

Installation, Operation & Maintenance Manual

Commercial and CONQUEST® AquaPLEX® Storage Tank



Important: This manual contains information required for installation, operation and maintenance of this equipment. Read and follow the information in this manual and all other provided instructions, labels and markings before installing, operating or servicing this unit.

Installation and service must be performed by a qualified service installer, service agency or the gas supplier.

To the installer: After installation, these instructions must be given to the equipment user or left near the appliance.

Special instructions to the owner: Retain this manual for future reference. These instructions contain important information that will help you in maintaining and operating this appliance.

Hot Water Solutions

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Product Description for Conquest® AquaPLEX® Storage Tank
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1 SAFETY CONSIDERATIONS

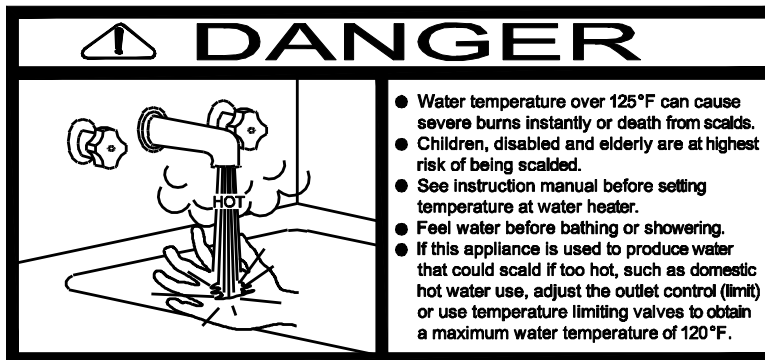
IMPORTANT SAFETY NOTE

It takes only 5 seconds of skin contact with 140°F water to cause a second degree burn! You must protect against high water temperatures at all lavatories, tubs, showers and other points of hot water contact.

Accidental scalding from high water temperatures is a greater risk in some types of installations. Some examples are:

**HOMES FOR THE MENTALLY HANDICAPPED
HOMES FOR THE PHYSICALLY HANDICAPPED
HOSPITALS AND NURSING HOMES
ELDER CARE FACILITIES AND REST HOMES
ORPHANAGES AND CHILD CARE FACILITIES**

OTHER INSTALLATIONS – WHERE RESPONSE TO CONTACT WITH HOT WATER MAY BE SLOWER OR WHERE THE DANGER OF HOT WATER CONTACT IS GREATER



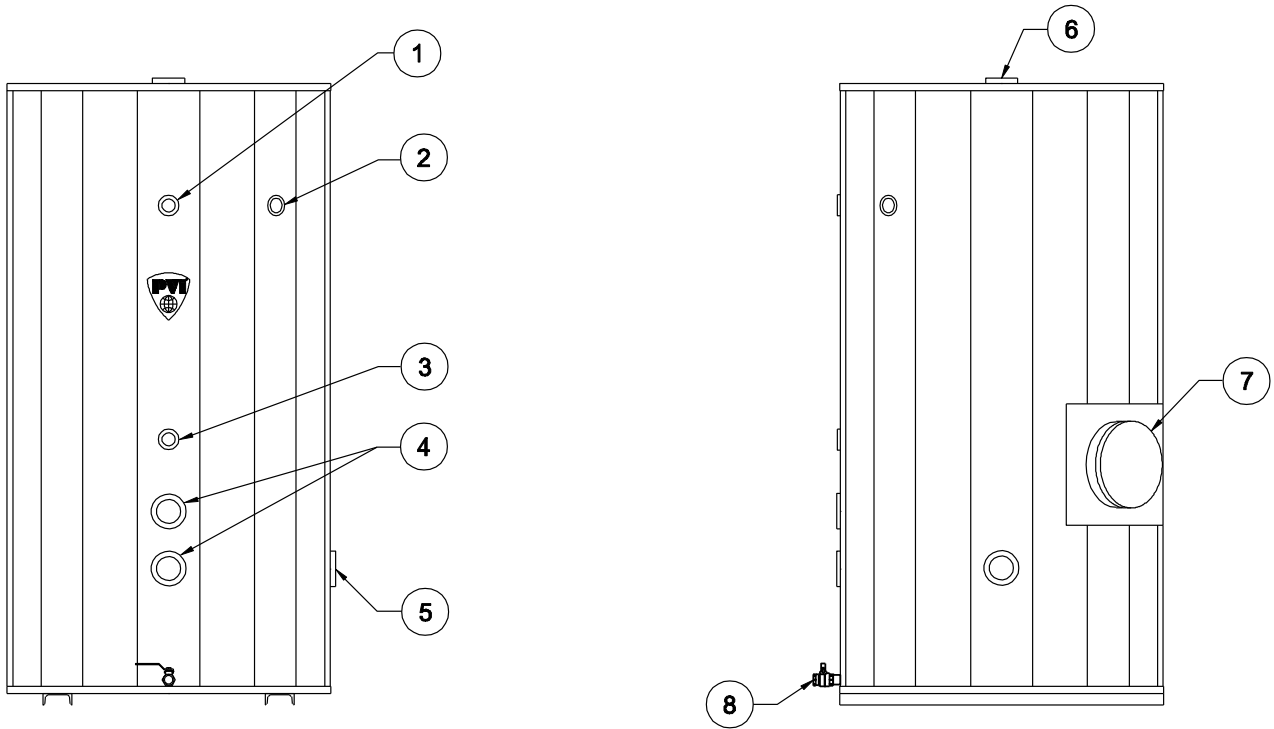
Thermostatically controlled mixing valves must be used in the design of the potable hot water system.

