Installing your CoolBot to a Mini-Split A/C

COMPATIBLE BRANDS:

LG, Mitsubishi, Fujitsu and Samsung Mini-Split units.
*Daikin (ONLY for uses over 45°F / 7°C).

INCOMPATIBLE BRANDS:

Panasonic, Fedders, Midea, Toshiba, Electrolux, or any other brand build with their compressors.

Please refer to our A/C selection chart at: https://www.storeitcold.com/ac-selection/ *to check the compatibility of your brand and model.*

IMPORTANT!

Before installing your CoolBot to your Mini-Split, run your A/C unit on the COOL Mode with the Fan set on High Speed. Set the temperature to the lowest setting. Allow the A/C to run for at least 24hrs to make sure that it was installed correctly, that it is performing well, and that it has no errors on the digital display.

CoolBot

STEPS

STEP 1

- Plug the CoolBot wires into the labeled ports at the bottom of your CoolBot.
- Make sure you plug the wires in their corresponding ports.
    - Room: Blue (or Black) Cable with a black tip
    - Fins: Blue (or Black) Cable with a black tip
    - Heater: Black Cable with a RED tip
    - Power: Mini-USB CoolBot Power Cord
- Plug the CoolBot wires in and out a couple times as sometimes they don't “seat” all the way the first time.

STEP 2

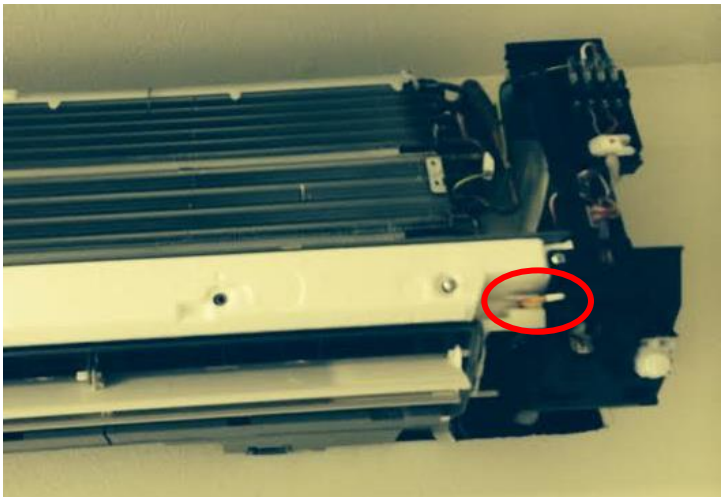
- Mount the CoolBot on the wall next to the control panel side of the A/C to make it easier to connect the wires.
- CAUTION! Make sure the wall fasteners are smaller in diameter than the hole in the CoolBot tabs or you will break the plastic tabs.

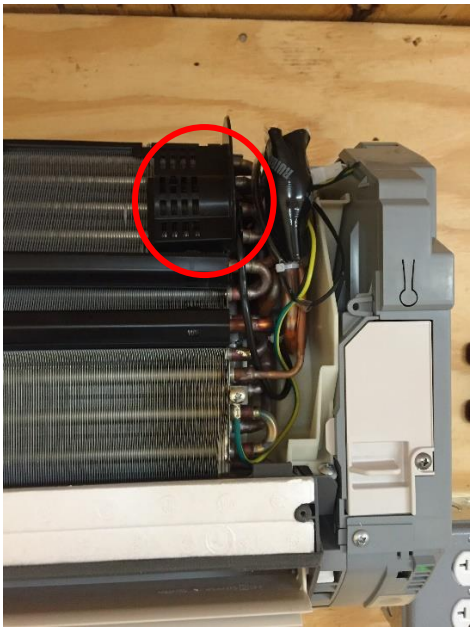
STEP 3

- Unplug your A/C unit from the power source.
- Remove the entire housing of the Mini Split indoor unit to expose the coil and the controls.

STEP 4

- Find and free your A/C's Temperature Sensor.
- On Mini-Splits it's often on the control panel side and it's a bit short. It can be under a plastic grill in front of the fins, or it can also be hidden in places like inside the plastic casing away from the fins, or even not a cable (Daikin units) but just a nub (resistance) built into the board. The main temperature sensor of your A/C will NOT be attached or touching any of the refrigeration tubes.

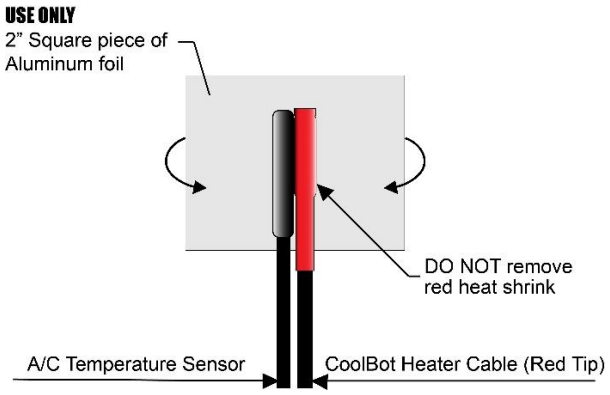




- If your A/C has a plastic clip built into the sensor to hold the sensor to the fins, remove the temperature sensor from the plastic clip.

