



# Hot Water 101: Replacing a Control Board

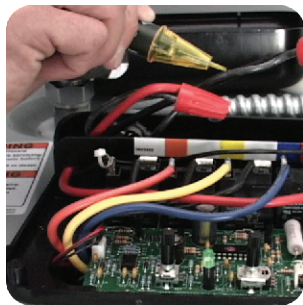
Energy Smart® Electric



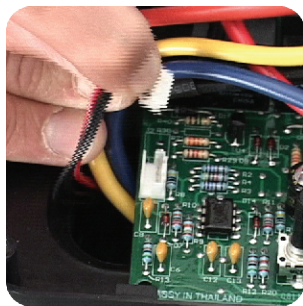
To replace the Energy Smart Control Board, first read the printed installation instructions, paying close attention to safety notices and installation details.

***Be sure to shut off power to the water heater before you begin. Locate the circuit breaker marked water heater and turn in OFF.***

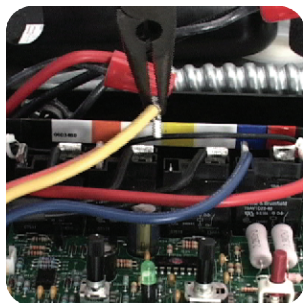
Remove the three screws on the plastic box and lift the Control Board cover off.



Because circuit breakers can be mismarked, also check the circuit with a circuit tester or meter before performing any work.



Pull the Temperature Sensor Plug up and away from the Control Board.

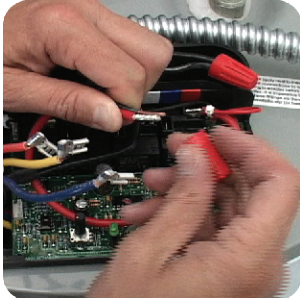


Using pliers, remove the yellow, orange and blue wires, pulling gently on each terminal.

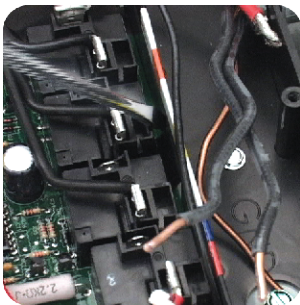


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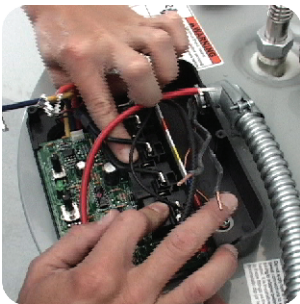
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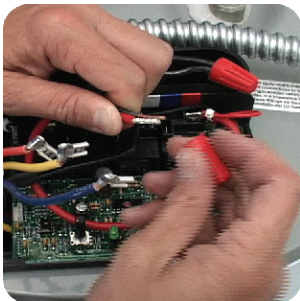
Disconnect the black and red power supply wires.



Push on the locking tab with a flat-blade screwdriver to release the Control Board.



Make sure there are no foreign objects or moisture inside the box.  
Install the new Control Board under the front retaining clips.  
***Then push firmly on the Control Board until it snaps into place.***

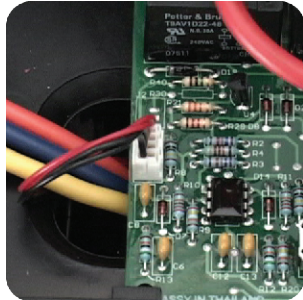


Insert the black and red power wires into the Field Wiring Compartment. ***Connect the power wires using wire nuts.***

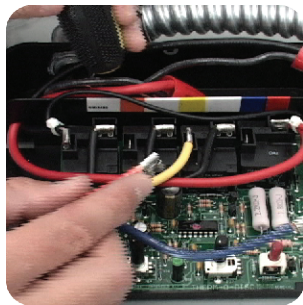


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Install the Temperature Sensor Plug. The Plug is made to fit only one way, and will insert easily if properly aligned.



Inspect the yellow, red and blue wires for damage. If the wires are damaged, use the replacement wires that came with the kit. **Reconnect the wires using the color code on the box as a guide.** Each wire terminal must be FULLY inserted and must fit tightly. Replace a terminal if it is loose. Loose terminals can overheat and damage the Control Board.



Check your work using the wiring diagram and the printed instructions. Reinstall the plastic cover and screws. Set the Temperature Control to 120 degrees. **Set the Mode Control to Energy Smart Mode.**



**Now turn electric power back ON.** The Control Board will perform a diagnostic check that takes about 10 minutes. It will take about 2 hours for the tank of cold water to heat up.

[View the Replacing the Control Board on [www.Hotwater101.com](http://www.Hotwater101.com)]