Table of Contents

**PROGRAMMING YOUR TRUTANKLESS® VERO WATER HEATER**  2
Display Interface Description ......................................................... 2
Settings/Adjusting the Flow Unit and Temperature Unit ......................... 3
Heating and Alert Indicators .......................................................... 4
Freeze Guard Protection Mode ....................................................... 4
Leak Sensor ................................................................................. 4

**TECHNICAL DATA** .................................................................. 4
Model Parameters ........................................................................ 4
Electrical Data ............................................................................ 5
Inlet Water Data .......................................................................... 6
Mechanical Data ........................................................................ 6

**INSTALLATION GUIDE** .......................................................... 7
INTRODUCTION ........................................................................ 7
Before You Begin ......................................................................... 7
Product Model and Specifications .................................................... 8
Product Model Settings .................................................................. 9

**INSTALLATION** .................................................................... 11
Mounting the Unit ....................................................................... 12
Cold Water Inlet Connection (Blue Arrow) ....................................... 15
Hot Water Outlet Connection (Red Arrow) ....................................... 15
Pressure Relief Value .................................................................. 16

**TROUBLESHOOTING** .......................................................... 19

**BOLLENTE, INC. WARRANTY & LEGAL** .................................. 21
MANUFACTURERS LIMITED WARRANTY ........................................ 20

**APPENDIX** ....................................................................... 25
COMPONENT TERMINOLOGY .................................................... 24

*Bollente trutankless® BR Series water heaters may have one of two brand names on the cover: VERO® or trutankless®. This user guide is suitable for both versions.*
Welcome to the world of endless hot water! Your trutankless VERO BR/BC device is truly a marvel of modern design and engineering and is now ready to supply you with unlimited hot water on demand.

**PROGRAMMING YOUR TRUTANKLESS® VERO WATER HEATER**

Your licensed contractor may have already set some basic system parameters, like temperature, and water flow, and date/time at the time of installation. You can verify these settings to ensure the best performance from your trutankless water heater. The LCD screen is the interface for all your programming needs.

**DISPLAY INTERFACE DESCRIPTION**

- **Indicator**
  - A: LOGO
  - B: Upgrade Indicator
  - C: Alert Indicator
  - D: Heating Indicator
  - E: In Temperature
  - F: Out Temperature
  - G: Set Temperature
  - H: Water Flow

- **Button**
  - 1: Upgrade & Flow Unit Conversion Button
  - 2: Temperature Unit Conversion Button
  - 3: Temperature Increase Button
  - 4: Temperature Decrease Button
SETTING/ADJUSTING THE OPERATING TEMPERATURE
The trutankless VERO BR/BC unit comes preprogrammed for an initial temperature setting of 120°F (49°C). This set point of residential version can be changed by pressing the Temp Increase or Temp Decrease buttons to control the temperature from 90°F to 140°F (32.2°C to 60°C) in the residential model, or from 90°F to 180°F (32.2°C to 82.2°C) in the commercial model, in single digit increments. Properly used, the trutankless VERO BR/BC water heater will deliver the desired temperature, even when the water flow varies, or when more than one hot water tap is open. Should the demand for hot water (flow) exceed the unit’s capability, there will be a corresponding decrease in the temperature of the water delivered.

- Press ▲ to Increase the set temperature.
- Press ▼ to Decrease the set temperature.

You may use higher or lower temperatures to suit your needs. Remember that maintaining lower hot water temperatures will save additional energy. The efficiency of the heater is not affected by mixing in cold water at the point of use because the trutankless will simply detect a lower flow through the heater and adjust the power accordingly. Most users find a happy medium by setting their unit at 120°F.

SETTINGS/ADJUSTING THE FLOW UNIT AND TEMPERATURE UNIT
The initial temperature of the water and flow units are displayed in Degrees Fahrenheit (°F) and Gallons per Minute (GPM).

- Press ▶ to toggle between Fahrenheit and Celsius as they will be displayed on the control screen.
- Press ◄ to toggle between Gallons and Liters as they will be displayed on the control screen.
HEATING AND ALERT INDICATORS

A.) Heating mode: the heating icon is illuminated
B.) Lockout mode: the heating icon is blinking slowly
C.) Anti-freeze mode: the heating icon is blinking rapidly
D.) Any alarm: the alert icon is illuminated

FREEZE GUARD PROTECTION MODE
The VERO BR/BC trutankless Residential & Commercial Water Heater is designed such that, should the water temperature at either the inlet or outlet cool to 41°F (5°C), the heater automatically warms the water to approximately 45°F (7°C). This cycle will continue for as long as the unit experiences temperatures near the freezing point.

If the main power to the heater is off, the freeze guard protection feature will not operate. The freeze protection circuit protects the heater only and is not sufficient protection for water connections to and from the heater, including the Flow Sensor and other optional devices. Any damage to the heater caused by freezing is not covered by warranty as it is the responsibility of the user to ensure the heater is installed in an environment protected from freezing.

LEAK SENSOR
A leak sensor is built into the controller circuitry on the interconnect module and activates if it senses a leak with a flow greater than .05 GPM. When this happens, the controller starts an audible alarm, displays an on-screen message, sends an alert, if desired, and disconnects the power within the VERO BR/BC unit. When power is disconnected within the heater it will not heat water. This option is particularly useful in condominium or high-rise applications where damage from flooding can be significant. Normal condensation will not trigger an alert.

TECHNICAL DATA
MODEL PARAMETERS

<table>
<thead>
<tr>
<th>Model</th>
<th>BC</th>
<th>BR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>208 VAC</td>
<td>220-240 VAC</td>
</tr>
<tr>
<td>Amperage</td>
<td>60-160 A</td>
<td>60-160 A</td>
</tr>
<tr>
<td>Power</td>
<td>12.5-33.3 kW</td>
<td>13.2-36.0 kW</td>
</tr>
<tr>
<td>Flow</td>
<td>0.2-10 GPM</td>
<td>0.2-10 GPM</td>
</tr>
<tr>
<td>Phase</td>
<td>Single, 60 Hz</td>
<td>Single, 50/60 Hz</td>
</tr>
<tr>
<td>Max Temp</td>
<td>180°F (82.2°C)</td>
<td>140°F (60°C)</td>
</tr>
</tbody>
</table>
ELECTRICAL DATA

Voltage ........................................ 208 - 240 VAC
Phase ........................................... SINGLE
Wattage ........................................ 12.5-36.0 kW
Max. amp. load ............................... 40A x 4 = 160A
Min. required circuit breaker size ........ Depends on Model (See table below)
Required wire size AWG 2,3 .......... Depends on Model (See table below)

