 PC(S)



2 TO 1.5 INCH CONNECTOR
2 PC(S)

OVERVIEW (PRODUCT INFORMATION)

SALT CHLORINE GENERATORS



CHLORINE WATER
Water containing pure chlorine (Cl) is returned to the swimming pool.

Electrolytic Plates

SALINE WATER
Water from the swimming pool, containing concentrated sodium chloride (NaCl), enters the cell.

ELECTROLYSIS PROCESS
A low-voltage electrical current passes through the TITANIUM plates in the Salt Cell, breaking down salt (NaCl) into sodium (Na) and chlorine gas (Cl_2) for chlorine water ($Cl_2 + H_2o$).

INTRODUCTION

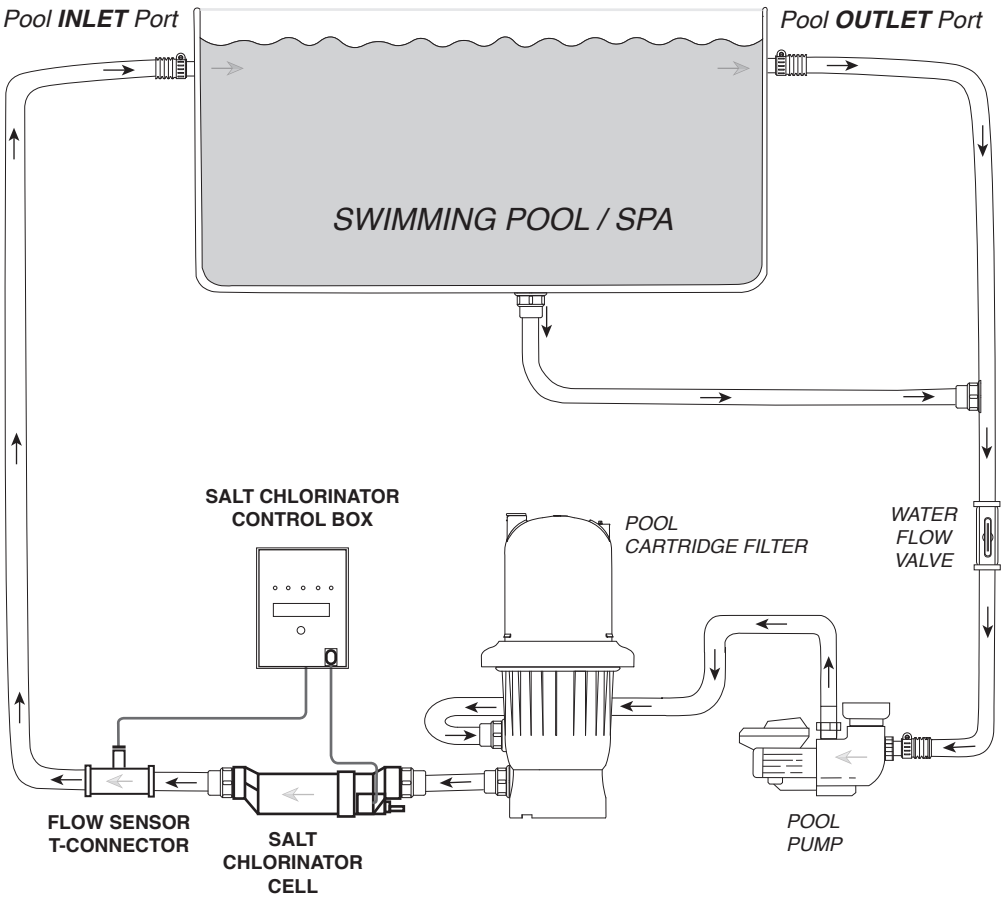
The XtremePowerUS Pool Salt Chlorinator System is an advanced and efficient solution for maintaining clean swimming pool water. Instead of relying on traditional chlorine tablets or liquid chlorine, this system automatically generates chlorine through electrolysis, utilizing dissolved salt in the pool water.

The Salt Chlorinator System produces 22 grams of chlorine per hour and is suitable for pools up to 40,000 gallons. With its eco-friendly operation, minimal maintenance, and superior chlorine generation, it enhances your pool's value and improves your swimming experience. Enjoy clearer, softer water with less maintenance.

SPECIFICATIONS

MODEL / SKU	90151	90152	90153
CONTROL BOX DIMENSION	9 x 5 x 15 INCH	9 x 5 x 15 INCH	9 x 5 x 15 INCH
SALT CELL DIMENSION	13 x 5 x 4 INCH	13 x 5 x 4 INCH	13 x 5 x 4 INCH
PRODUCT WEIGHT	24 LBS	24 LBS	24 LBS
POOL CAPACITY	15,000 GALLONS	25,000 GALLONS	40,000 GALLONS
FLOW RATE	528 GPH	528 GPH	528 GPH
CHLORINE GENERATION (24 HRS)	372g	684g	864g

INSTALLATION DIAGRAM



INSTALLATION INSTRUCTIONS

IMPORTANT GUIDELINES FOR SALT CHLORINE SYSTEM INSTALLATION

To ensure the safe and effective operation of your system, consider the following recommendations during installation:

