



HA Retro Control Board Installation



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HA Retro Control Board Installation

- TOOL(S) NEEDED:**
- Phillips Screwdriver
 - Flat tip Screwdriver
 - 3/8" Socket or Nut Driver
 - 9/16" Wrench
 - Hammer
 - Wire Cutters
 - SV1156 or SV1201 kit

Turn the cabinet off and disconnect the unit from power. (Fig.1-2)



Fig.1



Fig.2

*** Both the air and water probes must be replaced for the new control board to function.**

Air Probe Replacement

1. Locate the air probe access panel on the right side of the cabinet and using a Phillips screwdriver remove the retaining screw. (Fig.3-4)



Fig.3



Fig.4

2. Locate the two pin molex connection and cut the zip tie off. Disconnect the two pin connection. (Fig.5-6)



Fig.5

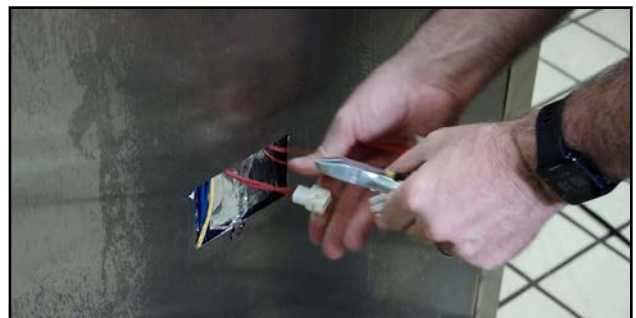


Fig.6

3. Pull back the insulation. Using a 3/8" nut driver or socket, remove the two retaining nuts. (Fig.7-8)



Fig.7



Fig.8

4. Pull retaining bracket up and off of the mounting studs. Next remove the air probe, back retainer, and orange washer. (Fig.9-10)



Fig.9



Fig.10

5. Locate the replacement air probe in the kit. Thread the mounting bracket, followed by the back bracket, and finally the orange washer. (Fig.11-12)



Fig.11



Fig.12

6. Insert air probe into opening and rotate until probe tip is pointing down and the wire end is pointing up. (Fig.13-14)



Fig.13



Fig.14

7. Place the mounting brackets onto the mounting studs. Start the two retaining nuts and tighten them using a 3/8" nut driver or socket. (Fig.15-16)



Fig.15



Fig.16

8. Reconnect the two pin molex connection. Pull insulation back into place and tuck the wires. Replace the air probe access panel (Fig.17-18)



Fig.17



Fig.18

Water Probe Replacement

*** Drain water from water pan before removing the water probe.**

1. Using a Phillips screwdriver, remove the four right side lower access panel screws and the lower panel. (Fig.19-20)



Fig.19



Fig.20

2. Locate the two pin molex connection in the front right hand corner. Disconnect the two pin molex connection.(Fig.21-22)



Fig.21



Fig.22

3. Using a 9/16" wrench loosen and remove the water probe compression nut. (Fig.23-24)

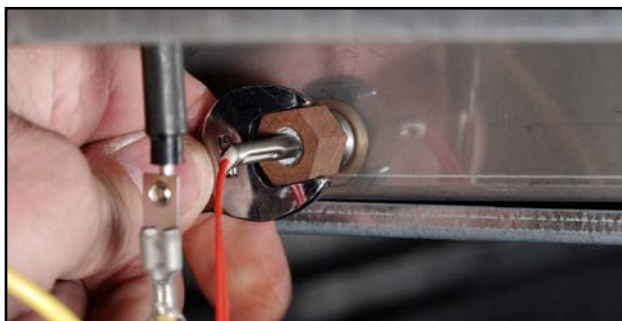


Fig.23

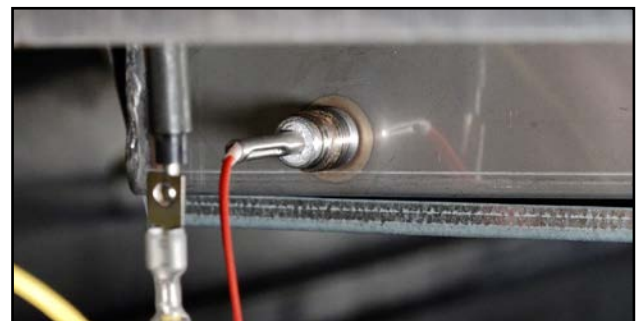


Fig.24

4. Using a hammer, tap the water probe out through the water pan side. Be careful not to bend or smash the probe. Pull the probe out of the water probe opening. (Fig.25-26)



