

BathPumps

Distributor Catalogue

- Energy efficient
- Quiet pump operations
- Built for durability, strong and reliable masage
- Industry leading massage performance to leave you rejuvenated and revitalised.





The revitalising touch of warm swirling water enriched with millions of bubbles on your body is the ultimate in therapeutic pleasure.



In perfect harmony with your spa bath the Onga hydromassage pumps deliver a strong, reliable massage with added features:



Ultimate water massage

will leave you rejuvenated and revitalised with industry leading water pressure delivered to the spa bath jets.



Energy efficient

with more water for less consumed power*.



Quiet pump operation

allows you to relax and be consumed in the soothing bubbling sound of the spa.



Hygienic

with self draining and full-flo pump design.



Versatile

Suitable for indoor or outdoor mounting without the need of a protective cover.

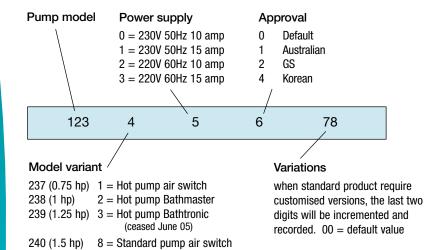
With the reliability, quality and Nationwide service support of the leading Onga brand.

*pumps without heating element



Part number nomenclature

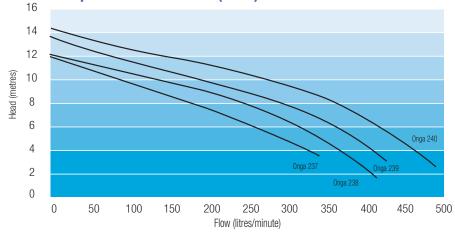
Onga Hydromassage pumps have an 8 digit part number



Date and serial number nomenclature

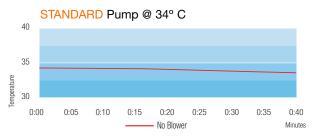
02 YEAR	-	07 MONTH	-	04261 UNIQUE SERIAL NUMBER
02 = 2002 03 = 2003 04 = 2004 05 = 2005		01 = Jan 02 = Feb		Numerical sequence, unique to each product

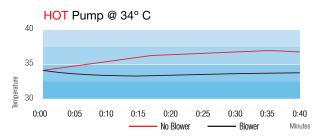
Pump Performance Table (50Hz)





Comfort Levels

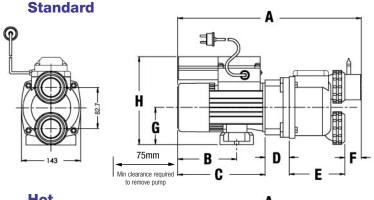




Disclaimers Tested for a 200 litre single person spa bath tested under laboratory conditions based on model 238. The information and specifications subject to change without notice.

	Standard	Model Hot	Bathtronic	Bathmaster	Benefits
Approved	AUST & N/Z STANDARDS	AUST & N/Z STANDARIOS	AUST & N/Z STANDARÚS	AUST & N/Z STANDARIOS	Approved to the comprehensive Australian/New Zealand standards.
Massage					Industry leading massage performance to leave you rejuvenated and revitalised.
Silence	9	9	9	9	Relax and be consumed in the soothing, bubbling sound of your spa.
Hygienic	0	0	0	0	Self draining and non-clogging pump design allows water flow to the jets without by-pass that may clog with hair, soap scum or exfoliated skin.
Jets					Independent pump control for jet pressure.
Climate					Install indoors or outdoors without a cover.
Operation	24,7	247	24,7	24,7	Reliable operation from the continuous duty motor.
Installer Friendly	INSTALLER	INSTALLER FRIENDLY	INSTALLER	INSTALLER	The compact design and self aligning barrel unions assist installation.
Levels of Safety	2	4	6	8	Multiple safety levels for peace of mind. Includes AS/NZS approvals.
Auto Heat					Guaranteed controlled heat of the dedicated heating element to maximise your bath water temperature.
Comfort Heat					Comfort Heat at your fingertips allows you to control the dedicated heating element.
Dry Fire					In-built protection against Dry Fire. A water pressure sensor controls the timing of the heat boost within safe conditions.
Over Temp		45°	45°	45°	Bathe safely knowing the Onga pump will NOT contribute heat beyond prescribed limits.
Voltage					Intelligent electronics protect your pump when the voltage supply is outside normal limits.
Motor					Fitted with independent motor overload to minimise electrical motor damage.
Run Dry					Dry run safety stops the pump if there is NO water - preserving your pump life.
Blocked Suction					Protecting you and your investment, the intelligent Bathmaster senses NO WATER FLOW and quickly turns the pump off.
Air System					BathmasterPlus can activate WhispairPlus air blower with its intergrated switch system





