



# Solar Roach

This fun solar power vibrobot looks a lot like a certain insect... Create one for fun or to use as a light sensor.

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## INTRODUCTION

The Solar Roach is a simple soldering project that uses the sun to power a vibrating motor. This project only takes a few minutes to build, but does require some simple soldering and use of a hot glue gun. For those reasons we recommend adult supervision.

- Solar Roach Kits now come with Maker Tape conductive tape for a non-soldering build. Those printable directions can be found in PDF format at the very end of this build guide.



### TOOLS:

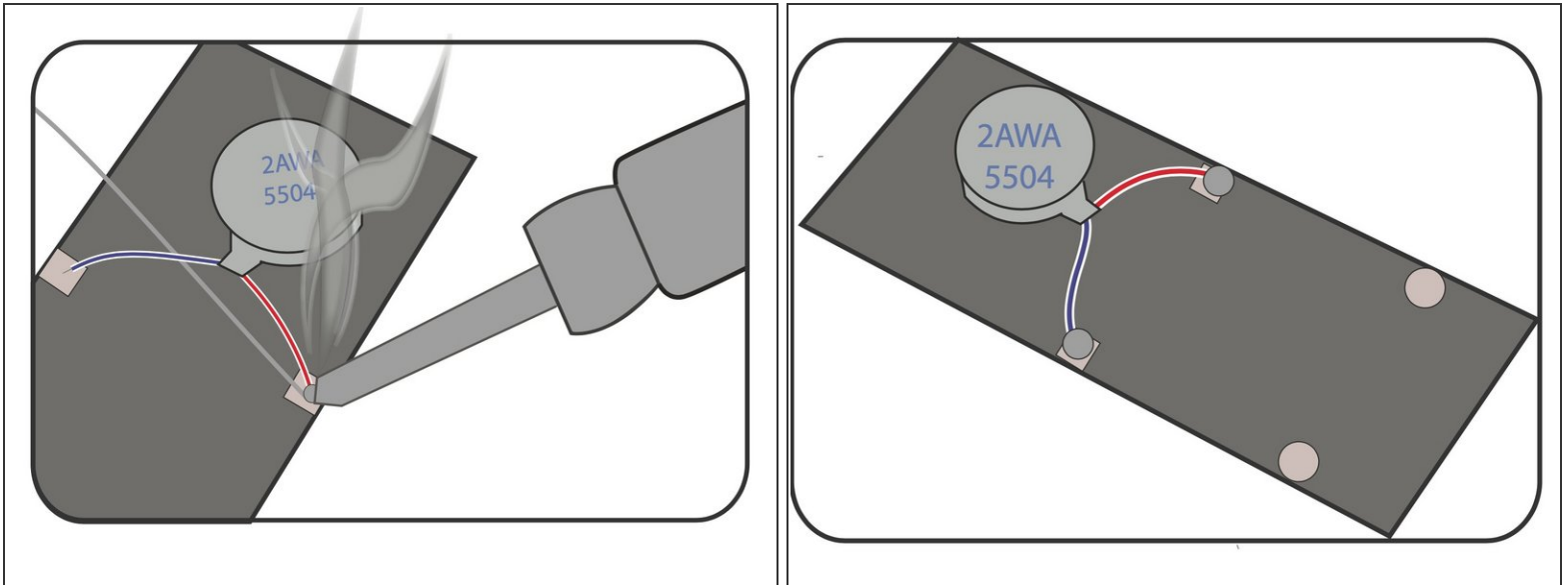
- [Soldering Iron](#) (1)
- [Hot Glue Gun](#) (1)
- [Wire Cutters](#) (1)



