

<u>Owner's Manual</u>

EPA Reg. No. 67712-15 EPA Est. No. 67712-CA-001

IMPORTANT: Spa Owner, save this manual. Installer, leave this manual with the spa owner.

Safety Instructions Important Information

Please read prior to installation.

Nature^{2®} Spa has been designed to sanitize spas up to 500 gallons.

Failure to heed the following can result in permanent injury or drowning.

EQUIPMENT UNDER PRESSURE

 Always turn spa off prior to installing or changing Nature² Spa. Your spa system is operated under pressure and the pressure must be released before you begin work. Please see your spa owner's manual for further instructions.

PREVENT CHILD DROWNING

 Do not let anyone, especially small children, sit, step, lean or climb on any equipment installed as part of your spa's operational system.

LOW CHLORINE RECIPE

 You must strictly follow the Nature² Spa recipe included in this manual to maintain proper water chemistry and avoid health hazards. Failure to follow these instructions can lead to sickness from bacteria and other noxious organisms.

PRECAUTIONARY STATEMENT HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

In the unlikely event that a cartridge breaks, mineral media should not be ingested by humans or animals as it may cause gastric distress.

FIRST AID

IF INGESTED: Call poison control center or doctor immediately for treatment advice.

The Nature² Spa is designed only for residential portable spas.

WE ASK YOU TO TAKE THE TIME TO GET FAMILIAR WITH THIS MANUAL.

Thank you for purchasing Nature²[®] Spa. We believe the more you know, the more enjoyable your bathing experience will be and the more you will reduce the time, effort and cost of maintaining your spa. Spa owners who switch from conventional chemical programs to the Nature² Spa spend less time maintaining their spa. Every spa has its own characteristics of water type, amount of sunlight, etc. The recipe included in this manual will help ensure good water quality in any spa. Remember, your Nature² Spa dealer can provide advice and service.

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Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Nature² Spa Compatibility

Important: When converting either a biguanide or bromide treated spa to a Nature² Spa, the spa must be completely drained and refilled. Then follow the Nature² Spa start-up procedure.

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Start-Up

Before starting up a new Nature^{2®} Spa. clean debris and algae out of the spa and spa equipment.

Important: Do not install the new Nature² Spa until the spa water is clean and chemically balanced.

Balance spa water before installing Nature² Spa.

•	pН	7.2-7.6
•	Calcium Hardness	200-400 ppm

- Calcium Hardness
- Total Alkalinity

80-120 ppm

Total Dissolved Solids (TDS) 300-2000 ppm

Consult your Nature² dealer for specific water balance instructions.

Balance the Water

To find out if your spa water is balanced:

- take a water sample to your dealer to be tested regularly, or
- · ask your dealer to recommend a spa test kit for water balance

Element: p	OH Range: 7.2-7.6		
If too low:	The surface of your spa can become etched. Metal parts in the pump and plumbing will corrode.		
How to fix:	Add pH increaser.		
If too high:	"Scale" forms on the surface of your spa. The water can become cloudy. Equipment can be damaged.		
How to fix:	Add pH decreaser.		
Element: Calcium Hardness Range: 200-400 ppm			
If too high:	Rough, discolored deposits ("scale") will form on the spa surface and inside spa equipment.		
How to fix:	low to fix: Drain or dilute the spa water. Consult your dealer.		
Element: 1	otal Alkalinity Range: 80-120 ppm		
If too low:	too low: It provides no buffer so that you constantly get fluctuating pH readings, which can damage equipment and spa surfaces.		
How to fix:	Use an alkalinity increaser.		
If too high:	The water becomes cloudy or milky white.		
How to fix:	Add acid to bring alkalinity down.		

Install the Nature^{2®} Spa

- 1 Drain and refill your spa. Balance the water per spa manufacturer guidelines.
- 2 Install the Nature² Spa after water is balanced. Refer to Assembly and Installation Diagrams below for instructions regarding your particular model's installation.
- 3 Superoxidize the spa water with an EPA registered source of chlorine according to manufacturer's instructions to burn off contaminants and activate cartridge.
 - Add 1.5 tablespoons of dichlor to spa per 250 gallons (approx. 1000 liters).
 - Note: 1.5 tablespoons is approximately 3/4 ounce or 24 grams.
 - Do not enter the spa if the free available chlorine residual is over 5 ppm.

Important: Initial superoxidation with dichlor¹ is required to burn off contaminants and activate cartridge.

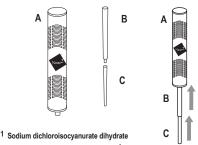
4 Run spa according to recommendations supplied to you by the manufacturer of your spa.

