

**MR. INSTALLER -
Please pass these
IMPORTANT
instructions along
to the homeowner!**



HYDRO SYSTEMS

family owned and operated since 1978

STUDIO COLLECTION

**IMPORTANT SAFETY INSTRUCTIONS
GENERAL INSTRUCTIONS**

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

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WARNING: When using your Hydro Systems tub, basic precautions should be followed.

READ AND FOLLOW ALL INSTRUCTIONS.

1. **DANGER:** To reduce the risk of injury, do not permit children to use this unit unless they are closely supervised at all times.
2. Use this unit only for its intended use as described in this manual. Do not use attachments NOT recommended by the manufacturer.
3. Never drop or insert any object into any opening.
4. Do not operate this unit without suction cover installed.
5. The unit must be connected only to a dedicated electrical supply circuit that is protected by a Ground Fault Circuit Interrupter (GFCI). The GFCI must be provided by the installer and should be tested on a routine basis by the homeowner. To test the GFCI push the test button. The GFCI should interrupt power. Push the RESET button. Power should be restored. If the GFCI fails to operate in this manner there is a ground current fault, indicating the possibility of an electric shock. Do not use the tub. Disconnect the power and have the problem corrected by a qualified service electrician. Re-test the GFCI and only when it is operating properly may the whirlpool tub be used.
6. A terminal is provided on the exterior of the pump. To reduce the risk of electric shock, connect this terminal to the grounding terminal of your electric service or supply panel with a conductor equivalent in size to the circuit conductors supplying this equipment.

Save These Instructions

INSTALLATION INSTRUCTIONS

Hydro Systems bathtubs and whirlpool bathtubs are designed and engineered for easy installation and years of trouble-free enjoyment. Installation is easy if you follow the step-by-step instructions. Please read all instructions before you begin the installation.

WARNING: - When using electrical products, basic precautions, should always be followed.

1. **DANGER: RISK OF ELECTRICAL SHOCK.** Connect only to a circuit protected by a ground fault circuit interrupter.
2. This unit should be installed by a qualified contractor/plumber. All electrical connections should be made by a licensed electrician. Grounding is required.
3. The installaion of Hydro Systems bathtubs must meet all applicable codes and regulations.

Note: Access panel (14" x 16") must be provided for servicing.

IMPORTANT - Never move or lift the tub by the pipes or other plumbing system components. Move or lift the tub by the deck or from under the bottom only.

1. **READ ALL THE INSTRUCTIONS** before you begin the installation.
2. **INSPECT THE TUB** before you begin the installation. Inspect the following:
 - Is it the correct model? The corect size? The correct color?
 - If options or upgrades were ordered, are they complete and correct?
 - If the tub was ordered with components in non-standard locations, check to make sure they all are in their correct locations.
 - Check all components to make sure no damage occurred during shipping.

DO NOT INSTALL THE TUB if any of the above is not correct.

Contact the dealer where the bathtub was purchased or call Hydro Systems directly at **661-775-0686**.

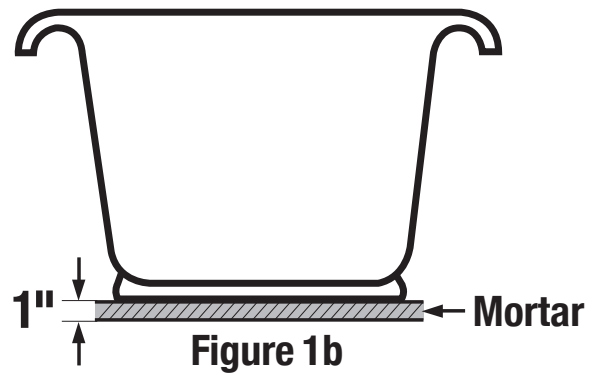
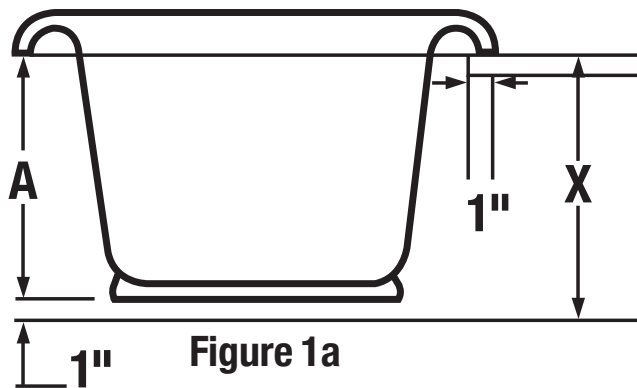
You will need to know the bathtub serial number attached to your warranty card and also located on the back side of the bathtub when contacting Hydro Systems.

