



# Point-of-Use Water Heater Owner's Manual

Installation, Care & Use

Instalacion, Cuidado & Uso

Installation, Sion & Utilisation



1.800.558.5700  
www.insinkerator.com

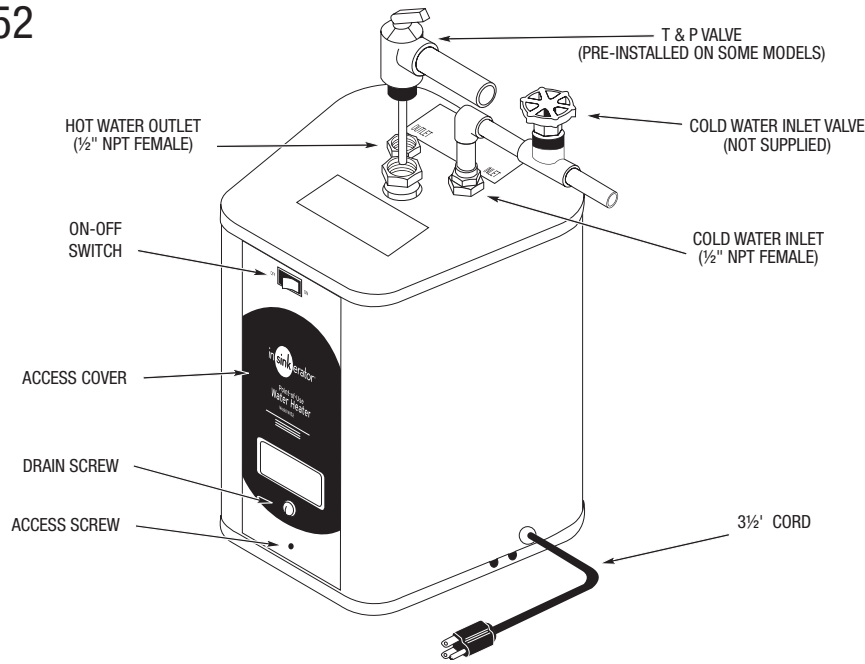


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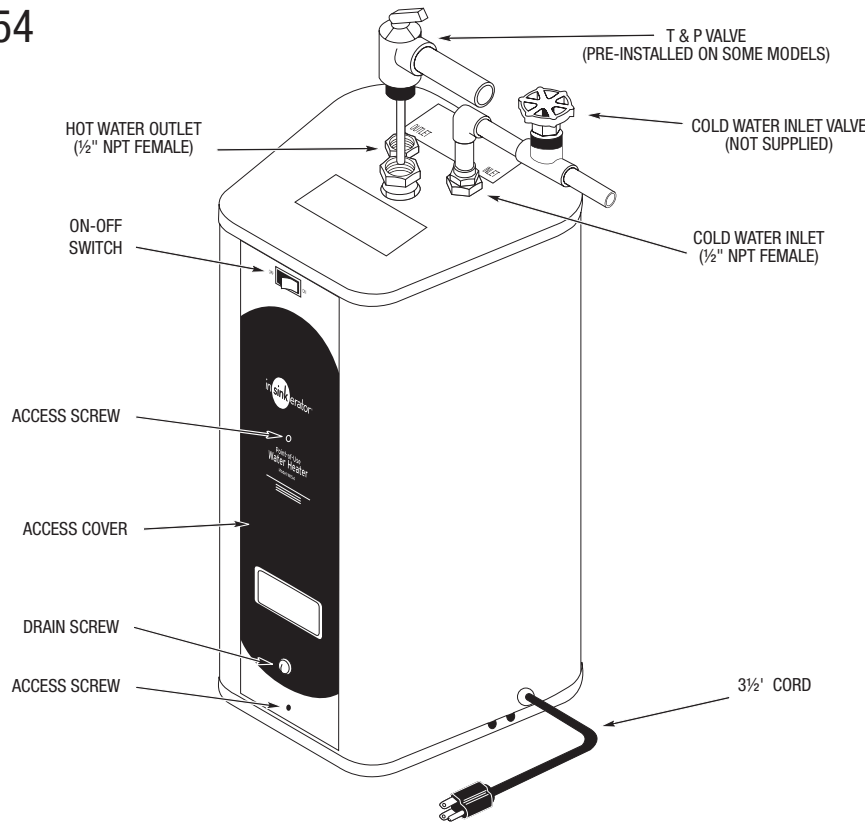
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# W152