### PARTS:

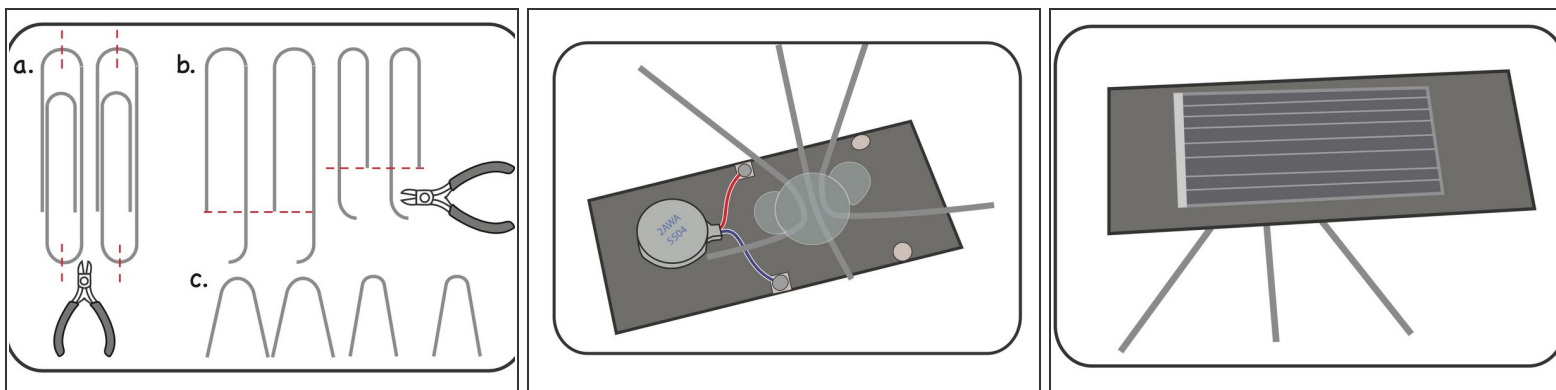
- [Solar Cockroach Kit](#) (1)

## Step 1 — Solder The Motor



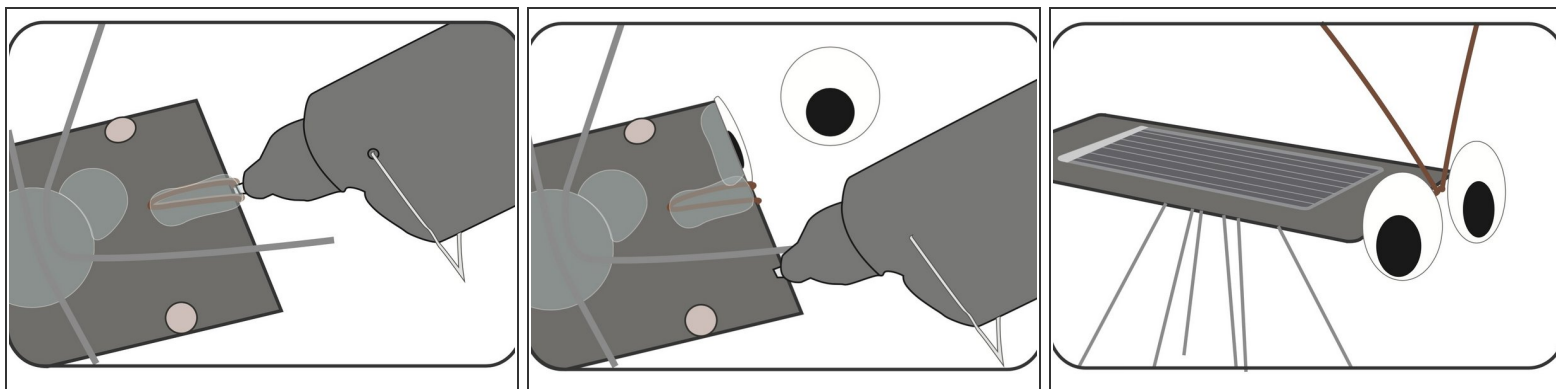
- Peel off the protective layer on the back of the motor.
- Stick the motor onto the solar cell, so that two wires can reach the solder points on the back of the solar cell.
- Solder the wires onto the solar cell.
- Optional: Take your solar cell outside and test in the sun.

## Step 2 — Add Legs



- Using your wire cutter, cut the paperclips similar to the diagram.
- Bend them apart slightly, and hot glue the to the solar cell.
- Use a minimum of two paperclips, for a total of four legs.

## Step 3 — Antenna and Eyes



- Use hot glue to glue on the antenna. Only a small amount is needed.
- Remove the protective layer on the back of each eye and stick onto the roach.
- Optional: Put a little hot glue behind the eyes, on the underside of the roach. This helps them stay on.