GENERAL PLACEMENT INSTRUCTIONS

- Install the Salt Cell Generator after the pump, filter, and heater (if applicable) to ensure proper water flow.*(See Figure 1)*
- Ensure at least 12 inches of straight pipe before and after the Salt Cell for optimal performance. *(See Figure 1)*
- Ensure the system is placed on a hard, level surface to prevent vibration or tipping during operation.
- Choose a dry, well-ventilated location and mounted the Control Panel horizontally on a flat surface. Do not block the bottom side of the Control Panel for wires connect. *(See Figure 1)*
-

PLUMBING THE SALT CELL

- Turn off the pool pump and filter.
- Identify the return pipe where the Salt Cell will be installed. *(See Figure 1)*
- Cut the return pipe and install union fittings on both ends of the Salt Cell for easy maintenance and removal.
- Use PVC primer and glue (for solvent welding) or Teflon tape (for threaded fittings) to secure connections.
- Allow glue to dry per manufacturer instructions before starting the system.

ELECTRICAL INSTALLATION

- Connect the Salt Chlorinator Control Box to a dedicated 110V or 220V power source. (Check unit specifications).
- Some models require a connection to the pool timer system to synchronize operation with the pump.
- Connect the Salt Cell to the Control Box using the provided cables. *(See Figure 1)*
- Secure all electrical connections and ensure they are waterproof. *(See Figure 1)*

ADDING SALT TO THE POOL

- Calculate the required salt amount based on pool size:
  - 10,000 gallons: 267 lbs of salt
  - 20,000 gallons: 533 lbs of salt
  - 30,000 gallons: 800 lbs of salt

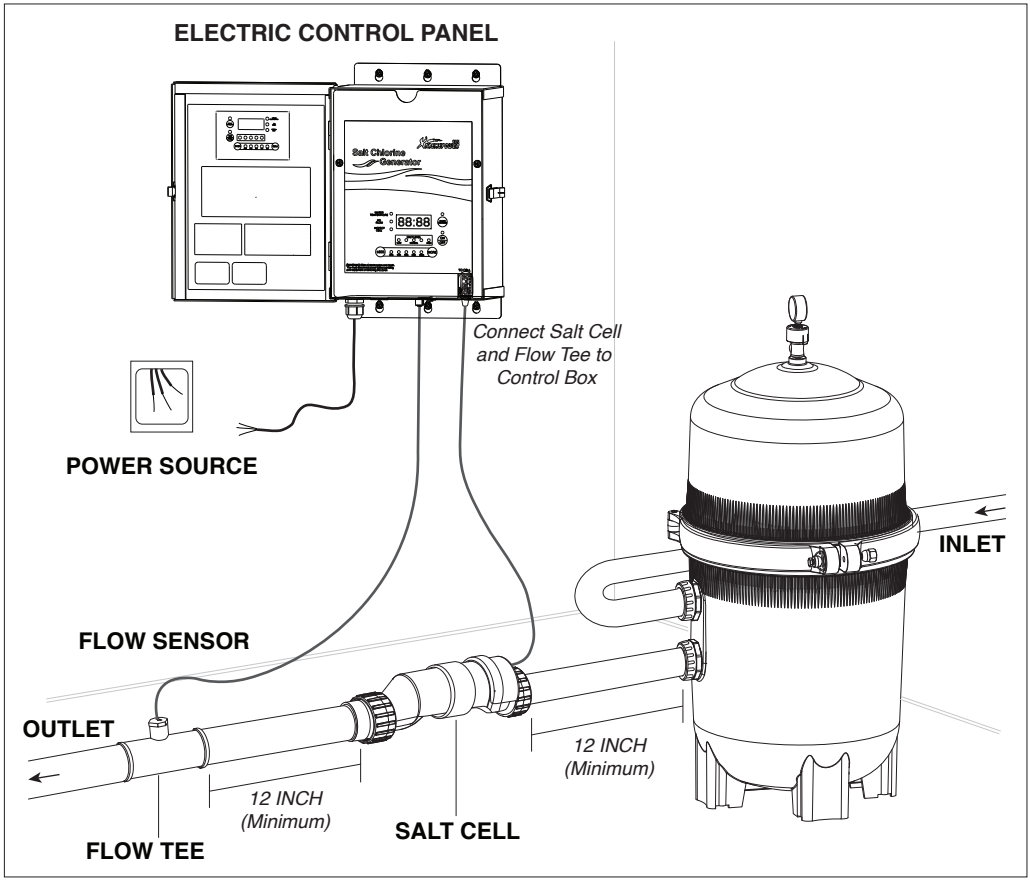
WARNING **SAFETY REASONS: Do not add salt to the pool while swimmers are inside.**

- Undissolved salt can cause irritation to the skin and eyes.
- High salt concentration in certain areas may lead to discomfort or accidental ingestion.
- The pool pump and circulation system need time to properly distribute and dissolve the salt evenly.
- Slowly pour the salt directly into the pool water, distributing it evenly.
- Run the circulation pump for at least 24 hours to fully dissolve and distribute the salt.
- Test salinity levels before allowing swimmers back into the pool.

Failure to follow these guidelines may result in swimmer discomfort and inefficient salt distribution.

INSTALLATION INSTRUCTIONS

Figure 1



SYSTEM START-UP AND CALIBRATION

- Turn on the pool pump and check for leaks.
- Power on the Salt Chlorine Generator Control Box and allow the system to run.
- Verify the salt level reading on the control panel and adjust if necessary.
- Set the chlorine output level based on pool size and chlorine demand.
- Monitor the chlorine production indicator to confirm proper operation.