Hot Win clearance required to remove pump Min clearance required to remove pump Min clearance required to remove pump To remove pump To remove pump To remove pump To remove pump

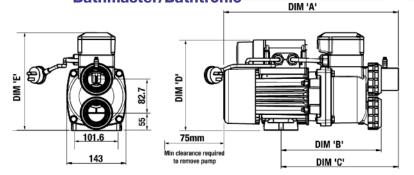
Dimension Table

Standard/Hot Pumps

Pump Model	A	В	C	D	E	F	G	H (****)
Model	(mm)							
237	392	143	217	59	135	40	90	213
238	410	143	217	59	135	40	90	213
239	410	143	217	59	135	40	90	213
240	420	143	226	59	135	40	90	213

Note: Unless otherwise specified, all dimensions in mm. Fixing slots accept 8mm fasteners

Bathmaster/Bathtronic



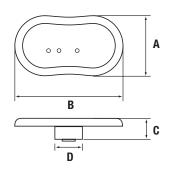
Dimension Table

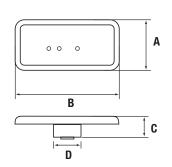
Bathmaster/Bathtronic Pumps

Pump Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
237	392	243	285	221	245
238	410	243	285	221	245
239	410	243	285	221	245
240	424	243	285	221	245

Note: Unless otherwise specified, all dimensions in mm. Fixing slots accept 8mm fasteners

Touch Pads



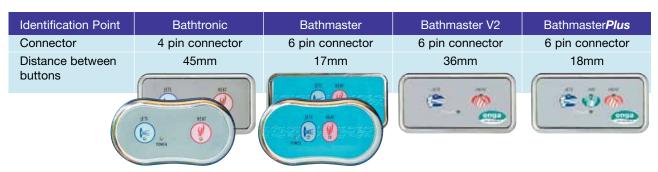


Dimension Table

Touch Pads

	Α	В	C	D	
Туре	(mm)	(mm)	(mm)	(mm)	
Kidney Shape	56	101	20	25	
Rectangle	50	97	20	25	

Note: Unless otherwise specified, all dimensions in mm.



Touch Pad notes

Escutcheon; rectangular shape available for order. Minimum quantities apply. Consult your Onga sales manager. Decal; customised Decals available for order. Minimum quantities apply. Consult your Onga sales manager.



Onga spa bath pumps are suitable for clean, non-corrosive bath water (where water is emptied after each bath). For other applications consult your Onga sales manager.

Construction

Component	Material
Pump Casing:	20%Glass Filled Noryl
Impeller:	20%Glass Filled ABS
Baffle:	20%Glass Filled ABS
End Shield:	Die Cast Aluminium
Shaft Sleeve:	Nylon
Motor Shaft:	Mild Steel
Motor Shell:	Die Cast Aluminium
O-ring's:	Nitrile
Barrel Union:	ABS
Heater Element:	Incalloy
Sound power level	from 65 dBa @ 1 metre

Operating Conditions

		Standard	Hot	Bathtronic	Bathmaster
Dry Run Protection:	30 seconds delay*				•
Blocked Suction Protection:	3 seconds delay*				•
Voltage Protection:	less than 190V, greater than 260V [†]			•	•
Ambient Temperature:	55°C Maximum	•	•	•	•
Fluid:	Water	•	•	•	•
Water Temperature:					
Primary Heater Cut-Out	40°C		•	•	•
Secondary Safety Cut-Out	45°C**		•	•	•
Maximum Temperature:	70°C***	•	•	•	•
Maximum Working Pressure:	300kPa	•	•	•	•

^{*}Dry Run/Blocked suction Protection feature isolates pump for a period of 10 seconds.

