

This guide is designed to help you quickly install the push button for on-demand recirculation with Rinnai SENSEI™ tankless water heaters using a dedicated return line in the plumbing system.

IMPORTANT

- Maximum distance from module to push button is 250 ft. (76 m).
- Additional wiring can run up to 300 feet (91 m) away from water heater (18-22 gauge wire required).
- Up to 30 push buttons are supported per module.

1 You Will Need

	Push Button(s)		2 Wire Nuts (or other approved wire connectors) (Field-supplied)
	Control-R™ Module		Phillips Head Screwdriver (Field-supplied)
	Water Heater Controller Cable (included in water heater packaging)		Wire Cutters/Stripper (Optional) (Field-supplied)

2 Install Module

Install on Water Heater

Place magnetic back panel to side of water heater (indoor water heaters only).

OR

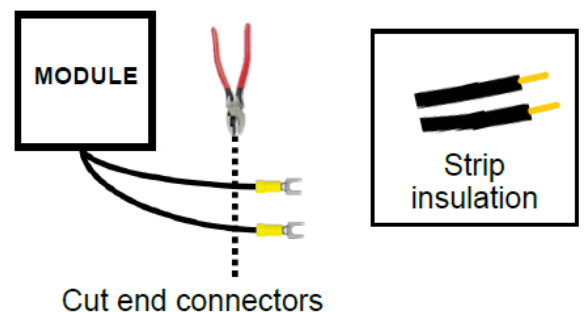
Install on Wall

Refer to Push Button Installation Instructions supplied with module for wall installation instructions.

3 Connect Module to Water Heater

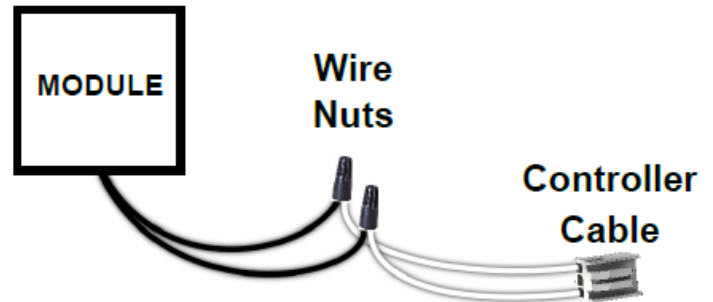
- 1 Unplug water heater power cord from power outlet.
- 2 Remove water heater front panel (use a Phillips Head screwdriver to remove 4 screws securing the panel).
- 3 Connect module wires to PC Board located inside water heater by completing steps a, b, and c below.

- a** If module comes with spade end connectors, cut spade end connectors off the two module wires.
Next, strip insulation off both ends.