# W154



## SPECIFICATIONS

	W152	W154
<b>Tank Construction</b>	Bronze	
<b>Tank Volume</b>	2.5 gallons	4 gallons
<b>Voltage</b>	120 volts	
<b>Heating Capacity</b>	1500 watts	
<b>Element Type</b>	Replaceable copper/bronze*	
<b>Temperature Range</b>	110°F - 170°F	
<b>Operating Pressure</b>	150 psi (max.)	
<b>Thermostat Type</b>	Resettable	
<b>Power Cord</b>	3 1/2 ft. cord and grounded plug	
<b>Water Connections</b>	1/2" NPT female	
<b>Pressure Relief Connection</b>	3/4" NPT female	
<b>Drain</b>	1/4" Screw Fitting	
<b>Insulation</b>	High Efficiency EPS meets U.L. 94 HF-1	
<b>Overall Dimensions</b>	13.5" H 10.4" D 10.7" W	20.2" H 10.4" D 10.7" W
<b>Shipping Weight</b>	18 lb.	23 lb.
<b>Standby Heat Loss 120°F (75°F Ambient)</b>	0.25 KWhr	0.50 KWhr
<b>First Hour Rating 80°F Rise</b>	8.6 gallon	10.4 gallon
<b>Usable Hot Water (25% Temp. Drop)</b>	1/2 GPM: 2.0 gallon 1 GPM: 1.62 gallon 2 GPM: 1.25 gallon	3.0 gallon 3.0 gallon 3.0 gallon

\*must be InSinkErator compatible copper with bronze base

### Definitions:

**Standby Heat Loss.** Measure of how well the tank is insulated. Use a Kilowatt Hour meter and measure power consumed in a 24 hour period for a full tank at normal operating temperature and no water being added.

**First Hour Rating.** Measure how much hot water can be delivered over a one hour period, with a 140°F tank water temperature and 60°F incoming water temperature.

**Usable Hot Water.** Measure of how cold incoming water mixes with the stored hot water. Start with hot tank. Draw water at 1/2 GPM until water temperature drops 25%. Measure amount of water drawn. Repeat for 1 GPM and 2 GPM.

## WHAT YOU SHOULD KNOW BEFORE YOU BEGIN

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

- This heater must only be installed or serviced by qualified persons with ability equivalent to that of a licenced tradesman in the field involved.**
- For your satisfaction and safety, read all instructions, cautions, warnings and dangers before installing or using this water heater.
- Unit must be installed indoors.
- Make sure that all electrical wiring and plumbing connections conform to local codes. Consult local code and national electrical code for proper installation.
- This water heater is an electrical device and must be properly grounded, fused and connected to the correct line voltage. Connect only to properly grounded outlet (see page 10).
- Install or locate this water heater only in accordance with the provided installation instructions. Do not operate the heater in rooms, garages or other areas where gasoline or other flammable liquids or engine driven vehicles or equipment are stored, operate or repaired. Flammable vapors are heavy and travel along the floor and may be ignited by the electric heater causing fire or explosion.
- Use this water heater only for its intended use as described in this manual.
- This heater is a pressure vessel and must have a T & P (Temperature & Pressure) valve installed.
- Do not 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.
- 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.
- Flammable items, pressurized containers or any other potential fire hazardous articles must never be placed on or adjacent to the heater. Open containers of flammable material should not be stored or used in the same room with the heater.
- Protect heater from freezing. Water left in the tank allowed to freeze will expand and damage the tank. Disconnect power and drain tank to prevent damage (see page 11).
- Do not attempt to operate this heater with cold water shutoff valve closed. Disconnect power if shutoff valve is closed.
- This water heater should be serviced only by qualified service personnel. Contact nearest authorized service facility for examination, repair or adjustments.

