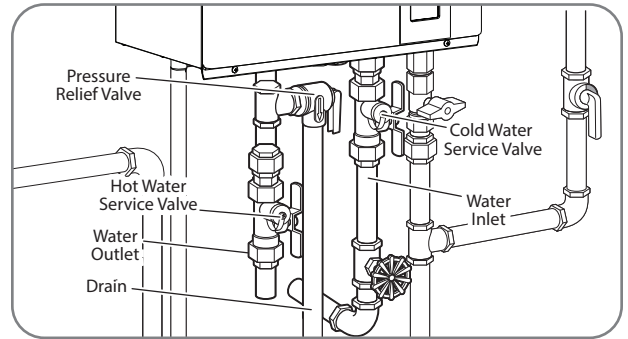


# INSTALLATION INSTRUCTIONS

## Water Piping Arrangement With Service Valve Kit

Service valve kits can attach to all tankless water heater systems. All kits include two full-port isolation valves to be used in the COLD and HOT water lines. When installed, these valves allow one person full diagnostic testing and ease of flushing the system. Contact your distributor or place of purchase for availability and installation information.



## Water Supply (cont.)

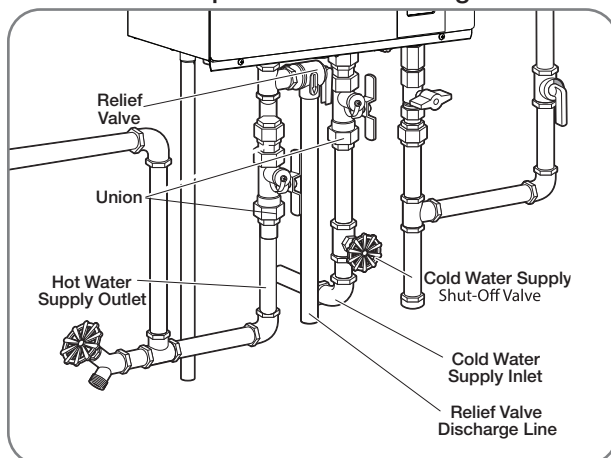
### Relief Valve

A new pressure-relief valve, complying with the Standard for Relief Valves and Automatic Gas Shut-Off Devices for Hot Water Supply Systems, ANSI Z21.22/CSA 4.4, must be installed at the HOT water outlet connection of the water heater during installation. Local codes shall govern the installation of any relief valve.

### NOTICE:

- The following drawing illustrates a pressure-only relief valve. If local codes require a combination temperature and pressure-relief valve, you may need to install an extension piece to ensure that the valve probe is not directly in the flow path of the water.
- A pressure relief valve supplied with this water heater must be installed as shown below.
- Manual operation of relief valves should be performed at least once a year.
- If the relief valve on the system discharges periodically, a problem exists. Turn off the water heater, unplug the unit, and call for service.

One end of the relief valve discharge line connects to the HOT water outlet pipe as shown above. The other end of the pipe should be routed to a suitable drain to eliminate potential water damage.



For safe operation of the water heater, be sure that:

The pressure rating of the relief valve must not exceed 150 psi (1,034 kPa) or the maximum working pressure of the water heater. (See the rating plate on the water heater.)

The BTUH rating of the relief valve must equal or exceed the BTUH input of the water heater. (See the rating plate on the water heater.)

No valve of any type should be installed between the relief valve and the water heater.

Discharge from the relief valve should be piped to a suitable drain. Piping used should be of a type approved for the distribution of hot water.

HOT and COLD water lines should be insulated up to the water heater. See "Water Supply Installation".

The discharge line must be NO SMALLER than the outlet of the relief valve. The drain line must pitch downward to allow for complete drainage of the line and the valve.

The end of the discharge line should not be threaded or concealed and should be protected from freezing. No valve of any type, restriction, or reducer coupling should be installed in the discharge line.

# INSTALLATION INSTRUCTIONS

## Hot and Cold Pipe Insulation Installation

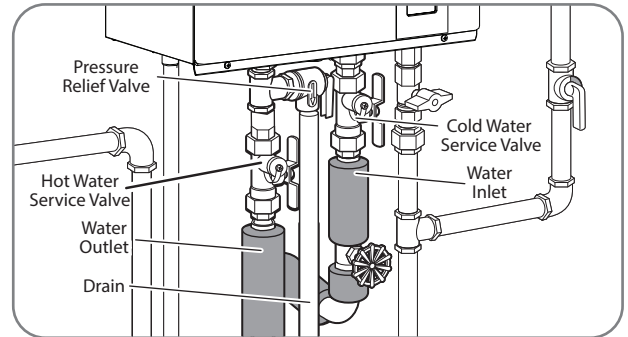
### ⚠️ WARNINGS:

- When pipe insulation is not rated for the appropriate weather conditions, install electric heat tracing or equivalent to prevent freezing of the pipes.
- DO NOT insulate or block drain valve on the hot outlet fitting.
- If pipes are allowed to freeze, the water heater and the pipes may malfunction or leak due to freezing water.

### NOTICE:

The hot and cold water supply pipes should be insulated to provide additional freeze protection.

For increased energy efficiency, use pipe insulation as shown in the diagram. Insulate the pipes all the way to the top. **DO NOT** cover any drain or pressure-relief valve(s).



Plumbing



## Condensate

### Condensate Drainage

It is recommended to install an external neutralizer. Contact a store where this water heater is purchased to purchase an external neutralizer.

### ⚠️ WARNING:

The condensate coming from the water heater is known to be acidic. Without an external neutralizer, metals contacting the condensate can be corroded.

Be sure the condensate runs freely to a drain and does not accumulate inside the water heater. In cold climates, precautions may need to be taken to ensure that the condensate drain does not freeze.

All condensation must be drained and disposed of per local codes and requirements.

If the condensate drain gets blocked, an error code will display on the remote control. If this occurs, the condensate drain must be cleared.

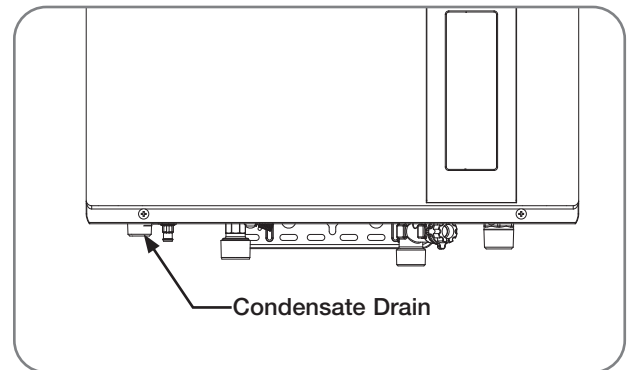
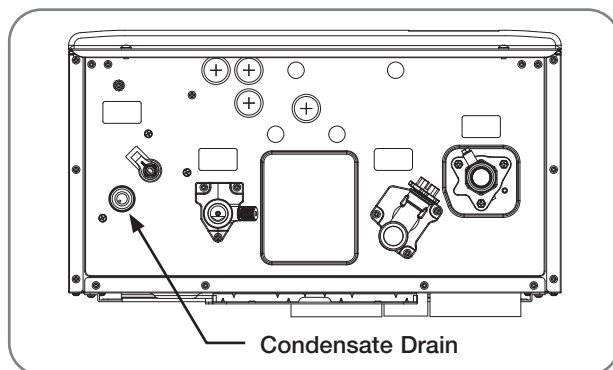
Use only PVC or CPVC pipe or flexible tube for the condensate drain line.

The drain pipe (along its entire length) must be at least the same diameter as the drain line.

The drain line should be as short as possible and have a downward slope toward the end.

The end of the drain pipe should be open to the atmosphere. The end should not be under water or other substances.

**DO NOT** connect the drain pipe directly to the drain sewer.



# INSTALLATION INSTRUCTIONS

## Gas Supply

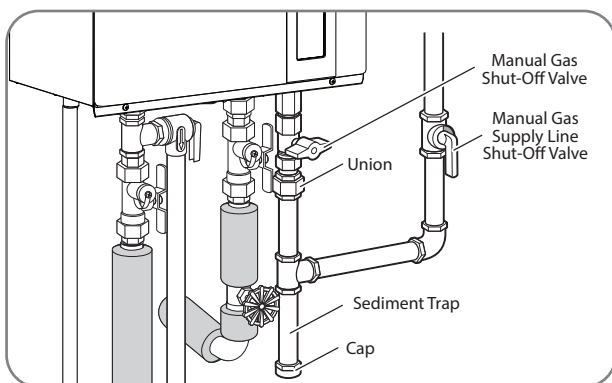
### Gas Supply System

#### ⚠ WARNING:

**DO NOT attempt to convert this water heater for use with a different type of gas other than the type shown on the rating plate. Doing so could result in death, personal injury, explosion or fire, product damage, and/or poor operating conditions or performance.**

#### NOTICE:

- Gas piping shall be in accordance with local utility company requirements and/or in the absence of local codes, use the latest edition of National Fuel Gas Code (NFGC), ANSI Z223.1. In Canada, use the latest edition of CAN/CSA B149.1, Natural Gas and Propane installation code.
- Apply a thin coat of pipe compound to all threaded male ends. Compound must be of the type resistant to the action of LP gas.
- To ensure proper water heater operation, the gas pipe and gas meter must be sized correctly.
- If flexible connectors are used, the minimum inside diameter must be 3/4" or greater and the rated capacity of the connector must be equal to or greater than the BTU capacity of the water heater. See manufacturer information for the gas connector. Lengths over 36 inches are not recommended.
- DO NOT use excessive force when tightening the pipe sections. Excessive force can damage the water heater, especially when Teflon pipe compound is used.



### Gas Piping

**Pipe-Sizing Procedure** – The gas supply system must be properly sized to ensure the proper operation of this tankless water heater as well as all the gas appliances on the system. Failure to ensure the gas system, (meter, regulators, and piping) are properly sized could result in improper operation of this or other gas appliances. Insufficient gas pressure/supply can cause pilot outages, lockouts, or operating conditions that could lead to an appliance failure, improper combustion, carbon monoxide, sooting, or fire. Gas line sizing is based on gas type, the pressure drop in the system, the gas pressure supplied, and the gas line type. For gas pipe sizing in the United States, refer to the National Fuel Gas Code, (NFPA 54, ANSI Z223.1). For Canadian gas pipe sizing, refer to the Natural Gas and Propane Installation Code CAN/CSA B149.1.

These simplified instructions only address low pressure gas systems using Schedule 40 Metallic Pipe (Black Iron). For hybrid gas systems, high pressure main lines with regulators at the appliances, gas systems piped with corrugated stainless steel tubing (CSST), or Propane gas systems.

### Determining the required regulator and gas meter size.

Find the BTU capacity of each appliance on the system. This information is located on a rating label attached to the appliance. Total the BTU of all the appliances together and divide that by the heating value of the fuel (for natural gas the average is 1,024 or 2,546 for propane). This will give you the total cubic feet per hour of gas required for the system.

At your gas meter/regulator there will be a rating plate that gives the cubic feet per hour capacity of that equipment. If the total gas required for the system is greater than the rating of the meter/

$$\text{Cubic Feet Per Hour (CFH)} = \frac{\text{Gas Input of Water Heater (BTU/HR)}}{\text{Heating Value of Gas (BTU/FT}^3\text{)}}$$

regulator then the local gas company will need to be contacted in order to upgrade the meter/regulator for the system.

# INSTALLATION INSTRUCTIONS



## Gas Supply

### Determining the required pipe size.

The gas system is designed to operate at a certain maximum pressure drop. A pressure drop greater than what is permissible can cause operational issues with the gas appliances. The National Fuel Gas Code (NFPA 54, ANSI Z223.1 2012) allows for three pressure drop levels, a 0.3 inch W.C., (see table 2); a 0.5 inch W.C., (see table 3) and a 3.0 inch W.C., (see table 4) pressure drop for natural gas. Only a 0.5 inch W.C. pressure drop is allowable with Propane (see table 5). For Canadian installations the maximum allowable pressure drop is 0.5 inch W.C., (see table 3).

Measure the inlet gas pressure to the system using a manometer. For Natural Gas, if the inlet pressure is less than 8.0 inches W.C. then use Table 2 or 3 for your gas pipe sizing. **Table 4 can only be used if the inlet gas pressure is 8.0 inches W.C. or greater.** Table 4 cannot be used for Canadian installations.

The gas piping system consists of a main trunk line that runs from the meter/regulator and branch lines that run from the trunk line to the individual appliances. A branch may carry gas for more than one appliance.

The trunk line must be sized to carry the entire load of all the gas appliances on the system. As with determining the meter/regulator size, total the BTU of all the appliances together and divide that by the heating value of the fuel (for natural gas the average is 1,024 or 2,546 for propane). This will give you the total cubic feet per hour of gas required for the trunk line. Measure the total length of the line Refer to Table(s) 2, 3, or 4 and find the number closest to but higher than the total cubic feet per hour requirement calculation. This will tell you the minimum size that the trunk line must be.

Each branch line must be sized to carry the load of the appliance(s) attached to it. If more than one appliance is on a branch total the BTU and as with the trunk line divide that by the heating value of the fuel. Refer to Table(s) 2, 3, or 4 and find the number closest to but higher than the total cubic feet per hour requirement calculation for the branch and appliance(s). This will tell you the minimum size for that branch line and appliance.

### Final Considerations

If this water heater is replacing an existing water heater, it is important to verify the capacity of the gas system. Check the capacity of the meter/regulator, and verify the pipe lengths and sizes.

An improperly sized gas system will cause operational issues with this water heater. Other appliances on the gas system may be affected as well.

Flexible Gas Connectors may be used however the BTU capacity of the connector must be checked. Each connector has a capacity label on it, verify that the connector has a BTU capacity greater than that of the water heater. An undersized flexible gas connector will cause operational issues with this water heater.

Half-inch gas lines are permissible provided the gas system meets certain requirements. **First, the gas pressure on the system must be 8.0 inch W.C. or greater.** Second the capacity of the pipe as outlined in Table 4 is followed. If the existing pipes are too small it could cause a pressure drop greater than 3.0 inch W.C. and will cause operational issues with this water heater as well as other gas appliances on the system.

# INSTALLATION INSTRUCTIONS



## Gas Supply

This is an example, in US, refer to current National Fuel Gas Code, NFPA 54 for correct pipe sizing chart, and in Canada, refer to current Natural Gas and Propane Installation Code CAN/CSA B149.1.

Table 2 - Pipe-Sizing - Natural Gas					
Schedule 40 Metallic Pipe (Black Iron)					
Inlet System Pressure: Less than 2 PSI (55 inches W.C.)					
Allowable Pressure Drop: 0.3 inches W.C.					
Specific Gravity : 0.60					
(Capacity in cubic feet per hour)					
Length	Pipe Size (Inches)				
	½	¾	1	1¼	1½
10	131	273	514	1,060	1,580
20	90	188	355	726	1,090
30	72	151	284	583	873
40	62	129	243	499	747
50	55	114	215	442	662
60	50	104	195	400	600
70	46	95	179	368	552
80	42	89	167	343	514
90	40	83	157	322	482
100	38	79	148	304	455
Information in this chart obtained from NFPA 54, ANSI Z223.1 - 2012 Table 6.2(a)					

Table 3 - Pipe-Sizing - Natural Gas					
Schedule 40 Metallic Pipe (Black Iron)					
Inlet System Pressure: Less than 2 PSI (55 inches W.C.)					
Allowable Pressure Drop: 0.5 inches W.C.					
Specific Gravity : 0.60					
(Capacity in cubic feet per hour)					
Length	Pipe Size (Inches)				
	½	¾	1	1¼	1½
10	172	360	678	1390	2090
20	118	247	466	957	1430
30	95	199	374	768	1150
40	81	170	320	657	985
50	72	151	284	583	873
60	65	137	257	528	791
70	60	126	237	486	728
80	56	117	220	452	677
90	52	110	207	424	635
100	50	104	195	400	600
Information in this chart obtained from NFPA 54, ANSI Z223.1 - 2012 Table 6.2(b)					

Table 4 - Pipe-Sizing - Natural Gas					
Schedule 40 Metallic Pipe (Black Iron)					
Inlet System Pressure: 8.0 inches W.C. or greater, but Less than 2 PSI (55 inches W.C.)					
Allowable Pressure Drop: 3.0 inches W.C.					
Specific Gravity : 0.60					
(Capacity in cubic feet per hour)					
Length	Pipe Size (Inches)				
	½	¾	1	1¼	1½
10	454	949	1,787	3,669	5,497
20	312	652	1,228	2,522	3,778
30	250	524	986	2,025	3,778
40	214	448	844	1,733	2,597
50	190	387	748	1,536	2,302
60	172	360	678	1,392	2,085
70	158	331	624	1,280	1,919
80	147	308	580	1,191	1,785
90	138	289	544	1,118	1,675
100	131	273	514	1,056	1,582
Information in this chart obtained from NFPA 54, ANSI Z223.1 - 2012 Table 6.2(c)					

