



After-sale Service Manual

DELIGHT BUBBLE Spa (EU,UK,SW)

Oriental Recreational Products (Shanghai) Co., Ltd.



Table of Contents

Chapter 1 After-Sale Service Center Operation and Warranty Policy 3	
1.1 After-sale Service Center Set Up	3↩
1.2 Obligations of the After-sale Service Center	3↩
1.3 MSpa After-sales Service Policy	4↩
1.4 MSpa Warranty obligations to Distributors/Importers	4⊷
Chapter 2 Important Information and Tips for Using Spa Products 5₽	
2.1 Heating Effect -Temperature Increasing Rate or Speed	5↩
2.2 Filter Cartridge	5↩
2.3 Inflate and Deflate the Spa to Avoid Air Leakage	6⊬
2.4 Avoid Air Leakage from Spa Liner Split or Tiny Holes Due to Over-inflation	6⊬
2.5 Try to Repair the Tiny Holes or Split on Spa Liner Instead of Replacing a New Spa Liner	6↩
2.6 Using Spa in the Cold Weather	7↩
2.7 Temperature issue	7⊷
2.8 Broken zipper issue	7⊬
2.9 Water treatment	8⊷
2.10 Where to find Mspa serial number?	10↩
2.11 How is Anti-icing System working for 2020 new spas?	11↩
Chapter 3 MSpa Assembly, Wire Diagram & Major Electric Parts 11₽	
3.1 MSpa Assembly;	11↩
3.2 MSpa Major Electric Parts	14⊬
3.3 Wiring Diagram	15↩
Chapter 4. How to Replace Mspa Parts 16₽	
4.1 Power Board Assembly and Wire Terminal Connection	16↩
4.2 How to Replace control box	16↩
4.3 How to Replace Bubble Generator	17↩
4.4 How to Replace PTC Heater Element	18↩
4.5 How to Replace Transformer	20↩
4.6 How to Replace Filter pump	21↩
4.7 How to Replace Power board	22↩
4.8 How to Replace PCB in the control panel	23↩
4.9 How to Replace check valve	24
4.10 How to Replace Rotation Knob	25↔
4.11 How to Replace Reed/Flow Switch	26⊹
Chapter 5. Trouble Shooting Guide 27₽	
5.1 Check Flow – E0-E1	27↩
Check Flow – Heating failure	27∻
Check Flow – No display	27∻
5.2 Air Leakage and Inflation Failure Checking Flow Chart	
5.3 Water Leaking Problem Checking Flow Chart	
Chapter 6. Frequently Asked Questions 28₽	
Chapter 7. Attachment 35-	
7.1 Attachment 1: Error code check flow	35
Check Flow – E0-E1	
Check Flow – Heating failure	
Check Flow – No display	
7.2 Attachment 2: After sales spare parts list	
7.3 Repair video download link and trouble shooting easy checking list	



Chapter 1 After-Sale Service Center Operation and Warranty Policy

1.1 After-sales Service Center Set-up

ORPC authorizes after-sale service center in each specified country, region or territory. ORPC requests its service center have necessary staff, equipments and facilities to ensure effective, professional and cost-saving warranty services provided to MSpa customers. The service center must be eligible for the following requirements:

- 1.1.1 Have a service telephone or hotline number for customers to call for warranty services or product related inquiries. The service number must keep in service during work days and normal business hours.
- 1.1.2 The service center must have dedicated staff customer service representatives or technical personal to answer phone calls, product inquiries or any other warranty related questions.
- 1.1.3 Provide a proper sized warehouse to store MSpa spare parts and returned defective parts from customers.
- 1.1.4 Have a workshop to test and repair defective spas that defects cannot be solved by telephone service. Repair service must be under valid warranty period.
- 1.1.5 Have necessary equipments or tools for service engineer to carry out the warranty services efficiently.
- 1.1.6 Set up service procedures to guide and monitor service staffs' daily service activities, include answering customers' phone calls, providing the service, recording service details, and filling in the service report.

1.2 Obligations of the After-sale Service Center

As an ORPC authorized After-sales service center, it is responsible to take care of all after-sales service related jobs for MSpa customers in the specific territory at its own cost:

- 1.2.1 Listen and answer customers' phone calls, inquiries, or warranty claims in a timely, polite and professional way
- 1.2.2 Verify warranty claims; decide if it's valid or invalid according to the warranty policy by ORPC.
- 1.2.3 Provide technical services by phone to solve simple warranty issues that are not required of returning product for testing and repair.
- 1.2.4 Test and repair the returned warranty spa products and ship back or return the repaired units.
- 1.2.5 Deliver replacement spare parts to customer if the spa is under warranty, and if customers are willing and capable of repairing the spa by themselves.
- 1.2.6 Record and summary service details by filling in the service report. ORPC requires after service center to submit the summary reports regularly for technical analysis and warranty re-verification purposes. The service report should include the following:
 - Model Number
 - Serial Number
 - Customer Name & Contact Information
 - Purchase Date
 - Claim Date
 - Defect Description



- Defective Part Name
- Repaired or Replaced Part Name and Quantity
- Warranty Service Period
- Photocopy of Customers' Purchase Invoice
- Photo of Defective Spa/Part etc.
- 1.2.7 For any serious quality problems or special warranty issues, the after-service center MUST report to ORPC for approval or confirmation.
- 1.2.8 Manage spare parts inventory effectively, do stock checking regularly and submit the stock inventory list/Consumption report to ORPC monthly.
- 1.2.9 Mspa service partner/distributor shall prepare monthly warranty service report in ORPC's template and submit to OPRC's after-sale service department on every second Monday of the following month.

1.3 ORPC Warranty Policy

ORPC provides warranty for MSpa bubble spa products against defects in materials or workmanship under proper usage and maintenance.

1.3.1 Warranty for Distributors/Importers

MSpa distributors and importers are entitled to manufacturer's warranty from the date of product arrival at the destination port. ORPC/MSpa is only responsible for providing parts, but not services or any labor costs.

Warranty Items:

Mspa Model:D-AL04/06,D-NE02,D-SC04/06,D-TE06,D-AU04/06, D-CA04/06, D-ST04

Warranty Period:

- Nine(9) months (including three(3) months of storage period) for the Delight series spa pool
- Fifteen (15) months (including three(3) months of storage period) for the electric part
- Six(6) months (including three(3) months of storage period) for other spa components like inflatable bladder, spa cover, and other non-electric part

Warranty Starting Date: MSpa distributor/importer warranty starts from the <u>product arrival date at the destination.</u>

1.3.2 Warranty for Consumers

Consumer is entitled to standard consumer warranty from the date of purchase. During the standard consumer warranty, ORPC/MSpa will only provide parts to carry out the warranty repair. The distributor/importer is responsible for all the other costs, including but not limited to labor cost, shipping, and other service related cost. Under all circumstances, it is the importer/distributor's responsibilities to honor the consumer warranty.

Warranty Items: Inflatable Spas

Standard Consumer Warranty Period:

- Six(6) months for the delight series spa pool
- Twelve(12) months for the electric part
- Six(6) months for other spa components like inflatable bladder, spa cover, and other non-electric part

Warranty Starting Date: End customer warranty starts from the date of purchase. Standard consumer warranty



apply ONLY to the original MSpa owners.

1.4 ORPC Warranty Obligations to Distributors/Importers

As manufacturer, ORPC provides sufficient support to the authorized after-sale service center to carry out the warranty service by the following activities:

- 1.4.1 Provide free spare part to the after-sale service center for valid distributor warranty claims.
- 1.4.2 Provide and update the service manual and other technical documents regularly. Provide training on warranty policies, procedures and other technical service issues.
- 1.4.3 Provide daily technical support to solve warranty problems effectively and smoothly through email or phone calls.
- 1.4.4 Provide technical service training at Shanghai headquarter upon after-sale service center's requests.
- 1.4.5 Collect, summarize and analyze the regional/territory service reports for future improvements in regards to product quality or service.

Chapter 2. Important Information and Tips for Using Spa Products

2.1 Heating Effect -Temperature Increasing Rate or Speed

For 220-240V 50Hz Spa (EU Standard)

For 2-4 person bubble spa, the heat increasing rate is about 1.5-2.5 °C/hour. To get a better heat increasing result, put on spa inflatable bladder and top lid.

For 6-person bubble spa, since the water capacity is bigger, the heat increasing rate is lower at 1.2-1.8 °C/hour.

