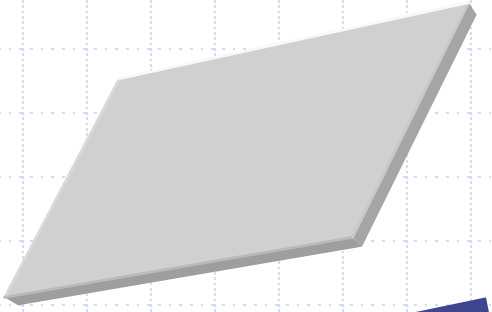
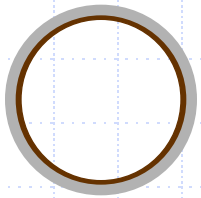
Improved Lifter V1 How-to-Guide

1. Prepare the following materials:

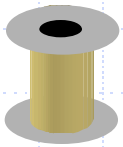


Polystyrene block, the smaller the granules, the better, its best to use the type used in food containers, the one used in restaurants. Block thickness should be ½ in. Area, 2 feet x 1 feet. Anyway, you'll use only a fraction of this, so you can actually use scrap or re-use the polystyrenes used for protecting packaged goods such as T.V's.

Aluminum foil, 8 meters x 30 cm.



Thin Double-Adhesive (Double side tape) Tape ½ in. wide rolls. The type of tape that is sticky on both sides but use the thin one (for lightness and ease of use) not the one that uses a foam.

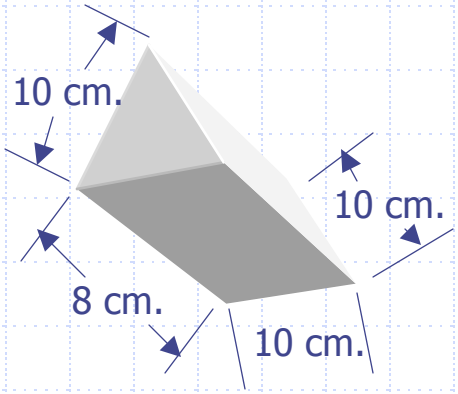


Gauge 30 wire. 0.1 mm. Thick, 3 meters long. Nothing thicker than this. Unenameled or bare wire is better than a coated motor wire. Gives your lifter a better chance of taking off. Gives more thrust.

3 mm thick, 1 feet long, brass rod, or any rod, as long as smooth and cylindrical in shape. Or any dimension al long as between 3 mm and 5 mm thick

Improved Lifter V1 How-to-Guide

1. Cut three pieces of polystyrene with a razor in the following dimensions, this will be the corona wire holder.



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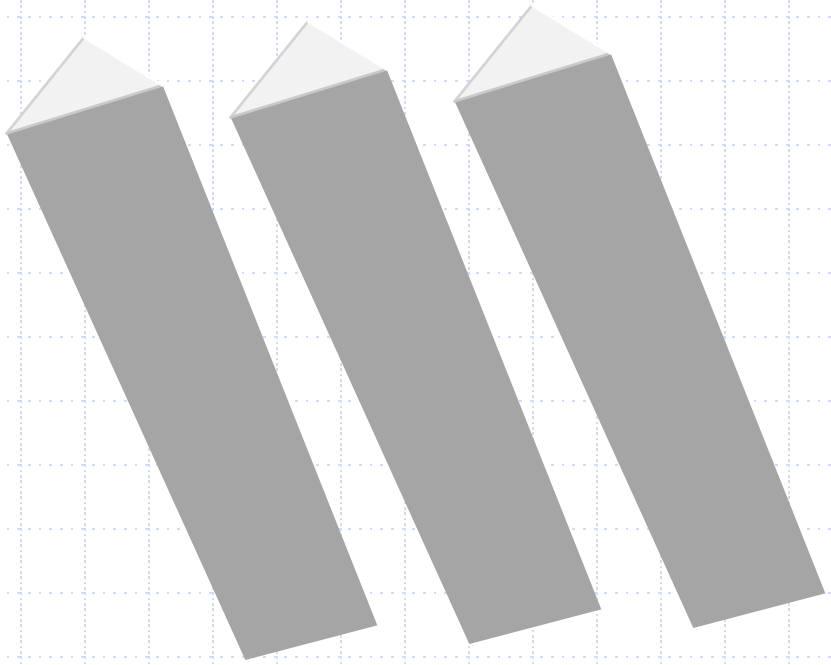
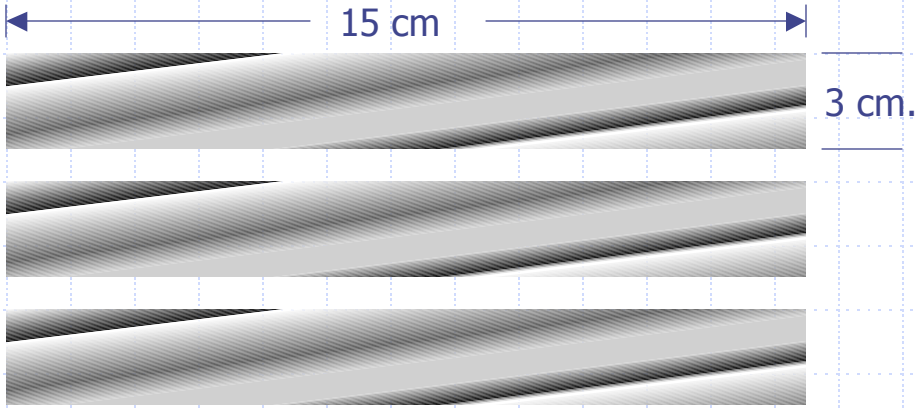
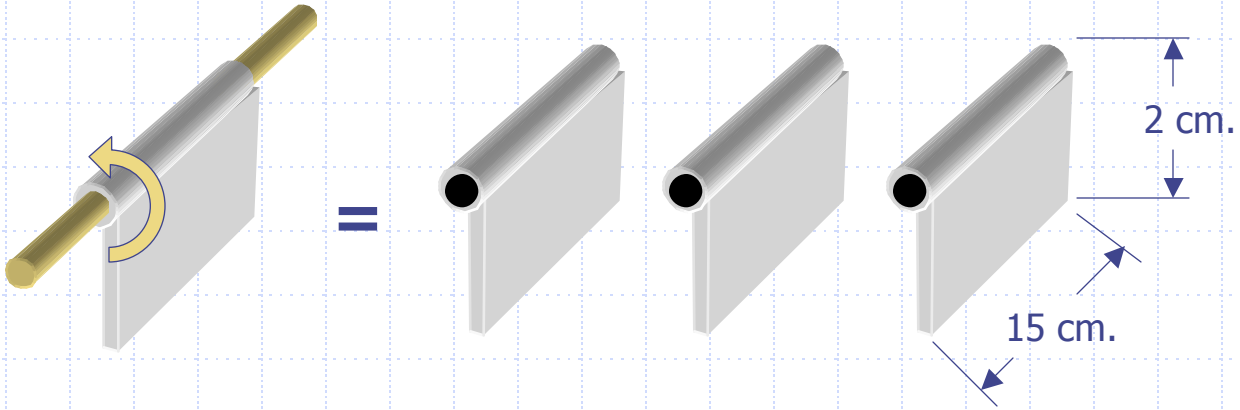