<table>
<thead>
<tr>
<th>Max kW</th>
<th>Height</th>
<th>Width</th>
<th>Depth</th>
<th>Weight</th>
<th>Amperage</th>
<th>Voltage Range</th>
<th>KW Range</th>
<th>Main Panel</th>
<th>Breakers (Two Pole) [Optional]</th>
<th>Copper Wire [Optional]</th>
<th>Plumbing Fittings</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 kW</td>
<td>17&quot;</td>
<td>23.74&quot;</td>
<td>5.5&quot;</td>
<td>35.3 lbs</td>
<td>160</td>
<td>220 – 240</td>
<td>31.8 – 36.0</td>
<td>&gt;200 A</td>
<td>(2) 80 A</td>
<td>(4) #4 AWG</td>
<td>Threaded 3/4&quot; NPT</td>
</tr>
<tr>
<td>29 kW</td>
<td>17&quot;</td>
<td>23.74&quot;</td>
<td>5.5&quot;</td>
<td>35.3 lbs</td>
<td>120</td>
<td>220 – 240</td>
<td>26.4 – 28.8</td>
<td>200 A</td>
<td>(1) 125 A [(2) 60 A]</td>
<td>(2) #2 AWG [(4) #6 AWG]</td>
<td>Threaded 3/4&quot; NPT</td>
</tr>
<tr>
<td>24 kW</td>
<td>17&quot;</td>
<td>23.74&quot;</td>
<td>5.5&quot;</td>
<td>35.3 lbs</td>
<td>100</td>
<td>220 – 240</td>
<td>22.0 – 24.0</td>
<td>200 A</td>
<td>(1) 100 A [(2) 50 A]</td>
<td>(2) #2 AWG [(4) #6 AWG]</td>
<td>Threaded 3/4&quot; NPT</td>
</tr>
<tr>
<td>20 kW</td>
<td>17&quot;</td>
<td>23.74&quot;</td>
<td>5.5&quot;</td>
<td>35.3 lbs</td>
<td>80</td>
<td>220 – 240</td>
<td>17.6 – 19.2</td>
<td>150 A</td>
<td>(1) 80 A [(2) 40 A]</td>
<td>(2) #4 AWG [(4) #8 AWG]</td>
<td>Threaded 3/4&quot; NPT</td>
</tr>
<tr>
<td>14 kW</td>
<td>17&quot;</td>
<td>23.74&quot;</td>
<td>5.5&quot;</td>
<td>35.3 lbs</td>
<td>60</td>
<td>220 – 240</td>
<td>13.2 – 14.4</td>
<td>125A</td>
<td>(1) 60 A [(2) 30 A]</td>
<td>(2) #6 AWG [(4) #8 AWG]</td>
<td>Threaded 3/4&quot; NPT</td>
</tr>
<tr>
<td>33 kW</td>
<td>17&quot;</td>
<td>23.74&quot;</td>
<td>5.5&quot;</td>
<td>35.9 lbs</td>
<td>160</td>
<td>208</td>
<td>33.3</td>
<td>&gt;200 A</td>
<td>(2) 80 A</td>
<td>(4) #4 AWG</td>
<td>Threaded 3/4&quot; NPT</td>
</tr>
<tr>
<td>25 kW</td>
<td>17&quot;</td>
<td>23.74&quot;</td>
<td>5.5&quot;</td>
<td>35.9 lbs</td>
<td>120</td>
<td>208</td>
<td>25.0</td>
<td>200 A</td>
<td>(1) 125 A [(2) 60 A]</td>
<td>(2) #2 AWG [(4) #6 AWG]</td>
<td>Threaded 3/4&quot; NPT</td>
</tr>
<tr>
<td>21 kW</td>
<td>17&quot;</td>
<td>23.74&quot;</td>
<td>5.5&quot;</td>
<td>35.9 lbs</td>
<td>100</td>
<td>208</td>
<td>20.8</td>
<td>200 A</td>
<td>(1) 100 A [(2) 50 A]</td>
<td>(2) #2 AWG [(4) #6 AWG]</td>
<td>Threaded 3/4&quot; NPT</td>
</tr>
<tr>
<td>17 kW</td>
<td>17&quot;</td>
<td>23.74&quot;</td>
<td>5.5&quot;</td>
<td>35.9 lbs</td>
<td>80</td>
<td>208</td>
<td>16.6</td>
<td>150 A</td>
<td>(1) 80 A [(2) 40 A]</td>
<td>(2) #4 AWG [(4) #8 AWG]</td>
<td>Threaded 3/4&quot; NPT</td>
</tr>
<tr>
<td>12 kW</td>
<td>17&quot;</td>
<td>23.74&quot;</td>
<td>5.5&quot;</td>
<td>35.9 lbs</td>
<td>60</td>
<td>208</td>
<td>12.5</td>
<td>125A</td>
<td>(1) 60 A [(2) 30 A]</td>
<td>(2) #6 AWG [(4) #8 AWG]</td>
<td>Threaded 3/4&quot; NPT</td>
</tr>
</tbody>
</table>

THE ABOVE INFORMATION IS MEANT ONLY AS A GUIDELINE AND SHOULD NOT BE RELIED UPON TO GUARANTEE SAFETY OF INSTALLATION OR CODE COMPLIANCE. ELECTRICAL WIRING SHOULD ONLY BE PERFORMED BY A QUALIFIED AND PROPERLY LICENSED CONTRACTOR. PLEASE ENSURE YOUR TRUTANKLESS VERO MODEL IS PROPERLY WIRED ACCORDING TO LOCAL AND NATIONAL ELECTRICAL CODES. IMPROPER ELECTRICAL INSTALLATION COULD CAUSE DAMAGE TO PROPERTY AND MAY RESULT IN PERSONAL INJURY OR DEATH.

1 NOTE: Tankless water heaters are considered a non-continuous load
2 NOTE: Conductors should be sized to maintain a voltage drop of less than 3% under load
3 American Wire Gauge (AWG) Tables are available at http://en.wikipedia.org/wiki/American_wire_gauge#Tables_of_AWG_wire_sizes
### INLET WATER DATA
- Maximum Inlet temperature °F (°C) .............. 131 (55)
- Water flow to activate unit = GPM (= liters/min) ... 0.2 (.76)
- Maximum Working pressure PSI (bar) .............. 80 (5.5)
- Tested to pressure PSI (bar) ....................... 150 (10.34)

### MECHANICAL DATA
- Weight lbs. (kg) .................................. 35.3 lbs. (16kg)-Commercial
  35.9 lbs. (16.3kg)-Residential
- Dimensions (HxWxD) inch (cm) .................... 17 x 23.7 x 5.5 (43.2 x 60.3 x 14)
INTRODUCTION

Thank you for purchasing the trutankless VERO BR/BC Water Heater.