Assembly and Installation Diagrams

The Nature 2 Spa comes in three (3) parts: the main body (A) and two (2) support stems (B and C).

1 Connect the support stems together and press onto main body to create a single device as shown.

Note: The Nature² Spa is designed to fit most portable spas. Zodiac Pool Systems, Inc. assumes no liabilities for the product if installed in any way other than the methods described in this manual.



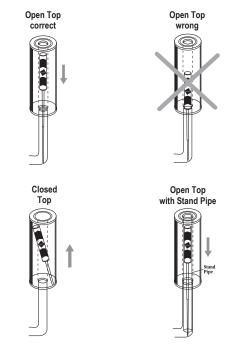
2. Slide the entire device into the core of your existing spa filter cartridge. See examples below.

Open Top: Slide unit in from the top. Position near the top half of the cartridge. (Support stems may be cut to position the cartridge correctly.)

Open Top with Stand Pipe: Some spa filter systems are configured with a standpipe running the length of the filter core. Simply slide unit in from the top. Position near the top half of the cartridge for easy retrieval.

Closed Top: Slide unit in from the bottom. Position unit to rest on shelf inside filter core.

Note: When installed, the Nature^{2 \otimes} Spa must be at least 1" (2.5 cm) above the bottom of the filter to prevent blocking water flow.



Operation and Maintenance

There is one (1) recipe for maintaining clean, clear, sanitized water with minimum time and effort. This recipe provides the easiest and most economical way to care for your Nature^{2®} Spa.

Low-Chlorine Recipe

Ingredients:

- Nature² Spa
- Non-chlorine oxidizer (MPS²)³
- Nature² Spa Test Strips⁴, or equivalent (MPS², pH, and total alkalinity)
- pH, hardness and total alkalinity adjusting chemicals
- · Dichlor¹, EPA registered source

When: What to do:

Every day	Run spa according to recommendations supplied to you by the manufacturer of your spa.
Before each use	Test the water with Nature ² Spa Test Strip equivalent). If the MPS ² level is low, add 1 tablespoon of MPS ² to spa per 250 gallons (approx. 1000 liters). Note: 1 tablespoon is approximately 1/2 ounce or 16 grams. Use the Nature ² Spa Test Strip (or equivalent) to test the spa water after each addition of MPS ² . If the test strip indicates levels below the OK range, add 1 tablespoon MPS ² to spa per 250 gallons and re-test. Enter spa only after test strip indicates a sufficient level of MPS ² .
After each use	Add 1 tablespoon of MPS ² to spa per 250 gallons (approx. 1000 liters).
Once per week	Adjust the pH, total alkalinity, and hardness as needed. A convenient way to test pH and total alkalinity is the Nature ² Spa Test Strip.
Every 4 months	Drain and refill your spa. Replace Nature ² Spa and repeat sanitizer start-up.

When: What to do:

As needed Shock treat with 1.5 tablespoons of an EPA registered source of dichlor¹ per 250 gallons (approx. 1000 liters) to remedy problems which may occur when bathing loads are high, when successive MPS² test strip reading indicate high demand, when water appears hazy or dull, when unpleasant odors or eye irritation occur, after heavy wind and rainstorms or if foam develops.

Note: As an alternative to MPS², an EPA registered source of dichlor¹ may be substituted: 1 tablespoon dichlor¹ = approximately 3 tablespoons MPS².

Important: Perform start-up procedures for spas which have been unused or unattended. The Nature^{2®} Spa is not to be used with products containing biguanides. If these products are being used, DRAIN AND REFILL SPA WITH FRESH WATER.

Provide Filtration / Circulation

To manage: You need to:

- Circulation Follow the manufacturer's directions for keeping the circulating pump in good working order and operate it at least four (4) hours a day. Consult your Nature² Spa dealer for optimum run times.
- Filtration Check the spa filter periodically and clean it as recommended by the manufacturer.

- 2 Potassium peroxymonosulfate
- $^3\,$ MPS may cause a lowering of the pH and total alkalinity of your spa water.
- Please monitor pH and total alkalinity at least once per week and adjust accordingly.
- ⁴ Nature² Spa Test Strips are available at your local Nature² Dealer.

¹ Sodium dichloroisocyanurate dihydrate

Nature^{2®} Spa Replacement Intervals

Use the month indicator decal to identify the date on which the cartridge should be replaced.

Always turn spa off prior to installing or changing Nature² Spa. Your spa is operated under pressure and the pressure must be released before you begin work. Please see your spa owner's manual for further instructions.

A cartridge lasts four (4) months. The cartridge should not be used longer than four (4) months.