### Definition of symbols in this instruction manual:

**⚠ DANGER** An imminently hazardous situation, which, if not avoided, will result in death or serious injury.

**⚠ WARNING** A potentially hazardous situation, which, if not avoided, could result in death or serious injury.

**⚠ CAUTION** A potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.

**Keep this warranty and manual near the heater for future reference whenever maintenance adjustment or service is required.**

### ⚠ WARNING

**Personal Injury:** Failure to follow these instructions can result in serious personal injury or death.

The installation must conform to these instructions, the local code authority having jurisdiction and the requirements of power company. In the absence of code requirements follow NFPA-70, The National Electrical Code, which may be ordered from: American Standards Institute, 1430 Broadway, New York, NY 10018.

## WHAT YOU NEED TO GET STARTED

### Equipment Required:

- Adjustable wrench
- Level
- Pencil
- Tape Measure
- Phillips and flat blade screwdrivers
- T & P valve  
(Pre-installed on some models)

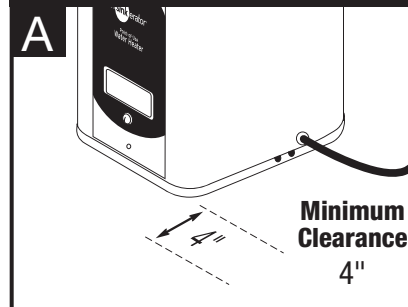
### Equipment You May Need:

- Support blocks
- Drain pan
- Teflon tape

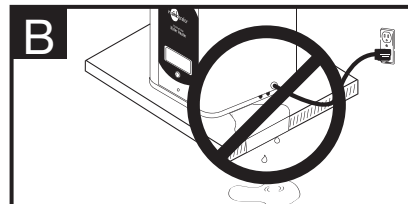
## INSTALLATION PROCESS STARTS HERE

1

### PREPARATION



- Ensure power switch located at the front-top of tank is in off position.
- Identify location for water heater tank.
- Check to make sure there is proper clearance in front of heater to allow for draining the tank and for access to replaceable parts such as the thermostat, heater and relief valve.



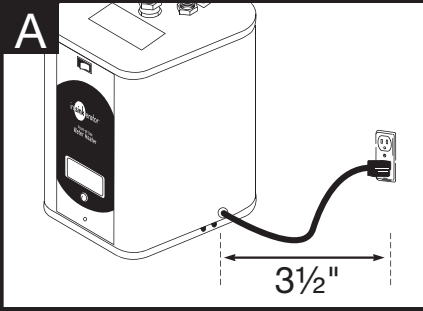
### ⚠ CAUTION

**Property Damage:** If the heater becomes immersed in water, the heater should be examined by a competent service person before it is placed back in operation.

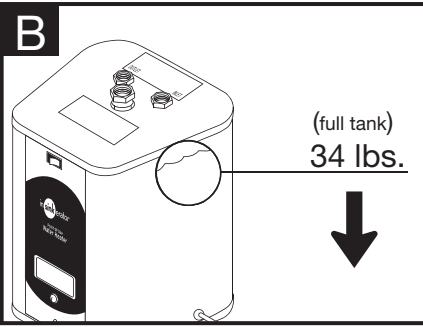
- Locate heater in an area where leakage of the tank or connections will not result in damage to the area adjacent or to lower floors of the structure.
- When such locations cannot be avoided, a suitable drain pan piped to an adequate drain should be installed under the heater (available from your distributor).