Potable hot water should be tempered to no more than 110°F when used for bathing or other personal use.

Good engineering practice mandates the use of thermostatically controlled mixing valves set at 120°F to keep the delivered water temperature below scalding temperatures.

AquaPLEX® STORAGE TANK

2 PRODUCT DESCRIPTION



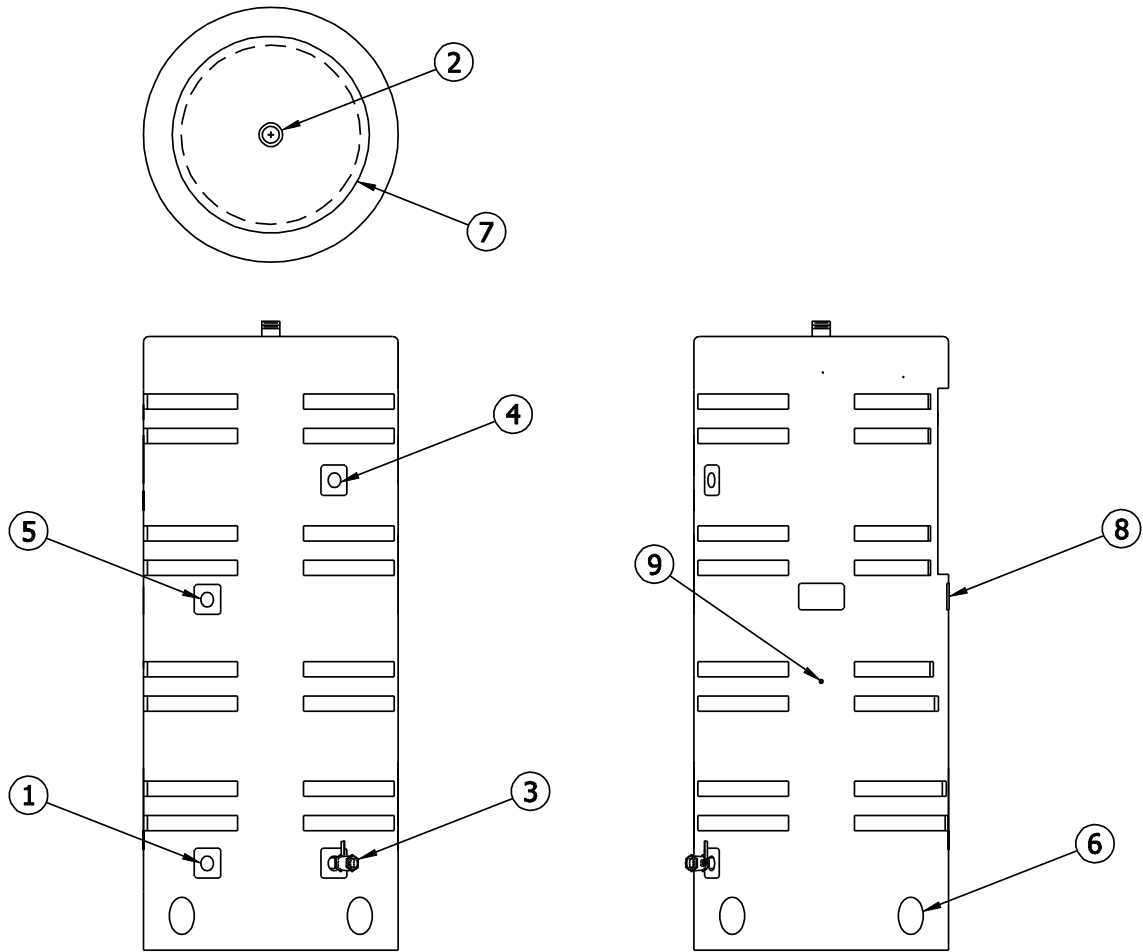
AquaPLEX® Storage Tank

- | | |
|------------------------------|--|
| 1. Temperature gauge fitting | 5. Cold water inlet and Building return connection |
| 2. T&P valve fitting | 6. Hot water outlet |
| 3. Thermostat fitting | 7. Manway access (250 gallon and larger) |
| 4. Circulating connections | 8. Drain valve |

Horizontal shipping skids for 1000, 1500 – 3000 gallon tanks (not shown)

AquaPLEX® STORAGE TANK

PRODUCT DESCRIPTION (con't)



Conquest® AquaPLEX® Storage Tank

- | | |
|----------------------------|---|
| 1. Cold water inlet | 6. Access to attachment points for floor anchors |
| 2. Hot water outlet | 7. Top access |
| 3. Drain valve | 8. Temperature sensor fitting |
| 4. T&P valve fitting | 9. Optional tie down points, Kit attachment points inside jacket (field installed, each side) |
| 5. Return water connection | |