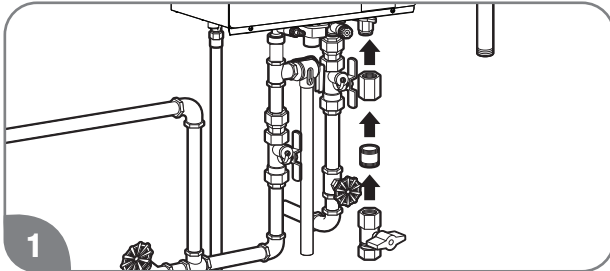
Table 5 - Pipe-Sizing - Undiluted Propane					
Schedule 40 Metallic Pipe (Black Iron)					
Inlet System Pressure: 11 inches W.C.					
Allowable Pressure Drop: 0.5 inches W.C.					
Specific Gravity : 1.5					
(Capacity in cubic feet per hour)					
Length	Pipe Size (Inches)				
	½	¾	1	1¼	1½
10	291	608	1150	2350	3520
20	200	418	787	1620	2420
30	160	336	632	1300	1940
40	137	287	541	1110	1660
50	122	255	480	985	1480
60	110	231	434	892	1340
80	101	212	400	821	1230
100	94	197	372	763	1140
125	89	185	349	716	1070
150	84	175	330	677	1010
Information in this chart obtained from NFPA 54, ANSI Z223.1 - 2012 Table 6.3(d)					

# INSTALLATION INSTRUCTIONS

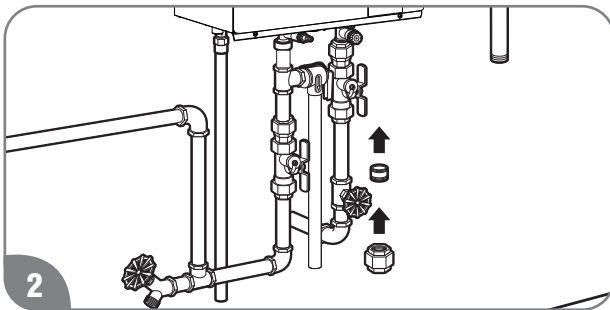


## Gas Supply

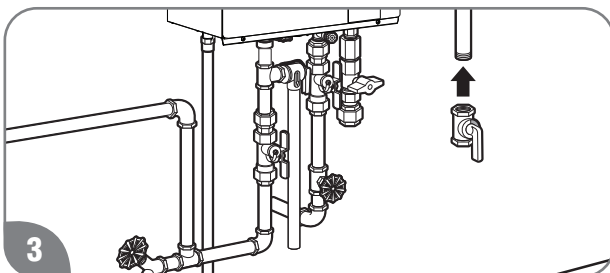
### Gas Supply Installation



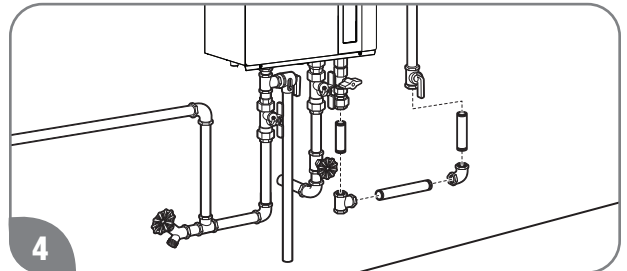
1 Install the manual gas appliance shut-off valve to the gas connection at the water heater.



2 Install a ground joint union or ANSI design-certified semi-rigid or flexible gas appliance connector to the open end of the manual gas appliance shut-off valve. The NFGC, ANSI Z223.1 and CAN/CSA B149.1 codes mandate the use of manual gas shut-off valve.



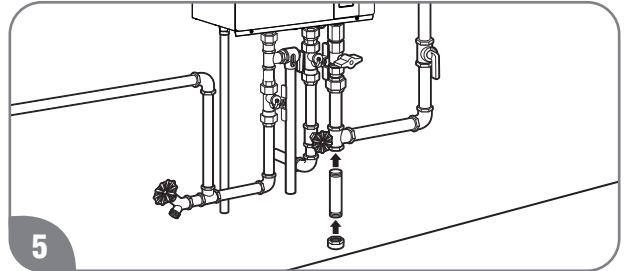
3 Install a manual gas supply line shut-off valve to the end of the gas supply line.



4 Using the proper-size piping, fittings, and components, build the gas supply line to the water heater.

### NOTICE:

The gas supply line should be a minimum of 3/4-in. (1.9-cm) black steel pipe or other approved gas piping material.



5 Install a sediment trap at the lowest portion of the gas line.

The inlet gas pressure to the water heater must NOT exceed 10.5 in. w.c. (2.6 kPa) for natural gas and 13 in. w.c. (3.2 kPa) for LP gas. For purposes of input adjustment, the minimum inlet gas pressure (with main burner on) is shown on the water heater rating plate. If high or low gas pressures are present, contact your gas supplier for correction.

# INSTALLATION INSTRUCTIONS

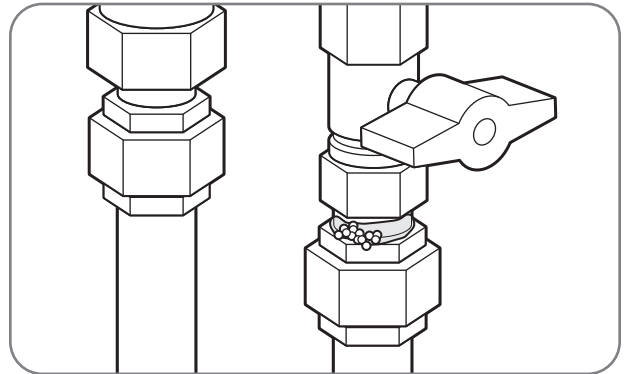
## Gas Supply

### Leak Testing

#### **⚠️ WARNING:**

Never use an open flame to test for gas leaks, because death, personal injury, and/or property damage can result.

The water heater and its gas connections **MUST** be leak-tested at normal operating pressures before the unit is placed in operation. These tests should also include all factory connections.

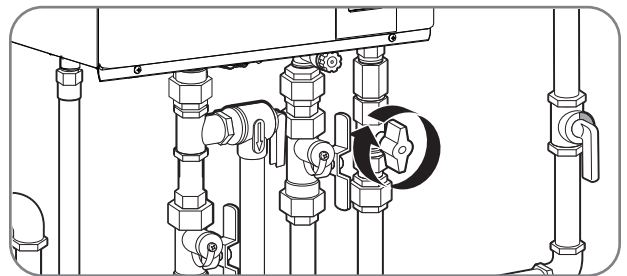


- Turn on the gas shut-off valve(s) to the water heater.
- Use a soapy water solution to test for leaks at all the connections and fittings. If bubbles are seen, it indicates a gas leak that must be corrected.
- Contact a qualified service technician.

### Pressure Testing the Gas Supply System

#### **⚠️ WARNING:**

If inlet gas pressure is out of allowable range [4.0" w.c. (1.0kPa) – 10.5" w.c. (2.6kPa)] for Natural Gas, or [8.0" w.c. (2.0kPa) – 13.0" w.c. (3.2kPa)] for LP gas, a gas pressure regulator must be installed to maintain the allowable inlet gas pressure.



The water heater and its manual gas shut-off valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of 1/2 psi (3.5 kPa).

The water heater must be isolated from the gas supply piping system by closing the manual gas shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa).

# INSTALLATION INSTRUCTIONS



## Gas Supply

### High-Altitude Installation

The water heater is certified for installations up to 7,800 ft. (610 m) above sea level. The input rating of this water heater is based on sea level operation. At higher elevations, the actual input rate may be lower than the value listed on the rating label due to the derating of Natural Gas and LP Gas.

### NOTICE:

For installations above 2000 ft. (610 m) elevation, contact a qualified service technician to make the proper altitude adjustments. See “Vent Length and High-Altitude DIP Switch Adjustments” for additional information.

### ⚠️ WARNING:

DO NOT install this water heater at elevations above 2000 ft. (610 m) without the proper adjustments. Please contact your installer, local gas supplier, place of purchase, or the Rheem Customer Service phone number listed in the “Call for Assistance” section.



## Electrical Wiring

### ⚠️ DANGER:

Shock Hazard – Before servicing the water heater, turn off the electrical power to the water heater at the main disconnect or circuit breaker. Failure to do so will result in death or serious personal injury.

### ⚠️ WARNING:

Field wiring connections and electrical grounding must comply with local codes or, in the absence of local codes, with the latest edition of the National Electrical Code, ANSI/NFPA 70, or in Canada, Canadian Electrical Code, CAN/CSA C22.1, Part 1.

### ⚠️ CAUTION:

Label all wires prior to disconnecting is recommended. Wiring errors can cause personal injury, product damage, and/or dangerous operating conditions. Verify correct operation after servicing.

### NOTICE:

- DO NOT connect power until venting installation is complete (see Venting Installation).
- Wait ninety (90) seconds after power is connected for the first time to initiate operation of the water heater.

Power consumption is up to 100 Watts during normal operation, 3-5 Watts during standby, waiting to run, and up to 200 Watts during the freeze protection operation.

### Power Cord

The electric power supply requirement for this water heater is 120 VAC/60 Hz, 2 amps.

A dedicated circuit is recommended for the water heater. DO NOT connect to a GFCI or AFCI circuit. Multiple units may be connected to a single circuit up to the circuit rating.

DO NOT use 3-prong to 2-prong adapters. DO NOT use power strips or multiple outlet adapters.

All direct-vent gas models come with a 3-prong power cord. Only use this power cord and a matching grounded electrical outlet.

All outdoor gas models DO NOT come with a power cord. Only hard-wire to an appropriate power outlet with a ground terminal.

Keep any excess length of the power supply cord on the outside of the water heater.

If local codes require hard-wiring, see instructions for “Hard-Wiring the Electrical Connections” below.

### Hard-Wiring the Electrical Connections

Wiring should be performed by a qualified electrician in accordance with local codes.

The water heater requires a properly grounded 120 VAC/60 Hz dedicated power supply. Multiple water heaters may be connected to a single circuit up to that circuit’s rating.

DO NOT connect grounding wire to water pipes, gas pipes, telephone cables, lighting conductor circuits, or to any other grounding circuits that require a GFCI or AFCI (arc fault circuit interrupter).

An ON/OFF switch must be provided and installed for the incoming 120 VAC power supply.

Wire the water heater exactly as shown in the wiring diagram. This wiring diagram can also be found inside the water heater cover panel.

The green screw is provided in the enclosure for a grounding connection.

Connect the live wire to the black wire and neutral wire to the white neutral wire.





# INSTALLATION INSTRUCTIONS



## Insulation Blankets

In general, insulation blankets for external use on gas water heaters are not necessary. The purpose of an insulation blanket is to reduce the standby heat loss from the water heater's storage tank. Since these water heaters **DO NOT** store water, they eliminate the need for the insulation blanket.

### **▲WARNING:**

Never cover the air inlet, flue outlet, or operating and warning labels attached to the water heater. Covering these components will cause dangerous operating conditions that can lead to death, personal injury, property damage, and/or product damage.

The manufacturer's warranty does not cover any damage or defect caused by insulation, insulation attachment, or use of any type of energy-saving or other unapproved devices (unless authorized by the manufacturer). The use of unauthorized energy-saving devices can result in death, personal injury, and/or property damage. The manufacturer disclaims any responsibility for such loss or injury resulting from the use of such unauthorized devices.



## Installation Precautions

Follow all installation instructions covered in this manual.

Check the inlet gas pressure to make sure it is within the range specified on the rating plate.

Make sure there is adequate air for combustion and ventilation as described on "Venting" in this manual.

Maintain proper clearances to combustibles and noncombustibles as specified on the rating plate.

Make sure the venting system complies with local codes, National Fuel Gas Code (ANSI Z223.1/NFPA 54) or Natural Gas and Propane Installation Code (CAN/CSA B149.1), and the guidelines found on "Venting" in this manual.

Make sure the heater and remote control are properly fastened to their mounting surfaces.

Make sure the heater and remote control are wired in accordance with all regulations and codes without any exposed connections.

Contact the local gas company to make sure the gas meter and gas piping are adequately sized.

Use only Teflon tape on all male water line connections and fittings.

**DO NOT** block or restrict any outside air intake openings.

**DO NOT** remove the front cover unless absolutely necessary. This should only be done by a qualified service technician.

**DO NOT** install this product where standing water may occur.

**DO NOT** use pipe dope on water line connections and fittings.

**DO NOT** use Teflon tape on gas line connections and fittings in US.

# INSTALLATION INSTRUCTIONS



## Installation Checklist

### A. Water Heater Location

- Indoor water heaters must be installed indoors.
- Outdoor water heaters must be installed outdoors.
- Close to area of ventilation termination (indoor models).
- Protected from freezing temperatures.
- Proper clearance from combustible material observed.
- Sufficient fresh air supply for proper operation of water heater.
- Air supply free of corrosive elements and flammable vapors.
- Provisions made to protect area from water damage.
- Sufficient room to service heater.
- Combustible materials, such as clothing, cleaning materials, and rags clear of the heater and vent piping.
- Water heater is properly secured to the wall.

### B. Vent (Indoor Models)

- Vent pipe material is ULC S636 approved and manufacturer-approved.
- Horizontal air intake pipe and exhaust pipe have a 1/4" per foot UPWARD slope toward the vent terminal.
- Vertical venting is installed as described in the "Vertical Vent Installation section."
- Connection(s) securely fastened together with cement and airtight.
- All vent runs are properly installed.
- Vent terminal is properly installed.
- Maximum vent length is observed.
- DIP Switches are properly adjusted per vent length and elevation

### C. Water Supply/Relief Valve

- Water supply has sufficient pressure.
- Air has been purged from the water heater and the piping.
- Water connections tight and free from leaks.
- Water filter is clean and in place.
- All piping has been assembled as described on "Water Supply".
- Water pipes are insulated and protected from freezing, if necessary.
- Pressure-relief valve properly installed with discharge line running to open drain.
- Discharge line protected from freezing, if necessary.

### D. Gas Supply

- Gas type matches listing on rating plate.
- Gas supply pressure is sufficient for the water heater.
- Gas line equipped with shut-off valve, union and sediment trap as described on "Gas Supply System".
- Approved pipe-joint compound has been used on all gas pipe connections.
- All connections and fittings have been checked for leaks with a soapy water solution.
- Gas company inspected installation (if required).

### E. Electrical Wiring

- Supply cord and/or wiring meets all local codes, National Electrical Code, ANSI/NFPA 70, in the U.S., or Canadian Electrical Code, CAN/CSA C22.1, Part 1, in Canada.
- Voltage matches listing on rating plate.
- Water heater is properly grounded.

### F. Condensate

- Condensate drain is properly routed to an external neutralizer or corrosive resistant drain, if applicable.

# USING YOUR WATER HEATER



## Activating the Water Heater

### **⚠️ WARNING:**

Before operating this water heater, be sure to read and follow the instructions on the following label, all labels on the water heater, and the "Important Safety Information" section in this manual. Failure to do so can result in unsafe operating conditions that can result in death, personal injury, property damage, and/or product damage.

### FOR YOUR SAFETY READ BEFORE OPERATING

**⚠️ WARNING :** If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance does not have a pilot. It is equipped with an ignition device which automatically lights the burner. DO NOT try to light the burner by hand.
- B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.  
**WHAT TO DO IF YOU SMELL GAS**
  - DO NOT try to light any appliance. ● DO NOT touch any electric switch; DO NOT use any phone in your building. ● Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions. ● If you cannot reach your gas supplier, call the fire department.
  - DO NOT return to your home until authorized by the gas supplier or fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. DO NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

### OPERATING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. Turn off all electric power to the appliance.
3. DO NOT attempt to light the burner by hand.
4. Turn the Gas Shutoff Valve located on the outside of the unit clockwise ↻ to the "OFF" position.
5. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
6. Turn the Gas Shutoff Valve located on the outside of the unit counterclockwise ↻ to the "ON" position.
7. Turn on all electric power to the appliance.
8. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

GAS SHUTOFF VALVE



OPEN



CLOSE

### TO TURN OFF GAS TO APPLIANCE

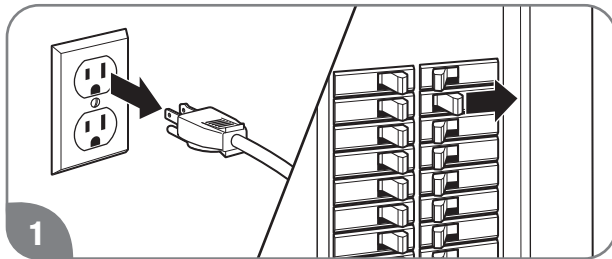
1. Turn off all electric power to the appliance if service is to be performed.
2. Turn the Gas Shutoff Valve located on the outside of the unit clockwise ↻ to the "OFF" position.

# USING YOUR WATER HEATER

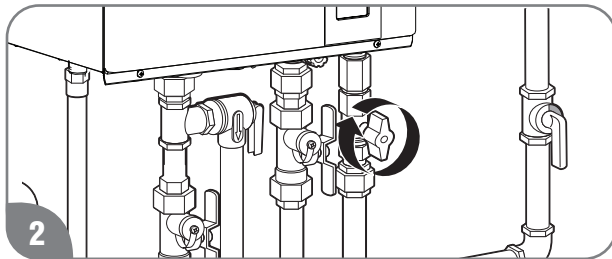
## Activating the Water Heater

### Operating Instructions

Read, understand, and follow the safety information listed on the operating label and in the “Important Safety Information” section in this manual.



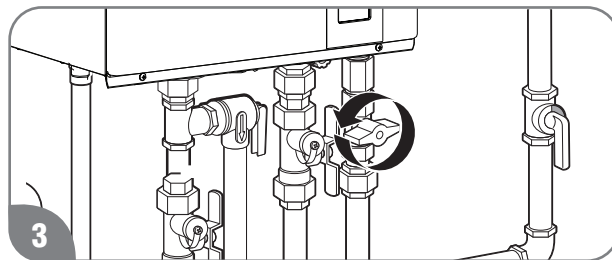
Disconnect all electric power to the water heater.