Heat Preservation Mat is helpful to reduce heat loss from bottom and it provides better heat insulation results together with the inflatable bladder in use. It is recommended to have the MSpa heat preservation mats in between the spa and ground. Consumer can also apply similar mat which is made of foam material or other material with heat insulation function.

It's only possible to set up and leave the spa at an outside temperature lower than 4°C as long as the spa has a constant water temperature guaranteed at above 4°C. The spa can be used under low-temperature environment and temperature down to maximum <u>-10°C ONLY</u> if it is set up properly to ensure no frozen water inside control box, pipes or spa pool.

2.2 Filter Cartridge

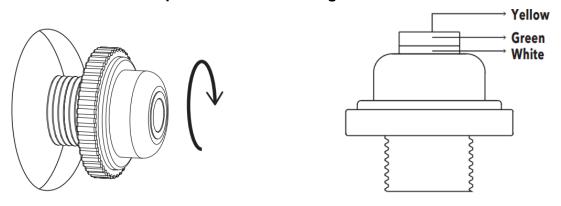


MSpa filter cartridge – Item No. B0302860 120 pleats is suitable for all Mspa delight models.

Item No. B0302949 90 pleats with new B0302950 cartridge base is suitable for all Mspa delight models.



2.3 Inflate and Deflate the Spa to Avoid Air Leakage



Note:

Check before inflation whether the manometer cap is screwed up tight on the valve of pool body. If not, please tighten and then inflate. After inflation, the manometer cannot be removed, otherwise air will be released.

When the Yellow section is pushed out, the Spa inflation is completed. You can fill the Spa with water.

After water filling is completed. Check air pressure once again to ensure the manometer reaches Green section. Always ensure the manometer is on Green section at use.

If the White section of the manometer appears, the spa is over inflated. Rotate the valve cap counter clockwise, have the air released till the Green section is pushed out, then tighten it clockwise.

To avoid over inflation caused by warm weather or sunshine when leaving spa for weeks inflated and filled with water in temperature higher than 20°C (68°F), please release some air to make sure the manometer is always on Yellow section.

Spa Deflation

- 1. Unscrew the manometer cap on the spa pool to deflate the spa.
- 2. Once the deflation is completed, screw the cap back.

2.4 Avoid Air Leakage from Spa Liner Split or Tiny Holes Due to Over-inflation (For Delight series only)



Ensure to ask customers to test the spa pool air pressure with manometer. Testing air pressure is very critical during the installation process, because any air leakage, pool liner splits due to over inflation are not covered by the ORPC/MSpa warranty. It is important to advise customers to watch the MSpa DVD or follow the instruction manual carefully to check and test the air pressure every single time before inflating or using the spa.

2.5 Try to Repair the Tiny Holes or Split on Spa Liner Instead of Replacing a New Spa Liner

For pool liner air leakage caused by tiny holes or splits, it is suggested to first try to repair with glue and PVC swatches provided in the repair kit. You can also order repair swatches from the spare part list.

With the repair material, most pin holes and splits can be repaired easily within 10 minutes.

Spa Tub and Air Bladder Repair

Use the enclosed repair patch to repair any puncture:

1. Clean and dry the area to be repaired thoroughly

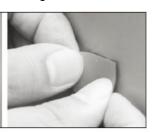


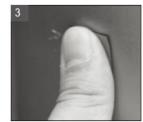
- 2. Apply the glue to the PVC patch and quickly attach it onto the damaged surface
- 3. Smooth the surface to remove any air bubbles and allow it dry for 5-10 minutes

NOTE: Glue is not included. Aquaseal & Stormsure glue is recommended for PVC inflatable items.









Glue physical and technical information:

SPECIFIC GRAVITY	0.9±0.05
SOLUBILITY	PARTIALLY
APPEARANCE	TRANSLUCENT VISCOUS
VISCOSITY	4000~5500 (CPS, 23°C)
SOLID CONTENTS	14~16%, (150°C×25)

2.6 Using Spa in the Cold Weather

It's only possible to set up and leave the spa in the environment of outside temperature of less than 4°C as long as the spa has a constant water temperature guaranteed over 4°C. Spa can only be used for temperature down to maximum -10°C if it is properly set up to make sure no frozen water inside control box, pipes and spa pool.

Optional accessories:



B9300109N/B9300492N Heat Preservation Mat is helpful to avoid heat loss from bottom and it provides better heat insulation results.



Inflatable bladder provides better heat preservation and rain outflow.

2.7 Temperature issue

If customer asks about temperature display on the control panel cannot reach to the set temperature of 40° C (Maximum) and it indicates 38° C, 39° C, 40° C and 41° C, we may explain to the consumer that it is normal to show a minor difference from the actual temperature to the rate displays on the control panel. It's normal with a 1-2°C gap.

2.8 Broken zipper issue

Regarding broken zipper complaint, first check if the air pressure is within the normal range. Over-inflated spa liner could damage the spa cover zipper.

A replaced top lid may not 100% fit onto the spa pool. 3-4cm (1-2") difference is common. Because there might be a little zipper length difference between the new top lid or spa liner and the used ones. To avoid zipper claim, please recommend the customer to maintain the zipper by waxing it regularly.

In case of broken zipper on liners, we'd suggest the new buckle cover with ground mat for service support:



B9301427: Buckle cover with ground mat for 4 person zipper lid service(M-011LS/D-SC04/D-ST04/P-MB04/D-AU04)

B9301428: Buckle cover with ground mat for 6 person zipper lid service (M-021LS/D-SC06/P-MB06/D-AU06)

2.9 Water treatment

The Spa owner must regularly check and keep the spa water santitized with scheduled maintenance(daily, if necessary). Adding sanitizer and other chemical will control bacteria and viruses present in the spa water. The maintenance of a proper water balance through appropriate use of sanitizers is the single most important factor in maximizing the life and appearance of the spa tub as well as ensuring clean, healthy and safe water. Proper technique is important for water testing and treating the spa water. See your pool/spa professional for chemical, sanitizer, test kits and testing procedures questions.

Warning

- Never mix chemicals together. Add the chemicals to the spa water separately. Thoroughly dissolve each chemical before adding one to the water.
- Bromine is highly recommended for good water quality.
- Please note that chlorine and bromine products should never be mixed. This is extremely dangerous. If you usually use chlorine-based products and you want to switch to bromine-based products, or vice versa, it is mandatory to completely change the spa water before any product changes.
- Do not over use the chemicals, otherwise there will be strong chemical odor and potential hazard to your skin

HTH BROMINE Information



Characteristics:



The use of bromine is particularly recommended in spas and heated waters over 27°C. It remains disinfectant even at high PH. of the original product (sodium bromide), Bromine takes its disinfecting action but also its non-aggressive properties. Has no odor, stings neither the eyes, nor the skin and does not bleach the hair.

- 20g tablet with slow dissolution, no residue
- Active ingredient content (BCDMH) greater than 96%
- Excellent disinfectant activity, regardless of the ph of the treated water (98% at ph 7.0 and still 75% at ph 8.2)

Safety with chemicals

Properly handled and used, the chemicals used in the maintenance of your spa are perfectly safe and harmless. If you use them inappropriately or do not follow the instructions on the package, the consequences can be severe. Here are some simple rules to always keep in mind:

- Keep chemicals in their original packaging. All products in the HTH Spa range are sold in one-certified packaging.
- Keep chemicals in their closed packaging when not in use.
- Keep all chemicals out of the reach of children.
- Never mix chemicals with each other. When you mix them with water, always add the products to the water, not the water to the products.
- Store your hth SPA chemicals by following the instructions on the package.
- If you accidentally spill a product, clean immediately. If it is a solid product, use a shovel and a brush, and add it to your spa in small quantities at a time.

Do not put the products back in their original packaging and do not use a household vacuum cleaner.

