Make Lightning

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TOOLS:
- Lighter or heatgun (1)
- Soldering iron (1)
- Wire strippers (1)

PARTS:
- 120v-9v transformer (1)
- Wire (1)
- Enclosure (1)
- terminal post (2)
- Solder (1)

SUMMARY

I have been fascinated with arcs and sparks, bangs and pops ever since I created an arc with a busted power adaptor.

One day I thought about making a proper "big boys' toy" that would be safer and more convenient.
Step 1 — Make Lightning

- Mains voltage is extremely dangerous and should not be used in this project. Even though the voltage from this project is high enough to arc, it is not deadly.

Step 2

- First you need:
  - 120v or 240v to 9v power adaptor
  - Enclosure
  - Wire
  - Terminal posts
  - Not shown: tactile switch
  - Connector socket
Step 3

- Solder the components according to the diagram.
- Don't forget to reverse the transformer so that you put power into the output terminals.

Step 4

- Now, put the electronics in the enclosure and make a foot switch.
Step 5

- Finally, put 12v into the input socket and Presto! You have your own high voltage power supply that can be connected to a Jacob's Ladder (basically, put two lengths of coat hanger wire close enough for the arc to jump across at different positions). Have fun!