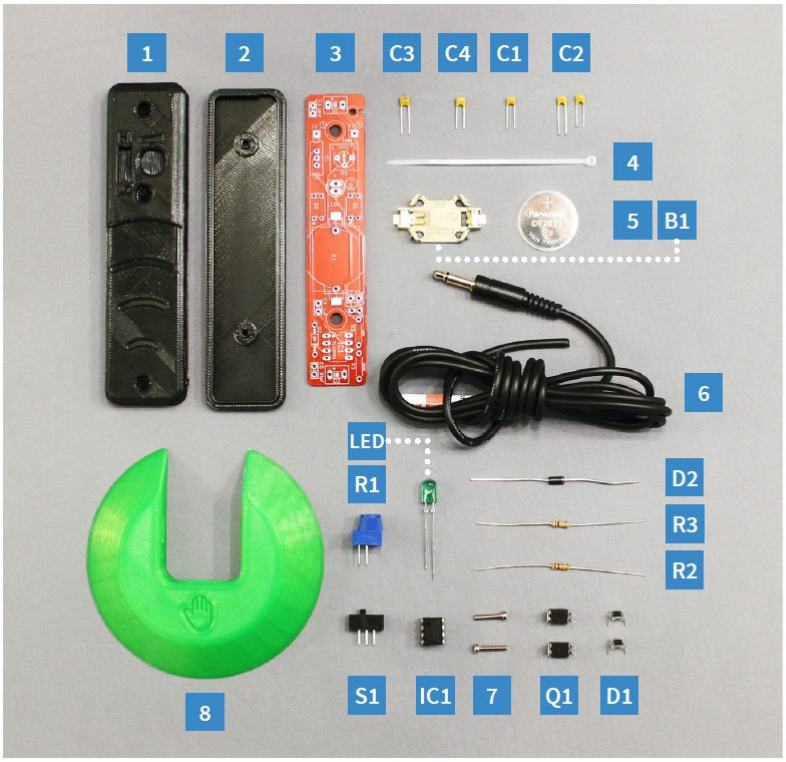
Proximity Switch: QC Guide

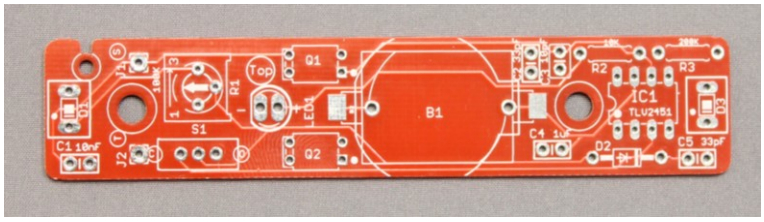


BILL OF MATERIALS

1	Case Top	D1	Diode
2	Case Bottom	R3	200k Ohm Resistor (RED BLACK YELLOW GOLD)
3	PCB	R2	10k Ohm Resistor (BROWN BLACK ORANGE GOLD)
C3	10pF Capacitor (label: BC10J)	D1	Photosensor Diode (2)
C4	1uF Capacitor (label: 105)	Q1	MOSFET (2)
C1	10nF Capacitor (label: 103)	7	Screws (2)
C2	33uF Capacitor (2) (label: 330)	IC1	OP Amp
4	Zip Tie	S1	Slide Switch
5	Battery	R1	Potentiometer
B1	Battery Holder	LED	LED
6	3.5mm mono cable (half length)	8	Switch Base

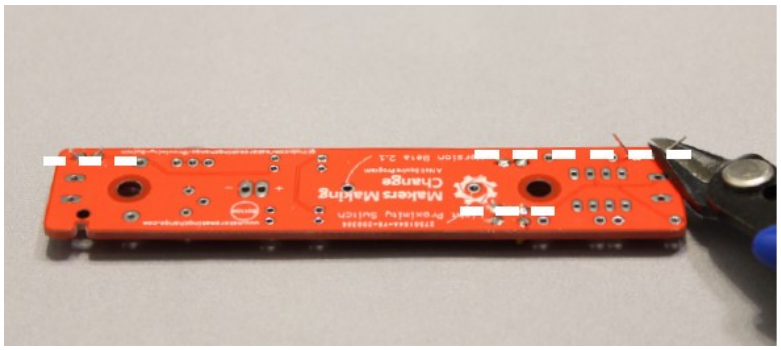
HOLE W9 = Hole to put part through

= Solder the area in the white square



Solder on the correct PCB side

All component will be **inserted** on the PCB side that says “Top” and **soldered** on the side marked “Bottom”.



Trim all excess leads

There is limited space between the bottom of the PCB and the bottom case. Make sure all leads are trimmed after soldering so it fits in the case.