STEP 5

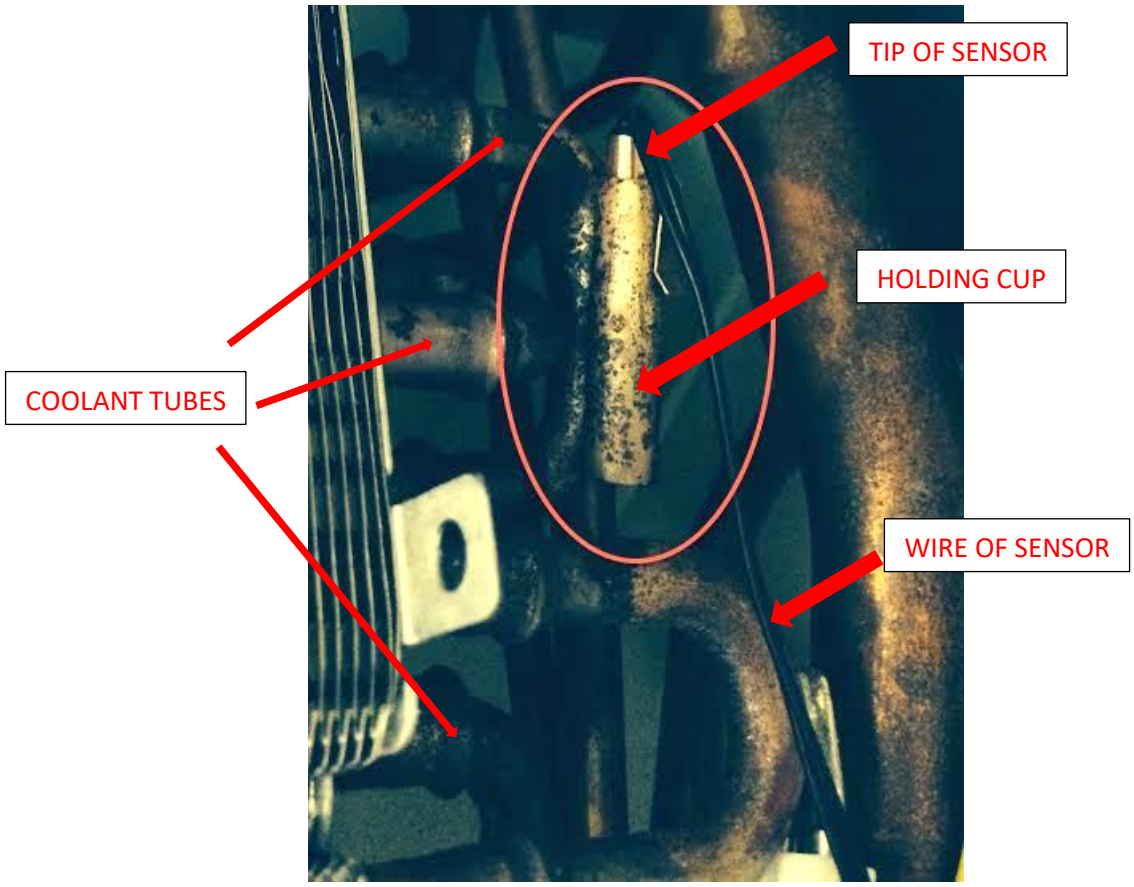
- Using ONLY a 2” square piece of Aluminum foil, place the CoolBot HEATER Cable (RED tip) next to the A/C’s Temperature Sensor (from STEP 4).
  NOTE: If you have a Daikin Mini-Split with a sensor build into the board, DO NOT use the foil. Please see Daikin Install below for guidance on this step.
- Keep them together next to each other, pointing in the same direction, and wrap them tightly with the foil (FIG 2).

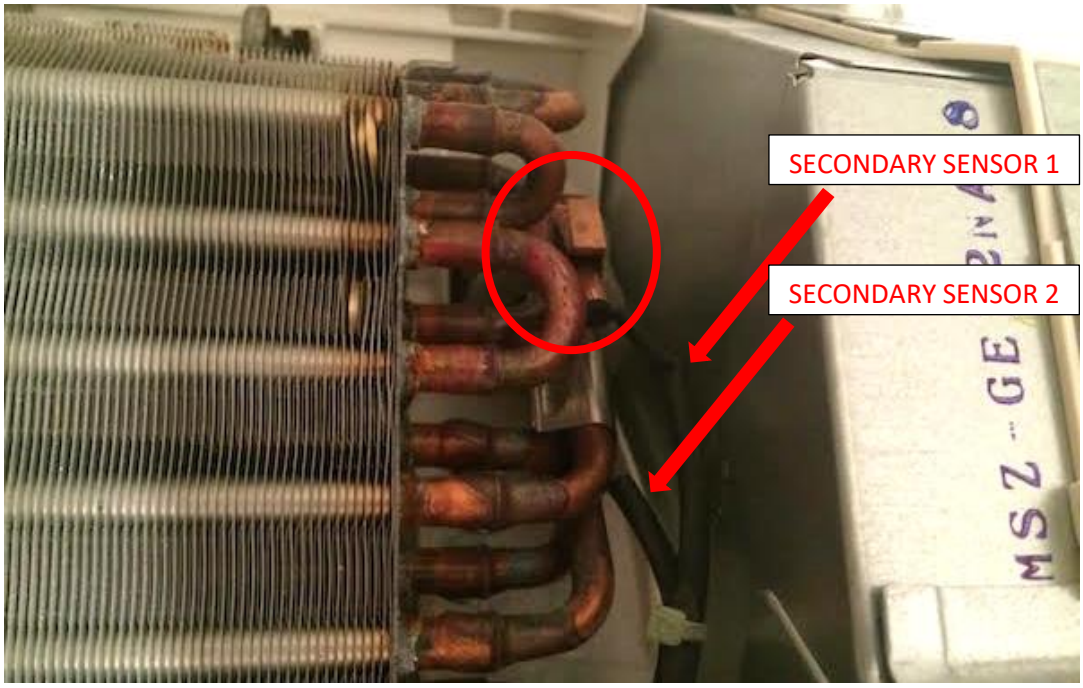


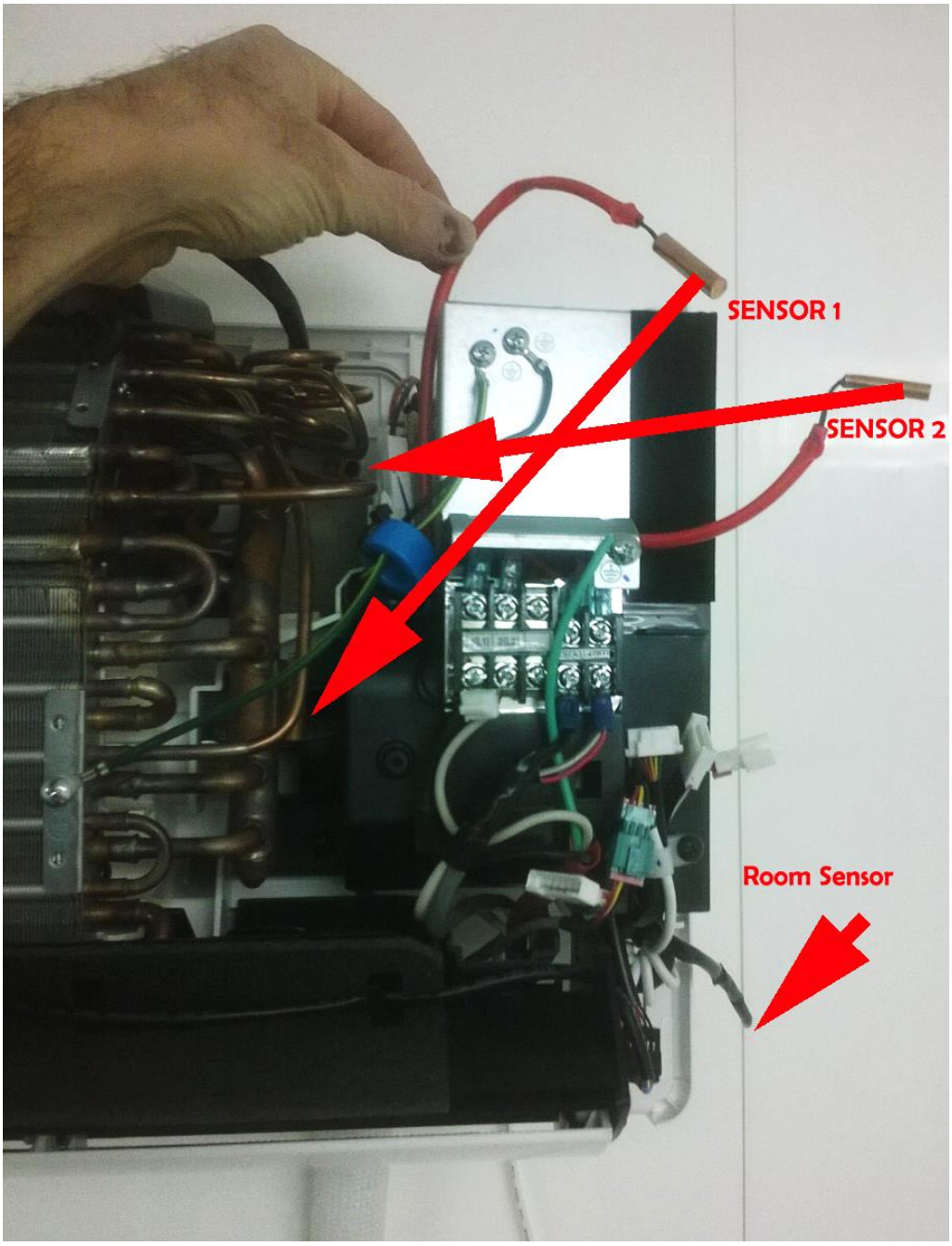
- Make sure they are away from the fins & flow of the air. Make sure they hang free, not touching anything cold or metal. You can put a wire tie or Zip-tie around the 2 wires (1 inch before the foil) to keep the wires from getting pulled apart.

