



# ACE<sup>®</sup>

**Salt Water Sanitizing System**



**HotSpring<sup>®</sup>**

*Every day made better<sup>®</sup>*

A C E O W N E R ' S M A N U A L

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## Important Safety Instructions (Read, Follow, and Save all Instructions)

**WARNING:** Operate the ACE® salt water sanitizing system only according to these instructions.

**WARNING:** Do not energize or operate the unit if the cell housing is damaged or improperly assembled.

**WARNING:** To reduce the risk of electric shock, replace damaged cords or cell immediately.

**WARNING:** Remove power from the spa before performing any maintenance or troubleshooting.

**CAUTION:** To avoid damage DO NOT insert any objects into the cell.

**CAUTION:** Prior to using the spa, check water parameters and adjust if necessary.

When using the spa, the chlorine level must be maintained between 1-5 ppm. Supplement sanitizer generation with dichlor or MPS as needed. The ACE system is compatible with dichlor, MPS, and silver. It is NOT compatible with bromine or BaquaSpa®/biguanide.

**Disclaimer:** This is not an automatic water care system. The system is sized for the typical user. Heavy users may need to supplement sanitizer generation with dichlor or MPS.

## THE SPA OWNER IS ULTIMATELY RESPONSIBLE FOR MAINTAINING PROPER SANITARY WATER CONDITIONS.

Carefully review the entire Owner's Manual before using the ACE system, and keep this manual available for reference. If you have any questions about your ACE salt water sanitizing system's set-up, operation, or maintenance, contact your authorized Hot Spring® dealer.

## Overview of the ACE System

The ACE<sup>®</sup> salt water sanitizing system automatically generates powerful cleaners to improve your hot tub ownership experience. The ACE system makes water care easy, provides better quality water, and with proper care, allows spa water to last much longer than with traditional water care – up to 12 months\*.

\*Visit [www.hot.spring.com/save-water](http://www.hot.spring.com/save-water) for more information.

**The ACE Cell** - Installed in the circulation pump filter of your Highlife Collection or Limelight Collection spa, the ACE cell contains a diamond electrode that generates active oxygen, chlorine and other cleaners. Depending upon your spa usage, source water make-up and proper cell maintenance, the average ACE cell life is 2-3 years. To maximize ACE cell life: **clean and inspect the cell a minimum of every 90 days**, keep spa water balanced and maintain a calcium hardness level of 50 ppm.

**The ACE Cleaning Cycle** - The ACE system cleans the water with active oxygen first, before it creates a measurable amount of chlorine. While the system is cleaning the spa water, you will not get a chlorine reading on your test strip. **If the chlorine level is at 0, add bottled dichlor or allow the system more time to build and maintain a chlorine level.**

**Calcium Hardness** - To ensure effectiveness of the ACE system and maximize ACE cell life, keep the calcium hardness level of the water between 25-75 PPM. There are two options to reduce hardness:

1. **Vanishing Act Calcium Remover.** The standard Vanishing Act can remove up to 100 ppms of calcium hardness from spa water after the hot tub has been filled, or after the spa has been topped off. The XL version can remove up to 300 ppm. Follow instructions on the box.
2. **On the Go Portable Water Softener** (sold separately). The *On The Go* portable water softener allows you to fill your spa with softened water at start up, and when you need to top the spa off. If you live in a region with hard water we highly recommend the On the Go portable water softener.

**Supplemental Water Care Products** - To properly maintain your spa water you will need additional water care products, some of which are included with your ACE system. The items included are:

Vanishing Act<sup>®</sup> Calcium Remover

- FreshWater<sup>®</sup> Spa Salt
- ACE Cell Cleaning Bottle
- FreshWater 5-way Test Strips
- FreshWater Salt Test Strips

Sold separately:

- Clean Screen<sup>®</sup> Pre-Filter
- Freshwater pH/Alkalinity Up and pH/Alkalinity down
- Freshwater Concentrated Chlorinating granules.

