



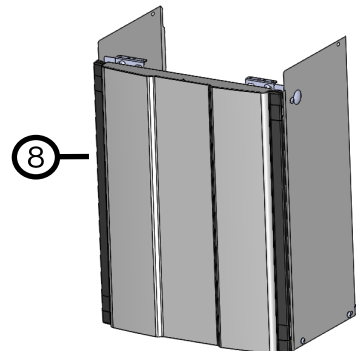
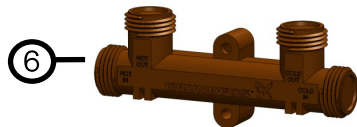
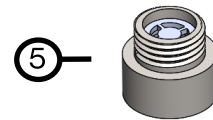
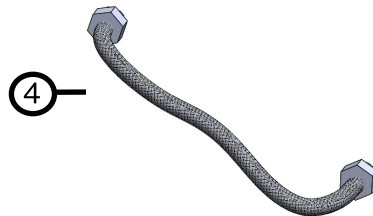
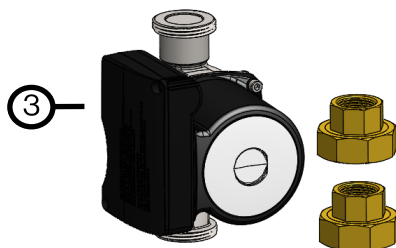
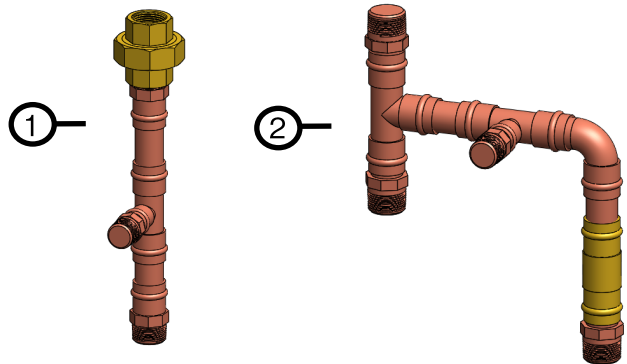
INSTALLATION INSTRUCTIONS

GTK03U Pump Kit Assembly

for the following kit: GTK03U-NCK

Kit Components

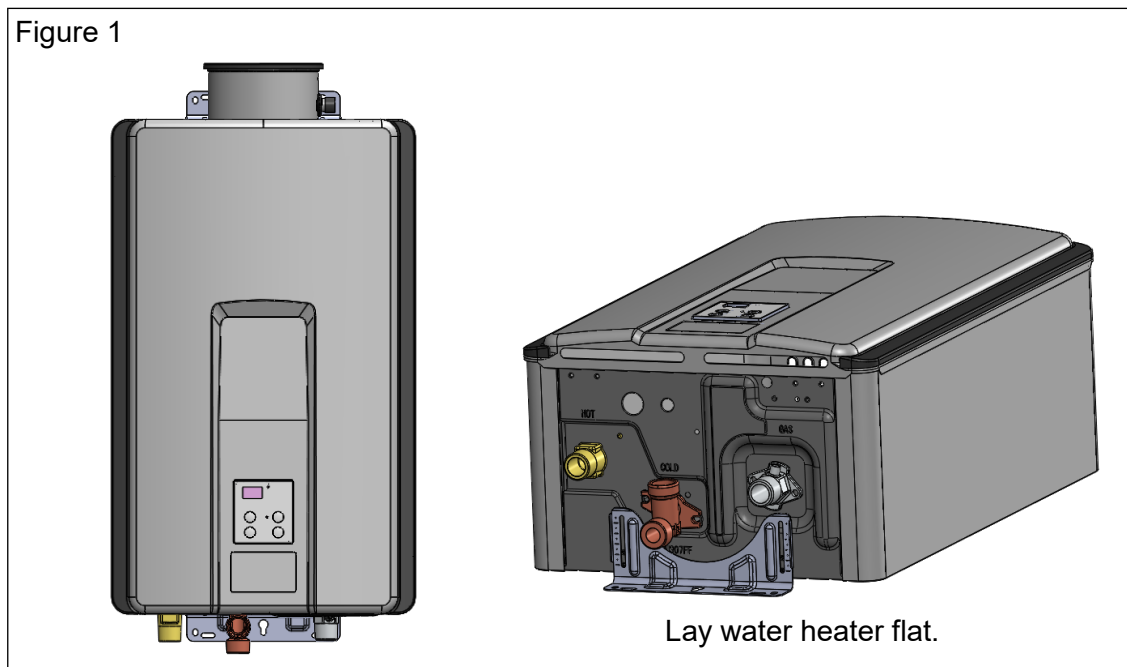
Item #	Item	Qty
1	Hot Water Manifold	1
2	Cold Water Manifold	1
3	GTK03U pump and two unions	1
4	Flow Restricting Bypass	1
5	Flow Restrictor Bypass Adapter	1
6	Grundfos Crossover Valve	1
7	Control-R™ Wi-Fi Module	1
8	Pipe Cover	1



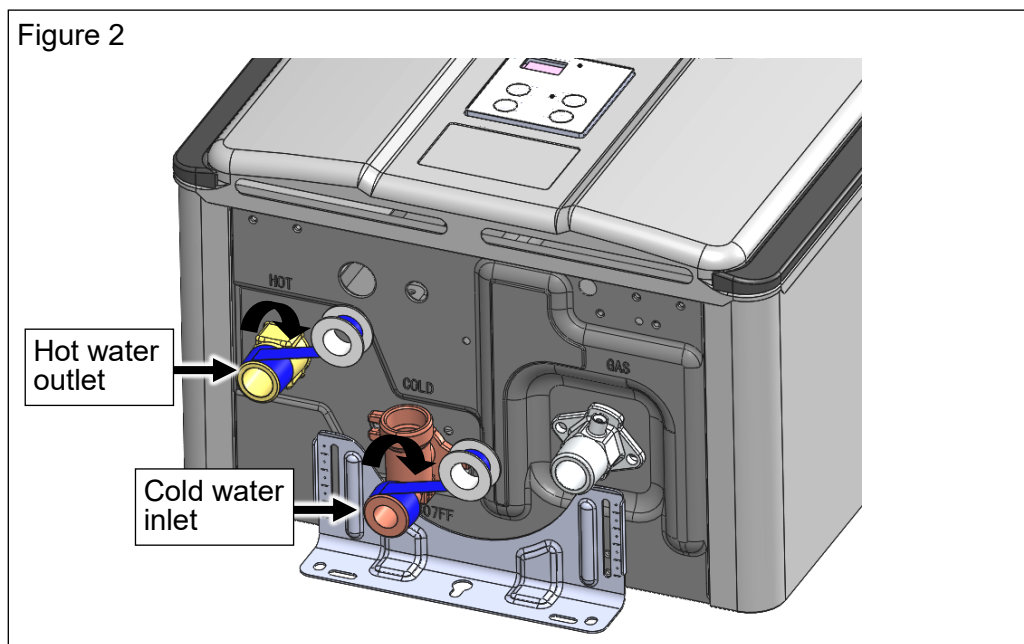
You Will Need

- Teflon Tape
- Hot and Cold Water Isolation Valves (supplied with water heater)
- Tankless Water Heater
- Tankless Water Heater Installation and Operation Manual