# 2

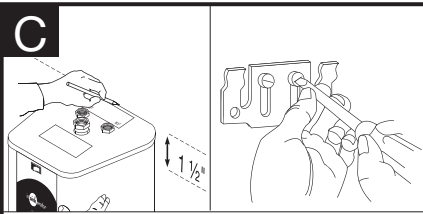
## MOUNTING THE TANK - W152



- The W152 model is designed for wall or floor mounting.
- Select a spot to mount water heater vertically, with water connection at the top.
  - Water heater must be located within 3-1/2 ft. of a grounded 120-volt electrical outlet.



- Ensure wall or cabinet is strong enough to hold the weight of a full heater. The model W152 tank holds 2-1/2 gallons and weighs 34 lbs. when full.
- Continue with "Step C" if wall mounting.



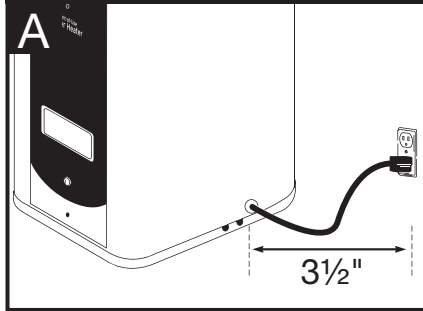
- Hold tank in the position to be mounted and mark with a pencil the top and center for the tank on the wall (mount to wall stud or added 2x4).
- Measure down 1-1/2" and mount the metal mounting bracket using two screws provided.
- Hang the water heater from the mounting bracket using the two slots in the back of the tank jacket.

**CAUTION**

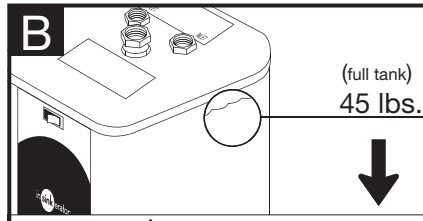
Property Damage: Do not connect the electrical power until the tank is full of water. Failure to comply will burn out the heating elements.

# 2

## MOUNTING THE TANK - W154



- The W154 model is designed for floor mounting only.
- Select a spot to mount water heater vertically, with water connection at the top.
  - Water heater must be located within 3-1/2 ft. of a grounded 120-volt electrical outlet.

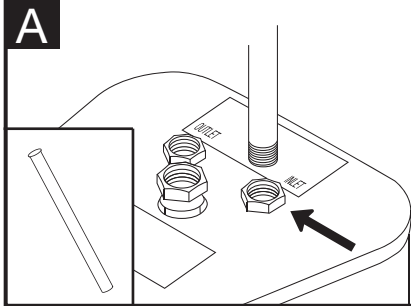


- Ensure cabinet floor is strong enough to hold the weight of a full heater. The model W154 tank holds 4 gallons and weighs 45 lbs. when full.
- It is recommended the water heater be raised off the cabinet floor several inches using suitable support blocks to allow drainage of tank (not supplied).

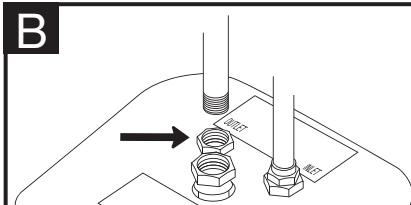
**CAUTION**

Property Damage: Do not connect the electrical power until the tank is full of water. Failure to comply will burn out the heating element.

### 3 CONNECTING TO WATER SUPPLY

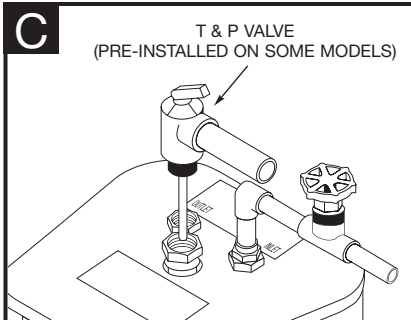


- Locate the cold water inlet identified **INLET**.
- Ensure the dip tube, supplied to carry cold water from the tank top to the bottom, is in the cold water inlet.
- Connect the cold water line to the 1/2" NPT female fitting on the top of the heater (use Teflon tape on threaded connections).