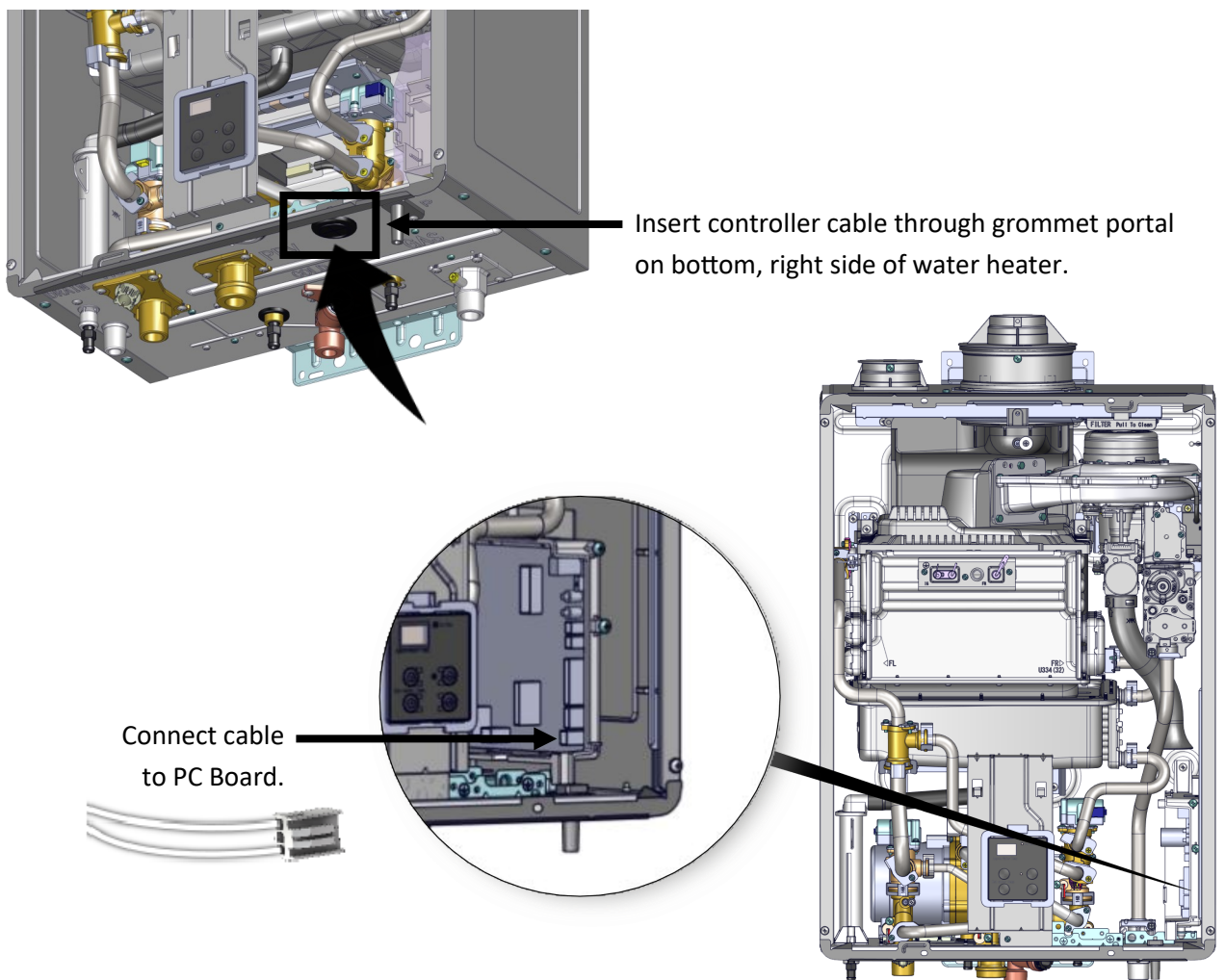


3 Connect Module to Water Heater (Continued)

- b** Connect module wires to water heater controller cable (included in water heater packaging) using wire nuts or other approved wire connectors.



- c** Connect controller cable to PC Board through grommet portal on bottom, right side of water heater.

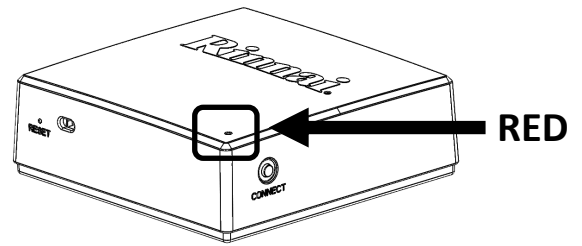


- 4** Plug water heater power cord into a power outlet.

Continue with next step.

4 Pair Push Button to Module

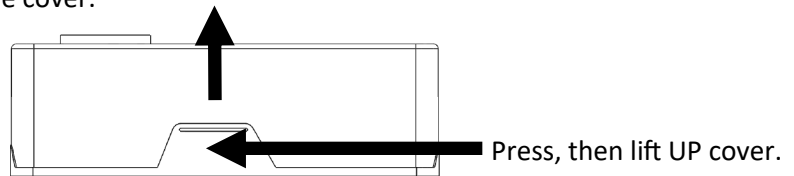
- 1 Make sure water heater is plugged into power outlet.
- 2 Wait for module LED to turn **RED**.
While you are waiting, continue with next step.