- On the Go Portable® water softener (if needed)
- Vanishing Act™ Calcium Remover XL (if needed)
- Freshwater® Cell Cleaner

For more information, including helpful videos, visit [www.hotspring.com/ace-salt-water-hot-tub-system](http://www.hotspring.com/ace-salt-water-hot-tub-system)

## Spa Owner Responsibilities

**Always maintain balanced spa water.** Use a test strip to test/adjust water at start-up and beyond. Ensure that pH and alkalinity levels stay within the OK range. Keep total hardness between 25-75 ppm. Use the Vanishing Act calcium remover as needed.

**Test for chlorine regularly.** Use a test strip. The recommended chlorine level is between 1 and 5 ppm. Add FreshWater Concentrated Chlorinated Granules to supplement the system as needed. You can reduce the chlorine level in the spa water by adding hydrogen peroxide.

**Adjust Output level as needed.** To maximize cell life, keep the output level set as low as possible to meet your needs. If your use pattern changes you will need to adjust the output level up or down accordingly. The boost function or Freshwater Concentrated Chlorinating Granules can be used on occasions when more chlorine is needed.

**Clean the ACE cell.** The cell should be cleaned at a minimum of once every 90 days. High levels of hardness in the water will mean the cell should be cleaned more frequently.

**Keep the filters clean.** Dirty filters can impact the ACE systems ability to maintain spa water. Clean filters every 30 days to ensure optimal ACE system performance.

**30-day check-up.** Every 30 days test and balance spa water, confirm your output setting, rinse filters, and shock with FreshWater Concentrated Chlorinating Granules. A 30-day timer will remind you to perform this step.

## Getting Started

### **Fill your Spa**

Fill the spa using the CleanScreen® pre-filter (with the valve 50% closed at a 45° angle). Soft water can be used to fill the spa.

If you have hard water, fill the spa using the On the Go portable water softener or other soft water source. Ensure hardness no lower than 25 ppm by topping the spa off with a small amount of tap water.



If you are filling with well water or have metal issues see **TREATING FOR METALS** in the troubleshooting section for additional instructions.

**NOTE:** If you are not filling your spa for the first time, clean your filters with Filter Cleaner or replace with new filters, before refilling spa.

## System Start-up

1. **Test and balance spa water** using a 5-way test strip. Measure pH, Total Alkalinity, and Hardness levels, to determine if your water is in the "OK" ranges specified for the ACE<sup>®</sup> system (see table below) and adjust as needed.

ACE System Parameter	Target	Min - "OK" Range - Max	
Salt	1750 ppm	1500 ppm	2000 ppm
Hardness	50 ppm	25 ppm	75 ppm
Alkalinity	80 ppm	40 ppm	120 ppm
pH	7.4	7.2	7.8
Chlorine	3 ppm	1 ppm	5 ppm

2. **Reduce Hardness if needed.** Using the Vanishing Act calcium remover may take 24 hours or longer. Rinse the calcium remover before use, and follow instructions on the box. Continue the start-up process while the calcium remover is working; be sure to reposition the bag after jets are turned on/off. Ensure that the calcium level reaches 50 ppm. Additional Vanishing Acts may be required.
3. **Treat for metals if needed.** See troubleshooting.
4. **Add Salt** based on your spa model size one cup at a time to the filter compartment with jets running. Add 1 cup (675 gm) per 100 gallons (378 liters). Run jets for 5 minutes to allow salt to dissolve. Verify salt level with salt test strips.
5. **Add FreshWater<sup>®</sup> Concentrated Chlorinated Granules** as directed on the bottle to create a chlorine residual of 5 ppm. Allow jets to run for 5 minutes per jet system, rotating diverter valves.
6. **Turn the ACE system ON.** Use your spa's control panel.
7. **Enter Output level.** Access the Water Care menu. Scroll through Output Levels (0=system off, 10=maximum output) by pressing the soft button near the word Output on the Standard Control Panel or press the  or  on the Wireless Remote Control Panel. The recommended Output Level at start-up is between 3 and 5 depending on the spa size.

**Note:** It may take up to 24 hours for the ACE System Status to register in the green/OK range of the system status bar.