- Locate the hot water outlet identified **OUTLET**.
- Connect the hot water line to the 1/2" NPT female fitting on the top of the tank (use Teflon tape on threaded connections).
- When tightening, grip the tank fittings with a wrench to minimize stress.

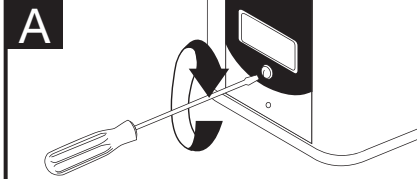
**This is a bronze tank. When connecting to galvanized pipe, always use a dielectric union to reduce corrosion due to galvanic action between dissimilar metals.**



- T & P valve comes included and pre-installed on some InSinkErator models. Consult local codes and regulations for proper installation and use of required T & P valve.

**T & P valve is available through your InSinkErator dealer.**

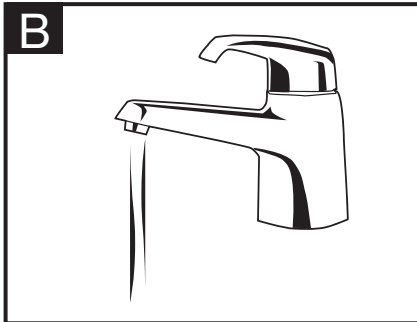
### 4 FILLING THE TANK



- Locate the hot water drain screw at the front-bottom of the tank.
- Ensure the screw is tight by turning clockwise with a screwdriver.

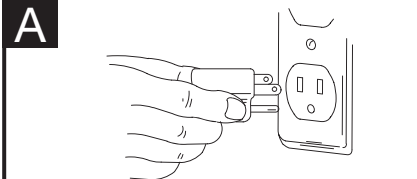
#### ⚠ WARNING

**Personal Damage:** Never operate the heater with the cold water inlet valve closed or before filling with water per the filling instructions. Failure to do so will cause damage and can void element warranty.



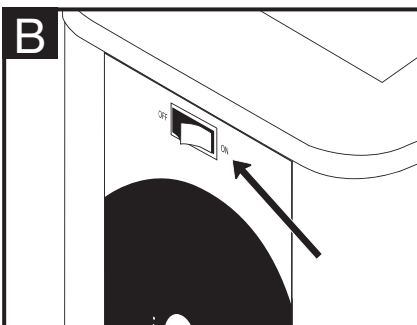
- Open a nearby hot water faucet to permit air to escape.
- Fully open the cold water inlet valve, filling the heater and piping.
- Leave "hot" faucet open until good flow of water occurs (evacuates air in lines).
- Close hot water faucet.

### 5 CONNECTING TO ELECTRICAL SUPPLY



- Check all connections to ensure they are tight and that there are no leaks.
- Plug 3-1/2 ft. water heater power cord into a grounded 120 volt A.C. three pin receptacle. Ensure that it is protected by a 15 to 20 Amp fuse and is grounded in accordance with all local codes and ordinances.

**Heater is not to be hard wired.**



- The water heater electrical switch is located at the front-top of tank.
- Power the tank by pushing switch to "ON" position.

**This appliance must be grounded.** In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment grounding conductor and a grounding plug. The plug must be plugged into a three pin receptacle that is properly installed and grounded in accordance with all local codes and ordinances. Have a licensed electrician check for ground continuity of the electrical supply system to insure proper grounding of the water heater.

**⚠ CAUTION**

**Property Damage:** Hydrogen gas can be produced in a hot water system served by this heater that has not been used for a long period of time (generally two 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 connected to the hot water system be opened for several minutes before using any electrical appliance. 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.**

**⚠ WARNING**

**Personal Injury:** "Insulation Blankets" are available for external use on electric water heaters. But are **not** recommended by InSinkErator.