STEP 6

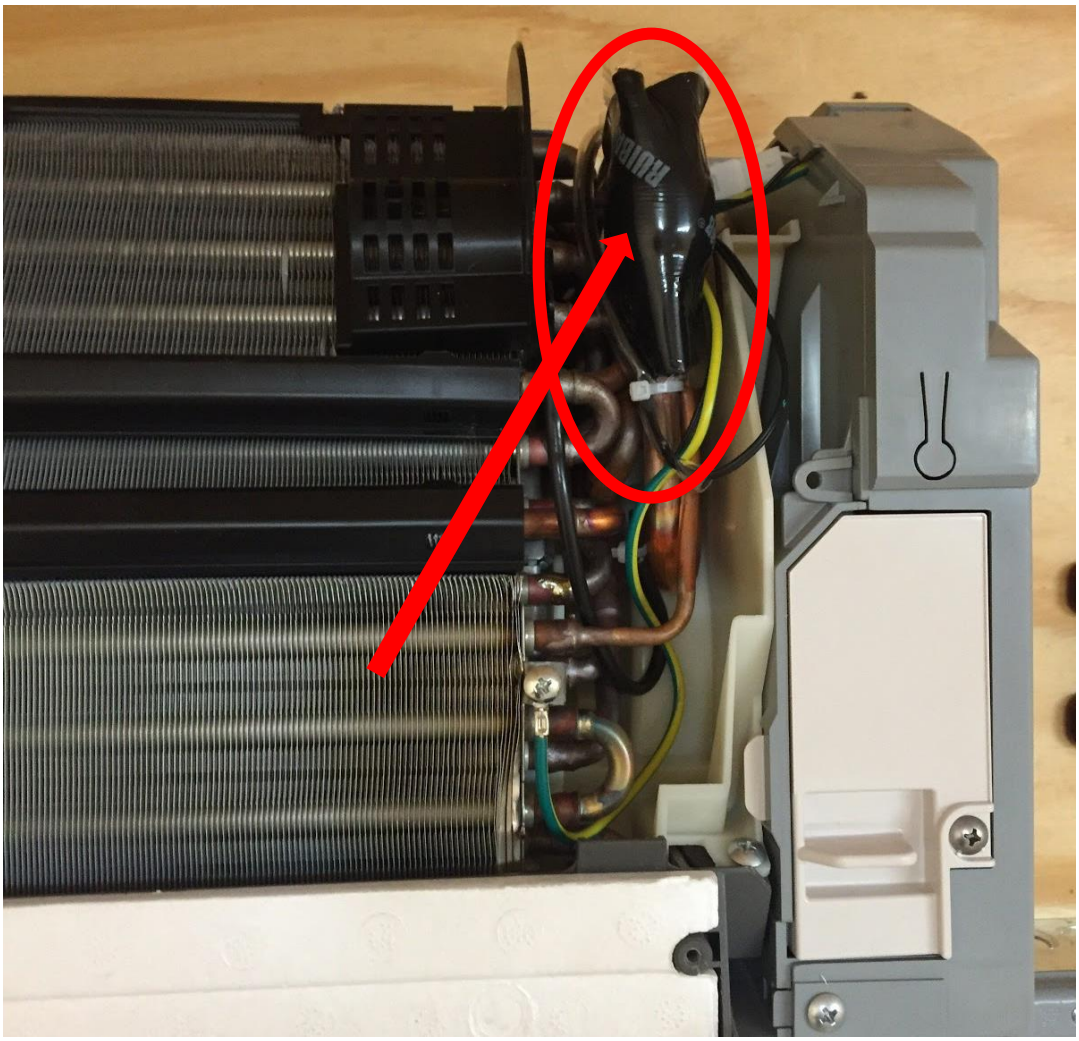
- Find and free your A/C's Secondary Sensor(s).
- Look for one electronic wire on the same side of the A/C as the control panel. It plugs into a little cup soldered onto one of the coolant tubes.
- Grab it with your fingers and slide it out of the copper cup. **DO NOT cut the sensor!** It is OK to cut the plastic tie-downs to free the sensor.
- Some Mini-Splits can have more than one Secondary Sensor. They will all be on the same side of the evaporator coil.




SECONDARY SENSOR 1
SECONDARY SENSOR 2
MSZ - GE


SENSOR 1
SENSOR 2
Room Sensor

- Sometimes the Secondary Sensor can be attached to the Cooling Pipes with black foam insulation tape instead of plugged in to a copper cup. Grab it with your fingers and slide it out of the insulation tape. DO NOT cut the sensor! It is OK to cut the plastic tie-downs to free the sensor.