## 24 Hours Later

Test spa water with a FreshWater 5-way test strip. Adjust alkalinity and pH as needed. If hardness is above 50 ppm, use additional calcium removers at this time.

If there is not a measurable amount of chlorine in the spa water after 24 hours, the ACE system is still cleaning the water. If there are contaminants in the fill water or if you use the spa heavily initially, it may take the ACE system a few days to clean the spa water and keep up with your chlorine demand.

You can still enjoy your spa, simply add FreshWater Concentrated Chlorinated Granules to the water to achieve a chlorine level of 3 ppm. Repeat this as needed until your test strip shows that the ACE® system is sustaining a minimum of 1 ppm residual of chlorine in the water.

## Ongoing Maintenance

### **Test spa water with a 5-way strip regularly (at least once every A week)**

- The pH level may increase during the first few weeks after start-up. Add pH down if needed.
- Use the Vanishing Act calcium remover to reduce hardness to 50 ppm as needed.
- Adjust output setting to maintain 1-5 ppm chlorine.

### **Monthly: Test the water, shock & confirm output level**

- Ensure water is balanced. Confirm/adjust output setting via the control panel.
- Shock the water with granular chlorine to 5ppm and flush all jet systems.
- Inspect Cell.

### **Clean the ACE Cell (at least once every 90 days)**

- Visually inspect the ACE cell for calcium scale between the plates (if fill water has hardness over 50ppm inspect cell monthly).
- Clean the cell as needed, or at least once every three months following instruction on the cell cleaning solution or cell cleaning bottle.

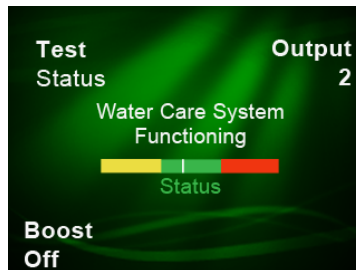
## System Operation

### **Bartop Control Panel**

Access the water care menu by pressing the Options hard key on the Highlife Collection bartop control panel. Within the water care screen, shown below, you can easily verify the System Status, test the system, or activate a system Boost.

**Test System Status**  
Press Soft key to test  
and refresh display

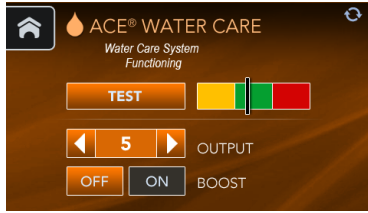
**Display Boost Status**  
Press Soft key to  
turn Boost on or off



**Displays Output Setting**  
Press Soft key to scroll  
through settings.

**System Status Message**  
is displayed and provides  
instructions for operation.

## Touch Control Panel



Access the water care menu by pressing the water care icon on the Home screen. Within the water care screen, you can easily verify the System Status, adjust output, test system or activate a system Boost.

## Features & Settings

### Output Level:

The ACE<sup>®</sup> system cleans the water throughout the day. The output setting of 0 -10 determines how long the cell runs each day. Observe your usage patterns and measure the chlorine level before each use to guide your output setting. Adjust output up or down to increase or decrease output. Keep your setting as low as possible to maintain 1-5 pm chlorine. Use Boost or add Freshwater Concentrated Chlorine Granules for occasional high use situations.

### Output Settings

- |     |  |
|-----|--|
| 0   | No output/System off   |
| 1   | Vacation/low output mode                                       |
| 2-7 | Normal use settings (recommended)                              |
| 8-9 | High use settings  |
| 10  | Maximum system output, equal to Boost (system runs constantly) |

### Turning the ACE System off

By setting Output to 0, the system will stop generating sanitizers. You will need to manually maintain the sanitizer level using FreshWater Concentrated Chlorinated Granules if the ACE system is off.

### Vacation or limited use

When the spa is not going to be in use, shock the spa by increasing chlorine to 3-5 ppm and then run the automatic clean cycle. Clean or replace filters. Lower Output to 2. For extended vacations, lower Output to 1 for low output mode.

