



A/C Unit Troubleshooting

For CoolBot Systems

GOLDEN RULE OF A “GOOD WORKING” A/C

Your **A/C alone** should **ALWAYS** be able to easily maintain the room at the **A/C’s lowest set** temperature (e.g. 60°F for LGs, 64°F for GEs, etc.).

GOLDEN RULE OF DEFROSTING A “GOOD WORKING” A/C

Your **A/C** should **ALWAYS** be able to defrost by “manually” setting the A/C on **FAN ONLY MODE** - this is the best way to defrost an Iced up A/C.

THINGS TO REMEMBER ABOUT YOUR COOLBOT- A/C SYSTEM

- There are **NO** electrical connections in between the CoolBot and your A/C
- The CoolBot **CANNOT** power OFF or ON your A/C Unit.
- The CoolBot **CANNOT** change your A/C’s Mode, Fan Speed, or Set temperature
- The CoolBot is **ONLY** warming up the temperature sensor of your A/C (when cooling)
- The CoolBot Fins Sensor does **NOT** heat up the coil (fins) of your A/C
- The Heater on the CoolBot will blink (or pulse) **ONLY** when the temperature of the room is under 68°F (20°C)

EXTENSION CORDS

A/C units should **ALWAYS** be plugged directly into a **dedicated outlet**. The use of extension cords is **NOT** recommended. If you use an extension cord your A/C might not operate properly.

RESETTING YOUR A/C UNIT

- On most A/Cs furnished with a **GFCI plug** just **unplug your A/C** and:
- Press the “Test” button on the GFCI plug. You should hear a “click”.
 - Press the “Reset” button. It should stay engaged.
 - Wait **3 minutes** and plug your A/C back into the outlet.
 - Check the settings on your A/C’s panel and adjust if needed; run the A/C again.

*If the “Test” button does not trip the GFCI plug or the “Reset” button fails to stay engaged (pushed in), your **A/C plug** is damaged and needs replacement.*

MY A/C IS RUNNING CONSTANTLY BUT THE ROOM IS NOT GETTING COLD!

1. Make sure your A/C is set to: **COOL MODE** and the **FAN is set to HIGH** with the **A/C set at the lowest temperature** the A/C will allow.
2. Make sure the **compressor is actually running**, not just the Fan
3. Check if your A/C Fans are working on the inside and on the outside.
4. If your **Compressor and Fan** are **both running constantly** and the room is not getting any colder, your A/C has most likely developed a **Refrigerant Leak** and unfortunately, needs to be replaced.
If you have a new system your A/C might be too small for the room -please check our [Sizing Tool](#).

MY A/C CHANGES MODE, FAN SPEED, OR IS TURNING OFF ON ITS OWN!

1. This indicates an **electrical problem with your A/C** or with the power **outlet**.
2. Check your power outlet to ensure **proper voltage** is being supplied to the A/C.
3. **Reset your A/C** (follow your manufacturer's Instructions or see above for resetting instructions).
4. If after resetting the A/C the problem persists, then the A/C may have an electrical problem with one of its electronic boards (MAIN or Control Board) and it needs repair.
5. If your A/C's Control Panel is not responsive when pressing the buttons, or fails to turn OFF or ON when you press POWER, your A/C's INPUT (Control) Panel is damaged and needs replacement.

MY A/C RUNS CONSTANTLY - IT GETS VERY COLD OR IT ICES UP!

If you answer **"YES"** to **ANY** of the following questions, your **A/C's MAIN board is damaged and needs replacement:**

- Does your A/C unit **ice up** OR **cool** the room while **on FAN MODE**?
- Do you hear a **"humming" noise** when your A/C is **turned OFF**? (using the POWER button on your A/C but **leaving the A/C plugged in**).
- Is the **ONLY way to defrost** your A/C to **unplug it** from the wall?
- Does your **A/C keep cooling** past **its own set temperature** even when the **CoolBot is unplugged**?
- Is the compressor **failing to turn OFF** when you switch the A/C from the **COOL MODE to the FAN MODE**?

MY BREAKER KEEPS TRIPPING!

1. **Unplug your CoolBot** and anything else that is plugged into the same outlet as the A/C - **leave ONLY the A/C plugged in**.
2. **Reset your breaker** and ensure it is correctly reset at the breaker panel.
3. **Reset the A/C** (follow your manufacturer's Instructions or see above for resetting instructions).

4. Check that the **A/C is responsive to changes** (Mode, Fan speed, etc.) at the **A/C's Input Panel**.
5. If after resetting the A/C if the problem persists, **try a different outlet**.
6. If the A/C trips the breaker in a different outlet then your A/C most likely has an electrical problem and needs repair. Contact a qualified electrician or HVAC technician to asses the problem.