**If you choose to ignore our recommendations and install an insulated blanket on this heater you must adhere to the following precautions in order to prevent serious injury or death to yourself or others:** (1)The junction box, external wiring, thermostats or heating elements on electric water heaters must not be covered; (2)The temperature-pressure relief valve must not be covered; (3)Operating instructions, installation or safety related labels must not be covered; (4)The American National Standards & Federal Laws pertaining to water heaters require that instructions and safety labels remain on the water heater proper. Do not remove instructions or safety labels from the heater; (5)InSinkErator will not be liable for any incident resulting from the use of insulation blankets; (6)Water and/or condensate can collect in an insulation blanket. InSinkErator will not be liable for any rust or corrosion damage caused by the installation of insulation blankets.

**⚠ CAUTION**

**Property Damage:** To reduce the risk of excessive pressures and temperatures in this water heater install temperature and pressure protective equipment required by local codes but not less than a combination temperature and pressure relief valve certified by a nationally recognized testing laboratory that maintains periodic inspection of production of listed equipment or materials, as meeting the requirements for Relief Valves and Automatic Gas Shutoff Devices for Hot Water Supply Systems, ANSI Z21.22.

**Temperature and Pressure Relief Valve.** This valve must be marked with a maximum set pressure not to exceed the marked maximum working pressure of the water heater. Install the valve into an opening provided and marked for this purpose in the water heater, and orient it or provide tubing so that any discharge from the valve will exit only within 6 inches above or at any distance below the structural floor and cannot contact any live electrical part. This discharge opening must not be blocked or reduced in size under any circumstances.

Check the metal tag on the relief valve and compare it to the heater's rating plate. Pressure rating of relief valve must not exceed the working pressure shown on the rating plate of the heater and the A.G.A. hourly Btu rated temperature steam discharge capacity of the relief valve shall not be less than the input rating of the heater. **No valve is to be placed between the relief valve and tank. Do not plug the relief valve.**

The drain line connected to the valve must not contain a reducing coupling or other restriction and should terminate near a suitable drain to prevent water damage during valve operation. Discharge line shall be installed to allow complete drainage of both the valve and line. **Do not thread, plug or cap the end of the drain line.**

## CARE AND USE

### ADJUSTING THE THERMOSTAT

Heating element has a thermostat which is factory set at 120°F (49°F) unless specified differently by state requirements.

- Turn off the heater electrical supply.
- Unplug power cord.
- Remove front panel.
- Move temperature indicator on thermostat to desired temperatures.
- Replace panel, plug in power cord and turn on heater electrical supply.

A non-adjustable high temperature limit control operates before steam temperatures are reached. The high limit is in the same area as the thermostat and must be reset.

**⚠ CAUTION**

**Personal Injury:** The consumer product safety commission recommends temperatures of 130°F or lower setting the temperature higher will **increase** the risk of scald injury.

**⚠ WARNING**

**Property Damage:** Because the high limit operates only when abnormally high water temperatures are present, it is important that a service agent be contacted to determine the reason for the high limit operation before resetting the high limit.

### SEASONAL STORAGE/DRAINAGE

Anytime the water heater is not used for extended periods of time, unplug and drain unit. If it is below freezing you will need to unplug the unit and drain it.

- Disconnect power from unit.
- Turn on "hot" faucet until water runs cool.
- Shut off cold water supply to heater.
- Leave hot faucet open to bleed off water pressure.
- Remove drain screw from front-bottom of tank with screw driver.
- Drain water from tank into suitable container.
- Leave the drain screw open during shut down.
- Close hot water faucet.
- To place back in working order, follow filling instructions.

### MAINTENANCE

Periodically drain the tank to help prevent sediment buildup. See draining instructions.

The temperature and pressure relief valve should be checked periodically to ensure it operates properly. Lift the level at the top of the valve to see if the valve opens and closes properly.

