

EHPWH Relay Board

REPLACEMENT INSTRUCTIONS

Kit Name	Relay Board E-box Assembly
Kit Part Number	105002060
Compatible Rinnai Products	Rinnai Heat Pump Water Heater: All REHP Series Models

WARNING Failure to correctly assemble the components according to these instructions may result in electric shock, injury, or death.

CAUTION

To protect yourself from harm, follow the steps below before proceeding.

- Antistatic gloves must be worn.
- Disconnect the electrical power supply by turning off the electricity at the circuit breaker.
- Turn off the water by closing manual ball valves for the hot and cold water connections at the appliance.

Items Inside Product Box

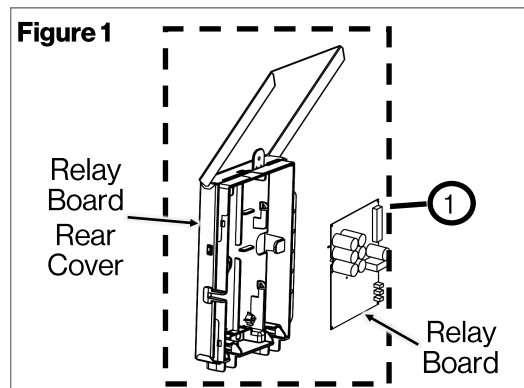
Before installation, please make sure all parts are located inside the product box.

Table 1

Item #	Item	Qty
1	Relay Board E-box Assembly	1

TOOLS/MATERIALS REQUIRED

- Phillips Head Screw Driver
- Flat Head Screw Driver
- Adjustable Wrench
- Tongue and Groove Plier



Instructions

1. Antistatic gloves must be worn to protect yourself from harm.
2. Disconnect the electrical power supply by turning off the electricity at the circuit breaker.
3. Turn off the water by closing manual valves for the hot and cold water connections at the appliance.
4. Use a Phillips head screw driver to remove 6 screws located around the appliance securing top cover to the appliance (Figure 2). Keep the removed 6 screws to be reinstalled in step 28.
5. Use a flat head screw driver to remove the display box front cover. To remove, slide the flat head of screw driver into the slots located on the bottom side of cover and twist the screw driver to remove (Figure 3). Keep front cover secured to be reinstalled in step 27.

IMPORTANT

When following the instructions to remove display box front cover, ensure not to apply unnecessary force. If applied, it may break the snap pins located on the display front cover and prevent it from assembling it back. Ensure to twist the screw driver softly and the cover should open without any damage.

Figure 2

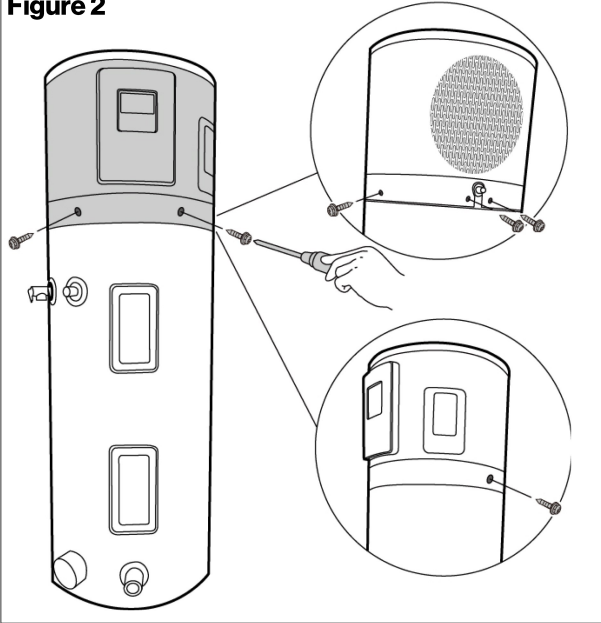
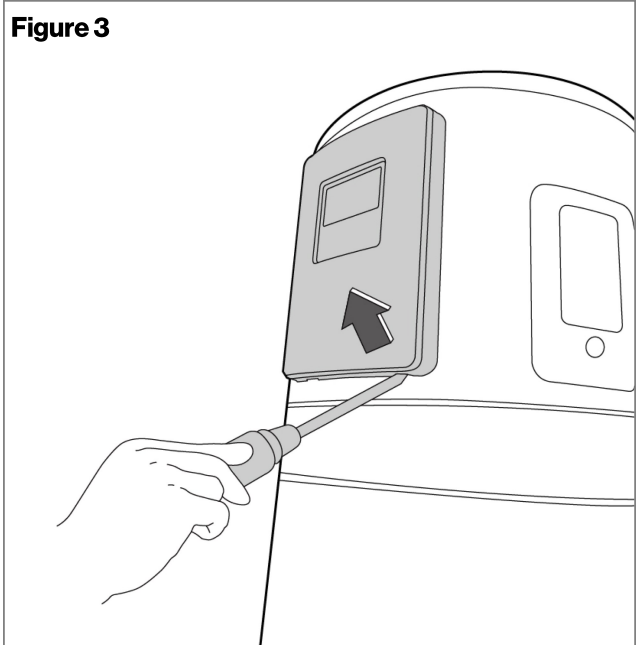