Improved Lifter V1 How-to-Guide

1. Cut three pieces of aluminum foil in the following dimensions:

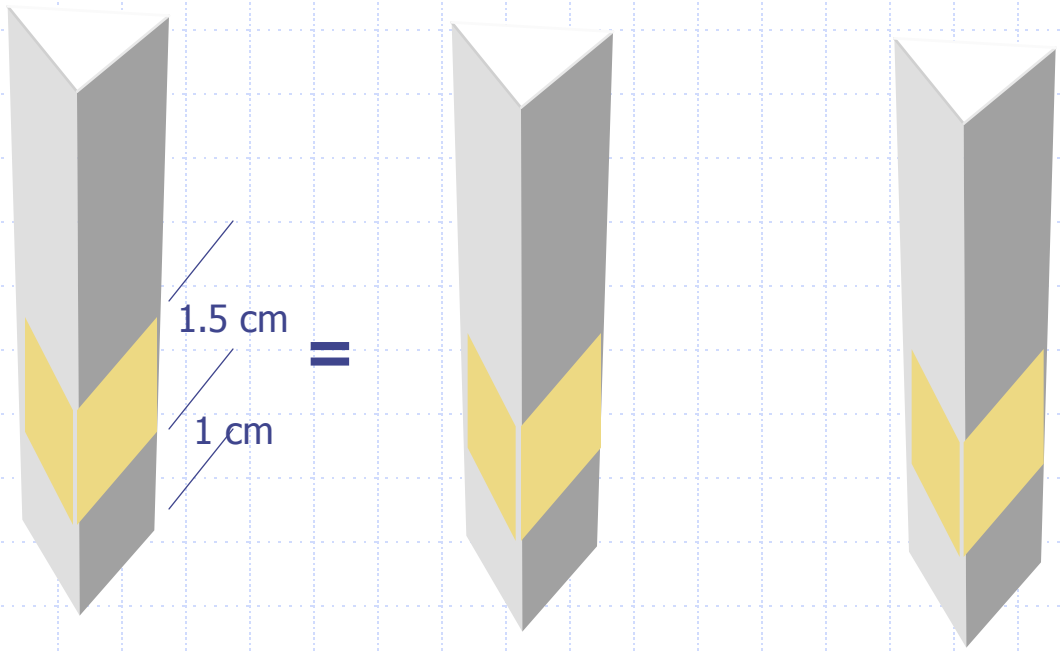


2. Fold one edge of foil with the brass rod until the foil height is reduced to 2 cm



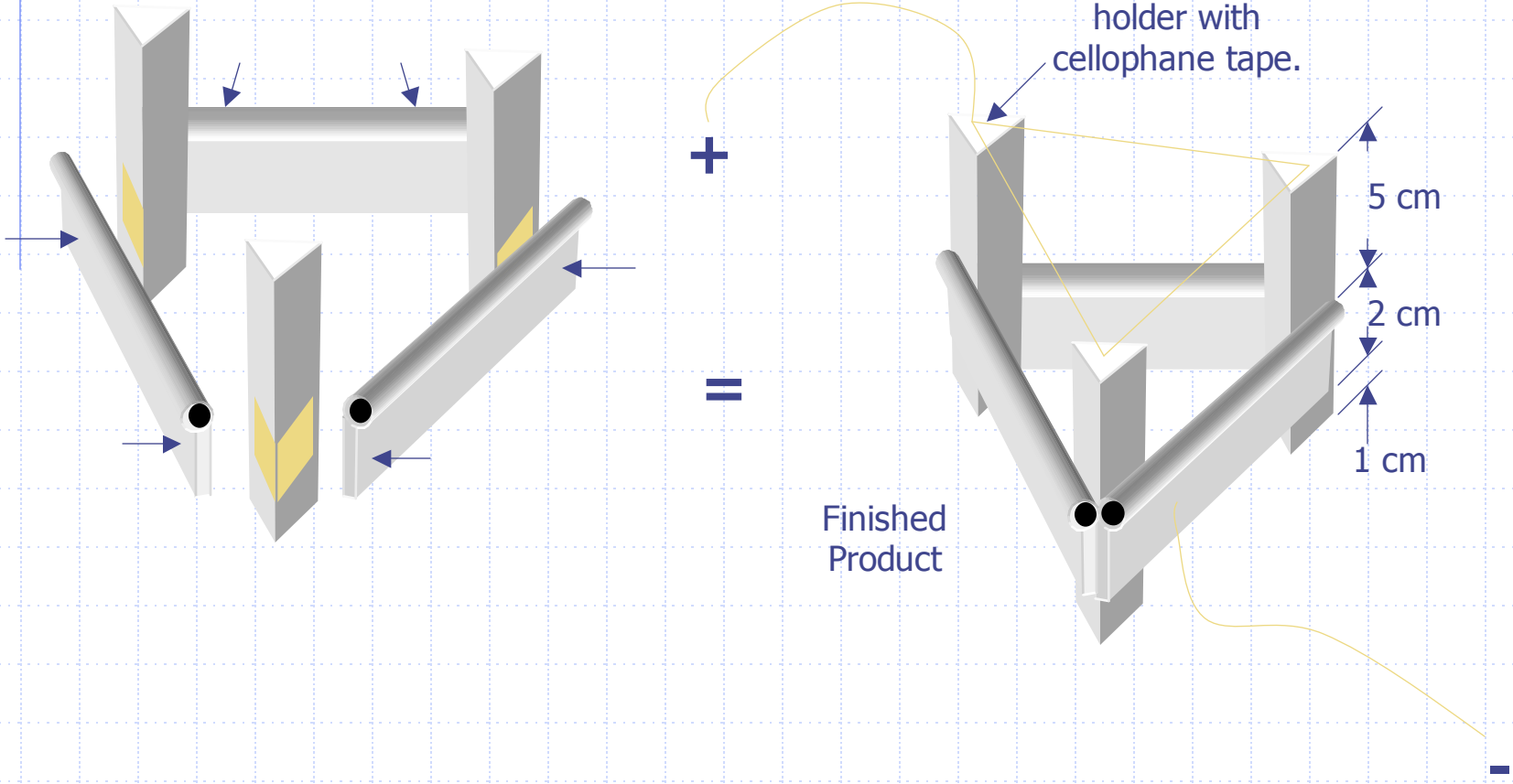
Improved Lifter V1 How-to-Guide

1. Apply double adhesive to the polystyrenes. Double adhesive tape is transparent, just used yellow in the diagram so it can be seen. Otherwise, you won't see it too **: -)**