**⚠ CAUTION**

**Personal Injury:** The water passing out of the valve during this check may be extremely hot. Collect discharge in appropriate containers.

### WHAT TO DO IF SOMETHING GOES WRONG

**Check the things you can do yourself:**

- Be sure water heater is plugged firmly into appropriate receptacle or is properly electrically connected in some other manner.
- Be sure fuses and circuit breakers are in good order.
- Reread instruction booklet to assure that you are using correct operation procedure.
- Many unnecessary service calls result in the service agent doing what the owner can do for himself.

Call InSinkErator or visit our website for information or for the location of the authorized service center nearest you. The toll free number is 1-(800)-588-5700, or visit our website at [www.insinkerator.com](http://www.insinkerator.com)

Write to us if a satisfactory solution is not reached. Our address is:

**InSinkErator  
Service Department  
4700 21st Street  
Racine, Wisconsin 53406 USA**

# WARRANTY INFORMATION

**Water Heater:** 1-year warranty

**Tank:** 5-year warranty on bronze tank

## Full Residential Water Heater Warranty

**Full One-Year Warranty.** InSinkEerator warrants that the water heater will be free from defects in material or workmanship for a period of one (1) year after date of original installation. If during this one-year period, the water heater is found to have any such defect, InSinkEerator will repair or replace it at no charge.

**Limitations.** The warranty on any replacement water heater furnished under this warranty will be limited to the unexpired term of this warranty.

**Conditions and Exceptions.** This warranty shall apply only if: the water heater is installed according to the installation instructions provided by us and in accordance with local plumbing, building and electrical codes; the water heater has a properly installed and rated temperature and pressure relief valve, certified by the American Gas Association; the water pressure in the tank has not exceeded the working pressure shown on the tank label; the tank is used in a non-corrosive and non-contaminated atmosphere and has been used only with potable water and the water heater has been installed in the continental United States, including Hawaii and Alaska. Any accident to the water heater, any misuse (including having been operated without water in the tank) or abuse (including freezing) and any alterations, modifications or attempts to repair tank leaks by person other than authorized InSinkEerator service representatives, will void the warranty.

**Service Information.** To obtain service under this warranty, call toll free: 1-800-558-5700 and we will provide you with the name and location of your nearest factory authorized service agency.

**Disclaimer and Exclusions.** There are no other express warranties, written or oral. InSinkEerator shall not be responsible for any incidental or consequential damages, including but not limited to water damage, loss of use of the unit, loss or damage to other personal property or personal injury. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from State to State.

## Limited Residential Water Heater Warranty

**5-Year Limited Warranty Against Tank Leakage.** InSinkEerator warrants that the bronze tank in your InSinkEerator water heat will not leak due to defects in material or workmanship for a period of five (5) years after date of original installation. If during this five-year period, the tank leaks due to any such defect, InSinkEerator will provide a replacement bronze tank at no charge, subject to the limitations listed below. This warranty applies only to units manufactured after April 1, 1993.

**Limitations.** Replacement tanks will be made available through InSinkEerator factory authorized service agencies. After the one-year full warranty on the water heater has expired, InSinkEerator will not: offer free replacement of any parts other than the bronze tank; pay for the labor to inspect or install the replacement bronze tank or to repair, replace or re-install any other parts of the water heater; offer any additional warranty on a replacement bronze tank beyond the unexpired portion of this limited warranty and pay for any permits required for installing a replacement bronze tank.

**Conditions and Exceptions.** This limited warranty shall apply only if: the water heater is installed according to the installation instructions provided by InSinkEerator and in accordance with local plumbing, building and electrical codes; the water heater has a properly installed and rated temperature and pressure relief valve, certified by the American Gas Association; the water pressure in the tank has not exceeded the working pressure shown on the tank label; the tank is used in a non-corrosive and non-contaminated atmosphere and has been used only with potable water; The water heater has been installed in the continental United States, including Hawaii and Alaska and the water heater is installed in a single family residence or other light usage area. Any accident to the water heater, any misuse (including having been operated without water in the tank) or abuse (including freezing) and any alterations, modifications or attempts to repair tank leaks by person other than authorized InSinkEerator service representatives, will void the warranty.