Fig.25



Fig.26

5. Locate the new water probe in the kit and thread on the compression nut and ferrule. The ferrule needs to be 2-1/4" from the probe tip.(Fig.27-28)



Fig.27

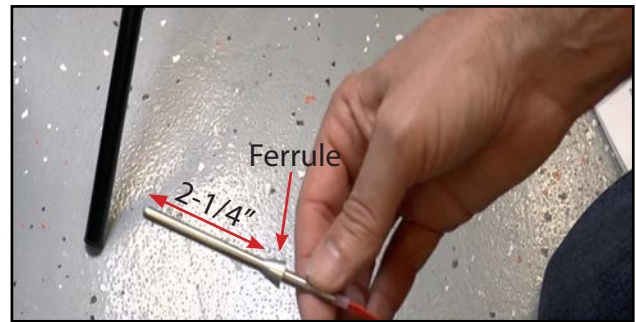


Fig.28

6. Insert the water probe into the probe opening. Thread the compression nut on and tighten the compression nut using a 9/16" wrench. Tighten the compression nut until the probe will no longer slide in or out. (Fig.29-30)

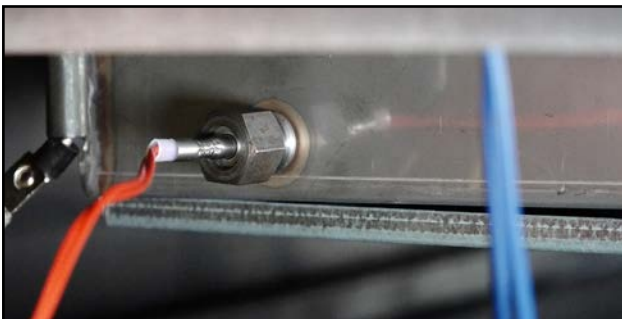


Fig.29



Fig.30

7. Reconnect the two pin molex connection. Refill the water pan and check for any leaks around the compression nut. Tighten if needed. Replace the bottom access panel. (Fig.31-32)

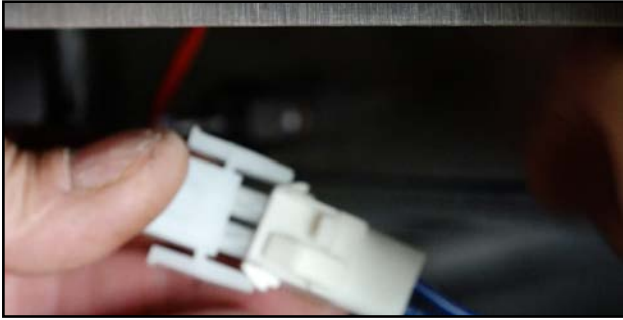


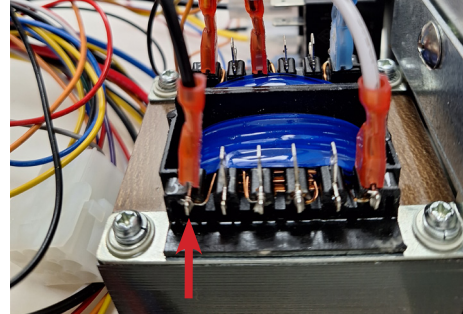
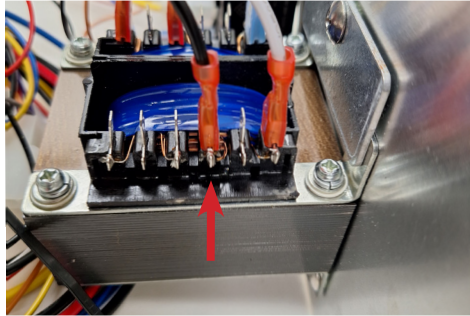
Fig.31



Fig.32

Relay Panel Installation

*****Important***** If the unit is a 240 volt unit, the relay board needs to be changed as follows:



Move the Black wire on the right side of the transformer from the #3 terminal to the #6 terminal.