Bromine Kit



Bromine spa treatment kit. The essential kit for your spa water maintenance. Includes:

- 1kg OVY Spa Bromine 20g Tablets
- 1kg OVY Spa Bromine Shock powder
- 1.5kg OVY Spa pH-minus powder
- 1L OVY Spa Anti algae liquid
- 50 Bromine strips: Aquacheck

1 measuring cap



Mspa clean



Spatime range by Bayrol The Spatime water line cleaner is ideal to easily clean the inside of the spa and eliminate the impurities and the greasy sediments. Condensed liquid cleaner

- how much liquid chlorine should be filled into the pool? No liquid chlorine in an inflatable spa
- how often should be filled in liquid chlorine? No liquid chlorine in an inflatable spa
- how often should be put new water into the pool if customer use NO liquid chlorine? It depends on how many times / week they go into the spa. In peak season when they use spa every day, I suggest to change water every month
- how often should be put new water into the pool if customer use liquid chlorine? No liquid chlorine in an inflatable spa
- if customer put in liquid chlorine, should the whirlpool be ON, so that chlorine can be better distribute? If yes, how long should the whirlpool be ON? No liquid chlorine in an inflatable spa

Liquid Chlorine is too aggressive for pvc pool, we strongly recommend to use bromine tabs for water sanitizing

2.10 Where to find Mspa serial number?

On the bottom of control box or back of the wired controller panel near the rating label.



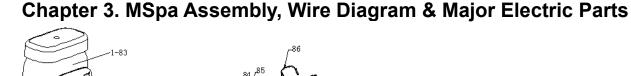


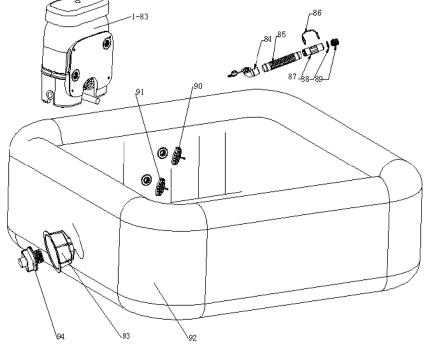
2.11 How is Anti-icing System working for 2020 new spas?

In most occasions, it is not suggested to leave or set up the spa when the outdoor temperature is below 4° C(39.2° F).

The brand new Anti-icing System will be the watcher of your spa, to guard the temperature safe line. When the water temperature is lower than 1° C(33.8° F), the heater runs automatically until the water is heated up to 3° C(37.4° F). This will help prevent water from freezing. The circulation system, pump and pipe will be saved.

It activates automatically if SPA is plugged with the power source and "reset" button is pressed on PRCD.

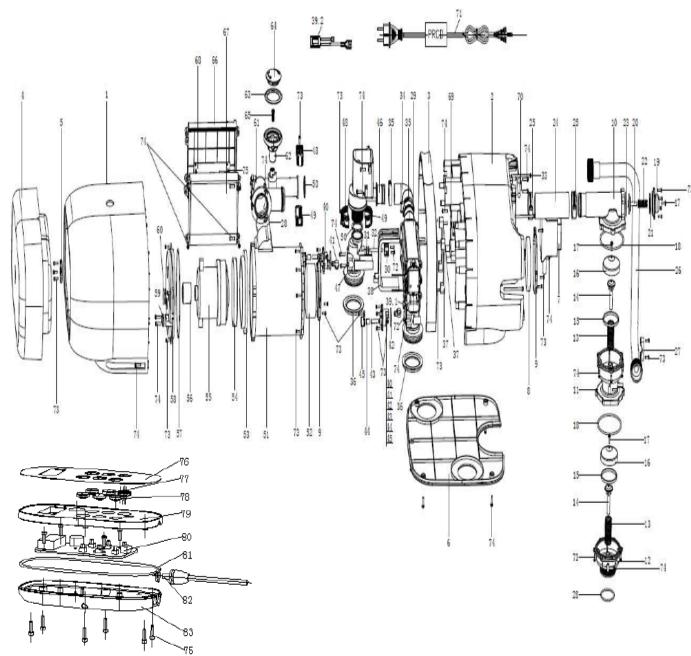




3.1 MSpa Assembly

Reference (Part No. on exploded view)	Component description	Quantity (Qty. used on product)	Material
1-83	Electric cabinet	1	Metal parts+ Silicone parts + plastic parts
84	Drainage adaptor	1	Grey PVC
85	PE pipe	1	Black PE
86	Connection ring	1	Grey PVC
87	Outlet connection	1	Grey ABS
88	Water seal	1	White silicone 45-55A
89	Drain cap	1	Grey ABS
90	Water inlet	1	ABS,PP+30%GF+CU
91	Water outlet	1	ABS,PP+30%GF+CU
92	Pool liner + cover lid	1	PVC
93	Valve cap	1	Black PVC
94	Manometer	1	ABS





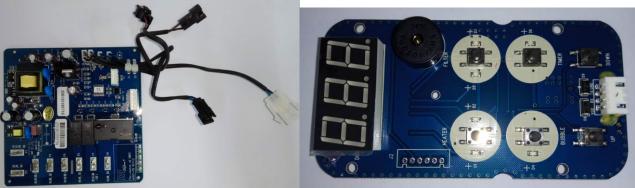
Reference (Part No. on exploded view)	Component description	Quantity (Qty. used on product)	Material
1	Shell of cabinet	1	ABS
2,8,9	Base+ Dust-proof sponge+inlet cover	1	ABS
3	Decorative ring	1	ABS
4	Foam of cabinet	1	EPS
5	Top cover	1	ABS
6	Rear cover	1	ABS
7	Transformer	1	AC230-240V/36VA,Output:AC12V
10-23	Checking valve	1	ABS+ silicon gel+metal
24	silicone tube	1	silicon gel 45-55A