! Complete Remaining Steps for EACH PUSH BUTTON to be Paired.

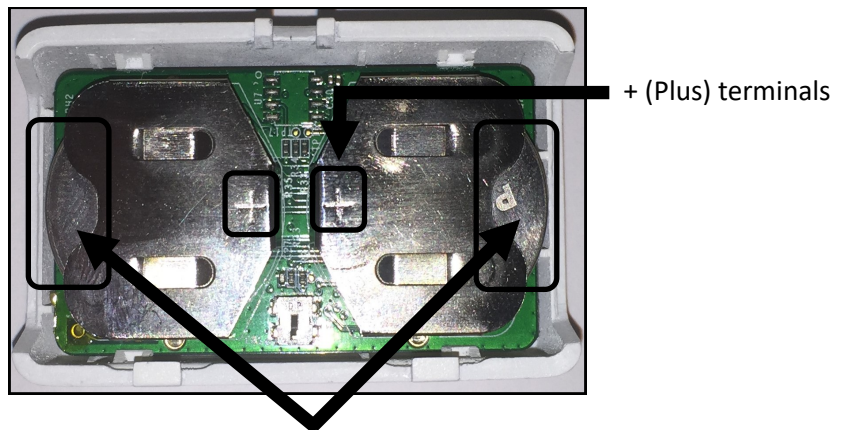
- 3 Insert push button batteries by following steps a, b and c below.

a Press both sides. Lift and remove cover.



b Press/hold down push button and insert two supplied batteries **at the same time**. Ensure + (plus) terminals are aligned correctly.

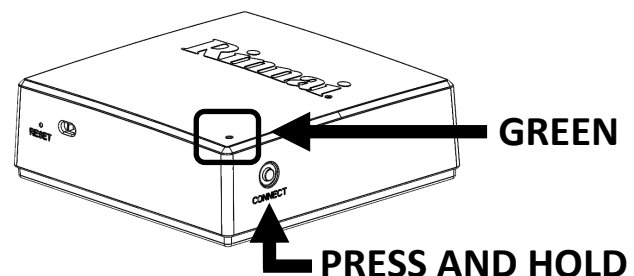
When batteries are installed, release the push button.



c Replace cover on push button (cover fits in one direction only).

- 4 Press and hold down **Connect** button on MODULE until LED turns **GREEN**.

Then, release button.



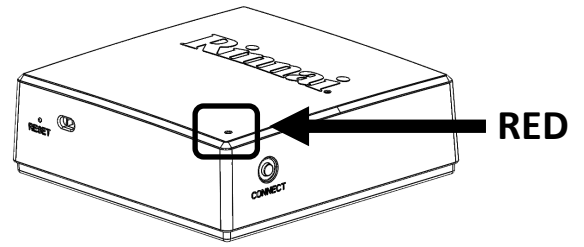
- 5 You have five minutes to complete the following three bullets:


- Press and hold down push button.
- Push button flashes three times and then rapidly flashes.
- Release push button.

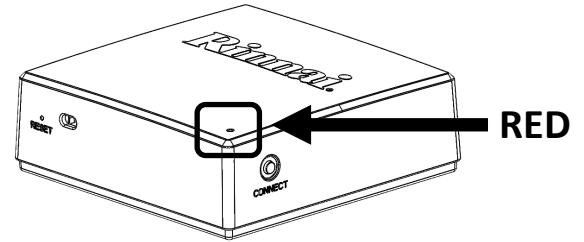


4 Pair Push Button (Continued)

- 6 If paired successfully, module LED quickly blinks **GREEN** and turns **RED**.



- 7 Press push button.  Module LED quickly blinks **GREEN** and turns **RED**.
(This signifies communication between push button and module.)