1. Using a Phillips screwdriver, remove the two control board retaining screws. Carefully pull the control board out of the housing.(Fig.33-34)



Fig.33

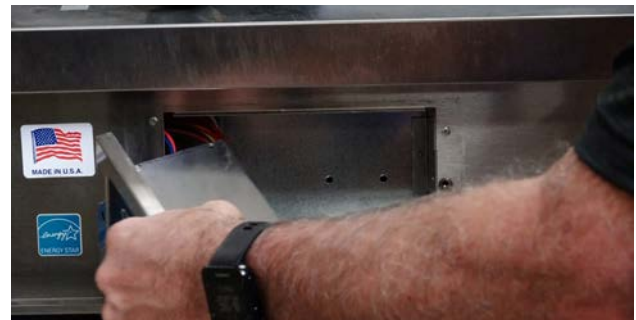


Fig.34

2. Disconnect the nine pin and the six pin molex connections. Remove the control board. (Fig.35-36)



Fig.35



Fig.36

3. Using a Phillips screwdriver remove the six top retaining screws and remove the cabinet top. (Fig.37-38)

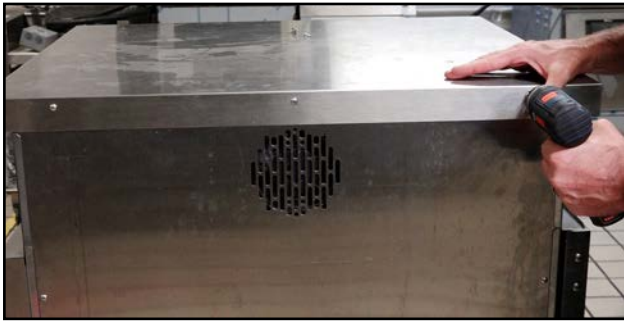


Fig.37

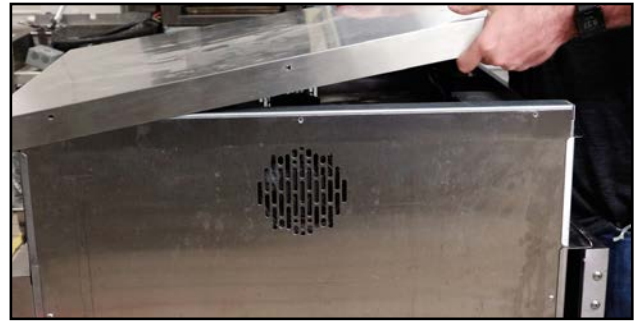


Fig.38

****If the unit is an HA40/4507-HA40/4522, proceed to step 4.**

****If the unit is an HA4003, 4005, or a HA4503, skip to step 6.**

4. If the unit is an **HA4507-HA4522**, Locate the two plastic grommets in the kit and insert them into the first and second large square holes on the right side support brace. (Fig.39-40)