***NOTE:** If your A/C is 120V, you can also try a different appliance or device (heat gun ,hair dryer, etc.) in the outlet where your A/C is usually plugged in to ensure the outlet and breaker for that outlet are in good condition.*

REPLACING ELECTRONIC BOARDS ON YOUR WINDOW A/C UNIT

Coolbot recommends hiring a qualified electrician or an HVAC technician to perform this type of repairs on your A/C.

MAIN A/C BOARD - See example pictures on last page

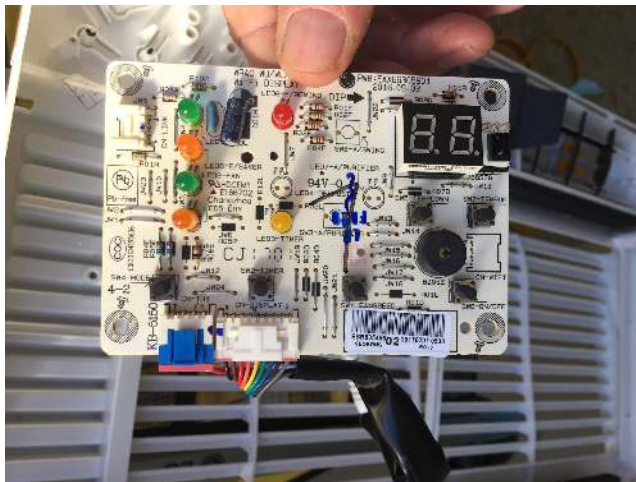
1. **Unplug the A/C from the wall.**
2. Slide the A/C unit out of its casing (for units that slide out)
3. Remove the front cover
4. The MAIN Board of the A/C is normally within a metal enclosure.
5. Remove the screws that hold the metal cover or enclosure to expose the board.
6. The area where the main board resides is where **ALL the wires of the A/C come together**. The power cord attaches here, the main sensors, fan connections, INPUT (Control) Board harness connection, etc.. (see pics below)
7. Take a clear picture of your board before you take it out and disconnect it to have a guide and reference of where all the wires are connected.
8. The connections in these boards are "friendly connections", with "spade connectors" or "harnesses", so they **DO NOT require soldering** or any special techniques.
9. All boards have a **PCB or EBR number printed on them**. Make sure you order the exact same model board or the recommended replacement part for your unit.
10. You can search for your part on Google for websites that sell parts directly. In these websites you can usually **search by the model number of your A/C as well**. Some websites that sell parts (among others) are: <https://www.repairclinic.com/>, <https://encompass.com>, <https://partsdirect.com/>, <https://www.searspartsdirect.com>,
11. Ensure that your NEW part is identical to the older one and **connect ALL the wires back in the exact same positions as they were on the old board**.
12. Close back the enclosure, slide the unit back in the casing and plug in again.

13. Test your A/C

INPUT A/C BOARD - CONTROL PANEL

1. **Unplug the A/C from the wall.**
2. The **Control Board** is the one where you turn your A/C ON and OFF, choose the A/C Mode select FAN Speed, and Set the Temperature.
3. Remove the full front cover of the A/C
4. The Control Board is sometimes attached to the front cover and sometimes is part of the body of the A/C. These change depending on the model of A/C.
5. The **Control Board connects to the MAIN Board via a Harness.**
6. On some A/C units the **Main Temperature Sensor of the A/C goes connected to the Control Board instead of the MAIN Board** - just remember to plug the sensor back in again when installing your replacement part.
7. Remove the screws or pry the tabs that hold the the board in place or in its enclosure.
8. Take a clear picture of your board before you take it out and disconnect it to have a guide and reference of where all the wires are connected.
9. **Follow steps 7 to 13 of the procedure mentioned above (MAIN Board).**

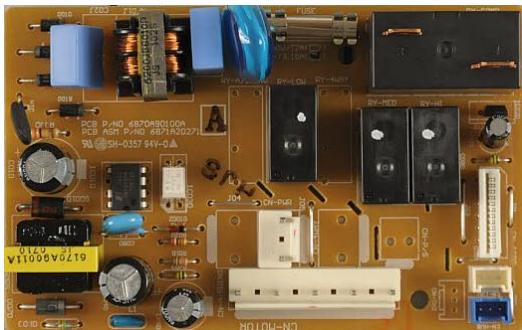
Example of a Control Board (INPUT board) on an LG A/C.



MAIN BOARD LOCATION EXAMPLE PICTURES

On **LG units** the **MAIN Board** is located in the **upper right corner** behind the **INPUT (Control Board)**.

Remove the metal cover from the corner and the MAIN Board will be located inside. (see pics below)



Examples of main boards for LG Window Units

Location of the Main Board on one **12K Btu Frigidaire Unit** (pictures below)



