

Diamond[®]

TUB & SHOWERS

www.diamondtubshowers.com

where design and durability meet

Diamond Whirlpool/Air pool INSTALLATION & OPERATION INSTRUCTION

WARNING

When using this unit, precautionary steps should be followed to prevent electrical shock or personal injury.

1. Do not permit children to use this product unless adult supervision is available.
2. Do not drop or put any foreign objects into any opening in the bathing unit.
3. Make sure the safety guard suction cup is covered with the strainer fitting installed on your system.
4. Electrical connections should only be made to a circuit that is protected by a ground-fault circuit interrupter (GFCI). The GFCI should be provided and installed by your installer. The GFCI is designed to interrupt power and turn off your system. Should this happen, push the reset button and power should be restored. If the GFCI fails to operate, the GFCI is defective. If the GFCI interrupts power without the test button being pushed, a ground current is present and there is a risk of electrical shock. Do not use the system, disconnect the system and have the problem corrected by a qualified technician before using again.
5. A grounding lug is provided on the exterior of the control panel (where applicable) & system pump to allow the connection of a Number 8, solid copper wire, for all other electrical equipment and exposed metal in the same general area, to comply with local code and electrical requirements.
6. Do not use any attachments not recommended by the manufacturer and use it for its intended purposes as described in this manual.
7. Do not attempt to run the pump/motor while the module is dry.
8. Be sure the installation meets and conforms with all code requirements.
9. Service and or repairs must be performed by a qualified service representative.
10. Questions regarding the installation or operation of the unit may be directed to:

CUSTOMER SERVICE:

574-453-2902

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

INSTALLATION INSTRUCTIONS



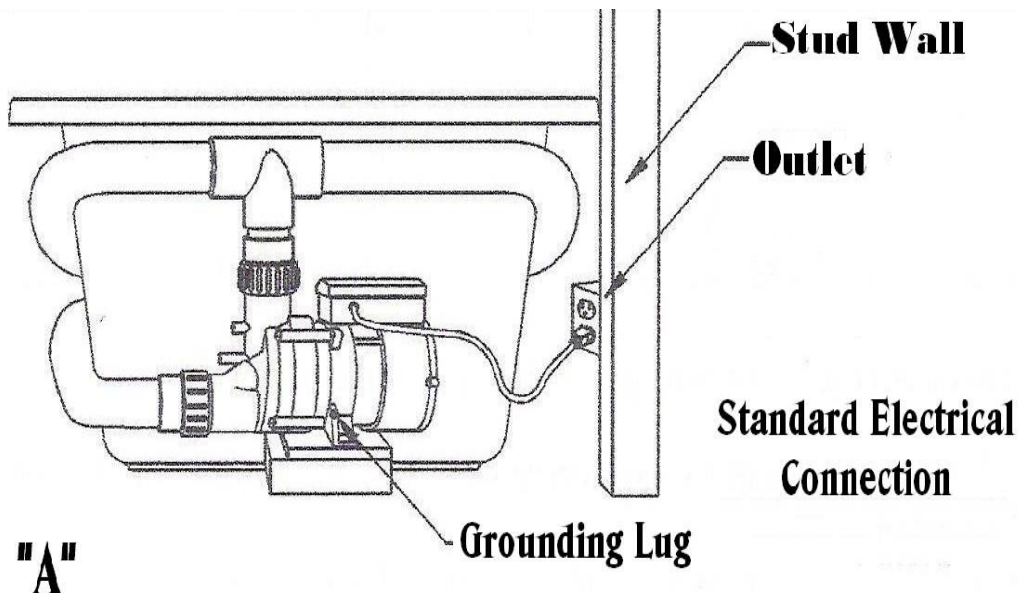
NOTE: *When working with or using electrical products, basic precautionary steps should be maintained and followed, including the following:*