**In line with Health Authority recommendations heater will not operate over 45°C.

***Capable of pumping 70°C, not recommended for spa bath applications.

† Voltage protection feature isolates pump when voltage is outside of set parameters.

Technical Data

	Standard pumps					Hot	pumps		
Pump model	237	238	239	240	237	238	239X0	239X1	240X1
Power Supply lead (Amps)	10	10	10	10	10	10	10	15	15
Agency listings*	AS/NZ, CE, GS*, CCC, KETI*								
Electrical Standards				AS/NZ	S 3136				
IP rating to AS60529		IP	X5			IP	X5		
Approval #		V	42			V	42		
emc approval		ує	es			yı	es		
emc approval #		N18	314			N1	814		
Installation Zone			Zone '	1 in accordanc	ce with AS/NZ	S 3000			
Ventilation requirements			50 sq.c	m in accordar	nce with AS/NZ	ZS 2023			
Power Supply (Volts)				220	- 240				
Frequency (Hertz)				5	50				
Motor type	single	phase, therma	ally protected,	TEFC, continu	ously rated, C	lass B temp ri	se, Class B in	sulation	
Nominal Horsepower	3/4	1	1 1/4	1 1/2	3/4	1	1 1/4	1 1/4	1 1/2
Motor input power (P ₁)	700W or 1HP	950W or 1.2HP	980W or 1.3HP	1350W or 2HP	700W or 1HP	950W or 1.2HP	980W or 1.3HP	980W or 1.3HP	1350W or 2HP
Motor output power (P ₂)	560W or 3/4HP	665W or 0.9HP	710W or 1HP	1040W or 1.4HP	560W or 3/4HP	665W or 0.9HP	710W or 1HP	710W or 1HP	1040W or 1.4HP
Heater Module	-	-	-	-	1.4 kW	1.4 kW	1.3 kW	2.2 kW	1.6 kW
Starting Current (Amps)	10	18	18	22	10	18	18	18	22
Full Load Current (Amps)	2.7	4.1	4.3	5.9	8.3	9.7	9.8	13.5	12.5
Pump weight (kg)	5.9	8.8	10.4	10.4	6.7	9.6	9.6	9.6	11.2
Packed weight (kg)	7.5	10.3	12	12	8.2	11.2	11.2	11.2	12.7
Carton Dimension (L x W x H)	427	′ x 144 x 260		523 x 218 x 260		427 x 14	4 x 260		523 x 218 x 260
Pipe Inlet - Horizontal		5	o swivel unior	n to suit: 40 m	m PVC pipe to	AS/NZS 147	7		
Pipe Outlet - Horizontal		5	o swivel union	n to suit: 40 m	m PVC pipe to	AS/NZS 147	7		
Air tube (air switch version)				6 metres x 3	mm internal				
Data cable (Bathmaster versions)	-	-	-	-	-6 met	res x 6 pin co	nnector		
Data cable (Bathtronic versions)	-	-	-	-	-6 met	res x 4 pin co	nnector		

^{*}applicable to certain models, contact Onga for assistance. Grey column = ceased production.



Installation Zone: Zone 1, in accordance with AS/NZS 3000:2000 Standard

A CAUTION

The Onga Hydromassage pumps have been specifically designed for use in spa baths (Whirlpools). They should not be used for any other purpose without first consulting your Onga dealer or Onga representative.

The Onga Hydromassage pump is NOT a self priming pump. Ensure there is sufficient water to completely fill the pump casing (flooded suction) before operating the pump. Do not use the pump if there is a possibility that the water in the pump is frozen.

