

# Hydrotherapy Bathtub Installation & Operation Instruction Manual

# Home Owner Use & Care Guide

# **Read and follow** *ALL* instructions in this manual.

# Save These Instructions!

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## Inspection, Testing, & Visual Inspection

Remove the bathtub from the shipping carton. Be careful not to scratch the surface of the bathtub on exposed staples. Remove the staples or fold them into the carton. Retain the carton until satisfactory inspection of the product has been made. Do not lift the bathtub by the plumbing at any time; handle by the shell only.

Inspect the shell and bathtub components. Should inspection reveal any damage or defect in the finish or visible damage to any components, *do not install the bathtub*. Damage or defect to the finish claimed after the bathtub is installed is excluded from the warranty. Trajet's responsibility for shipping damage ceases upon delivery of the products in good order to the carrier.

Refer any claims for damage to the carrier. For definitions of warranty coverage and limitations, refer to the published warranty information packed with the product or in the back of this manual.

### **General Information**

Upon receipt, *immediately inspect the tub to make sure the unit has shipped as ordered* and has arrived undamaged. If a problem is discovered, call Trajet immediately. Handling damages are not covered under warranty. Protect the tub during installation to prevent damage. Do not stand or place tools directly on the tub finish. Check pump unions, hand tighten only. Remember to water test the system and plumbing before enclosing. Always refer to local building codes.

### **Electrical Requirements:**

Pumps are pre-wired with leads that can be plugged into a grounded GFCI protected dedicated circuit of adequate amperage.



**WARNING:** When using electrical products, basic precautions should always be followed, Including the following:

- 1. **DANGER: RISK OF ELECTRIC SHOCK.** The unit must be connected to a supply circuit that is protected by the installer and should be tested on a routine basis. 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, the GFCI is defective. If the GFCI interrupts power to the bathtub without the test button being pushed, a ground current is flowing, indicating the possibility of an electric shock. Do not use this hydromassage bathtub. Disconnect the hydromassage bathtub and have the problem corrected by a qualified service representative before using.
- 2. A qualified service technician in accordance with all applicable local and national codes must perform all electrical wiring, service and repair. Failure to do so may pose electrical hazard.
- 3. Before making any electrical connections, make certain that the electrical power is turned OFF at the circuit breaker, and take measures to ensure that it CANNOT accidentally be turned on again.
- 4. Install in such a manner as to permit access for servicing. An approximate 14"x14" (35cm x 35cm) access door is recommended.
- 5. Grounding is required. The unit shall be installed and grounded by a qualified service representative before using.
- 6. For permanently connected units, a green colored terminal (or a wire connecter marked "G", "GR", or "Grounding") is provided within the terminal compartment. To reduce the risk of shock, connect this terminal or connector to the grounding terminal of your electric service or supply panel with a conductor equivalent in size to the circuit conductor supplying this equipment.
- 7. It is important that the wiring be safely completed. When cutting conduits, be sure to debur the edges and remove any sharp edges, which may cut or damage the wire. Use the proper electrical connectors and bushings for all installations.
- 8. Building materials and wiring should be routed away from the pump body or other heat producing components of the system.
- 9. The metal enclosure of all electric components, current collectors and other metal in contact with the tub water shall be bonded together by individual solid copper bonding conductors not smaller than #8AWG (8.4mm).
- 10. Install to permit access for servicing.
- 11. Never drop or insert any object into any opening.
- 12. Do not operate this unit without the guard over the suction fitting.
- 13. SAVE THESE INSTRUCTIONS.

### **Operational Safety instructions**



WARNING: RISK OF HYPERTHERMIA AND POSSIBLE DROWNING! Do not use a hydrotherapy bathtub equipped with a heater immediately following strenuous exercise.