### Boost:

The Boost feature activates the ACE cell for 24 hours of consistent operation, overriding the output setting. The system returns to its previous setting once the Boost cycle is over. Use the Boost function to gradually increase the chlorine level prior to a high use situation.

Freshwater Concentrated Chlorine Granules can also be added to create an immediate chlorine residual to remove bather load and assist the ACE® system in building a sanitizer residual.

### 30 Day Reminder:



You must check your spa water at least once every 30 days. To remind you, the green light on the logo light and the ACE water care icon will flash and the status message will read, Check Water/Confirm Output at the end of each 30-day cycle.

1. **Test and balance spa water** using a 5-way test strip. Measure chlorine, pH, Total Alkalinity, and Hardness levels, to determine if your water is in the “OK” ranges specified for the ACE system. Adjust as needed. Reduce Hardness to 50 ppm using the Vanishing Act calcium remover if needed.
2. **Confirm output setting.** Access the Water Care menu. To clear the 30 day reminder:

#### Standard Control Panel

- Press the Output soft key.
- Reset your Output setting as needed to maintain a 1-5 ppm chlorine residual.

#### Touch Control Panel

- Press  or  to lower or raise OUTPUT.
  - Reset your Output setting as needed to maintain a 1-5 ppm chlorine residual.
3. **Superchlorinate/Shock spa water.** Add granular sodium dichlor as directed on the bottle to bring the spa water to 5ppm. Allow jets to run for 5 minutes per jet system, rotating any diverter valves.

The 30-day timer resets any time the output setting is adjusted. If the output setting is not confirmed at the 30 day reminder, the ACE system will automatically lower the output setting.

**Day 30: Maintenance reminder, reconfirm output level**

**Day 33: Output setting automatically lowered to 2**

**Day 40: Output setting automatically lowered to 1 (Vacation/Low Output Mode).**



## Status Test:

The status test shows you if the ACE® is performing optimally. It reflects a number of elements that can impact performance including the salt level, cell status (clean/dirty), filter status (clean/dirty), and water temperature. The status automatically updates every six hours and prior to a Boost. You can manually update system status by activating the status test using your control panel.

OK: Your cell and water are working together to clean the water.

LOW: Your system needs your attention and is NOT generating cleaners at this time. Your cell may be dirty, or your salt level may be low. See TROUBLESHOOTING

HIGH: Your system needs your attention and is NOT generating cleaners at this time. Your salt level is high. See TROUBLESHOOTING

Status Message On Screen	Meaning or Action Required
Water Care System Functioning	Operating normally
Water Care System Off	System Off Output setting 0
Water Care System Low Output	Low Output Output setting 1
Water Care System Boosting - Output 10	Increasing Chlorine level Output setting 10 for 24 hours
Water Care System Testing Water	System test initiated/in progress
Water Care System Check Water/Confirm Output	Test Water, Update Output Setting
Water Care System Offline - Circ Pump	ACE is disabled for 8 hours when Summer Timer is active
Water Care System Offline - High Salt	Non-operational <b>High salt</b> level detected - Correct salt level; Clean/Inspect Cell
Water Care System Offline - Inspect Cell/Check Salt	Clean/Inspect cell for scale, clean cell if needed. Test water with salt test strips and add salt if needed
Water Care System Contact Dealer For Service	Contact Dealer For Service

## Cell Cleaning

The cell should be cleaned a minimum of every 3 months. A dirty cell requires the ACE® system to work harder than necessary, and can shorten the life of the cell. A dirty cell can also cause your System Status to register low, (in the yellow) and cause the system to go off line.

Prevent Cell Damage: NEVER insert anything into the cell or pressure wash it. This will damage the electrodes.

