

Fused LED Light Replacement

This guide will show you how to fix a fused bulb by changing the LED in the circuit.

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INTRODUCTION

The LED light bulb consists of many small LEDs connected in series. Whenever a single LED gets fused, the circuit is broken and the Light bulb stops functioning, even though most of the LEDs are still in working condition.

Use this guide to repair a fused bulb by easily replacing a fused LED with a new LED and completing the closed circuit through which the current flows again and lights the bulb.



TOOLS:

- Soldering Workstation (1)
- Lead-Free Solder (1)
- Screwdriver (1)
- IR LED (1)
- Heat Gun (1)

Step 1 — Fused LED Light





 Remove the upper semi-sphere diffuser by twisting or applying some heat with a heat gun or dryer to soften the adhesive.

Step 2







- Use a battery or a cell with connecting wires and apply them to the exposed solder ends on each LED.
- The LED which doesn't lights up is detected as the faulty LED.

Step 3



- Using a knife or screwdriver, remove the faulty LED.
- We need to replace it with a similar LED or a resistor.
- Connecting the terminals directly can result in an increased current and multiple LED failure.

Step 4





• Using the soldering iron solder an LED or a 100Ω (2W or 5W) resistor into the faulty LED space.

Step 5



 Connect the bulb to a power source to detect if it's working.

Step 6





• Finally, twist the light-diffusing dome back on the light bulb.

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