OPERATION INSTRUCTIONS

The chlorine generator is an automatic chlorine generation system designed for pool sanitation. It operates by using a low concentration of salt (sodium chloride) in the pool water. The system automatically sanitizes your pool by converting the salt into free chlorine, which eliminates bacteria and algae in the water.

How It Works

The system converts salt into free chlorine through a process called electrolysis:

- A small amount of salt is added to the pool water, which is necessary for electrolysis to occur.
- As the saltwater passes through the electrolytic cell, an electrical current splits the salt molecules into chlorine gas, which dissolves in the water as hypochlorous acid, and sodium ions.

Operational Conditions for Optimal Performance

Temperature Range

- The chlorine generator typically operates in a pool temperature range of 51.8°F to 113°F.
- If the temperature exceeds this range, the system will trigger an alarm and stop functioning until the water temperature returns to normal.

Water Flow Requirements

- Different salt chlorinators have varying water flow requirements.
- Follow the installation instructions to ensure proper setup.
- The salt cell must be installed below the waterline, and the pipe should be installed vertically on the back of the chlorine generator.
- Adequate water flow is essential for efficient chlorine generation and to extend the system's lifespan.

Chlorine Levels

- The chlorine generator operates effectively within a range of 1,700 PPM – 4,500 PPM.
- If chlorine levels exceed this range, the system will trigger an alarm and stop until the pool water returns to the correct level.

Flow Requirements for Different Chlorinators

The generator requires a minimum water flow to function correctly. If the water flow is too low, the system will not start.

Please refer to the following table for the required water flow rates for different chlorinators.

TYPES	INSTALLATION DIRECTION	MINIMUM WATER FLOW TO START gallons per hour (GPH)	MAINTAINING WATER FLOW Optimal Operation (GPH)
EXTERNAL FLOW SWITCH	HORIZONTAL	528 GPH	317 GPH (above)
	VERTICAL	528 GPH	317 GPH (above)

Chlorination Requirements:
The salt chlorine system supports pools up to 40 gallons. The actual chlorine needed varies based on factors such as:

- Bather load (number of swimmers)
- Rainfall
- Air and water temperature
- Sunlight exposure
- Pool surface type and cleanliness

Installation Note:

- Use titanium kits that are completely submerged in water.
- Refer to the installation instructions to properly set up your chlorine generator.
- Ensure proper positioning of the external flow switch for accurate operation.

Troubleshooting:
If the system stops working or alarms:
Check water temperature – Ensure it is within the 51.8°F – 113°F range.
Check salinity levels – Ensure it is within the 2700 PPM – 3400 PPM range.
Check water flow – Ensure that the system meets the required GPH flow rates.

PARAMETER TABLE

MODEL	90151	90152	90153
INPUT POWER	115 / 230V	115 / 230V	115 / 230V
OUTPUT POWER	24V		
MAX. ELECTRICITY CURRENT	8.5A		
WORKING TEMPERATURE	AIR TEMPERATURE 32°F - 122°F / WATER TEMPERATURE 51.8°F - 113°F		
FLOW SWITCH TYPE	EXTERNAL	EXTERNAL	EXTERNAL

OPERATION MODES

SUPER CHLORINATION MODE

- In any mode, press the "SUPER CHLORINATION" button to enter the super chlorination mode.
- This mode runs for 24 hours and then automatically returns to the original chlorination mode.
- To exit super chlorination mode manually, press the "SUPER CHLORINATION" button again.

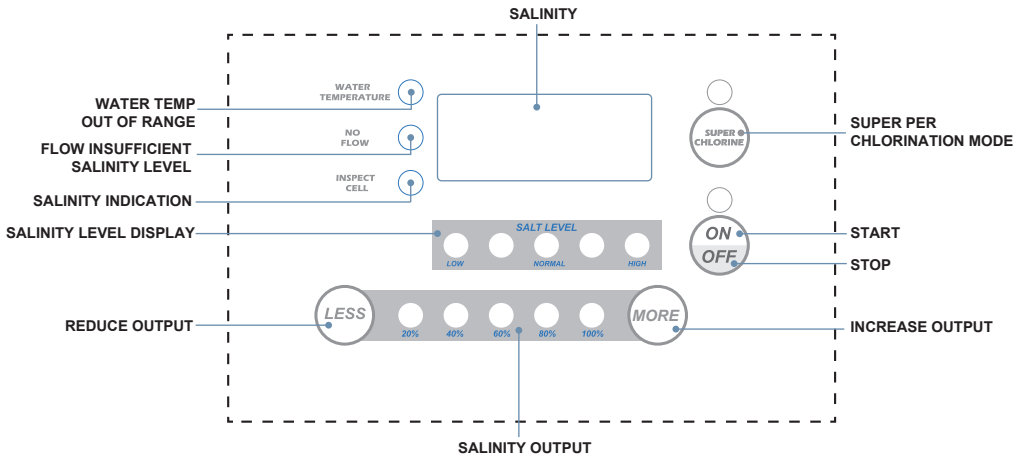
STANDARD CHLORINATION MODE

- There are five power levels for chlorination, ranging from 20% to 100%.
- To adjust the chlorination level, press the "MORE" button.
- The indicator light will change according to the selected chlorination intensity.
- The chlorine generator alternates between chlorination production and suspension in a three-hour cycle.
- For example, if set at 60% intensity, the generator will operate in chlorination mode for 108 minutes and remain in suspension mode for 72 minutes.