1. Turn off the power to the spa. Open the spa cover and remove the filter lid.
2. Unscrew gray filter cap and gently pull the cell out of the filter.
3. Inspect the cell for scale by looking between the electrodes.
4. Unscrew the lid to the ACE Cell Cleaner (or create a cleaning solution by following the instruction on the cell cleaning bottle included with the ACE system.)  
**NOTE:** A stronger cleaning solution of 1 part muriatic pool acid and 10 parts water, or a commercial cell cleaner, can be used if scale is excessive.
5. Remove the lid and place the ACE cell in the solution, ensuring that the bottom of cell is floating.
6. Soak the cell for 10 minutes or until bubbles stop coming from the cell. If bubbles are still releasing from the cell after 10 minutes, continue soaking until the cell is clean and all scale is removed.
7. Rinse cell and inspect for cleaning completion. Repeat as needed.
8. Replace cell into the filter standpipe. Screw on the gray filter cap, replace the filter lid, and power up the spa. Ensure that the cell is at the bottom of the filter standpipe by feeling for the pull of the pump's suction.

## Troubleshooting

### **Treating for Metals:**

High metal content can cause staining and discolored water. It's important that metals are removed before starting up the ACE system.

1. Fill the spa with the Clean Screen® pre-filter, ensuring that the valve is only 50% open (45° angle).
2. Ensure that there is no ozone unit installed and that the ACE system is turned off.
3. Add FreshWater Stain & Scale metal control according to the instructions on the bottle.
4. Place a Vanishing Act Calcium remover over the heater return.
5. DO NOT add oxidizers (chlorine, ozone, ACE) for at least 24 hours.

### **Flashing On/Ready light and Water Care Icon**

The green ON indicator light, in the Hot Spring logo on the front of your spa will slowly flash when the ACE system requires attention. The water care icon on the main control panel will also flash as an indication that some action is needed. Access the ACE system menu to read the System Status Message.

**NOTE:** You may continue to use your spa as long as the chlorine level on the FreshWater® test strip is in the OK range. Add granular chlorine as needed.

### **System Status Low (Yellow):**

The system status reading can be affected by cell age, scale build-up (dirty cell), cold water, high chlorine, dirty filters, or dirty water.

1. Verify water temperature
  - a. The status reading will read lower in cooler water. To get an accurate status reading, ensure water is above 95° F
2. Verify salt level

Use a salt test strip to measure salt level. If the test strip shows salt level is low:

  - a. Add (1) cup of salt to the water and circulate for 5 minutes.
  - b. Retest with a salt test strip, and repeat until salt level reads in the OK range.
  - c. Run a manual status test to refresh. If System Status still reads low, check for other conditions noted above.
3. Verify chlorine level

Use a 5-way test strip to measure chlorine level. If the test strip shows chlorine level is high (above 5 ppm):

  - a. Add 1 cup hydrogen peroxide with jets running. Check chlorine level after 10 minutes.
  - b. Retest with a test strip and repeat as needed
4. Visually inspect and clean the cell
  - a. Follow the cell cleaning process to ensure that scale has not accumulated on the cell.
  - b. Once the cell has been cleaned, replace the cell in the filter standpipe.
  - c. Run a manual Status Test to refresh.
5. Visually inspect and clean filters (refer to spa owner's manual).
6. If the System Status message continues to read low, it may be an indication that it is time to replace the cell. Call your authorized Hot Spring Dealer for further instructions.

### **System Status High (Red):**

If the Status indicator is in the red, this typically indicates that there is too much salt in the water.

1. If the status reading is less than halfway in the red use a salt test strip to measure salt level. If the test strip shows salt level is high:
  - a. Drain 25% of the water from the spa and refill with clean, clear water.
  - b. Retest with a salt test strip, and repeat until salt level reads in the OK range.
  - c. Run a manual Status Test to refresh.
2. If the salt indicator is more than halfway in the red part, drain completely and refill following the Start-up and Refill Procedure.

## Cloudy Water:

Cloudy water can be the result of number of issues.

- **High pH.** Use a 5-way FreshWater® test strip to check spa pH level. Add pH down as needed.
- **Low chlorine.** Use a 5-way FreshWater test strip. If chlorine is low, manually add granular dichlor as needed to shock spa for 24 – 48 hours.
- **Dirty filter.** Check filters and clean as needed (see your spa's Owner's Manual).