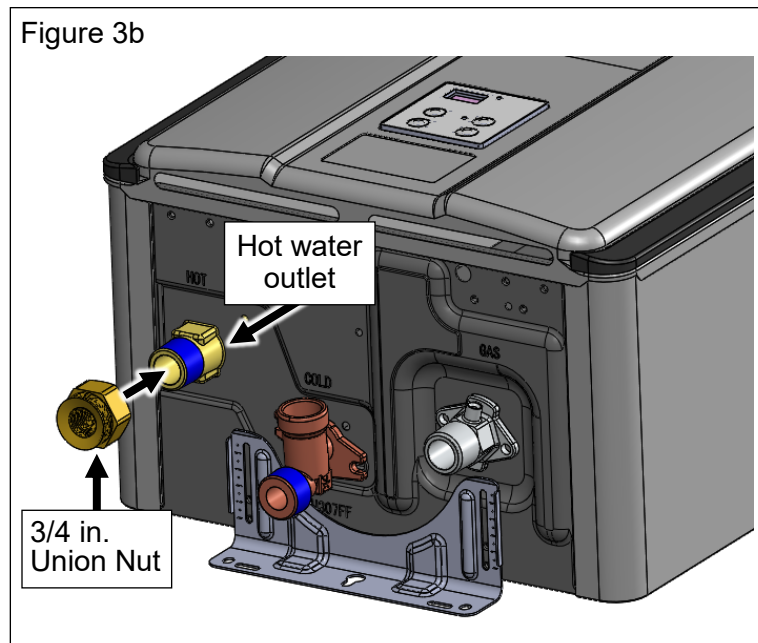
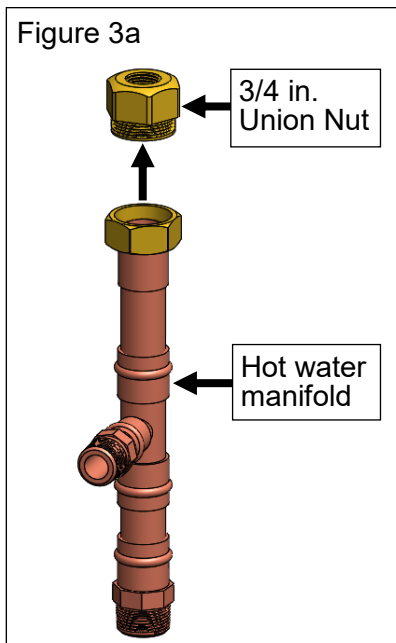
1. Remove the tankless water heater from the box and lay it flat with the front cover facing up (Figure 1).



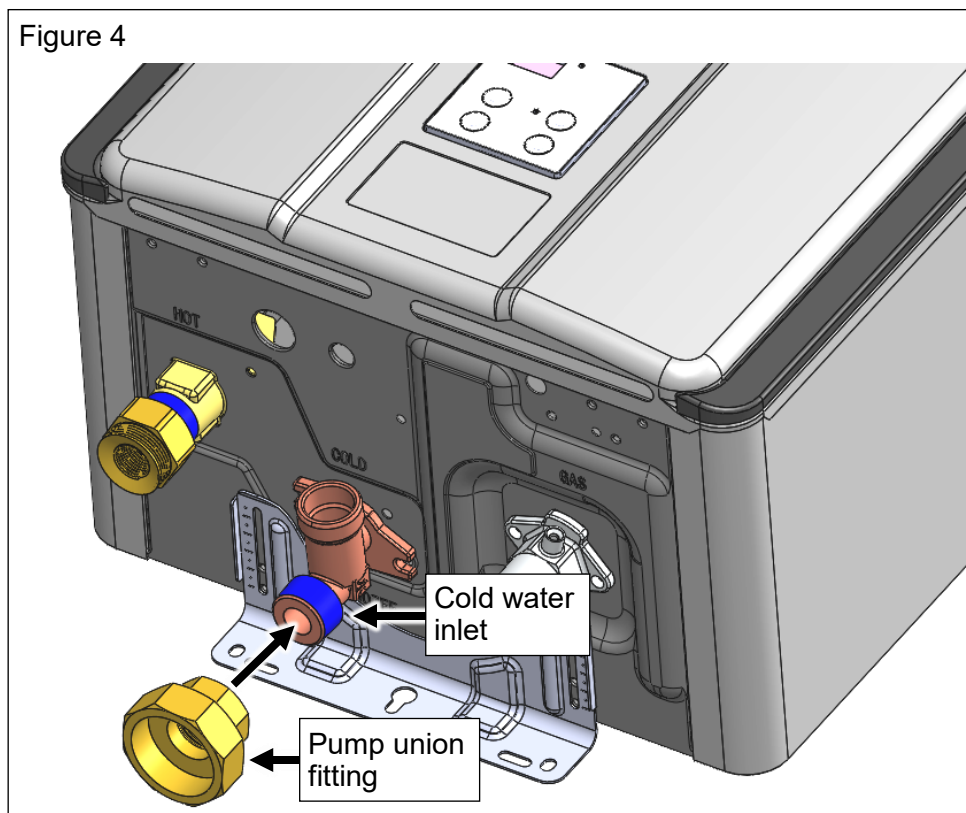
2. Wrap Teflon tape (field-supplied) around the threads of the cold water inlet and hot water outlet (Figure 2).



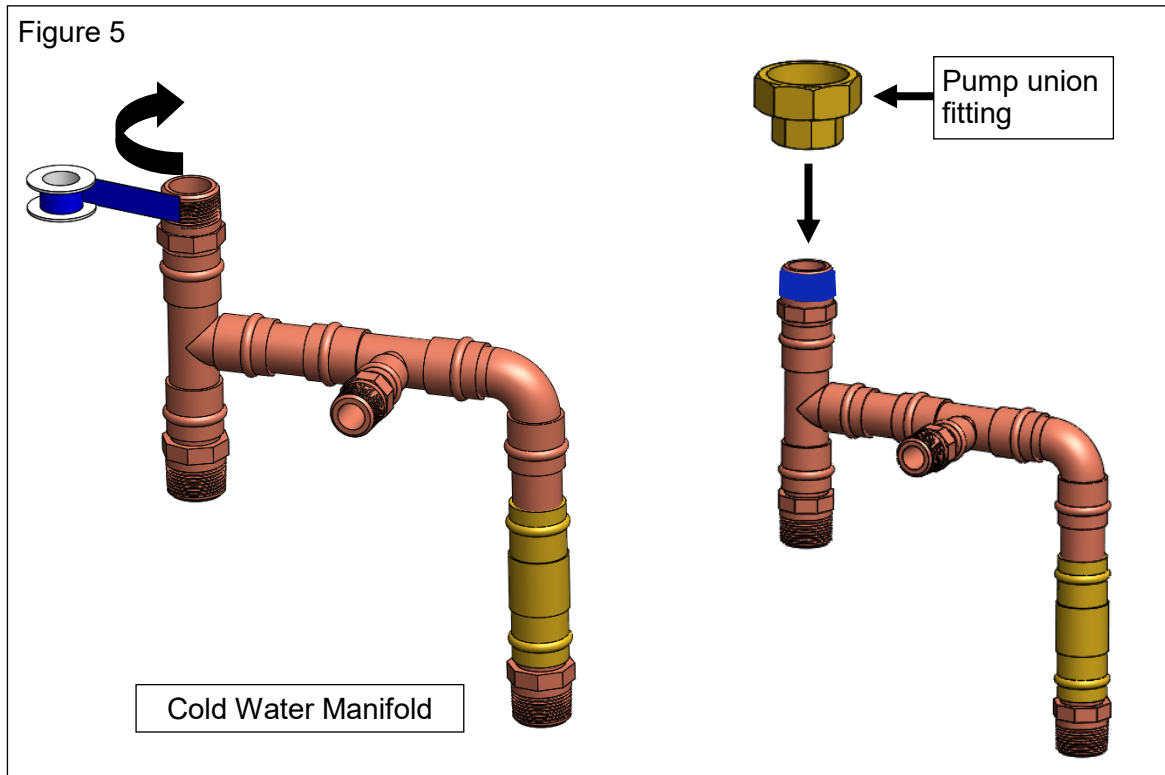
3. Remove the 3/4 in. union nut from the hot water manifold (Figure 3a) and install it on the hot water outlet (Figure 3b).