Improved Lifter V1 How-to-Guide

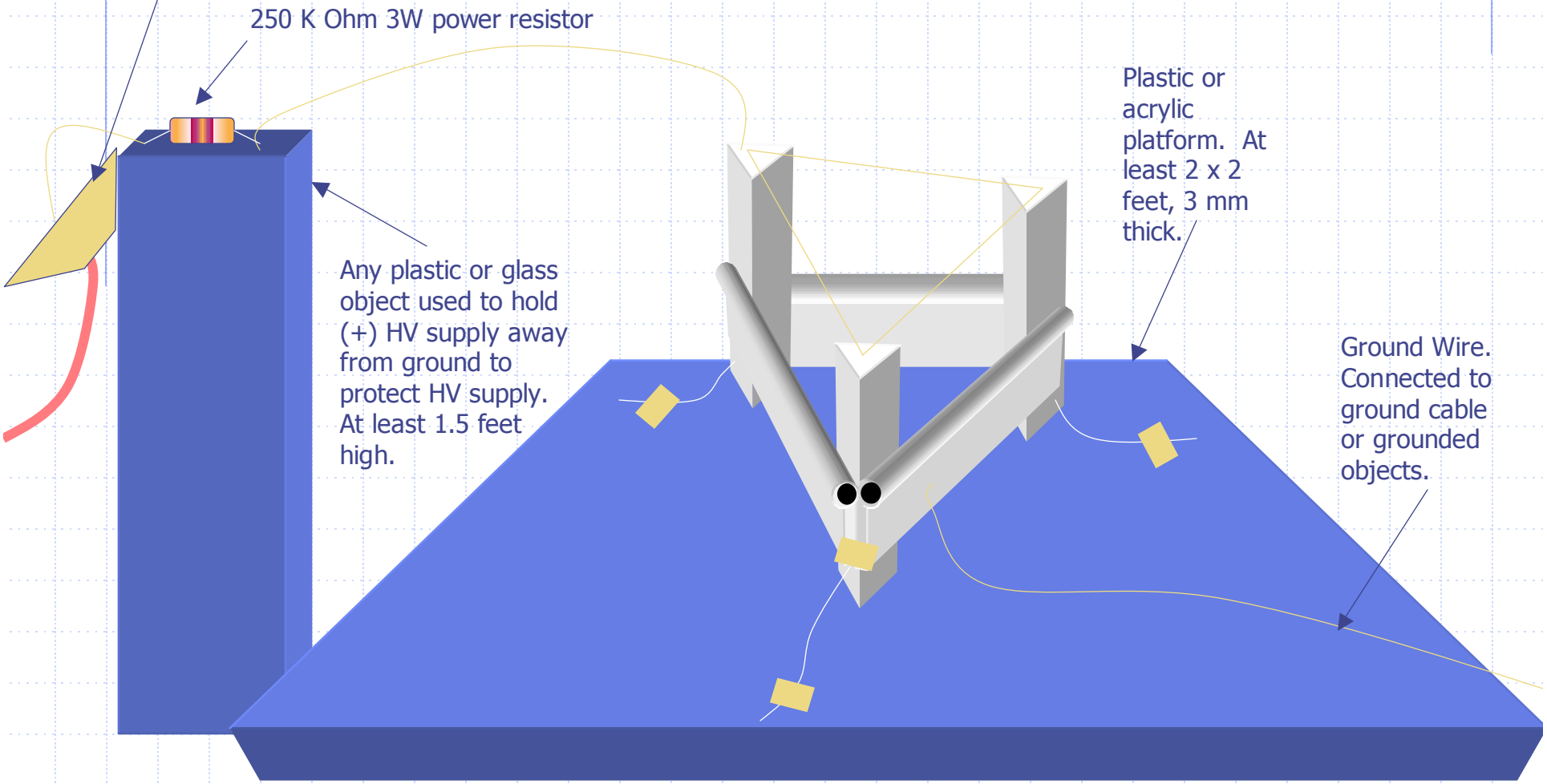
1. Apply the aluminum foil. As you notice, it doesn't have a horizontal framework. That will make this lifter so light, it will take-off quickly.



Improved Lifter V1 How-to-Guide

Test Flight Setup

Suction cup from monitor supplies 20 – 40 kv. Never touch during operation. Very dangerous. Also keep this area from touching the ground or any object. This can quickly short and destroy your monitor.

