



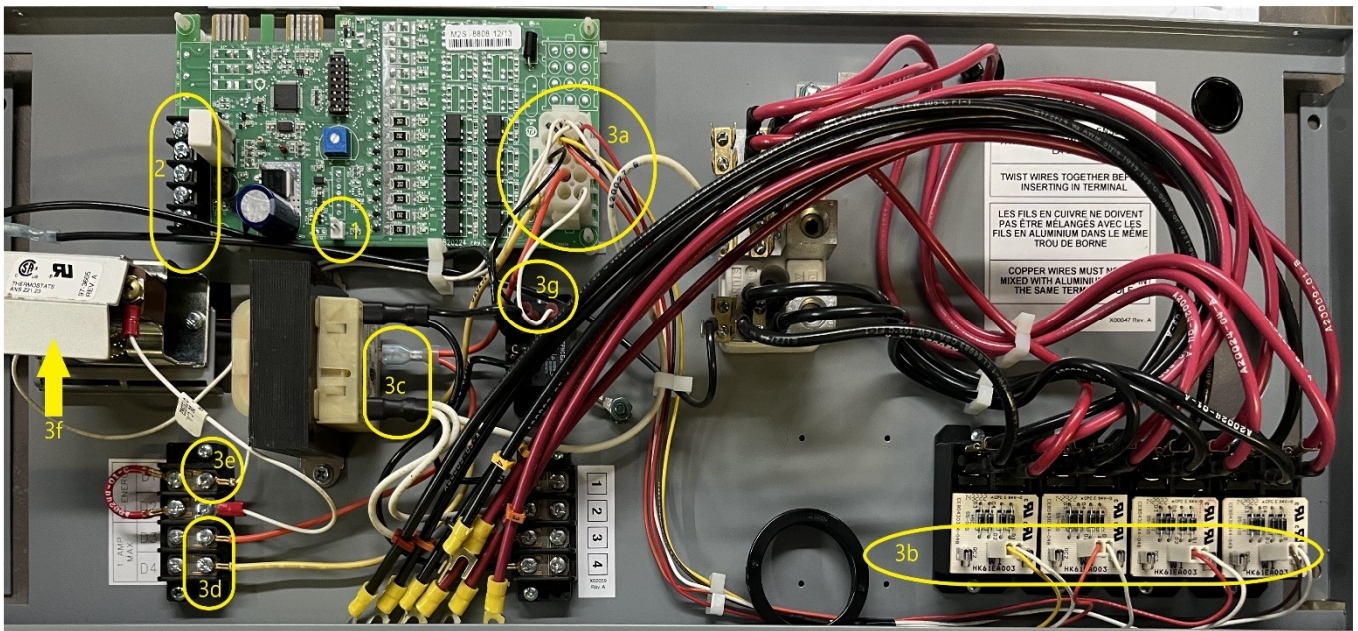
**K16013**

**REPLACEMENT CONTROL FOR  
HYDRA EVOLUTION**

**INSTALLATION INSTRUCTIONS**

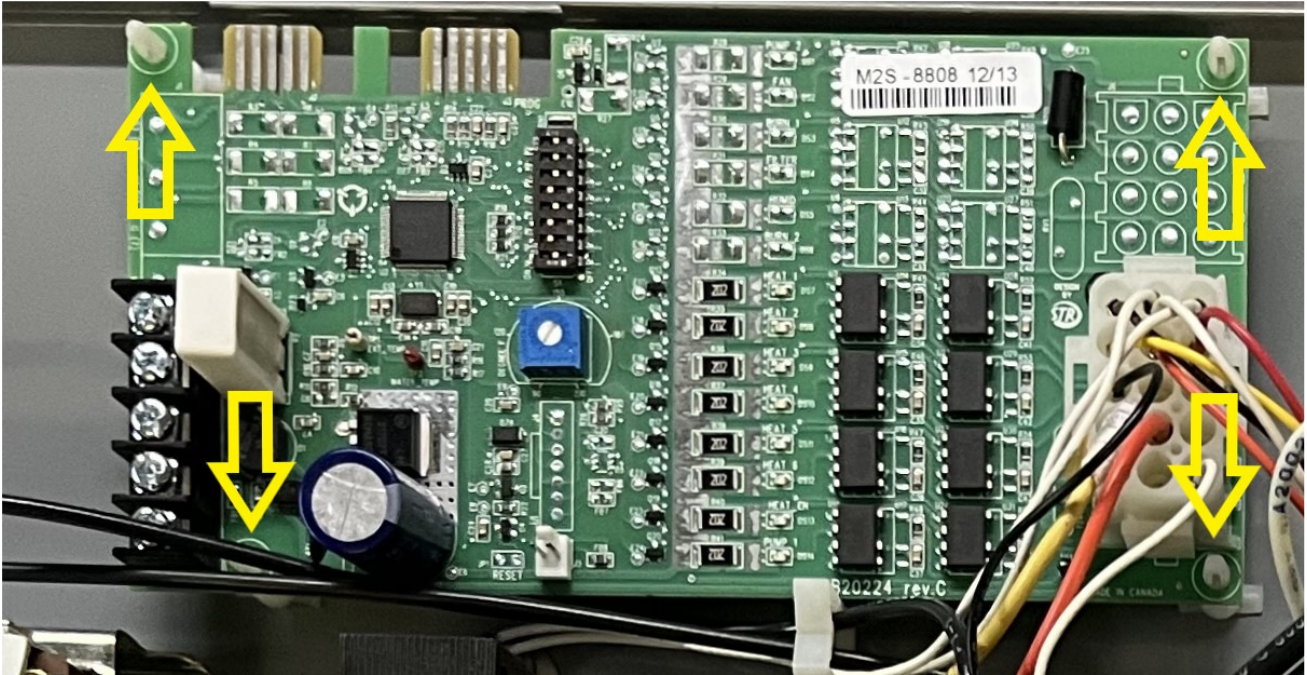
**WARNING: Make sure the power to the unit is turned off.**