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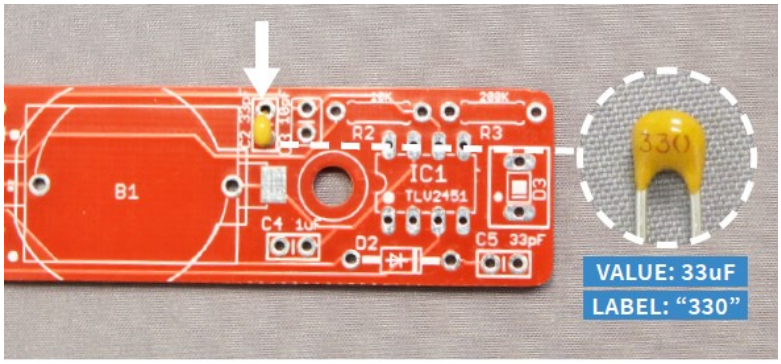
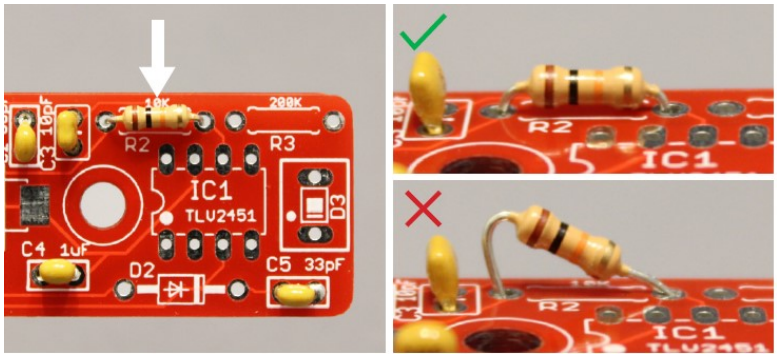


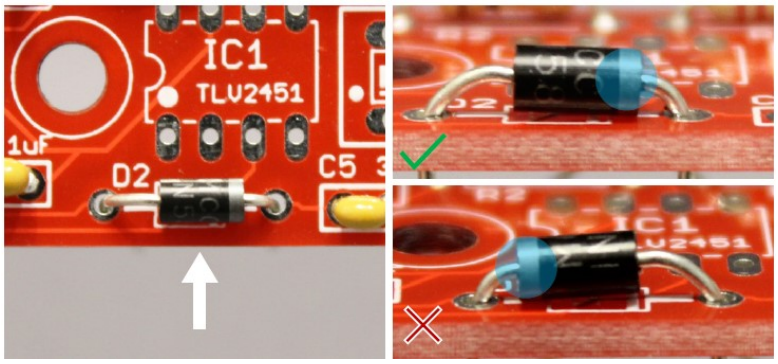
Capacitors

Capacitors may look similar so look at the printed labelling to differentiate them.



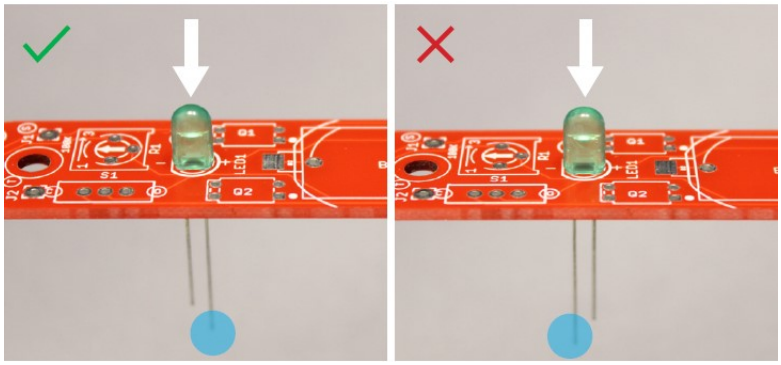
Ensure components are inserted flush to the board

Components not soldered flush to the board may interfere with the case. A good tip is to solder one lead first, check to see if part is flush, and continue soldering.



Diode

Insert the diode with the silver band towards the C5 marking.



LED

Insert the LED with the longer lead towards the centre of the PCB.

