

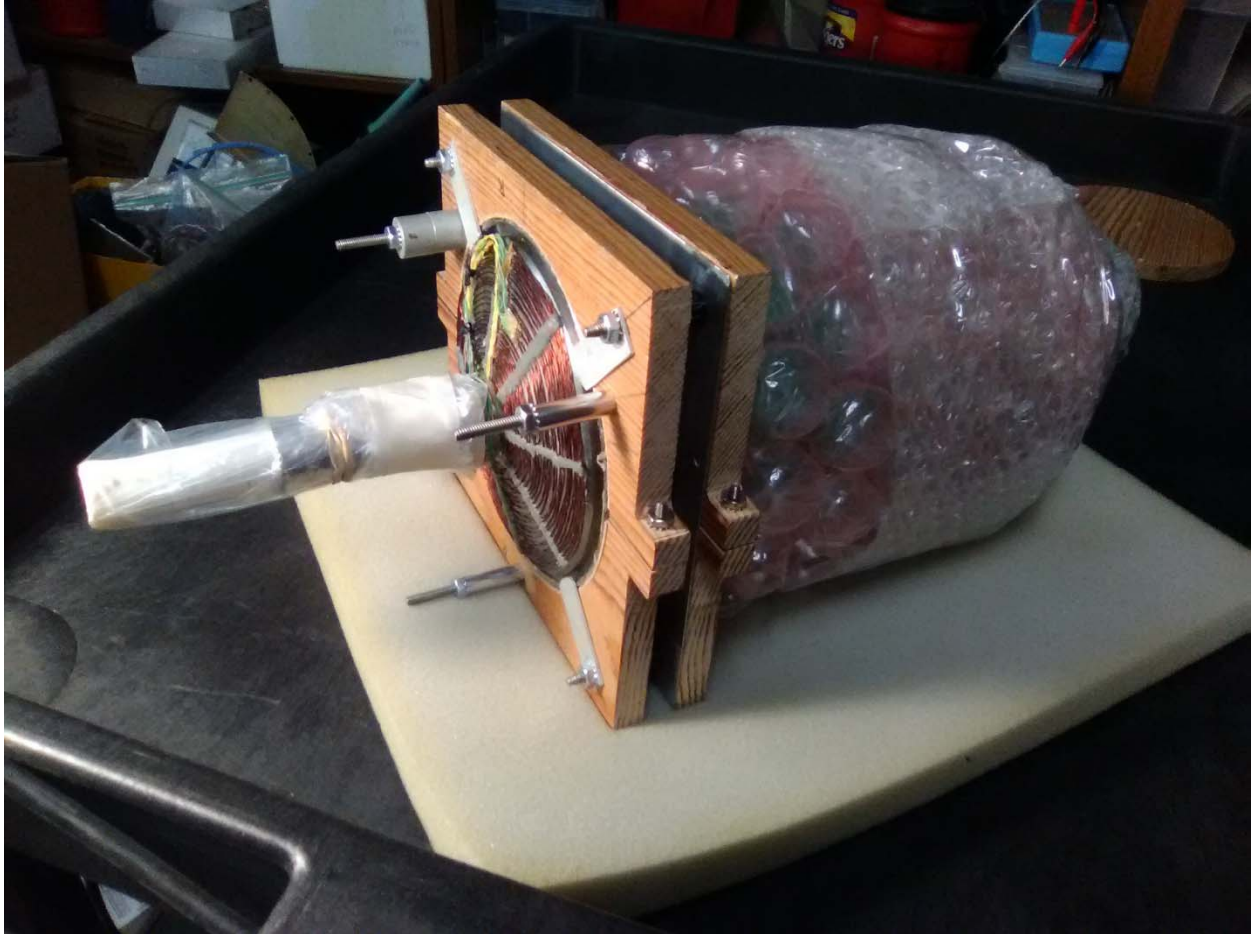
## UPDATE SIX

Built a two part jig as a cutting guide to open the vacuum envelope close to the RF end.

It holds both sides of the cut stable while cutting, and has a thin steel panel to help guide the cut.