1. Disconnect the water temperature sensor.
2. Disconnect the thermostat and outdoor sensor wires.
3. Disconnect and remove the 24V harness:
  - a. Disconnect the white connector from the control board.
  - b. Disconnect the coils of all the relays for the elements (pull connector off).
  - c. Disconnect the **orange** and **yellow** wires from the transformer using long-nose pliers.
  - d. Disconnect the **orange** and **yellow** wires on **D3** and **D4**.
  - e. Disconnect the **white** wire on **D1**.
  - f. Disconnect the left wire on the high-limit (the wire going back to the connector in 3a).
  - g. Disconnect the **white** and **black** wires from the pump relay coil (K-1).
  - h. The harness should no longer be connected and should be easy to remove.

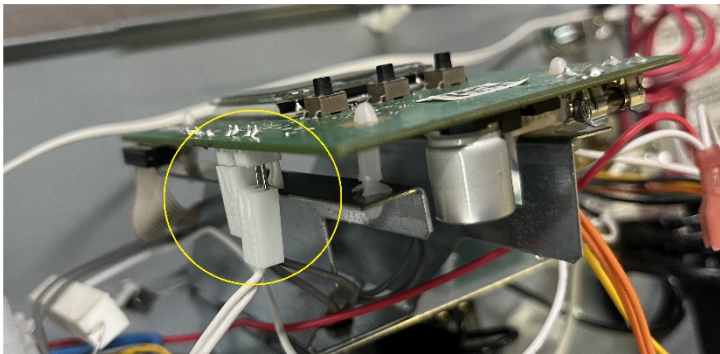




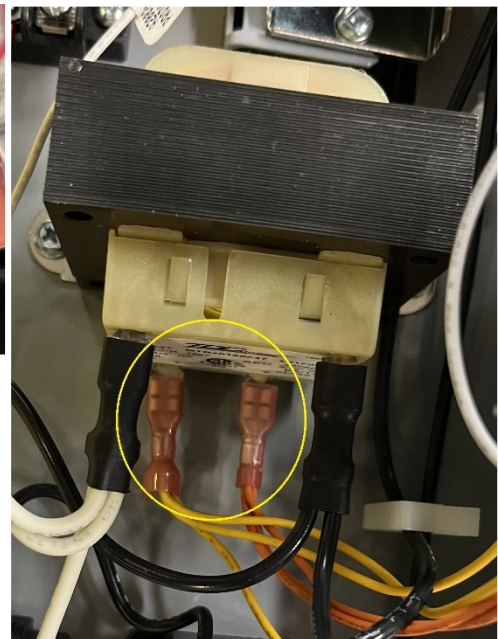
- Using long-nose pliers, squeeze the four stand-offs to release and remove the control board. If some stand-offs are damaged in the process, replace them with the provided spares.