Figure 3



6. Use a Phillips head screw driver to remove 4 screws securing the display box rear cover (Figure 4). Keep removed 4 screws secured to be reinstalled in step 26.
7. Use a flat head screw driver to remove the display box. To remove, slide the flat head of screw driver into the slots located on the bottom side of box and twist the screw driver to remove (Figure 5).

IMPORTANT

When following the instructions to remove display box, ensure not to apply unnecessary force. If applied, it may break the snap pins located on the display box and prevent it from assembling it back. Ensure to twist the screw driver softly and the box should open without any damage.

Figure 4

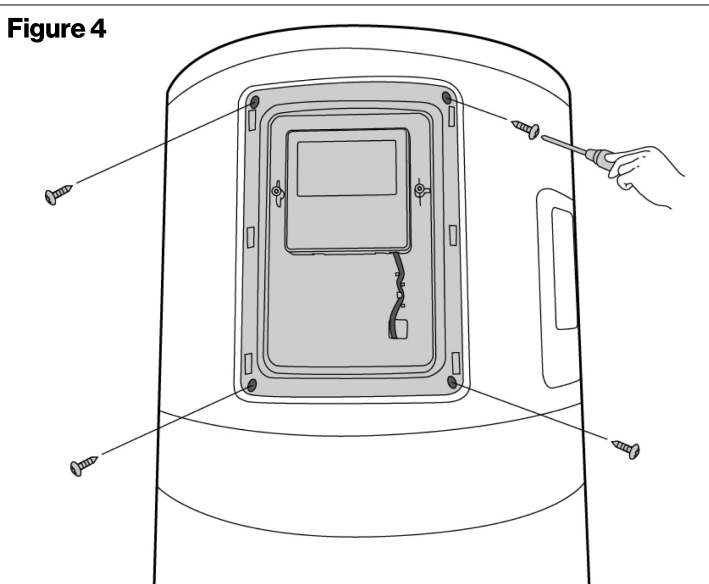
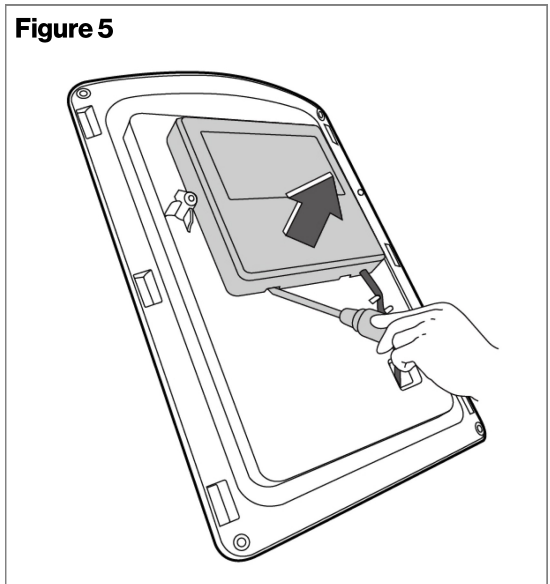