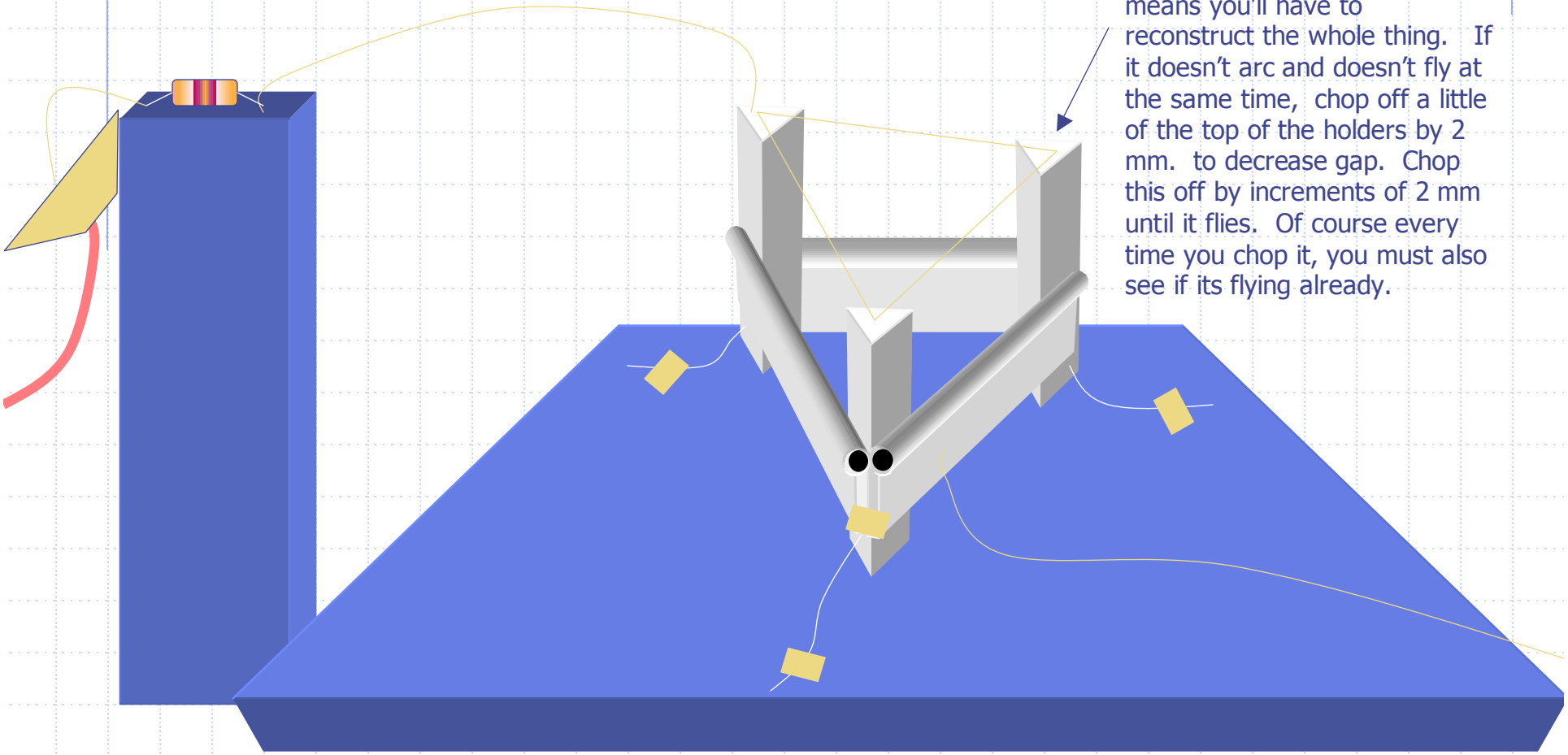


Improved Lifter V1 How-to-Guide

Troubleshooting

Don't use wooden table, floor, wooden platform, to test the lifter. Wood or ground is highly conductive and could cause arcs to jump the wood and set it on fire. Its may also short your hv supply. If you can't find a plastic or glass top table, buy an acrylic plastic 2 x 2 feet x 3 mm thick. Elevate this plastic platform 1 feet high by using 3 inch thick PVC pipes.

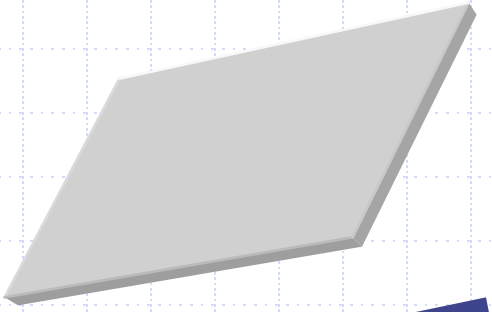
If arcing occurs, you have a big problem. Anyway, it won't happen with this dimensions. If in case it arcs, add 1 cm to the gap and increase length of corona wire holder by 1cm (it means you'll have to reconstruct the whole thing. If it doesn't arc and doesn't fly at the same time, chop off a little of the top of the holders by 2 mm. to decrease gap. Chop this off by increments of 2 mm until it flies. Of course every time you chop it, you must also see if its flying already.



Low Power Lifter How-to-Guide

Special thanks to Eng'r. Saviour, inventor of low-profile lifters

1. Prepare the following materials:



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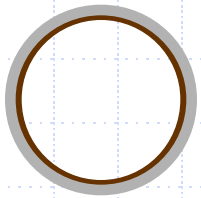
Aluminum foil, 8 meters x 30 cm.



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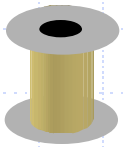

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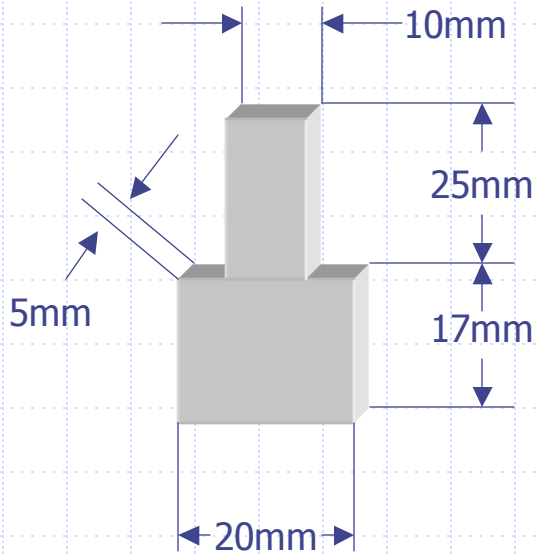
3 mm thick, 1 feet long, brass rod, or any rod, as long as smooth and cylindrical in shape. Or any dimension al long as between 3 mm and 5 mm thick