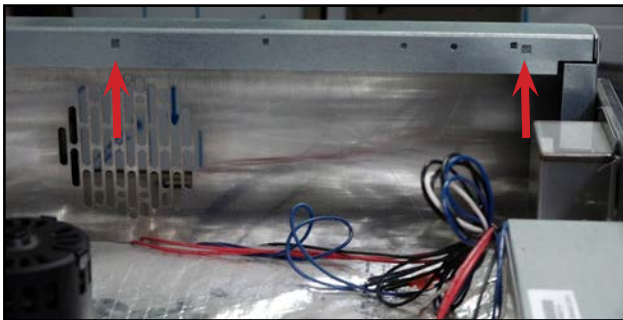


Fig.39

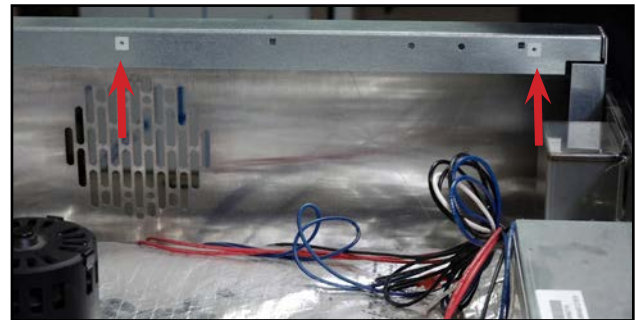


Fig.40

5. Using the two provided screws, mount the relay bracket to the cabinet side. (Fig.41-42)

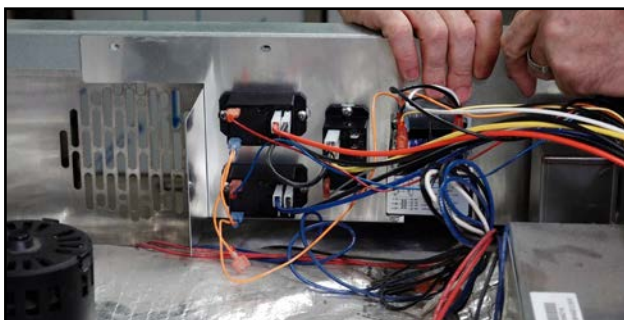


Fig.41

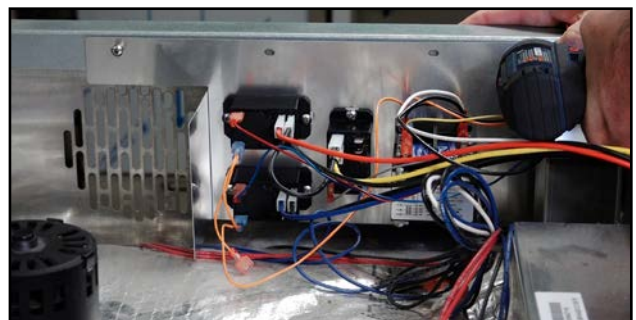


Fig.42

****PROCEED TO STEP 8****

6. If the unit is an HA4003, 4005, or a HA4503, the relay bracket is going to mount on the right side of the unit. Insert a provided grommet into the center square hole and the provided screw into the hole towards the back(Fig.43-44)