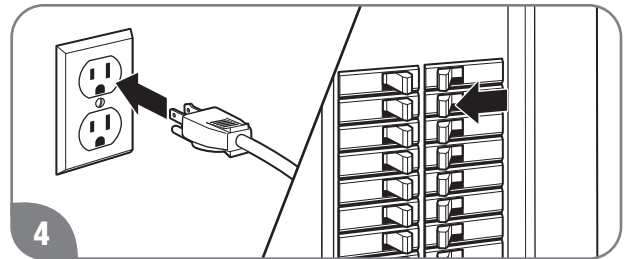
Turn the gas shut-off valve clockwise to the OFF position. This valve is located on the outside of the water heater. Wait 5 minutes to clear any gas. If you don't smell gas, proceed to Step 3.

### NOTICE:

If you smell gas, STOP and follow the safety instructions listed under B on the operating label or on the front cover of this manual.



Turn the gas shut-off valve counterclockwise to the ON position.



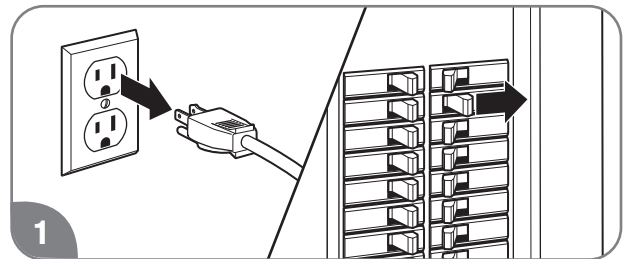
Turn on all electric power to the water heater. The remote control must be powered on prior to operating the water heater.

### ⚠ WARNING:

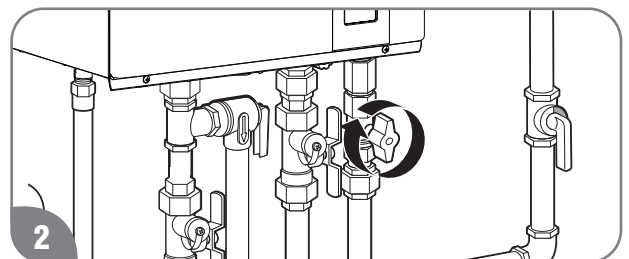
**DO NOT attempt to light the burner by hand. Lighting the burner by hand is an unsafe operating condition that can result in death, personal injury, property damage, and/or product damage.**

If the water heater burner will not light, turn off the water heater as described below and call your service technician or gas supplier.

### Shutting Off the Water Heater



Disconnect all electric power to the water heater.



Turn the gas shut-off valve clockwise to the OFF position.

# USING YOUR WATER HEATER



## Safety Precautions

### ⚠️ WARNING:

- Flammable vapors can be drawn by air currents from surrounding areas to the water heater. Vapors can ignite causing death, personal injury, or product damage.
- DO NOT store or use flammable or combustible materials (gasoline, paint thinner, adhesives, solvents, newspapers, rags, mops, etc.) in the vicinity of the water heater or any other gas appliance. If they must be used, open doors and windows for ventilation, and shut off all gas-burning appliances, including their pilot lights.
- DO turn off manual gas shut-off valve if water heater has been subjected to overheating, fire, flood, physical damage, or if the gas supply fails to shut off.
- DO NOT turn on water heater unless water and gas supplies are completely opened.
- DO NOT turn on water heater if cold water supply shut-off valve is closed.
- If there is any difficulty in understanding or following the operating and care instructions in this manual, it is recommended that you contact a qualified service technician to perform the work.



## Setting the Water Temperature

### ⚠️ DANGER:

Water temperatures above 125°F (52°C) will result in death and/or severe burns from scalding.

Safety and energy conservation are factors to be considered when selecting the water temperature setting. The temperature of the water in the water heater can be regulated by setting the temperature on the front of the remote control. Be sure to read and follow the warnings outlined on the pictured label.

The recommended setting for the water temperature is 120°F (49°C). The remote control has been preset and shipped at the recommended temperature setting.

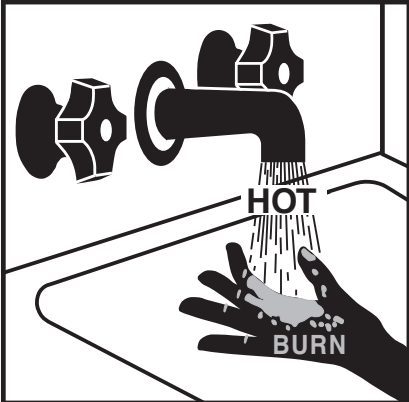
Safety factors should be considered whenever altering the water temperature setting. The chart below may be used as a guide in determining the proper water temperature for your home.

### Time/Temperature Relationship in Scalds

Water Temperature	Time to Produce a Serious Burn
120°F (49°C)	More than 5 minutes
125°F (52°C)	1 1/2 to 2 minutes
130°F (54°C)	About 30 seconds
135°F (57°C)	About 10 seconds
140°F (60°C)	Less than 5 seconds
145°F (63°C)	Less than 3 seconds
150°F (66°C)	About 1 1/2 seconds
155°F (68°C)	About 1 second

Table courtesy of Shriners Burn Institute

**⚠️ DANGER**



Water temperature over 125°F (52°C) can cause severe burns instantly or death from scalds.

Children, disabled and elderly are at highest risk of being scalded.

See instruction manual before setting temperature at water heater.

Feel water before bathing or showering.

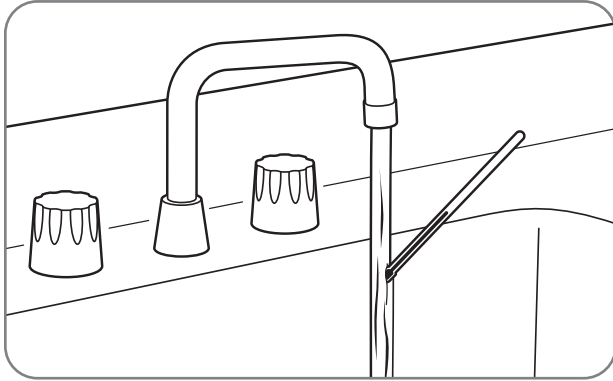
Temperature limiting valves are available, see manual.

Use Instructions

# USING YOUR WATER HEATER

Maximum water temperature occurs while the water heater burner is ON. To determine the water temperature:

Turn on the hot water faucet and place a thermometer in the water stream.



## NOTICE:

Water temperature at the faucet may vary depending on the season and the length of pipe from the water heater.

The display control temperature range is between 100°F (38°C) and 140°F (60°C). To adjust the temperature to a desired setting, press the UP or DOWN adjustment button on the face of the remote control. The new temperature set point will show on the LED display.

## NOTICE:

The temperature set point by default cannot be increase above 120°F (49°C).

To achieve temperatures above 120°F (49°C), refer page 56 in this Use & Care manual.

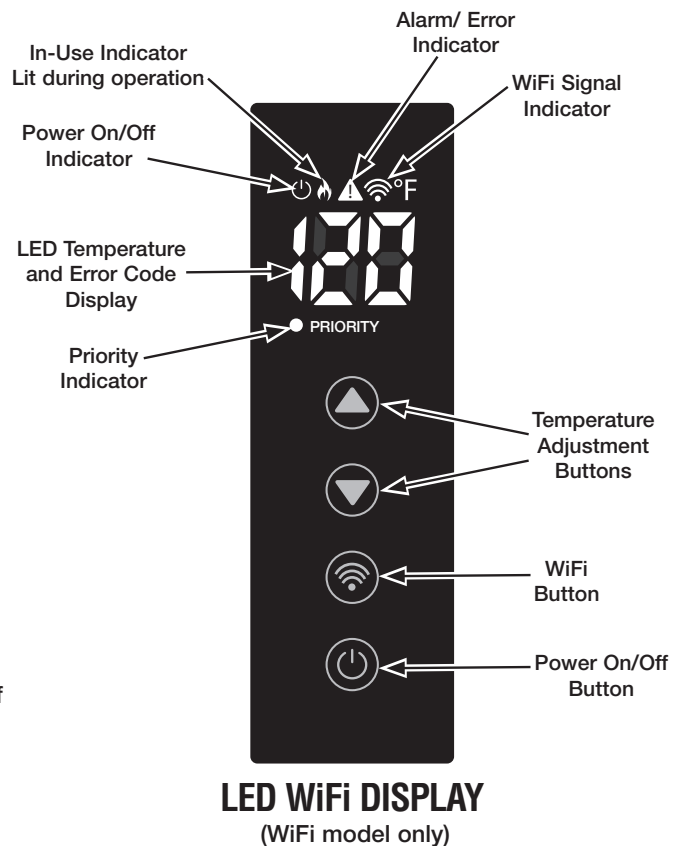
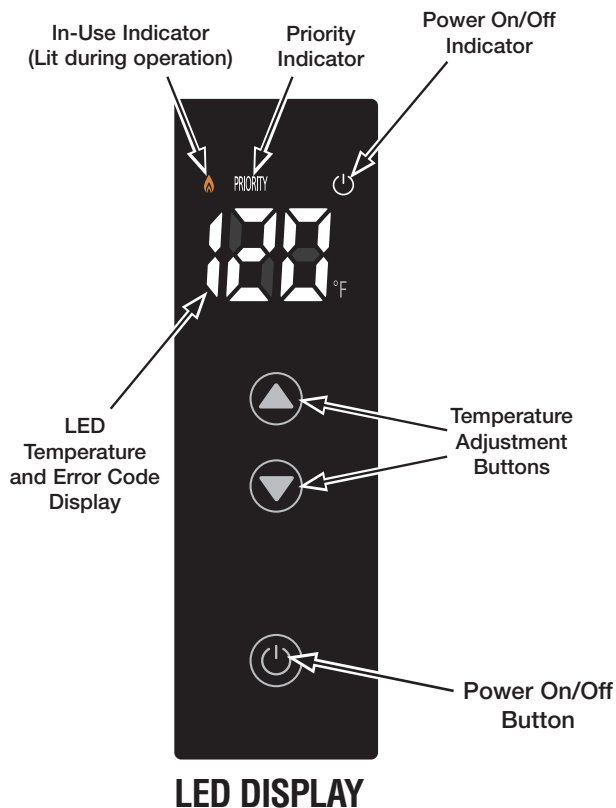
The water heater may not operate with a small water flow. Increase the water flow and recheck. If it still does not operate with the hot water faucet completely open, increase the temperature setting on the water heater.

## Water Heater Facts

### ⚠ DANGER:

Water temperatures above 125°F (52°C) will result in death and/or severe burns from scalding.

- The hottest temperature water will be at the faucet closest to the water heater.
- Always remember to test the water temperature with your hand before use.
- Always supervise young children or others who are incapacitated.
- The water heater is equipped with a device that will shut off the gas supply to the burner if the water heater exceeds normal operating temperatures.
- Any water heater that has been subjected to fire, flood, physical damage, or been under water should be turned off at the manual gas shut-off valve and not used until it has been checked by qualified service personnel.



# USING YOUR WATER HEATER



## Setting the Water Temperature

### ⚠️ WARNING:

Improper adjustment, alteration, service, or maintenance can result in death, personal injury, property damage, and/or product damage.

### Maximum Temperature Adjustment by the Main Display Control

### ⚠️ DANGER:

Water temperatures above 125°F (52°C) will result in death and/or severe burns from scalding.

### ⚠️ WARNING:

Refer to chart below and the scald potential warnings on page 4 on this manual before making an adjustment. Changing this setting is done at your own risk.

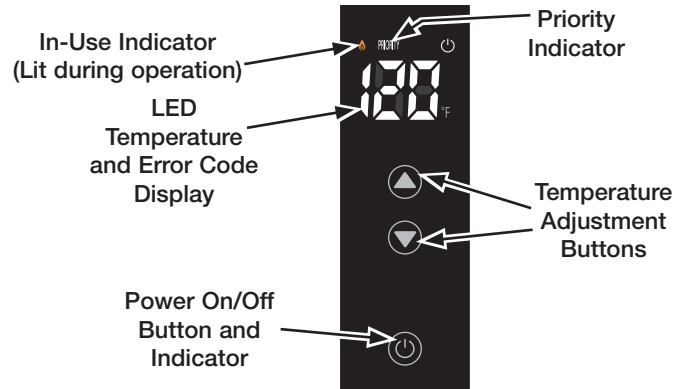
### Time/Temperature Relationship in Scalds

Water Temperature	Time to Produce a Serious Burn
120°F (49°C)	More than 5 minutes
125°F (52°C)	1 1/2 to 2 minutes
130°F (54°C)	About 30 seconds
135°F (57°C)	About 10 seconds
140°F (60°C)	Less than 5 seconds
145°F (63°C)	Less than 3 seconds
150°F (66°C)	About 1 1/2 seconds
155°F (68°C)	About 1 second

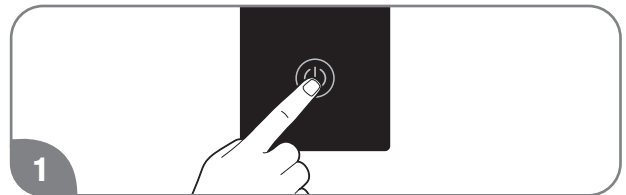
Table courtesy of Shriners Burn Institute

Residential water heater temperatures can be adjusted up to 140°F (60°C). DO NOT perform the following adjustment if a setting of up to 140°F (60°C) is not required.

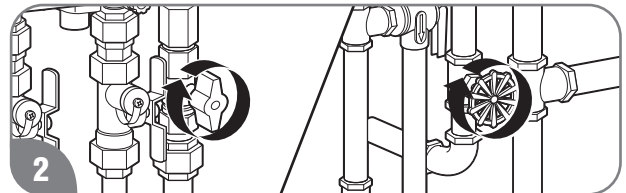
Temperature Conversion Chart °F/°C							
°F	100	102	104	106	108	110	112
°C	38	39	40	41	42	43	44
°F	114	116	118	120	125	130	140
°C	46	47	48	49	52	54	60



To adjust the set temperature above 120°F (49°C), please refer the following steps.



1 Turn on the control.



2 Turn off the gas and water to the water heater by closing the shut-off valves.



3 Press the UP adjustment button repeatedly until 120°F (49°C) shows in the LED display.

### NOTICE:

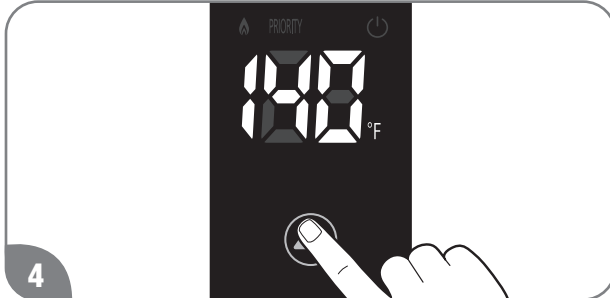
LED display only shows °F.

Start/Adjust



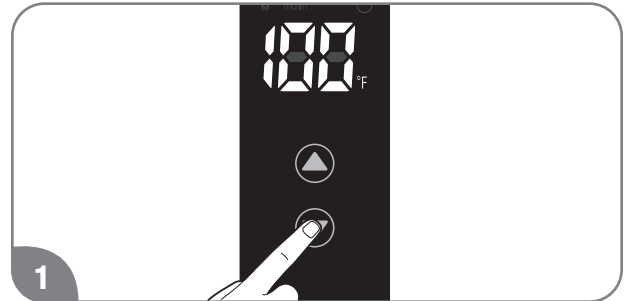
# USING YOUR WATER HEATER

## Setting the Water Temperature

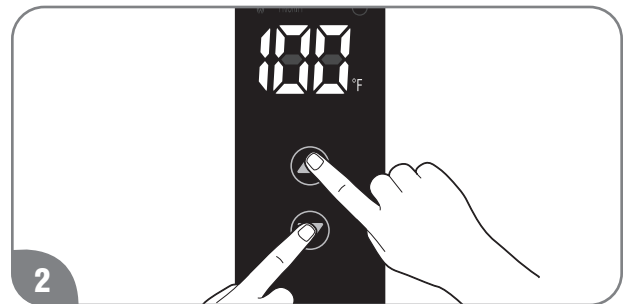


4 While "120" is shown on LED display, press and hold UP button for 5 seconds. "140" is shown on the LED display.

If need to disable the ability to set above 120°F, please refer the following steps:





1 Press DOWN button until "100" appears.



2 Press and hold DOWN button for 2 seconds. While holding the DOWN button, press the UP button. Release both buttons.

## WiFi Setup

1. Download the EcoNet app to your mobile device and ensure that the device is connected to the WiFi network.
2. Press and hold the WiFi button  on the display until the WiFi indicator  begins flashing .
3. Open the EcoNet application and follow the instructions on the application to connect the water heater.

# USING YOUR WATER HEATER



## Recirculation Pump Control

Local codes or plumbing authority requirements may vary from the instructions or diagrams provided in this manual and take precedence over these instructions.

### Recirculation Mode

Your tankless water heater has the ability to control an external recirculation pump which recirculates the water in the plumbing system to provide hot water more quickly when a faucet is opened.

Two modes are available:

- Timer recirculation (Energy Saver Mode)
- Timer recirculation (Performance Mode)

If this water heater has wifi capability, additional two modes are available:

- On-Demand recirculation
- Schedule recirculation

Information for setting up these modes can be found in the EcoNet App.

