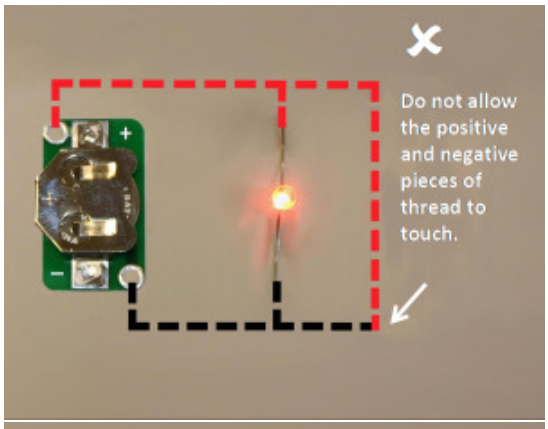
Kitronik Ltd – Fault finding in e-textiles

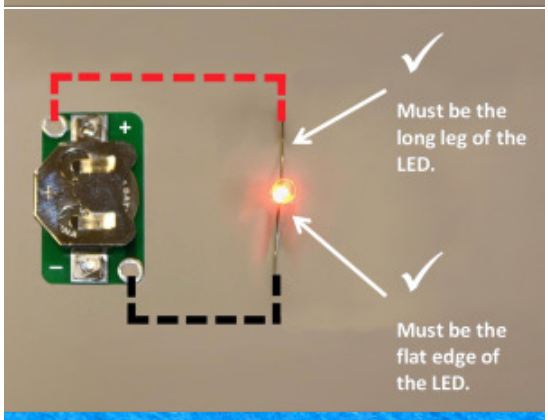
Below is a list of common faults that can stop your final circuit from working.



Thread touching / shorting

It is important to ensure that the positive and negative connecting pieces of conductive thread aren't touching each other. If they do the battery will be shorted which will prevent the LED from lighting up.

It is a good idea to fix or stitch the pieces into place so that no loose pieces can accidently touch.

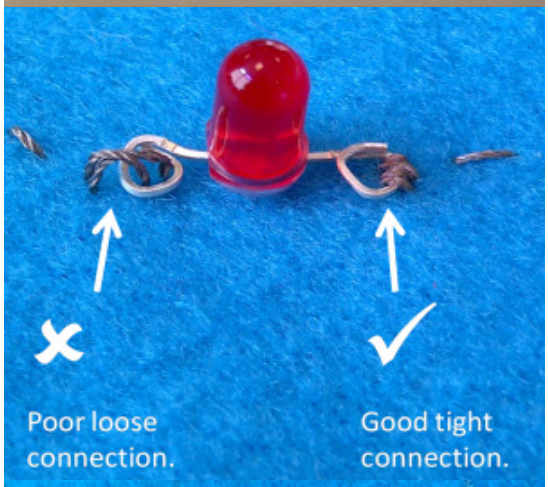


LEDs connected backwards

If the LED is connected backwards then it will not work.

Check the following:

- The long leg of the LED connects to the positive piece of thread.
- The flat on the LED connects to the negative piece of thread.



Thread connections not tight enough

If the point at which the thread connects to a component is not tight enough, the circuit may not work at all, or it may work in an inconsistent manner.

The image left, shows an example of a good connection and a bad connection.

Battery insertion

If the battery is not inserted correctly, the power to the LEDs will be in reverse and they will not work.

As shown in the picture to the left, both the top of the battery and the top of the coin cell retaining clip are marked with a '+' (positive) sign. The battery should be inserted so that they match.