AUTOMATIC CLEANING MODE

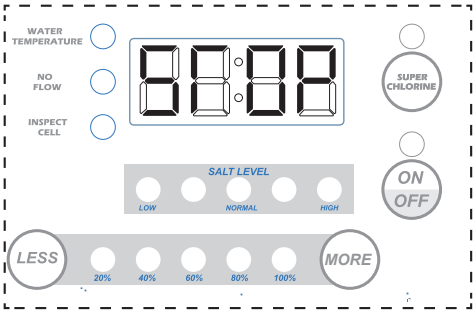
- The system has an automatic cleaning cycle that activates every three hours.
- Note: The salt cell value may temporarily increase during the cleaning process.
- This is caused by an increase in dipole current, which will return to normal within approximately 10 minutes.

CONTROL PANEL



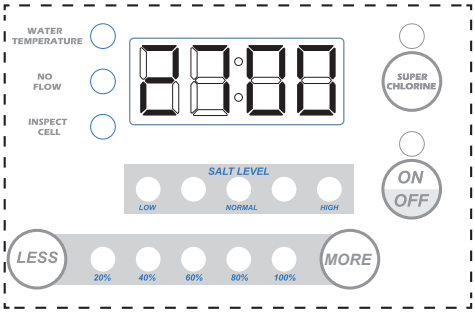
CONTROL PANEL INSTRUCTION

POWER ON / OFF



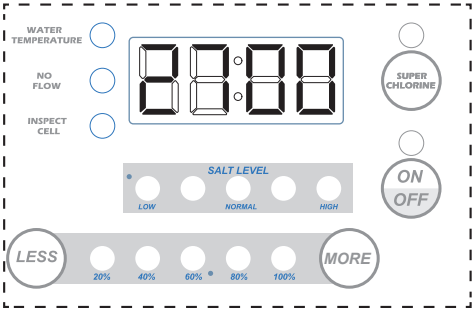
To power the generator on or off:
In standby mode, press the "**ON/OFF**" button to turn on the generator. The display will show "**ON**."
To turn off the generator, press the "**ON/OFF**" button again. The display will show "**STOP**."

FUNCTION SELECTING



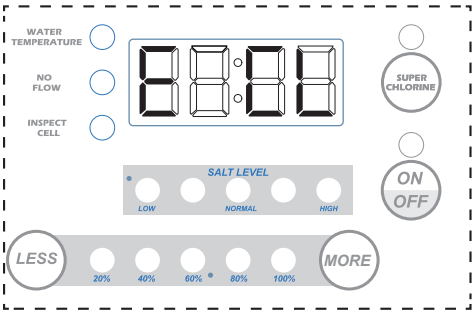
To reduce production time, press the "**LESS**" button.
To increase production time, press the "**MORE**" button.

SUPER CHLORINATION MODE



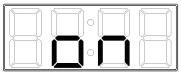
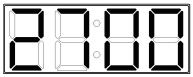
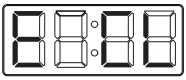
In any mode, press "**SUPER CHLORINE**" to enter Super Chlorination Mode.
In this mode, the cells will operate continuously for 24 hours.

ONE-CLICK RECOVERY MODE



When an error alarm occurs, long-press the "**ON/OFF**" button to attempt to resolve some errors.

CONTENTS FOR THE LED SCREEN

DISPLAY CHARACTER	MEANING	DISPLAY CHARACTER	MEANING
	The chlorine generator is turned ON.		Current salinity level (PPM).
	The chlorine generator is turned OFF.		An error alarm is activated, and the corresponding error light is RED.
	The chlorine generator is in suspension mode. It alternates between chlorine production and suspension in a one-hour cycle. For example, if set to 60% output, the generator operates in chlorination mode for 36 minutes, followed by 24 minutes in suspension.		

SALINITY REGULATION AND DAILY USAGE MAINTENANCE

The salt in the pool is constantly recycled, and the loss of salt is minimal throughout the entire swimming season. Salt loss primarily occurs due to splashing, backwashing, or drainage (especially after heavy rain). However, salt is not lost through evaporation.

Ideal Salt Levels:

- The recommended salt concentration ranges from **2.7 g/L (2700 PPM) to 3.4 g/L (3400 PPM)** for optimal chlorine production.
- **Higher salt levels (3.5 g/L (3500 PPM) – 4.0 g/L (4000 PPM))** may result in a slightly salty taste in the pool water.
- If the salinity **exceeds 4.8 g/L (4800 PPM)**, the chlorine generator will stop functioning (ERR4 fault). In this case, partially drain and replace some pool water to restore balance.

Low Salt Effects:

A low salt level reduces the efficiency of chlorine production. If the “Low Salt” warning appears, test the salt level and add more if needed.

If the salinity drops **below 1.7 g/L (1700 PPM)**, the chlorine generator will stop operating (ERR2 fault). When this happens, add salt according to the recommended volume in the provided table to restore functionality.