### NOTICE:

**Recirculation control is for residential application only. Recirculation control cannot be used with an air handler or with multiple water heater installations. The maximum temperature setting is 140°F (60°C) in recirculation control.**

### Pump Requirements

Voltage: 120V, 60Hz

In-rush current: Less than 2.5 amps

Amperage: less than 2.0 amps

### **⚠ WARNING:**

**A control board can be damaged if amperage exceeds 2.0 amps.**

### Pump Size

The pump should be sized for about 2.5 gpm at the pressure drop through the tankless water heater and the supply and return plumbing in the recirculation loop. Contact service department listed on page 76 of this use and care manual if you need more information.

### Recommend size and length for recirc. line

To conserve energy and minimize heat loss, insulation for hot water lines is recommended.

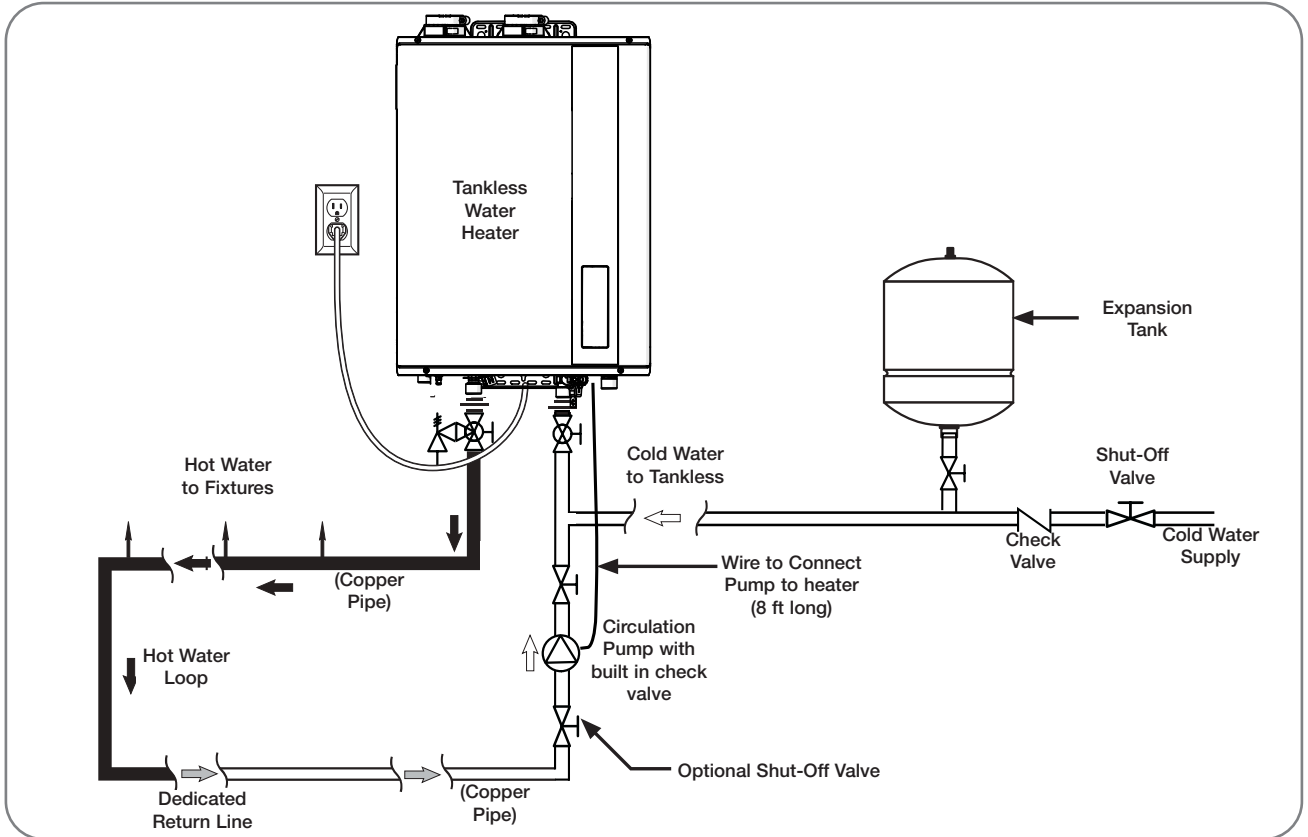
Maximum allowable equivalent pipe Length*		
Pipe Diameter (Copper pipe)	¾"	½"
Pipe length	400 ft.	100 ft.

\*Equivalent pipe length includes hot water line, return lines and all fittings.

# USING YOUR WATER HEATER



## Recirculation Pump Control

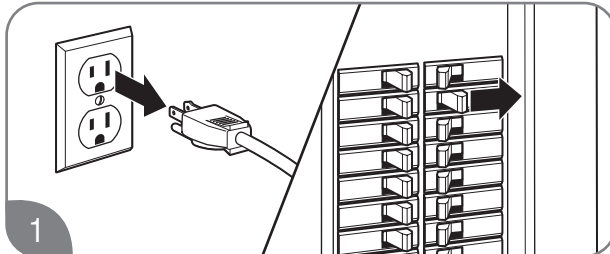


# USING YOUR WATER HEATER

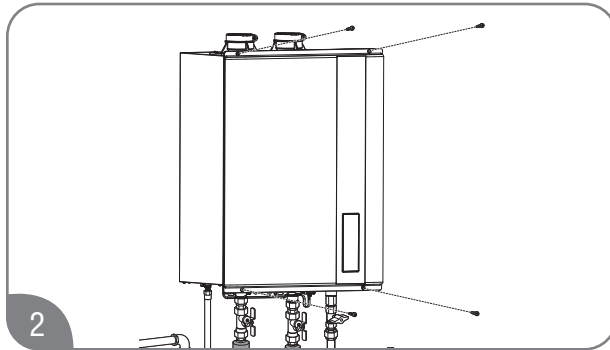


## Recirculation Pump Control

### Installation



1 Disconnect all electric power to the water heater.

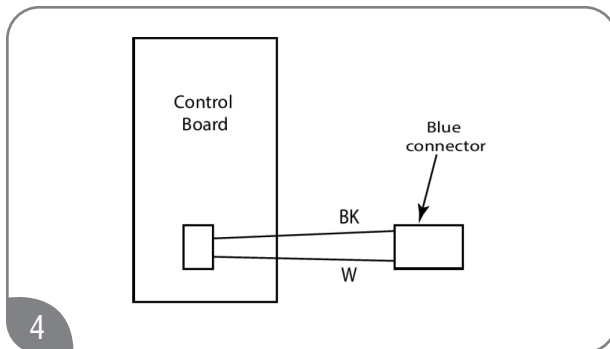


2 Remove the front cover panel on the water heater.

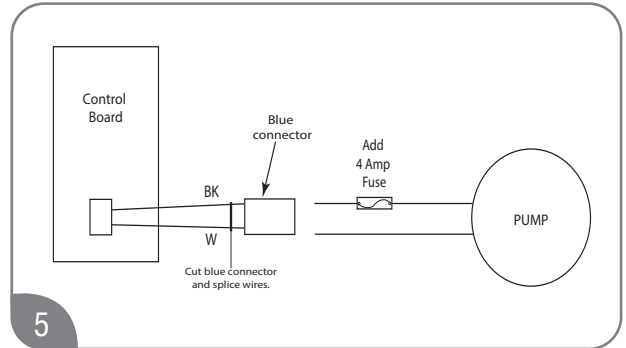
Install the recirculation pump on the return line according to the pump manufacturer installation instructions. Install a check valve in the return line as shown in typical recirculation pump installation if one is not integrated into the pump. See "Typical Recirculation Pump Installation".

**NOTICE:** Some pumps may have built in check valve.

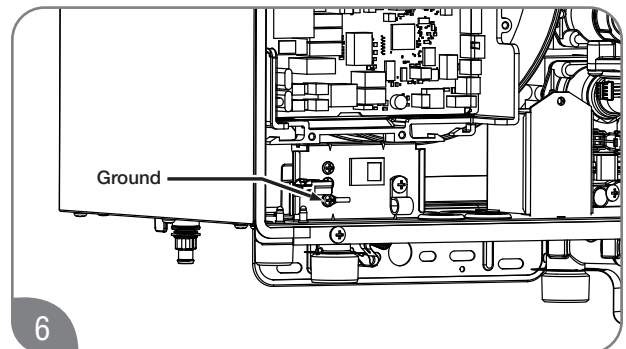
3



4 The wire harness for the recirculation pump is bundled with the wire harness from the control board. Find a blue connector with a black and a white wire.



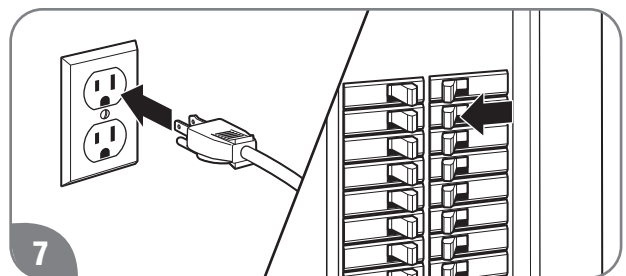
5 To connect to the pump, cut the blue connector, splice the wires, and add a 4 amp fuse to the hot wire of the pump. Rheem recirculation pump kit includes a molex connector and a 4 amp fuse so splicing wires is not required.



6 Connect the ground wire from the pump to a screw at the base of the water heater cabinet.

### **NOTICE:**

Follow any applicable electrical code and the pump manufacture installation instruction referring to the Pump Electrical Connection Diagram in Step 5 of these instructions.



7 Plug in the power cord or reconnect the power supply at the circuit breaker box.

Recirculation Pump

# USING YOUR WATER HEATER



## Recirculation Pump Control

### Recirculation Operation

#### Timer mode

The water heater is turned ON when the recirculation pump starts operation. The water heater produces hot water at the setting temperature. When the return water temperature reaches approximately 15°F (8°F) below the setting temperature, the water heater and the pump will turn OFF. The cycle will restart at the approximate time based on the temperature thermistor reading.

#### Energy Saver mode

The Energy Saver mode operates as below:

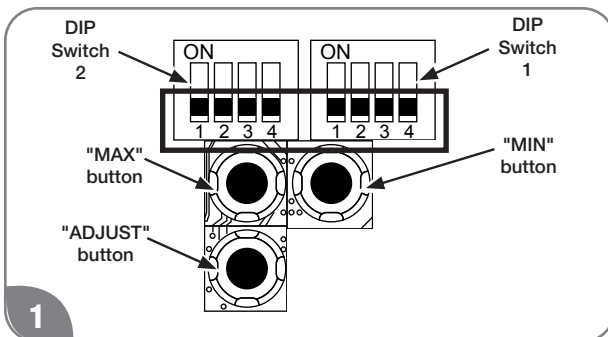
- Less Energy consumption due to fewer pump cycles
- Pump cycles ON Every 30 to 60 minutes

#### Performance mode

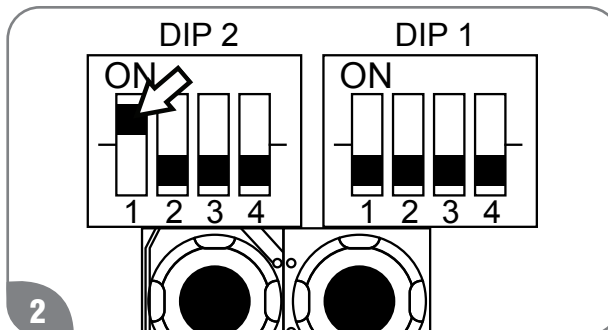
The Performance mode operates as below:

- Higher energy consumption due to more pump cycles
- Pump cycles ON every 15 to 30 minutes

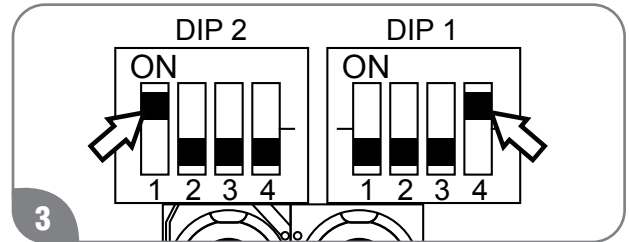
### Mode Setting -Timer Mode-



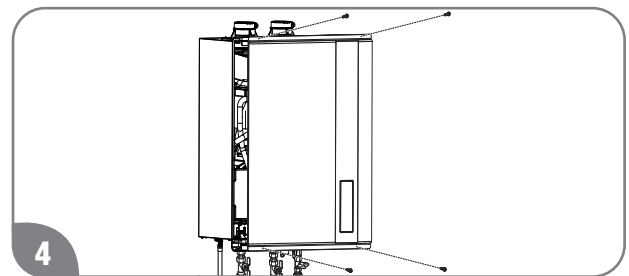
The factory setting for the switch should all be in the OFF position (Down).



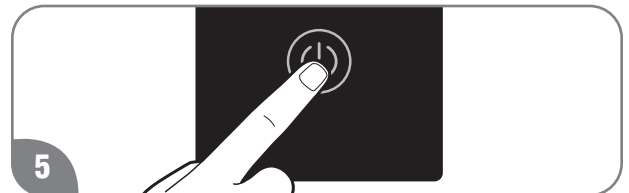
Change the first switch on "DIP switch 2" to the ON position (UP). Performance mode is selected.



To select Energy Saver mode, change the fourth switch on "DIP switch 1" to the ON position (UP).



Replace the front cover panel.



Turn on all electric power to the water heater.

Setting Temp [°F]	Typical Pump ON Intervals [Min]	
	Performance	Energy Saver
140	15	30
135	15	30
130	15	30
125	15	30
120	16	31
118	17	33
116	18	35
114	19	38
112	20	40
110	22	44
108	24	47
106	26	51
104	28	56
102	31	62
100	35	69

Actual pump ON intervals may vary based on the setting temperature, insulation, and heat loss in the system.

# USING YOUR WATER HEATER



## Recirculation Pump Control

### Recirculation Operation –

#### On-Demand mode-

If the On-Demand mode is used, the water heater needs wifi capability.

If the water heater is NOT a WiFi model, you cannot use the On-Demand mode.

To enter On Demand Mode

- Ensure Switch 1 on DIP 2 and switch 4 on DIP 1 are off.
- In less than one minute.
  - Turn Switch 1 on DIP 2 on-off-on-off.
  - Press the Adjust Button
  - The PCB LED will flash one time

The unit is now in on demand mode.

#### **NOTE:**

**If the water heater does not have WiFi capability, the built-in display needs to be replaced with the display including WiFi capability.**

Rheem offers the display including wifi capability.

See the Parts and Accessories catalog for more information.

When set to On-Demand mode, the recirculation pump is ON for 5 minutes when the water heater receive the signal form the application on smart phone.

### Mode setting – On-Demand mode-

Please refer to EcoNet app for instructions.

### Recirculation Operation – Schedule mode-

If the Schedule mode is used, the water heater needs wifi capability.

If the water heater is NOT a WiFi model, you cannot use the Schedule mode.

#### **NOTE:**

**If the water heater does not have WiFi capability, the built-in display needs to be replaced with the display including WiFi capability.**

Rheem offers the display including WiFi capability.

See the Parts and Accessories catalog for more information.

When set to Schedule mode, the recirculation pump is ON according the setting schedule on the application on smart phone

### Mode setting – Timer mode-

To use Schedule mode, the water heater should be set to Performance mode or Timer mode.

# USING YOUR WATER HEATER

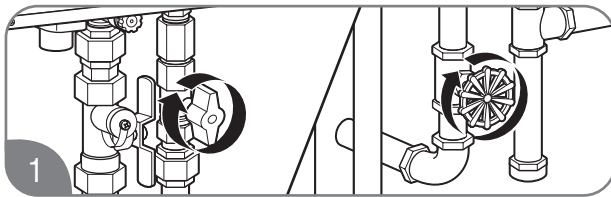
## Water Saving Control

Water saving control is optional and is inactive as default. To activate this control, appropriate procedures must be followed.

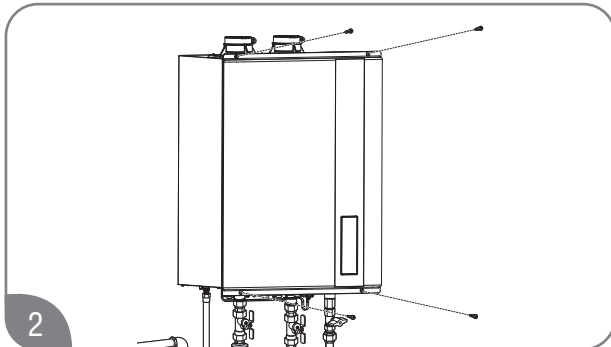
Water saving control can reduce waste water at initiation of hot water demand by reducing flow until outlet hot water reaches set temperature.

It is recommended to turn ON this control if the water heater is installed in a drought area or anywhere water conservation is needed.

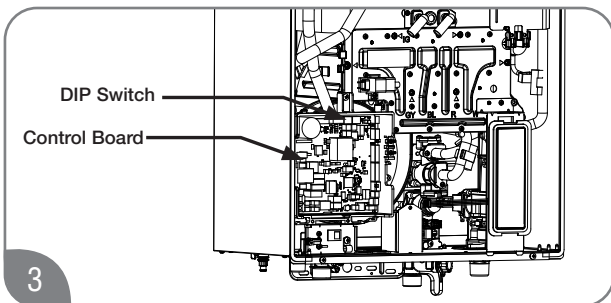
Follow the steps below to turn ON the water saving control.



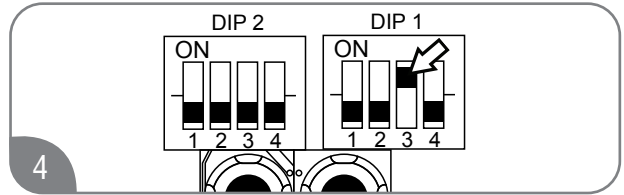
Turn off the gas and water to the water heater by closing the shut-off valves.