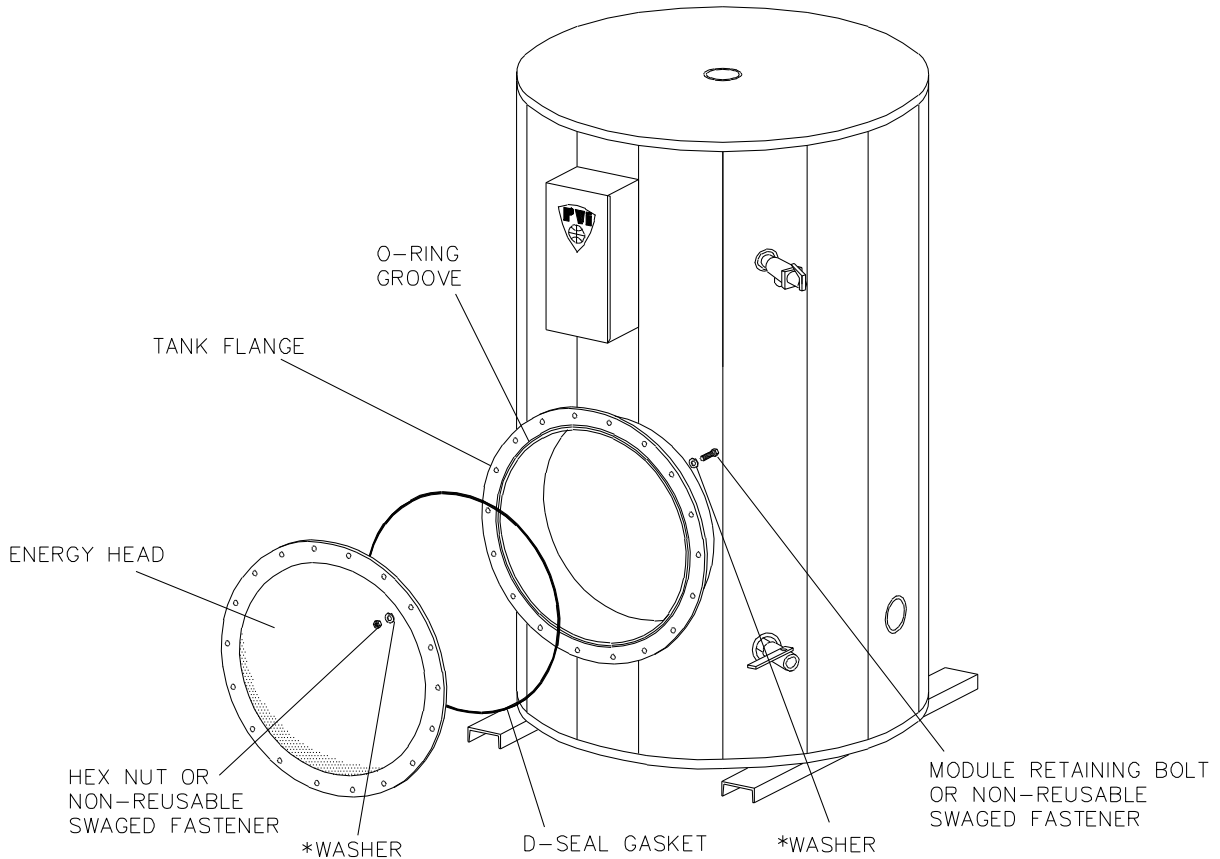
AquaPLEX® STORAGE TANK

3 BOLTED HEAD REMOVAL

AquaPLEX Commercial Storage Tanks MAY have one or more removable heads used to access the tank (See Figure 1, maybe located on top of head). If it is necessary to remove a head, the existing bolts and nuts should be replaced. Contact your PVI Representative or the factory at 1-800-433-5654 to order a D-Seal replacement kit:

Part Number 116816 Kit, Fastener Flange 18 Holes w/Instruction Sheet Gr 8

Part Number 116817 Kit, Fastener Flange 40 Holes w/Instruction Sheet Gr 8



*NOT USED WITH SWAGED FASTENERS

AquaPLEX® STORAGE TANK

4 MAINTENANCE

1. A preventative maintenance program should be established to assure a long, trouble-free life of the water heater.
2. A scale of lime will normally form and accumulate in the storage tank during operation. The lime is formed from the natural chemicals in the water that precipitate out during the heating cycles. Some water supplies contain more of these chemicals than others, and the scale buildup will occur more rapidly. Other factors affecting the scale buildup are the amount of hot water used and the temperature of the water. The more hot water used, the more fresh water containing the scale-forming chemicals is brought into the tank. As the temperature of the water increases, the rate of scale deposited will be increased.
3. To control sediment and scale buildup in the water heater, the tank should be initially flushed at three-month intervals with frequency depending on water conditions in your location. To flush, open the drain valve and allow water to flow through the tank until it runs clear. Close the drain valve.