IDEAL CHEMICAL LEVELS

SALT	FREE CHLORINE	PH	CYANURIC ACID	TOTAL ALKALINITY	CALCIUM HARDNESS	METALS	SATURATION INDEX
2700 TO 3400 PPM	1.0 TO 3.0 PPM	7.2 TO 7.6	60 TO 80 PPM	80 TO 120 PPM	200 TO 400 PPM	0 PPM	-0.2 TO 0.2

SALT LEVEL CHART

Pounds and (Kg) of Salt Needed For 3200PPM																		
Current salt Level ppm	6000 (22700)	Gallons and Liters of Pool / Spa Water																
		8000 (30000)	10000 (37500)	12000 (45000)	14000 (52500)	16000 (60000)	18000 (67500)	20000 (75000)	22000 (82500)	24000 (90000)	26000 (97500)	28000 (105000)	30000 (112500)	32000 (120000)	34000 (127500)	36000 (135000)	38000 (142500)	40000 (150000)
0	161 (73)	213 (97)	267 (121)	320 (145)	373 (170)	427 (194)	480 (218)	533 (242)	587 (267)	640 (291)	693 (315)	747 (339)	800 (364)	854 (388)	907 (412)	960 (436)	1013 (460)	1067 (484)
200	150 (68)	200 (91)	250 (114)	300 (136)	350 (159)	400 (182)	450 (205)	500 (227)	550 (250)	600 (273)	650 (295)	700 (318)	750 (341)	800 (363)	850 (385)	900 (408)	950 (430)	1000 (453)
400	141 (64)	187 (85)	233 (106)	280 (127)	327 (148)	373 (170)	420 (191)	467 (212)	513 (233)	560 (255)	607 (276)	653 (297)	700 (318)	747 (339)	793 (360)	840 (382)	887 (403)	933 (424)
600	173 (59)	173 (79)	217 (98)	260 (118)	303 (138)	347 (158)	390 (177)	433 (197)	477 (217)	520 (236)	563 (256)	607 (276)	650 (297)	693 (317)	737 (337)	780 (358)	823 (378)	867 (398)
800	119 (54)	160 (73)	200 (91)	240 (109)	280 (127)	320 (145)	360 (164)	400 (182)	440 (200)	480 (218)	520 (236)	560 (255)	600 (273)	640 (291)	680 (310)	720 (328)	760 (348)	800 (364)
1000	108 (49)	147 (67)	183 (83)	220 (100)	257 (117)	293 (133)	330 (150)	367 (167)	403 (183)	440 (200)	477 (217)	513 (233)	550 (250)	587 (267)	623 (283)	660 (300)	697 (317)	733 (333)
1200	97 (44)	133 (61)	167 (760	200 (91)	233 (106)	267 (121)	300 (136)	333 (152)	367 (167)	400 (182)	433 (197)	467 (212)	500 (227)	533 (243)	567 (258)	600 (274)	633 (289)	667 (304)
1400	86 (39)	120 (55)	150 (68)	180 (82)	210 (95)	240 (109)	270 (123)	300 (136)	330 (150)	360 (164)	390 (177)	420 (191)	450 (205)	480 (218)	510 (232)	540 (246)	570 (259)	600 (263)
1600	75 (34)	107 (48)	133 (61)	160 (73)	187 (85)	213 (97)	240 (109)	267 (121)	293. (133)	320 (145)	347 (158)	373 (170)	400 (182)	427 (195)	453 (207)	480 (219)	507 (231)	533 (243)
1800	71 (32)	93 (42)	117 (53)	140 (64)	163 (74)	187 (85)	210 (95)	233 (106)	257 (117)	280 (127)	303 (138)	327 (148)	350 (159)	373 (169)	397 (180)	420 (190)	443 (201)	467 (211)
2000	60 (27)	80 (36)	100 (45)	120 (55)	140 (64)	160 (73)	180 (82)	200 (91)	220 (100)	240 (109)	260 (118)	280 (127)	300 (136)	320 (145)	340 (154)	360 (163)	380 (172)	400 (181)
2200	49 (22)	67 (30)	83 (38)	100 (45)	117 (53)	133 (61)	150 (68)	167 (76)	183 (83)	200 (91)	217 (98)	233 (106)	250 (114)	267 (121)	283 (129)	300 (137)	317 (144)	333 (152)
2400	40 (18)	53 (24)	67 (30)	80 (36)	93 (42)	107 (48)	120 (55)	133 (61)	147 (67)	160 (73)	173 (79)	187 (85)	200 (91)	213 (98)	227 (104)	240 (110)	253 (117)	267 (123)
2600	31 (14)	40 (18)	50 (23)	60 (27)	70 (32)	80 (36)	90 (41)	100 (45)	110 (50)	120 (55)	130 (59)	140 (64)	150 (68)	160 (73)	170 (77)	180 (81)	190 (86)	200 (90)
2800	20 (9)	27 (12)	33 (15)	40 (18)	47 (21)	53 (24)	60 (27)	67 (30)	73 (33)	80 (36)	87 (39)	93 (42)	100 (45)	107 (48)	113 (51)	120 (54)	127 (57)	133 (60)
3000	9 (4)	13 (6)	17 (8)	20 (9)	23 (11)	27 (12)	30 (14)	33 (15)	37 (17)	40 (18)	43 (20)	47 (21)	50 (23)	53 (24)	57 (26)	60 (27)	63 (29)	67 (30)
3200	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal
3400	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
3600+	Dilue	Dilue	Dilue	Dilue	Dilue	Dilue	Dilue	Dilue	Dilue	Dilue	Dilue	Dilue	Dilue	Dilue	Dilue	Dilue	Dilue	Dilue

SALT TYPE

It is important to use only sodium chloride (NaCl) salt with a purity of more than 99%. Additionally, water-toning pills can be used; however, they may take longer to dissolve in the pool. Do not use stone salt, soda salt, yellow blood salt, or iodized salt.