Figure 5



8. Disconnect the display board connector (Figure 6). Keep display box and display board safe to be reinstalled in step 24 & step 25.
9. Use a Phillips head screw driver to remove 6 screws securing the junction box cover and CTA 2045 cover (Figure 7). Keep these 6 screws safe to be reused in step 23.

Figure 6

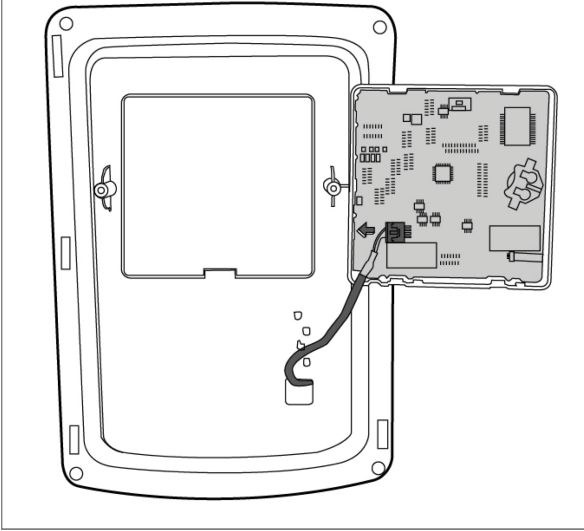
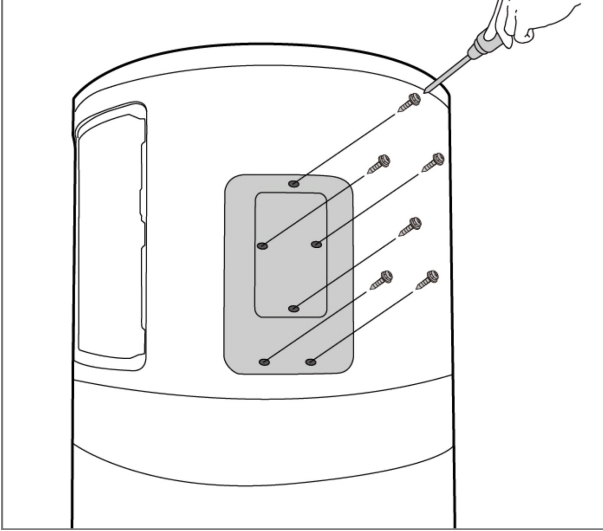


Figure 7



10. Use a Phillips head screw driver to remove 2 screws and release line L1 (black) and line L2 (white) (Figure 8). Disconnect power supply cable on the breaker side too if needed. Keep removed 2 screws safe to be reinstalled in step 22.
11. Remove CTA2045 connector from the junction box cover (Figure 9). Keep junction box cover and CTA2045 cover secured to be reused in step 21.

