



THE BEAUTY OF WATER
THE SCIENCE OF RENEWAL



HOT BATHE

Heating Circulation System

Installation Instruction Manual

**For use by Tub Manufacturers or
Qualified Service Personnel ONLY.**



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Important Safety Instructions

**PLEASE READ CAREFULLY PRIOR TO
Troubleshooting and Servicing Electrical Equipment**

Definitions

WARNING May cause serious injuries or death

CAUTION May cause property damage

For information on NuWhirl Instructions, see:
www.nuwhirl.com/docs/product-instructions.html

When installing and using this electrical equipment, basic safety precautions should always be followed, including:

WARNING Keep dry. Replace control if exposed to water, moisture or contamination.

WARNING Use and follow these instructions along with all instructions that have been provided.

WARNING Electronic control system components should be installed as per local and national Electrical Codes, in a location not to be subjected to splashing or flooding. Exposure to water or splashing will void all product certifications and warranties.

There are no user serviceable parts inside. Opening, modifying, or tampering with control system components will void all product certifications and warranties.

WARNING Risk of electric shock. Connect only to a ground type receptacle or power supply junction box protected by a Ground-Fault Circuit Interrupter (GFCI). Contact a qualified electrician if you cannot verify that the power supply is protected by a GFCI. The GFCI should be tested on a routine basis. Consult the GFCI manufacturer's instructions for correct testing and operation

For electrical connections, see applicable wiring diagram.

See www.nuwhirl.com/docs/product-instructions.html

Do not use an extension cord to connect the product to the electric supply; provide a properly located receptacle or junction box.

WARNING Failure to install in strict accordance with each and every instruction above may compromise the system, which may cause injury to persons and/or property.

The tub may be supplied from more than one power source. Before working on any electrical device, make sure all power to the control system is off.

Use this unit only for its intended use as described in this manual. Do not use attachments not recommended by the manufacturer. Any improper installation or misuse of the equipment may result in injury to the user and will void the warranty.

Do not run unit dry. Always be certain that the pump casing is filled with water before starting the unit. If pump fails to prime within 30 seconds, turn it off. Check if there is an airlock, clogged plumbing, or closed valve.

Save these instructions.

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Important Notes

DANGER Risk Of Electric Shock.

These Tub Water Heaters are approved for Factory Installation ONLY, per the Tub Factory's relevant Certification Files (UL / CSA / etc.), and are to be serviced by Qualified Service Personnel only.

Do not subject the Heater to splashing/water, dropping, rough handling, freezing, or running dry; the unit must be replaced if this happens. No User-Serviceable Parts Inside. Misuse or misapplication of the unit voids all warranties.

The Power Cord is to be connected as intended (Plug / Hardwire) to a GFCI-Protected circuit.

The Bonding Lug must be connected to the Tub's Bonding Wire System.

The Heater is to be installed horizontally, with the Housing oriented vertically, sideways or upside down, as shown in the diagrams. Never install the Heater vertically.

The Heater is to be installed with the Water Flow Arrow pointing in the correct direction.

Ensure that the O-Rings in the Pipe Fittings are correctly in place before installing.

The Pipe Fittings are to be securely Hand-Tightened only.
Do not use tools!

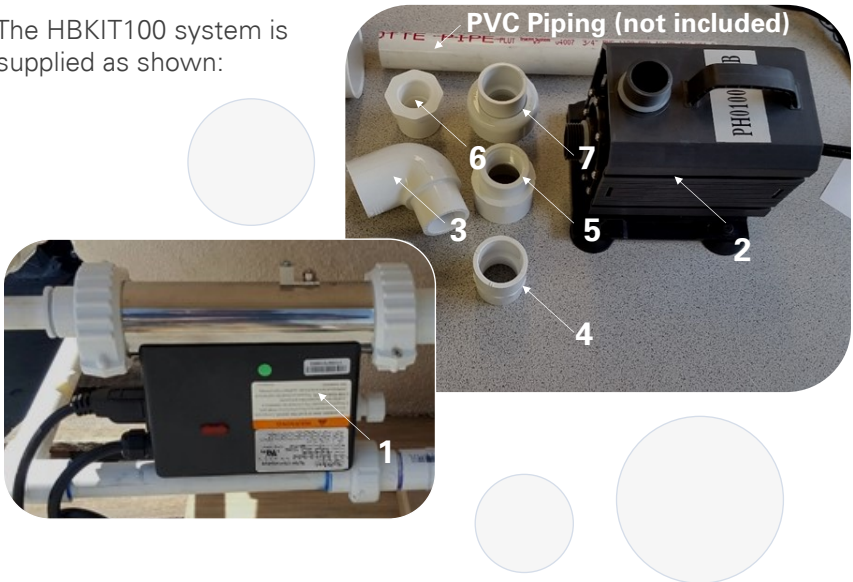
Hot Bathe is compatible with MJE1-xx series Micro Jets.