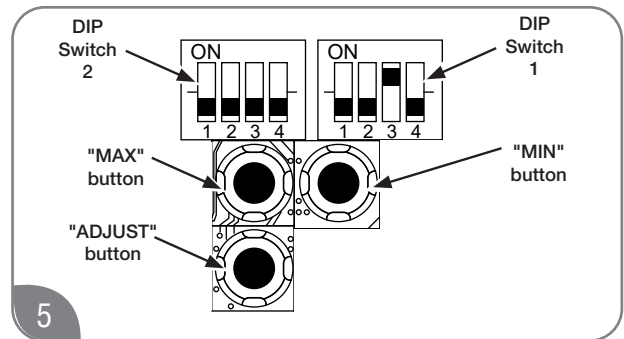
Remove the front cover panel on the water heater and ensure the remote is OFF.



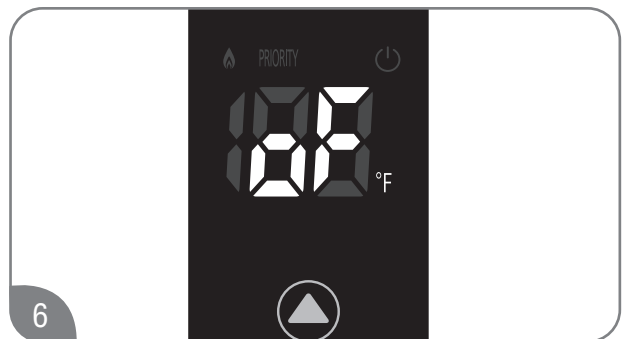
Find DIP Switch 1 located in the top-right portion at the control board. The switch labeled "DIP 1" is the right-most set of switches. If any DIP switches are on for venting/altitude settings, switch them to the OFF position.



Change the third switch on "DIP 1" to the ON position (UP).



Within 30 seconds of turning the third switch ON, press the "Max button" or "Min button" on the control board to set the activation of this control.



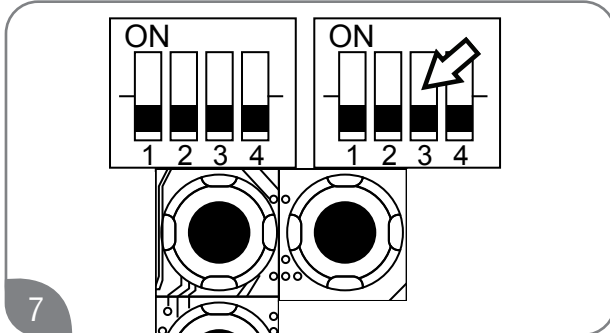
LED display on the built-in control shows "oF".

Within the next 30 seconds, the display/control board will show the water saving control setting. The LED identifications are below

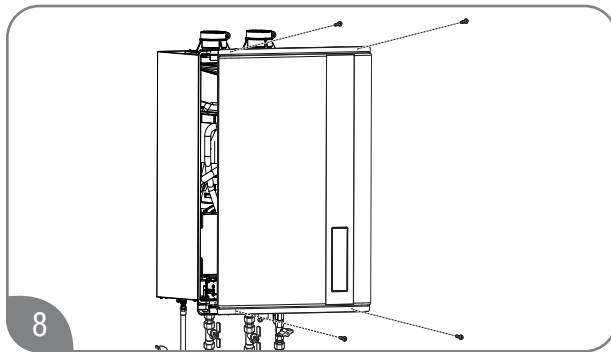
WATER SAVING CONTROL	CONTROL BOARD LED (RED)	DISPLAY LED
ON	Once Flashing	ON
OFF	Twice Flashing	OF

# USING YOUR WATER HEATER

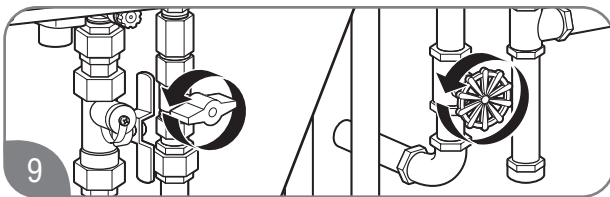
## Water Saving Control



After setting the activation of this control, change the third switch on “DIP 1” to the OFF position (DOWN). Be sure to reapply any venting/altitude DIP switch settings.



Replace the front cover panel and turn the remote ON. Turn the remote on before turning the water supply on.



Turn on the gas and water to the water heater by opening the shut-off valves.



# CARING FOR YOUR WATER HEATER



## Water Heater Inspections

### Venting System (Direct Vent Only)

The venting system should be inspected annually to ensure all of the vent sections are secure and airtight. Qualified service personnel are familiar with vent system inspections and may be contacted for advice.

#### **⚠️WARNING:**

**DO NOT** operate the water heater if the vent system shows signs of leaking exhaust. Leaking exhaust could lead to death, personal injury, and/or product failure.

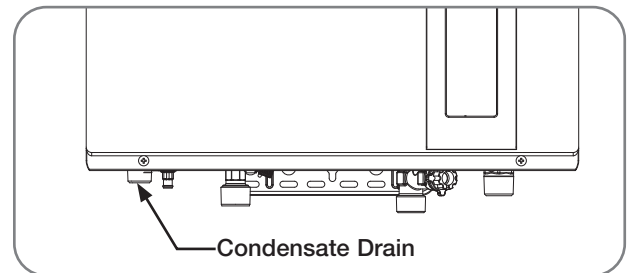
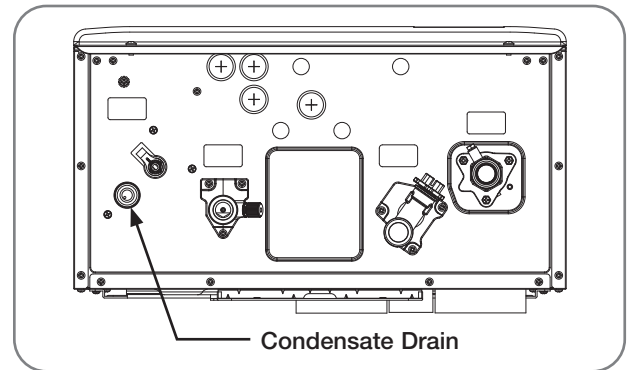
#### **⚠️DANGER:**

**Shock Hazard** – Make sure the electrical power to the water heater is **OFF** before removing protective cover. Electric shock will cause death or serious personal injury.

### Condensate Collector

#### **⚠️CAUTIONS:**

- Condensate is known to be acidic; refer to federal, state (provincial), and local codes for proper handling and discharge methods.
- **DO NOT** operate without the condensate collector drain connected and routed to an external neutralizer or proper drain that can handle corrosive condensate. This could cause the system to malfunction or fail.



On a regular basis, inspect the condensate drain line to ensure the condensate is draining properly.

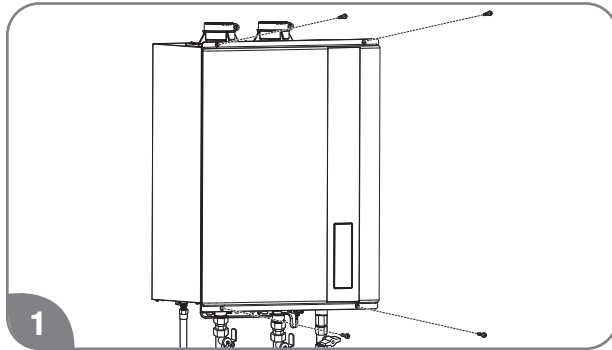
# CARING FOR YOUR WATER HEATER

## Burner

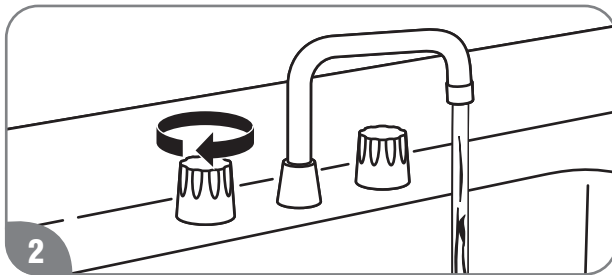
It is recommended the burner be annually inspected by a qualified service technician.

### **⚠ DANGER:**

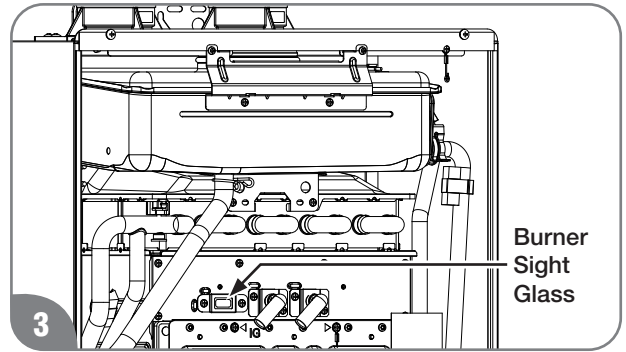
**Shock Hazard** – Removing the front cover panel exposes you to live electricity. Electric shock will cause death or serious personal injury.



Remove 4 screws and the unit cover panel.



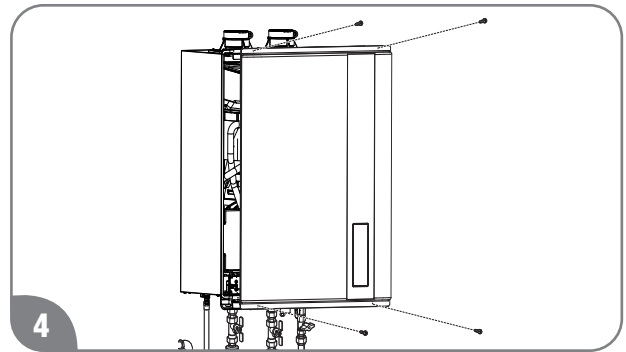
Turn on a hot water faucet.



While the water heater is operating, inspect the main burner flames through the burner sight glass. The flames should be blue when the main burner is firing.

### **NOTICE:**

If the flames are not blue or you observe unusual burner operation, shut off the water heater and contact a qualified service technician.



Turn off the hot water faucet and reinstall the unit cover panel.

# CARING FOR YOUR WATER HEATER



## Care and Cleaning

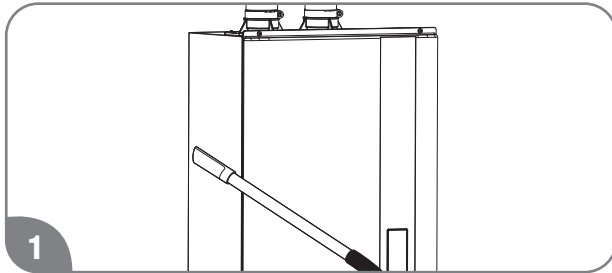
### **⚠ DANGER:**

**Shock Hazard** – Make certain power to the water heater is OFF before removing protective cover for any reason. Electric shock will cause death or serious personal injury.

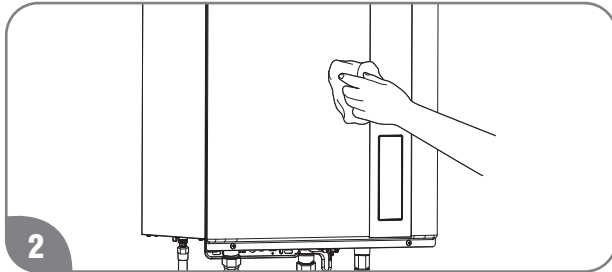
### **⚠ WARNING:**

Combustible materials, such as clothing, cleaning materials, or flammable liquids, must not be placed against or next to the water heater. Fire or explosion can occur causing death, personal injury, and/or product damage.

All care and cleaning to and around the water heater should only be performed with the water heater turned off and the electrical power supply disconnected.

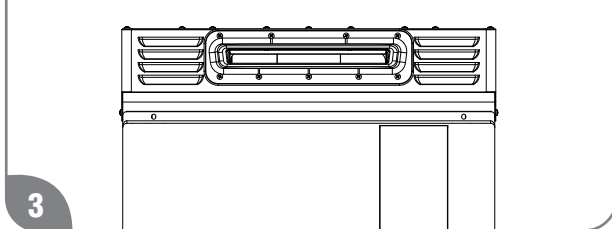


Vacuum around the water heater to remove any dust, dirt, and/or lint buildup.



Clean the water heater with a damp soft cloth and mild detergent. Gently wipe and completely dry all surfaces.

#### Outdoor models



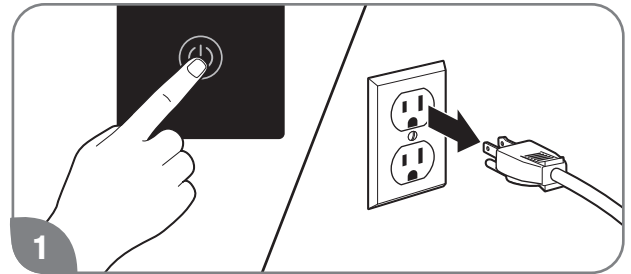
Check the air intake and vent outlet for blockage and/or debris.

### **NOTICE:**

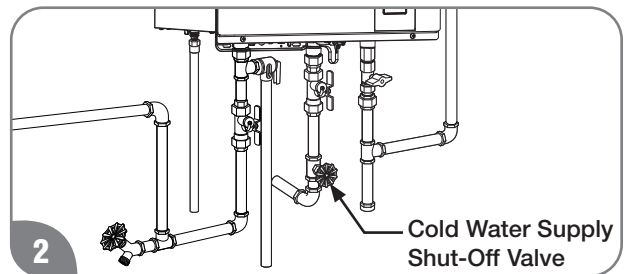
The air intake requires a minimum of 12 in. (30 cm) of clearance between the air intake opening and any obstruction.

Clean the water filter monthly, as described below and on the next page.

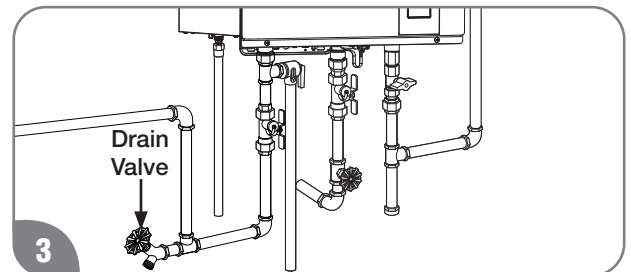
### Water Filter Cleaning



Turn off the water heater and disconnect the electrical power supply.



Turn off the water supply to the water heater.

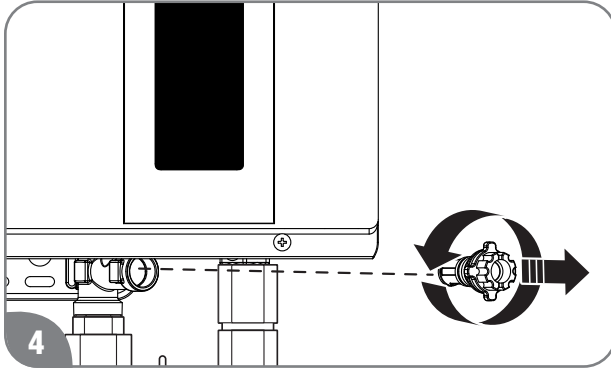


Drain the water heater. See "Draining the Water Heater" section.

# CARING FOR YOUR WATER HEATER

## ⚠ CAUTION:

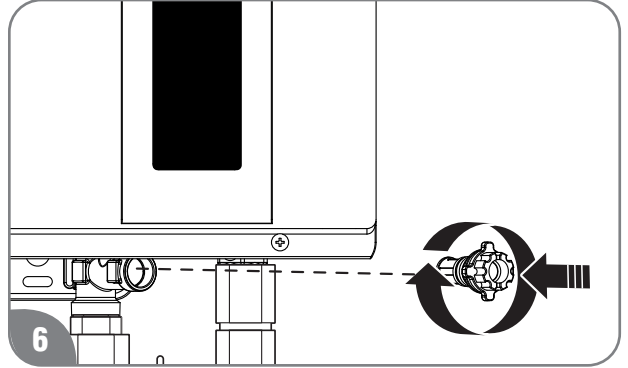
DO NOT tap or force the filter during removal. This can deform and/or damage the filter.



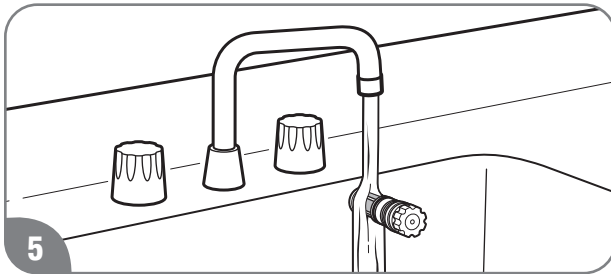
Unscrew the water filter from the base of the cold water inlet line and carefully slide it out of the line.

## ⚠ CAUTION:

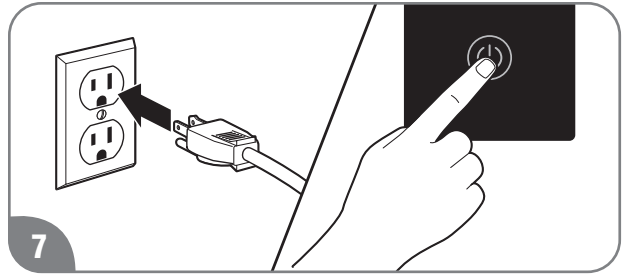
DO NOT overtighten the water filter. Overtightening can deform and/or damage the filter.