- **RISK OF ELECTRICAL SHOCK:** All electrical connections should only be made to a circuit protected by a GFCI. This unit should only be installed by a qualified service representative.
- **Access for Servicing system components:** If your unit is designed without or does not have a means of accessing the system, an access opening of a minimum of 15" x 20" must be provided should the pump or other component need servicing at a later date.
- **Pre-Installation Testing:** It is mandatory that the unit be water tested prior to installation. Provide an area where the unit can be filled and drained for testing purposes. Plug the drain hole and fill the unit to the overflow. Make sure all fittings and jet connections are water tight. If leaks are present, contact the distributor for service. **DO NOT INSTALL THE UNIT.**
- **Rough In:** Actual pre-rough in should be kept at a minimum stage and completed when the unit is on site. Measurements may vary + or - 1/4" from original product specs, but may vary more if a whirlpool/air-pool combination is used.
- **Make Sure Unit is Level:** Place the unit into the alcove or island rough in framing. (Refer to rough in applications) Check to make sure the unit is level from end to end and across the mid section. If necessary, shims can be used under the unit's bottom to correct any leveling discrepancies.
- All electrical hook-ups and connections must be done by a licensed electrician in accordance with local, state and national electrical codes.

Electrical connections

WHIRLPOOL PUMP SPECIFICATIONS: 120V 5.5 AMP 60HZ (No hard wiring required)
AIR POOL BLOWER SPECIFICATIONS: 120V 5.9 AMP 60HZ (No hard wiring required)
IN-LINE HEATER: 120V 12.5AMP 60HZ (No hard wiring required, needs separate 20 amp circuit)

Grounding lugs are provided on the exteriors of the pumps, in-line heaters and control boxes to allow connection with a No 8 solid copper wire between the unit and all other equipment, including exposed metal in the same vicinity; as needed to comply with governing code requirements.



PRECAUTIONARY STEPS TO FOLLOW:

Preliminary Inspection: Upon receipt of the Diamond Whirlpool bath, the unit should be inspected thoroughly for possible damages that may be the result from shipping or handling. If damage is found, notify the distributor immediately. Under no circumstances, should a damaged unit be installed. Contact your distributor for further instructions and possible remedy to the problem. Neither Diamond Tub and Showers or the distributor will be responsible for the removal or re-installation costs incurred if it is determined that a damaged unit was installed without contacting the proper person for authorization to proceed with the installation.

- Each Diamond unit is water tested at the factory before shipping to check for correct fittings and possible leaks. During the shipping and handling process, damages may occur to the unit or loosening of the fittings or connections. It is important to water test the unit again, once on site to check for these damages.
- When moving the unit, prior to and during the installation process, **DO NOT LIFT** the unit by the piping or whirlpool assemblies. Move only by lifting the module by its deck and or surface areas. Do not drag or push the unit on the subfloor or floor areas. Do not modify or change any part of the factory installed system. This may affect the operation performance or safe operation of the unit and will **void all warranties**.
- If your Diamond whirlpool unit is equipped with a motor that is activated by a pneumatic on/off switch, make sure the air line that is connected to the motor is also connected to the on/off button nipple under the deck of the unit for proper use and activation.
- If your Diamond system is supplied with a motor that is activated by an integral electronic control pad, make sure the wiring is connected to the control keypad under the deck for proper use and activation.
- To prevent possible surface damage during the installation process, keep the module covered and protected.

After installation: Check System & Clean-Up

System Check

- Once installed, fill the unit with water to a level of no less than 3" above the highest jet. (Any dirt or sediment in the unit may cause staining)
- Check the GFCI by pushing the test button. This should interrupt the power. Push the reset button and power should be restored. If the GFCI fails to operate in this manner, there is a ground current present. Do not use the unit. Disconnect the unit and have the problem corrected by a licensed electrician.
- Push the on/off button on the whirlpool/blower unit (if included).
- Check air flow adjustment by turning the air control knobs counter-clockwise to fully open and increase the whirlpool water action. Turn knobs clockwise to decrease or cut-off whirlpool water action.
- It is recommended that you allow the system to run at least 10 minutes.
- Through the access door/panel check for possible leaks in the plumbing system. Make sure unions at both ends of the pump are hand-tight. If leakage is present, notify distributor.

Clean-Up

- Remove any construction residue or foreign materials that might be in the unit. Clean the unit by wiping with a damp rag.
- Plaster may be removed by using a piece of wood or rigid plastic to scrape the residue. Do not use anything metal. Spots left by plaster or grout can be removed by using a liquid detergent with a sponge or damp cloth.
- Do not use abrasive cleaners, scouring powders, steel wool, wire brushes or anything else that may damage the finished surfaces. Stubborn spots (paint, tar, etc.) can be removed by using paint thinner, turpentine or rubbing alcohol. Never use lacquer thinner or chlorinated solvents.
- If any surface flaws or damage has occurred during the course of installation, contact the Diamond Customer Service Department to schedule an authorized Diamond Service Technician to remedy the problem.