GENERAL REQUIREMENTS FOR INSTALLATION

MECHANICAL REQUIREMENTS:

- 1. WEIGHT:** Tubs must be installed in a location that will support the combined weight of the tub plus the water plus the bather. As a rule of thumb, this will be a maximum of 1000 lbs. for a 60" tub, 1200 lbs. for a 66" tub, and 1400 lbs. for a 72" tub.
- 2. TILE FLANGES:** Tubs can be installed as a drop-in unit or they can be installed against one, two or three walls. Tubs installed against walls should be ordered with a tile flange on each side that will be against a wall to provide a leak free water barrier.
- 3. FRAMING:** When framing it is best to measure the actual tub to be installed to determine framing dimensions. In the absence of the actual tub, refer to the Hydro Systems catalog drawings or website at www.hydrosystem.com.
- 4.** All support is from the mortar base. No weight shall be bared by the lip or the deck of the bathtub.

The two most common types of installations are DROP-IN and THREE WALL installations. **DROP-IN (Figure 1)** For drop-in, or deck-mounted tubs, the finished height of the deck (**X**) where the tub will sit must equal the dimension from the trimmed edge of the tub to the floor at the drain end of the tub (**A**) plus 1". The 1" is for the mortar bed.



NOTE: Tub lip resting on ledge, stringer or frame is non-weight bearing.

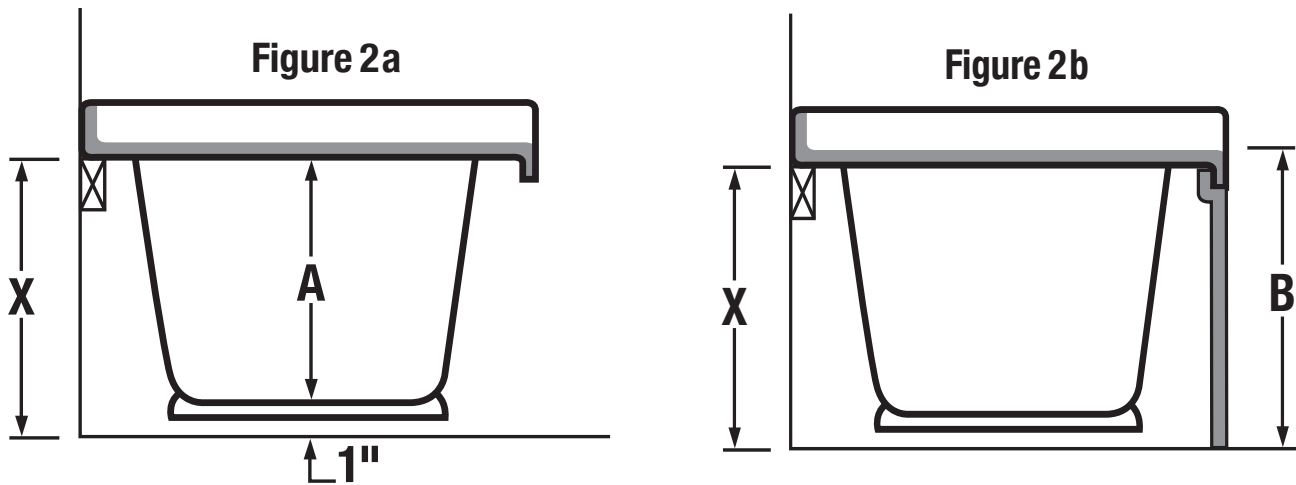
Tub MUST be supported by mortar only.

IMPORTANT - the deck must be level both front to back and side to side. If it is not level, the tub will not drain properly. The opening into which the tub will be dropped should be cut 1" smaller than the tub on all four sides. For example, for a 60" x 42" rectangular tub, an opening 58" x 40" will extend 1" under the lip of the tub all the way around and will provide clearance for the whirlpool system. In the case of oval and round tubs, Hydro Systems ships a full size paper template with the tub; cut 1" inside the outside diameter (o.d.).

