

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:

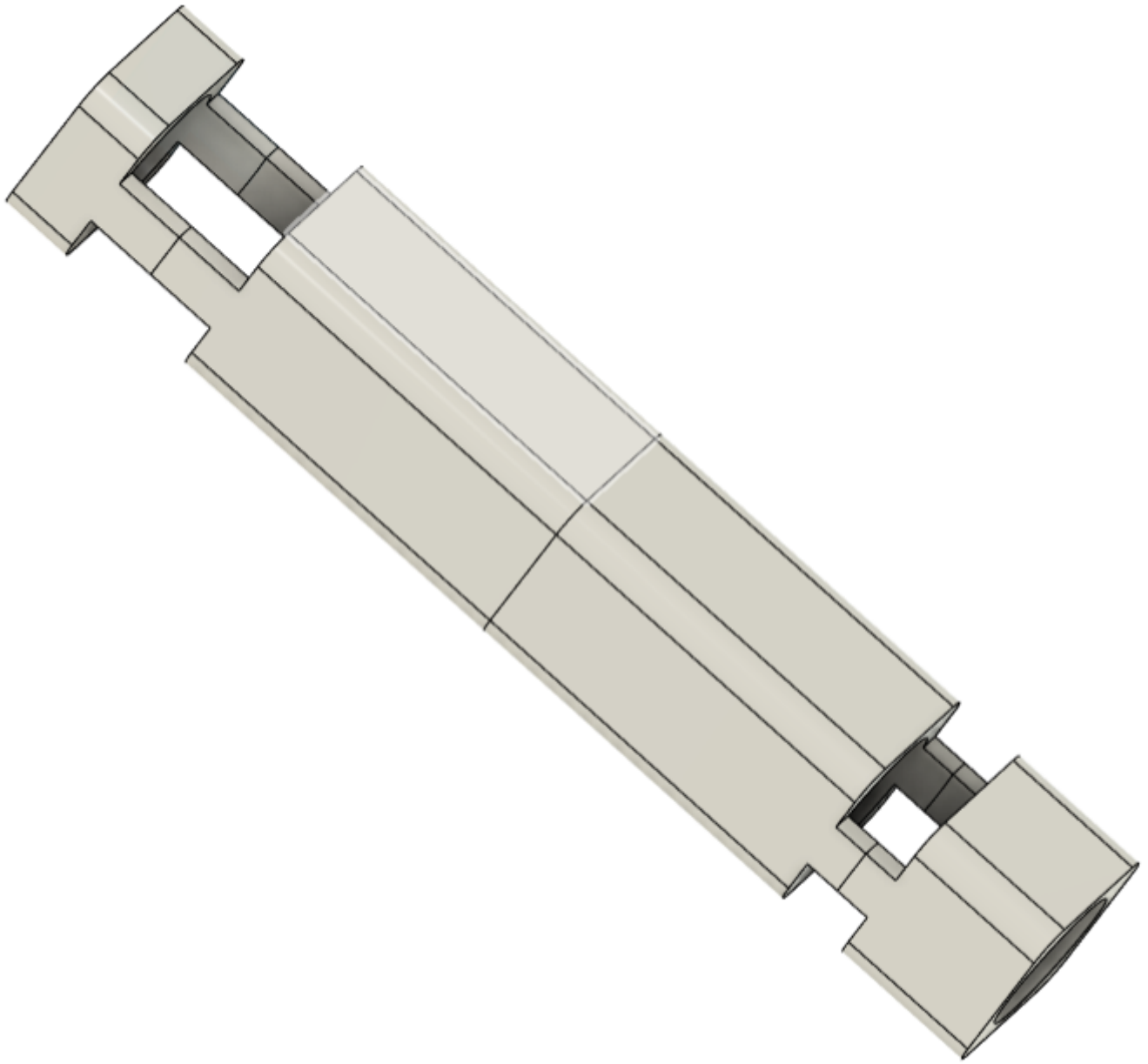
[Part A_Resonant Cavity Holder.stl](#)

[Part B_Resonant Cavity Holder.stl](#)

[Part C_Inner Electrode Template.stl](#)

[Part D_Inner Electrode Template.stl](#)