#### WARNING: RISK OF ELECTRICAL SHOCK!

- Do not permit electrical appliances (such as a hair dryer, lamp, telephone, radio or television) within 60<sup>"</sup> (1524mm) of this bathtub.
- Do not operate hydrotherapy system unless the bath is filled with water to at least 1-2<sup>"</sup> above the highest jet.
- Do not immerse the control panel by overfilling the bath.
- When cleaning your bath, do not use abrasive substances which will damage the bath's surface.
- To prevent discoloration of the acrylic finish, do not fill the bath with water in excess of 140°F (60°C).



WARNING: PROLONGED IMMERSION IN HOT WATER MAY INDUCE HYPERTHERMIA! Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6°F (37°C). The symptoms of hyperthermia include:

- an increase in the internal temperature of the body,
- dizziness,
- lethargy,
- drowsiness
- Fainting.

The effects of hyperthermia include:

- A. Failure to perceive heat.
- B. Failure to recognize the need to exit the bath.
- C. Unawareness of impending hazard.
- D. Fetal damage in pregnant women.
- E. Physical inability to exit the bath.
- F. Unconsciousness resulting in danger of drowning.



**WARNING: RISK OF FETAL INJURY!** Pregnant or possibly pregnant women should consult a physician before using a hydrotherapy bathtub equipped with a heater.



**WARNING:** To reduce the risks of injury, do not allow children to use this unit without the supervision of an adult at all times.



**WARNING:** The use of alcohol, drugs or medication can greatly increase the risk of fatal hyperthermia. People using medications or having an adverse medical history should consult a physician before using a hydrotherapy bathtub equipped with a heater.



**WARNING:** Use this unit only for its intended use as described in this manual. Do not use attachments not recommended by the manufacturers.



WARNING: To avoid injury, exercise caution when entering or exiting the bathtub.

**WARNING:** Do not use hydrotherapy bathtub unless all suction guards are installed to prevent body and hair entrapment. Never operate the hydrotherapy bath if the suction cover is broken, damaged or missing. Failure to provide suction cover can cause bodily injury, disembowelment, and drowning from hair entrapment.

WARNING: Water temperature in excess of 104°F (40°C) may be injurious to your health. Check and adjust water temperature before use.



**CAUTION:** Test the ground fault circuit interrupter protecting this appliance periodically in accordance with manufacturer's instructions.

**IMPORTANT:** Read the complete instructions provided in this manual before beginning installation.

The Company has obtained applicable code (standards) listings generally available on a national basis for products of this type. It is the responsibility of the installer/owner to determine specific local code compliance prior to installation of the product. The Company makes no representation or warranty regarding, and will not be responsible for any code compliance. Product specifications are subject to change without notice.

### **Electrical Connections**



Risk of electric shock. Connect only to a circuit protected by a GFCI.

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

• Always follow local building and electrical codes.



• Grounding is required. The unit should be installed and grounded by a qualified electrician.

Two separate GFCI protected circuits are required.

A separate, 120VAC, 20 Amp GFCI circuit is required for the pump/motor.

A separate, 120VAC, 15 Amp GFCI circuit is required for the heater.



WARNING: Metal housing pump requirements: 1hp. = 120 volts, 7.5 amps; 1-1/4hp = 120 volts, 5.5 to 5.9 amps; 1-1/2hp. =120 volts, 16.5 amps. The metal enclosure of all electrical components, current collectors and other metal in contact with tub water shall be bonded together with individual solid copper bonding conductors not smaller than #8AWG (8.4mm). A grounding clamp is provided on the pump housing.