Had to unwind several turns of the oven winding to get the 1 ½ inch clearance desired for the jig.

Wound bubble wrap around the other end of the envelope for protection while handling.



Made preliminary partial cuts around the circumference. Had to remove the ½" spacers one at a time to allow cutting at the 4 cardinal points that get blocked by the spacers.

Then worked slowly with the aim to barely cut through simultaneously around the entire tube.



Cut just starting to break through.



Success! Cut completed. Now dropped the RF end into a stand to hold it stable.



Undid the nuts holding the two jigs together and, after careful inspection through the dissociator end to ensure the storage bulb stem would not hang up, removed that end of the vacuum enclosure. Here is an outside PIX of the really neat looking Oxygen free high conductivity Copper RF cavity!!!

Removed RF end of the vacuum enclosure. Here you can see the input and output SMAs and the feedthrough for the varactor.

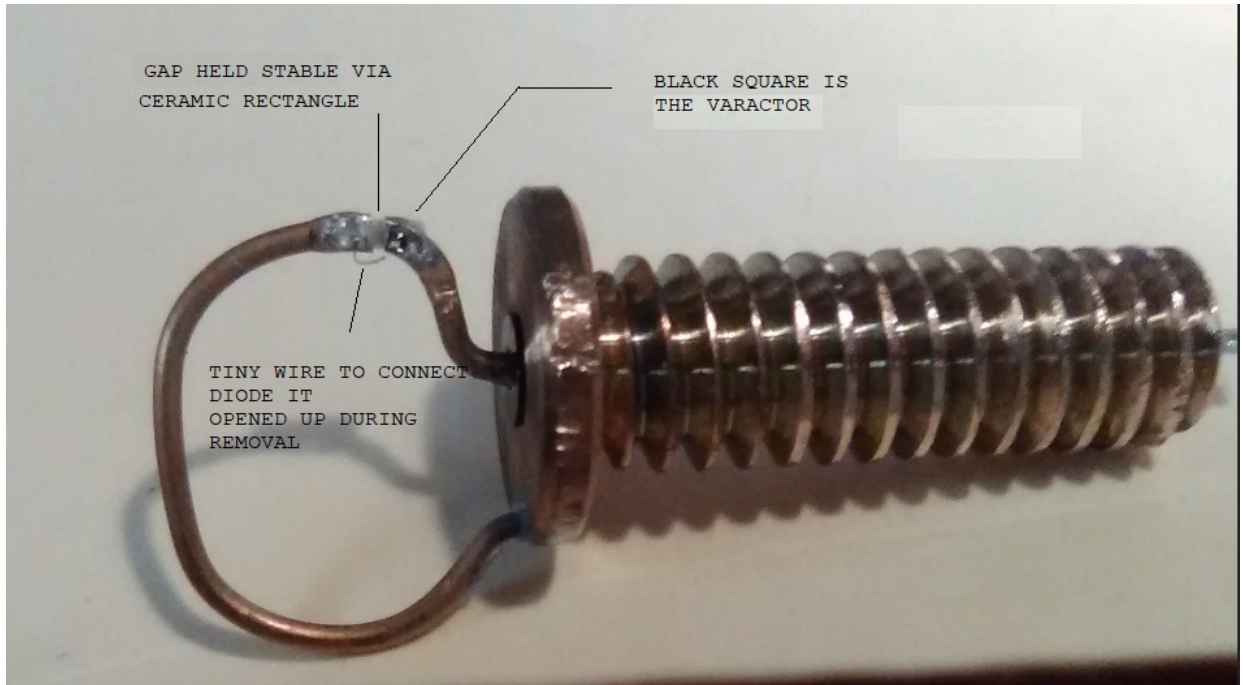




Pulled open the cavity to remove the varactor feedthrough. Cool looking!!!!

The storage bulb and stem are visible. The 4 copper segments attached to the bulb provide the proper loading to allow the reduction in cavity size required.

Illudium Q-36 Explosive Space modulator anyone???



Here is a close-up of the varactor loop showing some details. Now to figure out what varactor I'll replace the shorted original with??? That in the next update.

Cheers,

Corby