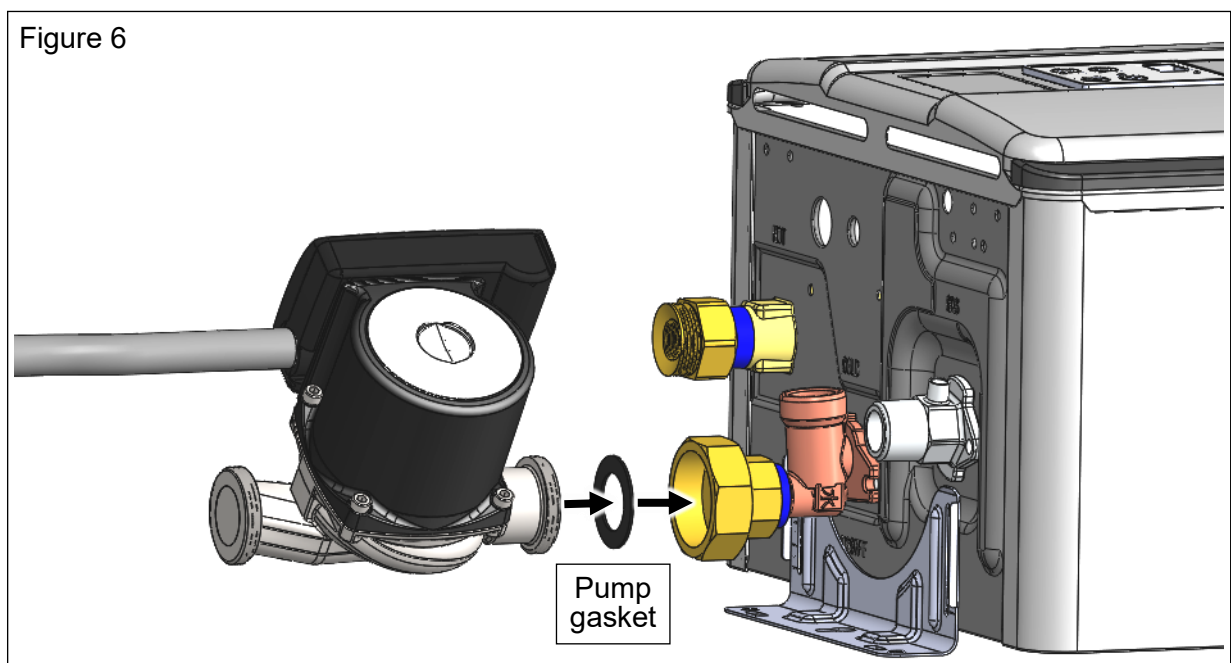
4. Install one of the pump union fittings onto the cold water inlet (Figure 4).



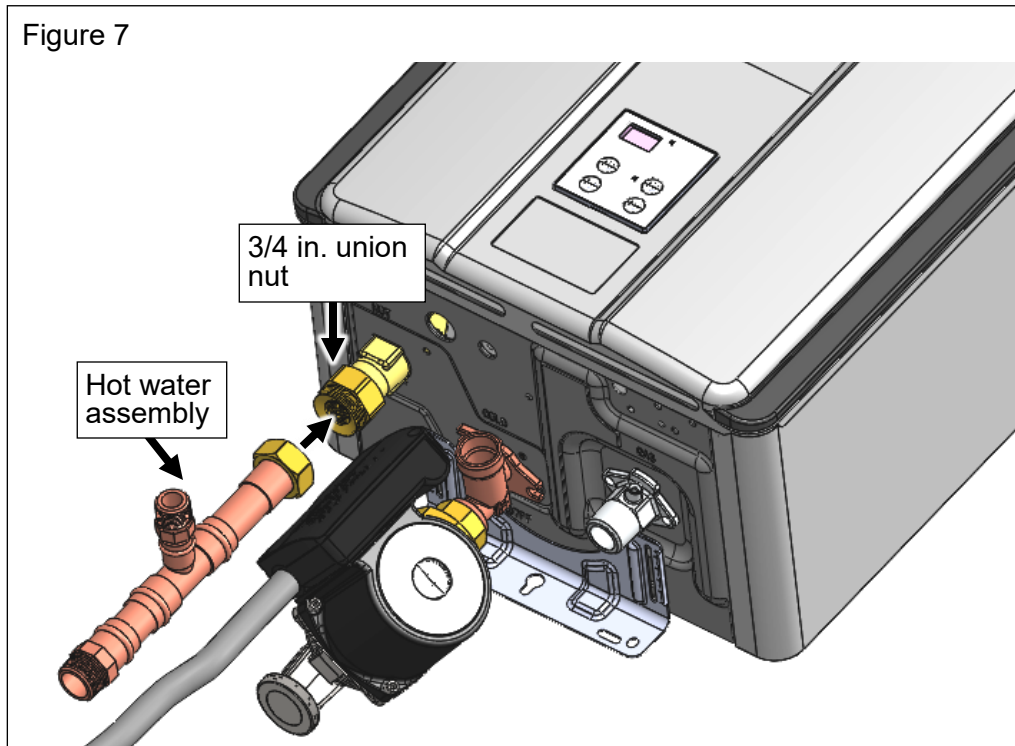
5. Wrap Teflon tape around the top connection on the cold water manifold and install the second pump union fitting (Figure 5).