The VERO BR/BC water heater is a sophisticated, yet easy to operate, water heating system that will provide years of trouble-free service. The VERO BR/BC water heater will reduce overall energy usage right out of the box by eliminating the standby-by loss that is common to tank heaters. This unit, when installed and maintained properly, will provide years of use and efficient hot water generation in an eco-friendly manner. It is extremely important to follow the installation and maintenance section carefully.

The VERO BR/BC water heater has many unique features:

- Compact wall-mounted installation (No venting required)
- Digital LCD readout
- Push Button control setting of water temperature
- Supplies continuous hot water at a constant temperature
- Startup lockout delay timer
- English-language screen display; simple messages
- US or Metric units display
- Drip sensor alert for leak detection
- Freeze protection
- High quality, energy efficient appliance
- Quiet operation

BEFORE YOU BEGIN

THIS MANUAL MUST BE READ CAREFULLY AND BEFORE ATTEMPTING TO INSTALL THE WATER HEATER.

IF YOU DO NOT FOLLOW THE SAFETY RULES OR THE INSTRUCTIONS OUTLINED IN THIS MANUAL, THE UNIT MAY NOT OPERATE PROPERLY AND IT COULD CAUSE PROPERTY DAMAGE, SERIOUS BODILY INJURY AND/OR DEATH!

BOLLENTE, INC. WILL NOT BE LIABLE FOR ANY DAMAGES BECAUSE OF FAILURE TO COMPLY WITH THE INSTALLATION AND OPERATING INSTRUCTIONS OUTLINED IN THIS MANUAL OR BECAUSE OF IMPROPER USE.

IMPROPER USE INCLUDES THE USE OF THIS APPLIANCE TO HEAT ANY LIQUID OTHER THAN WATER. FAILURE TO COMPLY WITH THE INSTALLATION AND OPERATING INSTRUCTIONS OR IMPROPER USE VOIDS THE WARRANTY.

IF YOU HAVE ANY QUESTIONS REGARDING THE INSTALLATION OR OPERATION OF THIS WATER HEATER, OR IF YOU NEED ANY ADDITIONAL INSTALLATION MANUALS, PLEASE CALL OUR TECHNICAL SERVICE LINE ON 855-TO-BUY-TRU (855-862-8987).
PRODUCT MODEL AND SPECIFICATIONS

1. Pipe diameter: ¾ Inch (26mm)
2. Working Pressure: 145 psi

Table 1 — Product Specifications

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>RESIDENTIAL SPECIFICATIONS</th>
<th>COMMERCIAL SPECIFICATIONS</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage Range</td>
<td>220V-240 VAC 50/60HZ</td>
<td>208 VAC 60HZ</td>
<td>Single-phase Alternating Current</td>
</tr>
<tr>
<td>Current (Max. Load)</td>
<td></td>
<td>160 A</td>
<td></td>
</tr>
<tr>
<td>Power Capacity</td>
<td>13.2 – 36.0 KW</td>
<td>12.5 – 33.3 KW</td>
<td></td>
</tr>
<tr>
<td>Flow Rate</td>
<td>Min. 0.2 GPM (0.76 liters / min)</td>
<td>Max. 10 GPM (37.8 liters / min)</td>
<td></td>
</tr>
<tr>
<td>Max. Working Pressure</td>
<td></td>
<td>80 PSI (5.5 bar)</td>
<td></td>
</tr>
<tr>
<td>Max. Inlet Temperature</td>
<td></td>
<td>131°F (55 °C)</td>
<td></td>
</tr>
<tr>
<td>Outlet Temperature Range</td>
<td>90°F to 140°F (32°C to 60°C)</td>
<td>90°F to 180°F (32°C to 82.2°C)</td>
<td></td>
</tr>
<tr>
<td>Temperature Control Accuracy</td>
<td></td>
<td>+/-1°C</td>
<td>After temperature has stabilized</td>
</tr>
<tr>
<td>Over-temperature Protection</td>
<td>&gt;158°F (70°C)</td>
<td>&gt;198°F (92°C)</td>
<td></td>
</tr>
<tr>
<td>Over-voltage Protection</td>
<td>&gt;255 V</td>
<td>&gt;218 V</td>
<td></td>
</tr>
<tr>
<td>Leak Detection</td>
<td>&gt;.05 GPM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short circuit Protection</td>
<td>&gt;63 A</td>
<td></td>
<td>Each circuit breaker</td>
</tr>
<tr>
<td>Anti-freezing Mode</td>
<td>Engages at &lt;41°F (5°C)</td>
<td>Disengages at &gt;45°F (7°C)</td>
<td></td>
</tr>
</tbody>
</table>
PRODUCT MODEL SETTINGS

IMPORTANT: IDEAL PERFORMANCE OF THE TRUTANKLESS SYSTEM DEPENDS ON COMPLIANCE WITH THIS SECTION.

The DIP switch positions determine the performance parameters of the unit model. To ensure proper installation and system operation, the unit MUST be configured using the DIP switches settings specified in Table 2 below and pictured in Table 3 on the following page. Following these instructions and properly setting the DIP switches at installation is extremely critical to the proper functioning of the system and will ensure ideal temperature rise and flow rate maximums.

Figure 1 — Dip Switch Pin Locations

Table 2 — DIP Switch Settings Per Current Limit

<table>
<thead>
<tr>
<th>RESIDENTIAL MODELS</th>
<th>COMMERCIAL MODELS</th>
<th>Current Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 1 OFF</td>
<td>POS 2 ON</td>
<td>POS 3 ON</td>
</tr>
<tr>
<td>POS 1 ON</td>
<td>POS 2 OFF</td>
<td>POS 3 ON</td>
</tr>
<tr>
<td>POS 1 OFF</td>
<td>POS 2 OFF</td>
<td>POS 3 ON</td>
</tr>
<tr>
<td>POS 1 ON</td>
<td>POS 2 OFF</td>
<td>POS 3 OFF</td>
</tr>
<tr>
<td>POS 1 ON</td>
<td>POS 2 ON</td>
<td>POS 3 ON</td>
</tr>
</tbody>
</table>
Table 3 — DIP Switch Settings Per Model

<table>
<thead>
<tr>
<th>ELECTRICAL REFERENCE</th>
<th>OPTION 1</th>
<th>OPTION 2</th>
<th>DIPSWITCH CONFIGURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Max kW Setting</strong></td>
<td><strong>Maximum Amperage</strong></td>
<td><strong>Minimum Breaker Size</strong></td>
<td><strong>Minimum Wire Size</strong></td>
</tr>
<tr>
<td>BR-36kW BC-33 kW</td>
<td>160</td>
<td>2 X 80 Amp 2-Pole Breakers</td>
<td>4 X #4 Ga. Copper</td>
</tr>
<tr>
<td>BR-29 kW BC-25 kW</td>
<td>120</td>
<td>2 X 60 Amp 2-Pole Breakers</td>
<td>4 X #6 Ga. Copper</td>
</tr>
<tr>
<td>BR-24 kW BC-21 kW</td>
<td>100</td>
<td>2 X 50 Amp 2-Pole Breakers</td>
<td>4 X #6 Ga. Copper</td>
</tr>
<tr>
<td>BR-20 kW BC-17 kW</td>
<td>80</td>
<td>2 X 40 Amp 2-Pole Breakers</td>
<td>4 X #8 Ga. Copper</td>
</tr>
<tr>
<td>BR-14 kW BC-12 kW</td>
<td>60</td>
<td>2 X 30 Amp 2-Pole Breakers</td>
<td>4 X #8 Ga. Copper</td>
</tr>
</tbody>
</table>
INSTALLATION

**CAUTION:** It is required that a licensed plumber and electrician install the unit and that all pertinent regional building codes be followed. Please read each of the following notices and caution messages below before continuing with the installation of this unit as they pertain to safety considerations.