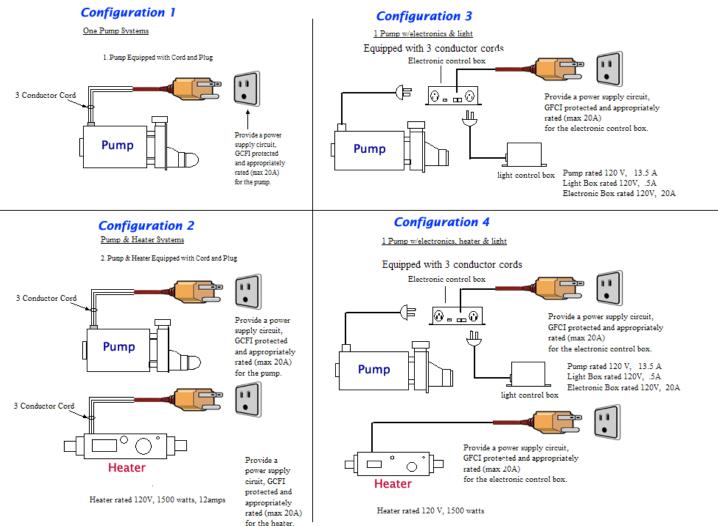


**WARNING**: Each pump is equipped with a thermal limiter that shuts off the entire unit, in the event the pump becomes overheated.

WARNING: The GFCI should be provided by the installer and should be tested on a routine basis.

#### CONFIGURATION SHEET

Follow instructions pertaining to your tub configuration.



### Framing Instructions and Illustrations

### **Plumbing Requirements**

All Hydrotherapy Systems are filled in the same manner as a standard bathtub with an over-the-tub spout and 1 ½" drain. Certain units may require a longer spout. Check the specifications to locate the position of the floor cut out needed to hook up the drain on your specific model. The water heater capacity should be equal to the water capacity of the tub.

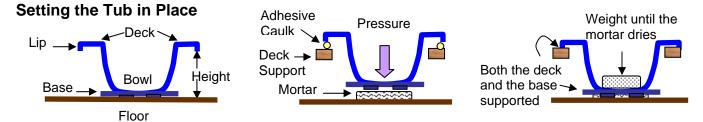
#### **Framing Instructions:**

**Framing is not recommended prior to receiving your tub due to possible measurement variances.** After receiving the unit, measure the height of the unit from the floor to the tub lip. Build a support frame under all four lips slightly higher than the height of the tub itself. Add an additional 1/2" of height to allow the mortar and caulk to bridge any gaps between the floor and tub base or between the frame and tub lip (diagrams below). Remember that the support frame should be level in all directions to insure that the tub deck after installation is level. If the tub is not installed with a level deck, the tub bowl and piping may not drain properly. If your tub is provided with a skirt, there is no need to build a support frame on the skirt side. The skirt will provide support to the tub lip.

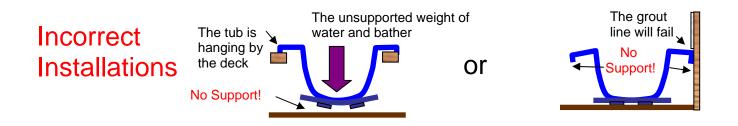
However, the other sides do have to be supported.

**Access Panel Required:** Sufficient clearance must be provided for access to service connections, pump and electrical hook-ups. A 14" x 14" access door is recommended.

When fittings (spout, handles, valves, etc.) are to be mounted on the unit, be certain that the hot and cold water copper supply lines are located where there is ample room for mounting **before** setting the unit in place.



Build a level support frame as recommended. Put a bridging agent both on the floor and the deck support. Set the tub in place and apply pressure until the tub deck is firmly against the support frame. Leave some weight (approximately 50 lbs) in the tub until the mortar and adhesive caulk dry. This weight will prevent the tub from rising back up. If the tub bowl is not supported, the weight of the water and an occupant will eventually cause the tub to shift or crack. If the tub deck is not supported properly, it will flex causing the grout line to fail.



- Do **NOT** lift the tub by any portion of the plumbing or pump.
- Do NOT stand in the tub during construction. To help protect your tub, place corrugated or other padded material on the tub floor.
- Do **NOT** put insulation around, or block airflow to pump. Pump will over heat and shut down.
- Damage by incorrect installation is **NOT** covered under warranty.
- Do NOT make any alterations, additions, or deletions to the hydrotherapy system, pump, or bathtub. Warning: The pump and piping are factory assembled. Relocation of pump or other modifications could adversely affect the performance and safe operation of the unit, and will void the warranty.