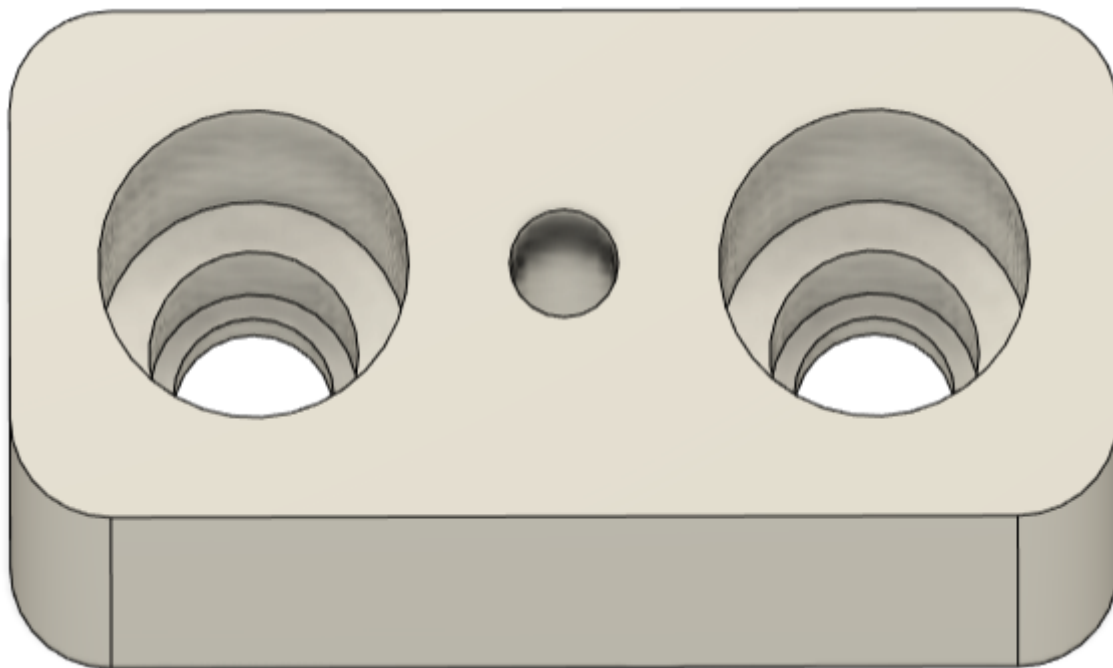
[Inner Insert.stl](#)



Cell Holders:

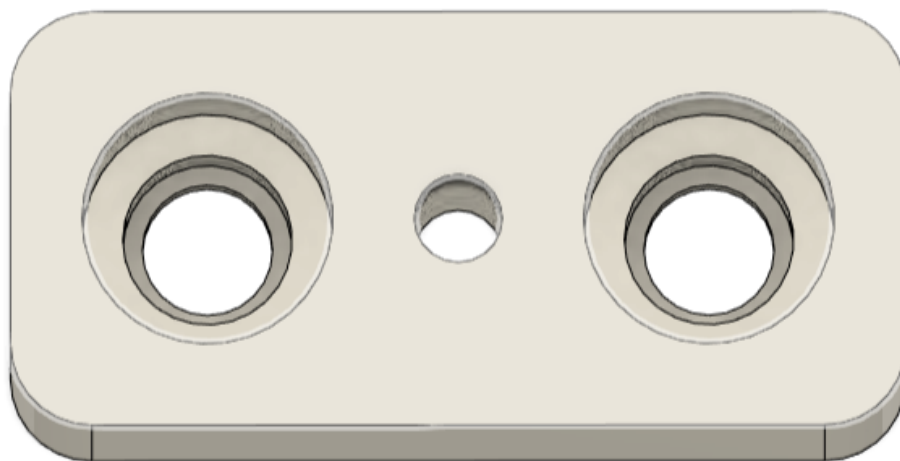
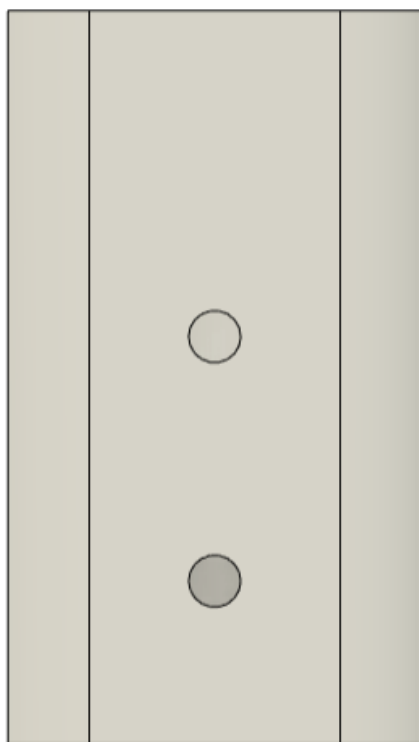
Part A:

Part A_Resonant Cavity Holder.stl

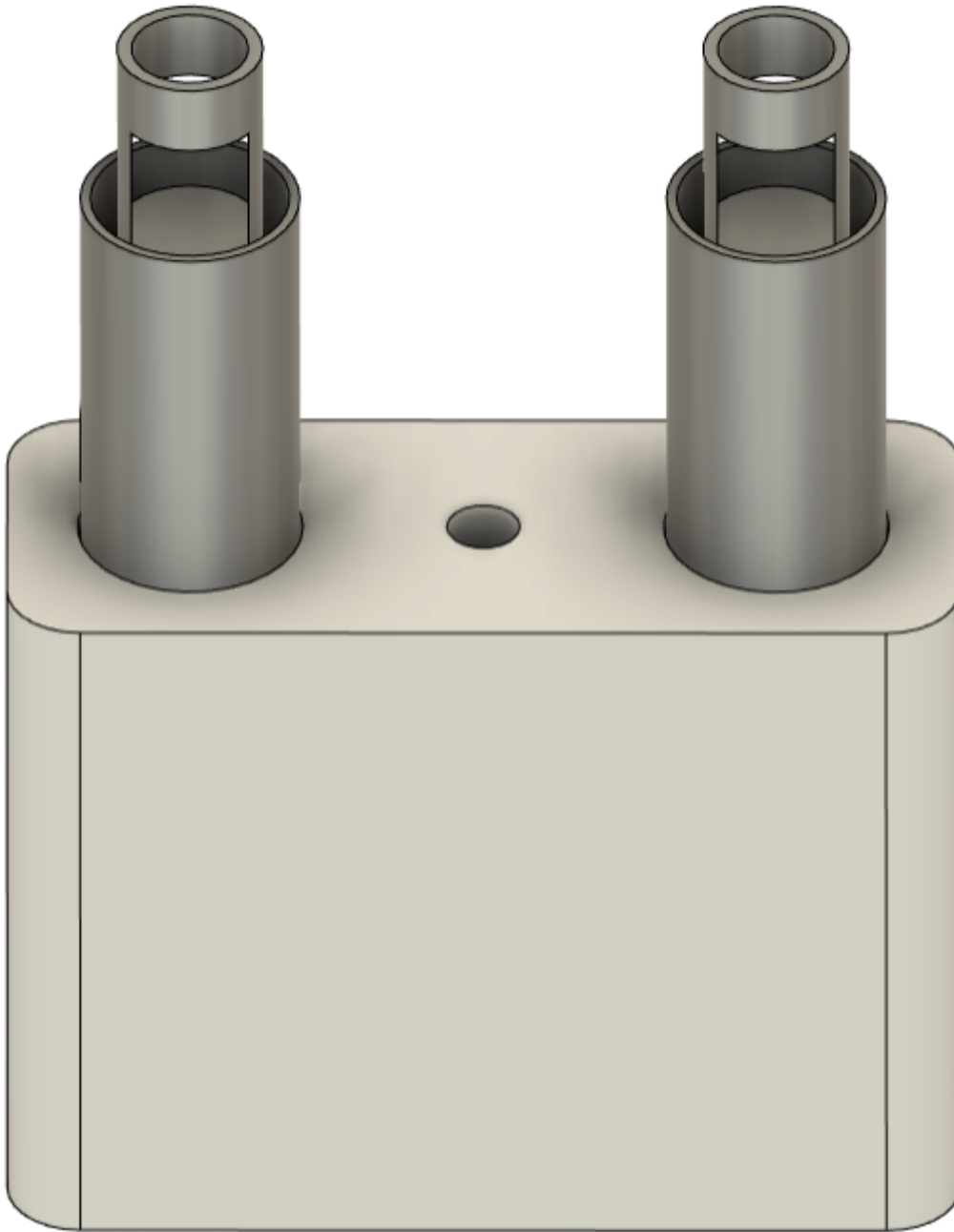


Part B:

Part B_Resonant Cavity Holder.stl



Assembly with Electrodes



Revision #4

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