Before removing the old tank water heater and undertaking installation, unbox the unit. Remove all parts from the box and ensure all parts are included.

In general, the trutankless unit can be installed in the same location where the old tank water heater was located. However, to ensure safe, trouble-free performance and keep the warranty in effect, the following precautions must be observed:

1. The trutankless unit must be installed where minimum clearances can be met, and indoors or under cover where it is protected from the elements and extreme weather. Do not install the unit where it will be exposed to direct sunlight, rain, snow, hail, salt spray, blowing sand, etc.

2. The unit MUST be installed in an upright orientation with the water fittings positioned below and pointing downward.

**WARNING:** Do not install the unit where it would routinely be splashed with water. Avoid the potential for exposure of the unit to dripping water or collection of condensation. **ELECTRIC SHOCK MAY RESULT.**

3. Hot water outlet pipes leaving unit can be hot to the touch. Insulation must be used for hot water pipes located 36” (92 cm) or less from ground level due to burn risk to children.

4. Note that a Temperature, Pressure and Relief (TP&R) safety valve is not required according to National Plumbing Codes as instantaneous water heaters are not considered pressure vessels. Bollente strongly suggests consulting local code to determine if required.

**SAFETY NOTE:** Commercial units (BC Series) are designed for commercial settings only, and can be set as high as 180°F (82° C) for industrial processes including sterilization of equipment and utensils. **EXTREME CARE should be taken when setting temperatures higher than 140°F (60°C), such temperatures should not be directly used in the shower or intended for contact with skin, there is risk of injury.**
5. This unit should not be installed in a location where it may be exposed to freezing temperatures (less than 32°F (0°C)).

**CAUTION:** This unit comes equipped with freeze protection. However, in the event that electrical power is lost or is disconnected from the unit, there is NO freeze protection. FREEZE PROTECTION OF THE WATER HEATER IS ONLY POSSIBLE WHEN ELECTRICITY AND NORMAL WATER HEATER FUNCTIONS ARE ENABLED. If you expect freezing conditions while electrical supply is interrupted, WATER MUST BE COMPLETELY DRAINED FROM WATER HEATER.

**FAILURE TO COMPLY WITH THIS INSTRUCTION VOIDS ALL WARRANTIES.**

NOTE: The installation of auto drain down solenoid valves is optional. However, Bollente strongly recommends that these valves be installed so that water may be drained from the unit to prevent damage from freezing in case the normal freeze protection should become disabled. If the valves are not installed, then any product damage due to freezing will not be covered by the warranty.

6. The unit should be located in an area where water leakage from the unit or connections will not result in damage to the area adjacent to the unit. If such a location cannot be avoided it is recommended that a drain pan be installed under the unit.

7. Electrical service to the VERO BR/BC trutankless water heater must be in accordance with all applicable national electric safety codes, state/provincial and local electric and building codes.

NOTE: Bollente recommends you place the unit near the electrical service panel. A licensed contractor can help you choose the unit location and the chassis electrical access point which is best suited for your installation.

8. Place the unit where it will not be struck by objects and away from other sources of heat.

9. Install the unit where it can be mounted at eye level to allow easy access to the touch screen display for reading and programming controls.

10. The unit must be mounted to wall studs or other structural member, or with wall anchors appropriate for the type of wall surface and sufficient to securely hold 40 pounds if there is no convenient structural member available.

**WARNING:** Failure to comply with this requirement may result in the unit falling from the wall, creating the possibility of personal injury or death.

11. trutankless electric water heaters are designed for a very long service life, but actual life expectancy will be directly affected by water quality and use. If you do not already know the quality of your water, we advise testing (your water department may be able to assist). Especially in areas where the water hardness exceeds 180 PPM or 10.5 grains/gallons, installing a non-salt based softener or polyphosphate in-line filter may prolong the life of your unit.

**MOUNTING THE UNIT**

The unit requires the following minimum physical clearances:

- Front: 24” (61 cm)
- Back: 0” (0 cm)
- Sides: 1” (2.5 cm)
- Top: 10” (25.4 cm) [18” (45.7 cm) recommended]
- Bottom: 15.5” (39.4 cm) [24” (61 cm) recommended]
Figure 3 — Unit Dimensions and Clearances

**FRONT VIEW**

- 25-3/4 in (654 mm) Suggested Clear Space
- 23-3/4 in (605 mm) Unit Width
- 10 in (254 mm) Min Clearance
- 3 in (78 mm) Top of Unit to Topline of Bracket #1
- 10 in (254 mm) Offset Between Brackets Topline to Topline
- 17 in (432 mm) Unit Height
- 42-1/2 in (1080 mm) Suggested Clear Space
- 20 in (508 mm) Centerline to Centerline
- 15-1/2 in (394 mm) Min Clearance
- Hot Water Outlet 3/4 inch NPT
- Cold Water Inlet 3/4 inch NPT
- 10 in (254 mm) Min Clearance
Affix the mounting brackets to the wall. **Brackets must be mounted to wall studs,** or with wall anchors appropriate for the type of wall surface and sufficient to securely hold 40 pounds if there is no conveniently located wood stud or other structural member behind the surface.

Remove the cover from the unit and set it aside. The VERO BR/BC unit has four (4) slots on the back panel that fit over corresponding hooks located on the top edge of each wall bracket. One of the two brackets supplied with the trutankless unit has two (2) truss head Philips machine screws lightly threaded into it. Remove these two screws and carefully set aside.

Lift the unit and center it over the brackets. Align the slots on the back above the top line of the brackets, flush with the wall, and lower the unit until the arcs of the hooks are fully resting in the slots. Ensure that all 4 hooks are in place.

Line up the bottom screw holes with the corresponding holes on the lower bracket by sliding the unit left or right on the brackets if necessary to center it, and then install the two (2) truss head screws, tightening with a Philips head screwdriver.