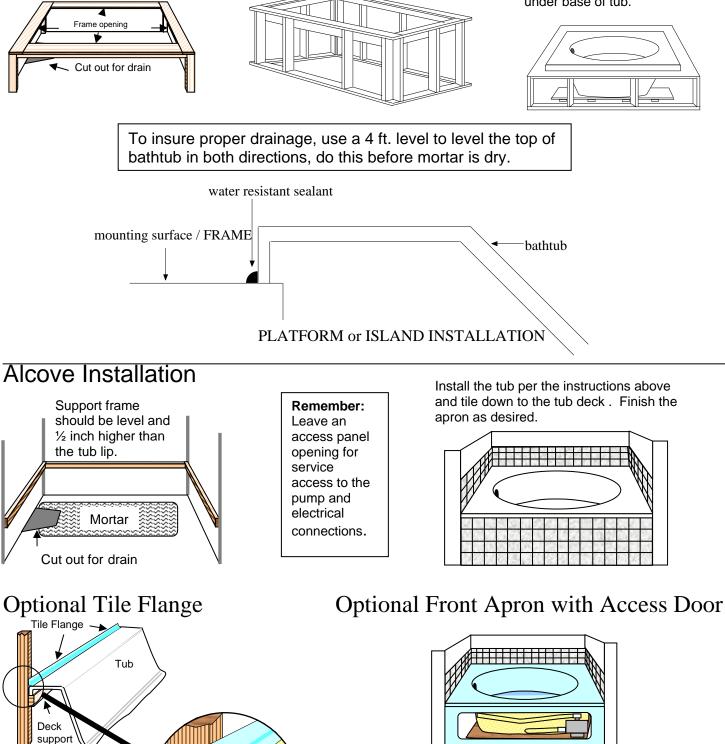
## <u>Illustrations</u> Platform Installation

frame

Frame opening should be 2" less than the length and width of the tub to provide deck support

Build frame 1/2" higher than tub lip.

Slide the tub in place as instructed above with both the deck and bowl supported. A layer of mortar is placed under base of tub.



### Clean-Up:

- 1. Remove all construction residue and foreign materials. Wipe unit clean with a damp rag, otherwise, staining may occur.
- Plaster drops may be removed by applying pressure with the edge of a piece of wood or plastic putty knife. **Do Not** use metal scraper. For spots left by plaster or grout: rub lightly with a liquid detergent on a damp cloth or sponge.
- 3. **Do Not** use abrasive cleaners, scouring powders, steel wool, wire brushes, or anything else that may harm or dull the surface.
- 4. Paint, tar or stubborn stains may be removed with acetone (fingernail polish remover), turpentine or rubbing alcohol. To avoid discoloration, cleaners containing petroleum distillates must not remain on surface. **Never** use lacquer thinner or chlorinated solvents.
- 5. Dulled areas can be restored to a high gloss with white or cream colored automotive rubbing compound, followed by application of carnauba wax or white or cream automotive paste wax and buffing.
- 6. Remove minor scratches with 600grit wet/dry sandpaper, followed by use of automotive rubbing compound and paste wax, as above.
- 7. Major gouges require professional repair.

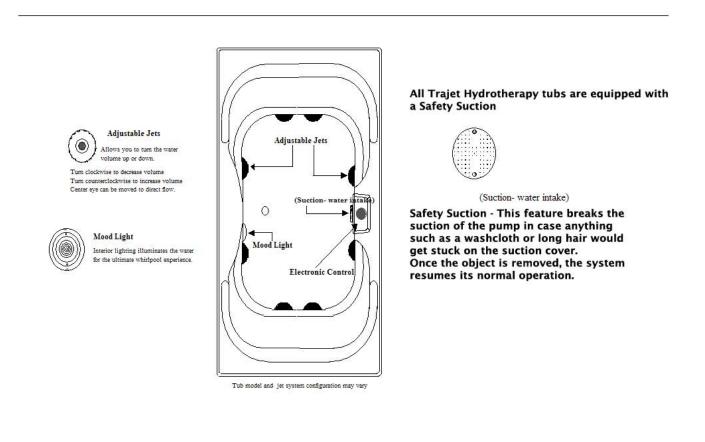
### System Test:

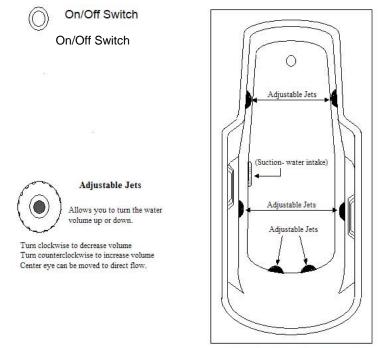
- 1. Dirt left in tub may cause staining. Remove all debris before filling. Fill clean tub with water to overflow fitting.
- To test the Ground Fault Circuit Interrupter (GCFI), push the test button. The GCFI should interrupt power. Push the reset button. Power should be restored. If the GCFI fails to operate in this manner, there is a ground current flowing, indicating the possibility of an electric shock. Do not use this unit. Disconnect the unit and have the problem corrected by a licensed electrician before using.
- 3. Run the Hydrotherapy System through its entire time cycle (20 Minutes) using every possible function on the control panel according to the Operation and Maintenance Guide.
- 4. If any electrical malfunctions occur, consult electrician. Malfunctions of the pump, system controls or the circulation system should be reported back to Trajet Products, Inc.
- 5. Through access panel, check for leaks in the system plumbing. Make sure unions on pump are hand tight.

If leakage is occurring at any other point, notify plumber immediately.

6. Empty bathtub completely by allowing self-draining components to empty. Wipe dry.

### Trajet offers a wide variety of models of tubs





Tub model and jet system configuration may vary

### If your bathtub has a touch pad, it has electronic/digital controls:

#### **Digital Variable Speed Control, One Pump Version**

The **Digital VSC Control** (1 pump version system) is a versatile control consisting of a Power Box, a Keypad with Digital Display, and temperature probe. It is designed to interface with universal AC motors up to 1.5 HP rating and is capable of controlling one pump plus one light via standard NEMA-style AC sockets.

### **Electrical Specifications**

Heaters need to have a separate dedicated line from the pump. Each with GFCI.

Power Input: 117 VAC +-10% 60 HZ only 16 Amps Maximum (requires 20 AMP service connection)

Output Jet Pump: 16 Amps Maximum, Universal AC Pump motor only; do not use with AC induction motor pumps.

**Output Light or auxiliary:** 16 amps capable, reduced by the amount of current required by the jet pump. Therefore, if the jet pump requires 12 amps maximum, the Light outlet can supply 16-12= 4 amps maximum. When used to control a 12VAC or 24VAC low voltage lighting system, an external step-down/isolating transformer *MUST* be used. *NEVER plug a low-voltage lighting system directly into the light output socket or the lights will be destroyed!* 

Electronic Controls

### Bathtub Care and Use

#### **Operating your System:**

-Before using your tub for the first time, clean the tub and wipe out any debris.



-Fill the tub *at least two inches* above the highest jet before turning on the pump. Exposed jets will cause excessive splashing.



Never run the unit dry - this can damage the pump.

Do not leave *children unattended* in or around an operating system.

-Never have any *electrical device* within reach.



-Never put your *head under water* while operating the Hydrotherapy System. Hair can be caught in suction inlet and cause injury.

-*High foaming agents* (bubble baths) should not be used when the pump is operating. Take your Hydrotherapy bath first, then use soap like a standard tub. Using oils can cause build-up in the system and may require extra cleaning.

