

# Resonant Cavity

- [Resonant Cavity Holder Dimensions, STLs](#)

# Resonant Cavity Holder

## Dimensions, STLs

These replicated cavities are the ones used on the buggy. Some machining is required for the inner electrodes, cost effectiveness may not be ideal for many experimenters. Therefore, a 3D printable and glue-together template was made to allow those with simple hand tools (grinder or Dremel cutoff wheel) to be able to cut slots into a 1/2" tube. In addition to this template, a 3d printable insert can be pressed or hammered into the inner diameter portion of the inner tube to provide analog to having a solid electrode.

Inner electrode dimensions: 4.00" length, 0.500" outside diameter, 0.400" inside diameter, 0.050" wall

Outer electrode dimensions: 2.75" length, 0.75" outside diameter, 0.680" inside diameter, 0.035" wall

The terminal holes should be drilled out to receive a 1/4-20 tap.

### Inner Electrode Templates:

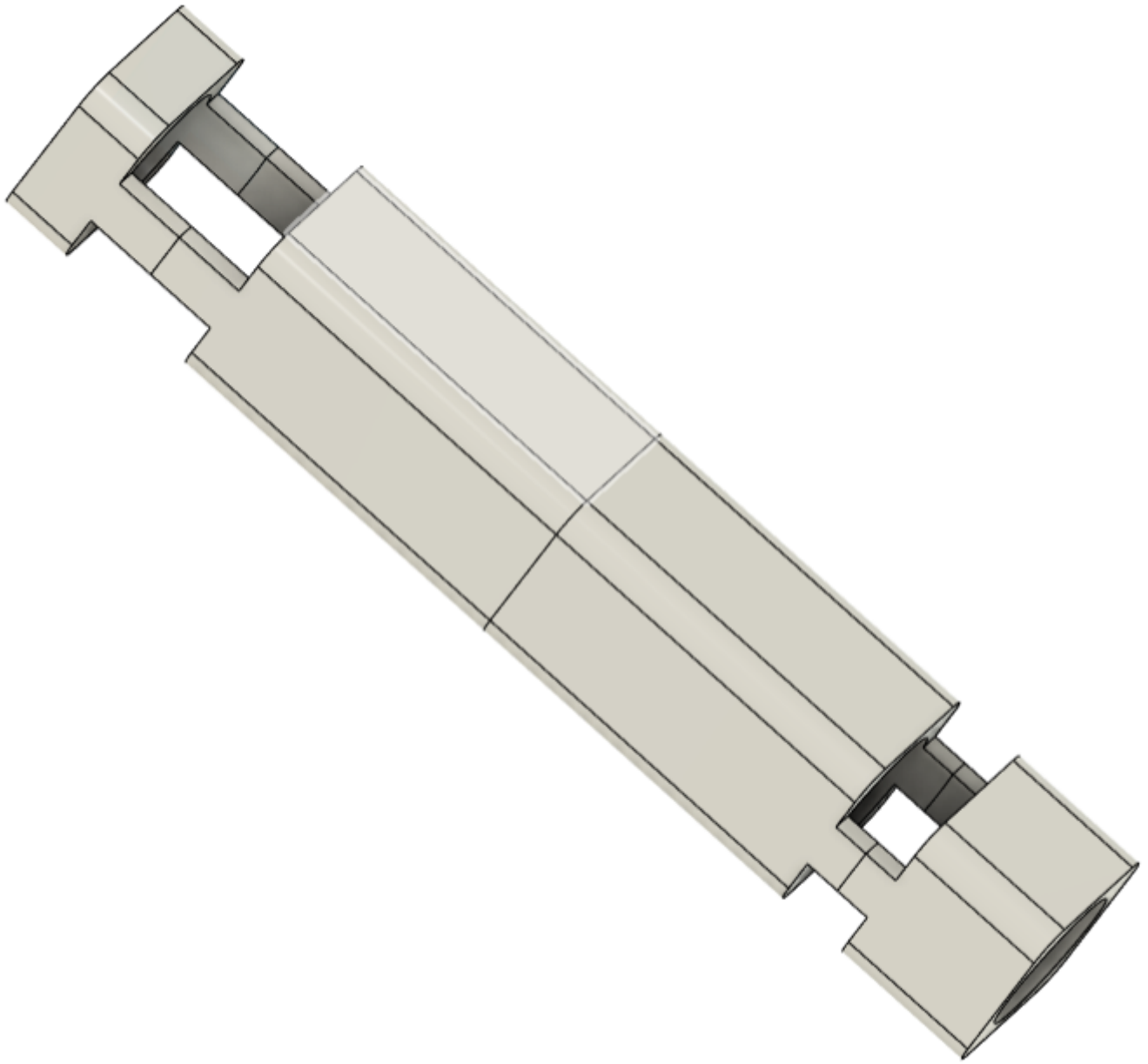
[Part A\\_Resonant Cavity Holder.stl](#)

[Part B\\_Resonant Cavity Holder.stl](#)

[Part C\\_Inner Electrode Template.stl](#)

[Part D\\_Inner Electrode Template.stl](#)