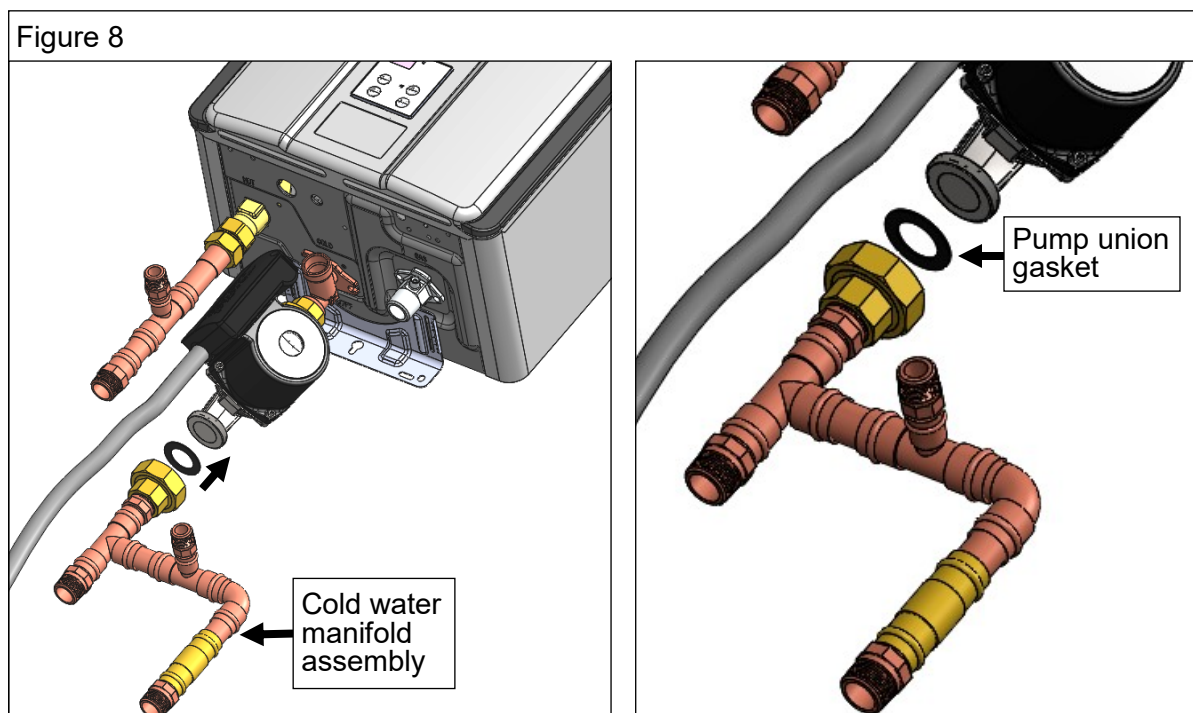
6. Connect the pump to the union on the cold water inlet, making sure the pump gasket is in place. The arrow on the side of the pump must be pointed up towards the water heater for correct installation (Figure 6).



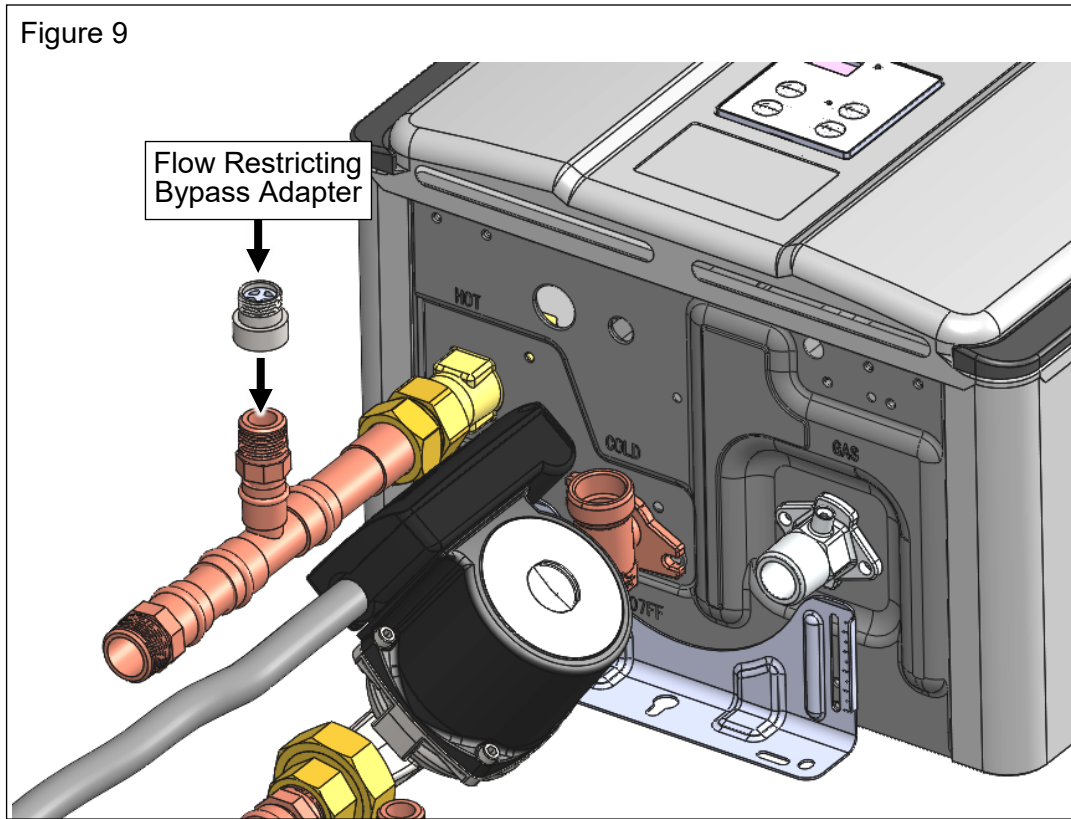
7. Install the hot water assembly onto the union nut from step three (Figure 7).



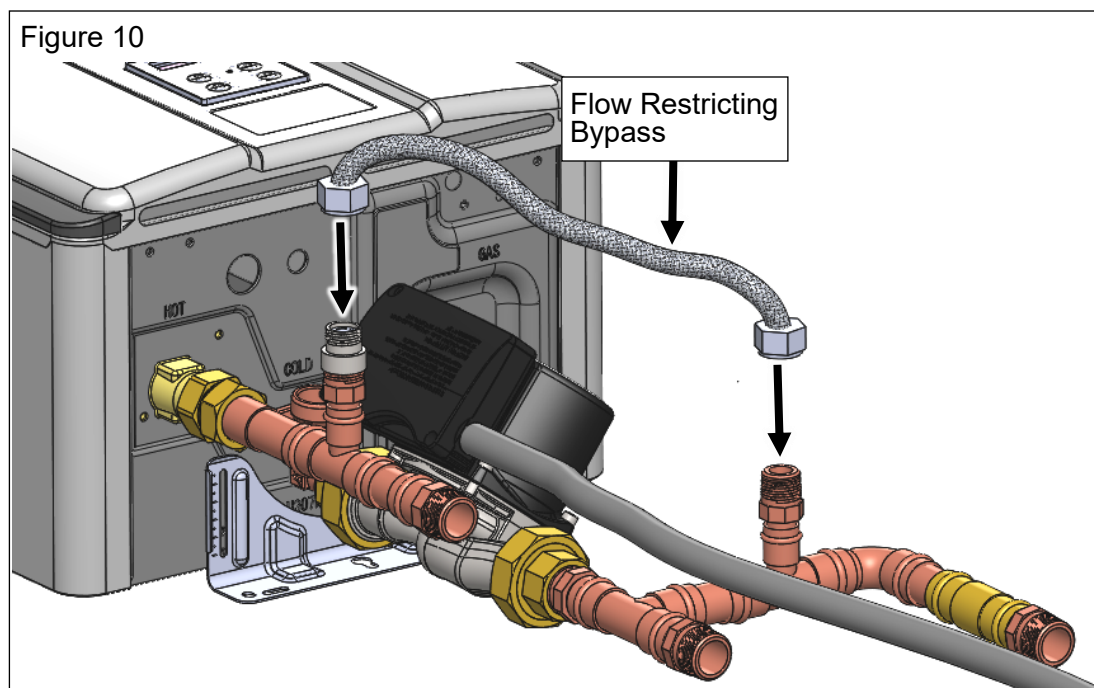
8. Connect the cold water manifold assembly to the inlet of the pump. Ensure the pump union gasket is in place before connecting (Figure 8).