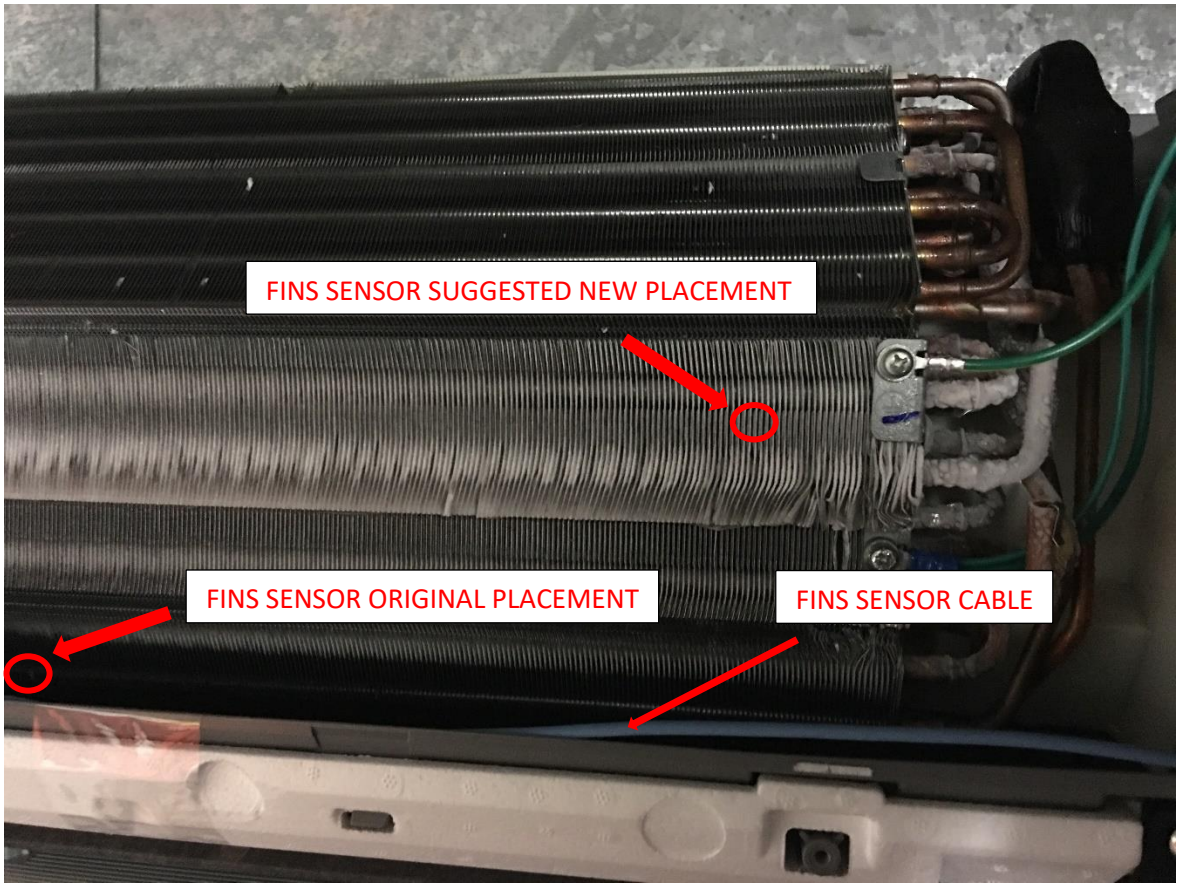
STEP 7

- For rooms above 50°F/10°C, just let the Secondary Sensor(s) hang free outside the body of the A/C unit so it doesn't touch anything metal.
- **For rooms below 50°F/10°C, use just 1 layer (loop) of electrical tape (or a Zip-Tie) to attach the end (tip) of the Secondary Sensor(s) to the OUTSIDE of the aluminum foil connection from STEP 5.**

STEP 8

- Use a pen/pencil to open a small gap in the fins of the evaporator coil, about 1" from the bottom and near the center (horizontally), between the bottom and second horizontal cooling pipes.
- Take the cable sensor coming from the CoolBot port labeled "Fins" and gently insert just 1/4 inch (0.7 cm) of the TIP into the small gap. DO NOT force the sensor in, you'll damage it.
- Do not touch a coolant pipe with the FINS Sensor tip. You want to be between the bottom 2 horizontal cooling pipes.
- Pinch the fins lightly around the sensor so it doesn't fall out.

IMPORTANT! Watch how the ice forms on your coil, once the CoolBot installation is finished and before putting your housing on. Move the Fins Sensor to where the ice first starts to form (see picture below).



STEP 9

- You can use your indoor Mini Split unit with or without the housing, or just removing the air direction blades and the filter covers. See examples below.

STEP 10

To set the temperature on your CoolBot, press the checkmark button – the current set temperature will blink. Use the right or left arrows to set the temperature to the desired value. Press the checkmark to save the value.

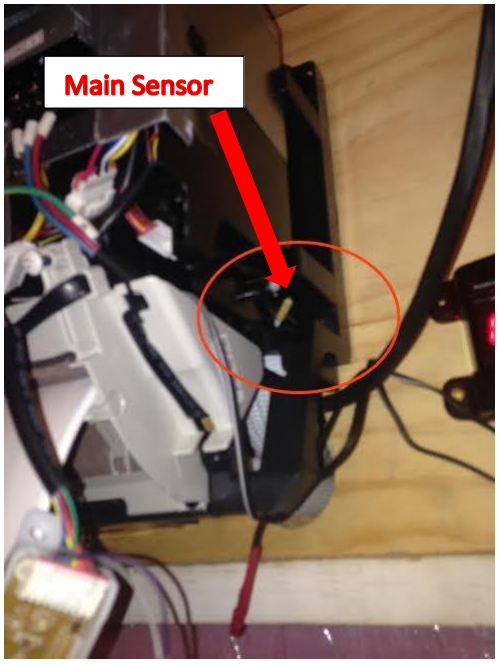
You are done! Happy Cooling!

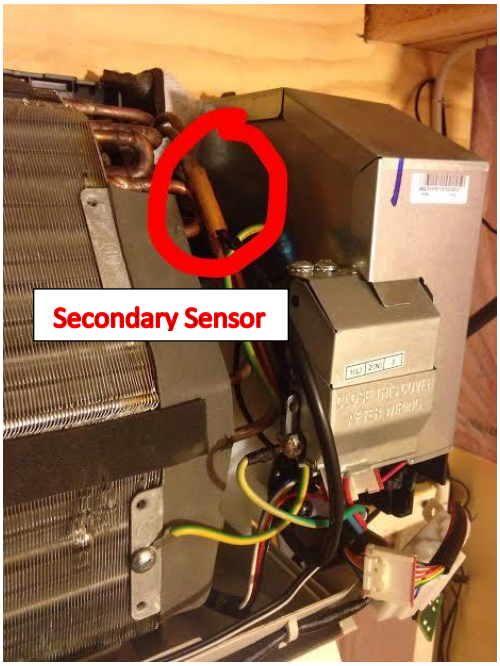
For Troubleshooting please visit us at: https://www.storeitcold.com/support