THREE WALL: For tubs installed in a three wall enclosure, the tub will need a rough opening the same size as its overall dimensions. For example, a 60" x 42" tub will need a space 60" x 42" for installation. Do not include finish wall coverings (wall board, tile, etc) in your rough framing calculations. Studs and walls should be straight and plumb, and corners must be square. Stringers must be provided to support the deck where it meets the wall.

IMPORTANT - The stringers must be level both front to back and side to side. If they are not level, the tub will not be level and it will not drain properly.

On tubs with integral tile flanges, (**Figure 2a**) measure the distance from the underside of the tub deck to the bottom of the tub base at the drain end of the tub (**A**) plus 1" for the mortar bed. On tubs with integral tile flanges and a skirt panel, (**Figure 2b**) measure the distance from the top of the stringer to the floor (**X**) must equal the distance from the bottom of the skirt to the top of the deck (**B**), minus 1/4" (the thickness of the tub deck)



For installations that are any combination of decks, walls, and pony walls, use the same methods to determine critical heights. Remember that all supports must be at the same height and must establish a plane that is level front to back and side to side.

5. HOT WATER HEATER: As a rule of thumb, the capacity of the hot water heater needs to be 2/3 of the capacity of the bathtub.

ELECTRICAL REQUIREMENTS:

Whirlpool Only: 115V 15Amp Dedicated GFCI Protected

Thermal Air: 115V 15Amp Dedicated GFCI Protected

A dedicated 15AMP GFCI Breaker or Protected outlet(s) for each load item i.e. pump, blower, heater, ect.

WARNING: When using electrical products, basic precautions should always be followed.

DANGER: RISK OF ELECTRICAL SHOCK. Connect only to a circuit protected by a ground fault circuit interrupter. Grounding is required. All electrical connections should be made by a licensed electrician. Installation of Hydro Systems bathtubs must meet all applicable codes and regulations.

INSTALLING THE TUB

1. The installation of the tub/whirlpool tub must meet all applicable regulations and codes. Access must be provided for future service or removal of the equipment without removing the tub or damaging the building structure or finish. An access panel at least 14" high by 16" wide must be located directly in front of the equipment. The optional Hydro Systems skirt with removable panel will satisfy this requirement. Minimum clearance in front of any panel should be 30"

2. TEST THE WHIRLPOOL or THERMAL AIR SYSTEM BEFORE YOU INSTALL THE TUB. All Hydro Systems whirlpool / thermal air tubs are fully tested at the factory before shipping. However, it is the responsibility of the installer to check the system before installing the tub; if the tub is to be set in "rough framing" and can be accessed from all sides after setting, skip to paragraph 4 below. If the tub will be set in "finished framing" and can't be accessed from all sides, you must test the tub outdoors before setting it. Here's how:

- Put the tub on a flat surface such as a driveway or lawn.
- Tape over the drain.
- Fill the tub with a garden hose. Fill it to at least 1" above the highest jet.
- Plug the pump into a 110v GFCI protected outlet.
- Start the pump / blower by pressing the Air Switch button.
- Check the entire system for leaks. Some components will be inaccessible after the tub is installed,

so check each component and each connection all around the tub.

- If the tub has optional equipment, now is the time to check those components, too.
If the tub has an in-line heater, plug it into a separate 110v GFCI protected source while the pump is running. (The heater will operate only when the pump is running). The heater's indicator light will be on when the heater is operating.

DO NOT INSTALL THE TUB if the system is leaking. Contact your dealer or call Hydro Systems at 661-775-0686. If the whirlpool system is performing properly and there are no leaks in the system, you are now ready to set the tub.

NOTE: Bathtub serial number will be needed in the event that "any" type of service is required.