*Figure 4 — Fastening the Unit*

The trutankless unit is now securely affixed to the wall.
NOTE: Bollente recommends covering the unit with plastic or other impermeable sheeting until all water connections have been installed and tested, to protect the internal parts from potential leaks. Leave the tubing manifold connections uncovered for access.

Next, the unit must be connected to the local potable water supply.

The VERO BR/BC has two plumbing connections:

- ¾˝ MNPT male (blue) cold water supply inlet (rightmost when facing the unit)
- ¾˝ MNPT male (red) hot water outlet

**Figure 5 — Plumbing Connections**

**Cold Water Inlet Connection (Blue Arrow)**

First, connect the inflowing Cold Water Supply to the INLET connection, indicated by the Blue “Inlet Water” tag. This is accomplished by connecting the recommended ¾˝ x 12˝ stainless steel braided flex hose from the potable cold water supply to the unit’s ¾˝ NPT inlet. Using a wrench, attach the stainless flex lines to the inlet connection.

NOTE: Take care to NOT over-torque these connections (both cold and hot.) Doing so induces stress on the heating manifold assembly. Manifolds damaged by over-tightening these connections are NOT covered by warranty.

NOTE: The VERO BR/BC unit is shipped with an in-line screen filter which should be inserted in the cold (inlet) connection. The use of this filter is optional, but it is highly recommended, especially in new constructions where debris may be present in the line. The gasket is placed over the domed side of the screen, then the domed side is inserted into the cold (inlet) pipe so that the gasket is between the pipe and filter ring. Ensure that the assembly is well-seated with no gaps between the inlet pipe, gasket, and filter ring before attaching the flex line to the connection.

**Hot Water Outlet Connection (Red Arrow)**

Next, connect the outflowing Hot Water Supply main to the Outlet connection, indicated by the Red “Outlet Water” tag. This is accomplished in a manner identical to connecting the inlet supply.

Turn on the water supply to the system. Open a hot water tap in the house to allow water to flow.

NOTE: Outflowing water will be cold at this point of installation. Water will not flow hot until electrical supply is connected. Verify that the inlet and outlet connections are leak-free, both with water flowing and with the water flow stopped. Maintain water pressure and check for leaks for a minimum of ten (10) minutes. If a slight leak is noted at either of the stainless steel flexible line connection points, carefully tighten further with both wrenches as noted above.
**Pressure Relief Value**

A pressure relief valve is not provided with your VERO BR/BC unit. If local codes require a pressure relief valve to be installed, simply remove the ¾” NPT cap covering the top end-cap pipe nipple and install a ¾” NPT standard female coupling. This should then be connected to an external drain as per local code requirements.

The trutankless VERO BR/BC unit plumbing connections are now completed.

NOTE: Electrical service connection to the unit must be performed by a licensed contractor in accordance with all applicable National Electric Safety Codes, and all state/provincial and local electrical codes.

**WARNING:** This heating apparatus is an electrically powered high voltage and high current device. It is intended to be installed by a qualified and licensed contractor only. Failure to install this unit in accordance with all applicable codes and requirements may result in personal injury or death.

**WARNING:** Make sure the main power is OFF before proceeding with the electrical service connection to the system.

NOTE: We strongly recommend the use of copper conductors only.

NOTE: Electrical connections should be made ONLY after the water system is connected and is tested to be leak-free; all appropriate fittings are installed; and the required AWG copper wires have been routed to the trutankless VERO BR/BC Water Heater.

*Figure 6 — Wiring Connections: L1, L2 (Red Arrows) & Ground (Orange Arrow)*
Confirm that the cold water supply main is turned on and that main power is connected to the unit. Replace the outer cover of the unit by lining up the cutouts with their corresponding pipe connectors, etc., and sliding it into place. Tighten the four (4) truss head screws (two at bottom of unit and two at top) until comfortably snug. Do not over tighten.

Only now is trutankless VERO BR/BC Water Heater ready for power-up and configuration.

**IMPORTANT:** Ideal performance of the trutankless system depends on compliance with properly setting the DIP switch positions. The DIP switch positions determine the performance parameters of the unit model. To ensure proper installation and system operation, the unit MUST be configured using the DIP switches settings specified in Table 2 on Page 9 and pictured in Table 3 on page 10. Following these instructions and properly setting the DIP switches at installation is extremely critical to the proper functioning of the system and will ensure ideal temperature rise and flow rate maximums.

Switch ON the main power circuit breakers.
Switch ON the trutankless unit circuit breakers.

The controller powers up and the LCD screen displays the Startup screen for approximately 4 seconds.

Next, open a hot water tap inside the building with a minimum flow of one (1) gallon (3.8 liters) per minute and allow it to flow for a minimum of two (2) minutes to purge air from the heating chamber and protect the unit from dry fire.

NOTE: The trutankless VERO BR/BC unit must sense active water flow before it will allow the elements to heat. The LCD screen will be in lockout mode for a period of 120 seconds (2 minutes) while the water fills the heating tubes completely and the startup sequence completes.

This completes the installation procedure. The trutankless Water Heater is now in service. Operation is as simple as opening a hot water tap. The unit will then begin heating water and can typically reach the set-point temperature in as little as 15-30 seconds.

NOTE: Remember that water already in the supply line may be cold, so it may take somewhat longer for the hot water to reach the faucet.

Upon closing the hot water tap, the unit automatically returns to standby mode. That’s all there is to operating your trutankless VERO BR/BC Water Heater!
trutankless VERO BR/BC units have been designed to be maintenance-free*, yet periodic system checks are recommended.

*In areas where the water hardness exceeds 180 PPM or 10.5 grains/gallons, a water softener or filter needs to be installed and system checks, particularly of sedimentation accumulation in the flow sensor, should be carried out annually. Failure to install a filtration or softening system in areas with very hard water voids this warranty completely.

**WARNING:** Always turn off the power circuit breakers at BOTH the main electrical panel and at the unit access panel! High voltage is present in the system. Personal injury or death can result if caution is not taken!

The following items should be checked at each inspection:

- Flow Sensor (paddle wheel clear of any sediment)
- Breakers (corrosion)
- Inlet pipe connection (is it tight and dry?)
- Outlet pipe connection (is it tight and dry?)
- Flush Pipe Connection (is it tight and dry?)
- Surrounding heater – Clean and free of dust and debris

In case of an error message from the trutankless VERO BR/BC Water Heater, turn off all the hot water faucets. Wait for one minute. Turn a hot water faucet back on. If the error message persists, call your licensed contractor or authorized service technician. Do not attempt to self-service the unit!

