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@Electric Explosions@
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1 - explosions

There are a few electronic components that make nice explosions under certain conditions. The most common are:

Transistors

These are quite easy to kill, especially the puny ones. Just wire a high voltage (30v or more) across any 2 legs and they pop quite nicely.

Diodes

These explode about like transistors, and are usually cheaper.

Resistors

If you double the voltage across a resistor the current will double, so the power dissipated will increase fourfold. It works especially well with small resistors which will give a higher current. They generally tend to heat up a lot and start to smoke a lot, but sometimes they fizzle and even make popping noises.

741s

A 741 is a basic operational amplifier - quite common and cheap. They can handle 30v(+15v to pin 8 and -15v to pin 4), but if you wire these up the wrong way round the poor little things can't cope. you'll either get some nice smoking and a cracked chips, or they will go bang and fly off in a few hot shards.

555s

A 555 is a timer chip that can be used to make oscillators and other useful things. They also make quite loud bangs. They run with up to an 8v power supply, but if you increase this they pop. It's best if you reverse the polarity, giving louder bangs than a 741.

Capacitors

By far the best for exploding. The type you need to use are electrolytic capacitors, which are polarised. Obviously you have to wire them in the wrong way round, and about 30v should do (this depends on the specs of the capacitor...some are built to withstand a lot of damage) for a small capacitor. A few μ Fs is the kind of size you're looking for. The capacitor has some wierd chemicals inside to help it work, but when it's wired in the wrong way with too much voltage the capacitor heats up very fast. So fast that the chemicals vaporise almost instantly and rip the whole thing apart with the insides flying everywhere, leaving nasty (and probably toxic) fumes in the air. Bigger capacitors give bigger explosions (just like more dynamite gives bigger explosions) but are harder to kill. If it's a bit hard going, just wire it across the mains and it'll make a nice loud bang, and probably trip some circuit breakers somewhere.

note: if you plan on doing any of this, stand well back (this can be done easily by leaving a gap in the circuit and 2 long wires running to where you are, so you can touch them together and you'll be safely round a corner or in the toilet or

whatever). Another thing to watch out for is that some of these things take time, especially capacitors. I've known them to look harmless for half a minute before exploding in your face when you look to see what's wrong.