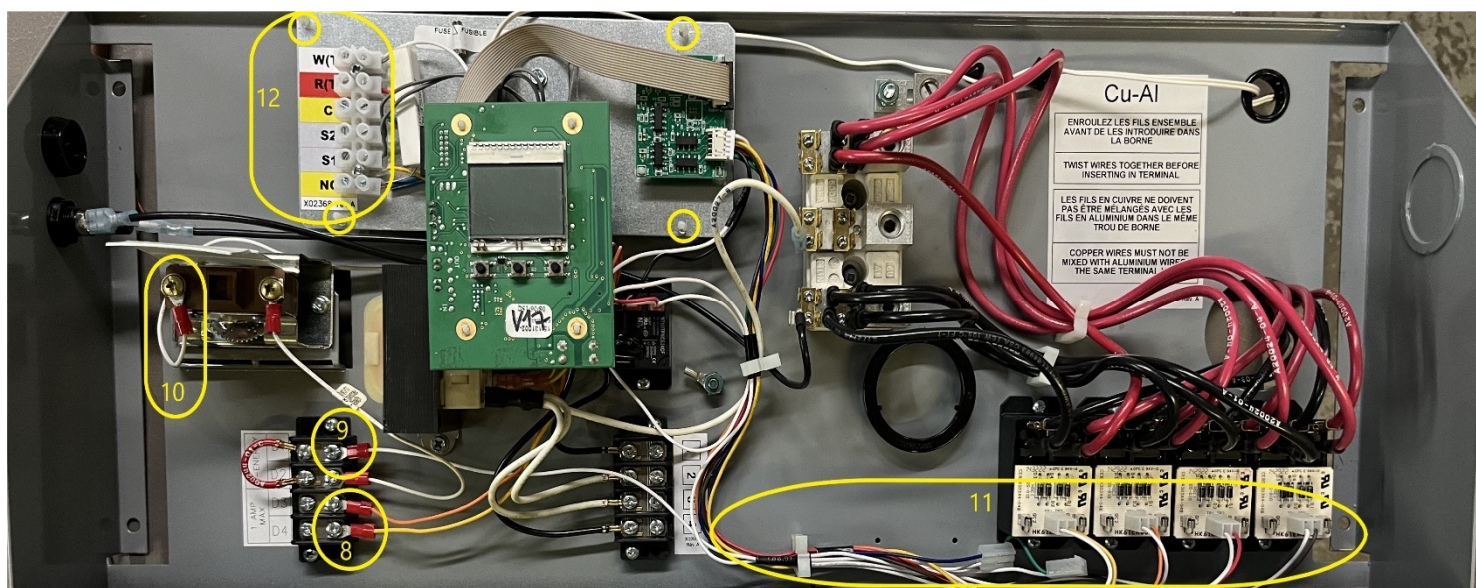
- Take out the new control board and connect the water temperature sensor to it.



- Using long-nose pliers, connect the **orange** and **yellow** wires of the new control assembly to the transformer.



7. Clip the new control assembly on the 4 stand-offs of the original control board.
8. Connect the fork of the **orange** wire to **D3**, and the fork of the **yellow** wire to **D4**.
9. Connect the fork of the **short white** wire (going to the relays) to **D1**.
10. Connect the fork of the **long white** wire (going to the control board) to the left side of the high-limit.
11. Route the colored wires through the wire holders all the way to the element relays and connect them in order on the relay coils.  
From right to left, following this color order: **brown, red, orange, yellow, green, blue**.  
Leave the extra connectors unconnected (e.g., If there are only 4 relays for a 20kW unit, do not connect the green and blue wires).
12. Connect the thermostat wires between **R(T)** and **W(T)**, and the outdoor sensor between **S1** and **S2**.



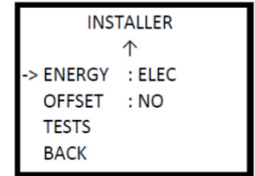
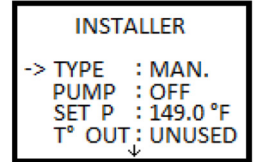
13. Install the new wiring diagram (provided) on the panel of the unit.
14. Power up the unit and program the control board.
  - a. Press:
 

LEFT	MIDDLE	RIGHT
APPUYER BOUTON 1	APPUYER BOUTON 2	APPUYER BOUTON 3
  - b. Using LEFT and RIGHT, select the capacity of the unit (KW).
  - c. Press MIDDLE once.

TESTS  
 ENTRER CONFIG  
 < 15KW >



- d. Press LEFT and RIGHT simultaneously to exit to the main screen.
  - e. If the wrong power was selected, it is possible to change it by navigating to the INSTALLER menu and selecting TESTS. The password is RIGHT, RIGHT, RIGHT, MIDDLE.
15. Adjust the operating settings.
- a. Use RIGHT or LEFT until INSTALLER is displayed.
  - b. Press MIDDLE. The controller will ask for a password.
  - c. Press LEFT, MIDDLE, RIGHT, MIDDLE. Press MIDDLE again to enter the menu once “CORRECT” is displayed.
  - d. Use LEFT and RIGHT to select an adjustable item. Use MIDDLE to select it. When selected, the arrow will disappear, and LEFT and RIGHT can be used to adjust the value. Press MIDDLE again to confirm.
  - e. Refer to the table below for a description of each setting.
16. Set the thermostat for a heating demand. The unit should start the pump and the heating elements.



### Installer Settings

Setting	Description	Value	Note
TYPE	Pre-set values for set point.	Mass, Baseboard, Light, Cast Iron	Automatic set points. “Manual” allows a manual adjustment of the set point.
PUMP	Pump driving options	OFF	Pump runs only when there is a demand.
		ON	Pump is always ON.
		Timed value	Pump runs for specified delay after the demand stopped.
SET P	Target water temperature		
T° OUT	Usage of outdoor sensor	UNUSED	No outdoor sensor connected.
		USED	Outdoor sensor connected.
ENERGY	Must be set to “ELEC”.		
OFFSET	Temperature dead band adjustment.		
TESTS	Refer to step 14e.		
BACK	Exits the installer menu.		

