# **IMPORTANT SAFETY INSTRUCTIONS**

**WARNING:** When using electrical appliances, basic safety precautions to reduce the risk of fire, electric shock, or injury to persons should be followed, including:

- 1. READ ALL INSTRUCTIONS BEFORE USING THIS WATER HEATER.
- 2. This water heater must be grounded. Connect only to properly grounded outlet. See "GROUNDING INSTRUCTIONS" found on Page 4, Item 7.
- 3. Install or locate this water heater only in accordance with the provided installation instructions.
- 4. Use this water heater only for its intended use as described in this manual.
- 5. Do no use an extension cord set with this water heater. If no receptacle is available adjacent to the water heater, contact a qualified electrician to have one properly installed.
- 6. As with any appliance, close supervision is necessary when used by children.
- 7. Do not operate this water heater if it has a damaged cord or plug, if it is not working properly, or if it has been damaged or dropped.
- 8. This water heater should be serviced only by qualified service personnel. Contact nearest authorized service facility for examination, repair, or adjustment.

## **WARNING:**

This Water Heater is equipped with a heat exchanger. Extended engine coolant circulation through the heater may result in excessively hot water.

This water heater tank and heat exchanger is made of aluminum. Some engine manufacturers recommend that the cooling system be flushed periodically. Caustic chemicals are commonly used. **Do not** flush caustic chemicals (such as Nalcool) through your system with the heat exchanger hooked up or damage **Will** occur to heater.

If flushing is required by your engine manufacturer, you must isolate heater from this process. After system flushing is complete and neutralized, you can then re-plumb heater. Make sure recommended automotive type premixed ethylene glycol coolants such as Prestone, Xerex, or Peak are used for replacement. Damage that occurs to Heater due to hemical reaction by caustic chemicals is not under warranty.

## **CAUTION:**

Hydrogen gas can be produced in a hot water system served by these heaters that have not been used for a long period of time (generally 2 weeks or more.) Hydrogen gas is extremely flammable. To reduce the risk of injury under these conditions, it is recommended that the hot water faucet be opened for several minutes at the kitchen sink before using any electrical appliance connected to the hot water system. If hydrogen is present, there will probably be an unusual sound such as air escaping through the pipe as the water begins to flow. There should be no smoking or open flame near the faucet at the time it is open.

Small amounts of electric currents may move to your boat through your shore cord, causing galvanic damage to your water heater. To help prevent possible damage, a galvanic isolator is recommended. Galvanic corrosion **is not** covered under warranty.

#### NOTICE:

This temperature/pressure valve may weep during initial operation. This is normal. The valve will seat itself with use. A drain hose should be installed at this valve directed into bilge.

If the boat is connected to the dockside water system, make sure to turn off the system at the dock when not attended. Also make sure a pressure regulator is used to control pressure.

# **OPERATING INSTRUCTIONS**

- 1. Fill water system and completely fill tank.
- 2. Locate and turn remote electrical switch to "ON".
- 3. Turn switch to "OFF" position prior to draining water system.
- 4. The temperature/pressure valve may weep during initial operation. This is normal. The valve will seat itself with use.

NOTE: Do not operate heater without element being submerged in water.



# MAINTENANCE

- 1. Check heat exchanger lines for leaks at regular intervals. A leak in the system will cause coolant loss and may damage engine.
- 2. Flush tank periodically to help prevent buildups of deposits.
- 3. Protect against damage from freezing temperatures, (32°F. or less). Please review the following:
  - a.) Drain tank by fully opening drain valve. Open T & P valve to help relieve vacuum in tank. (See item 2 in exploded view.)
  - b.) It is recommended you winterize your fresh water system. First complete step 3a, then follow instructions of your local supplier regarding chemicals to use and how to use them.

## **CAUTION:**

If heater has been run without water and now fails to work, push electric reset button high limit switch under wire access cover before calling for service.