3. SETTING THE TUB

- Install the waste & overflow on the tub.
- Your tub has the standard single speed pump or variable speed or blower, remove the hold-down bolts or screws securing the components to the platform prior to setting the tub.
- The tub must be supported evenly around the perimeter of the deck and also under the entire bottom.
- To set the tub, mix a stiff batch of mortar (without gravel) and pile more than enough on the floor. It may be necessary to construct a dam to contain the mortar. **Do not use drywall compound, plaster of Paris or foam - doing so will void the warranty.**
- Lower the tub into position. Slip the drain into the waste line as it goes down. Allow the tub to settle into the wet mortar, squishing the excess out at the sides and ends of the tub.
- When the deck hits the support stringers make sure the tub is level end to end and side to side.
- If the mortar is very deep, the tub may try to "Float" in the mortar bed. Put four to six inches of water in the tub to hold it down. Allow the mortar to cure overnight before draining the tub.
- Fasten the tile flanges to the wall studs with galvanized nails or screws - pre-drill the holes for them first. Note – the tile flanges are not structural and must not bear any weight. The tub must be supported from the bottom.
- If the tub was ordered with the pump in a remote location, the pump is mounted to the platform opposite the drain. All PVC pipe and fittings required to connect the pump to the whirlpool system are strapped to the tub. Remove them now. The pipes are color coded , connect piping to corresponding colors. Construct a support stand for the pump. The slope of the pipe from the suction fitting up to the pump should be a minimum of 1/8" per foot. The discharge line from the top of the pump to the tub must slope evenly up to the system. It must not go below the pump intake or above the jet closest to the pump. The pump must not hang on the pipes. It must sit on the rubber feet and it is not required to be bolted down. Connect both pipes to the whirlpool system and thread the unions onto the pump. Be sure the "O" rings are in the unions. Hand tighten only, and do not use any type of joint sealant. The use of any sealant voids the warranty.
- There is a red tube connected to the air switch button located on the tub that connects to the top of the pump or to the blower controller.

ELECTRICAL CONNECTION:

If the pump and/or blower is in the standard location, make sure the bolts have been removed that hold the pump or blower to the pump platform and plug pigtail into the home's dedicated GFCI.

FINAL CLEANUP

DO NOT USE ABRASIVE CLEANERS TO CLEAN THE BATHTUB. They may scratch or mar the surface. Liquid soap or a cleaner intended for fiberglass bathtubs should be used. Please refer to the USER CARE AND MAINTENANCE section. Do not use wire brushes or metal tools or scrapers to remove paints drips, plaster, tar, etc. If a scraping device is required, a wood edge may be used carefully. Use lighter fluid to remove any adhesive left from stickers and labels.

OPERATING INSTRUCTIONS

WARNING: To reduce the risk of injury, do not permit children to use this unit unless they are closely supervised at all times.

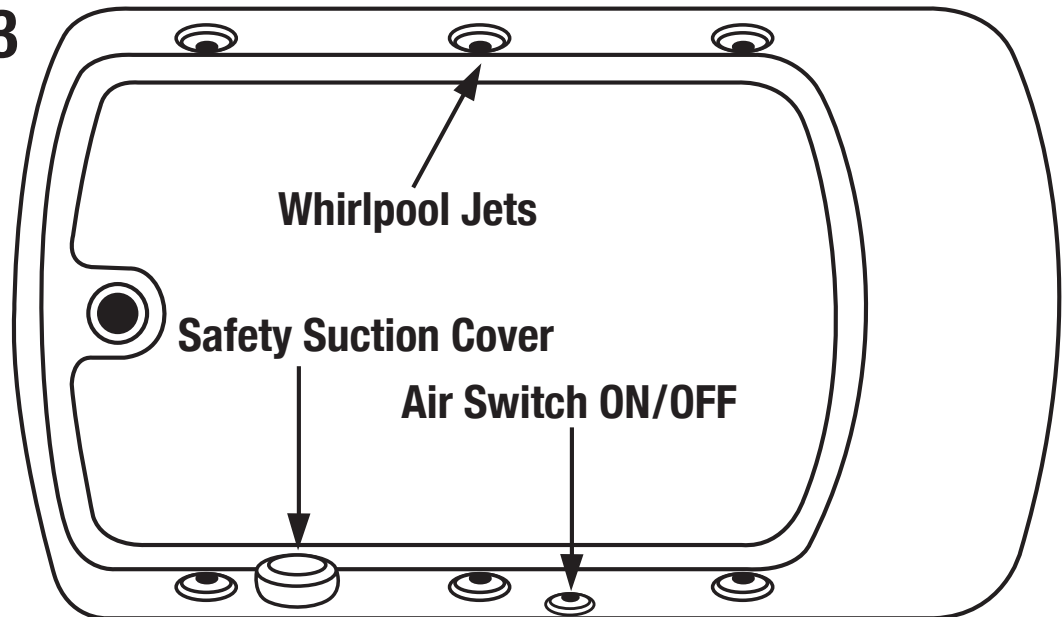
- Use this bathtub only for its intended use as described in this manual. Do not use attachments not recommended by Hydro Systems.
- Never insert or drop any object into any opening.
- Do not operate this unit without the cover over the suction fitting.
- Hydro Systems tubs are designed for “fill-and-drain” use. Fill the tub to use it and drain it when you are finished.