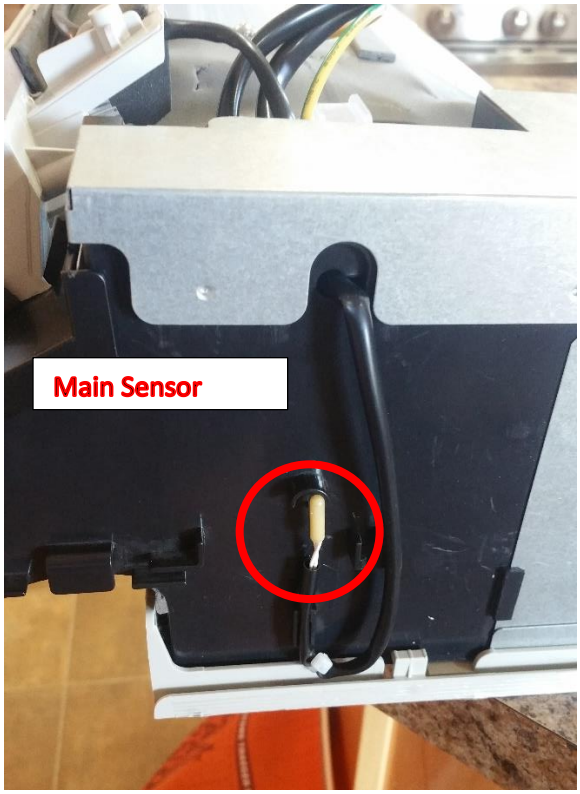
GALLERY OF MINI-SPLIT INSTALLATIONS BY BRAND

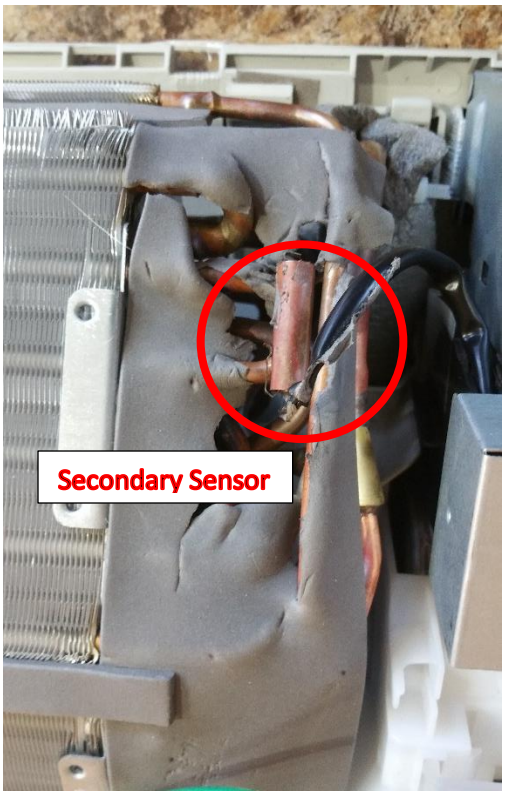
LG

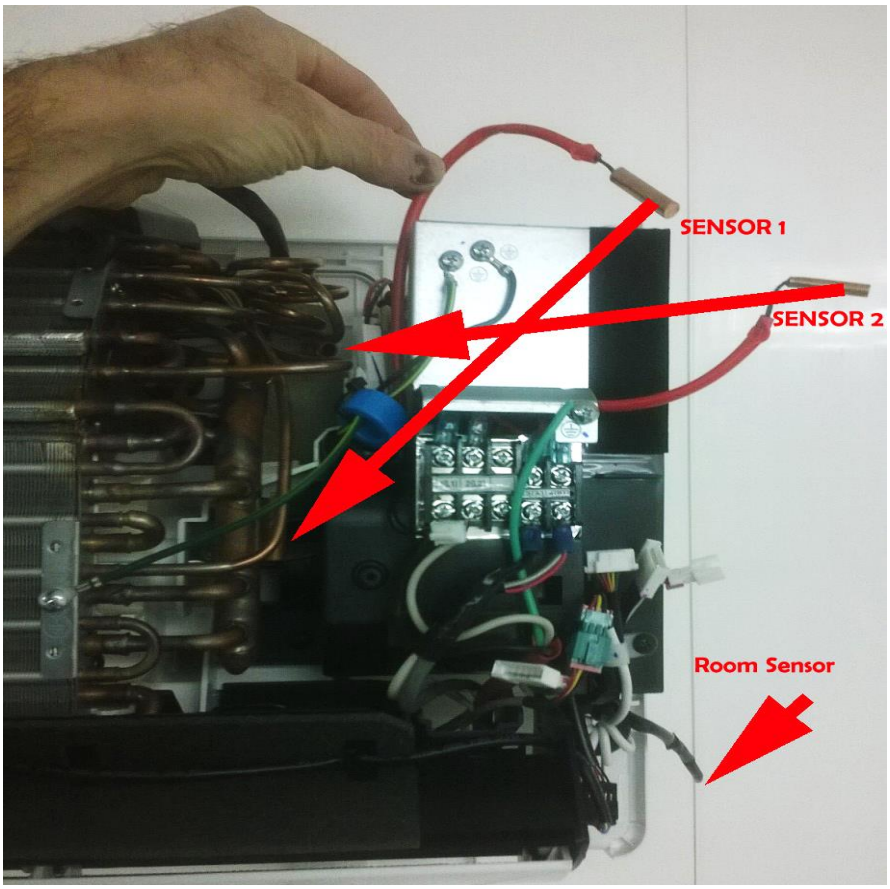
The primary sensor comes out of the circuit board and attaches into a plastic cover/face on the inside (not the outer shell). There are usually two secondary sensors, sometimes only one on the LG, and they can be found on the coils, inserted into copper cups.






Main Sensor


Secondary Sensor


SENSOR 1
SENSOR 2
Room Sensor

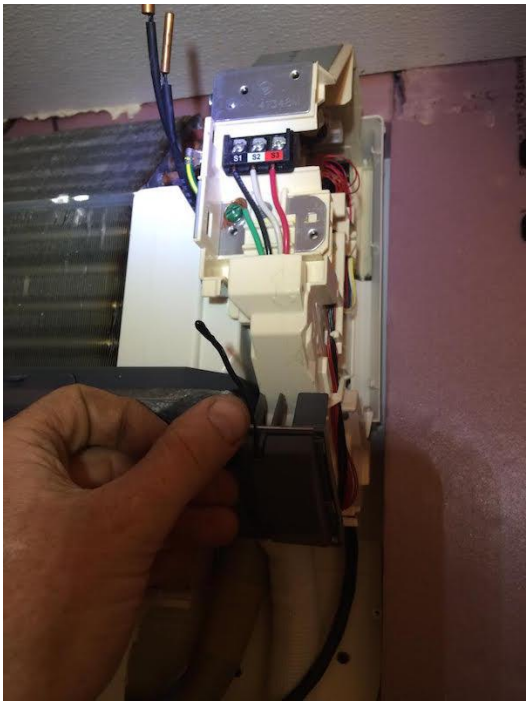
Mitsubishi

Our friend Brandon was kind enough to share these excellent pictures of a **Mitsubishi Mr. Slim** Unit. Here is a shot of the unit with the cover and air direction blades removed.