<table>
<thead>
<tr>
<th>ITEM</th>
<th>RESIDENTIAL</th>
<th>COMMERCIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4 DIN Mount Circuit Breakers (63A Rating)</td>
<td>4 DIN Mount Circuit Breakers (63A Rating)</td>
</tr>
<tr>
<td>2</td>
<td>4 Traics</td>
<td>8 Traics</td>
</tr>
<tr>
<td>3</td>
<td>240V 9000W Element</td>
<td>208V 9000W Element</td>
</tr>
<tr>
<td>4</td>
<td>158°F (70°C) Thermal Cutout Switch</td>
<td>197.6°F (92°C) Thermal Cutout Switch</td>
</tr>
</tbody>
</table>

**SAFETY NOTE:** Commercial units are designed for commercial settings, and can be set as high as 180°F (82°C) for industrial processes including sterilization of quipment and utensils. EXTREME CARE should be taken when setting temperatures higher than 140°F (60°C), such temperatures should not be directly used in the shower, there is risk of burns.

**Hot Water Scald Burn Warning for Infants, Children, & Elderly:** Great care must be taken when exposing infants or children to warm or hot water as they can be badly burned quickly and at shorter exposure times.
**TROUBLESHOOTING**

The following is a list of the most frequent fault conditions and the possible corrective action. If you are not able to resolve a problem please contact us toll free at 855-TO-BUY-TRU (855-862-8987) before removing the unit from the wall.

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water does not flow</td>
<td>Water supply is turned off</td>
<td>Turn water on</td>
</tr>
<tr>
<td>Water is not hot — No Alarms</td>
<td>Power is off</td>
<td>Verify that the main breakers and unit circuit breakers are on.</td>
</tr>
<tr>
<td></td>
<td>Settings have been adjusted</td>
<td>Adjust temperature setting</td>
</tr>
<tr>
<td></td>
<td>Startup Lockout mode is on</td>
<td>Startup Lockout mode requires two (2) minutes of flow after power outage</td>
</tr>
<tr>
<td></td>
<td>Water flow rate too high</td>
<td>Reduce water flow to a rate at which the system is able to maintain desired temperature</td>
</tr>
<tr>
<td></td>
<td>Flow Meter Fault</td>
<td>Verify water flow by visual inspection of Flow Meter, paddle should be spinning if water is flowing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If condition persists, notify your licensed contractor or authorized service technician.</td>
</tr>
<tr>
<td>Flow Sensor stops turning</td>
<td>Flow Sensor clogged</td>
<td>If the Flow Sensor is clogged and the paddle wheel is not turning, the heater will not operate properly.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disconnect the power and water to the unit.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remove the cover of the Flow Meter by loosening the four screws</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Take care to set aside the bearings that are seated at each end of the paddle wheel axle, they are critical to proper Flow Meter operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pull off the outer ring.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remove the white paddle wheel by pulling on the clear handle.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clean the unit and reinstall; make sure the associated O-ring is properly seated. A thin coat of lubricant will help to seat the seal.</td>
</tr>
<tr>
<td>Alarms/Alerts</td>
<td>Thermal Cut Out</td>
<td>Switch should reset automatically</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduce Temperature Setpoint</td>
</tr>
<tr>
<td></td>
<td>Leak</td>
<td>Your VERO BR/BC unit has a built in “Leak Detection” as part of the controller assembly. If a leak is detected the alarm will sound, display</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the alert notification and cut power to the heating circuit of the unit.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Caution:</strong> High voltage current is still connected to the unit.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disconnect power by switching main breakers off.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Notify your licensed contractor or authorized service technician immediately for service.</td>
</tr>
</tbody>
</table>
BOLLENTE, Inc. WARRANTY & LEGAL

MANUFACTURERS LIMITED WARRANTY

Bollente, Inc.’s trutankless product has been manufactured under strict standards of workmanship and have gone through rigorous testing to ensure quality and reliability.

1. PRODUCT WARRANTY: Bollente, Inc., (hereinafter, “Bollente or Manufacturer”) subject to the terms and conditions set forth in this limited warranty, warrants to the original purchaser at the original address or the authorized transferees (Transferee is defined as any owner of the residence which the trutankless unit has been installed during the term of this warranty) of such purchaser at the original address (collectively, the “Owner”), the trutankless (hereinafter, “trutankless or unit”) to be free from (i) mechanical or electrical failure of any component solely due to defects in materials or Manufacturer’s workmanship from the date of original purchase and (ii) leaks solely due to defects in materials or Manufacturer’s workmanship from the date of original purchase or the date of Owner’s occupancy of a new dwelling in which the trutankless Water Heater is installed. However, if Owner cannot document the original date of purchase with the original sales receipt, then the limited warranty period begins on the date the trutankless Water Heater was manufactured. As Owner’s sole and exclusive remedy, Manufacturer shall, at Manufacturer’s sole election, either repair or replace the trutankless Water Heater or the defective portion of such product. Manufacturer is not liable for any costs incurred by Owner, including, without limitation, the cost of any labor. All repairs or replacements must be performed by a Manufacturer-authorized installer or licensed contractor, using Bollente parts or Bollente approved parts. Manufacturer’s maximum liability is limited to the value of the water heater. This limited warranty shall be governed by the laws of the United States.

2. COVERAGE TERM: Bollente warrants trutankless residential units (prefaced by a BR model number), and its Component Parts, to be free from all defects of all materials and workmanship for a period of Five Years from the date of original purchase or the date of Owner’s occupancy of a new dwelling in which the trutankless Water Heater is installed. trutankless Commercial units (prefaced by a BC model number), and its Component Parts are warrantied to be free from all defects of all materials and workmanship for a period of Three Years from the date of original purchase. However, if Owner cannot document the original date of purchase with the original sales receipt, then the limited warranty period begins on the date the trutankless Water Heater was manufactured. Additionally, Bollente warrants the copper ceramic manifold from leaks solely due to defects in materials or workmanship for Lifetime of Owner.

1. Manufacturer is not liable for any water damage or other damages arising, directly or indirectly, including but not limited to damage caused by frozen or broken water pipes in the event of equipment failure, resulting from any defect in the trutankless Water Heater component part(s) or from its use.