Figure 8

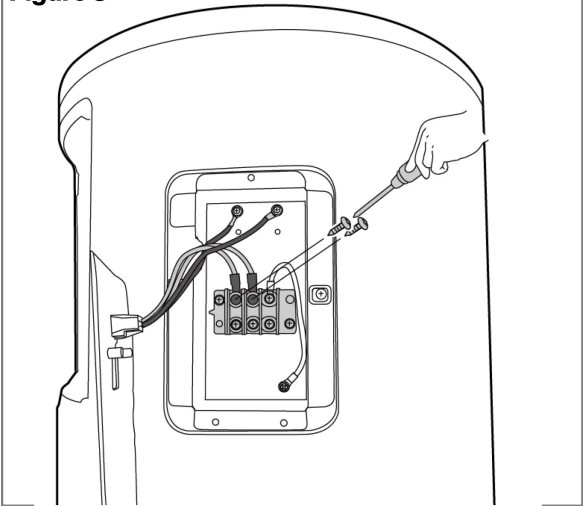
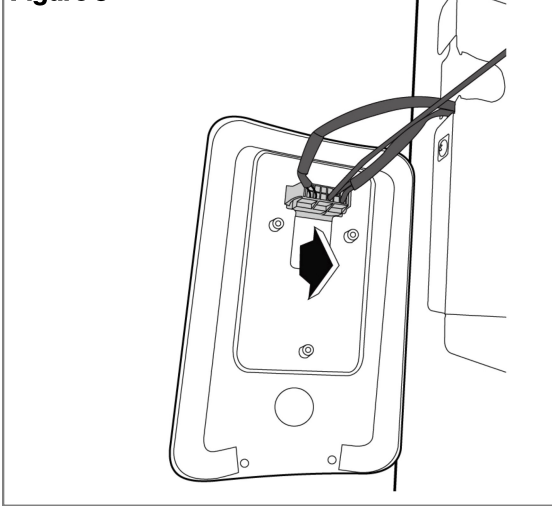


Figure 9



12. Use a Phillips head screw driver to remove 2 grounding screws and 2 screws securing junction box to the appliance (Figure 10). Keep the junction box safe to be reinstalled in step 20.
13. Slide the top cover upwards to remove (Figure 11). Keep the top cover safe to be reinstalled in step 19.

Figure 10

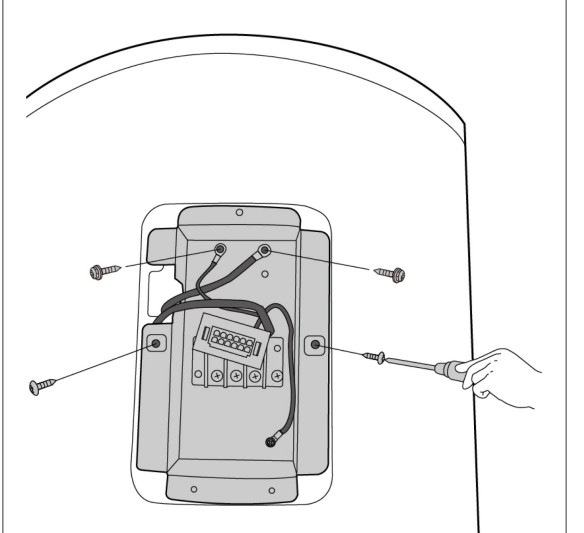
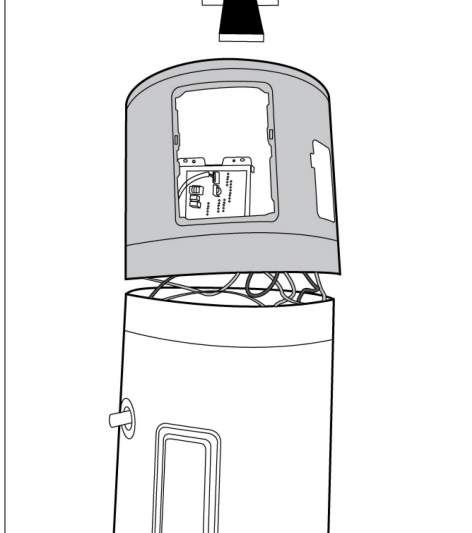
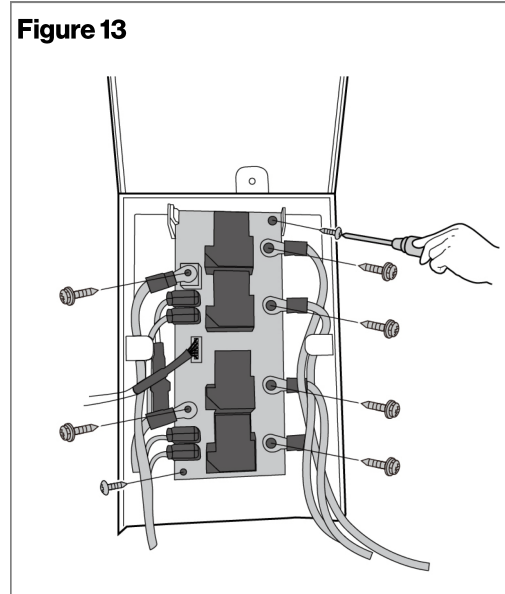
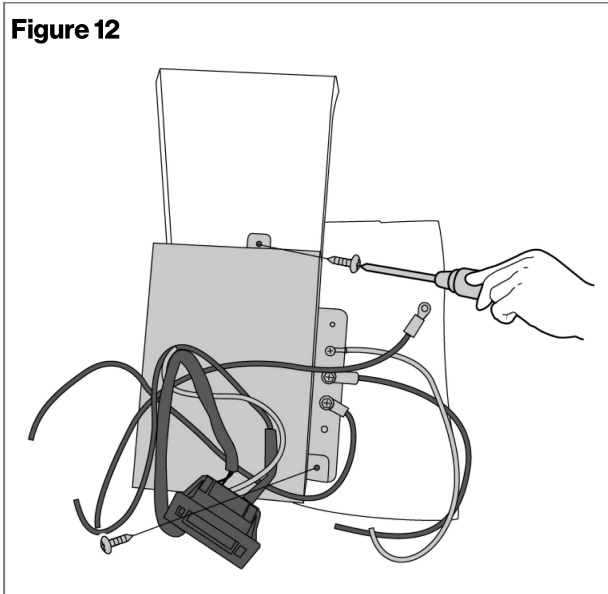