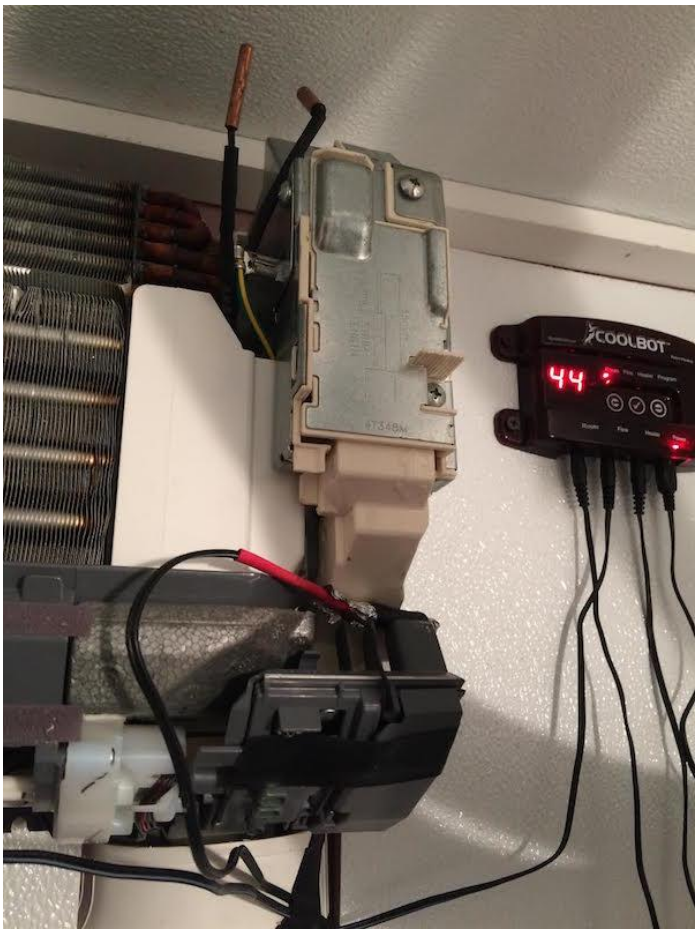
There are 2 Secondary Sensors on the top right-hand corner, one clipped onto a silver clip and one sitting in a copper cup. This copper cup has a copper lever that secures the thermostat inside the cup. Gently pull the lever up to free the thermostat.

Here are the two sensors pulled up and away from the unit

The room thermostat is a little tricky to find. It is located inside the dark grey electronic control panel. It is tucked in behind the square piece of grey plastic (to the right of thumb nail).

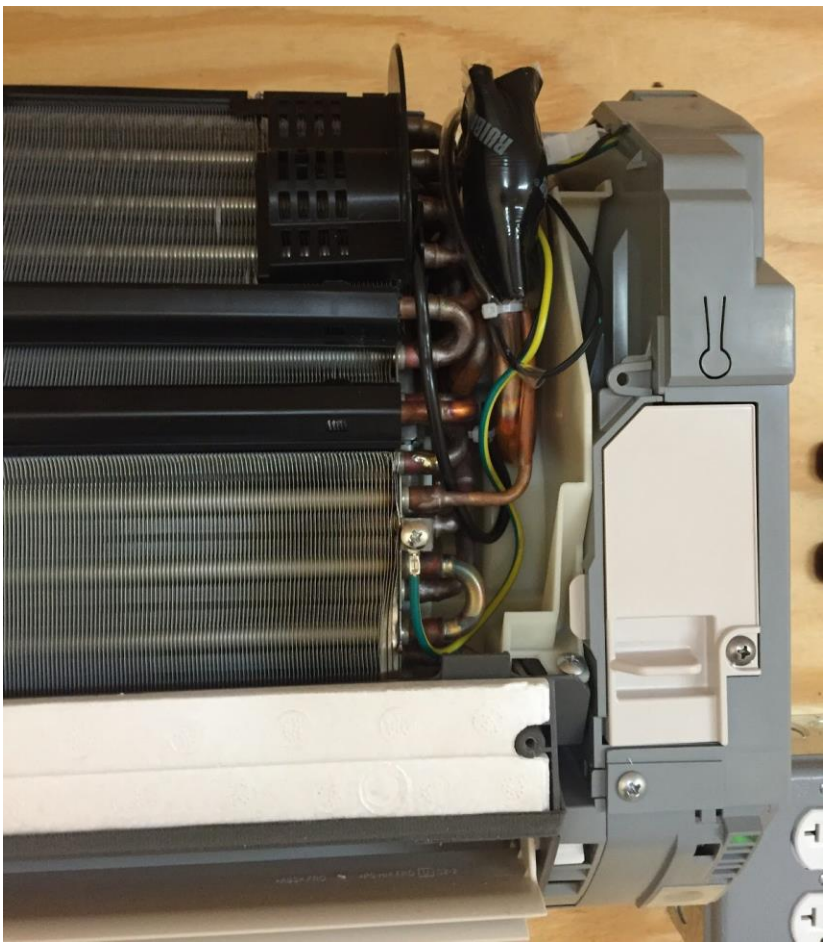


Here is the final set up. The CoolBot Heater Cable is foiled to the A/C room thermostat and tucked up away from the air flow. The 2 Secondary Sensor thermostats stand free (in this case they worked OK just hanging free for a set temperature of 44°F).