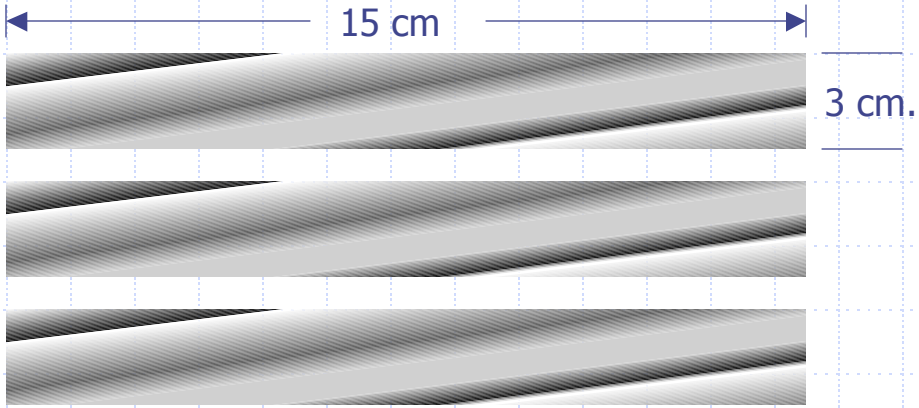
Low Power Lifter How-to-Guide

1. Cut **ten** pieces of polystyrene with a razor in the following dimensions, this will be the corona wire holder.

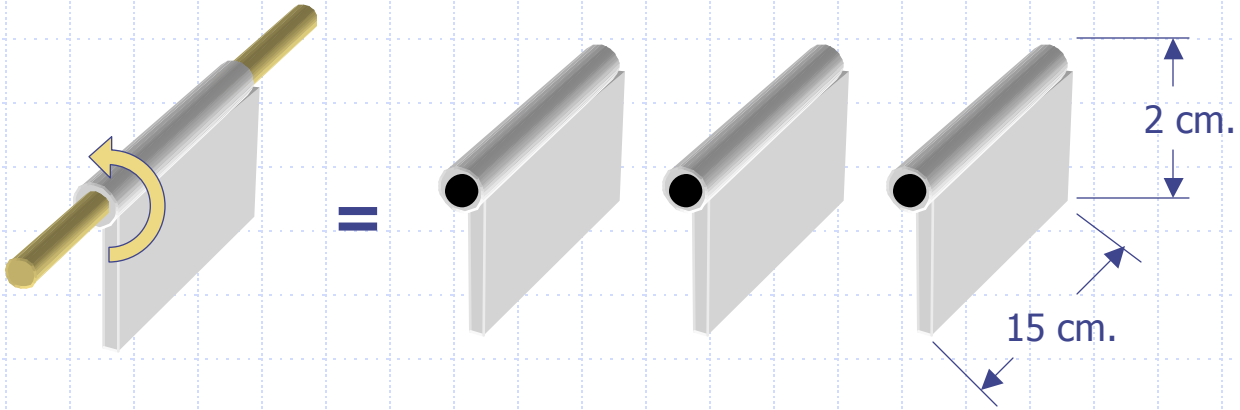


Low Power Lifter How-to-Guide