## No Chlorine Reading:

The ACE system cleans spa water differently than bottled chlorine. Since the water is cleaned before the chlorine residual is established, only a small chlorine residual is needed. If there appears to be no chlorine in the water:

- **Check Output settings.** If you are using the spa heavily, your use level may require you to increase the Output setting to a higher number.
- **Increase Salt Level.** Keep the salt level near the high-end of the OK range (1750 ppm) to ensure maximum chlorine generation.

It is very important that you shock the spa water with FreshWater Concentrated Chlorinated Granules at start-up. Skipping this step can prevent the ACE® system from establishing a chlorine residual.

If the ACE system is running at the maximum output setting and still not able to keep up with your chlorine demands, manually add Chlorine granules.

## High Chlorine Level:

The ACE system will continue to produce chlorine according to the selected Output level, regardless of whether you use your spa or not. If you begin to use your hot tub less frequently, it is important that you adjust the Output setting down. If the chlorine level is too high:

- **Check Output settings.** Check settings. Your Output may require you to decrease the setting to a lower number.
- **Reduce chlorine level.** Add 1 cup hydrogen peroxide with jets running. Check chlorine level after 10 minutes and repeat as needed.

## Tips:

- **Calcium Hardness:** Use the Vanishing Act calcium remover to keep total hardness levels low and minimize the need for anti-scalant & metal control. ON THE GO® portable water softeners are recommended for ACE owners in hard water areas.
- **Heavy Use.** Initiate a Boost a few hours prior. Periodically measure the chlorine and add granular sodium dichlor as need.
- **MPS use.** Granular MPS (Potassium Peroxymonosulfate) can be used in place of chlorine granules to establish a sanitizer residual at start-up, and for shocking the spa at each 30-day check-up. Use FreshWater MPS test strips to measure MPS levels in the spa water if MPS is preferred.

- **Metal Treatment.** If metals are present be sure to discuss this with your Hot Spring dealer. Use a Vanishing Act and Stain and Scale control for 24 hours before adding oxidizer from granular chlorine, ozone, or turning the ACE<sup>®</sup> system on. Excessive use of phosphate anti-scalant will promote high phosphate levels which can cause scale and weaken chlorine output.
- **Mixed Oxidants.** To clean the water, the ACE salt water sanitizing system generates a variety of mixed oxidants, in addition to chlorine. The chlorine reading on the test strip may not be indicative of total oxidizer level.
- **Ozone.** The ACE system should be capable of maintaining a sufficient sanitizer level, and adding ozone is not recommended.
- **Phosphates.** High levels of phosphates (above 300 ppb) may cause reduced sanitizer output, ask your local Hot Spring<sup>®</sup> dealer to help you test for phosphates.
- **Salt level.** Salt is not consumed during sanitizer production. The salt level is only reduced by adding water to the spa. Using the spa and adding chemicals will increase the salt level over time.
- **Salt buildup.** Periodically hose off your spa and the deck or concrete surrounding your spa after use to prevent salt buildup that can occur from splash-out.
- **Summer Timer.** The Summer Timer will decrease the chlorine generation time of the ACE system. If the spa's Summer Timer is activated, the Output will most likely need to be increased to compensate. If chlorine level is low, adjust Output up by one each day until 1-5 ppm is maintained. Add granular chlorine to compensate.
- **Water Changes.** Because the ACE salt water sanitizing system reduces the amount of chemicals added to the spa water, it is possible to significantly extend the life of the water. Test your water regularly to ensure safety.

## Important Additional Information

**WARNING:** Operating ACE without water flow through the cell can cause a build up of flammable gas.

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

**WARNING:** Spa usage and higher temperatures may require higher chlorine output to maintain proper free available chlorine residuals.

**WARNING:** Maintaining high salt and chlorine levels above recommended range can contribute to corrosion of pool or spa equipment.

Check the expiration date of test strips as test results may be inaccurate if used after that date.

When replacing the cell, only use replacement cells having a label the clearly states that it is a replacement cell for the chlorine generating ACE device.

Follow all aspects of the local and National Electrical Code(s) when installing ACE.

Maximum spa water usage temperature is 104<sup>o</sup> F (40<sup>o</sup> C). Bathing in spa water at maximum temperature should not exceed 15 minutes.