CARE AND MAINTENANCE OF YOUR DIAMOND BATHING UNIT

- *Your GFCI should be tested on a routine basis to insure this device is working properly.*

General cleaning & maintenance Your Whirlpool Tub

- Use only recommended cleaning materials and procedures as outlined in this section. Use of other materials or methods to clean your tub may damage your tub or system and VOID the warranty.
- The surface of your tub will retain its color and gloss indefinitely with normal use. Many bathroom cleaning products can damage the surface. Please read the following cleaning and maintenance procedures outlined below:
 - Apply a coat of good quality automotive paste wax, no rubbing compound, and buff to a high gloss shine with a soft cloth or bath towel. This should be done approximately every 6 months. Do Not Wax textured standing/walking surfaces.
 - Never use abrasive materials or cleaners, such as sandpaper, steel wool, metal scrapers that could scratch or dull the surface. Use warm water and liquid detergents that are recommended for cleaning fiberglass surfaces.
 - Adhesive residues: An alcohol based substance can be used. Rub area vigorously until adhesive dissolves and disappears. Once the residue is removed, take an automotive wax and polish area to restore possible dulling or dull area where the adhesive was.
 - Use of Rubber or Anti-skid Mats: All Diamond products are produced with a non-skid surface on the floor areas of bathing units. If you use a rubber or plastic anti-skid mat, remove the mat after each use to avoid harm or discoloration to the units finished surface.
 - Water Conditions: Hard water in certain areas will cause fading and discoloration of some fixtures colors. To curtail or help prevent this, wipe the unit after each bathing/shower use. This is a natural occurrence beyond Diamond's control and is not covered under product warranty.
 - Maintenance of Whirlpool System: Failure to perform a periodic maintenance schedule may result in health or safety issues that could harm the bathtub, the whirlpool system, including the pump and void the warranties.
 - The Whirlpool/Circulating System **must** be purged at least once a month or more, depending on usage.. This is done to remove accumulations of bath residue from the system.

How to clean the system

- Fill the tub with hot water to a level of 3" above the highest jet in the tub.
- Add to the water 4 to 6 tablespoons of low foaming detergent such as liquid Cascade or Calgonite and 24 to 30 ounces of liquid household bleach.
- Turn the air controls completely off. Run the whirlpool for approximately 10 minutes. Drain the tub completely.
- Refill with cold water only. Run the whirlpool again for approximately 10 minutes. Drain the tub completely.

The use of certain bath oils, bubble baths, water conditioners or other bath additives will more than likely increase the amount of and the accumulation of soap residues and build ups within the whirlpools system. Use of such materials requires an increase in purging/cleaning cycles as described above. If excessive accumulations persist, you should discontinue the use of these products.

Warranty

All Diamond Fiberglass models are backed by a 6 year limited non-transferable warranty.
Whirlpool and Air Pool Systems are backed with a 1 year limited non-transferable warranty.

Whirlpool pump, piping and connections are factory assembled. Relocation of the pump or other modifications could affect the overall operation and safety of the whirlpool. Diamond will not be liable under its warranty or otherwise for personal injury or damage caused by unauthorized modifications to this unit.

TROUBLESHOOTING GUIDE

Pump will not start:

- Is the power on?
- Check GFCI & reset if necessary
- Make sure the air hose is properly connected or does not have kink in the line

Pump will run, but water is not circulating:

- Check to see if the jets are “closed”. Turn the jets counter-clockwise to open the water flow.
- Make sure the water level is at the prescribed height or level; 3” above the highest jet.
- The suction screen may be clogged or blocked. With the motor off, unscrew the safety suction cover and clean away any debris. Replace the screen before operating.
- Contact a local plumber to check the suction line.
- If the problem persists, contact the Diamond Service Department and arrange a service call.