Replace the filter in the cold water inlet line and tighten until it is snug.



Clean the water filter under running water. To remove severe sediment and dirt, use a soft brush.



Turn on the water supply, reconnect the electrical supply, and turn on the water heater.

# CARING FOR YOUR WATER HEATER



## Preventive Maintenance

### ⚠️WARNING:

Failure to perform routine preventive maintenance can prevent the water heater from operating properly. Improper operation can cause carbon monoxide dangers, excessive water temperatures, and other potentially hazardous conditions resulting in death, personal injury, and/or product damage.

Properly maintaining your water heater will ensure dependable, trouble-free service.

### User Preventive Maintenance

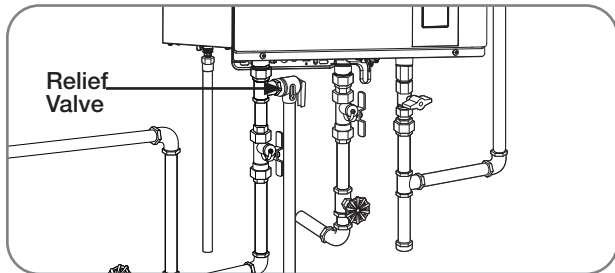
Establish and follow a routine preventive maintenance program. The following suggested items should be included in your program.



Check and clean the water filter monthly. See "Water Filter Cleaning" on this Use and Care Manual.

### ⚠️WARNING:

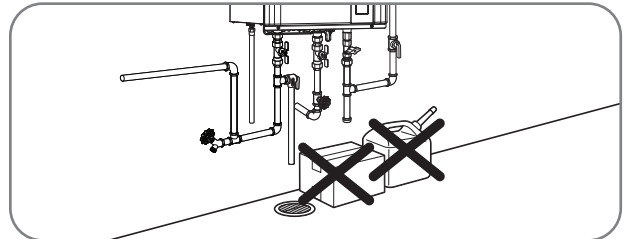
Hot water is released during manual operation of the relief valve. Make sure all people and animals are clear from the area before performing this check to prevent death, personal injury, and/or property damage from hot drain water.



- Annually check the operation of the pressure relief valve annually. Lifting the lever handle on the pressure-relief valve opens the valve to flush hot water through the discharge line to the drain. After several gallons have drained, release the lever handle to close the valve and stop draining.

### NOTICE:

If the pressure relief valve on the hot water heater discharges periodically, this may indicate a problem in the water system. Contact the water supplier or a plumbing contractor to correct the problem. **DO NOT** plug the relief valve outlet.



- Inspect and keep the area around the water heater clear and free of flammable materials, such as gasoline and other flammable vapors and liquids.
- Visually inspect the water heater for damage and/or denting. If present, contact qualified service personnel to verify proper operation.
- Check for abnormal sound during normal operation (e.g., hissing or banging noises). Contact qualified service technician or plumbing contractor if abnormal sounds are noted.
- Check all gas and water pipes for leaks. See "Leak Testing" on this Use and Care Manual.
- Visually inspect vent screens. Remove any debris or blockages.
- If condensate neutralizer is installed; annually inspect and ensure the neutralizer medium is present. If the medium is depleted, replace the neutralizer.
- Check for blockage of condensate line.

### NOTICE:

- **DO NOT** operate the water heater if you feel something is wrong with the unit.
- **DO NOT** allow children to operate or handle the unit.

- After inspections, maintenance, and/or cleaning, ensure proper operation by turning on a hot water faucet.

### Professional Preventive Maintenance

It is recommended that a periodic inspection of the water heater burner, relief valve, air intake filter, water filter, and venting system be made by a qualified service technician.

### ⚠️WARNING:

Certain water conditions can damage the water heater and may cause defects, malfunctions or failures of the water heater that are not covered by the limited warranty. See "Water Quality" on this Use and Care Manual.

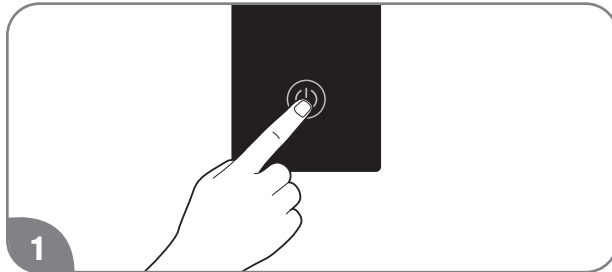
# CARING FOR YOUR WATER HEATER



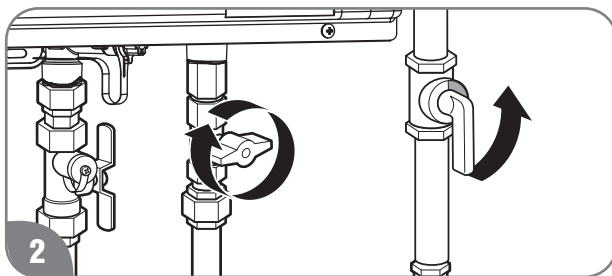
## Draining the Water Heater

### **⚠️ WARNING:**

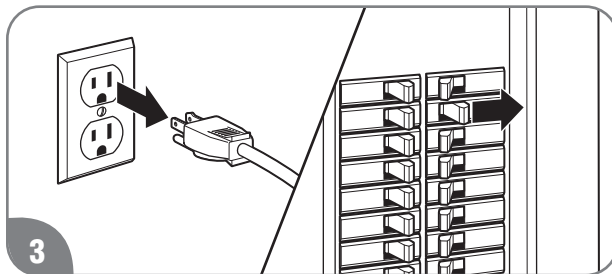
Failure to follow these draining instructions can cause serious personal injury from scalding and/or product damage.



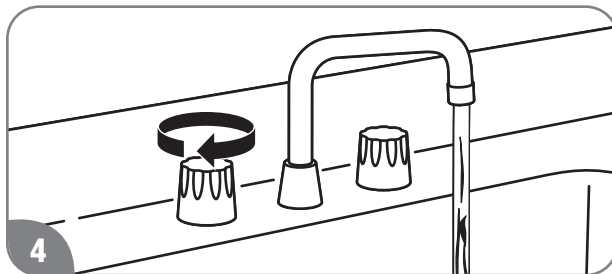
Turn off the water heater by pressing the POWER ON/OFF button on the LED display.



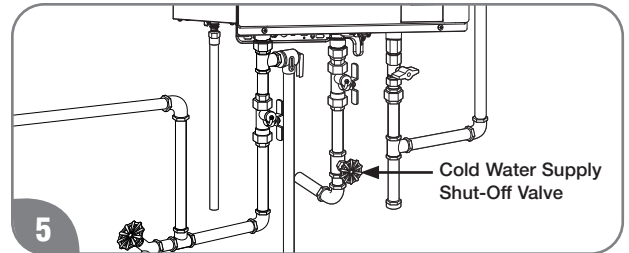
Close the gas shut-off valve(s).



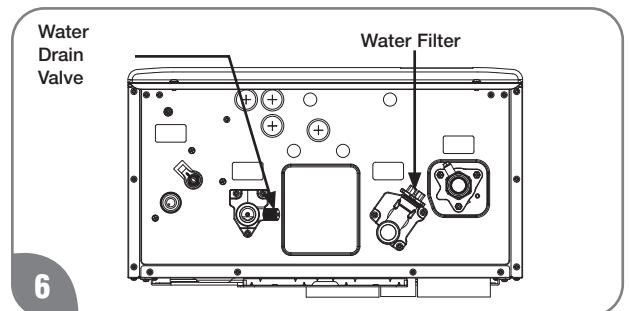
At least 10 seconds after Step 1, unplug the water heater or disconnect the power supply at the circuit breaker box.



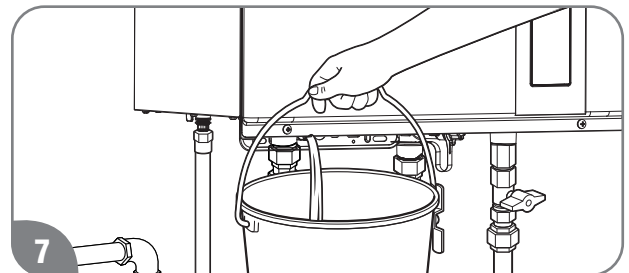
Open all hot water faucets. Run the water until it is COLD; then shut off the faucet.



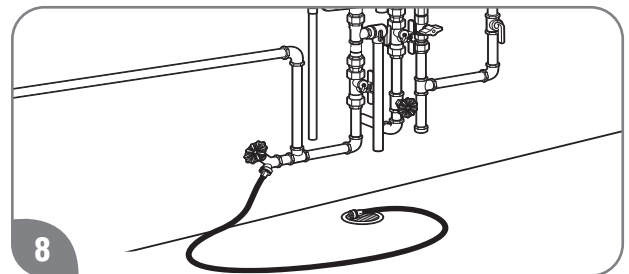
Close the water shut-off valve.



Find the water drain valve and the water filter located at bottom of the water heater.



Using a suitable container to catch the water, remove the water drain valve from the base of the hot water outlet line, and the water filter from the base of the cold water inlet line.



Connect a garden hose to the drain valve in the hot water outlet line and place the other end in a suitable drain. Open the drain valve until all the water has drained from the water heater. Leave water heater as is until placed back in service.

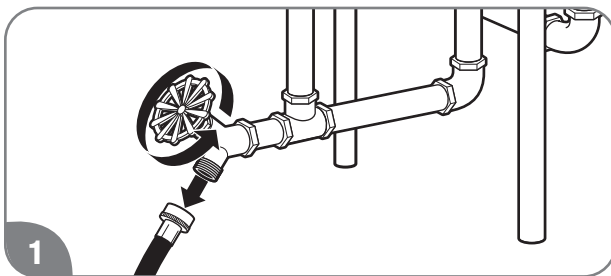
# CARING FOR YOUR WATER HEATER

## Draining the Water Heater

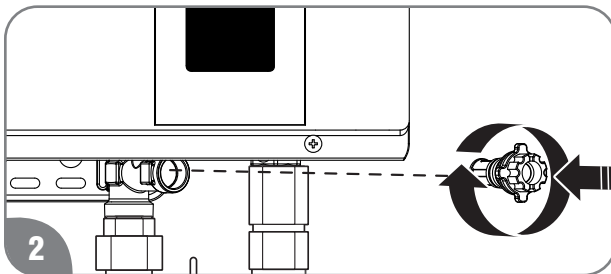
### **⚠ CAUTION:**

Even when drained properly, a small amount of water will remain in the water heater. In cold weather conditions, this water can freeze. If this happens, allow the defrost protection on the water heater at least 60 minutes to melt the frozen water. The water heater will not work properly until this water is thawed.

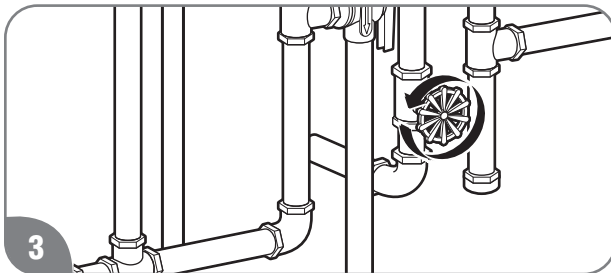
To put the water heater back in service:



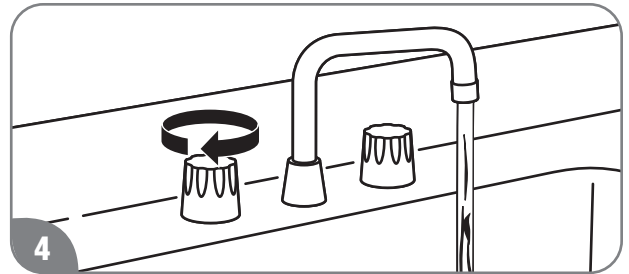
Disconnect drain hose. Make sure the drain valve is closed.



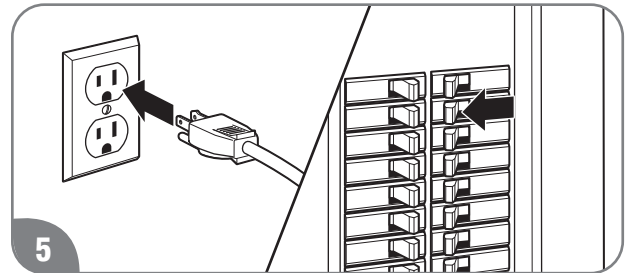
Reinstall the water filter in the base of the cold water inlet line, the water drain valve, and the water drain plug.



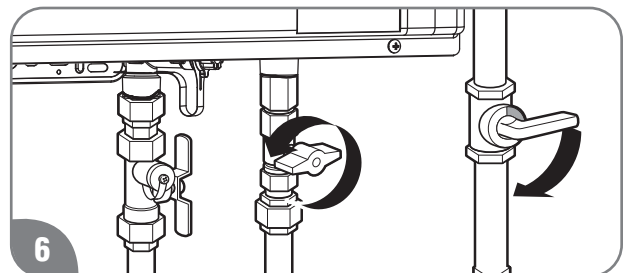
Open the water shut-off valve.



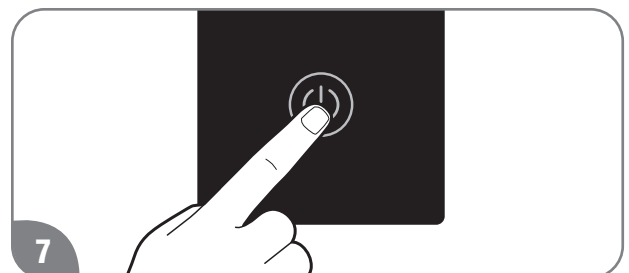
Open all hot water faucets and let run until all air has been purged from the lines. Close all hot water faucets.



Plug in the power cord or reconnect the power supply at the circuit breaker box.



Open the gas shut-off valve(s).

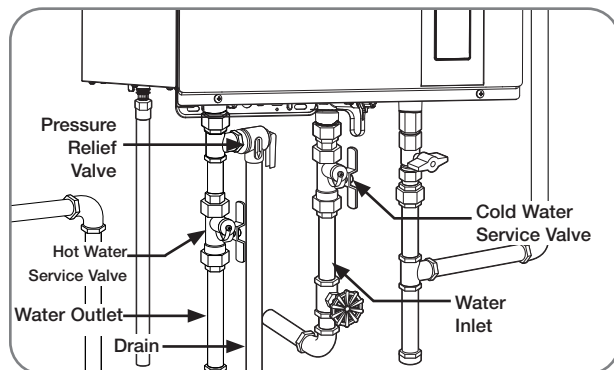


Press the POWER ON/OFF button on the remote control to restart the unit.

# CARING FOR YOUR WATER HEATER

## Standard Drain Method

Service isolator valve kits may be purchased from the manufacturer, distributor, or place of purchase. The kits include two full-port isolation valves to be used in the inlet and outlet water lines. These kits provide a means for full diagnostic testing and ease of system flushing and draining.



## Freeze Protection

### ⚠️WARNING:

Failure to drain the water heater can cause serious personal injury from scalding and/or product damage.

Whenever the water heater may be exposed to freezing conditions, precautions should be taken to help prevent the water heater from freezing.

Freezing conditions come from the ventilation system on direct-vent models and from exposure to cold air on outdoor models.

All of these water heaters are equipped with a freeze protection electric heater. This heater helps prevent freezing inside the water heater down to an outside temperature of  $-30^{\circ}\text{F}$  ( $-35^{\circ}\text{C}$ ) on indoor installations and approximately  $-4^{\circ}\text{F}$  ( $-20^{\circ}\text{F}$ ) on outdoor installations. These temperatures are all based on temperatures without wind.

The heater only protects the internal components of the water heater.

### NOTICE:

Unplugging or disconnecting the power supply to the water heater will also disconnect the power to the freeze protection electric heater.

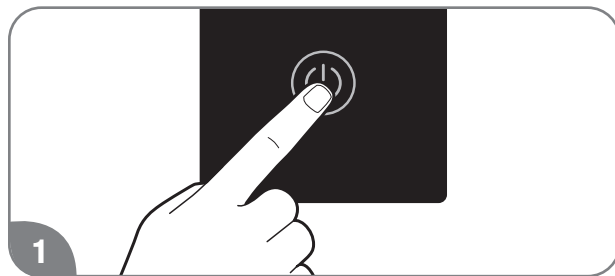
External piping and valves require additional freeze protection. One method is to wrap insulation around the piping and valves.

Another method is to turn on a hot water faucet and leave a small amount of water running at a faucet. This will help protect the water heater, piping, and valves from freezing.

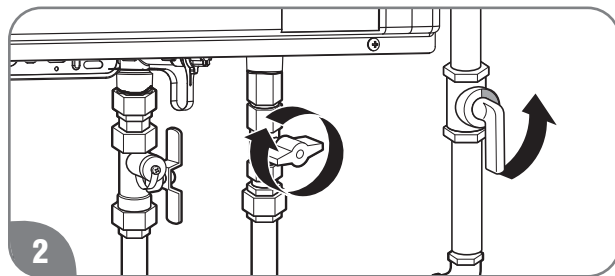
If power outages occur during freezing conditions, it is recommended to completely drain the water heater to help prevent damage to the unit. See "Draining the Water Heater." Once power is restored, refill the water heater and check for frozen or leaking components.

Components or heat exchangers damaged by freezing conditions is not covered under manufacturer's warranty.