### **Controlling Whirlpool Direction and Flow**

**Direction -** All jets, except the rotating neck jets, can be directionally adjusted. To change the direction of the water flow, swivel the jet nozzle to the desired angle. The jets can be directed individually toward any location on your body to provide a hydrotherapy experience. The jets can also be adjusted so that they all point in the same direction (clockwise or counterclockwise) to circulate the water in a circular motion around the bath, causing a total whirlpool effect.

**Water Volume -** Most jets are designed for flow adjustment. For robust action, increase the force of the flow by rotating the nozzle, or face, to the left (counterclockwise). For a more gentle effect, or to close off the jet, rotate the nozzle, or face, to the right (clockwise).

Closing one or more jets can increase the water volume in the remaining jets.

The rotating neck jets, and some Micro jets, cannot be adjusted for water volume.



Never run the whirlpool system with all the jets closed.

### Cleaning your Hydrotherapy System:

- For normal cleaning, use a soft sponge with warm water and cleaner. Make sure the cleaner does not contain abrasives, ammonia or any harsh additives. Many non-abrasive cleaning agents designed for plastics and fiberglass are now on the market.
- One way to keep your Hydrotherapy System looking like new is with a little preventative maintenance. After using your tub, take a moment and wipe it out with a towel. This habit prevents usual film build-up. Products such as Gel-Gloss can be applied to the unit to increase and maintain the shine.

The Hydrotherapy System should be flushed once a month using the following

- Procedural sequence:
- Set air controls to fully closed position.
- Fill tub with hot water until water covers jets.
- Add 2 teaspoons of a low-foaming automatic dishwasher detergent, such as Cascade, and 4 ounces of household bleach, (Clorox).
- Run the hydrotherapy system unit for 10 to 15 minutes.
- Drain tub and fill with cold water until water covers jets.
- Run hydrotherapy system unit another 5-10 minutes then drain tub.

You can protect and restore the gloss to a dulled acrylic surface by applying Meguiar's #10 Mirror Glaze, a product specifically designed for use on acrylic finishes. If Meguiar's is not available, use a fine grade automotive rubbing compound followed by an application of automotive paste wax.



Never use abrasive household cleaners on any Trajet product.

Troubleshootin PROBLEM	PROBABLE CAUSE	SOLUTION
Black particles are coming out of the ports	System NOT flushed on a regular basis	If this should occur, you may need to clean the system several times, doubling the cleaning agent amounts.
Pump/motor does not start	No power to pump/motor	Reset GFCI. Test status of outlet by plugging in a working electrical Appliance.
	Pump/motor not plugged in	Insert plug securely into outlet Ensure th
	Pump/motor faulty	control panel is connected to control box Replace Pump
Scratches or cracks in finish	Dropped a blunt object	Call a bathtub refinishing company or se "Other Information" section below
Pump/motor operates but no jets are functioning	Jets are closed	Open jets by rotating counter-clockwise
	Suction cover/strainer may be clogged	With the motor turned OFF, remove the suction cover/strainer and remove any debris. Replace the suction cover before operating
Too little or too much pressure from the jets	Air valves are closed/or open to far	Tighten or loosen air control knobs to regulate the pressure.
		Rotate the center eyeball of the jet to redirect the water flow
Pump/Jet pressure surges (slows down then speeds up again)	Pump cavitations	Change direction of jets so they do not point at the suction.
Pump/motor operates but air is not injected into the water	Air valves are closed	Open air control valves
Any movement of the tub		Check for proper installation by referring to installation instructions provided by Trajet
Water leakage from pump unions	Over tightened, O-ring may be pinched or improperly seated, under tightened	Loosen unions , check and reseat O-ring If O-ring has been pinched out of shape, replace (refer to number below). When tightening union nuts, hand tighten only.
Pump/motor shuts off by itself	Motor thermal protection has deactivated pump/motor due to overheating (supply voltage low)	Let motor cool; thermal protection will reset. Check for proper ventilation (checl supply voltage)
	GFCI tripped	Reset GFCI. If it continues to trip, do not use this unit.
	Inadequate supply wiring	Disconnect the unit.
Chromatherapy lights do not operate	Connector has come loose	Contact Trajet Service

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Disconnect the unit and have the problem corrected by a licensed electrician before using.