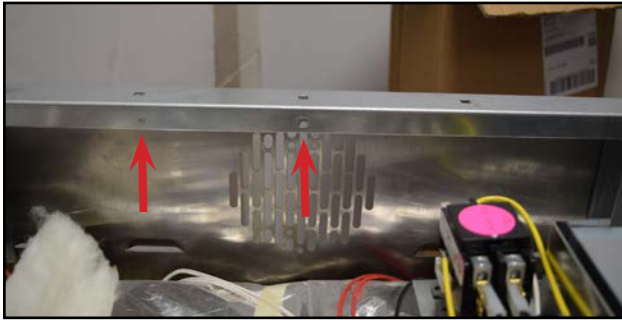


Fig.43

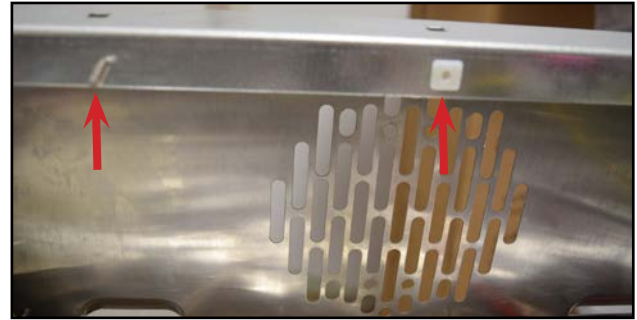


Fig.44

7. Using the provided screw and nut, mount the relay bracket to the cabinet side. (Fig.45-46)

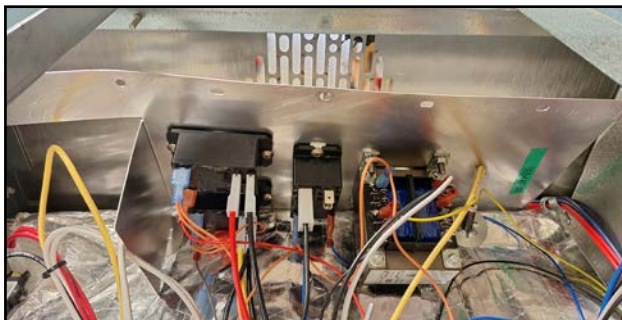


Fig.45

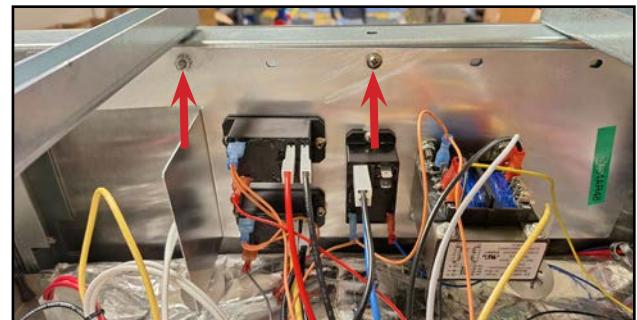


Fig.46

8. Using a flat tip screwdriver, depress the tab on the interior nine pin molex connection and remove from the control board housing. (Fig.47-48)

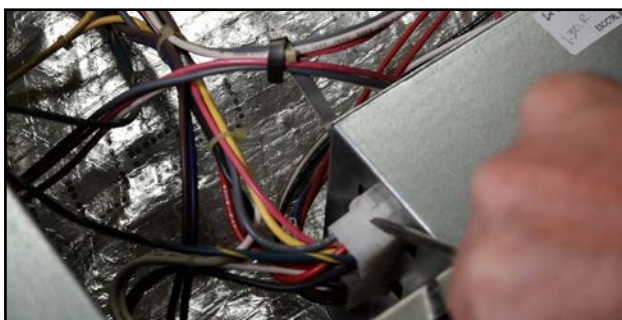


Fig.47



Fig.48

9. Connect the interior nine pin molex connection to the thicker wire nine pin connection coming from the relay bracket.(Fig.49-50)



Fig.49



Fig.50

10. Locate the nine pin signal wire (thinner) connection coming from the relay board. Insert the connection into the control board housing where the nine pin was removed from. (Fig.51-52)



Fig.51



Fig.52

11. Locate the male green lead coming from the signal wire nine pin molex. Locate the female capped green wire coming from the cabinet grounding lug. (Fig.53-54)

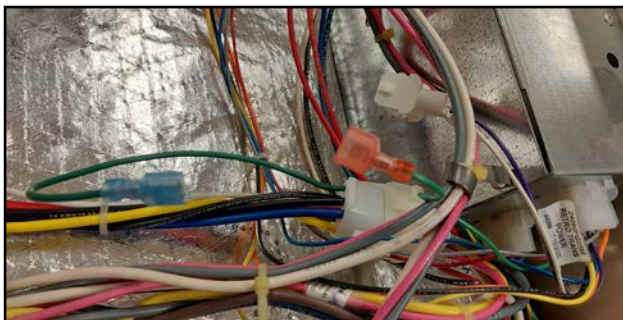


Fig.53



Fig.54

12. Remove the wire cap and plug the male green wire coming from the signal wire connections into the green ground wire.(Fig.55-56)

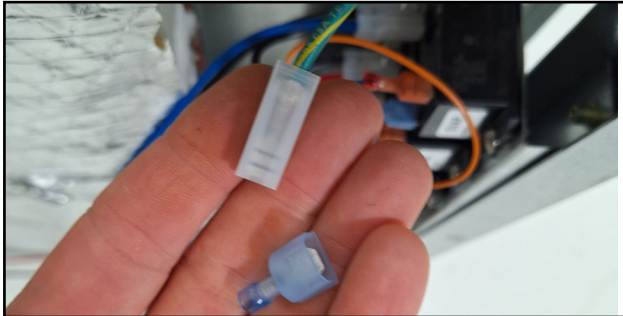


Fig.55

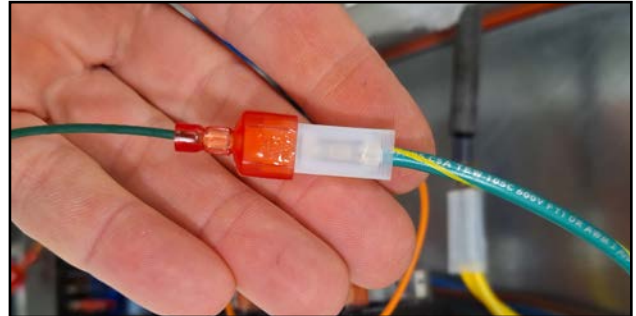


Fig.56

13. Locate the retro control board in the kit. Connect the nine pin and six pin connections. Carefully slide the control board into the housing and secure with the two mounting screws. (Fig.57-58)