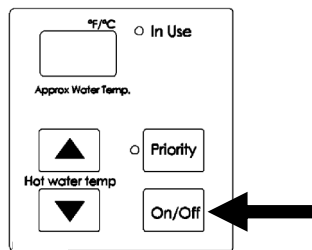
IMPORTANT: After pressing push button, **DO NOT** press it again until 5-minute timer is complete (as explained in next step).

- 8 Set a timer for **5 minutes**.
While waiting, continue with next section.



5 Configure Water Heater Settings to Comfort Mode

- 1 Press **On/Off** button on controller to turn **OFF** water heater.

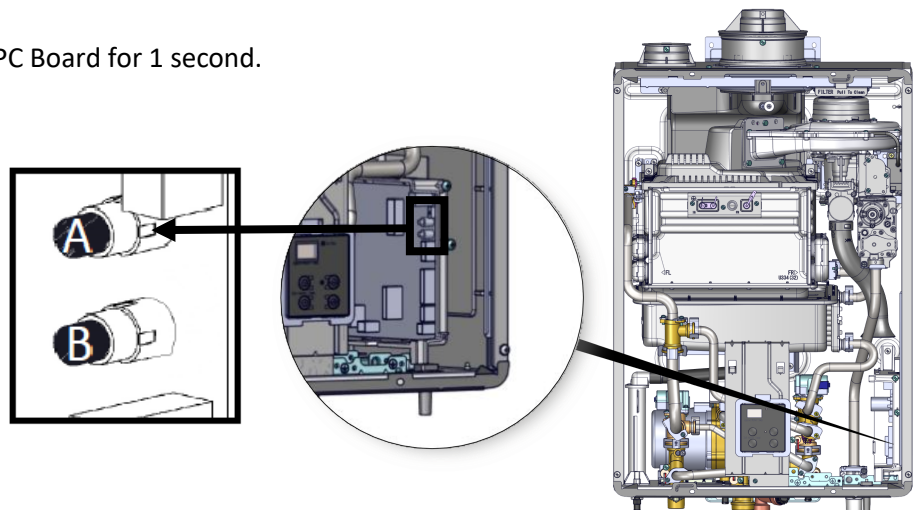


IMPORTANT

Controller MUST be turned OFF for remaining steps to work correctly.

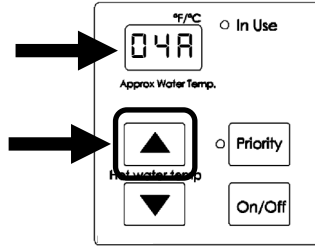
- 2 Press and hold down **A** button on PC Board for 1 second.

The controller turns **ON**.

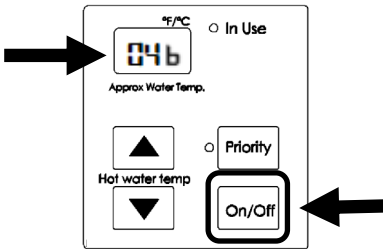


5 Configure Water Heater Settings to Comfort Mode (Continued)

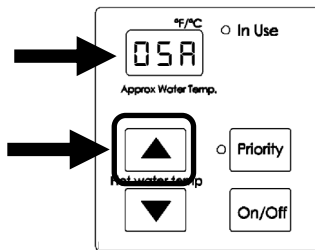
3 Press **Up** arrow until **04A** appears in display.



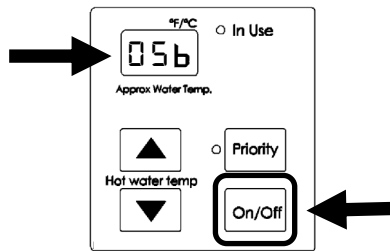
4 Press **On/Off** button until **04b** appears in display.



5 Press **Up** arrow until **05A** appears in display.



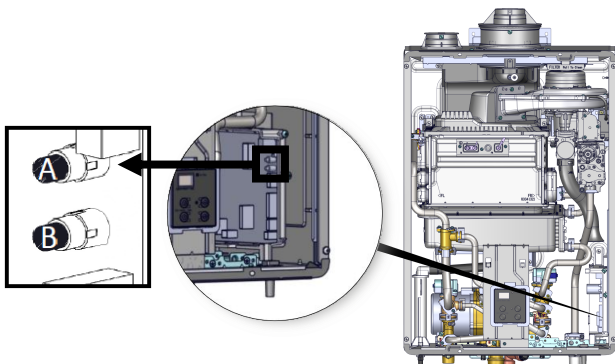
6 Press **On/Off** button until **05b** appears in display.