1. Cut **six** pieces of aluminum foil in the following dimensions:



2. Fold one edge of foil with the brass rod until the foil height is reduced to 2 cm



Low Power Lifter How-to-Guide

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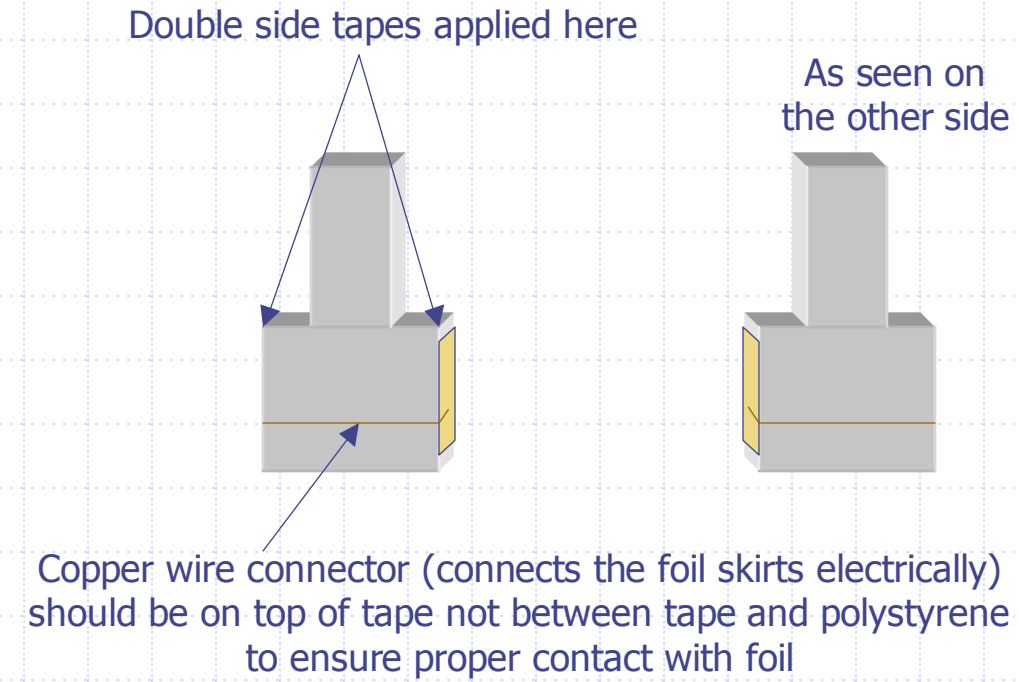
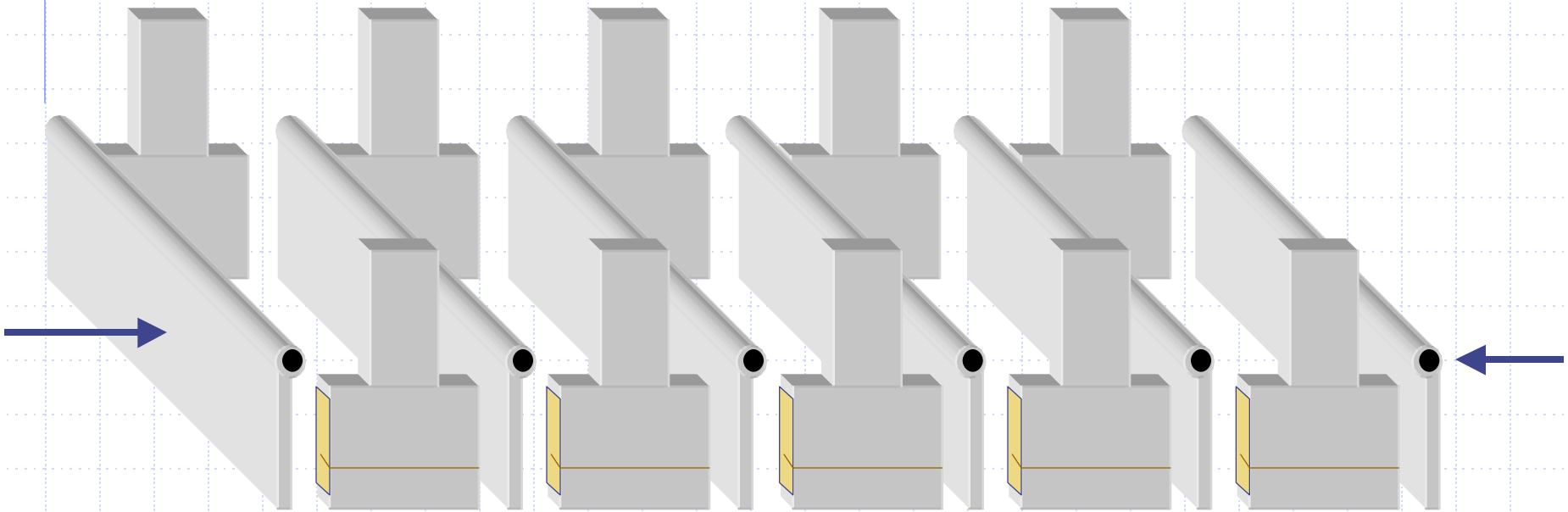