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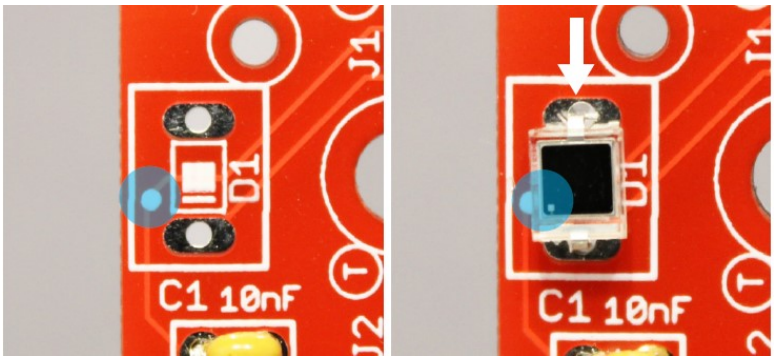
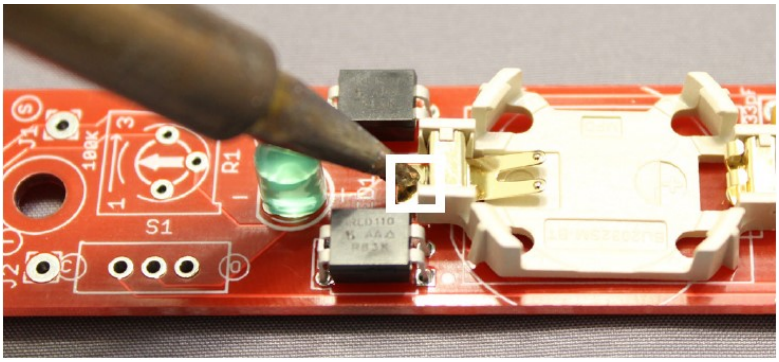


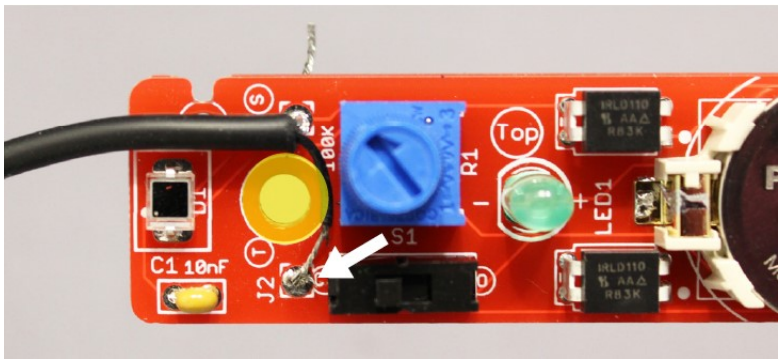
White dot

Several components have white dots on the top. Align the white dot on the component with the white dot on the PCB.



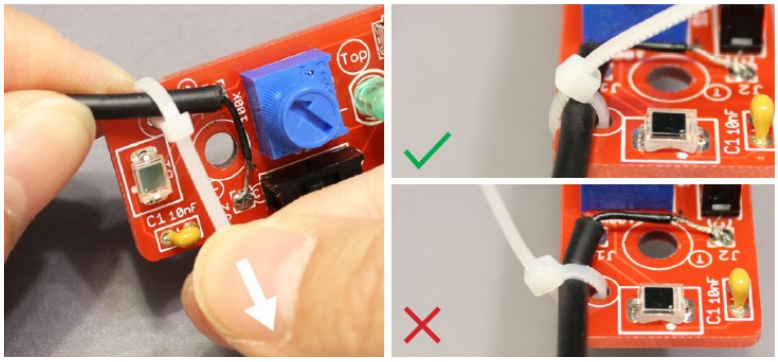
Soldering the battery holder

Be careful of the soldering iron when soldering the battery holder to the PCB as the heat may damage surrounding components.



Mono cable

When inserting and soldering the mono cable to the PCB, ensure enough clearance around the highlighted yellow circle.



Zip tie

Cinch the zip tie in the depicted manner or else the knot will interfere with the case.

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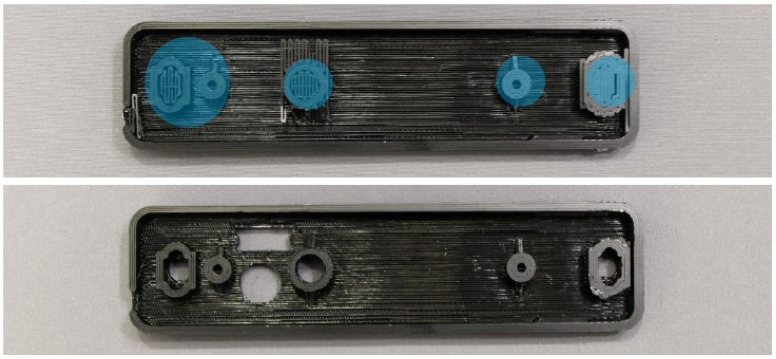

Support Material

Remove all the support material from the top case.

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