

OWNER'S MANUAL THERMA-FLO® SERIES PUMPS WITH "ENVIRO-HEAT" TECHNOLOGY®



IMPORTANT SAFETY INSTRUCTIONS

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

<u>WARNING</u>: When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

1.) READ AND FOLLOW ALL INSTRUCTIONS.

- 2.) **DANGER**: To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
- 3.) Use this unit only for its intended use as described in this manual. Do not use attachments not recommended by the manufacturer.
- 4.) Never drop or insert any object into any opening.
- 5.) Do not operate this unit without the guard over the suction fitting.
- 6.) This unit must be connected only to a supply circuit that is protected by a ground-fault circuit-interrupter (GFCI). Such a GFCI should be provided 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 pump. Disconnect the pump and have the problem corrected by a qualified service representative before using.
- 7.) SAVE THESE INSTRUCTIONS.

Therma-Flo® Series Pumps

INSTALLATION INSTRUCTIONS

WARNING: WHEN USING ELECTRICAL PRODUCTS, BASIC PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING:

- 1. DANGER: RISK OF ELECTRICAL SHOCK. Connect only to a circuit protected by a ground-fault circuit interrupter.
- 2. Grounding is required. The unit should be installed by a qualified service representative and grounded. Upon installation of the pump, the motor must be bonded with no smaller than a No. 8 AWG (8.4MM²) solid copper conductor per National Electric Code.
- 3. Install to permit access for servicing.
- 4. Always be sure that the electrical power to the pump motor is off before attempting to work on the unit.

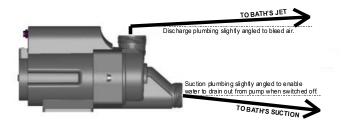
IMPORTANT: This pump is intended for Jetted Bath use ONLY, and is not suitable for any other application.

This pump is to be mounted INDOORS ONLY.

MOUNTING PREPARATION

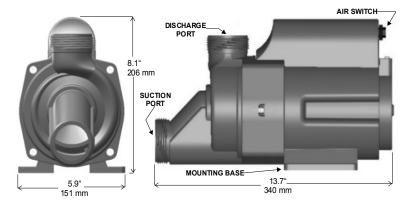
- 1. Find a suitable indoors mounting location where the pump is close to the jetted bath, as safely as possible, but remains inaccessible to the person in the jetted bath.
 - a. The pump's suction port (inlet) must be lower than the normal operating bath water level to ensure proper pump priming, but higher than the jetted bath suction to ensure correct draining. When emptied, the water must drain back into the jetted bath as required by Health Department Regulations.
 - b. The discharge port (outlet) should be lower than the water level and the plumbing should be horizontal or rise slightly to prevent airlocks. Airlocks will prevent the pump from properly priming.

SEE DIAGRAM ON THE FOLLOWING PAGE



- 2. This pump is intended for permanent installation only and must not be used in portable service application. The mounting surface must be constructed from durable material and supported securely in a horizontal position.
- 3. A clearance of at least 7.5 cm (3") on all sides (top, sides, front, and back) is required for ease of installation and air circulation. Enclosures must be adequately ventilated to promote free flow of air and prevent condensation.
- 4. Provision for securing the plumbing leading to the pump must be considered to avoid undue stress to the pump's connections.
- 5. The pump requires 115 Volts A.C., 15 amperes minimum, 60 Hz, single-phase power supply supplied through a Ground Fault Circuit Interrupter (GFCI) with a rated tripping current not exceeding 5 mA.

Above are the minimum requirements required for installing this pump. Additional requirements, standards, and codes, mandated by government agencies on specific areas where the pump will be installed, must be followed.



INSTALLATION

WARNINGS (MAY CAUSE SERIOUS INJURIES OR DEATH)

- The power supply must be turned off during the installation process.
- This pump is wired for 115 VAC, 60 Hz, and Single Phase power supply only. The power supply should be supplied through a Ground Fault Circuit Interrupter (GFCI) with a rated tripping current not exceeding 5 mA.
- No part of the pump is to be located above the jetted bath during use. Parts incorporating electrical components, except remote control devices, must be located or fixed so that they cannot fall into the jetted bath.
- Pump and other parts containing energized or live parts, except parts supplied with safety extra low voltage not exceeding 12 V, must be INACCESSIBLE to a person in the jetted bath.
- Pump must be mounted INDOORS on top of a horizontal and solid surface; fixed securely using screws or bolts through the 4 mounting holes located on the base.
- This pump is not intended for use by young children or infirm persons without supervision.
- Young children should be supervised to ensure that they do not play with the unit.