## Specifications

- System designed to treat 500 gallons (1890 liters).
- The maximum output of hypochlorous acid equivalent to 16 grams of free available chlorine per day.
- Input:100-240VAC 0.55A 50/60Hz
- Output: 12VDC 1.67A

## Customer Service

If you have any questions about your ACE salt water sanitizing system that have not been answered by this manual, consult your authorized Hot Spring dealer.

Watkins Manufacturing Corporation can be reached at: 1-800-999-4688 (extension 8432) inside the USA or +1 760-598-6464 outside the USA Monday through Friday, 8 a.m. to 5 p.m. Pacific Standard Time (PST) or e-mail [custsvc@watkinsmfg.com](mailto:custsvc@watkinsmfg.com).

Watkins Manufacturing Corporation, 1280 Park Center Drive, Vista, CA 92081 USA.

## ACE® Salt Water Sanitizing System Warranty

### **One-Year Limited Warranty**

Watkins warrants to you, the original consumer purchaser, that the components of the ACE salt water sanitizing system will be free from defects in materials and workmanship for one year.

### **Extent of Warranty**

This warranty extends only to the original consumer purchaser of the ACE salt water sanitizing system when purchased and originally installed within the boundaries of the United States. If the ACE salt water sanitizing system is purchased outside the United States other warranties may apply. See your local Hot Spring dealer for details. This warranty begins upon installation of the spa. This warranty terminates upon any transfer of ownership, or if the spa is installed or relocated outside the boundaries of the United States by the original consumer purchaser prior to the expiration of the warranty period.

### **Warranty Performance**

To make a claim under this warranty, contact your dealer. In the event you are unable to obtain service from the dealer, please contact Watkins Manufacturing Corporation, 1280 Park Center Drive, Vista, California, 92081. Attn: Customer Service Department (800) 999-4688 inside the USA or +1 760-598-6464 outside the USA or via e-mail, [custsvc@watkinsmfg.com](mailto:custsvc@watkinsmfg.com). You must give Watkins and/or your dealer written notice of any warranty claim, along with a copy of your original purchase receipt indicating the date of the purchase, within thirty (30) days of the time you discover the claim. Watkins reserves the right to inspect the malfunction or defect on location.

Watkins or its Authorized Service Agent will repair any defects covered by this warranty. Except as described herein, you will not be charged for parts, labor or the freight costs for parts necessary to repair the ACE<sup>®</sup> system for defects covered by this warranty. In some cases, the servicing dealer may charge you a reasonable repairperson travel/service charge that is not covered by this warranty. Please contact the dealer for information regarding any such charges.

### **Limitations**

Except as described above, this warranty does not cover defects or damage due to normal wear and tear, improper installation, alteration without Watkins' prior written consent, accident, acts of God, misuse, abuse, commercial or industrial use, use of an accessory not approved by Watkins, failure to follow Watkins' Owner's manual, or repairs made or attempted by anyone other than an authorized representative of Watkins. Alteration includes, but is not limited to, any component change, or electrical conversion. Visit [www.hotspring.com](http://www.hotspring.com) or contact your dealer for a list of manufacturer approved accessories.

### **Disclaimers**

**TO THE EXTENT PERMITTED BY LAW, WATKINS SHALL NOT BE LIABLE FOR LOSS OF USE OF THE SPA OR OTHER INCIDENTAL OR CONSEQUENTIAL COSTS, EXPENSES OR DAMAGES, INCLUDING BUT NOT LIMITED TO THE REMOVAL OF ANY DECK OR CUSTOM FIXTURE OR ANY COST TO REMOVE OR REINSTALL THE SPA, IF NEEDED.** Some states do not allow limitation or exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you. **ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THE APPLICABLE WARRANTY STATED ABOVE.** Some states do not allow limitations on how long an implied warranty may last, so the above limitations may not apply to you.

### **Legal Remedies**

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.



IMPORTANT: Watkins Manufacturing Corporation reserves the right to change specifications or design without notification and without incurring any obligation.

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