26 27 28 29-32,39,40-45 33 34 35 36 37 38 46 47 48 49 50 51 52 53 54	The metal band ₱ 30-45 PE air pipe PE pressing buckle of air pipe Motor outlet seal ring PTC heating element Screw M4*60 Water pipe The metal band ₱ 30-45 Sealed ring for inlet/outlet PTC Support frame PTC fix mount Filter pump Filter inlet pipe Upper nut Under nut PVC Inflatable mouth gasket Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	2 1 1 1 1 4 1 2 2 2 1 1 1 2 2 2 1 1 1 1	SUS304 PE ABS silicon gel 45–55A AC230V/1500W SPCC, silicon gel 45–55A SUS304 silicon gel 45–55A PA66+30%GF PA66+30%GF AC12V/35W PA66+30%GF ABS ABS silicon gel 45–55A ABS P18 PA66+30%GF
27 28 29-32,39,40-45 33 34 35 36 37 38 46 47 48 49 50 51 52 53 54	PE pressing buckle of air pipe Motor outlet seal ring PTC heating element Screw M4*60 Water pipe The metal band \$\psi\$ 30-45 Sealed ring for inlet/outlet PTC Support frame PTC fix mount Filter pump Filter inlet pipe Upper nut Under nut PVC Inflatable mouth gasket Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	1 1 1 4 1 2 2 2 2 1 1 1 2 2 2 2 1 1 1 1	ABS silicon gel 45–55A AC230V/1500W SPCC, silicon gel 45–55A SUS304 silicon gel 45–55A PA66+30%GF PA66+30%GF AC12V/35W PA66+30%GF ABS ABS silicon gel 45–55A ABS P18
28 29-32,39,40-45 33 34 35 36 37 38 46 47 48 49 50 51 52 53 54	Motor outlet seal ring PTC heating element Screw M4*60 Water pipe The metal band \$\psi 30-45 Sealed ring for inlet/outlet PTC Support frame PTC fix mount Filter pump Filter inlet pipe Upper nut Under nut PVC Inflatable mouth gasket Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	1 1 4 1 2 2 2 1 1 1 2 2 2 2 1 1 1 1 1 1	silicon gel 45–55A AC230V/1500W SPCC, silicon gel 45–55A SUS304 silicon gel 45–55A PA66+30%GF PA66+30%GF AC12V/35W PA66+30%GF ABS ABS silicon gel 45–55A ABS P18
29-32,39,40-45 33 34 35 36 37 38 46 47 48 49 50 51 52 53 54	PTC heating element Screw M4*60 Water pipe The metal band \$\psi 30-45 Sealed ring for inlet/outlet PTC Support frame PTC fix mount Filter pump Filter inlet pipe Upper nut Under nut PVC Inflatable mouth gasket Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	1 4 1 2 2 2 1 1 1 2 2 2 2 1 1 1 1	AC230V/1500W SPCC, silicon gel 45–55A SUS304 silicon gel 45–55A PA66+30%GF PA66+30%GF AC12V/35W PA66+30%GF ABS ABS silicon gel 45–55A ABS P18
33 34 35 36 37 38 46 47 48 49 50 51 52 53 54	Screw M4*60 Water pipe The metal band \$\psi 30-45 Sealed ring for inlet/outlet PTC Support frame PTC fix mount Filter pump Filter inlet pipe Upper nut Under nut PVC Inflatable mouth gasket Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	4 1 2 2 2 1 1 1 2 2 2 2 1 1	SPCC, silicon gel 45–55A SUS304 silicon gel 45–55A PA66+30%GF PA66+30%GF AC12V/35W PA66+30%GF ABS ABS silicon gel 45–55A ABS P18
34 35 36 37 38 46 47 48 49 50 51 52 53 54	Water pipe The metal band ₱ 30-45 Sealed ring for inlet/outlet PTC Support frame PTC fix mount Filter pump Filter inlet pipe Upper nut Under nut PVC Inflatable mouth gasket Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	1 2 2 2 1 1 1 2 2 2 2 1 1	silicon gel 45–55A SUS304 silicon gel 45–55A PA66+30%GF PA66+30%GF AC12V/35W PA66+30%GF ABS ABS silicon gel 45–55A ABS P18
35 36 37 38 46 47 48 49 50 51 52 53 54	The metal band ₱ 30-45 Sealed ring for inlet/outlet PTC Support frame PTC fix mount Filter pump Filter inlet pipe Upper nut Under nut PVC Inflatable mouth gasket Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	2 2 1 1 1 2 2 2 2 1 1	SUS304 silicon gel 45–55A PA66+30%GF PA66+30%GF AC12V/35W PA66+30%GF ABS ABS silicon gel 45–55A ABS P18
36 37 38 46 47 48 49 50 51 52 53 54	Sealed ring for inlet/outlet PTC Support frame PTC fix mount Filter pump Filter inlet pipe Upper nut Under nut PVC Inflatable mouth gasket Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	2 2 1 1 1 2 2 2 2 1 1	silicon gel 45–55A PA66+30%GF PA66+30%GF AC12V/35W PA66+30%GF ABS ABS silicon gel 45–55A ABS P18
37 38 46 47 48 49 50 51 52 53 54	PTC Support frame PTC fix mount Filter pump Filter inlet pipe Upper nut Under nut PVC Inflatable mouth gasket Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	2 1 1 1 2 2 2 2 1 1	PA66+30%GF PA66+30%GF AC12V/35W PA66+30%GF ABS ABS silicon gel 45–55A ABS P18
38 46 47 48 49 50 51 52 53 54	PTC fix mount Filter pump Filter inlet pipe Upper nut Under nut PVC Inflatable mouth gasket Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	1 1 2 2 2 1 1	PA66+30%GF AC12V/35W PA66+30%GF ABS ABS silicon gel 45–55A ABS P18
46 47 48 49 50 51 52 53 54	Filter pump Filter inlet pipe Upper nut Under nut PVC Inflatable mouth gasket Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	1 1 2 2 2 2 1 1 1	AC12V/35W PA66+30%GF ABS ABS silicon gel 45–55A ABS P18
47 48 49 50 51 52 53 54	Filter inlet pipe Upper nut Under nut PVC Inflatable mouth gasket Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	1 2 2 2 2 1 1 1	PA66+30%GF ABS ABS silicon gel 45–55A ABS P18
48 49 50 51 52 53 54	Upper nut Under nut PVC Inflatable mouth gasket Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	2 2 2 1 1	ABS ABS silicon gel 45–55A ABS P18
49 50 51 52 53 54	Under nut PVC Inflatable mouth gasket Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	2 2 1 1 1	ABS silicon gel 45–55A ABS P18
50 51 52 53 54	PVC Inflatable mouth gasket Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	2 1 1 1	silicon gel 45–55A ABS P18
51 52 53 54	Motor cabinet Built-in noise reduction sponge Air pump motor stand Motor cushion	1 1 1	ABS P18
52 53 54	Built-in noise reduction sponge Air pump motor stand Motor cushion	1 1	P18
53 54	Air pump motor stand Motor cushion	1	
54	Motor cushion		PA66+30%GF
		1	1
55			silicon gel
	Bubble motor	1	AC230V/600W
	Motor cushion	1	silicon gel
57	Motor seal	1	silicon gel 45-55A
58-60	Top cover of motor	1	ABS etc
61	Checking valve	1	ABS+PVC
62	rotary switch	1	ABS
63	Knob ring	1	ABS
64	The lid switch	1	ABS
65	Screw M5*15	1	SUS304
66	The mainboard under cover	1	ABS
67	The mainboard upper cover	1	ABS
68	Power board	1	fiberglass, 94V0 t1.6
69	Ground terminal	1	SUS304
	Line pressing gate	1	PA6
71	Plug+PRCD+power cable H07BQ-F,3*1.0MM2	1	Rubber+copper+PC
	Screw ST3*15	4	
	Screw ST3*10	56	45#,
	Screw ST4*18	35	SPCC,
	Screw ST3*8	14	45#,
	Panel sticker	1	PET,
	Round button in the panel	4	transparent silicone 45-55A
	Semicircle button in the panel	2	transparent silicone 45-55A
	Panel front shell	1	Golden ABS
	PCBA in the display	1	fiberglass, 94V0 t1.6
	Sealed ring in the display	1	Black silicone 45-55A
	4-pin signal cord	1	
	Under shell of the panel	<u> </u>	PVC+copper Black ABS



3.2 MSpa Major Electric Parts



Power board PCB

Control panel PCB



Transformer



Filter pump

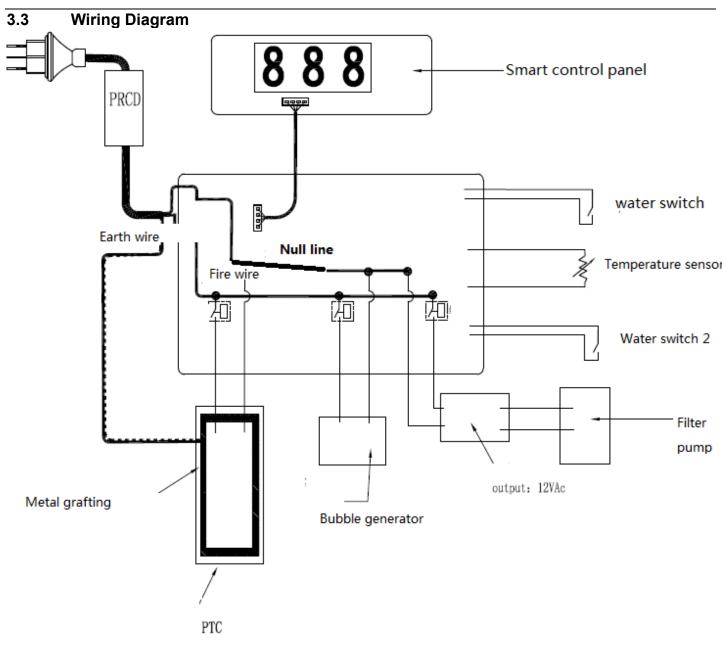


Bubble Generator



PTC heater

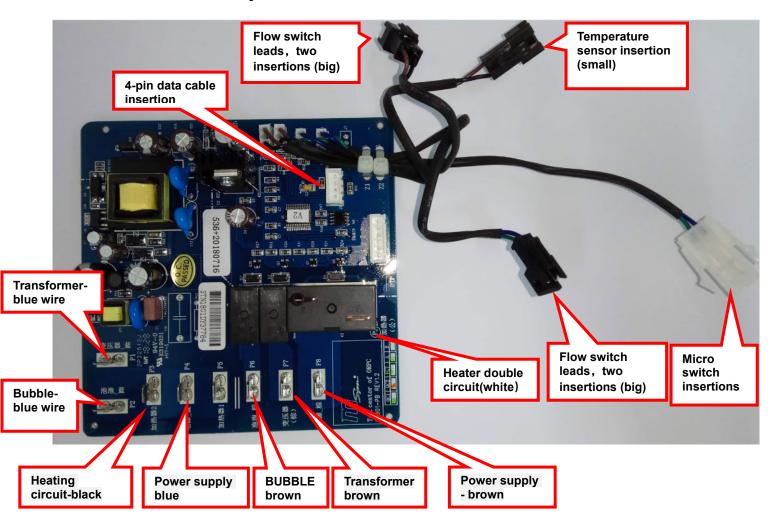




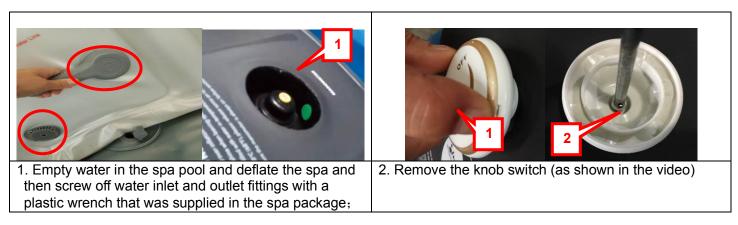


Chapter 4 How to Replace Mspa Parts

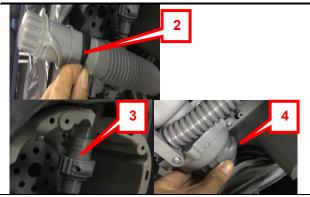
4.1 Power Board Assembly and Wire Terminal Connection