**Service Information.** To obtain service under this warranty, call toll free: 1-800-558-5700 and we will provide you with the name and location of your nearest factory authorized service agency.

**Disclaimer and Exclusion.** Any and all implied warranties, whether or merchantability, fitness for particular purpose or otherwise, relating to this warranty against tank leakage are limited in duration to the term of this warranty. InSinkEerator will not be responsible for any incidental or consequential damages, including but not limited to water damage, loss of use of the bronze tank, loss or damage to other personal property or personal injury. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Also, some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

**Your Rights.** This warranty gives you specific legal rights, and you may have other rights which vary from State to State.

### For Your Records.

Model Number \_\_\_\_\_

Serial Number \_\_\_\_\_

Date Installed \_\_\_\_\_

Proof of purchase and/or installation must be presented with your warranty claim; otherwise the beginning of the warranty period will be deemed the date of manufacture of the water heater.



## TROUBLESHOOTING

Always remove the power cord from its receptacle before servicing the heater.

### If the heater stops working:

- Check the circuit breaker supplying power to the outlet where the heater is installed.

#### If the circuit breaker has tripped:

- Have the circuit checked by an electrician to determine if the circuit is overloaded or if a short exists.

#### If the circuit breaker has not tripped:

- Remove the power cord from its receptacle.
- Remove the thermostat cover on the front of the heater.
- Inspect the heater for any frayed or loose electrical connections.
- Push the red "reset" button at the top of the thermostat compartment.
- If the button "clicks" when pushed, something has caused the heater to overheat. Leave power cord unplugged and contact your service agency.
- If the button does not "click" when pushed, the element has probably burned out and should be replaced. Contact your service agency.

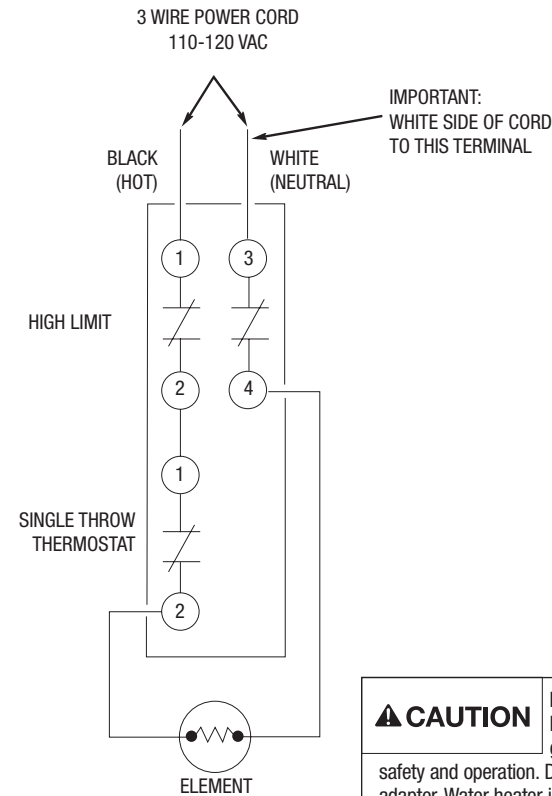
### If the water over heats, or if steam is released from the relief valve:

- Unplug the power cord immediately.
- Allow tank to cool.
- Remove the cover on the front of the heater and check that the thermostat is seated firmly against the front of the tank and that the mounting bracket is snug, but not over tightened.
- If there are any continued signs of overheating, disconnect the power and contact a qualified service person.

### Relief Valve Operation:

- If the relief valve weeps or drips hot water, contact a qualified service person. If a check valve is installed in the hot water line, an expansion tank must be properly installed.

## WIRING DIAGRAM



## HEATER DIMENSIONS