Hot Pumps: The spa bath (whirlpool) heater element is not recommended for use in chemically treated water. Europe; incorporate a heater element which is suitable for spa pool (Hot Tub).

Spa Pump Position



To avoid water damage to property from leaking connections or normal wear, the pump must be installed on a well drained site or a properly constructed drain tray. (Do not submerge in water)

If the pump is supplied separately to the spa bath, position the pump as close as possible to the spa. This will ensure optimum spa performance.

Pump Installation:

- The pump mount must be Solid Level Rigid Vibration free (to reduce vibration and pipe stress, bolt the pump to the pump mount).
- Install the pump suction inlet higher than bath suction fitting. (Refer Fig 1.) This allows the pump to drain completely when the bath is emptied in accordance with Local Health Regulations.
- Ensure suction pipe has an even rise from the spa bath (Whirlpool) suction inlet to avoid air locks (otherwise the spa pump may not prime). (Refer Fig. 1)
- Ensure discharge pipe has an even rise from the pump

to the spa bath (Whirlpool) connection to avoid air locks.

- Protect pump from excess moisture, external weather (where applicable).
- Allow adequate access for servicing pump & piping.

Ventilation

- Provide adequate ventilation to prevent the motor from overheating (minimum area is 50cm²). Without adequate ventilation the pump motor may overheat causing the pump to stop.
- The hydromassage pumps are suitable for exposure to the weather. For extended pump life, a protective cover is recommended.

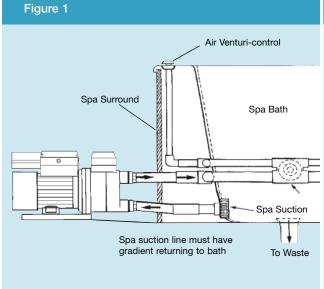
Piping

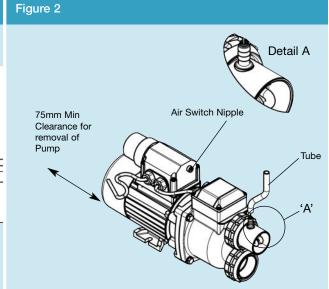


The fittings on these hydromassage pumps are constructed of ABS. Some PVC jointing compounds are incompatible with ABS possibly causing failure to the product. Check compound suitability prior to use.

For best pump efficiency use the least amount of fittings. Onga hydromassage pumps are supplied complete with integrated multidirectional (5°) barrel unions to allow easy installation of pipework. Use as follows for leak-free connections to pump:

- 1. O-Ring and sealing surfaces must be clean.
- Ensure O'Ring remains on barrel unions and tighten Hand Tight only! (NO WRENCHES).
- 3. No pipe compound or teflon tape on unions.
- 4. Bond pipe to unions with a compatible PVC/ABS solvent cement suitable for maximum pump pressures.
- 5. When appropriate fill the bath with water and check that there are no visible leaks from the plumbing joints. Start the pump and repeat this step.







Air Bleed Valve (where fitted)

Certain Onga 200 series Hydromassage pumps are fitted with an air bleed valve. If the pump is installed exactly as per Fig. 1 this valve will not be required to be made functional (the air bleed valves are sealed at time of manufacture).

For automatic air venting cut the top of the valve off at the cut groove found approximately 3.5mm from top of the valve as per Fig. 2 using a pair of side cutters. DO NOT use pliers. The air bleed valve will now expel air.

As it is common for air valves to squirt water when sealing (each time the pump is turned on), Onga recommends that a 10mm drain tube to be fitted over the barbed section of the air bleed valve to allow excess water to drain to waste. (Refer Fig. 2)

Electrical Connection



Onga advises that an earth leakage or residual current protection device must be fitted to all installations, rated residual operating current not exceeding 30mA.

Exactly match supply voltage to name plate voltage 220-240 Volt 50Hz (single phase only). Onga advises that a voltage surge protector be fitted as voltage spikes or incorrect voltage can cause fire or seriously damage the motor which is not covered by your Onga warranty!