4. If the tank has a manway access for inspection and cleaning use. The tank should be inspected for scale buildup through this opening. If scale is present, it can be loosened with a high-pressure stream of water. The smaller pieces can be flushed through the drain and the larger pieces removed by hand. The frequency of inspections will be determined by the rate of scale buildup. We recommend 30-60 day intervals.
5. The temperature and pressure relief valve should be checked at regular intervals to determine its condition for safe operation. The openings inside the valve may become inoperative. If the valve does not open and close properly when tested, it must be replaced. Replace relief valve with a like kind or one meeting the requirements stated on the rating decal located adjacent to the relief valve mounting location.

CAUTION: The relief valve is a primary safety device.

6. Extended shutdown of the appliance and restarting are as follows:
 - a. Turn off all power on fuel supplies.
 - b. Drain and flush tank as previously discussed.
 - c. Tag all power switches to indicate that fuel is off and the tank is empty.
 - d. Refill tank with water and energize fuel and power switches to restart. Reset all controls and conduct start-up of the appliance.

AquaPLEX® STORAGE TANK

AquaPLEX® STORAGE TANK

Since PVI cannot control the use of the appliance, water conditions, or maintenance, the warranty on the heat exchanger does not cover poor performance, structural failure, or leaking due to an excessive accumulation of scale.

Warranty Forms Ship Separately with Each Product

MODEL NUMBER: _____

SERIAL NUMBER: _____

INSTALLATION DATE: _____