CAUTION (MAY CAUSE PROPERTY DAMAGE)

- This pump is intended for <u>Jetted Bath use ONLY</u>, and is not suitable for any other application.
- DO NOT run the pump without water. This may damage pump and its components.
- 1. Be sure that the requirements under Mounting Preparation section have been met.
- The pump is provided with barrel unions to connect the pump's Suction port (inlet) and Discharge port (outlet) to the plumbing. The plumbing must be routed or oriented in a way that when the pump is installed, the port connections are not subjected to undue stress.

OPERATING & MAINTENANCE INSTRUCTIONS

INITIAL START-UP

WARNINGS (MAY CAUSE SERIOUS INJURIES OR DEATH)

• This pump is wired for 115 VAC, 60 Hz, and Single Phase power supply ONLY. The power supply should be supplied through a Ground Fault Circuit Interrupter (GFCI) with a rated tripping current not exceeding 5 mA.

CAUTION (MAY CAUSE PROPERTY DAMAGE)

- This pump is intended for <u>Jetted Bath use ONLY</u>, and is not suitable for any other application.
- The pump is NOT self-priming; therefore, the water fill level of the jetted bath must be equal or higher than the pumps suction port (inlet).
- 1. Fill the jetted bath with water to the normal operating bath water level.
- 2. Open all the valves within the plumbing system.

CAUTION (MAY CAUSE PROPERTY DAMAGE)

- DO NOT run the pump without water. If pump fails to prime within 30 seconds, turn it off. Check if there is an airlock, clogged plumbing, or closed valve.
- 3. Turn the power supply "ON".
- 4. If the pump has an air switch, depress the air button switch to turn the pump "ON" or "OFF".
- 5. Check plumbing system for leaks.

OPERATION

- Fill the jetted bath with water to the normal operating bath water level.
- 2. Depress the air button switch to turn the pump "ON".
- 3. Depress again, to turn it "OFF".
- 4. Be sure to drain the water from the jetted bath after each use.

MAINTENANCE

This pump does not require periodic cleaning or maintenance to perform properly. It was designed and built to be trouble free. If, for some reason, the pump leaks or fails to perform after completing the troubleshooting procedure below, please contact your local *Authorized Dealer* for assistance. If it is still under warranty, we will replace it free.

CAUTION (MAY CAUSE PROPERTY DAMAGE)

- DO NOT open or service the pump. There are no "user servicable" parts or assemblies inside. This pump contains dielectric oil used to cool down the motor. The amount of oil contained herein was precisely measured for optimum performance. Opening or altering the pump will void the warranty.
- This pump is a <u>Type Y Attachment</u>. If the power cord needs to be replaced, please contact your local authorized dealer.

WARNING — **RISK OF ELECTRIC SHOCK.** Connect only to a circuit protected by ground-fault circuit-interrupter. The unit should be installed by a qualified service representative. All electrical wiring of the motor installation must be done by a qualified electrician in accordance with applicable electrical codes. Grounding is required. Before working on any motor, be certain that the source of electrical power is off at the main junction box.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Pump Does Not Run	Power cord not plugged in	Plug in power cord
	Power supply is OFF	Turn power supply ON
		and/or replace fuse
	Air switch is OFF	Depress the air button
	Ground Fault Circuit	Unplug power cord, reset
	Interrupter (GFCI) tripped	GFCI, check power in
		receptacle and plug in
		power cord
	Motor over heats	Let the motor cool down
Pump Still Does Not Run,	Air tube disconnected	Connect tube to air switch
Even After Performing #1		and air button nipples,
		secure
	Air tube damage/leaks	Replace tube
	Air tube kinked	Remove kink and properly route the tube
	Air button damaged	Replace air button
	Air switch damaged	Replace air switch
Pump Runs But Low or No	Closed valves	Open valves
Water Pressure on Jets	Low water level in jetted	Fill jetted bath up to the
	bath	normal bath water level
	Airlock in the plumbing	Bleed air from plumbing
	Clogged or blocked	Open air-venturi control
	plumbing	valve to release air trapped in plumbing

SAVE THESE INSTRUCTIONS.