HOW TO ADD OR DISSOLVE SALT

- Add salt directly to the pool and start the circulation pump.
- Stir the water around the salt to speed up dissolution. Do not allow salt to pile up at the bottom of the pool.
- Run the filter pump for 24 hours to distribute the salt evenly throughout the pool.
- For new cement pools, ensure that the pool walls are completely solidified before adding salt.

ANTIFREEZE PROTECTION

- The replaceable parts in the chlorine generator can be damaged by freezing water, just like swimming pool hoses.
- In regions with severe or prolonged freezing, drain all water from the drainage pumps, filters, and pipes to prevent damage.
- The control box and the pipe connecting the salt cell vessel must withstand freezing temperatures and should not be removed.

MAINTAINING AND CLEANING THE SALT CELL

REMOVING SALT CELL FROM SYSTEM

Before removing the Salt Cell, disconnect the power supply to the chlorinator generator, pump and unplug the salt cell.

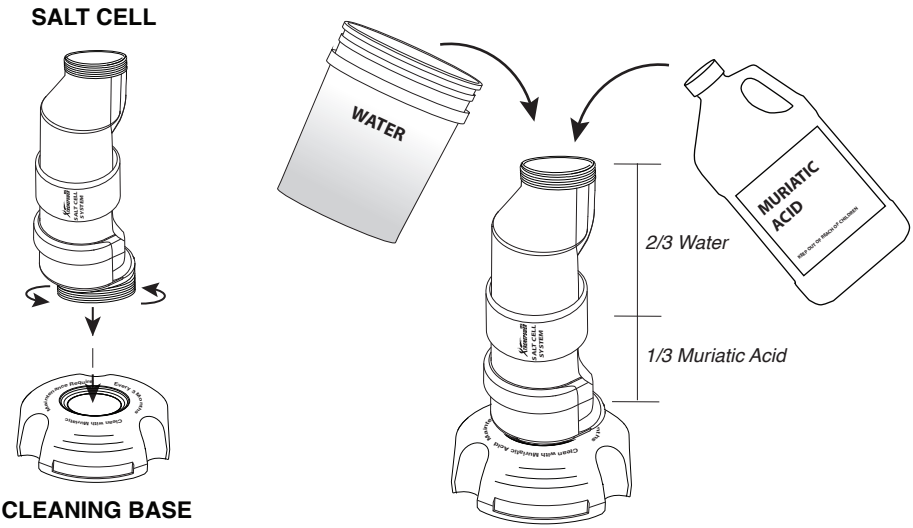
- Open the strainer lid allow air into the system. Helps release water from the salt cell for easy removal.
- Remove the Salt Cell from the system by loosen the joints on both ends of the Salt Cell.
- After removal, check for:
  - Scaling (light-colored hard skin or flaky sediment) between titanium plates
  - Debris stuck on the electrode plate

CLEANING THE SALT CELL

- Need a salt cell CLEANING BASE (PART: 8), **Muriatic Acid Solution,** and a bucket of clean water.
- Attach the salt cell to the cleaning base (PART: 8)
- Fill the salt cell with one-third muriatic acid solution and the remainder with clean water.
- Let it sit for 15 minutes to dissolve mineral deposits on the titanium plates.
- After 15 minutes, pour out the solution and rinse the salt cell thoroughly with clean water.
- Detach the cleaning base and rinse the salt cell thoroughly with clean water.
- Repeat these step periodically, the salt cell will maintain peak performance, ensuring efficient.

NOTE

If scaling persists, the electrolytic cell may need to be replaced.
Titanium scaling indicates a high calcium level in the pool. If this cannot be corrected, the electrolytic cell must be cleaned regularly.



REPLACING THE FLOW SENSOR
Over time, the flow sensor in a pool salt cell system may wear out or become damaged, affecting the chlorine generator's operation. Replacing the sensor ensures the system continues to function properly. Follow the steps below to replace the flow sensor safely and efficiently.

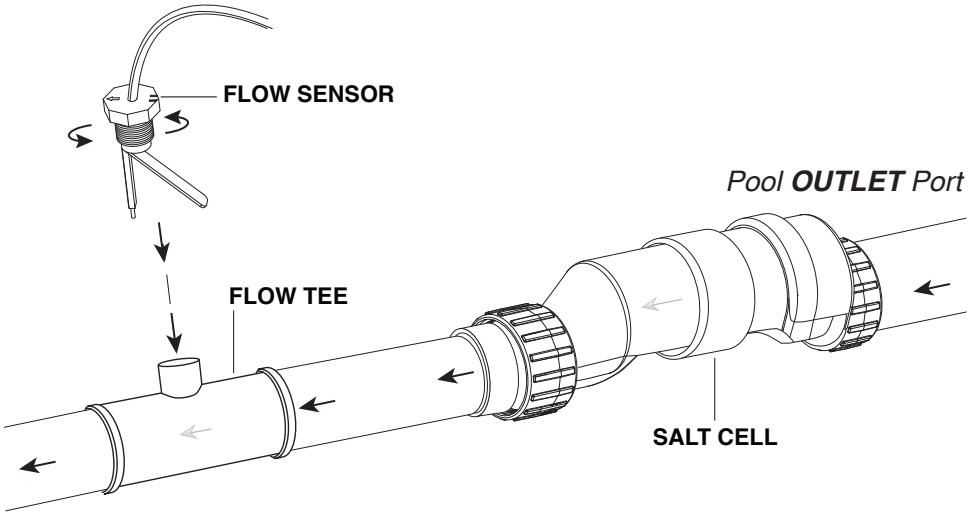
Steps to replace the flow switch:
Turn Off the Power: Before performing any maintenance, turn off the power supply to the chlorine generator to prevent electrical hazards.

