



Lighting: Replacing Light Emitting Diode

The Light Angel is an easy to install, portable, indoor/outdoor light source that uses motion sensor technology. It has 7 LEDs and 360 degree rotation.

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INTRODUCTION

Use this guide to replace a broken LED bulb in a Light Angel motion activated LED. Disassembling the device requires a Phillips screwdriver and a plastic opening tool. Replacing the LED bulb requires knowledge of soldering. For users with basic soldering experience, this project will take about 30 minutes.



TOOLS:

- [Magnetized jeweler's #1 Phillips screwdriver](#) (1)
- [iFixit Opening Tools](#) (1)
- [Soldering Iron](#) (1)
- [Solder](#) (1)
- [Desoldering Braid](#) (1)



PARTS:

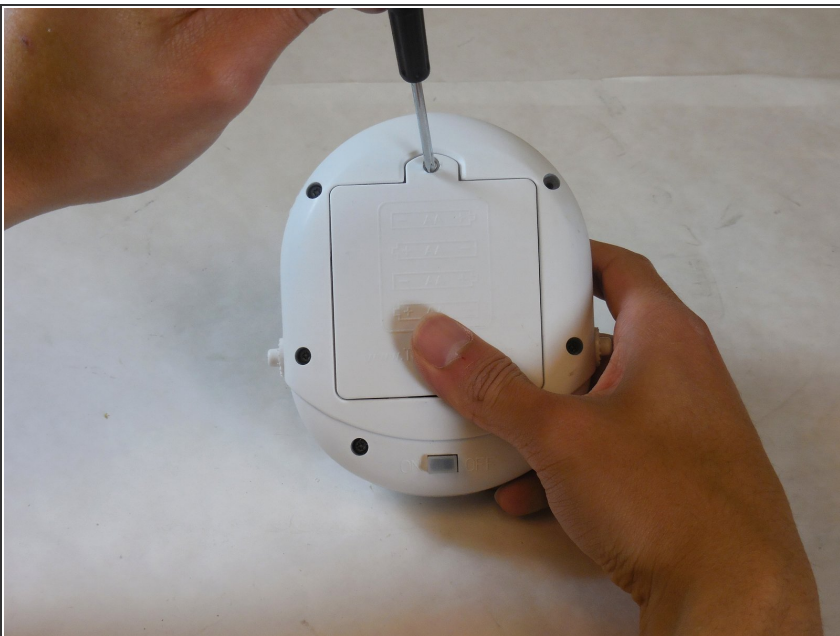
- [IR LED](#) (1)

Step 1 — Light Emitting Diode



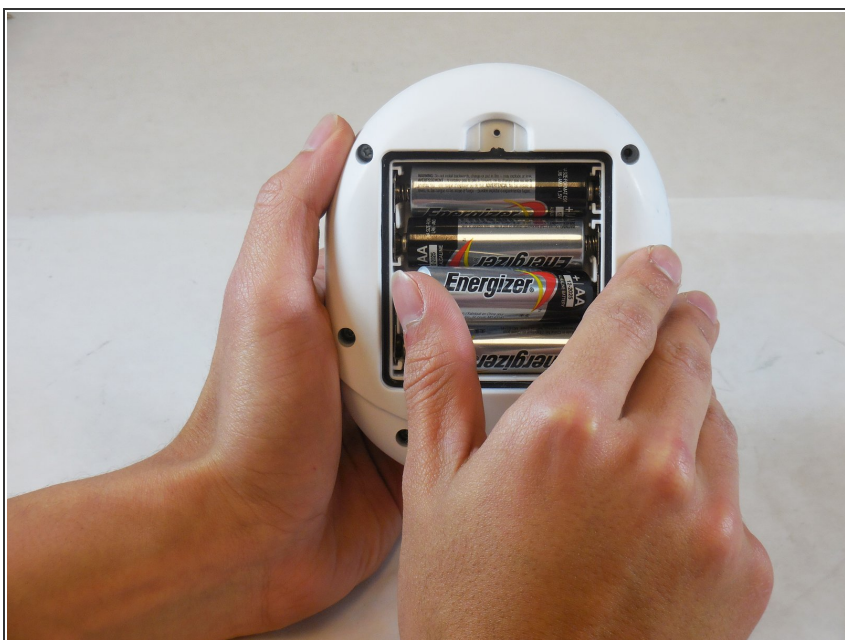
- Using a plastic opening tool, remove the base of the Light Angel.
- ⓘ Insert the plastic opening tool between the base and the LED housing and pull outwards on the handle.