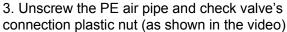


4.2 How to replace control box (B9301280/ B9301398)













4. Take out the control box from the pool liner; pull out the smart control panel from the hole of pool liner.



5. Dissemble the plug and upper foam from the original control box, then mount to the new replaced control box.

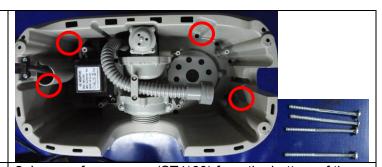


6. Assemble back new replaced control box into pool liner in reverse order.

4.3 Replace the bubble generator(B9300679)

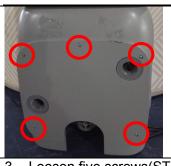


1. Take out the control box



2. Loosen four screws (ST4*60) from the bottom of the cabinet







3. Loosen five screws(ST4*15) from the rear cover of the cabinet; Loosen two screws (ST4*15) from the bottom of the cabinet



4. Take out the internal cabinet and power board



5. Loosen screws and dissemble the top cover from the bubble generator



6. Remove the connection of leading wire and take out the bubble generator



7. Put into the new bubble generator; assemble the heat shirnkable sleeving; connect the leading wire from the bubble generator and power cable.



Connect the transparent protective suit on the lead to the joint, assemble the heat shirnkable sleeving; Tie binding after fusing shrinkage

9. Assemble the control box in reverse order.



1. Take out the control box



 $2\sqrt{1000}$ Loosen four screws (ST4*60) from the bottom of the cabinet







3. Loosen five screws (ST4*15) from the rear cover of the cabinet; Loosen two screws (ST4*15) from the bottom of the cabinet



4. Take out the internal cabinet and power board;





5. Loosen three screws from the fixed junction box; disassemble 3 sets black pin-cable;





unction box; 6. Remove 4 screws and open the wire connection box; cut off the bindings and take out the 2 heating wires ,



7. Loosen 6 screws from the filter pump





8. Loosen 1 screw from the bubble generator to PTC heater; 2 screws from the fixed mount; 2 screws from the outlet of PTC heater



10. Use cross screwdriver to disassemble the 2 heating earth wire



11. Take out the PTC heating element and filter pump; disassemble the metal band from outlet of filter pump.

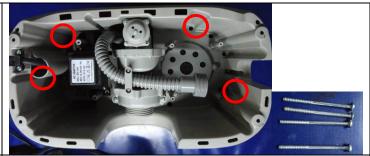


12. Assemble the new PTC heater back into the control box in reverse order. (Video available)

4.5 How to replace transformer (B9300680)



1. Take out the control box;



2. Loosen four screws(ST4*60) from the bottom of the cabinet



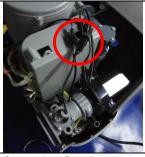


3. Loosen five screws (ST4*15) from the rear cover of the cabinet; Loosen two screws (ST4*15) from the base of the cabinet



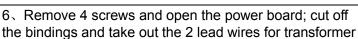
4. Take out the internal cabinet and power board;





5. Loosen three screws from the fixed junction box; disassemble 3 sets black pin-cable;;







6. Loosen 4 screws from the filter pump



8. Loosen the plastic connection nut from inlet and filter pump;





9. Take down the filter pump and disassemble the connection pin-cable from filter pump to transformer



10 Loosen the 4 screws and take out the original transformer. Assemble the new transformer into the control box in reverse order.

4.6 How to replace filter pump (B9301262)



1. Take out the control box;



2. Loosen four screws (ST4*60) from the bottom of the cabinet



4*15) from the rear cover

3. Loosen five screws (ST4*15) from the rear cover of the cabinet; Loosen two screws (ST4*15) from the base of the cabinet



4. Take out the internal cabinet and power board;



7. Loosen 4 screws from the filter pump



6. Loosen the plastic connection nut from inlet and filter pump;





7. Use a screwdriver to remove the metal clamp in the connection between the filter pump and the water pipe;



8. Take down the filter pump; Loosen the signal cable between filter pump and transformer; Assemble the new filter pump into the control box in reverse order.

4.7 How to replace power board (B9301279)



1. Take out the control box:



2. Loosen four screws (ST4*60) from the bottom of the cabinet



3. Loosen five screws (ST4*15) from the rear cover of the cabinet; Loosen two screws (ST4*15) from the base of the cabinet



4. Take out the internal cabinet and power board;



5. Loosen three screws from the junction box; Loosen three black insertion pins



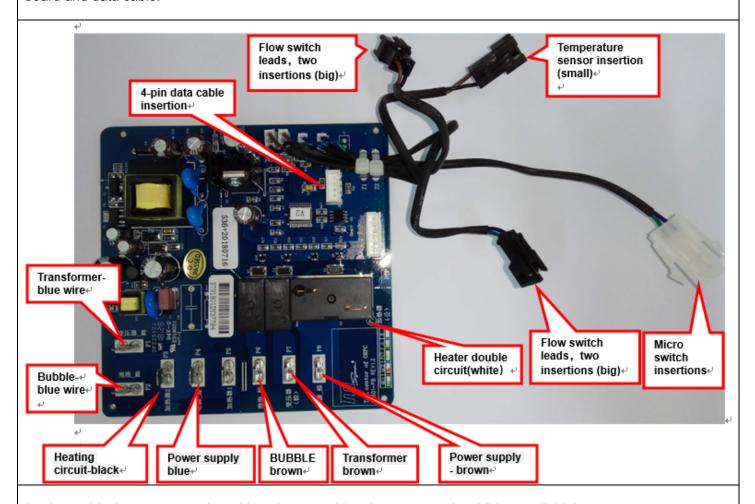


6. Loosed four screws on the junction box and cut off the tie binding. Remove all leads on the circuit board





7.Loosen the fixed screws on circuit board; Take out the circuit board; Remove the tie and insertion between Circuit board and data cable.

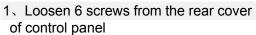


8. Assemble the new power board into the control box in reverse order. (Video available)



4.8 How to replace PCB in the control panel (B9301277/ B9301396 Internal circuit board + B9301278 smart control panel)







2. Remove the rear cover of the panel









3. Take down the data cable and 6 Transparent buttons

4. Remove 4 fixed screws from internal PCB





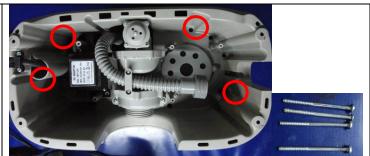


5. Assemble the new PCB in reverse order (Video available) (Make sure the button is in right place and flexible before fixing the shell)

4.9 How to replace check valve (B9301215)

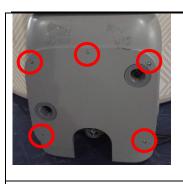


1. Take out the control box:



 $2\sqrt{1000}$ Loosen four screws (ST4*60) from the bottom of the cabinet









3. Loosen five screws (ST4*15) from the rear cover of the cabinet; Loosen two screws (ST4*15) from the base of the cabinet

4. Take out the internal cabinet and power board;





5. Take out the metal tube in the air tube with a screwdriver

5. Remove screws from the PE pipe of checking valve



Take out the check vale, remove the metal tube in the other end.

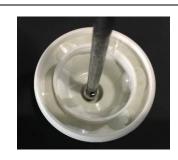


8. Assemble the new check valve into the control box in reverse order

4.10 How to replace Rotation Knob (B9301267)



1. Turn the rotation knob to "OFF" position, open and remove the top cover by hand (as shown in photo)



2. Loosen the fixed screw to remove the rotation knob





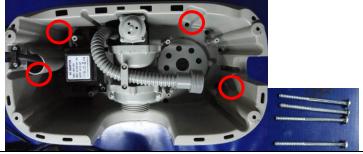


3. Assemble the new rotation knob onto the spa in reverse order;

4.11 How to replace Reed/Flow switch (flow switch B9301227 + B9301234)



1. Take out the control box;



 $2 \ \ Loosen$ four screws (ST4*60) from the bottom of the cabinet





3. Loosen five screws (ST4*15) from the rear cover of the cabinet; Loosen two screws (ST4*15) from the bottom of the cabinet



4. Take out the internal cabinet and power board;



5. Loosen the fixed screws and take out old reed switch; Assemble new reed switch into the control box. If replace the reed switch from heater element, need to remove the bubble generator and reed switch first.