Locate the Flow Sensor: The flow sensor is typically installed in the plumbing near the salt cell. Identify the sensor by looking for a small device with electrical wiring connected to the control box.

Remove the Old Flow Sensor: Unscrew the flow sensor from its housing using an appropriate tool (e.g., a wrench or pliers). Carefully disconnect the wiring from the control unit. Inspect the old sensor for any visible signs of damage, corrosion, or debris.

Install the New Flow Sensor: Align the new flow sensor in the correct orientation (follow the directional arrow on the sensor). Securely screw the sensor into place, ensuring a tight fit to prevent leaks. Reconnect the wiring to the control unit, following the manufacturer's wiring instructions.

Restore Power and Test the System
Turn the power back on and restart the chlorine generator. Observe the system to ensure the new sensor is functioning correctly. Check for any leaks or error messages related to water flow.



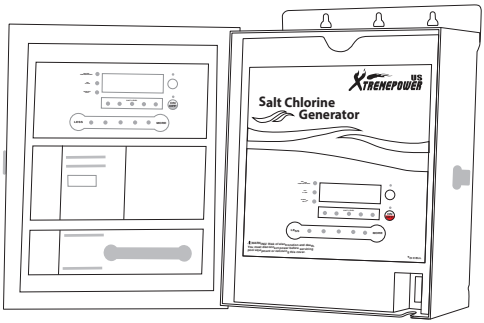
TROUBLESHOOTING

ERROR CODE	POSSIBLE REASONS	TROUBLESHOOTING
E-CH LOAD SHORT CIRCUIT	A conductive metal is embedded in the titanium plates.	Cut off the power supply, remove the chlorine generator and rinse the titanium plate.
	There is a short circuit of water inlet at the connection of titanium plates.	Check whether the wiring position of titanium plate is flooded or burnt out. If not drain out of water, re-install and chlorine generator.
E-CL LOAD BREAK	Very low salinity, no current or very little current.	Add a small amount of salt water to the cells and restart the chlorine generator.
	The wire connecting the titanium plate fall OFF.	Cut off the power supply, remove the chlorine generator, and check whether the titanium plate wiring is OFF.
	The titanium plate is very old.	Change electrolytic cell.
HIGH LED LIGHT (EER4)	Salinity is higher than the maximum limit specified.	Change part of the pool water to reduce salinity.
E-SL LOW LED LIGHT	Salinity is lower than the maximum limit specified.	Expel air from the cells, ensuring that the water surface exceeds 2/3 of the cells. -Add salt to the pool.
NO FLOW	Insufficient water flow, the cavity is filled with air, and the flow switch is not turned ON.	Ensure the filter pump is operating and that there are no obstructions or restrictions in the piping. • Increase the flow of filter pump. • Expel air from the cells, ensuring that the water surface exceeds 2/3 of the cells.
	The filter is in backwash status.	Adjust filter operation status.
	Disconnection of the flow switch circuit or other fault.	Replace the flow switch.
LED DISPLAY SCREEN DOES NOT DISPLAY	Display screen damaged.	Check that the power cord of the control box is plugged into a socket. • Make sure that the chlorine generator is working properly. • Replace the chlorine generator controller box.
E-UL LOW INPUT VOLTAGE	Incorrect wiring mode, the jumper was not adjusted when the 115V power supply was connected.	Change the jumper as shown.
E-UH HIGH INPUT VOLTAGE	Incorrect wiring mode, the jumper was not adjusted when the 230V power supply was connected.	Change the jumper as shown.
LOW LED LIGHT (EER2)	Salinity is lower than the maximum limit specified.	Add salt accrouding to the recommended volume.

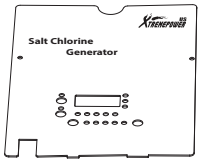
REPLACEMENT PARTS

PARTS DIAGRAM / PARTS LIST

PART	PART NO.	DESCRIPTION	QTY
1	5320124107	ELECTRIC CONTROL BOX	1
1-1	5320126107	CONTROL PANEL	1
1-2	5760202000	SANITIZER CONTROL PANEL ASSEMBLY	1
1-3	5028312000	POTENTIAL TRANSFORMER	1
1-4	5760198000	COOLING FAN	1
1-5	5760199000	RECTIFIER BRIDGE	2
1-6	5029024000	BLADE-TYPE FUSE	1

