

Tank and Revision Notes – June, 2009

When you get your steel, chances are it will NOT be 16 gage (.0625). It will probably be .0595 (1.5mm +). Bob Boyce tightened the slot tolerances up from a loose fitting +.003 (wider than the plates – which was originally done to allow the fluid to leak and level itself from cell to cell) to a tight fitting .0593 (note .0002 narrower than the plate). The cells at +.003 were leaking electrically to the point where resonance could NEVER be obtained. THEREFORE, there isn't liquid leakage between the cells! Soooo, a water refill tube had to be conjured up that would (evenly) add water to the depleted cells as needed.

Then it was discovered that the very large amount of hydrogen being generated was going into the pickup tube along with bubbles (and of course some fluid). This caused the bubbler(s) to overfill and eventually the fluid could go directly to the engine. Therefore, a gas pickup tube with top intake vents was added.

Because hydrogen is very small (atomically), it was leaking around the various electrical connectors. Thus, phenolic "penetrators" incorporating double "O" rings (6 of them – two for the +/- and four for the water level "sensors" to turn on and off the water refill pump) were installed.

Now we find that there is still a leakage (electrical) between the cells at the corners where the vertical (side) UHMW and lower (bottom) separator plates meet. To rectify this, I am now making a completely watertight UHMW inner box that surrounds the inside of the outer acrylic box. I'm using a "tongue and groove" design with a .002 press fit to accomplish this.

Previously, an assortment of sealants were tried to eliminate this leakage but the fluid attacked the sealants and created many problems. Hopefully, this is now eliminated. And now, you know the rest of the story!

I want to make sure you are up to date on where the information is on the Boyce 101 Electrolyzer. The old "Panacea" website is now obsolete. For updated info, go to: http://www.free-energy-info.co.uk/ Chapter 10 starting around page 64. Even this is not completely up to date (like the watertight UHMW box).

If you need additional info, drop me an email or Skype me at eholdgate Regular phone is 727 447 8387 and regular e-mail is eholdgate@tampabay.rr.com