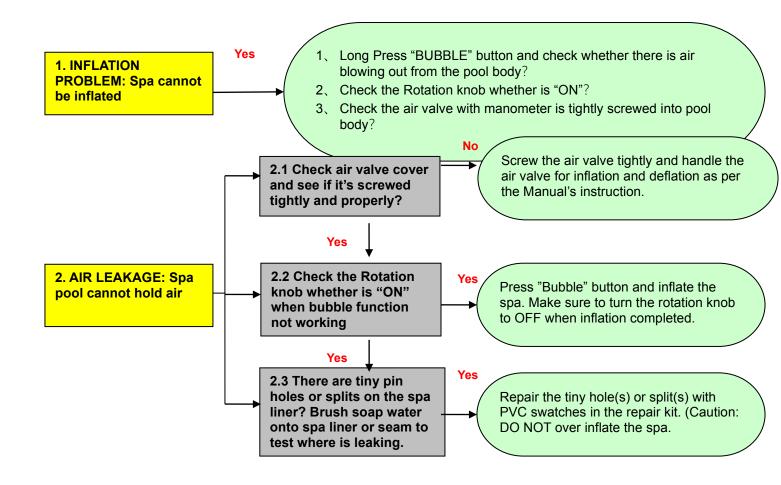
Chapter 5. Trouble Shooting Guide

5.1 The following Check Flow is as attached.

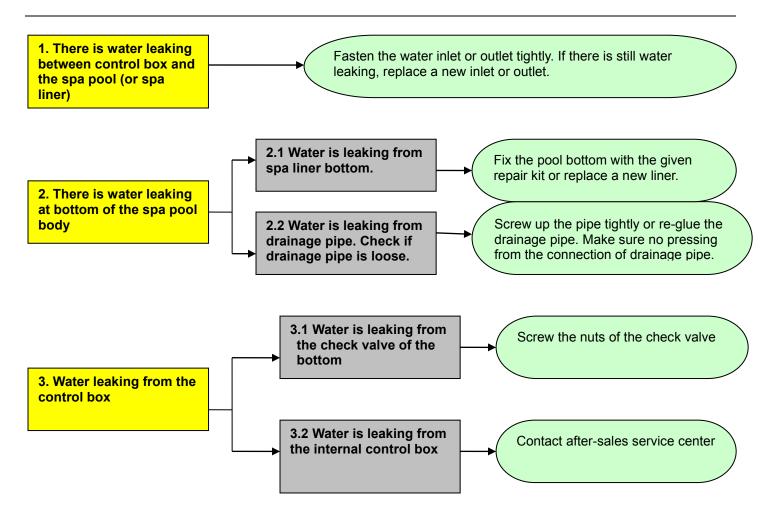
DELIGHT/CONCEPT Spa Check Flow –E0-E1.pdf **DELIGHT/CONCEPT** Spa Check Flow –heating failure.pdf **DELIGHT/CONCEPT** Spa Check Flow -NO DISPLAY.pdf

Tips: To keep the filter pump and heater at a great performance, proper maintenance and cleaning of filter pump, paper filter cartridge and water inlet is highly recommended. How often to clean depends on the local water conditions and user habits. Regular fresh water and vinegar are suggested for the filter pump cleaning.

5.2 Air Leakage and Inflation Failure Checking Flow Chart



5.3 Water Leaking Problem Checking Flow Chart



Chapter 6. Frequently Asked Questions

1: Question:	Approximately, how many gallons / liters of water does the spa pool hold?		
Answer:	When filled to 80% of max water capacity, as recommended, the spa pool water volume is approximately:		
	For 4-6 person spa 1200ltr/320gal.		
	For 4 person spa 800ltr/211gal.		
	For 2-4 person spa 700ltr/185gal.		
2: Question:	Can I set the spa up on a concrete patio?		
Answer:	Yes, but a ground cloth is highly recommended, and do not drag the spa pool across the concrete patio as the abrasion may cause holes on the spa pool. The surface of the patio must be smooth, level, stable and free of any sharp objects.		
3: Question:	Can the spa be left up year-round?		



Answer:	It depends on where you live. It is not recommended to keep your spa on if your temperature falls lower than 0 degrees Celsius or 32 degrees Fahrenheit. The spa may freeze and cracking may occur. Spa can not withstand the weight of ice and snow. It is recommended to store the spa when you will not use it for a while.
4: Question:	Do you recommend using chemicals?
Answer:	Yes, contact our service partner for information on the best chemicals to use for your spa.
	We recommend the inflatable spa starter kit. It is composed of bromine disinfection products, very effective for high temperature water.
5: Question:	Does the spa pool require any special care to ensure durability?
Answer:	Keep sharp objects out of the spa pool or from underneath of the spa pool. Maintain proper PH level of water and keep the spa sanitary and clean.
6: Question:	How do I prevent dirt and grime from getting into the spa water?
Answer:	Use the top lid to keep your spa covered when not in use. This will help keep wind and other elements from depositing dirt and debris in your spa, and will also prevent excess rainwater from overfilling your spa.
7: Question:	How do I protect the spa from damaging grass or fungi developing on the concrete?
Answer:	It is impossible to prevent grass or lawn damage under the spa. Keep this in mind when selecting your site for setting up the spa. Keep the grass and concrete floor or patio as dry as possible.
8: Question:	How do UV rays affect the materials that the spa pool is made of?
Answer:	All PVCs degrade over prolonged exposure to excessive sunlight. Our Spas are manufactured with UV inhibitors to delay the degradation caused by sunlight.
	However the spa pool can get an irregular shape if the pressure is too high due to strong hot sunshine. The customers can buy a spa cover to protect the spa pool from UV and pollution.
9: Question:	How much water or how high of the water level shall the consumer fills water in the spa?
Answer:	There are two water lines printed on the inner wall of the spa pool: Minimum Water Level and Maximum Water Level, The customer needs fill the water into the spa between the two water lever liners.
	Special Attention:
	1.Fill in water into the spa pool carefully especially for the first time of use. The water must reach the minimum water line but not exceed the maximum water line, otherwise it may cause filter pump failure.
	2. Please avoid water spillage from the spa pool, the spilled water may flow into the control box and damage the components inside the control box.
	3. After filling in water, please check air pressure again and make sure the indication pin reads in green sector. When needs to inflate more air during use, please make sure the indication pin also point within

Visit our website at: www.the-mspa.com

green sector in any term.

10: How long does it take to fill the spa with water?

weather or sunshine etc. after leaving the spar pool outside under the sunshine for long.

4. Please reduce the air pressure to the yellow sector of manometer to avoid over inflation due to warm



Question:	
Answer:	Around 10 minutes or more, it depends on the hose size and water pressure. Remember to observe the initial filling of the spa for several minutes in order to make sure that the spa is well setup and the bottom is flat.
11: Question:	How many seasons should the spa last?
Answer:	It depends on how the consumer uses, maintains and cares the spa. Regular maintenance and proper storage of the spa in the off-season will prolong its life. Warranty on the spa liner is maximum 6 months from the date of purchase.
12: Question:	How much air should the consumer inflate the spa?
Answer:	The spa can be Inflated until it becomes stable with approx.85% capacity only. An over inflated spa may burst or suffer from leaks in the seam while it's filled with water and heated by the sunshine in hot summer. Always remember to use manometer to test and adjust the air pressure of the spa pool to a suitable status (make sure the air pressure indicates within the green sector after filling the water). When the spa needs to inflate more air during use, please also make sure the air pressure indicats in green sector at any time.
13: Question:	How often should the water be changed?
Answer:	The frequency to change the spa water can vary due to different usage ways of the spa and different chemical balance of the water. If properly filtered and chemically balanced, no need to change the water through the whole summer season. The frequency to change water can be reduced by keeping the spa covered when not in use, testing the water regularly to ensure proper chemical balance, operating the pump for an adequate number of hours each day, keeping the filter pump cartridge clean, and replacing the cartridge when needed.
14: Question:	Is there a video available to show how to set up the spa?
Answer:	Yes. The spa setup DVD is included in the spa package. You may also visit the website as www.the-mspa.com for solutions to your questions.
15: Question:	Is it safe for pets to play in the spa?
Answer:	No, dogs, cats, and all other household pets should be kept away from the spa to avoid possible danger of being drowned inside the pool water, and also to protect the spa side walls, inflatable ring, RCD plug cable etc from pets bites or scratches which may cause punctures, holes, opening crack and other damages to the spa pool or the RCD plug.
16: Question:	Is there repair material enclosed for spa liner repair?
Answer:	Yes, but only a few pieces of repair PVC swatches are included in the package. For safety reason, the repairing glue is not included to the package. But consumers can ask for the glues from the service center or can try to find a similar glue used for PVC gluing for such repair at their local shops. Small tears or holes can be repaired with the enclosed repair PVC swatches. The surface should be dry and clean while affixing the PVC swatch to the leaking tiny holes or tears.
17: Question:	How often to test the spa water?