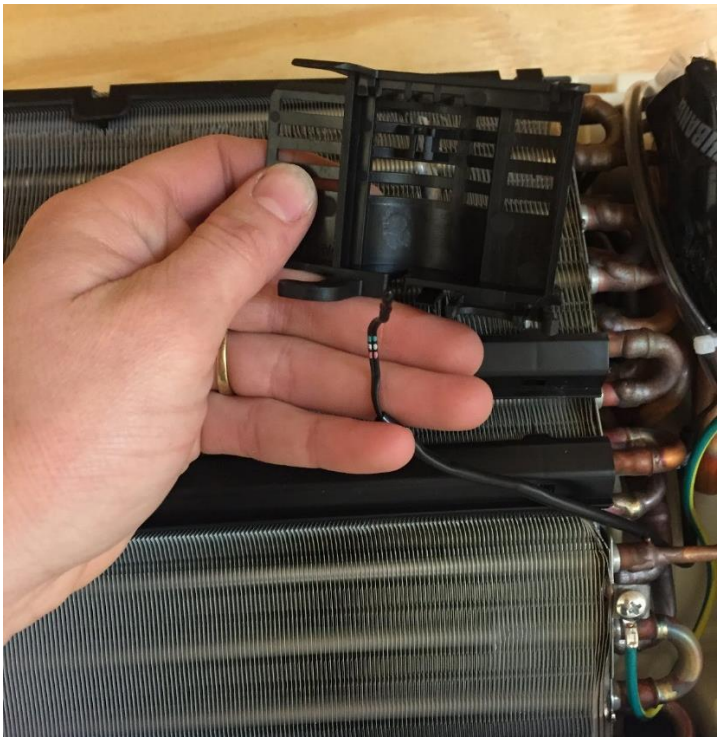


Fujitsu

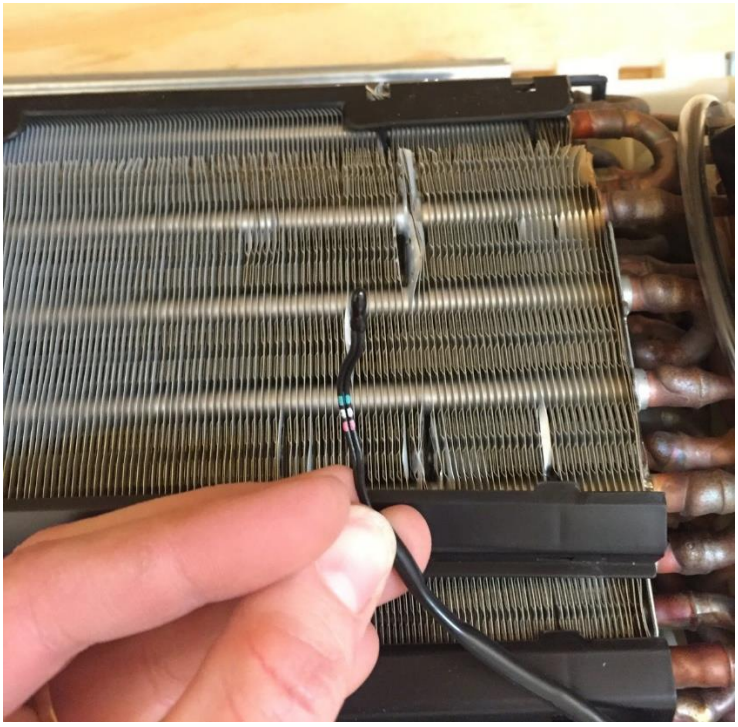
With the wonderful help of Lauren in Virginia we are able to share these pictures. They have their primary sensor hidden under a little black cage in the upper right-hand corner.



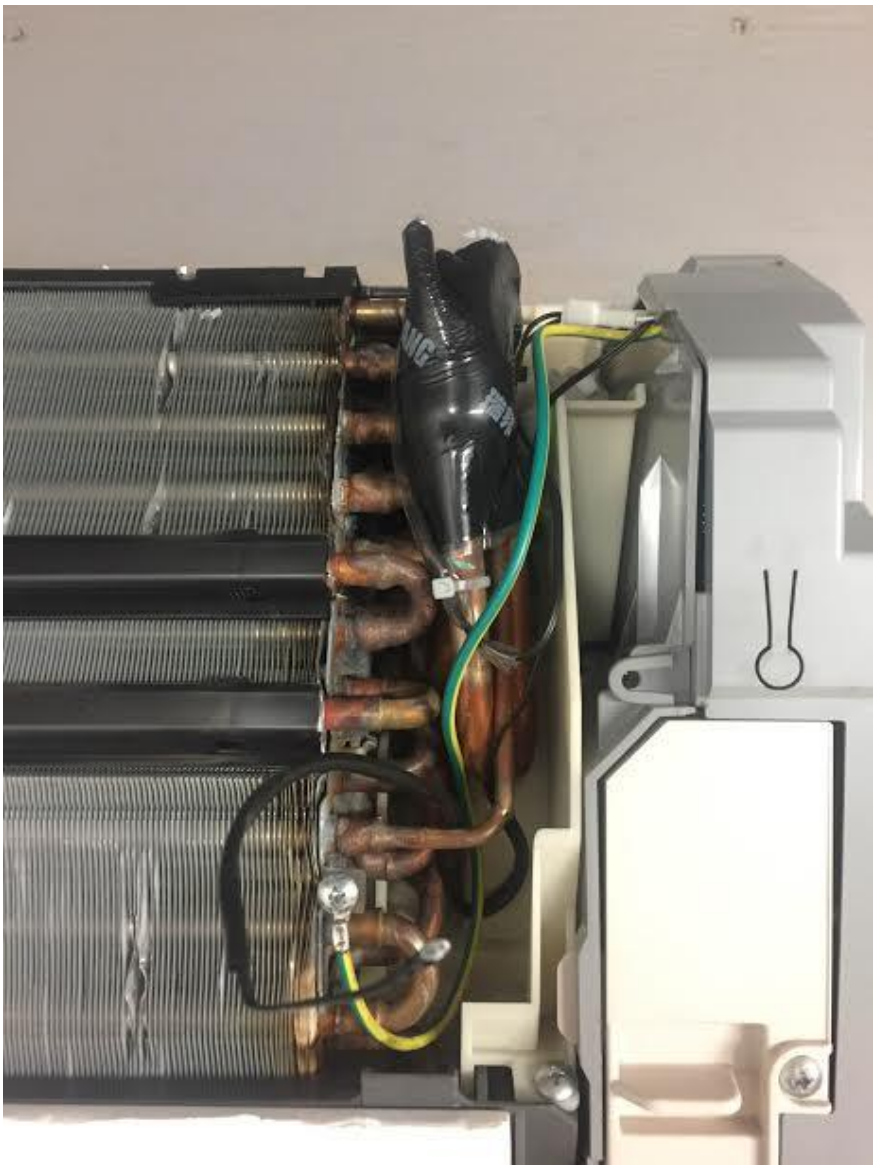
We have to pull that black cage off the fins and you'll see the primary sensor is clipped on the backside.