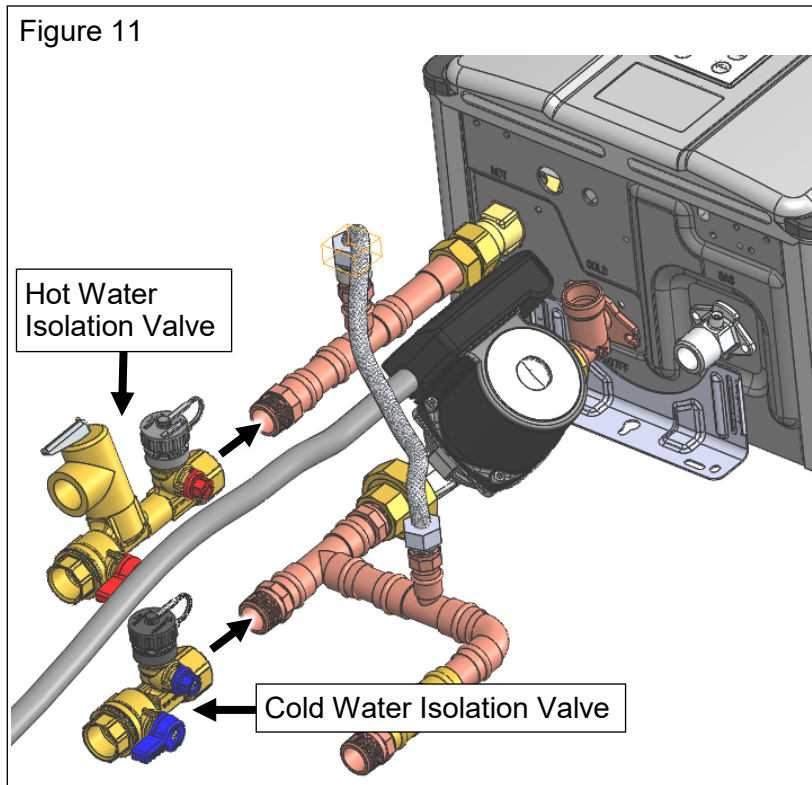
9. Install the flow restricting bypass adapter onto the hot water manifold (Figure 9).



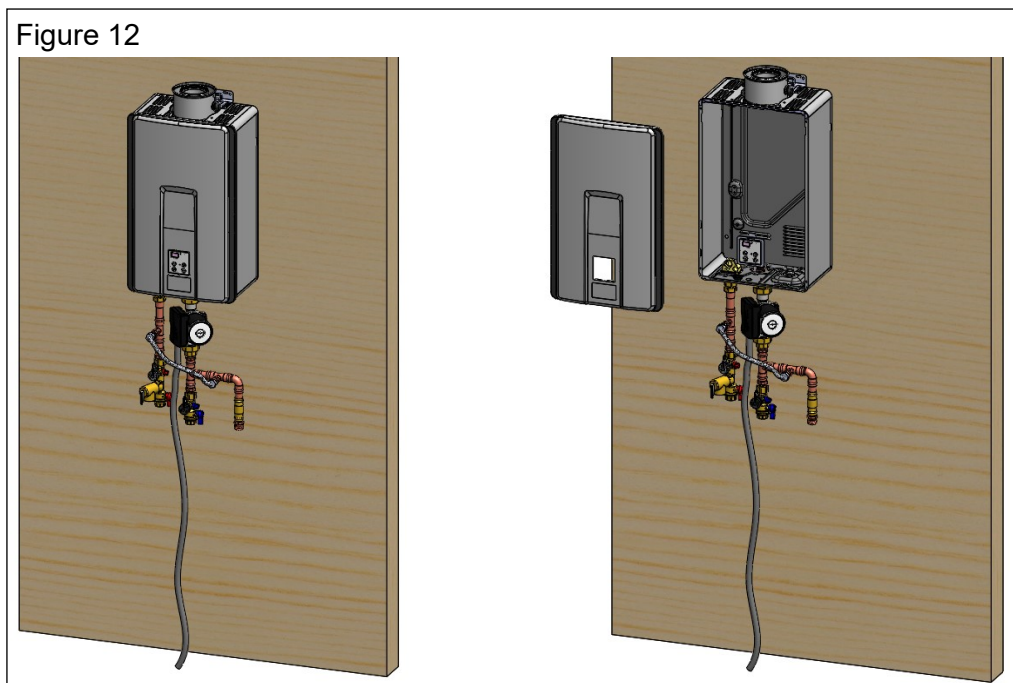
10. Thread the flow restricting bypass onto the hot and cold water manifolds (Figure 10).



11. Install the hot and cold water isolation valves (supplied with the tankless water heater) (Figure 11).

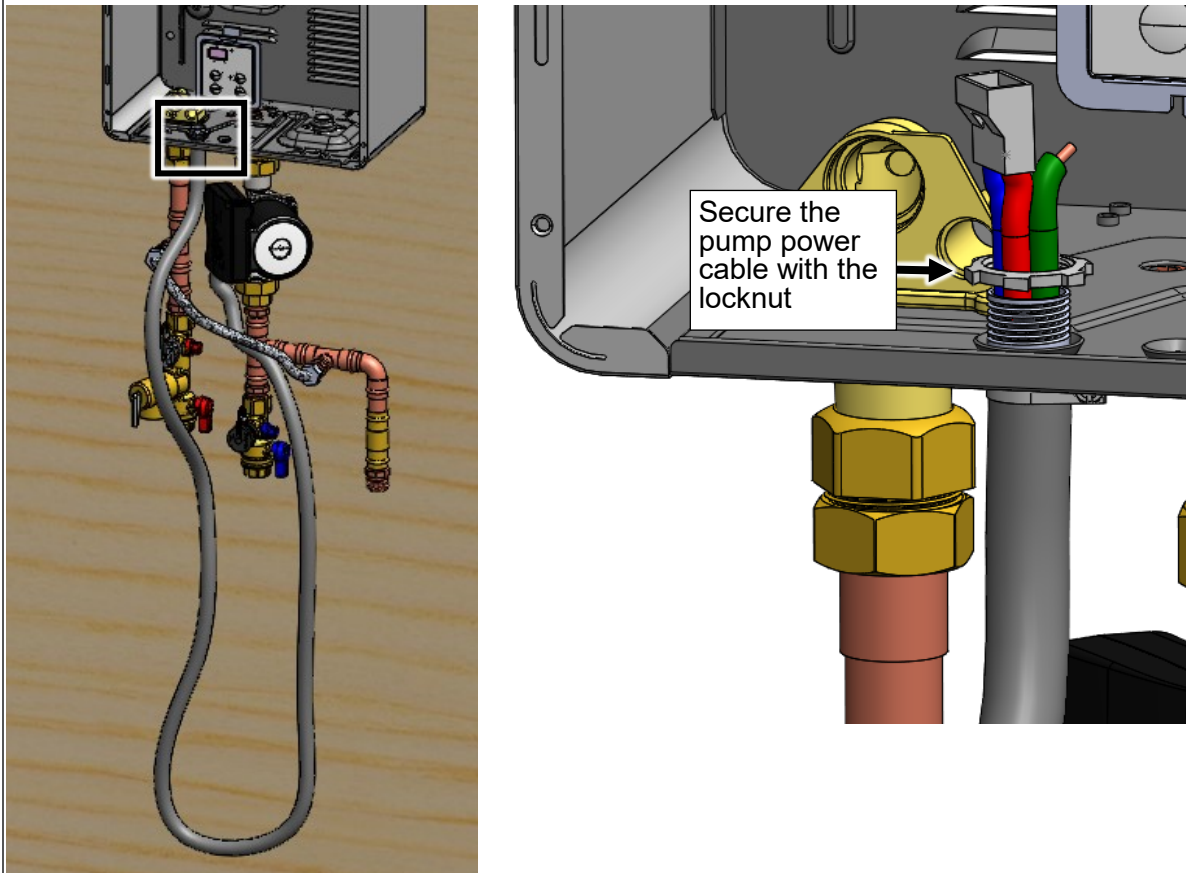


12. Install the tankless water heater onto the wall and remove the front cover (Figure 12). For detailed instructions, refer to the Tankless Water Heater Installation and Operation Manual supplied with the tankless water heater.