Answer: Spa water should be tested each time before using the spa. Take an easy test with the pH test strip to

- 30 -

check alkalinity, chlorine or bromine level of water. Keep the pH level and alkalinity in a proper range, this also helps to extend the product life of filter pump and heater.

	this also helps to extend the product life of filter pump and heater.
18: Question:	Should I install my spa inside or outside?
Answer:	Each location has its pros and cons. Outside installations may compromise some of your privacy, but you can add screens, shrubbery, or fencing to minimize peering eyes. The outside weather can be a deterring factor, although many people absolutely love the experience of lounging in bubbling hot water while a light rain or snowflakes are falling! It can be exhilarating. Awnings can be built to shelter the effects of weather. It should be noted for those of you who have not experienced it, hot water raises your body's core temperature, so you will normally not feel cold even when exiting a hot tub outdoors in the dead of winter. Inside installations will add humidity to the air in your home. It is imperative that proper ventilation be maintained to control this moisture and to prevent mildew and other damage. If you decide on an inside installation, be sure to take into account the draining and filling of the unit. There are two other important questions: will it fit through your doorway, and is your flooring strength adequate? Keep in mind that a typical 3-person spa weighs about 2500 pounds filled with water. On the plus side, you will have privacy and convenience. Your unit and cover will also be fully protected from the weather.
19: Question:	What could cause the spa to be lopsided?
Answer:	The base or bottom of the spa is not laid out flat (without wrinkles). The spa pool liner and cover must be extended evenly around when the spa is filled with water.
20: Question:	Can I use Chlorine and Bromine sanitizer products together?
Answer:	NO. Chlorine and Bromine sanitizing products shall never be mixed up together. This is very dangerous. If customer usually uses chlorine, but wants to switch to Bromine, or vice versa, make sure to drain out the water and refill with fresh water before switching chemicals.
21: Question:	What should I do if there is a strong chemical odor or my skin is irritated when having a bath in the spa?
Answer:	The spa might contain a high concentration of Chloramines. Drain out the spa water, clean the spa pool wall and re-fill with fresh water.
22: Question:	How often should I wash or change the filter cartridge?
Answer:	The frequency varies according to the use and maintenance of the spa. We recommend replacing the cartridge filter every 2 to 4 weeks, continuously using for 72 hours.
26: Question:	Can I use the spa during cold weather? How to use?
Answer:	Yes, the spa can be used during cold weather by following the suggested ways as below:

- 1. Fill the spa with warm water to warm up the control box first, this will shorten the course to heat up the water.
- 2. Drain the spa water when the spa is not going to be used for a while or keep the heater on. Do not put the spa outside with temperature less than minus 10 °C (14°F) even the heater is kept on.

Question: What is needed to prepare a site for the spa?

Answer: A level, stable surface is needed and all sharp objects must be removed. A ground cloth or tarp should be placed under the spa prior to setting it up. If a site does in fact have hardy types of grass it is recommended to remove these grasses before initial set up. Do not set up Mspa in a place where it

	can be flooded with water.
28: Question:	What is the approximate depth of the water for spa?
Answer:	If the spa is filled with 80% of its maximum water capacity, the depth is about 44-46cm.
29: Question:	What is the steepest slope that I am able to set up my spa on?
Answer:	For best results the surface should be perfectly level. Pay close attention to the spa's stability and levelness in the early stages of filling your spa up with water. If after about an inch of water is accumulated, and the water is not spreading out evenly, or the spa appears to be bulging to one side, stop filling the spa, drain the water, and select a new site. If the spa is set up on a slope, the spa will be lopsided and could collapse.
	Never set up the spa on slope ground.
30: Question:	What material is the spa made of?
Answer:	The spa pool is mainly made with heavy gauge of PVC.
31: Question:	What other surfaces can be safely used to set up my spa?
Answer:	The spa can be set up on grass or pavement that is completely smooth, level and stable. A ground cloth or tarp is recommended. The spa should NOT be set up on sand or muddy ground that could possibly shift around.
32: Question:	What should the customer use to clean his spa before storing it for the winter?
Answer:	The customer can use mild soap and water to wash his spa. He shall wash the spa thoroughly and make sure the spa is completely dry before storing.
33: Question:	Why sometimes can algae be found in the spa even the customer runs the filter pump regularly?
Answer:	The filter pump itself will not prevent algae from growing in the spa water; this can only be done by maintaining proper chlorine and pH levels at all times. The customer can check the local pool chemical supplies store for further information.
34: Question:	Would excessive spa chemicals affect / cause deterioration to the spa pool(liner)?
Answer:	Excessive or concentrated chemicals may cause damage to the spa liner and the user.
35: Question:	Why an extension cord should not be used as stated in the spa set up instruction?
Answer:	In order to reduce the risk of electric shock, the customer can't cut off the cord and connect the cord with other one to extend the length of the power supply cord by himself since this may cause potential danger. It is important only to use a 10A power supply. If the customer has to use an extension cord/connecting cable, please make sure this is for 10A purpose and for outdoor use. For safety reasons, set up spa a few meters away from power supply.
36: Question:	When the setting temperature is lower than environment or water temperature, is the heater will be defective as the heater button does not light up?
Answer:	No.
37:	Why does the bubbling stop working suddenly?



Question:			
Answer:	It is normal. As our spa is designed to have automatic stop of the bubbling function.		
	For the bubble spa, the bubbling function will stop working for 10 minutes after having worked 20 minutes and needs to be restarted by pushing the bubble function button manually.		
38: Question:	Why is the filter function activated at the same time upon pressing the heater button?		
Answer:	It is normal. The heater function cannot be turned on independently, when the customer pressed the heater function, the filter function also starts at the same time. At the same time, when the heater is working, the filter function cannot be turned off individually either, but can only be turned off by pressing "HEATER" button but not "FILTER" button.		
39: Question:	How to get a better heating result for the water inside the spa pool?		
Answer:	We strongly recommend the top lid of spa is covered with inflatable bladder when the heater function is on to prevent the heat loss.		
	And also temp barrier mat can be used at the bottom to have better heat preservation result.		
40: Question:	What is wrong when the control panel display such code as "E0", "E1", or "No display"?		
Answer:	Please see the troubleshooting guide to find out the error code checking flow steps.		
41: Question:	How high the water temperature will be increased after using heater?		
Answer:	Maximum 40°C or 104°Fwhile there may be some indication tolerance which will indicate about 38°C or 100°F. This is normal. And also please note that the following conditions will lead to slow and even heating without heating phenomenon:		
	1. Environmental temperature lower than 10°C(50°F)		
	2. Outdoor wind force above Gentle breeze/F 3		
	3. Environmental temperature lower than 10°C(50°F) and wind power above Gentle breeze/F 3		
	4. Activate bubbling system when heating		
	5. Spa lid is not covered or improperly covered when heating		
	So the customer is recommended to fill spa with warm water for quick heating and energy saving if necessary.		
42: Question:	Why is the temperature showing on the control panel differs from the actual water temperature?		
Answer:	Before entering the spa tub, users should measure the water temperature with an accurate thermometer since the tolerance of water temperature regulating devices may vary as much as +/- 2 $^{\circ}$ C (5 $^{\circ}$ F).		
43: Question:	I bought the spa from online person as second-hand, can I have Mspa warranty service?		
Answer:	No. Standard consumer warranty applies ONLY to the original MSpa owner		
44: Question:	How can I dry the spa pool before storage?		