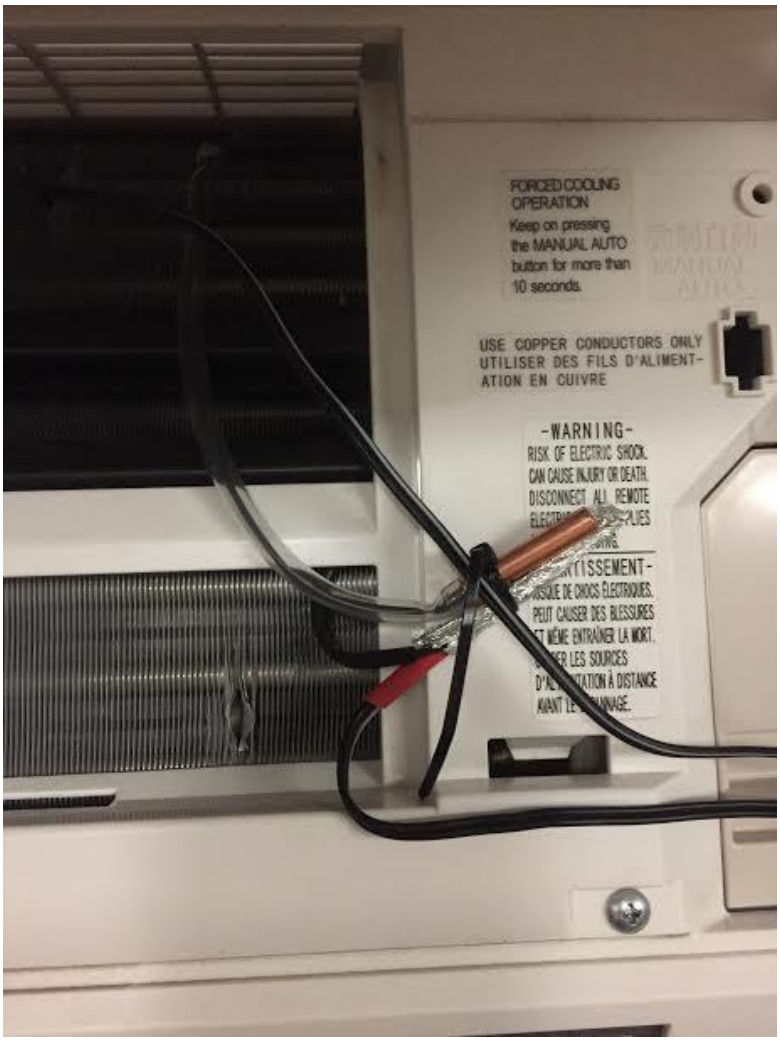
Un-clip the primary sensor so it can then be wrapped up with the CoolBot Heater.



Below you can see the secondary sensor is the wire all wrapped up in the foamy black insulation tape, unwrap it.



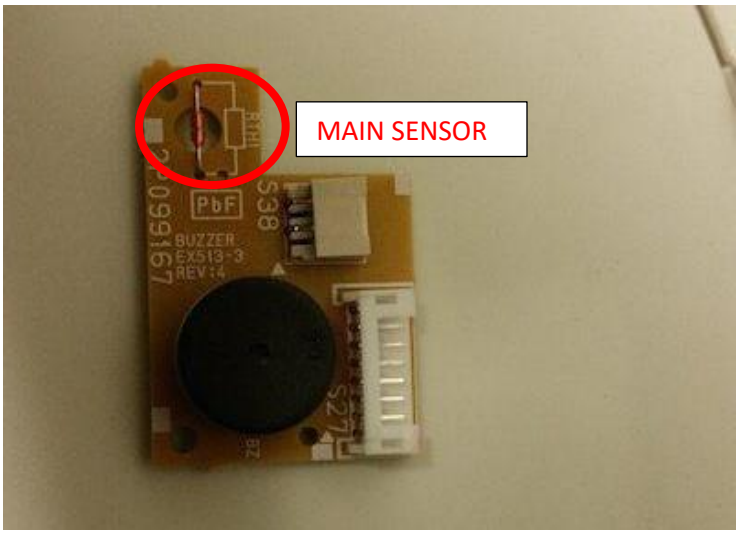
Finally, we wrap the primary sensor to the Heater using the foil, and then use a zip tie or electric tape to hold the secondary sensor along the foil pack too.



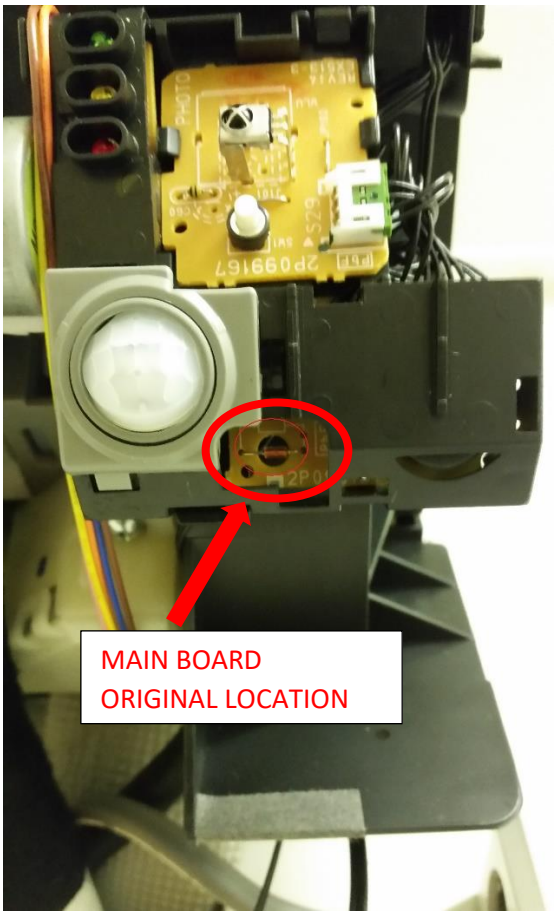
Daikin

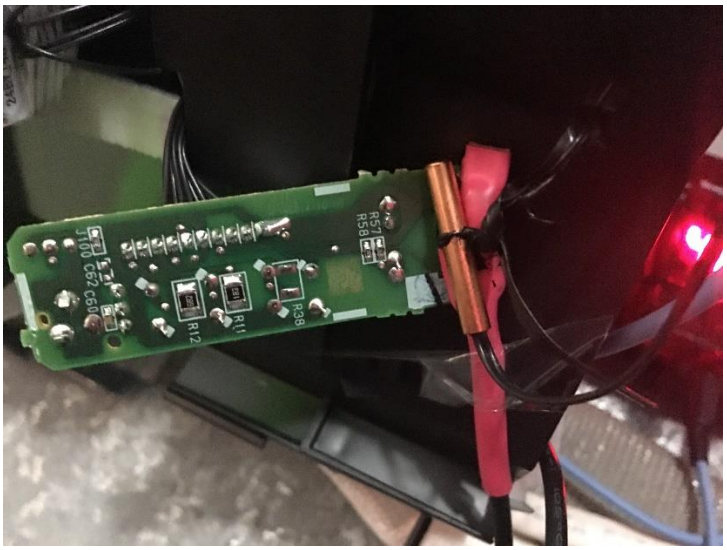
Daikin should ONLY be used for temperatures 45°F (7°C) and above. The Daikin's primary sensor is part of the board itself. DO NOT use the foil provided. Carefully strap the Heater cable to the board with a Zip-tie, DO NOT over tighten the Zip-tie as it can break the board.

This is what the board looks like in some models when its removed. The part labeled "RHT1" is the temperature sensor on this unit.



You can see the heater zip-tied into place and the board tucked back onto the unit here.





SAMSUNG

Sorry, no installation pictures yet.

Do you have a Samsung and would like to share your installation pictures? Send them to us at: info@storeitcold.com and we will double the Warranty of your CoolBot. We would love to share with other fellow CoolBot customers your story just as the other customers did for the other brands.