Step 2



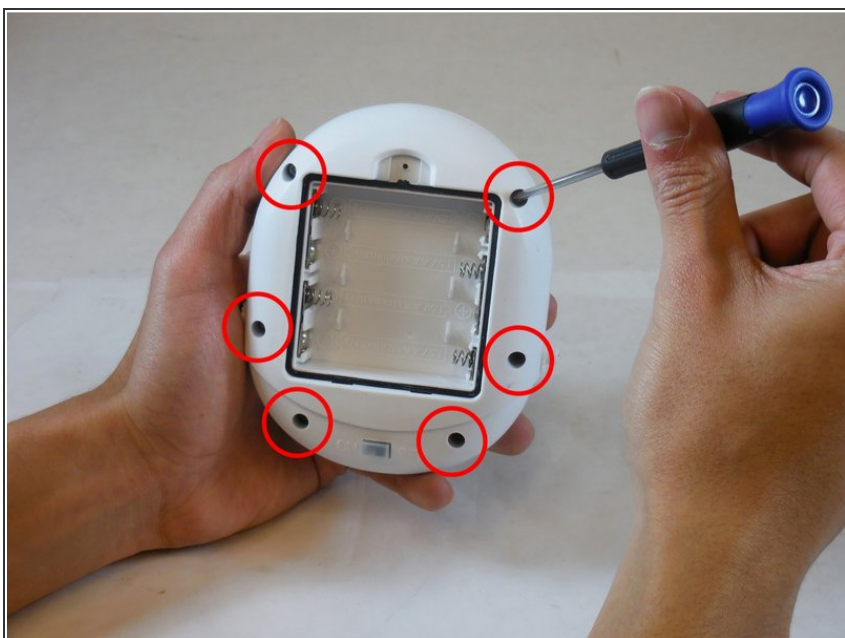
- Using a Phillips head jeweler's screwdriver, remove the screw on the battery housing.
 - ⓘ To remove the screw, turn counterclockwise.
- ⚠ Remember to put all the screws you take out somewhere safe so you can find them when it's time to reassemble the light.

Step 3



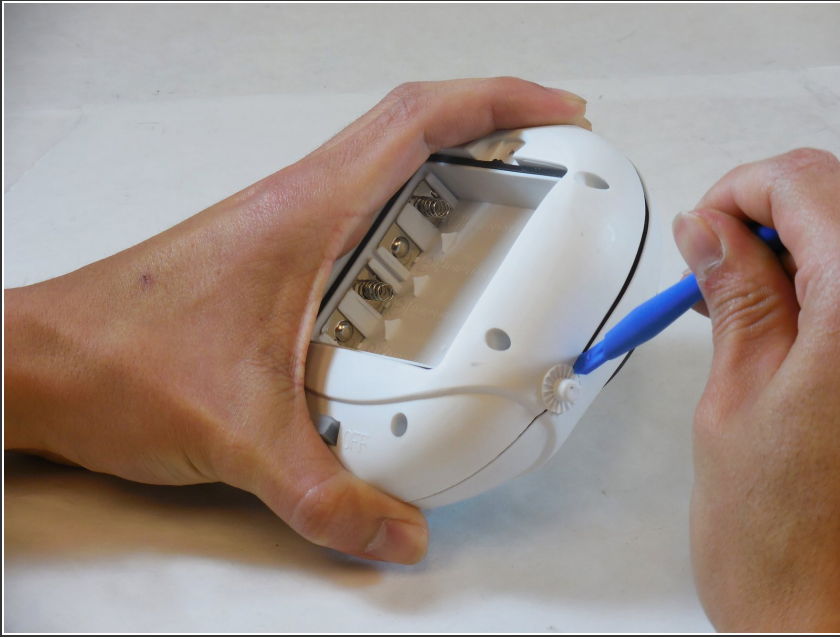
- Remove and set aside the (4) AA batteries in the battery housing.

Step 4



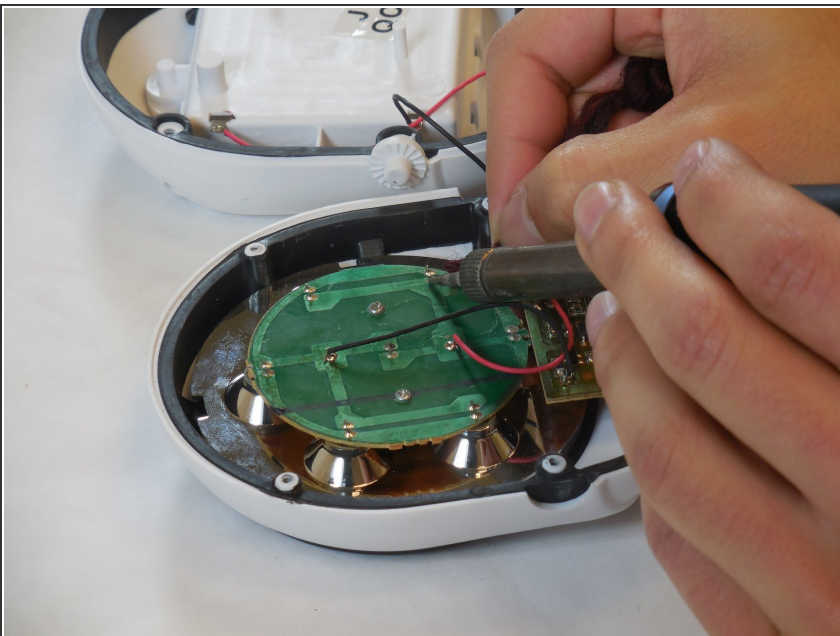
- Using a Phillips head jeweler's screwdriver, remove the (6) screws holding the LED housing together.
- ⓘ To remove the screws, turn counterclockwise.