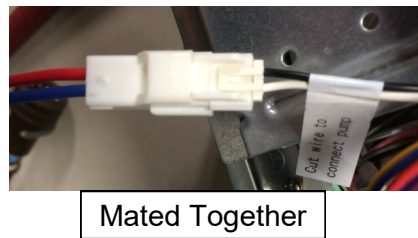
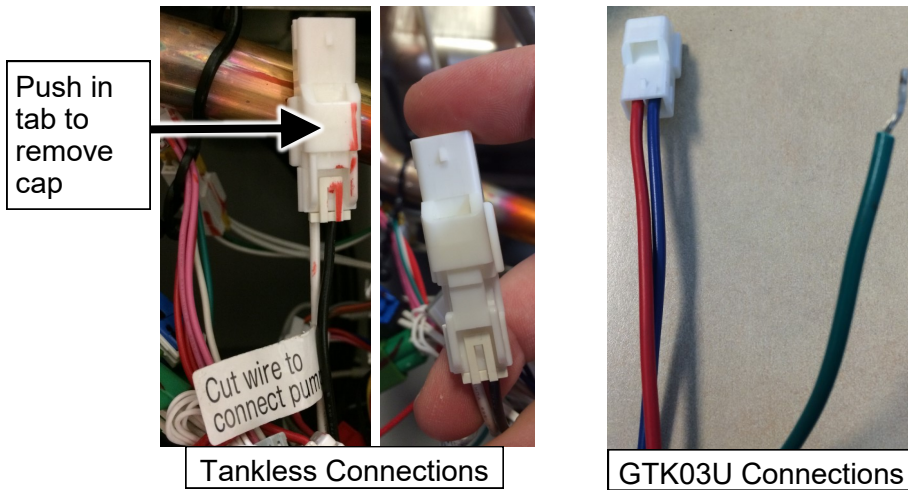


13. Route the pump power cable through the hole in the bottom of the unit and secure it from the inside with the supplied locknut (Figure 13).

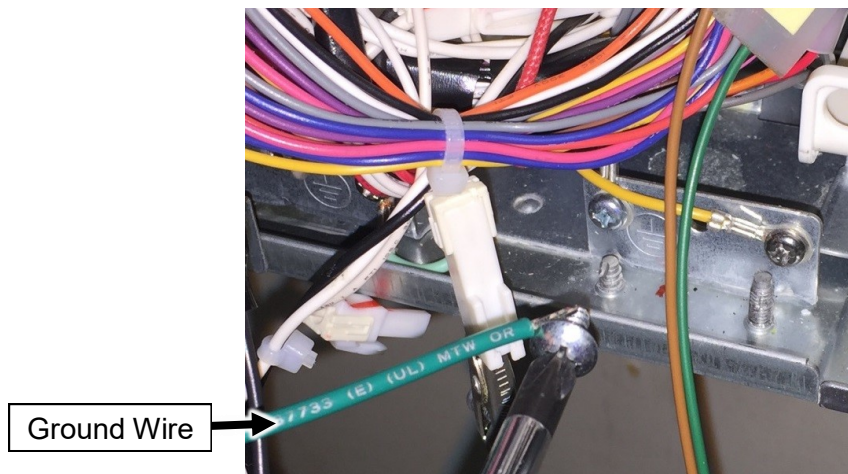
Figure 13



14. Connect the pump power cable to the water heater PC Board.
15. The wire harness for the recirculation pump is bundled with the wire harness from the PC Board (the pump wiring is labeled to show where to connect to the tankless water heater). The connector from the tankless water heater has a black and white wire with the label "Cut wire to connect to pump." DO NOT CUT THE WIRE. To connect to the pump, remove the protective cap from the wire lead and plug the GTK03U connection into it.



16. Connect the ground wire to the body of the tankless water heater.



17. While the tankless water heater front cover is off, set the dip switches for recirculation. Adjust the dip switch in the water heater by moving the 4th switch in the white set of switches (SW2) to ON.

- For Economy Mode, set the 8th dip switch in the white set of switches (SW2) to OFF (default).
- For Comfort Mode, set the 8th switch in the white set of switches (SW2) to ON.

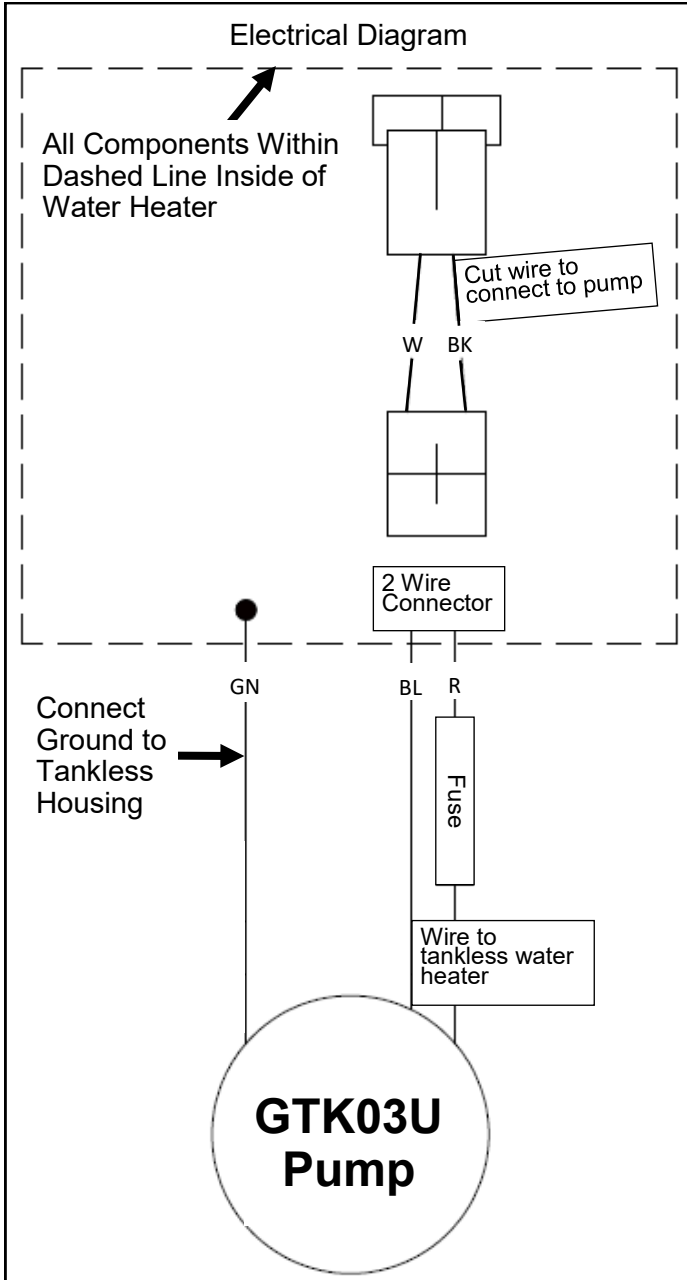
NOTE: For water heaters being set between 135 and 140 degrees, you must set the 7th switch in the yellow set of switches (SW1) to ON. If not completed when set between these temperatures, the pump flow will not activate the water heater.