Low Power Lifter How-to-Guide

1. Apply the aluminum foil. As you notice, it doesn't have a horizontal framework. That will make this lifter so light, it will take-off quickly.

Secure to corona holder with cellophane tape.



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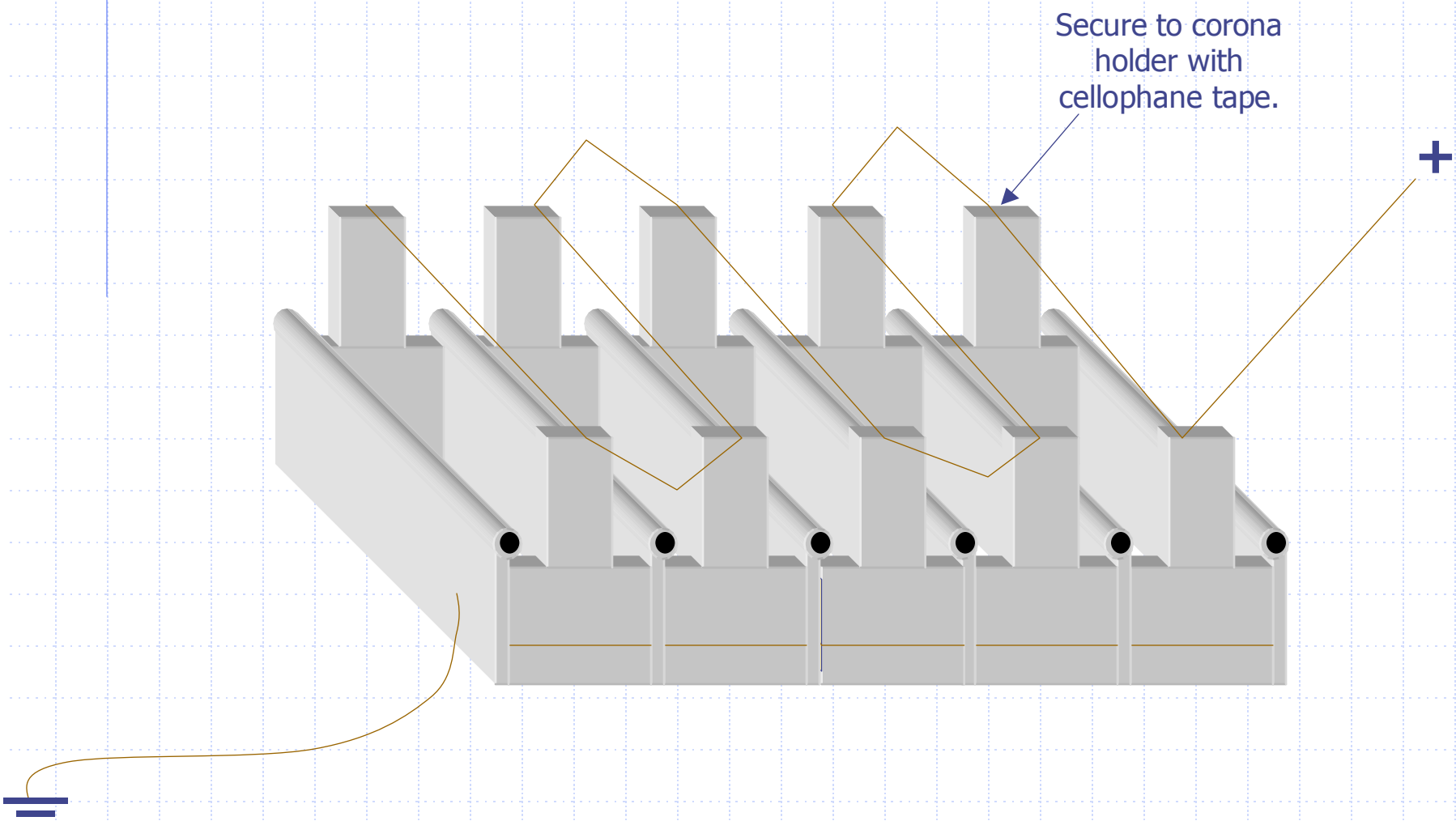