Figure 11



14. Use a Phillips head screw driver to remove 2 screws securing relay board front cover (Figure 12). Keep the relay board front cover safe to be reinstalled in step 18.
15. Use a Phillips head screw driver to remove 6 screws securing ring terminals and 2 screws securing relay (Figure 13). Also, disconnect the connector before removing the relay board. Ensure to push the snap pins out to remove relay board.



Relay Board Reassembly

16. Prepare new relay board E-box assembly for installation by removing the 4 screws and pulling out new relay board from the rear cover.
17. Install new relay board by pushing it in the box on appliance and securing using 2 screws (Figure 13). Secure the 6 ring terminals with screws, 4 spade terminals and a connector back on the new relay board.
18. Install relay board front cover on using 2 screws (Figure 12).
19. Slide back the top cover on the appliance (Figure 11). Ensure to align the top cover to the appliance correctly so the cavity of the main control board on the top cover lines up with the main control board.
20. Reinstall grounding cables and junction box on the appliance using 4 screws (Figure 10).
21. Install back the CTA-2045 connector on the junction box cover (Figure 9).
22. Mount back power supply cables using 2 screws as shown in Figure 8.
23. Reinstall junction box cover and CTA 2045 cover using 6 screws (Figure 7).
24. Reconnect the display board connector (Figure 6).
25. Install back the display board on the display box rear cover (Figure 5).
26. Reinstall display box rear cover on the appliance using 4 screws (Figure 4).
27. Install back display box front cover on top of display box rear cover (Figure 3).
28. Secure top cover to the appliance using 6 screws (Figure 2).
29. Turn on the water by opening manual valves for the hot and cold water connections at the appliance.
30. Reconnect the electrical power supply by turning on the electricity at the circuit breaker.
31. Ensure that the appliance runs fine. May need to open one of the faucets in the house to fire up the appliance.