⚠ WARNING RISK OF ELECTRIC SHOCK

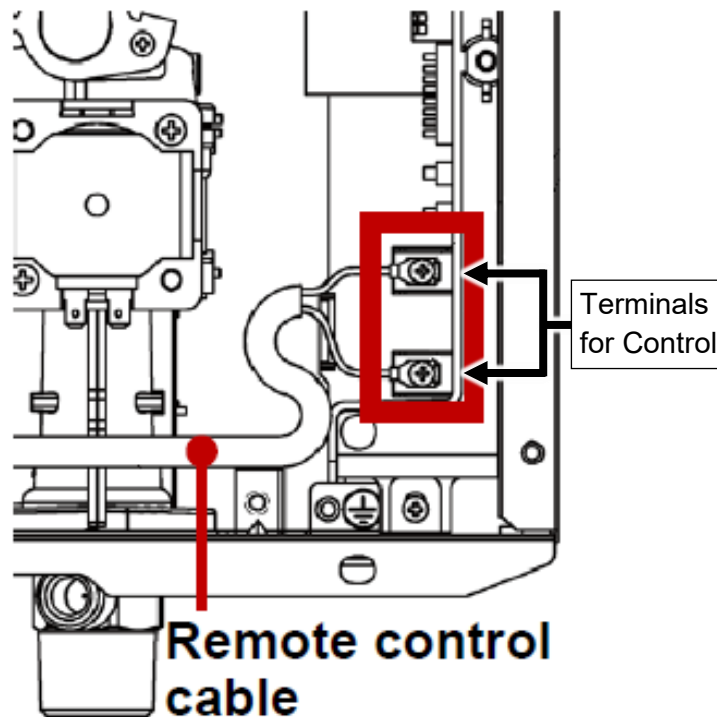
The Grundfos GTK03U Pump's power source is from the tankless water heater. Disconnect this supply connection before servicing.

Settings for SW2 (Bank Of White Switches)		
	Switch 4	Switch 8
Economy Mode	ON	OFF
Comfort Mode	ON	ON

Wiring Table		
	GTK03U (Pump)	Rinnai Circ-Logic
+115VAC (Circ-Logic)	Red (R) with fuse	Black (Bk)
Neutral (Circ-Logic)	Blue (Bl)	White (W)
Ground	Green (Gn)	*Connect ground to body of the tankless water heater



18. Connect the Control-R™ Wi-Fi module to the terminals for controls on the PC Board.
19. Place the module wires through the bottom opening of the water heater.
20. Attach each module wire to the two screws labeled “Terminals for Controls” and partially unscrew each of the two screws.
21. Insert the spade terminals between the screw and the contact, then tighten the screws.



22. Reinstall the front cover onto the water heater.
23. Before connecting the water supply:
 - The piping (including soldering materials) and components connected to the tankless water heater must be approved for use in potable water systems.
 - Purge the water line to remove all debris and air. Debris will damage the water heater.
 - The tankless water heater must not be connected to a system that was previously used with a non-potable water heating appliance.
 - Ensure that the water filter on the water heater is clean and installed.

To connect the water supply, follow the instructions below.

IMPORTANT

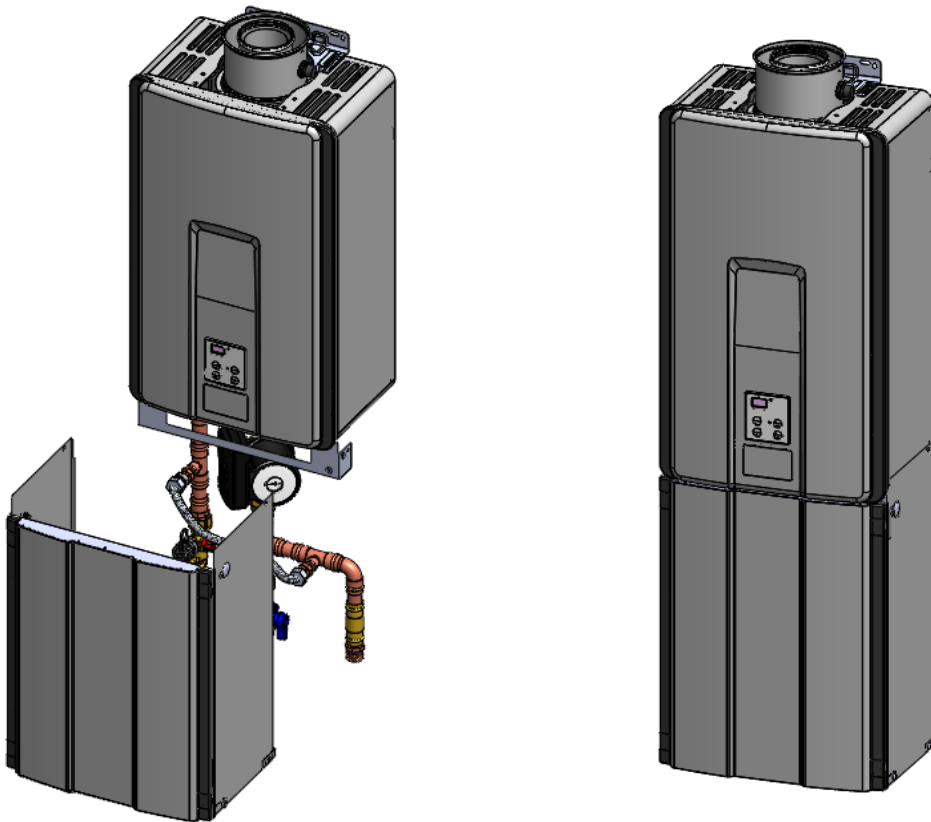
Water connections to the water heater should follow all state and local plumbing codes. Refer to the plumbing diagrams on the following pages.

24. Plumb the cold water supply line to the water heater on the 3/4 in. MNPT connection at the bottom of the water heater marked "COLD."
25. Plumb the hot water supply line to the 3/4 in. MNPT connection marked "HOT."