Low Power Lifter How-to-Guide

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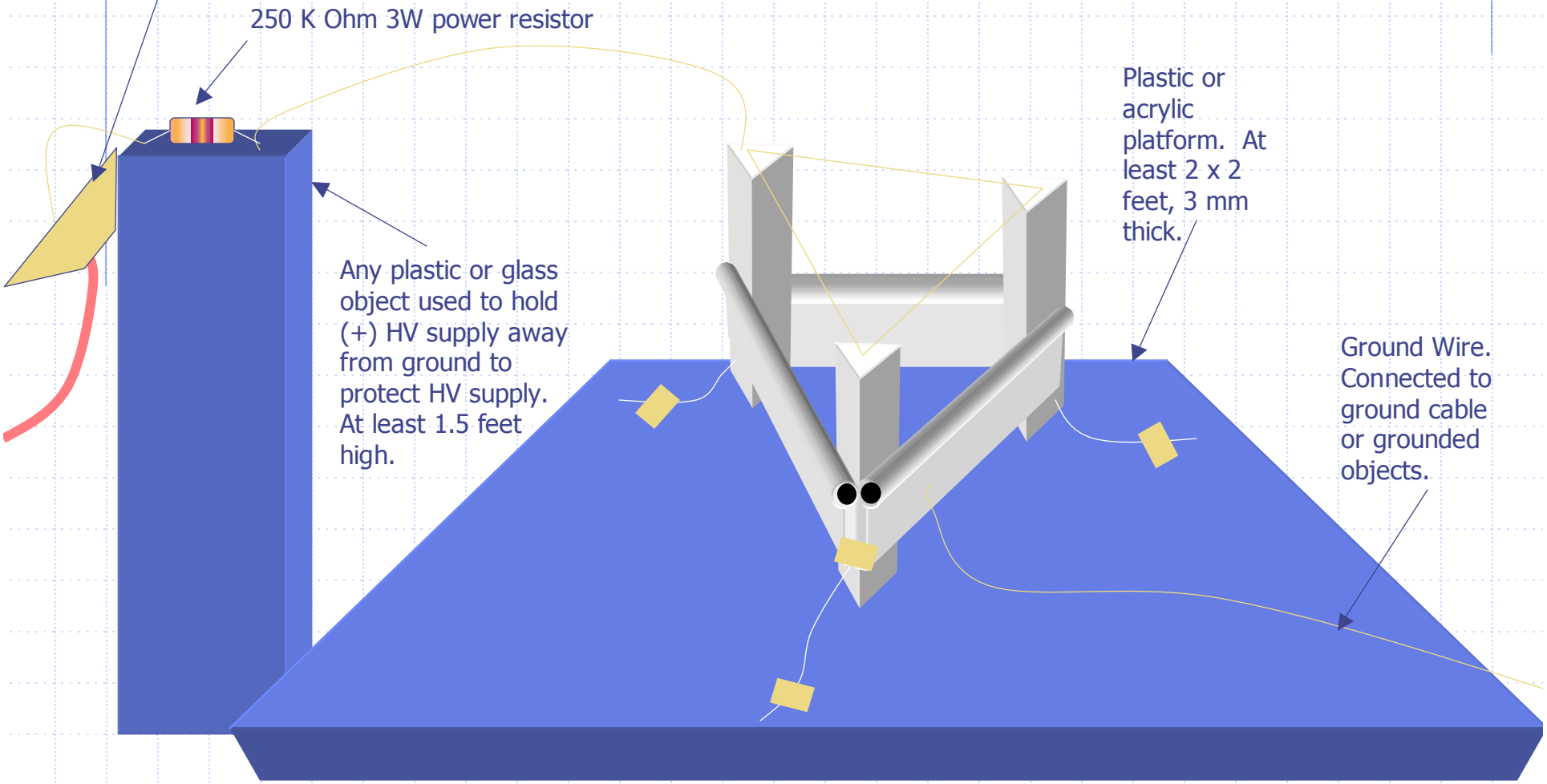

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