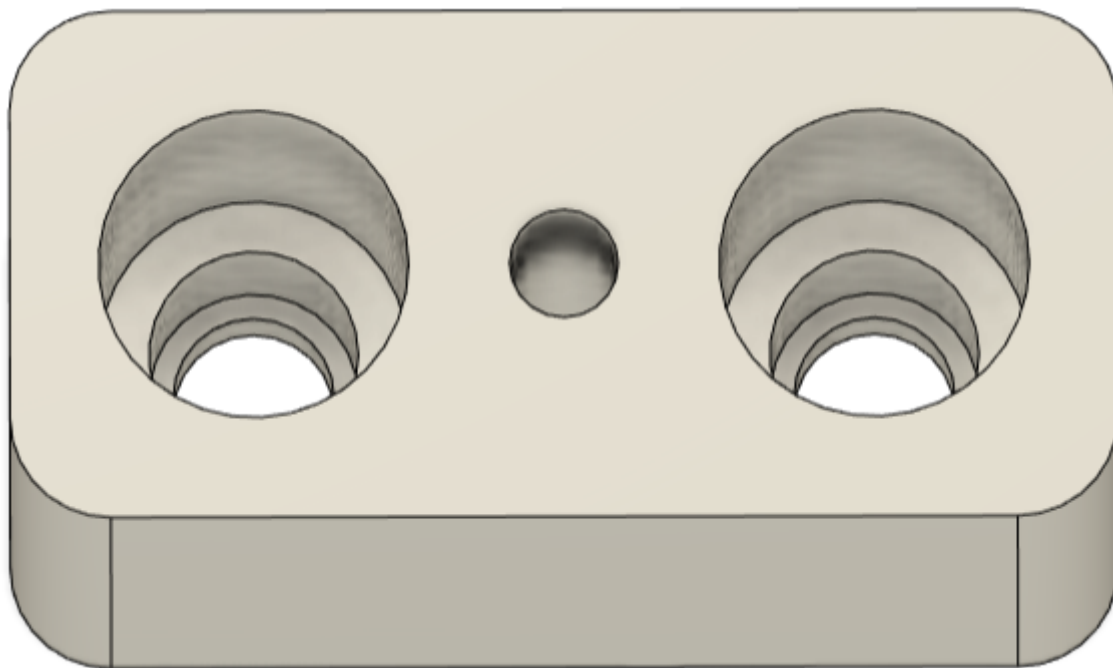
[Inner Insert.stl](#)



## Cell Holders:

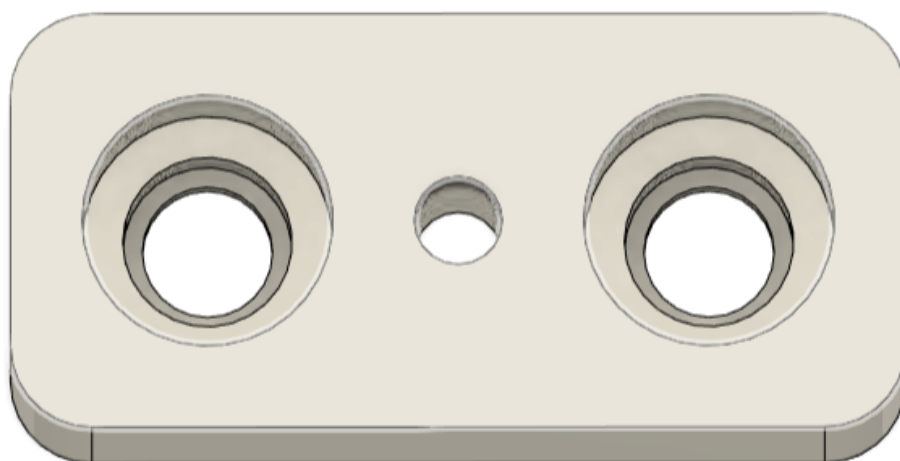
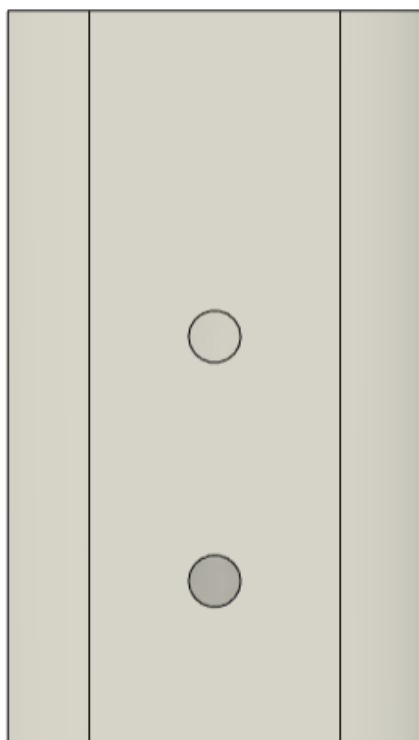
### Part A:

Part A\_Resonant Cavity Holder.stl



## Part B:

Part B\_Resonant Cavity Holder.stl



Assembly with Electrodes