Onga 200 series hydromassage pumps are suitable for connection to 220-240 Volt 50 Hz power outlets.

Some models will require a 15 amp power outlet, check motor label for details.

Electrical supply must conform to local/national electrical standards. Pump and motor must not be accessible to the bath user.

Pump must be installed in the correct zone, refer technical data on Page 3. Equipotential Bonding must be carried out.

NOTF:

The power supply cord must only be replaced with an original power supply cord by the Manufacturer, an authorised Service Agent or a suitably qualified person. Warranty is void if unauthorised modifications are made to any component. The plug may be accessible for service reasons but must not be accessible to the user in the bath.

Test reference pressure measured at 6 metres Total Head.

Pump Operation



Never run pump dry! Running pump dry may damage seals, causing leakage and flooding!

Before filling and starting your spa bath (Whirlpool), ensure that the spa bath (Whirlpool) is free from debris or foreign material as irregular pump conditions may occur.

Before switching on, fill the bath to a minimum 50mm above the spa jets.

NOTE: HOT PUMPS; To ensure that the over temperature sensor does not activate whilst filling the bath and thus preventing the pump heater from operating, fill the bath with cold to luke warm water until water level reaches the suction cover.

Water temperature greater than 40°C may make the heating element inactive.





Hazardous suction. Can trap hair or body parts, causing severe injury or death.

Do not block suction.



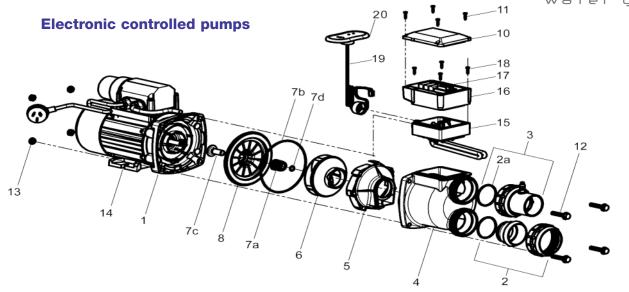
Too much heat can cause nausea, dizziness, fainting or death.

Check temperature before using bath.

Figure 3

Figure 4





Items with suffix K are packaged for display

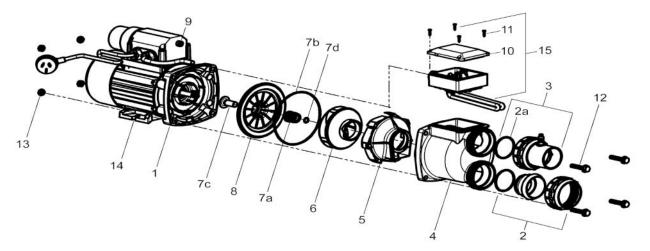
Model
Part number
Description
Heater Module
Ceased Production

		Bathtronic®			Bathmaster®					
237	238	239 10A	239 15A	240 15A	237	238	239 10A	239 15A	240 15A	
23730100	23830100	23930100	23931100	24031100	23720100	23820100	23920100	23921100	24021100	
3/4 hp	1 hp	1 1/4 hp	1 1/4 hp	1 1/2 hp	3/4 hp	1 hp	1 1/4hp	1 1/4hp	1 1/2 hp	
1.4kW	1.4kW	1.3kW	2.2kW	1.6kW	1.4kW	1.4kW	1.3kW	2.2kW	1.6kW	
June 2005	June 2005	June 2005	June 2005	June 2005				June 2005		

