



instructables

## Make Your Own Crude Shaking Torch (Emergency Flashlight)



by GreatScottLab

In this project I will show you how I combined a joule thief circuit with a coil and a magnet in order to create a shaking torch which is an emergency flashlight that does not require batteries. **Let's get started!**



### Step 1: Watch the Video!

The video gives you an overview on what is necessary to do to create your own shaking torch. The next steps will contain useful extra information.

[https://youtu.be/ttwsMwG\\_Gco](https://youtu.be/ttwsMwG_Gco)

### Step 2: Order Your Parts!

For the project you will need a joule thief circuit. You can find a parts list for it and the instruction to build it by following this link:

Here are the additional components that you will need (affiliate links):

#### **Aliexpress:**

PVC Pipe: -

Neodymium Magnets:

[https://s.click.aliexpress.com/e/\\_d8XlnLC](https://s.click.aliexpress.com/e/_d8XlnLC)

2W10 Bridge Rectifier:

[https://s.click.aliexpress.com/e/\\_dUW3EqE](https://s.click.aliexpress.com/e/_dUW3EqE)

Slide Switch: [https://s.click.aliexpress.com/e/\\_dVn7Jlz](https://s.click.aliexpress.com/e/_dVn7Jlz)

1.5F 5.5V Supercapacitor:

[https://s.click.aliexpress.com/e/\\_d8QDBrY](https://s.click.aliexpress.com/e/_d8QDBrY)

#### **Ebay:**

PVC Pipe: <http://rover.ebay.com/rover/1/711-53200-19255-0/1?...>

Neodymium Magnets:

<https://www.instructables.com/id/Supercapacitor-Joule-Thief/>

[http://rover.ebay.com/rover/1/711-53200-19255-0/1?...](http://rover.ebay.com/rover/1/711-53200-19255-0/1?icep_ff3=2&pub=5575101368&toolid=10001&campid=5337582279&customid=&icep_item=121878422447&ipn=psmain&icep_vectorid=229466&kwid=902099&mtid=824&kw=lg)

2W10 Bridge Rectifier:

<http://rover.ebay.com/rover/1/711-53200-19255-0/1?...>

Slide Switch: <http://rover.ebay.com/rover/1/711-53200-19255-0/1?...>

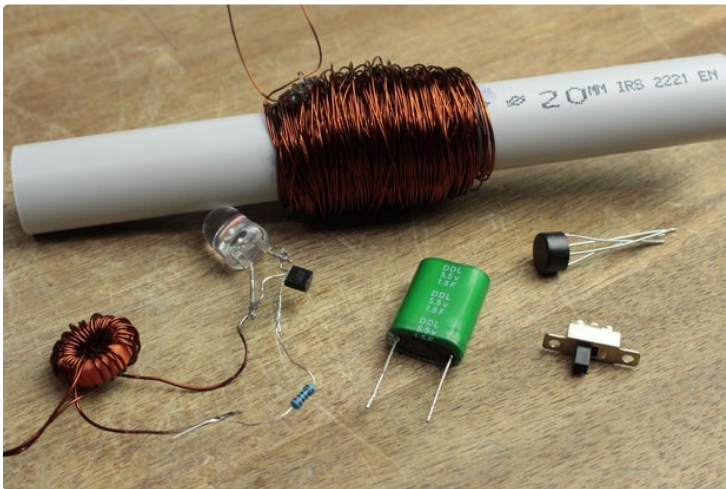
1.5F 5.5V Supercapacitor:

<http://rover.ebay.com/rover/1/711-53200-19255-0/1?...>

#### **Amazon.de:**

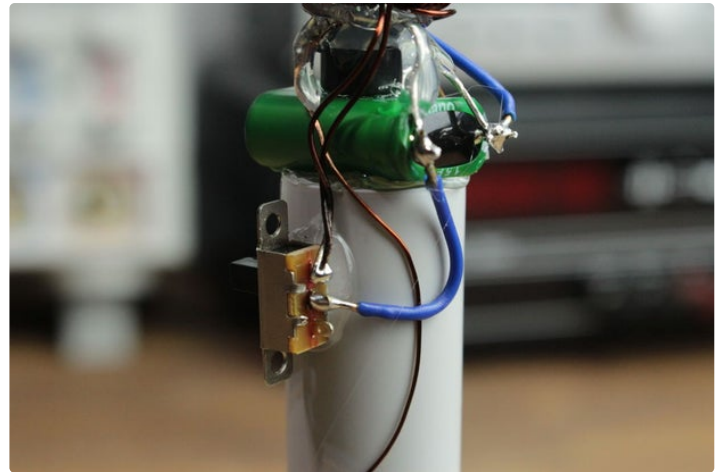
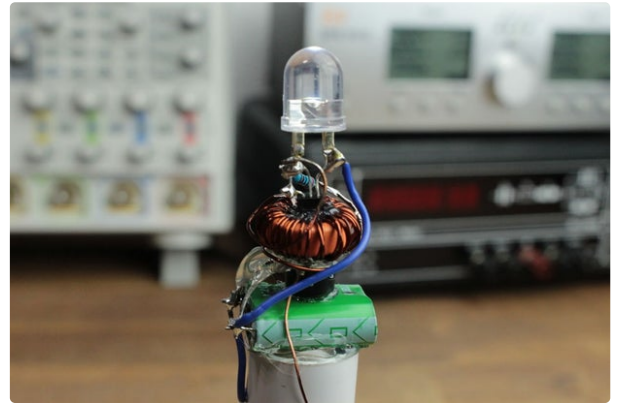
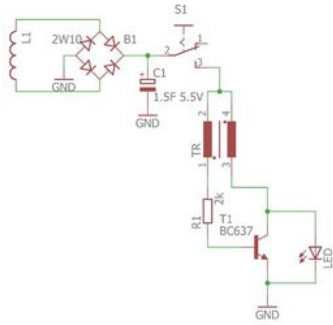
PVC Pipe: <http://amzn.to/2a7w17F>

Neodymium Magnets: <http://amzn.to/2a7w97e>



### **Step 3: Create the Circuit!**

Here you can find the schematic and pictures which you can use as a reference to create your own circuit.



## Step 4: Success!

You did it! You just created your own Shaking Torch!

Feel free to check out my YouTube channel for more awesome projects:

<http://www.youtube.com/user/greatscottlab>

You can also follow me on Facebook, Twitter and Google+ for news about upcoming projects and behind the scenes information:

<https://twitter.com/GreatScottLab>

<https://www.facebook.com/greatscottlab>





Hi scott, I would like to know if it is possible to turn this project into a phone charger?



This is an awesome flashlight! Could you increase the capacitance for a longer-lasting light?



Watch the video! Higher capacitance means more time to charge. It would take ages to charge a bigger one



Hallo...i want ask a question, for build this project. I've done follow every step you explain. But in my coil dont have any current flow i measure it with avometer. I use 3/4 inch pipe, 0.5 mm wire coil and my coil length 54mm, 104 turn and 5 layer, and magnet neo 5x3 mm x 30 pcs. And the point is magnet size take effect for this?and what size i should use.



Extremely well



Hi I like so much you YouTube channel ;), how did you wire the toroid core, how did you attach it?



Watch my video about the joule thief.



I noted you have copper wire, toroid, transistor, resistor and LED not marked in your list of materials



Right above the list is a link to my instructables about the joule thief. There you can find those parts.



That's a great idea :) and a nice scope :)