7 Comfort mode is selected.

To select additional parameters, see **Appendix A**.

When parameter settings are complete, press and hold down **A** button on PC Board for one second to exit parameters. The controller turns **OFF**.

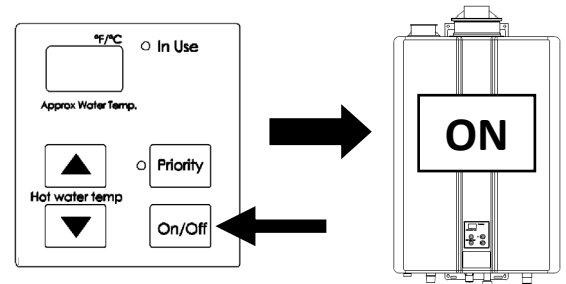


8 Replace water heater front panel.

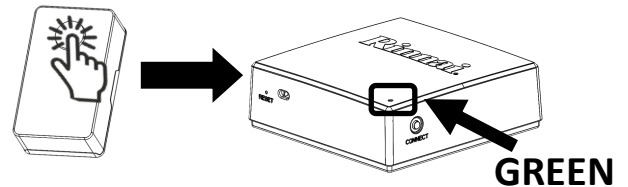


COMPLETE REMAINING STEPS ONLY AFTER 5-MINUTE TIMER IS FINISHED FROM STEP 8 ON PAGE 4.

9 Press **On/Off** button on water heater controller to turn **ON** water heater.



10 Press push button. Module LED blinks **GREEN** and pump turns on.



11 Instructions for pairing one push button are complete.

To pair additional push buttons, follow the steps below.

Pair Additional Push Buttons

- Press **On/Off** button on water heater controller to turn **OFF** water heater.
- Unplug water heater power cord from outlet and then plug it back in.
- Repeat steps 3-6 from pages 3 and 4.
- Press **On/Off** button on water heater controller to turn **ON** water heater.
- Press push button. Pump turns on.

Appendix A: Additional Parameter Settings



TIP

Parameter settings can be set with the water heater turned **OFF**.



IMPORTANT

Refer to “Rinnai Tankless Water Heater Installation and Operation Manual” for complete list of water heater parameter settings.

High Altitude (Installation Location)

1. Press **On/Off** button on controller to turn **OFF** water heater.
2. Press **A** button on PC Board for 1 second.
3. Press **Up** arrow until **02A** appears in display.
4. Press **On/Off** button until the following appears in display:
 - **02A** 0 to 2,000 ft
 - **02b** 2,001 - 5,400 ft
 - **02C** 5,401 - 7,700 ft
 - **02d** 7,701 - 10,200 ft
5. To exit parameter settings, press and hold down **A** button on PC Board for 1 second.

Service Soon

1. Press **On/Off** button on controller to turn **OFF** water heater.
2. Press **A** button on PC Board for 1 second.
3. Press **Up** arrow until **03A** appears in display.
4. Press **On/Off** button until the following appears in display:
 - **03A** Disabled
 - **03 b** 0.5 Year
 - **03C** 1 Year
 - **03 d** 2 Years
5. To exit parameter settings, press and hold down **A** button on PC Board for 1 second.

Recirculation Settings

1. Press **On/Off** button on controller to turn **OFF** water heater.
2. Press **A** button on PC Board for 1 second.
3. Press **Up** arrow until **04A** appears in display.
4. Press **On/Off** button until the following appears in display:
 - **04A** No Recirculation
 - **04b** Dedicated Mode
5. To exit parameter settings, press and hold down **A** button on PC Board for 1 second.