Item	Description	Qty			Part numb	per			
1	Motor	1	801321	801322	801336	801321		801322	801336
2	Nut, Tail & O'ring Kit	1			8012	216K			
2a	O'ring - Barrel Union (Pack of 4)	2			7022	232K			
3	Tail & Airbleed Assy.	1			509	790			
4	Casing	1			303	930			
5	Diffuser	1			303	750			
6	Impeller	1	508020 510810 50	07910	509740	508020 510810	507	910	509740
7	Seal Kit (Incl. Seal + Items 7b, c & d)	1			8008	913K			
7a	Seal (Pack of 25)	1			800	901			
7b	O'ring - Casing	1			7022	239K			
7c	Shaft Sleeve	1			607	800			
7d	O'ring - Shaft Sleeve (Pack of 10)	1			702	196K			
8	Baffle	1			3037	760K			
9	O'ring - Lid (Not Shown)	1			702	260			
10	Lid	1			305	440			
11	Screws - Lid (Set of 10)	8			800	607			
12	Screws - Casing (Set of 10)	4			800	399			
13	Nuts (Set of 12)	4			800	163K			
14	Base & Screws Kit	1			800	532			
15	Heater Module Assy.	1	801325	801326	801334	801327		801328	801335
	Electronic Service Kit	1	Includes HTR module, PCB, T/Pa	d, Decal	801	395			
	Screw - Heater Module (Not Shown)	4			800	607			
16	Base - PCB	1			305	430			
17	PCB	1	801323	<			801324K		
18	Screw- Base to Heater Module	4			800				
	Screw- PCB (Pack of 10)(Not Shown)	2			800	607			
19	Signal Lead - 6 Metres	1	801329 801330						
20	Touchpad Kit		·		al, data lead	and kidney shaped esci	utcheon)		
	White	1	106900				1070000	Bathmaster	version
	Chrome	1	1069003				1070003	2 compone	
	Gold	1	106900				1070004	ordered ser	
	lvory	1	106901	5			1070015	refer price	ist
	Motor Lead - 4 Core (Not Shown)	1			608	600			



Air switch controlled pumps



Items with suffix K are packaged for display

		Star	ndard pun	nps	Hot pumps				
Model	237	238	239	240	237	238	239 10A	239 15A	240 15A
Part number	23780100	23880100	23980100	24080100	23710100	23810100	23910100	23911100	24011100
Description	3/4 hp	1 hp	1 1/4 hp	1 1/2 hp	3/4 hp	1 hp	1 1/4 hp	1 1/4 hp	1 1/2 hp
Heater Module					1.4kW	1.4kW	1.3kW	2.2kW	1.6kW
Ceased Production								June 2005	

Item	Description	Qty					Part numb	er			
1	Motor	1		800710		801214	800709	800709	800709	801337	801338
2	Nut, Tail & O'ring Kit	1		801216K							
2a	O'ring - Barrel Union (Pack of 4)	2	702232K								
3	Tail & Air Bleed Assy.	1	509790								
4	Casing	1	303930								
5	Diffuser	1	303750								
6	Impeller	1	508020	510810	507910	509740	508020	510810	507	910	509740
7	Seal (Pack of 25)	1	800901								
7a	Seal Kit (Incl. Seal + Items 7b, c & d)	1	800913K								
7b	O'ring - Casing	1	702239K								
7c	Shaft Sleeve	1		607800							
7d	O'ring - Shaft Sleeve (Pack of 10)	1	702196K								
8	Baffle	1	303760K								
9	Airswitch	1				302471K				302	470
10	Lid	1		407780 407790							
11	Screws - Lid (Set of 10)	4					800607				
12	Screws - Casing (Set of 10)	4		800399							
13	Nuts (Set of 12)	4	800163K								
14	Base & Screws Kit	1	800532								
15	Heater Module Assy.	1	408358 <mark>408357</mark> 4			408356					
	Lead w/ 3-pin Plug	1	608080				608340	608340			
	Lead Kit: 3-Core (Not Shown)	1	-	-	-	-			801332		

Quantity column indicates maximum number of individual items per service repair. The part number given is for singular units unless otherwise stated in the item description. Drawings are indicative only, product appearance may change slightly.

Grey column = ceased manufacture June 2005



A CAUTION

Onga stands by its quality products, however if a fault occurs and cannot be rectified by following the trouble shooting guide as set out below, please contact onga on 1800 664 266 (Australia) or 0800 664 269 (New Zealand) where our locator service will direct you to your nearest sales stockist or service agent.

Please be aware that a service fee will be applicable if a fault occurs other than that as described in the product guarantee as being due to defects in materials or faulty manufacture.