2. Manufacturer is not liable under this limited warranty or otherwise if:
   a. The water heater is not installed by Manufacturer-authorized installer or licensed contractor; or
   b. The water heater or any of its component parts have been subject to misuse, alteration, neglect or accident; or
   c. Improper sizing; or
   d. Using the water heater to heat chemically treated water like that found in a pool or spa; or
   e. The water heater has not been installed in accordance with the applicable local plumbing and/or building code(s) and/or regulation(s); or
   f. The water heater has not been installed or maintained in accordance with Manufacturer’s printed instructions, or installed with improper orientation, improper fastening, improper use of pipe dope/plumbers putty or with the use of any non-Manufacturer approved sealant; or
   g. The water heater has not been continuously supplied with potable water or the water’s inlet temperature is in excess of 131°F (55°C), Manufacturer’s recommended maximum temperature; or
   h. The water heater experiences any water pressure or flow interruptions, normal inlet water pressure is outside of the published specification for the heater; is exposed to any condition that causes the heater to turn on before the air is purged from the heater also known as dry fire; or
   i. If a water softener or filter was not installed in line before the cold water inlet in an area where water hardness exceeds 10.5 grains or 180PPM; or
j. The water heater has been exposed to conditions resulting from floods, earthquakes, winds, fire, freezing, lightning, electrical surges or circumstances beyond the Manufacturer's control including all acts of God; or
k. The water heater has been removed from its original installation location; or
l. The water heater has been used for other than the intended purpose; or
m. There have been changes or modifications in the appearance of the unit and the software and firmware installed; or
n. The installation of parts or accessories not supplied or designated by Bollente, Inc.; or
o. Damages or repairs required as a result of the use of components or accessories not compatible with this unit.

3. Owner, and not Manufacturer or its agent/representative, is liable for and shall pay for all field charges for labor or other expenses incurred in the removal and/or repair of the water heater or any expense incurred by Owner in order to repair the water heater.

3. **LIMITATIONS OF REMEDIES AND DAMAGES:** This Limited Warranty shall be the exclusive warranty made by Manufacturer and is made in lieu of all other warranties, statutory, expressed or implied (whether written or oral), including, but not limited to, warranties of merchantability and fitness for a particular purpose.

Manufacturer expressly disclaims the implied warranties of merchantability and fitness for a particular purpose. Owner's sole and exclusive remedy is product repair or replaced, as provided in this Limited Warranty, and all other claims for damages are excluded.

The remedies set forth in this Limited Warranty are the only remedies available to owner or any person for breach of any covenant, duty or obligation on the part of manufacturer. Manufacturer is not liable to owner or any third party for any loss, personal injury or property damage, directly or indirectly, arising from the Trutankless water heater. Under no circumstances is Manufacturer liable to owner or any third party for incidental, consequential, special, contingent, or punitive damages of any description, whether any such claim be based upon warranty, contract, negligence, strict liability, or other tort, or otherwise.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to owner.

4. **WARRANTY REGISTRATION:** To be covered under the Bollente, Inc., Manufacturer's Limited Warranty Buyer must register product within thirty (30) calendar days of receipt of Product, by registering online at www.mytankless.com (registration is not required in California and Quebec but failure to register may affect warranty servicing policy – see Section 6). This is a Limited Manufacturer's Warranty that conveys benefits to the Owner, subject to the terms and conditions set forth herein. Keep Product documents and online passwords in a safe and secure location. Owner's obligation under the terms of purchase and sale require that Warranty Registration must be completed within the prescribed timeframe (within 30 calendar days) and retain all proof of purchase and installer receipts (evidencing installers contractor license number) for Warranty in order to protect Owner's rights and obtain Warranty Confirmation.

5. **WARRANTY PROCEDURE FOR SERVICE:** Have a licensed electrician determine the exact issue that requires repair. Please note that technical support is available for qualified technicians only (licensed electricians and/or plumbers). Technical support that involves potentially dangerous electrical conditions is not available to unqualified persons. When contacting a trutankless Service Professional, please be sure that the technician has the Serial Number of the unit used during registration and has reviewed the “Installation Manual” that was supplied with the Product.

The Serial Number of the unit can be found on the log file of the unit. Trutankless Technical Assistance will, at its sole discretion, determine the best method for repair. Methods of repair include, but are not limited to, replacement of specific part of Product or replacement of whole unit. If a whole unit requires replacement under the terms of this Manufacturer’s Warranty, the original unit must be returned to the Bollente office and a Returned Merchandise Authorization (see Section 6) is required. Owner must secure the cost of return delivery with a valid U.S. credit card. Credit Card Authorization Forms are available upon request.

If the replaced unit arrives at the trutankless office within ten (10) calendar days of shipment and is repaired within the specifications of this Manufacturer’s Warranty then the credit card will not be charged. If the unit damage is found to
be as a result of items listed in the Exclusions of Coverage (see Section 2), Owner will be charged amount of replacement parts, and shipment costs. If trutankless Technical Assistance determines a component requires repair or replacement at the Owner cost under the terms of this Manufacturer’s Limited Warranty, the part will be shipped via standard ground delivery. If faster shipping service is desired, the Owner must select and pay for those services.

6. RETURNED MERCHANDISE AUTHORIZATION: Subject to the terms and conditions set forth in this limited warranty, if the trutankless Water Heater fails or leaks because of defects in materials or Manufacturer’s workmanship during the applicable warranty period set forth above, Owner should contact Manufacturer for a Returned Merchandise Authorization (RMA). In order to obtain an RMA the Owner must have either registered the unit previously at mytankless.com or must provide the original purchase order showing the serial number of unit. No returns will be accepted by the Manufacturer without an RMA and the trutankless assumes no responsibility for a water heater returned without an RMA. Once an RMA number is issued it is good for 10 days, after that time the heater will be refused for service and a new RMA must be issued for the return. Water heater should be wrapped and packaged securely to avoid shipping damage. Damage occurring in transit as a result of improper packaging is the sole responsibility of the Owner. All shipments of parts from the Manufacturer to the Owner to replace defective components shall be made via normal ground transportation. If expedited shipment is required, it will be provided at additional cost to the Owner.

ANY QUESTIONS REGARDING OUR LIMITED WARRANTY SHOULD BE DIRECTED TO OUR SERVICE CENTER BY CALLING TOLL FREE 855-TO-BUY-TRU BETWEEN 8:00 AM and 5:00 PM MONDAY thru FRIDAY ARIZONA TIME. NO RETURN WILL BE ACCEPTED BY BOLLENTE WITHOUT PRIOR APPROVAL AND THE ISSUANCE OF RETURN MERCHANDISE AUTHORIZATION NUMBER CLEARLY MARKED ON THE EXTERIOR OF PACKAGING.

This warranty does not cover any failure or operating difficulties due to accident, abuse, misuse, alteration, misapplication, force majeure, improper installation, improper maintenance or service, poor water quality, scale build-up, or for any other cause other than defects in materials or workmanship.