Water Seems to be Circulating Slowly:

- Repeat the above steps.
- Check for incorrect voltage; call a qualified electrician
- If problem is not remedied, contact the Diamond Service Department and arrange a service call.

Motor Overheats (Trips Protector)

- Inadequate ventilation may not have been provided when the unit was installed.
- Contact an electrician for the following that may be causing the unit to over heat
 - Wiring too small
 - Low voltage
 - Motor windings connected for wrong voltage.

Before your first use

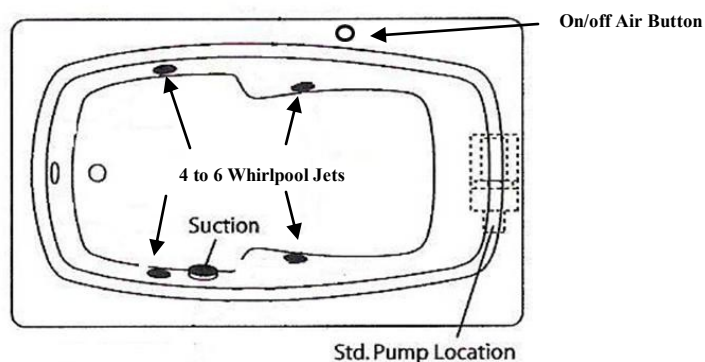
1. Make sure your bathtub is clean. If there are any materials, residues left from construction, clean the tub thoroughly with materials and methods described in cleaning and maintenance section earlier.
2. When filling the tub with water, make sure the proper water level is reached before activating your whirlpool system.

Starting the whirlpool System

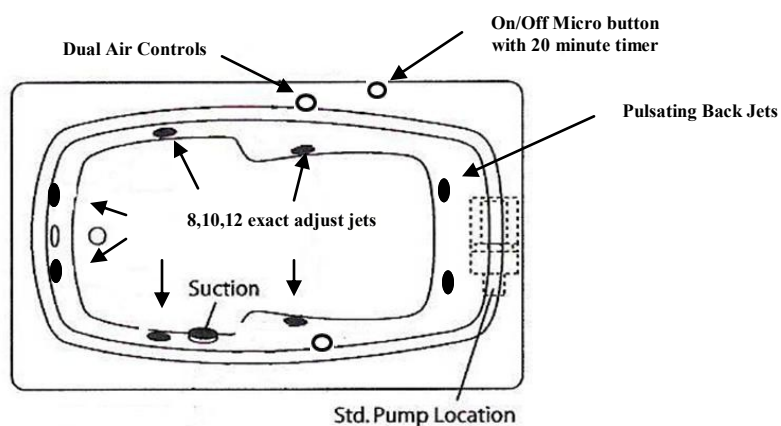
1. On/off button: Diamond tubs use an on/off air activated switch. This is mounted on the bathtub. Push the button to turn the system on. You can stop the system by pushing the button again. Diamond systems have a built-in 10 minute timing device. Once you activate the whirlpool system, it will run for 10 minutes and then shut off automatically. You can push the air button again to activate for another 10 minute cycle or stop the system anytime by depressing the air button again.
2. Air Controls: These are controls that regulate the amount of air induced into the water circulating system. More air will result in more action. Some Diamond models are equipped with one air control, others are equipped with two air controls. This depends on the size of the tub and the number of jets in the system. To increase the air flow, turn the knob(s) counter-clockwise to open.
3. Directional Jet Nozzles: Nozzles will rotate freely 360 degrees. The position of the jet can be adjusted to direct flow to specific parts of the body or to adjust the overall whirlpool action and direction in the bathtub.

Diamond Standard and Deluxe Whirlpool Operating System Guide

Typical Standard Whirlpool Configuration 4 to 6 jets



Typical Deluxe Whirlpool Configuration: 8, 10, 12 Jets



Standard Whirlpool System

- 4 to 6 whirlpool jets
- On/Off air button
- 3/4 hp pump
- Air control knob
- Safety suction water circulator

Deluxe Whirlpool System

- Deluxe systems are upgraded from standard system offerings
- Jet upgrades to 8, 10, 12 jets
Includes 2 pulsating back jets
- Dual air controls to provide balanced system
- Micro on/off button with built-in 20 minute timer
- Exact-adjust side jets that allows air/water mixture regulation at each individual jet.