Tools List



- Soldering iron
- Solder
- PCB vice
- Diagonal cutters

Parts List



- PCB
- 3x 10KΩ Resistors (brown black orange)
- 3x 0.1μF Capacitors (104)
- Battery Clip

- 555 Timer
- Piezoelectric Buzzer
- Two Pin Female Header

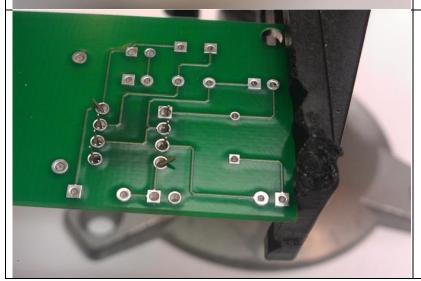
Assembly Directions



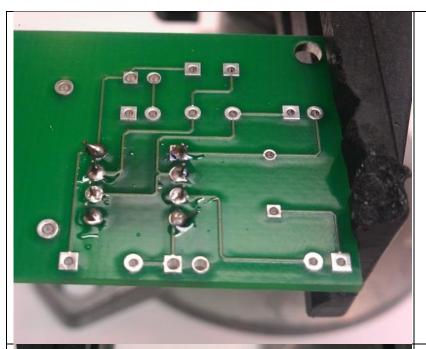
 Place the PCB in the PCB vice with the top facing up. The top has the white silkscreened parts and words



Place the 555 Timer in the PCB as shown.
The dot indicates pin one on the top left of the 555 Timer. Pin one is also marked by the square solder pad. If the 555
Timer is in the wrong way, the circuit will not work.



Bend the pins of the 555 Timer so when you flip the board over to solder the timer does not fall out.



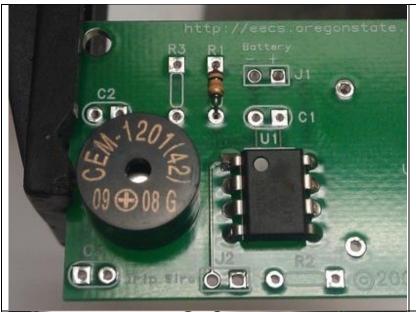
 Solder the legs. Solder joints should be conical not balls of solder. Make sure not to bridge the pins with solder.



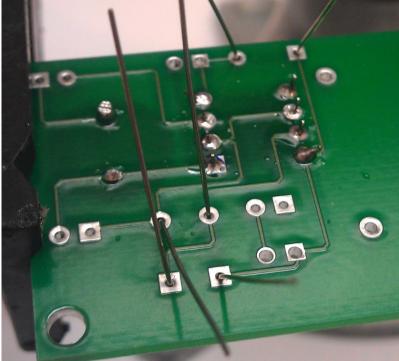
 Place the Piezoelectric Buzzer as shown with the plus sign on the same side as the silk screening. The buzzer may need to be held when you flip the PCB over. Flip the board and solder.



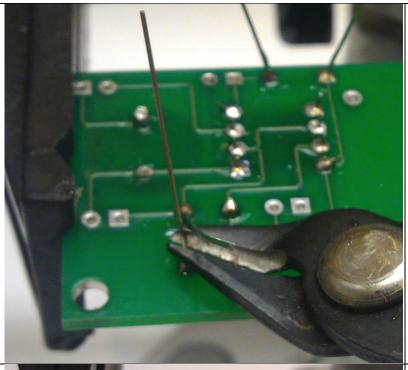
• Bend the resistor leads so they will fit into the holes.



Place all the resistors in R1, R2, and R3.
The resistors are the same value so it does not matter which resistor location they are placed.



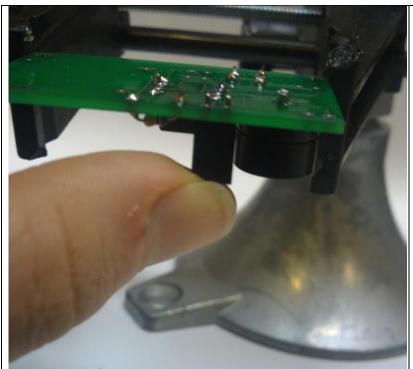
• When all the resistors are in, bend their leads so they do not fall out when flipping the PCB over.



 After soldering the resistors, cut the leads with the diagonal cutter. Caution: leads will go flying! Hold the lead with one had while cutting prevent flying leads.



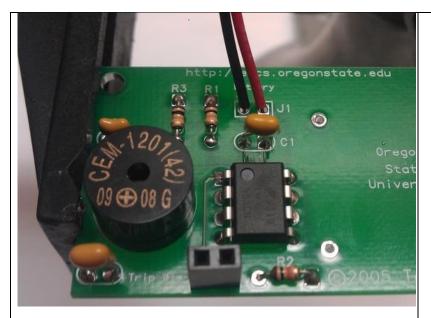
• Put the two pin female header in the spot marked J2. This is where the trip wire will be.



 Hold the header with your thumb. Get a ball of solder on your iron and stick it to a pin on the header. This solder joint will be bad, but will hold the head in place. Once the solder is cooled solder the other pin normally with a conical joint. Then go back and redo the first header solder joint.



 This step is just like the resistors. The capacitors are the same value. Put them in C1, C2, and C3. Bend the leads before flipping the PCB over. Solder and trim the leads.



 Put in batter clip so the black wire is in the negative hole and the red in the positive. Like with the header, hold it and dab a solder ball on first to hold the wires in place. Caution: the wire will heat up quickly.



 Take one of the cut leads and bend it so it fits into the female header. This will be pulled out by the trip wire and sound the alarm.