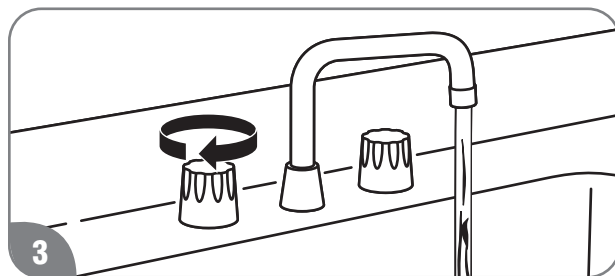
## Running Water Freeze Protection



Turn off the water heater by pressing the POWER ON/OFF button on the remote control.



Close the gas shut-off valve(s).



Open a hot water faucet slightly until the water stream is approximately 1/8 in. (0.3 cm). Be sure to check the flow periodically.



# CARING FOR YOUR WATER HEATER



## Vacation and Extended Shutdown

### ⚠️WARNING:

Failure to drain the water heater can cause serious personal injury from scalding and/or product damage.

If the water heater is to remain idle for an extended period of time, the power and water to the heater should be turned off.

The water heater and piping should be drained if they might be subjected to freezing temperatures. When drained, some water may remain in the unit. See “Freeze Protection” section on this Use and Care Manual.

After an extended shutdown, the water heater’s operation and controls should be checked by a qualified service technician.



## Troubleshooting Chart

The information in the following troubleshooting chart may help you diagnose and/or fix a problem you may be experiencing. Please review this chart before calling for service assistance.

### ⚠️DANGER:

Shock Hazard – Make certain power to the water heater is OFF before removing protective cover for any reason. Electric shock will cause death or serious personal injury.

### ⚠️WARNING:

For Your Safety, DO NOT attempt repair of electrical wiring, gas piping, remote control, burners, vent connectors, or other safety devices. Refer repairs to a qualified service technician.

Problem	Possible Cause	Solution
	1. Unit is not ON.	1. Turn on the unit by pressing the POWER ON/OFF button.
	2. Water shut-off valve is not completely opened.	2. Check shut-off valve and open completely.
	3. Hot water faucet is not completely opened.	3. Open hot water faucet completely. (The main burner goes off when incoming water volume is inadequate.)
	4. Water piping is frozen.	4. Allow piping to thaw.
	5. Electrical power is disconnected or water supply is shut off.	5a. Plug in the power cord or reconnect the power supply at the circuit breaker box. 5b. Completely open the water supply valve. (Inadequate water volume will cause the main burner to turn off.)
	6. The temperature may be set too low.	6. Increase the temperature setting.
	7. Mixing valve malfunctions (if applicable).	7. Check and replace the mixing valve.
	8. Error code displayed on the remote control.	8. See “Service Error Code Chart” on page 76. If required, contact a qualified service technician.
	9. Not enough water demand.	9. Increase the hot water flow at the faucet.
	10. Water filter is clogged or dirty.	10. Clean the water filter. (See page 76.)
	11. Fixture aerator is clogged or dirty.	11. Clean the aerator.
	12. Scale buildup in the heat exchanger.	12. Check for error code. If required, contact a qualified service technician.
	13. Hot and cold water lines reversed.	13. Reverse the water lines.

# CARING FOR YOUR WATER HEATER



## Troubleshooting Chart

Problem	Possible Cause	Solution
<b>Water not hot enough.</b> 	1. The temperature may be set too low.	1. Increase the temperature setting at the remote control.
	2. The gas valve is not completely opened.	2. Check and completely open the gas valve.
	3. Gas supply pressure is low.	3. Contact your gas utility company or gas contractor to verify the gas meter and gas piping size.
	4. Bleed-over in one of the hot water fixtures.	4. Contact a dealer or a qualified service technician.
<b>Water too hot.</b> 	1. Temperature is set too high.	1. Decrease the temperature setting at the remote control.
	2. Water shut-off valve is not completely opened.	2. Check and completely open the water shut-off valve.
	3. Small amount of water has been heated.	3. Increase the hot water flow at the faucet to allow more water to flow through the water heater.
<b>Fan continues to rotate after the hot water faucet is closed.</b>	<b>The post-purge cycle clears flue gases.</b>	<b>Normal operation.</b>

# CARING FOR YOUR WATER HEATER

## Service Error Code Chart

Your water heater has an electronic diagnostic system built into it. When the water heater finds a problem, it displays an error code in the LED display on the remote control. The chart on the next page lists the error codes along with their possible problem and solution. Using this chart may help you diagnose and/or fix a problem you may be experiencing. Please refer to this chart before calling for service assistance.

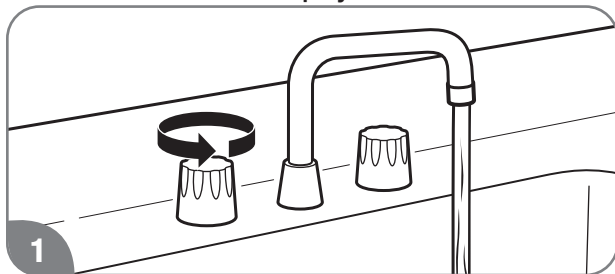
### **⚠ DANGER:**

**Shock Hazard – Make certain power to the water heater is OFF before removing protective cover for any reason. Electric shock will cause death or serious personal injury.**

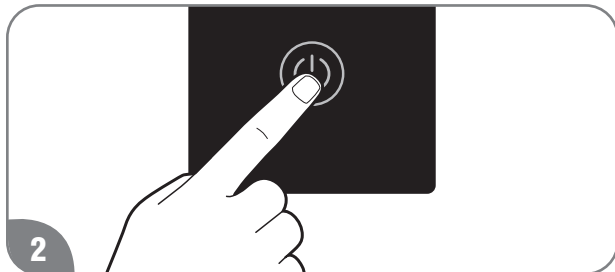
### **⚠ WARNING:**

**For Your Safety, DO NOT attempt repair of electrical wiring, gas piping, remote control, burners, vent connectors, or other safety devices. Refer repairs to a qualified service technician.**

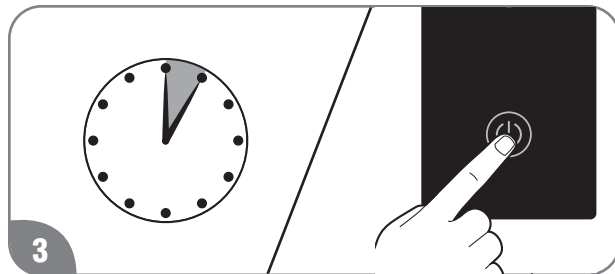
When an error code is displayed:



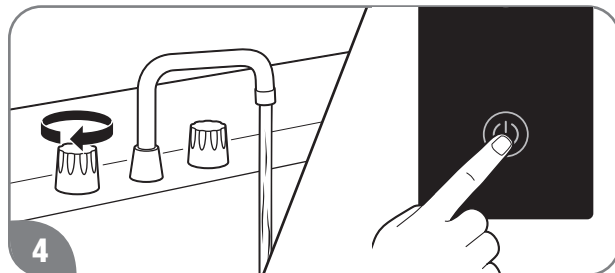
Turn off all the hot water faucets.



Turn off the water heater by pressing the POWER ON/OFF button on the remote control.



Wait about 5 minutes; then restart the water heater by pressing the POWER ON/OFF button.



Turn on a hot water faucet and recheck the remote control display.

If the error code remains in the display:

1. Turn off the hot water faucet.
2. Turn off the water heater.
3. Unplug the water heater from power, wait about 30 seconds and plug back in.
4. Follow the error code chart information.
5. Restart the water heater, turn on a hot water faucet, and recheck the remote control display.

If the error code is still shown:

1. Turn off the hot water faucet.
2. Turn off the water heater.
3. Make note of the displayed error code and call for service assistance. See *“Call for Assistance”* section on this Use and Care Manual.

### **NOTICE:**

**If the displayed error code is not listed in the chart, immediately turn off the water heater and call for service assistance.**

# CARING FOR YOUR WATER HEATER

Error Code	Possible Cause	Solution
1L	Water heater has buildup of lime deposits.	Contact a dealer or qualified service technician.
11	The gas shut-off valve is not fully opened.	Check shut-off valve and open completely.
12	Gas service has been interrupted.	Contact your gas utility company.
	LP gas is running low (LP models only).	Refill or replace your LP gas container.
14	Water heater is overheating.	Contact a dealer or qualified service technician.
29	Neutralizer is clogged.	Contact a dealer or qualified service technician.
31	Faulty inlet thermistor.	Contact a dealer or qualified service technician.
33	Faulty outlet thermistor.	Contact a dealer or qualified service technician.
61	Faulty blower motor.	Contact a dealer or qualified service technician.
66	Faulty bypass motor.	Contact a dealer or qualified service technician.
71	Solenoid valve circuit failure.	Contact a dealer or qualified service technician. Flushing procedure may need to be repeated for excessive lime and scale build-up.
88	Reminder of flushing the heat exchanger and/or replacing the water treatment filter.	Contact a dealer or qualified service technician.
90 or 99	Air intake or vent exhaust opening may be blocked.	Remove any blockage. (Air intake requires 12 in. [30 cm] of clearance.)
	The vent pipes on the vent termination may not be connected properly.	Contact a dealer or qualified service technician.
P1	Not enough water flow to operate the unit.	Increase the water flow from the fixtures.

## IF YOU NEED SERVICE



### Call for Assistance

- All questions, adjustments, repairs, and/or routine maintenance should be directed to your installer, plumbing contractor, or licensed service agent. If your contacts have moved or are not available, please refer to the telephone directory, commercial listings, or local utility company for qualified service assistance.
- If your problem has not been solved to your satisfaction, contact the Manufacturer National Service Department at the following address:

Manufacturer National Service Department  
 800 Interstate Park Drive  
 Montgomery, AL 36109  
 Phone: 1-866-720-2076

When contacting the manufacturer, the following information will be requested:

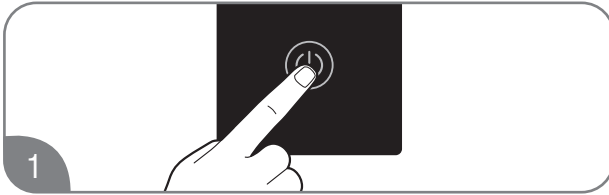
- Model and serial number. (See page 8 or the ratings plate on the side of the water heater.)
- Address where the water heater is located.
- Name and address of installation contractors (page 8) and all qualified service companies that have worked on the water heater.
- Original installation date. (See page 8.)
- Dates any service or preventive maintenance was performed.
- Details of the persisting problem.
- List of businesses that have tried to fix this problem, along with dates of service.

# CARING FOR YOUR WATER HEATER

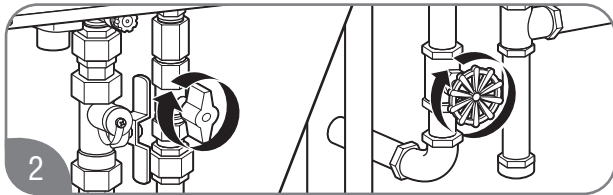


## Maintenance Notice

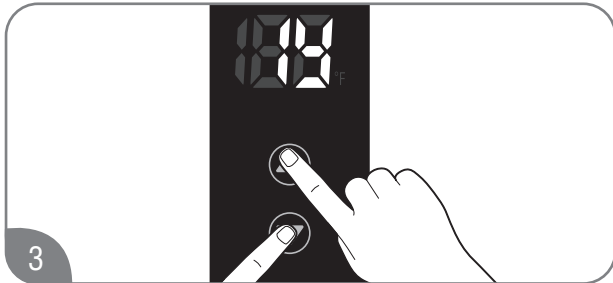
Maintenance notice is an optional control and is inactive as default. Maintenance notice reminds users of water heater maintenance activities such as flushing the heat exchanger or replacing the water treatment filter (if applicable) in order to maximize the life of your tankless water heater. Contact technical service department listed on page 76 of this use and care manual if you are not familiar with these maintenance activities.



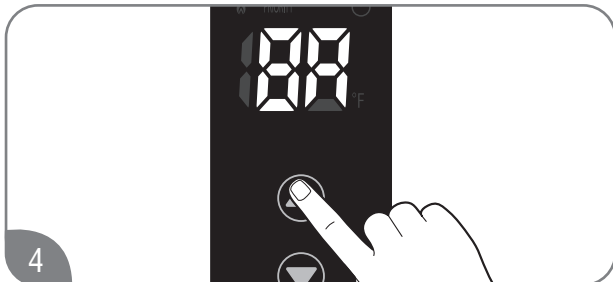
Turn off the remote control.



Turn off the gas and water to the water heater by closing the shut-off valves.

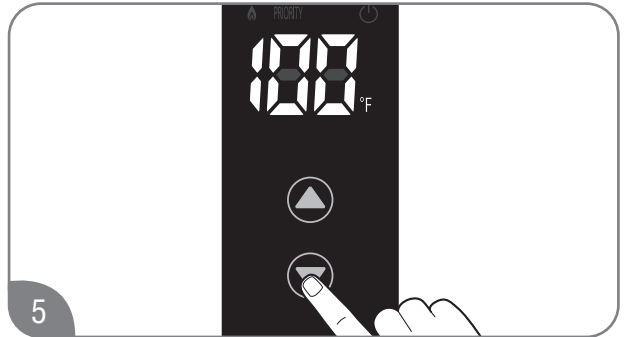


Press and hold the “▲” and “▼” button until “1Y” is displayed on the built-in display.



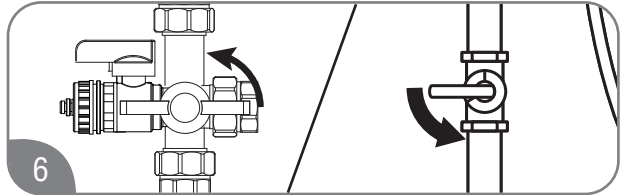
Press the “▲” or “▼” button until “8A” is displayed. Press and hold the power button on the built-in display for 1 second.

The current setting time is displayed on the display. (Factory setting is “OFF”)



Press the “▲” or “▼” button to choose “50”, “75”, “100” or “OFF”.

Displayed	Maintenance Notice Hour
50	500 hours
75	750 hours
100	1,000 hours
OF	OFF



Turn on the gas and water to the water heater by opening the shut off valves.

When tankless water heater has a certain number of hours of combustion, error code “88” is shown on the display. It is highly recommended to perform water heater maintenance activities such as flushing the heat exchanger and/or replacing the water treatment filter (if applicable).

# CARING FOR YOUR WATER HEATER



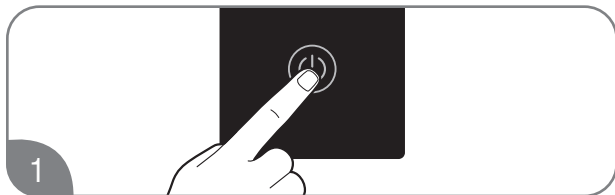
## Maintenance Notice

### ERROR CODE 88 CLEARING

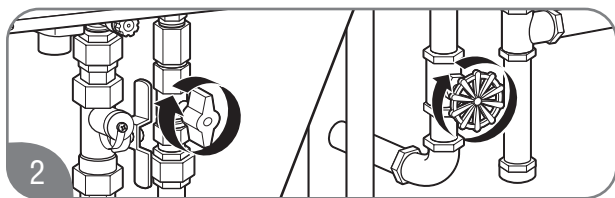
#### IMPORTANT

It is highly recommended to perform water heater maintenance activities such as flushing the heat exchanger and/or replacing the water treatment filter (if applicable) before clearing this error code.

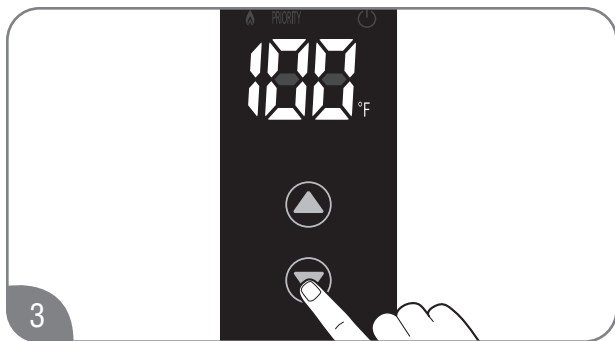
After these maintenance activities are completed, follow the steps below to clear error code "88".



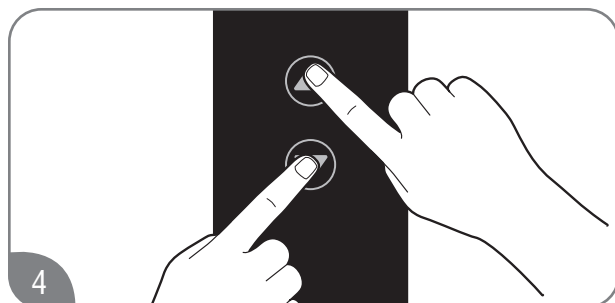
1 Turn on the remote control.



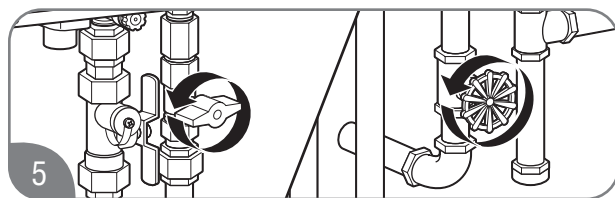
2 Turn off the gas and water to the water heater by closing the shut-off valves.



3 Press the DOWN adjustment button repeatedly until the lowest setting temperature shows in the LED display.



4 Press and hold the DOWN and UP adjustment button for 5 to 10 seconds.



5 Turn on the gas and water to the water heater by opening the shut off valves.

If error code "88" is still shown, repeat steps 1 through 5 above.