Pump service should be performed by suitably qualified personnel.

Always unplug power lead prior to service to prevent personal injury.

Trouble Shooting - all models

Symptom	Cause	Remedy			
Pump does not start.	No Power at power point	Use another known good electrical appliance to check power outlet.			
	Blown fuse	Check fuse and replace if required			
	Automatic thermal overload has tripped to protect the motor	- Check motor cooling and ensure adequate ventilation. Allow motor to cool then restart pump.			
		 Ensure the pump is not jammed with debris or foreign material and motor is able to spin freely. 			
		- Motor is operating with low voltage supply.			
		WARNING Continued operation with this symptom may result in permanent damage.			
	Pump is jammed (check if shaft is free to rotate).	- Pump is blocked with foreign material. Clear debris and foreign material from pump and ensure that the pump is able to spin freely.			
		- Bearings seized. Contact Service Technician.			
Pump starts but no water coming	Pump not installed at correct level in relation to the spa suction (refer Fig 1)	Confirm correct installation with the installer.			
from spa jets	Water level too low.	Ensure water level is at least 50mm above the level of the jets prior to operating the pump.			
Pump starts then stops	Automatic thermal overload has tripped to protect motor	- Check motor cooling and ensure adequate ventilation. Allow motor to cool then restart pump.			
σιορο		 Ensure the pump is not jammed with debris or foreign material and motor is able to spin freely. 			
		- Motor is operating with low voltage supply.			
		WARNING Continued operation with this symptom may result in permanent damage.			
Bath water	No Heater element.	This is normal in the standard pumps, models 2378, 2388, 2398 and 2408.			
temperature drops when pump & spa	Heater module does not operate.	Contact service technician.			
jets are operating normally.	Heater module is too small for the capacity of the bath.	Confirm capacity of the heater module			



Trouble Shooting - air switch models

Symptom	Cause	Remedy			
	Faulty air button on side of bath.	Ensure air button is able to give a "pulse of air".			
Pump does not start	Airtube is dislodged or kinked.	Check that the air tube is connected to pump and the air button and is not kinked so that it allows a free flow of air.			
	Airtube is blocked.	Ensure that the airtube is clear and can pass air freely.			
	Faulty Air switch in pump.	Contact service technician.			
Pump will not	Faulty air button on side of bath.	Ensure air button is able to give a "pulse of air".			
turn off.	Airtube is dislodged or kinked.	Check that the air tube is connected to pump and the air button and is not kinked so that it allows a free flow of air.			
	Airtube is blocked.	Ensure that the airtube is clear and can pass air freely.			
	Faulty air switch in pump.	Contact service technician.			

Trouble Shooting - electronic models (Bathmaster)

Symptom	Cause	Remedy				
Pump does not start.	Low voltage conditions (green power light is flashing on the Touchpad).	Periodically retry "jets" button as unit will start to work once voltage supply returns to an acceptable level.				
	Pump in "lock-out" mode (green light on the touchpad is flashing).	Wait for all flashing lights on the touchpad to stop, then activate the "JETS" button.				
	The electronic touchpad system is faulty.	Contact your local service technician.				
Pump starts then	Pump has not achieved prime.	Ensure pump and suction line are clear of any debris and blockages.				
stops.		Ensure the water level is at least 50mm above the height of the jets.				
		Ensure that there are no air leaks in the suction line.				
Pump stops during	Pump has lost prime	Ensure pump and suction line are clear of any debris and blockages.				
normal operation.	Pump has cut out on Low/High voltage conditions.(power light is flashing Red/Green on touchpad).	Periodically retry "JETS" button as unit will start to work once voltage supply returns to an acceptable level.				
Bathmaster Plus Blower does not	Data cable / Signal cable not correctly inserted or damaged.	Check cable connection and replace if required.				
start.	Button not pressed firmly.	Repeat operation sequence.				
	For further troubleshooting; refer Whispair <i>Plus</i> blower owners manual.					

offices world-wide

BALBOA WATER GROUP www.balboawater.com

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