HBKIT100 Parts List

Item	Part Number	Description	Qty
1	HWIPS120-1500NR	Heater, 7", Water, Inline, Pressure, Air Switch, 120V, 1500W, w/ NEMA Plug and NEMA Housing Receptacle	1
2	PH01000XCS	Pump, Circulation, 120V/60HZ, 1/10 HP, .5A, 8.66 GPM, No Air Switch, Cord & Plug, Single	1
3	409010	Elbow, 1" Sigot x 1" Socket, Schedule 40, PVC	1
4	435007	Adapter, 3/4" Socket x 3/4" FPT, Schedule 40, PVC	1
5	435131	Adapter, 1" Socket x 3/4" FPT, Schedule 40, PVC	1
6	437130	Bushing, Reducing, 1" Spigot x 1/2" Socket, PVC	1
7	700301	Union, 3/4" Socket x 3/4" Socket, Schedule 40, PVC	1

The HBKIT100 system is supplied as shown:



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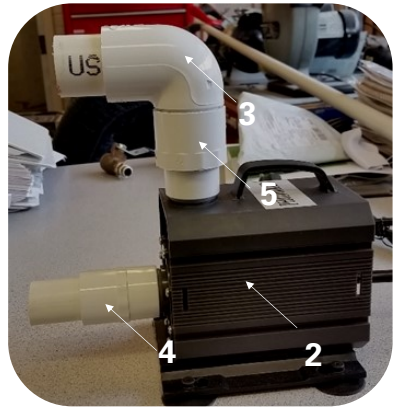
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Design Guide

It is recommended that all parts be dry-fitted as the system installation process is being designed.

Pump Assembly

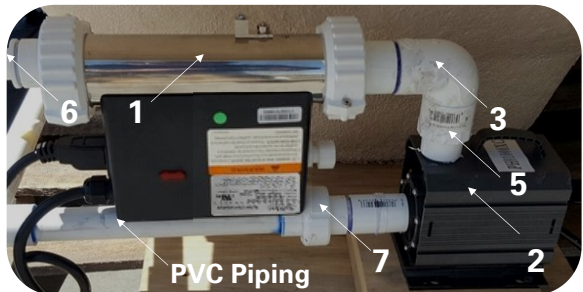
1. Fasten Adapter Fitting #4 to the Pump's Lower Suction Port, and Adapter Fitting #5 to the Discharge Port.
2. Insert Elbow Fitting #3 into Adapter Fitting #5.
3. Using PVC Schedule 40 Piping (not included), prepare a 3/4" x 2" L and a 1" x 2" L Pipe.
4. Insert the 3/4" Piping into the lower Adapter Fitting #4, and the 1" Piping into the upper Elbow Fitting #3.



CAUTION Hand-tighten plumbing fittings only. Using tools or overtightening may result in breakage while insufficient tightening may result in the circulation system becoming inoperable or having water leaks.

Heater Assembly

1. Insert Union Fitting #7 onto the lower 3/4" Piping.
2. Insert 3/4" Pipe into Union Fitting #5.
3. Insert Heater Fittings onto the upper 1" Piping, then install the Heater onto this Fitting.
4. Insert Reducing Bushing #6 into the discharge-side of the Heater.
5. Plug the Pump Power Cord into the Heater's Receptacle. Neatly bundle and tie the extra cord.





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Tub Installation

Note Hot Bathe is compatible with NuWhirl's suction assemblies, air switches, and MJE1-xx series Micro Jet assemblies. Additional plumbing fittings also available.

Pump Installation Install the Pump at a level that it is at least 1" higher than the top of the Suction Fitting.

Pump Suction Run the 3/4" Suction Pipe with a downward slope from the Pump to provide the required self-drainage. Connect the Pipe to the Suction Assembly.

Pump Discharge Run the 1" Discharge Pipe with a downward slope from the Jet Assembly to the Pump to provide the required self-drainage. Connect the Pipe to the Wall Fitting.

Air Switch Connect the Tubside Airswitch Tubing to the Airswitch Fitting on the Water Heater.

Bonding Lug Connect the Heater's Bonding Lug to the Tub's Bonding Wire System.

Once the design process has been completed, use a Thread Sealant that is compatible with Plastics and apply it to the Pump's Threaded Fittings. Secure the Pump and cement/hand-tighten all joints.

Plug the Heater Power Cord to a GFCI-Protected circuit.

Test Operations

1. Once the pipe cement has cured, fill the Tub with water to the overflow.
2. Press and release the Air Switch to turn Hot Bathe on (and again to turn it off).
3. Upon activation, the Pump will start, and the red indicator light will illuminate on the heater unit.
4. Warm water should begin to flow from the Jet Assembly shortly.

Note Hot Bathe is not equipped with an automatic shut-off timer.

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System Troubleshooting

The NuWhirl Hot Bathe system is designed for easy installation and years of trouble-free operation. This section is provided to help with the most common issues that may arise when installing, testing, and using the Hot Bathe system.

Symptom	Probable Cause	Remedy
The system does not start when the air switch is activated	Tripped GFCI circuit protector	Heater, 7", Water, Inline, Pressure, Air Switch, 120V, 1500W, w/ NEMA Plug and NEMA Housing Receptacle
	Incorrect NEMA plug setup of pump and heater	Check NEMA plug (pump and heater) setup
The pump runs, but the system does not warm the bath water	Over temperature protector tripped	Reset temperature protector*
	System backpressure is too low	Ensure outlet jet provides at least 2.88 PSI backpressure to the pump and heater piping
The indicator light on the heater does not illuminate when the system is turned on	Over temperature protector tripped	Reset temperature protector*
	System backpressure is too low	Ensure outlet jet provides at least 2.88 PSI backpressure to the pump and heater piping

*To reset the temperature protector, press the reset button located beneath the heater unit. The installed heater can be pivoted if PVC piping blocks access to the button.



Retain this manual for future reference



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