# PARTS REPLACEMENT



## Parts Ordering

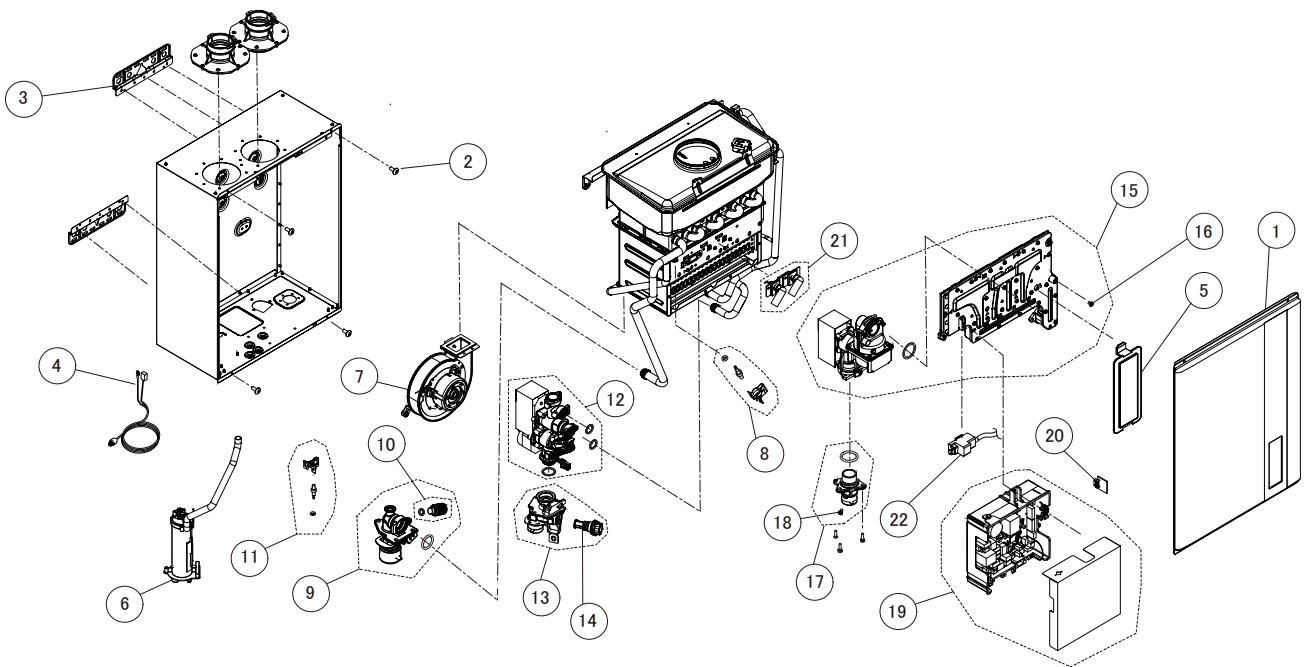
### **⚠️ WARNING:**

For your safety, **DO NOT** attempt to disassemble, repair, or replace any portion of this unit. Refer all repairs, service, and/or adjustments to qualified service personnel.

Address all parts orders to the distributor or store where the water heater was purchased. All parts orders should include:

### Direct-Vent Gas Components

1. The model and serial number of the water heater from the rating plate.
2. Specify the gas type (natural or LP) as marked on the rating plate.
3. Parts description (as shown below) and number of parts desired.



1	Front Cover Final Assembly
2	Front Cover Screw
3	Cabinet Bracket
4	Power Cord
5	Display / Controller
6	Condensate Drain
7	Blower Motor
8	HEX Thermistor
9	Hot Water Connection
10	Drain Valve
11	Hot Water Thermistor

12	Water Control Valve
13	Inlet Water Connection
14	Water Filter
15	Manifold/Gas Valve Kit
16	Manifold Screw
17	Gas Connection
18	Inlet Gas Screw
19	Control Board
20	Program Chip
21	Igniter / Flame Rod Kit
22	Igniter Module

# LIMITED WARRANTY

**For the RHEEM®, RUUD®, Richmond®, Paloma®, and EcoSmart® Residential Tankless Gas Water Heaters.**

## GENERAL

This Limited Warranty is only available to the original owner of the water heater at the original installation location. This Limited Warranty is not transferable.

Rheem Sales Company, Inc. (Rheem) warrants this tankless gas water heater, and its component parts, to be free from defects in materials and manufacture, under normal use and service, for the Applicable Warranty Period specified below. At its option, Rheem will repair or replace the defective water heater, or defective component part(s), in accordance with the terms of this Limited Warranty, if it fails in normal use and service during the Applicable Warranty Period. The replacement water heater must be manufactured by Rheem under one of the covered brand names. The replacement component part(s) must be Rheem authorized component part(s). The replacement unit will be warranted only for the unexpired portion of the original unit's Applicable Warranty Period.

Rheem strongly recommends that this tankless water heater be installed by a contractor that is licensed, state qualified and trained on Rheem's tankless products because improper installation may invalidate warranty coverage.

## EFFECTIVE DATE

The Effective Date of warranty coverage (or the beginning of the Applicable Warranty Periods) is the date of the original installation of the water heater, if properly documented. Otherwise, it is the date of manufacture of the water heater plus ninety (90) days.

**APPLICABLE WARRANTY PERIODS:** The Applicable Warranty Period depends on the type of installation, as described below:

### Residential: a Single Family Dwelling

Twelve (12) years from the Effective Date for the heat exchanger, five (5) years from the Effective Date for the component parts, and one (1) year from the Effective Date for certain labor as described under the heading, LABOR, SHIPPING AND PROCESSING COST.

### Residential: a Single Family Dwelling used with Hydronic Force Air Heating

Ten (10) years from the Effective Date for the heat exchanger, five (5) years from the Effective Date for the component parts, and one (1) year from the Effective Date for certain labor as described under the heading, LABOR, SHIPPING AND PROCESSING COST. Provided that a Rheem manufactured/ Rheem approved potable water hydronic air handler is installed with the system.

### Residential: a Single Family Dwelling with recirculation, controlled loop

Twelve (12) years from the Effective Date for the heat exchanger, five (5) years from the Effective Date for the component parts, and one (1) year from the Effective Date for certain labor as described under the heading, LABOR, SHIPPING AND PROCESSING COST. Provided that the recirculation system is an on demand type system or the pump is controlled with a temperature sensor (aquastat) and timer.

### Residential: a Single Family Dwelling with recirculation, uncontrolled loop

Three (3) years from the Effective Date for the heat exchanger, three (3) years from the Effective Date for the component parts, and one (1) year from the Effective Date for certain labor as described under the heading, LABOR, SHIPPING AND PROCESSING COST, if the water heater is installed in a system in which the water is re-circulated using a continuously operating pump.

### Commercial: any installation that is not a single family dwelling

Five (5) years from the Effective Date for the heat exchanger, five (5) years from the Effective Date for the component parts, and one (1) year from the Effective Date for certain labor as described under the heading, LABOR, SHIPPING AND PROCESSING COST.

### Commercial: with recirculation, controlled loop

Five (5) years from the Effective Date for the heat exchanger, five (5) years from the Effective Date for the component parts, and one (1) year from the Effective Date for certain labor as described under the heading, LABOR, SHIPPING AND PROCESSING COST. Provided that the recirculation system is an on demand type system or the pump is controlled with a temperature sensor (aquastat) and timer.

### Commercial: with recirculation, uncontrolled loop

Three (3) years from the Effective Date for the heat exchanger, three (3) years from the Effective Date for the component parts, and one (1) year from the Effective Date for certain labor as described under the heading, LABOR, SHIPPING AND PROCESSING COST, if the water heater is installed in a system in which the water is re-circulated using a continuously operating pump.

## WARRANTY EXCLUSIONS

This Limited Warranty will **not** cover:

a) Damages, malfunctions or failures resulting from:

Chart for Recommended Water Quality Levels									
pH	(Total Dissolved Solids) TDS	Free Carbon Dioxide (CO <sub>2</sub> )	Total Hardness	Aluminum	Chlorides	Copper	Iron	Manganese	Zinc
6.5-8.5	Up to 500 mg/L	Up to 15 mg/L	Up to 200 mg/L	0.05 to 0.2 mg/L	Up to 250 mg/L	Up to 1.0 mg/L	Up to 0.3 mg/L	Up to 0.05 mg/L	Up to 5 mg/L

Cited reference: National Secondary Drinking Water Regulations

1. Installation of the water heater in environments in which water quality levels DO NOT fall within the ranges listed in the table below:
- b) Operating the water heater in a corrosive or contaminated atmosphere, including without limitation damages, malfunctions or failures caused by lime, mineral build-up, or scale.
- c) Service trips to your business to teach you how to install, use, or maintain this water heater or to bring the water heater installation into compliance with local building codes and regulations or manufacturer's installation requirements.
- d) Water heater unit installed for use in: spa or pool heating; a recreational vehicle; a boat or any other watercraft.
- e) Water heater unit installed in any circulating system in which the temperature of the incoming water to the water heater is in excess of 140° f.
- f) Water heater unit that is installed in any installation supplying radiant heat, such as in floor, baseboard, radiators, snow melt or closed loop systems, or any system using glycol or non-potable water.
- g) Damages, malfunctions or failures resulting from failure to install the water heater in accordance with applicable building codes/ordinances or good plumbing and electrical trade practices.
- h) Damages, malfunctions or failures resulting from improper installation or failure to operate and maintain the unit in accordance with the manufacturer's instructions.
- i) Performance problems caused by improper sizing of the water heater or the gas supply line, the venting connection, combustion air openings, electric service voltage, wiring, or fusing.
- j) Damages, malfunctions or failures caused by improper conversion from natural gas to LP gas or LP gas to natural gas fuel source.
- k) Damages, malfunctions or failures caused by operating the water heater with any parts removed or with modified, altered, or unapproved parts installed.
- l) Damages, malfunctions or failures caused by abuse, accident, fire, flood, freeze, lightning, acts of God and the like.
- m) Heat exchanger failures (leaks) caused by operating the water heater in a corrosive or contaminated atmosphere or damages, malfunctions or failures caused by lime, mineral build-up, or scale.
- n) Damages, malfunctions or failures caused by operating the unit at water temperatures exceeding the maximum setting of the operating, or high limit, control.
- o) Heat exchanger failures caused by operating the water heater when it is not supplied with potable water, free to circulate at all times.
- p) Damages, malfunctions or failures caused by subjecting the heat exchanger to pressures, or firing rates, greater than those shown on the rating label.
- q) Damages, malfunctions or failures resulting from the use of any attachment, including any energy saving device, not authorized by Rheem.
- r) Units installed outside the fifty states (and the District of Columbia) of the United States of America and Canada.
- s) Units removed from the original installation location and reinstalled elsewhere.
- t) Units that have had their rating labels altered, tampered with, or removed. A water heater should not be operated if the rating label is removed.



## LABOR, SHIPPING, AND PROCESSING COSTS

For one (1) year after the Effective Date, Rheem will cover reasonable labor costs necessary to repair or replace a tankless water heater or component part that Rheem determines to be defective and covered by this Limited Warranty. The warranty service must be performed by a contractor that is licensed, state qualified, and trained to install and service Rheem's tankless water heaters. This Limited Warranty does not cover any labor expenses for general service, inspection, reinstallation, permits, removal and disposal of the failed water heater or defective component part(s), or updating the installation to meet manufacture or local code requirements. All such expenses are your responsibility.

Rheem will pay the transportation costs for an "in-warranty" replacement water heater, or "in-warranty" replacement component part(s), to a convenient delivery point (selected by Rheem) near the place the original water heater, or original component part(s), is located: such as a local water heater distributor. You must pay any local freight charges, including the cost of returning the failed water heater, or defective component part(s) to a convenient shipping location (selected by Rheem): such as a local Rheem distributor.

Rheem does not authorize, recommend, or receive any benefit from any claims processing or similar fees charged by others to process warranty claims for any water heater or component part(s). Rheem will not reimburse any party for these, or any other, fees not specifically covered in this Limited Warranty document.

## HOW TO OBTAIN WARRANTY CLAIM ASSISTANCE

Any claim for warranty assistance must be made promptly. First, determine if your water heater is "in-warranty" (that is, within the Applicable Warranty Period). You can determine your unit's warranty status by adding its Applicable Warranty Period to its date of installation. However, if you **DO NOT** have documentary proof of your water heater's date of installation, your unit's warranty status will be based on its date of manufacture as determined from the serial number. Add the Applicable Warranty Period plus ninety (90) days to the date of manufacture to determine whether the water heater is still covered by this Limited Warranty. You may also determine your unit's warranty status by obtaining the complete model number, complete serial number, and date of installation of your water heater and then accessing the "Warranty Verification" information on Rheem Water Heaters' internet website ([www.rheem.com](http://www.rheem.com)) or contacting Rheem's Claims Department (telephone (800) 621-5622) during normal business hours (in the Central Time Zone) to determine if the Applicable Warranty Period has expired.

If your water heater is "in-warranty", contact the plumber, or mechanical contractor, that installed it for assistance with the warranty repairs, or replacement, required. Rheem Water Heaters' Technical Service personnel are available to assist you (by telephone at (866) 720-2076) in obtaining "in-warranty" service or to answer your questions about the operation or repair of your water heater during normal business hours (in the Central Time Zone). Be prepared to provide the plumber, mechanical contractor, or Rheem Technical Service person you call with the complete model number, the complete serial number, and the date of installation of your water heater in addition to an explanation of your water heater problem.

If an exact replacement is not available, Rheem will provide you with the current model of your water heater, or component part(s), or a replacement unit with comparable operating features. If government regulations or industry certification or similar standards require the replacement water heater, or replacement component part(s), to have features not found in the defective water heater, or the defective component part(s), you will be charged for the difference in price represented by those required features. If you pay the price difference for those required features and/or to upgrade the size and/or other features available on a replacement new water heater, you will also receive a complete new Limited Warranty (with the full Applicable Warranty Period) for the replacement new water heater.

Rheem reserves the right to inspect, or require the return of, the failed water heater or the defective component part(s). Each "in-warranty" failure water heater must be made available to Rheem (with the rating label and all the component parts intact) in exchange for the replacement water heater. Each defective "in-warranty" component part to be replaced must be returned to Rheem in exchange for the replacement component part.

Warranty compensation is subject to validation of "in-warranty" coverage by Rheem Claims Department personnel.

- To obtain warranty compensation for an "in-warranty" water heater failure, you must provide Rheem with the failed water heater (with the rating label and all the component parts intact) the complete model number and the complete serial number of the Rheem or Ruud water heater that replaced the failed unit; and the date the original water heater failed. You may also be required to provide documentary proof of the failed water heaters date of installation to establish its "in-warranty" status.
- To receive warranty compensation for an "in-warranty" defective component part, you must provide Rheem with: the defective component part; the complete model number and the complete serial number of the Rheem or Ruud water heater from which the defective component part was removed; and the date the defective component part failed. You may also be required to provide documentary proof of the date of installation of the Rheem or Ruud water heater from which the defective part was removed – or the date of purchase of the part (if it was purchased separately) – to establish the "in-warranty" status of the defective component part.
- If Rheem determines that the water heater or component part returned to Rheem is free of defects in material and manufacture and/or that it was damaged by improper installation or other cause not covered by this Limited Warranty, the warranty claim for the product, component part and/or labor maybe denied.

Warranty claim documentation should be mailed promptly to Rheem Water Heaters, Claims Department, 800 Interstate Park Drive, Montgomery, Alabama 36109, or in Canada, 125 Edgeware Rd. Unit 1, Brampton, ON, Canada L6Y 0P5

## EXCLUSIVE WARRANTY – LIMITATION OF LIABILITY

**THIS LIMITED WARRANTY IS THE SOLE AND EXCLUSIVE WARRANTY PROVIDED IN CONNECTION WITH THIS RHEEM®, RUUD®, RICHMOND®, PALOMA® AND ECOSMART® RESIDENTIAL TANKLESS GAS WATER HEATER UNIT (THE "WATER HEATER").** No one is authorized to make any other warranties on behalf of Rheem. **ANY IMPLIED WARRANTIES, INCLUDING MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE APPLICABLE WARRANTY PERIODS, SPECIFIED PREVIOUSLY. RHEEM'S SOLE LIABILITY, WITH RESPECT TO ANY DEFECT, SHALL BE AS SET FORTH IN THIS LIMITED WARRANTY, AND ANY CLAIMS FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING DAMAGE FROM WATER LEAKAGE) ARE EXCLUDED.** Some states **DO NOT** allow limitations on how long an implied warranty lasts, or for the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This Limited Warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

## DO NOT RETURN THIS WATER HEATER OR PART TO RHEEM WITHOUT A RETURN AUTHORIZATION.

**This document is for reference only and does not replace the original warranty document found in the back of the Use and Care manual provided with the tankless water heater.**

**DO NOT RETURN THIS DOCUMENT TO RHEEM.**

**KEEP IT WITH YOUR WATER HEATER OR BUSINESS RECORDS.**

Name of Owner: \_\_\_\_\_

Owner's Address: \_\_\_\_\_

Name of Plumber/  
Mechanical Contractor – Installer: \_\_\_\_\_

Address of Plumber/  
Mechanical Contractor – Installer : \_\_\_\_\_

Telephone Number of Plumber/  
Mechanical Contractor – Installer: \_\_\_\_\_

Date of Water Heater Installation: \_\_\_\_\_

Model Number of Your Water Heater: \_\_\_\_\_

Serial Number of Your Water Heater: \_\_\_\_\_