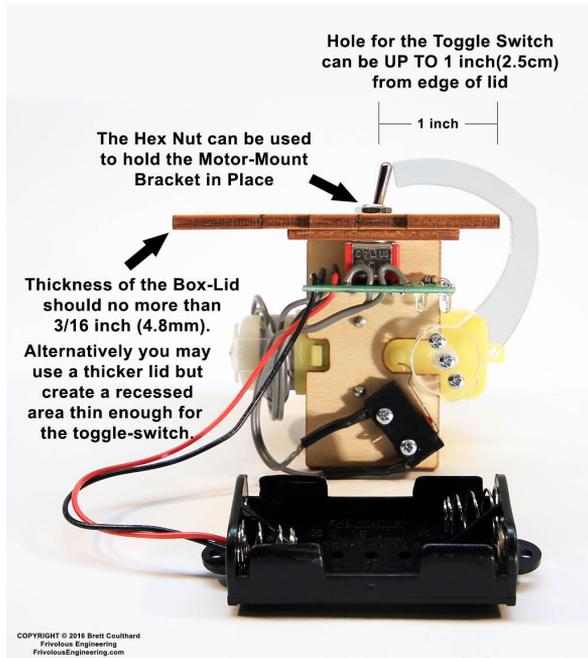


# Useless Machine Parts-Only Kit Assembly Instructions



The Parts-Only Kit is intended to be mounted inside a box that you supply.

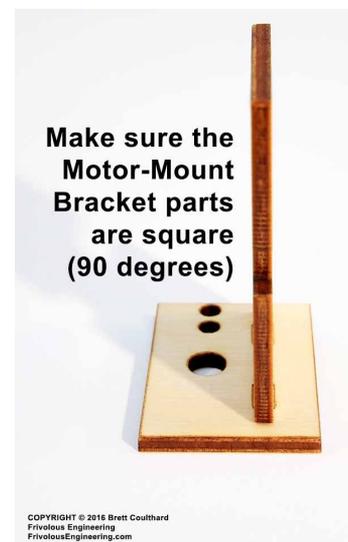
The minimum interior dimension of your box:  
 13cm(5 inches) Long  
 9 cm (3 ½ inches) Wide  
 6 cm (2 ½ inches) Tall

Ideal thickness of lid where the toggle-switch hole is located should be no more than 3/16th inch (4.8mm). Alternatively, a thicker lid with a recessed area for the toggle-switch can be fashioned.

First build the Electronics Assembly. Instructions can be found here:  
<http://frivolousengineering.com/soldering.htm>

Then build the Motor-Mount:

Using Elmer's or any similar craft glue, the two motor-mount pieces as shown in the photos. Make sure they are squared (90 Degrees).



Attach the Motor to the Motor-Mount Bracket using the two large screws. They go from the motor side and screw into the Motor-Mount as shown.

Using two of the smaller screws, attached the micro-switch to the motor mount as shown in the photo.

Using two of the small screws attach the Cam Disk to the actuator. Make sure the bump on the cam disc is on the bottom as shown in the photo.

Attach the Actuator/Cam to the shaft of the Motor using the last small screw.

The Useless Machine Assembly is now ready to be mounted in your case.

If the case lid is thin enough, 3/16ths of an inch or less (4.8mm or less) then you can use the hex nut on the toggle-switch to secure the Assembly to the lid.

If the case lid is more than 3/16 inch thick, then we recommend that a recessed area be created in your lid to accommodate the assembly.

Alternatively, there are two holes in the top of the motor mount that you can use to screw the assembly to your case lid instead of using the hex-nut.

These instructions can be found on our website: <http://frivolousengineering.com/partskitassembly.htm>

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