If the unit is within the warranty period, contact Trajet Service Support at 1-800-795-1812 with your bath's serial number before work is started. The serial number is located on Serial Number Plate just below the waste and overflow.

## **Other Information**

### Scratches, burns and stains and dulling.

Of all the day to day wear and tear around a home, a scratched bath tub is one of the more demoralizing things. Our beautiful glossy acrylic bath tub that once looked perfect now displays a blemish, an imperfection, which makes us wonder if we have to go shopping for a replacement. But before you start checking your bank balance to see what you can afford you should know that there are alternatives.

One of the great advantages of an acrylic bath tub is that it has a solid surface. In other words, the color that you see on the outside goes all the way through the surface. It hasn't been painted or sprayed on, but has been applied from a solid color base.

As a result, minor repairs to an acrylic bathtub are relatively straightforward.

### Cleaning an acrylic bath tub

Cleaning an acrylic bath tub of stains and deposits is simple. The tub surface is non-porous and, as a result, normal dirt washes off with clean water. For more stubborn stains try ordinary liquid dish washing soap or stronger ammonia based cleaners.

You should never use paint removers, thinners or acetones as these will damage the acrylic, and, most likely, make void the bath tub's warranty.

### Scratches and dulling

For very fine scratches or dulling, use a liquid polisher or metal polish. These polishes are relatively gentle but slightly abrasive. Rub the area around the scratch in a circular motion, with a little polish on a soft clean cloth, and watch the scratch disappear.

If the scratch is a little deeper, or if the surface is burnt, you may need to use first a piece of fine sandpaper (1500 grit). When using sandpaper, apply a little water first to avoid scratching the area further. Then you should use a liquid polisher as previously described. You should repeat the process until the scratch has completely disappeared. Then buff the surface with a soft dry clean cloth.



Trajet warrants to the consumer owner, that if a Trajet Hydrotherapy tub should stain, fade, crack, rupture or delaminate within a period of five (5) years (under normal usage) from the original date of purchase, Trajet will at its option, repair or replace any such defect or supply a new unit F.O.B. Trajet, at a minimal cost to owner.

If the particular model is no longer in stock, Trajet reserves the right to replace the defective unit with a comparable unit. If Trajet determines that a replacement unit is required, consumer owner is required to return said defective unit to Trajet with a valid Return Goods Authorization number.

Product is to be packaged in a 600 psi cardboard box or wooden crate, and shipped freight prepaid. Trajet shall not be responsible for cost of removal or replacement whatsoever of the product. This warranty does not cover damage or failures caused by Acts of God, misuse or abuse, accidents, negligence, fire or improper installation.

This warranty also has specific limitations. Excluded from warranty are certain damages including but not limited to: damage by carrier, damage occurring during or after installation, damage resulting from installation, damage from the use of chemicals, bath oil additives, or improper cleaning agents, and damage from product modifications or alterations, careless handling, or unreasonable use such as use for non-bathing purposes or failure to provide regular or necessary maintenance. In no way shall the liability to Trajet exceed the purchase price of the unit.

Trajet warrants the product plumbing, motor and pump for a period of two (2) years from the date of purchase against manufacturer defect. Trajet shall not be responsible for any labor charges and consequential or incidental damages, including but not limited to: any damages for loss of use of system, tub or shower or injury to any person or property.

Trajet shall not be responsible for any costs associated with gaining access to defective units. Any claims, therefore, are hereby specifically disclaimed and excluded. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights and you may also have other rights, which vary from State to State. Proof of purchase must be presented with any claim. This warranty does not apply to units used for commercial property.

Trajet Products Inc.

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