This warranty applies to potable water meeting the National Secondary Drinking Water Regulations as set forth in the U. S. Code of Federal Regulations, 40 CFR Chapter 1 Part 143 (as from time to time amended). Water quality must meet the following:

<table>
<thead>
<tr>
<th>Description</th>
<th>pH</th>
<th>TDS Total Dissolved Solids</th>
<th>Total Hardness</th>
<th>Aluminum</th>
<th>Chlorides</th>
<th>Copper</th>
<th>Iron</th>
<th>Manganese</th>
<th>Zinc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Levels</td>
<td>6.5 to 8.5</td>
<td>Up to 500</td>
<td>Up to 200 mg/L</td>
<td>Up to 0.2 mg/L</td>
<td>Up to 250 mg/L</td>
<td>Up to 1.0 mg/L</td>
<td>Up to 0.3 mg/L</td>
<td>Up to 0.05 mg/L</td>
<td>Up to 5 mg/L</td>
</tr>
</tbody>
</table>

If the water quality at the unit’s service location fails at any time to meet the qualitative standards, the limited warranty will be void, and BOLLENTE shall have no further obligation in connection with this limited warranty.

In order to facilitate compliance with U.S. Code of Federal Regulations, 40 CFR Chapter 1, Part 143, BOLLENTE recommends that the unit be supplied with potable water that has been treated by an in-home treatment device such as a water softener or reverse osmosis unit.

This limited warranty shall be the exclusive warranty made by BOLLENTE International and it made in lieu of all other warranties, expressed or implied, whether written or oral, including by not limited to warranties of merchantability and fitness for a particular purpose.

Any implied warranties of merchantability and fitness arising under state law are limited in duration and period of coverage provided by this limited warranty, unless the period provided by state law is less. Some states do not allow limitations on the duration of the implied Warranty lasts, so the above limitation may not apply to you.

BOLLENTE is not responsible or liable for any special, incidental, indirect or consequential damages that may arise, including damage to person or property, loss of value use or inconveniences. In the case of prevailing local state statutes, the preceding statement may not apply to you.

Be certain that the heater is installed in accordance with the Manufacturer’s written instructions, and in accordance with applicable federal, state and local codes.
Keep the heater free of damaging scale build-up and water sediment.

Install the water heater in such a manner that if it should leak, the resulting flow of water will not damage the area in which it is installed. BOLLENTE requires that a drain pan or catchment basin with suitable drainage be located immediately below the heater. Failure to ensure proper drainage in the event of a flow will result in damages for which BOLLENTE is not responsible.

Ensure that the in-home water pressure does not exceed the rated capacity of the water heater.

The original installer should be your first point of contact. Should you need further assistance, such as a service request or warranty claim under this warranty, please contact BOLLENTE, Inc. at: 8800 N. Gainey Center Dr. Suite 270, Scottsdale, AZ 85258; or call 855-TO-BUY-TRU or fax (480) 275-8975. At the time a claim is filed, the original purchaser must provide a copy of the original sales receipt, and a title deed, or equivalent document(s) that evidence the ownership of the heater and installation of the heater in the dwelling or commercial property owned by the original purchaser.

**Purchase and Log-In Information:** Upon registration we request that you provide your name, email address, address, phone number and any other information necessary to complete your device registration.

**Minors:** Our Site does not knowingly collect or store any personal information about children under the age of 18.

**Business Transitions:** Upon the sale or transfer of the company and/or all or part of its assets, your personal information may be among the items sold or transferred. We will request a purchaser to treat our data under the privacy statement in place at the time of its collection.

**Changes to Privacy Policy:** Please note that this privacy policy may change from time to time. We will not reduce your rights under this privacy policy without providing you with notice – on the Site or by contacting you – and the opportunity for you to stop using the Site.

If you have any questions, please contact us at privacy@trutankless.com.

Last Updated: June 2nd 2014.

Bollente, Inc., and its subsidiaries and affiliates (collectively, “trutankless”) provide: (1) a Trutankless user website that may be accessed at www.trutankless.com (“Site”), the term “Services” means the website.

**a) Customer Service.** If you have any questions or concerns regarding the Products, or these Terms, please contact trutankless.

You may choose to, or trutankless may invite you to submit comments, suggestions, or ideas about the Products, including how to improve the Products. By submitting any Ideas, you agree that your submissions are voluntary, gratuitous, unsolicited, and without restriction and will not place trutankless under any fiduciary or other obligation. trutankless may use, copy, modify, publish, or redistribute the submission and its contents for any purpose and in any way without any compensation to you. You also agree that trutankless does not waive any rights to use similar or related ideas previously known to trutankless, developed by its employees, or obtained from other sources.

**b) Copyright/Trademark Information.** Copyright, 2014, trutankless. All rights reserved. All trademarks, logos are the property of trutankless or of their respective holders. You are not permitted to use any of the Marks without the applicable prior written consent of trutankless or such respective holders. trutankless reserves the right to alter product offerings, specifications, and pricing at any time without notice, and is not responsible for typographical or graphical errors that may appear in this or in related documents.

**c) Disclosures.** Please see our website contact information for Trutankless’s address:

15720 N Greenway Hayden Loop
Suite 2
Scottsdale AZ 85260

By calling 1-855-TO BUY TRU

Via email at support@trutankless.com
APPENDIX

COMPONENT TERMINOLOGY

Heating Chamber: Made of heat insulator-coated copper tubes connected in series (serpentine), this chamber is where the water flows through and is heated by over 20 feet (6 meters) of internal heating elements.

Wiring Harness: This harness provides for the electrical connectivity between the heating elements, mechanical relays, solid state relays, transformer and the supplementary load center with quad circuit breakers.

Safety Relays: Eight relays completely cut power to the heating elements in case of a leak, temperature cutout and firmware fault.

TRIACS: TRIACs regulate, via firmware control, the amount of power to the elements in order to smoothly heat the water to the desired temperature. Residential units contain four (4) TRIACs; commercial units contain eight (8).

Over-Temperature Switch: Monitors the internal temperature of the heating chamber. If the temperature of residential water heater exceeds 158°F (70°C), the Over-Temperature switch will shut down the heater as a safety precaution. The heater will automatically reset this switch when the temperature drops back below 122°F (50°C). If the temperature of commercial water heater exceeds 197.6°F (92°C), the Over-Temperature switch will shut down the heater as a safety precaution. The heater will automatically reset this switch when the temperature drops back below 161.6°F (72°C).

Hot Water Outlet: ¾” NPT and port for temperature sensing thermistor; heated water comes out at this location.

Flow Sensor: This sensor determines the incoming water flow rate and communicates that to the microprocessor controller board.

Incoming Water Inlet: ¾” NPT and port for temperature sensing thermistor; where cold water enters the heater.

Wiring Block Access: Electrical wire access to main terminating lugs (2 hot, 1 ground.) Electrical wire is top fed.

Quad Circuit Breakers: Simplifying installation, the circuit breakers provide an internal shut-off to the water heater. The size of the circuit breakers is dependent on the amperage model of the unit.

Display: Backlit LCD with push-button control.

Controller Board: The brain of the heater. It controls the advanced features including temperature set point, time of use, startup delay and gallon/time limits.