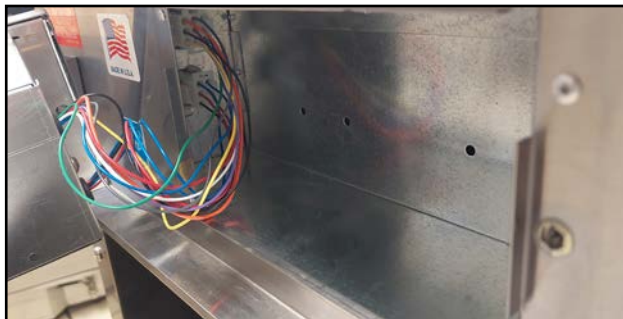


Fig.57



Fig.58

14. Plug unit in and turn on to verify that the control board is working. Re-attach the unit top.(Fig.59-60)



Fig.59



Fig.60

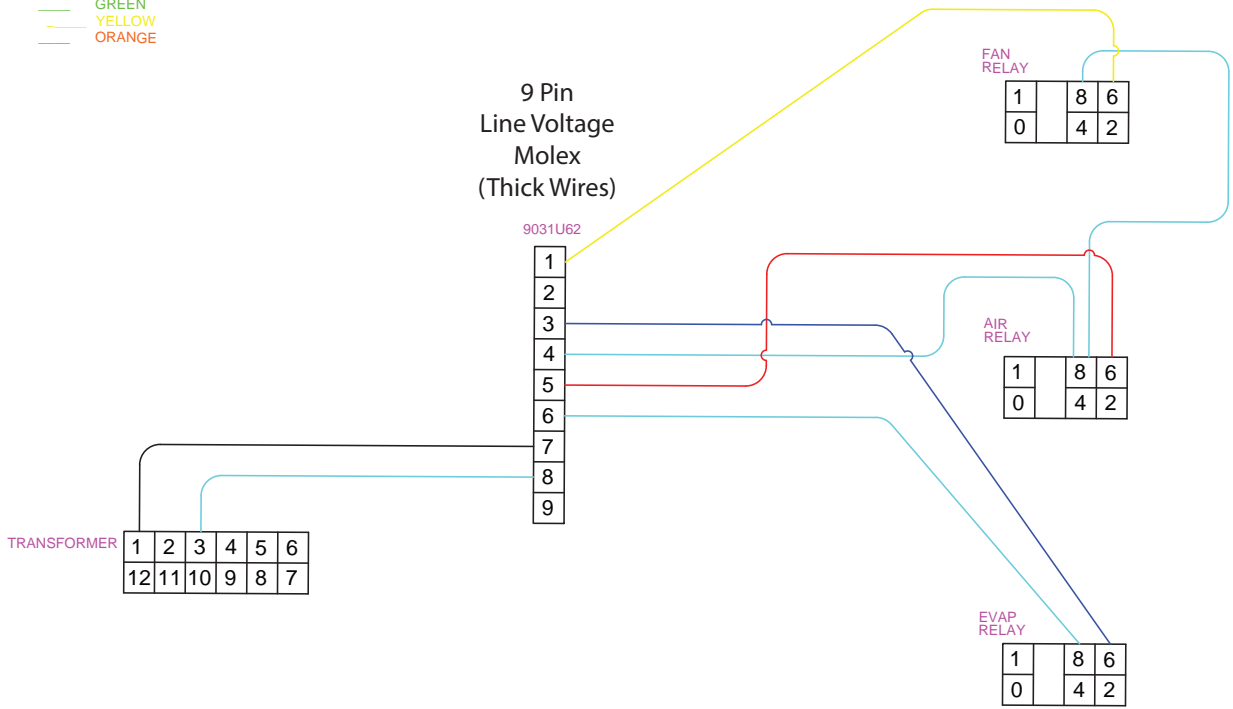
15. If the unit is a Panda unit, place included sticker on door over existing sticker.(Fig.61)



Fig.61

Wiring Diagrams

- BLACK
- WHITE
- RED
- BLUE
- GREEN
- YELLOW
- ORANGE
- GREY
- PURPLE



- BLACK
- WHITE
- RED
- BLUE
- GREEN
- YELLOW
- ORANGE
- GREY
- PURPLE