Step 5





- Insert the plastic opening tool into the crease on the side of the LED housing to separate it from the rest of the device.

Step 6

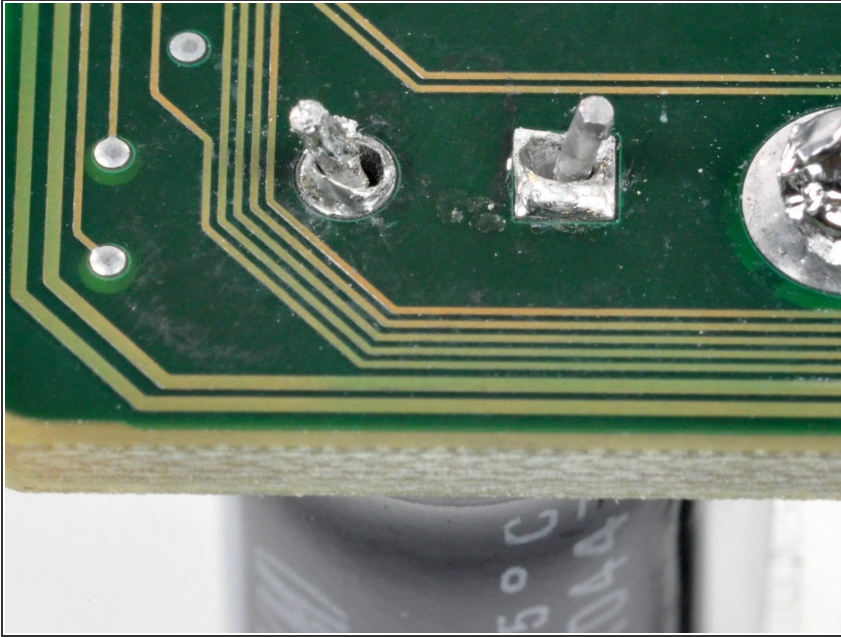


- Locate the faulty light emitting diode on the back of the circuit board.
- Using a soldering iron and desoldering braid, unsolder the connection on the light emitting diode.

 Do not allow the soldering iron to come in contact with other components on the circuit board.

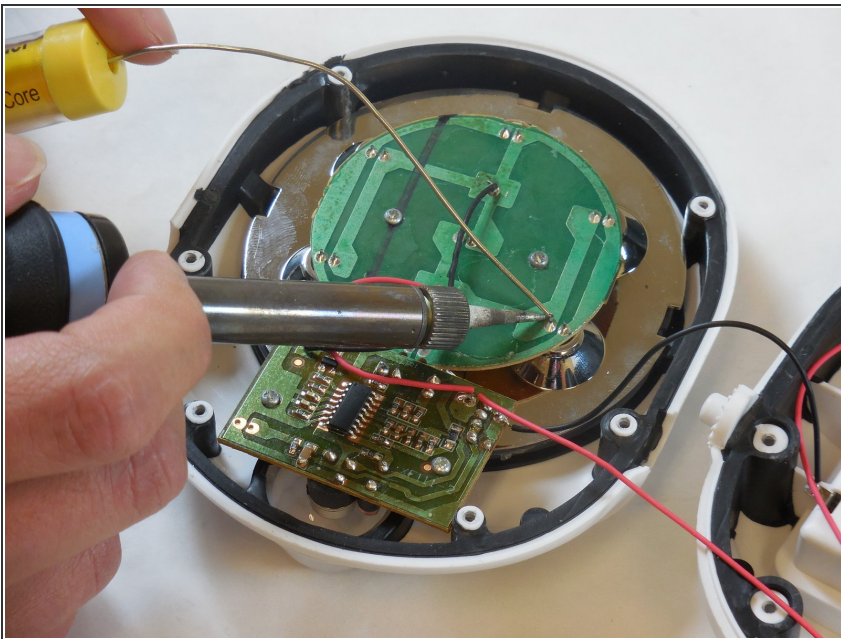
 For detailed instructions on how to solder go to [How To Solder and Desolder Connections](#)

Step 7



- Insert the new light emitting diode through the two holes left from removing the old one.
- ⓘ Note: the picture is not of the Light Angel circuit board. It is a general example of inserting a light emitting diode on a circuit board. Photo Credit: [How To Solder and Desolder Connections](#)

Step 8



- Using solder and a soldering iron, solder the new LED to the circuit board.
- ⚠ Keep your solder joints separate to avoid short circuiting the circuit board.

To reassemble your device, follow these instructions in reverse order.