Note: The pump motor is equipped with a thermal overload protector which senses current and temperature. The motor will shut down automatically in the event of an unsafe condition. If this happens, turn the whirlpool system off. When the unsafe condition has been corrected the motor is automatically ready to restart.

TO OPERATE:

Fill the tub with water at the desired temperature and push in air switch. When you're sitting in the tub the water level should be at least 1" above all jets but lower than the overflow. Each Hydro Systems Studio series whirlpool bathtub is equipped with these standard features (**Figure 3**).

Figure 3



WHIRLPOOL JETS - These have fully adjustable direction. By rotating the jet escutcheon, this will open/close the flow of water to that jet, point the eyeball in the desired direction.

ANTI-VORTEX SAFETY SUCTION - This is the intake where water is drawn in for the pump. Do not operate the whirlpool system without the suction cover in place.

USER CARE AND MAINTENANCE

WARNING: Any service or maintenance other than described below should be performed by a qualified service representative. Call your Hydro Systems dealer for the name of a qualified service representative near you.

To maintain the “like new” look of your Hydro Systems acrylic or gelcoat bathtub, we recommend the following easy care procedures.

- Never use abrasive cleaners
- Use common household, non-abrasive cleaners for most cleaning jobs such as Lysol Basin, Tub & Tile Cleaner®, Glass Plus®, Simple Green®, Mr. Clean, and Top Job, or a mild dishwashing detergent such as Ivory® Liquid. Follow the manufacturers’ directions and precautions. Rinse well and dry with a clean cloth.
- Do not use products such as acetone (nail polish remover), dry cleaning solution, lacquer thinners, gasoline, pine oil, wintergreen, etc.
- Use Isopropyl rubbing alcohol to clean grease oil glue, paint or ink. Dry with a clean soft cloth.
- Avoid using razor blades, putty knives, or other metal instruments that might scratch the surface. Small scratches can be removed by applying a thin coat of automotive paste wax and buffing lightly with a clean cloth. For deeper scratches, sand the surface lightly with 600 grit “wet or dry” sand paper, rub out with fine buffing compound, and apply a coat of wax.

Flush the whirlpool system periodically (at least every 90 days) as follows: Fill the bathtub with water, add 1/2 cup of household bleach, run the whirlpool system for 10 minutes, drain completely. Rinse the bathtub and refill with water, run the whirlpool system for 5 minutes, drain completely. Wipe dry with a soft cloth.

LIMITED WARRANTY

This limited warranty is extended to the first user or the original retail purchaser for a period of sixty (60) months from purchase on shell and 1 year on air channel, electronics and plumbing. This limited warranty is not enforceable by any other party. HYDRO SYSTEMS, INC. warrants that the system and/or bathtub is free from defects in the workmanship and/or materials. This limited warranty does not include any other items not manufactured by HYDRO SYSTEMS, INC. HYDRO SYSTEMS, INC. does not assume liability for the finish or the wearing quality of any plate product. No dealer or other person has any authority to make any warranties or representations concerning HYDRO SYSTEMS, INC. or its products. Accordingly, HYDRO SYSTEMS, INC. is not responsible for any such warranties or representations. THERE ARE NO WARRANTIES.

Hydro Systems Designer Series Whirlpool Bathtubs are listed by:



U.L. LISTED – Pumps



U.L. LISTED – Hydromassage Bathtubs



IAPMO LISTED –
Uniform Swimming Pool, Spa & Hot Tub Code



IAPMO LISTED –
Uniform Plumbing Code

Hydro Systems Designer Series Whirlpool Bathtubs meet or exceed the requirements of:

- ANSI Z124.1
- ASME/ANSI A 112.19.7M
- ASME/ANSI A 112.19.8M

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