Answer: After the spa is drained, operate the bubble function for another 20 or 30 minutes to dry the bottom Visit our website at: www.the-mspa.com



ring. Remove the control panel from the spa tub, disassemble filter pump from the bottom of control box so as shown in the video. Drain water and clean off any scale incrustation, like white coagulations inside the filter pump. Unscrew the complete part of the air valve on the spa pool and the spa will be deflated

45: Whom should I contact to claim a warranty request? Question:

Answer:

There is service contact information printed on the back of warranty card. Therefore, users should contact their local dealer or service partners for service requests. Mspa provides 12 months warranty for the electric parts and 6 months warranty for spa pool (liner). If users have difficulty in finding the local dealer, please contact Mspa headquarter service center and advise us of the spa serial number. We will try to help you track the right dealer.

	, , ,
46: Question:	Where can I find the series number of my MSpa?
Answer:	The MSPA serial number can be found on the back of your spa's control panel, on its carton, or on one of the feet of the engine block.
47:	How much does it cost to run?

Question:

Answer:

With a full function and half an hour use, the MSpa will cost approximately £5 or €3.2 per day. Each function on the pump/uses the following:

Massage: 0.6 kW/hr Filter: 0.035 kW/hr Heater: 1.5kW/hr

Qı	48: uestion:	How long does it take to heat up?
Α	nswer:	The heat increase rate is maxi. 1.2 to 2.5°C(1-3°F for US) per hour. If the water temperature starts from about 24°C (75F), and you want to warm water to 38°C (100F), it'll take about 7-10hours

49: If turned off at night time, how much will the temperature drop? Question:

Answer:

50:

From our tests about one degree per 5 hours (based on Spring season outside temperatures).

Question:	Can I buy liners on the high street:
Answer:	Please purchase filters from local authorized MSpa dealer or service partner, you may void the warranty if potential problems from faking filters using. There is Mspa logo carving on the branded filters.

51: Question:	How long will my MSpa last?
	If I all ad after your MO a altered for your

Answer

If looked after, your MSpa should last for years.

The blower of bubble has a lifetime. MSpa blower is Quieter & more durable than like product for > 200 Hours – equal to 600 time of use.

For your health concern, MSpa has the auto break design, sets the bubble function for every 20 minutes and auto stop for 10 minutes break. Soaking in the 40°C MSpa for 20 minutes, you can burn about 200 calories, which equals to:

Brisk walking of 45 minutes at speed of 5.2 km/h

23 minutes ride or ride 4.6 miles

29 minutes yoga exercise

27 minutes diving activities

27 minutes to play sports

4 to 7 km jogging



52: Question:	
Answer	Please screw the filter onto the water inlet (upper fitting with two bulges) on the spa wall by turning it clockwise, through which water is drawn from the pool by a pump. The hole(s) on the surface of filter cartridge is a security to make sure there is always minimum water flow to avoid damage to heater and pump when filter cartridge would be blocked. MSpa does have no cover or bag for the filter cartridge anymore
53: Question:	Can I use MSpa in the rain?
Answer	MSpa can leave outside in light rain as it is of IPX5, protection against harmful ingress of water. But we do not suggest people use it with bubbling open because the water may cause air pump damped and rusted which could result the air pump works improperly and will void your warranty. And also you'll need to make sure to keep the power plug dry.
54: Question:	What if I already screw off the inlet and outlet when the product was full with water??? Did I hurt the engine?
Answer	No, it'll not hurt the engine, but the water leakage is a big problem, which would damage or cause electric shock if there is any other electrical equipment around the spa
55:	Why there is red light keeps flashing or red and green lights alternately flashing?
Question	
Answer	This is filter Cartridge Cleaning Reminder: When red light keeps flashing (Filter function is OFF) or red and green lights alternately flashing (Filter function is ON), the filter cartridge shall be cleaned or replaced. After that, press Filter button for 3s to delete the reminder.

Chapter 7. Attachment

DELIGHT Spa Check Flow –E0-E1.pdf (Same as SS18) **DELIGHT** Spa Check Flow –heating failure.pdf (Same as SS18) **DELIGHT** Spa Check Flow -NO DISPLAY.pdf (Same as SS18)

SS20 spare parts list EU/SW/UK version

Repairing video download link:

https://www.adrive.com/public/Se7C6Z/2019%20delight%20concept

2019-2020 Premium/Elite/Concept trouble shooting easy checking

Problem	Cause	Solution
E0	Water temperature is lower than 0 degree or higher than 55 degree Video guide:	Change the water



T		
	Temperature sensor failure	Replace with a new temperature sensor
	Water level doesn't reach the minimum water line	Add more water to the minimum line.
	Water inlet is blocked	Replace with a new filter and clean the inlet. Video guide: https://youtu.be/4-jyyfKg9xM
E1	Filter failure No filtering water from the inlet	No filtering water from the inlet, take out the control box (heater/blower engine) to the local service partner, a new filter pump needs to be replaced. Video guide: https://youtu.be/ZyibpFOkGvU
	Flow switch is not closed	Check whether there is abnormal objects blocked the flow swich, clean it or change a new flow switch. Video guide to take out the control box: https://youtu.be/ZyibpFOkGvU
	Memory self - check after power on	Power off the plug. Wait for 5S to see if the error code will disappear. If yes, re-start the power to use the spa as normal.
EEP/888/BBB	Signal cord gets loosen	Uncsrew the control panel and tighten the singal cord
EE1 70007 BBB	Power boards failure	Take out the control box (heater/blower engine) to the local service partner, a new power board in the control box needs to be replaced. Video guide: https://youtu.be/ZyibpFOkGvU
	Power failure	Check the power supply
No display on the control	PRCD is off	Reset the PRCD following testing guidelines (press the RESET / TEST / RESET in sequence)
panel	PRCD is defective	Replace with a new PRCD
	Signal cord gets loosen	Uncsrew the control panel and tighten the singal cord
	Spa inlet connection not securely tight(if not fixed tight).	Tighten the inlet&outlet connection.
Spa leaking	Drainage valve is not well screwed on	Close the drainage valve.
	Water leaks from the spa pool body	Re-glue help or contact service partner to replace a new pool body:https://youtu.be/szF-4t0Ff5Q
	Low water level	Add more water to the minimum line.
	Temperature is set too low.	Set a higher temperature
No heating properly	Dirty filter cartridge	Clean or replace a new filter cartridge
	Heating element failure (Not heating up)	Take out the control box (heater/blower engine) to the local service partner, a new heater in the control box needs to be replaced. Video guide: https://youtu.be/ZyibpFOkGvU



	Filter pump doesn't work	Refer to filter pump doesn't work section
	Inflation knob is in "ON" position, not turned to "OFF"	Turn the Knob to "OFF" position and turn on the bubble button again.
Bubble air	Auto-off 10 minutes after it works every 20 mins	It's normal that the spa is programed to Auto-off 10 minutes after it works every 20 mins Wait for 10 mins to restart the bubble
blower does not work	Bubble fails to inflatable	Take out the control box (heater/blower engine) to the local service partner a new power board & bubble generator needs to be replaced. Video guide: https://youtu.be/lhOkbOFGgWk
	Bubble function doesn't work while all other functions works	Take out the control box (heater/blower engine) to the local service partner a new bubble generator needs to be replaced. Video guide: https://youtu.be/lhOkbOFGgWk
	Power failure	Check power supply
Filter pump	Low water level	Add more water to reach the minimum water line.
does not work	Filter cartridge stuck by dirt or other objects	Replace with a new filter and clean the inlet. Video guide: https://youtu.be/4-jyyfKg9xM
Spa tub	No liquid chlorine for water sanitizing.	Bromine is highly recommended for good water quality. No liquid chlorine for water sanitizing.
deformation	Over-inflation or extra air pressure under strong sunshine	Release the air till the manometer shows yellow. Well-covered with a MSpa overall cover when leaving spa outside.No direct exposure under strong sunshine.
0	Air valve got loosen	Screw up tight the air valve
Spa looses air	Hole or puncture on the spa tub	Re-glue help or contact service partner to replace a new pool body: https://youtu.be/szF-4t0Ff5Q
	Insufficient filtering time	Extend the filtering time
Water not clean	Dirty filter cartridge	Clean or replace a new filter cartridge
Ciedii	Improper water maintenance	Use proper chemicals (HTH brand is recommended)