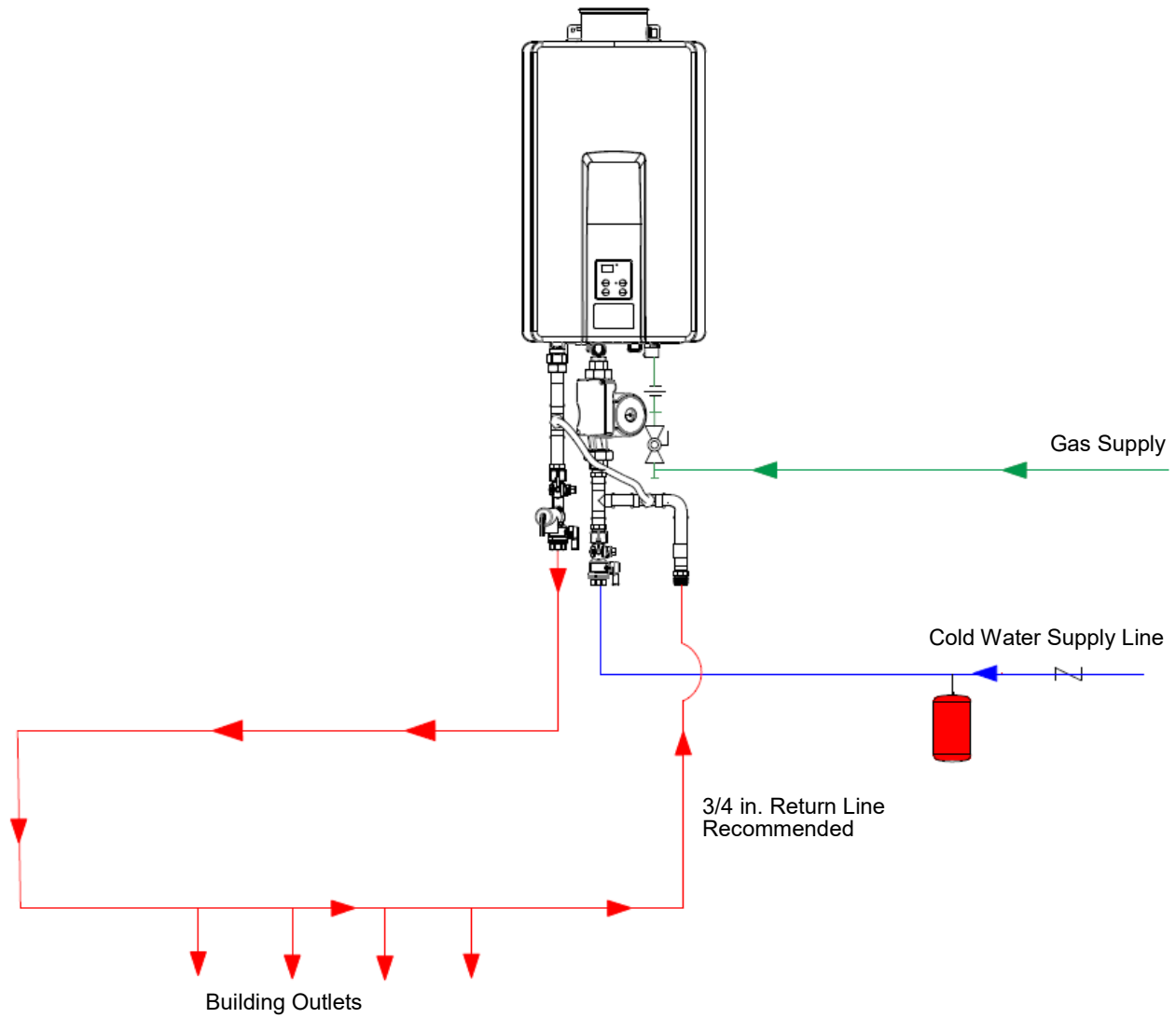
NOTE

Make sure the water lines to the water heater fit within the confinements of the pipe cover.

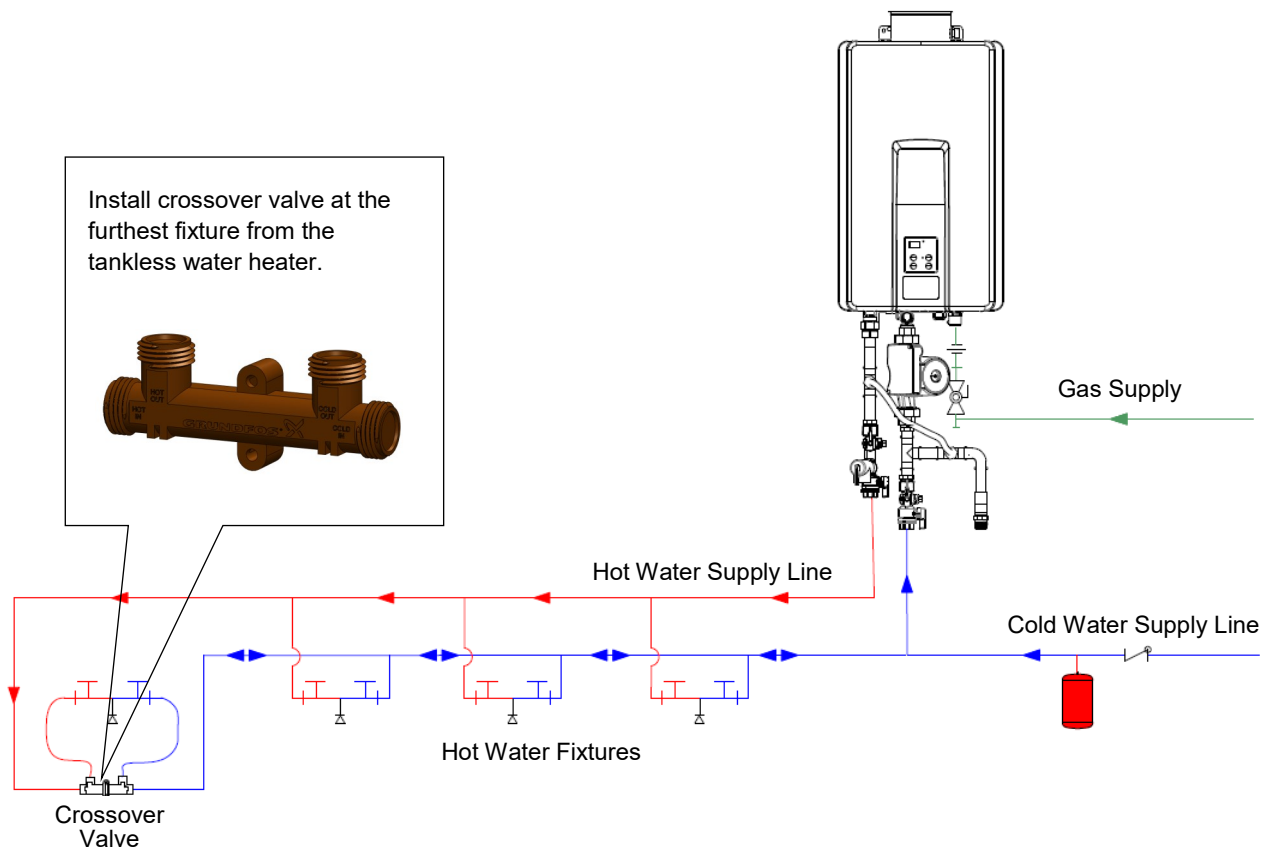
26. Install the pipe cover using the installation instructions included in the pipe cover box.



Dedicated Return Line Plumbing Diagram



Crossover Recirculation Plumbing Diagram



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Learn more about Rinnai high-performance Tankless Water Heaters, Hybrid Water Heating Systems, Boilers, Vent-Free Fan Convectors and EnergySaver® Direct Vent Wall Furnaces at:

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