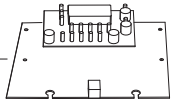


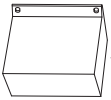
ELECTRIC
CONTROL PANEL



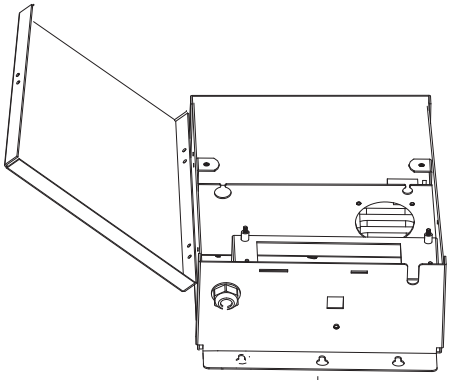
PART: 1-1

PART: 1-2



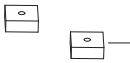


PART: 1-3



PART: 1

PART: 1-4



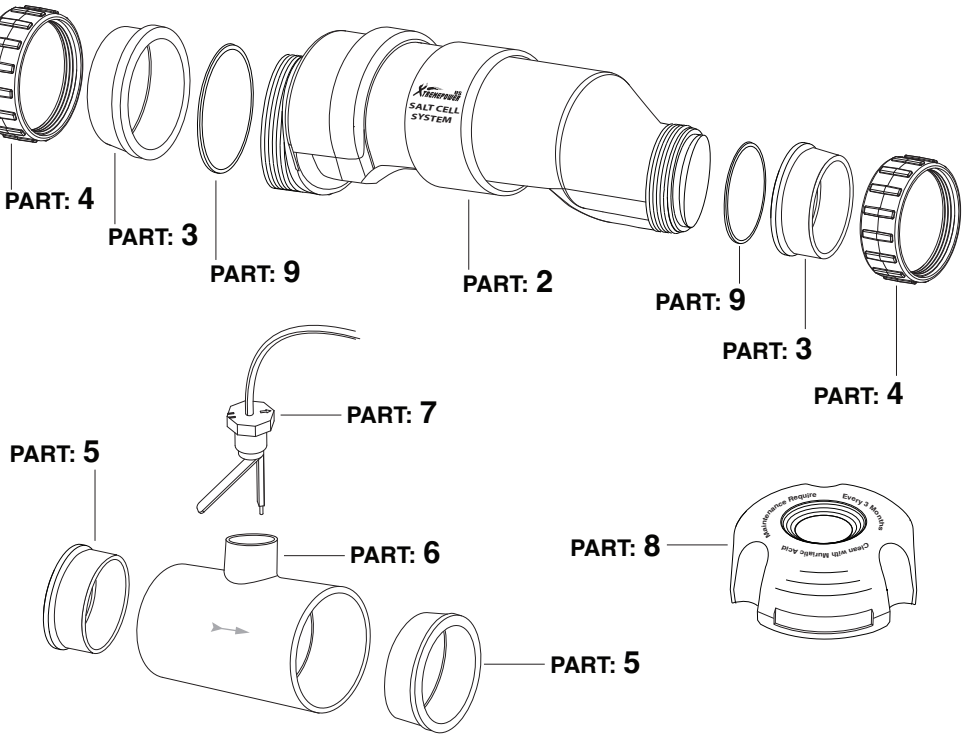
PART: 1-5

PART: 1-6

REPLACEMENT PARTS

PARTS DIAGRAM / PARTS LIST

PART	PART NO.	DESCRIPTION	QTY
1	5320124107	ELECTRIC CONTROL BOX	1
2a	647018871000	SALT CHLORIDE BODY - SKU 90151	1
2b	647018971000	SALT CHLORIDE BODY - SKU 90152	1
2c	647019071000	SALT CHLORIDE BODY - SKU 90153	1
3	47018036001	WATER PIPE CONNECTION	2
4	47018037001	NUT JOINT	2
5	47018020001	2 TO 1.5 INCH CONNECTOR	2
6	47018017001	2 INCH FLOW TEE	1
7	5760099000	FLOW SENSOR	1
8	647018872000	CLEANING BASE with O-RING ϕ62*ϕ3	1
9	5431031080	O-RING ϕ63*ϕ3	2



DISCLAIMER

PLEASE READ THE FOLLOWING CAREFULLY

The manufacturer and/or distributor have provided the parts list and assembly diagram in this manual for reference purposes only. They do not make any representation or warranty to the buyer that they are qualified to make repairs to the product or replace any parts of the product. In fact, the manufacturer and/or distributor expressly state that all repairs and parts replacements should be undertaken by certified and licensed technicians, and not by the buyer.

The buyer assumes all risk and liability arising from their repairs to the original product or replacement parts or arising from their installation of replacement parts. It is strongly advised that qualified professionals handle any repairs or replacements to ensure safety and proper functioning of the product. Improper installation and operation may result in injury, property damage, or voiding of warranty. The manufacturer and/or distributor shall not be held responsible for any accidents, damages, or malfunctions resulting from the buyer's installation and operation of the product. It is essential to follow all safety guidelines and recommendations provided in this manual and to seek professional assistance if unsure about the installation or operation procedures.

CUSTOMER SERVICE

If you have any questions about ordering our pool pumps and replacement parts or other products, please feel free to contact us using the following contact information:

Customer Service and Technical Support

Phone: (909) 628-0880
Email: customer@xtremepowerusa.com
Hours of Operation: Monday – Friday, 9AM – 4PM (CST)