Nature² Disposal

After four (4) months of use, discard Nature² Spa in household trash. Do not save the cartridge for re-use. The cartridge is manufactured with the mineral media sealed inside. In the unlikely event a cartridge breaks, remove it and vacuum out any media introduced into the spa.

Nature^{2®} Spa Limited Warranty

The limited warranties contained within this document are the only warranties given with your Nature² Spa and supercede any prior warranties. All other warranties, expressed or implied, including the implied warranty of merchantability or the implied warranty of fitness for a particular purpose are hereby disclaimed. Our sole obligation under this warranty, and the purchaser's sole remedy, is limited to repair or replacement of the Nature² Spa. The Nature² warranty applies to the original owner only.

THE LIMITED WARRANTIES OF THE NATURE² SPA ARE:

Nature² Spa is warranted to be free of defects in materials and to perform satisfactorily for a period of four (4) months from the date of purchase. Nature² Spa is warranted not to cause staining in your spa. This limited warranty requires that you exercise reasonable care of your spa and keep water in balance at all times. This limited warranty does not cover discoloration to chromium fittings. This warranty does not cover cartridges used with any biguanide products. If the cartridge is defective and does not perform satisfactorily for the entire four (4) months, we will replace the cartridge.

EXCLUSIONS FROM WARRANTY

Nature² Spa is designed for use on residential portable spas up to 500 gallons. If it is used in any other application, the warranty is void, and the purchaser and/or spa owner releases the manufacturer from any and all claims related to the use of the Nature² Spa.

This warranty does not cover problems arising in whole or in part from purchaser's negligence, misuse or abuse, improper maintenance or storage, accident, improper installation, improper application, failure to follow all appropriate safety precautions, Acts of God, abnormal weather conditions, damage from plants or animals, and improper use of chemicals.

This warranty specifically excludes all incidental or consequential damages, except where state law requires them to be paid. This warranty gives you specific rights. You may have other rights that vary from state to state.

TO SUBMIT A CLAIM

Report claims to Zodiac Pool Systems, Inc. by calling 1-800-822-7933. Only the original purchaser may submit a claim under this limited warranty. Claims must be accompanied by an original purchase receipt.

Troubleshooting

	Problem	What to look for
Cloudy water Frequently caused by	Spa filtration	Slow filter turnover rates
improper start up. See section on Start Up	Algae growth	Hazy spa water; may have slightly green appearance.
and Install the Cartridge.	Unbalanced water	 High hardness High TDS (total dissolved solids) High pH High total alkalinity
Algae Algae may be caused by insufficient levels	Green or white algae	Pea green to white color; attaches to spa walls, sometimes colors the entire body of water.
of oxidizer and/or inadequate water circulation.	Note: Do not use algae treatments containing either copper or sodium bromide.	
Stains	Blue/green	Copper or iron from spa equipment corrosion or water supply
	Red/brown	Iron or manganese from equipment corrosion or water supply.
	Black	Manganese in water supply.
	Metal tarnishing	High native mineral content in water; unbalanced water
Scale	Crusty deposits on spa surfaces	High pH and high total alkalinity
		High TDS (total dissolved solids) or high hardness

Consult your Nature^{2®} Dealer for additional info or call 1-800-822-7933.

Treatment

- 1 Backwash and clean filter.
- 2 Run filter for 24 hours.
- 3 Increase run time per day.

Superchlorinate water with EPA registered source of dichlor¹ according to manufacturer's instructions.

Balance the spa water.

- 1 Check pH and adjust if necessary
- 2 Superchlorinate water with EPA registered source of dichlor¹ according to manufacturer's instructions.
- 3 Repeat steps 1 and 2 until algae is gone.
- 1 Adjust pH and total alkalinity to ideal ranges.
- 2 Vigorously brush stained areas.
- 3 Add sequestrant.
- 4 Run filter.
- 5 Twelve hours later, superchlorinate the spa.
- 6 Test and balance water.
- 7 Test spa water for dissolved metals.

Clean with soft cloth and mild detergent.

Test water for minerals; use a sequestrant;

maintain water balance.

Adjust pH and total alkalinity to ideal ranges.

- Replace a volume of spa water with water low in hardness and dissolved solids.
- Use sequestrant to prevent scale buildup if high hardness is a continuing problem.
- 3 If remedial action has been taken, and problem still persists, drain and refill spa.

Nature^{2®} Spa Test Strips



Just dip and swirl the Test Strip.

See accurate and reliable results on the levels of MPS², Alkalinity and pH in your spa's water.

Now available at your local Zodiac® Nature² Dealer.



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