Greg and all....

I don't see the metal "eyelets" that go in the IN and OUT flow holes... I have been including these for years now and the eyelets do two things.  Stops the in/ out flow holes from wicking epoxy in the installation and plugging them.  AND makes the installation just plain easier

The white plastic background is plain 'ol acrylic plastic and its purpose is to enhance the meniscus line   (  fuel level line)....So any amount of Ethanol will degrade that plastic.   The stronger the Ethanol percentage, the faster it will degrade.  Thus using the aluminum background.  Even if the owner of  the source of your car gas sez no ethanol is in his fuel, there may be some minuscule amount lurking there which over time will close the flow holes without  that eyelet in the hole.

I see both the floats are sunk.  Usually, they will stick to the side of the gauge occasionally and as the fuel level goes down they will stay at that spot.  Make your hand into a fist and give it a good hard whack to the ball and it will fall to the fuel level again.  The reason for it sticking is static electricity, our planes are full of it.  The float is made from cork, and it loves static electricity.

Your floats are sunk, and I have not seen that before.  Yours may be due to the ball being wedged in the side corner.  Try whacking it.  In any case if flow holes are plugged you will have to remove the plastic bubble and you will most likely see damage to the white plastic from the ethanol .  So you will have to replace the background piece.  Write me and Ill tell you how to do that and what your options are.

Typically, you will replace the entire unit but 30 % of builders who go this route are able to reuse the bubble if they wish, as the bubble did not crack in the removing process.

Be sure and save the floats.  They are valuable as I cannot get them anymore for a reasonable price.  After you have them out, throw them in some fuel to make sure they still float.  Ive never received a message saying they don't float anymore, which is a different problem than just being stuck on the side of the bubble.

Vance Atkinson

nostromo56@tx.rr.com

Greg,

I run the same fuel in the same engine as you.   The white backplate for the standard fuel sight gage does react with the ethanol in the fuel.  I think it’s polyethylene.  When Vance Atkinson saw my sight gages the first time, he knew they were not going to last, and I did later get a clogged hole like you are seeing.  Vance makes the sight gages.  I had to replace mine with new sight gages with aluminum back plates and the good long aluminum grommets (they are pre deformed pop rivet sleeves).  No problems since then.  Yes, this was a PITA, but no problems since then.  Talk to Vance about replacements.

Scott Fish

N78CZ

On Oct 26, 2021, at 12:07 PM, Gregory A. Cross <gacross@twc.com> wrote:

I recently decided to empty the fuel tanks of old fuel.  It was Shell V-Power premium auto fuel that my UL Power engine was made to run on.  It was about 1-1/2 years old, and I'm about 90% sure it has ethanol in it.

So, I drained that out, and put 10 gallons of newly purchased Shell V-Power in the left strake, leaving the right one empty.  I hadn't looked at the sight gauges after I emptied out the old fuel and was shocked to see this:

<IMG\_0144.JPG>  <IMG\_0145.JPG>

These are the left and right tank gauges.  The left one should be at the 10 gallon mark, and the right one should be empty!

The only thing I can think of is that the grommet at the bottom of each gauge is clogged, trapping a bit of the old fuel.  It's very unlikely to be foam dust, as we were very careful to not get any in the tanks, and vacuumed the tanks through the fillers just in case.

The gauges worked for years, now they don't.  I noticed the stuck float balls about 6 months ago, as far as I can recollect.

The tanks were built with liberal applications of EZ-Poxy 10A & 87B.

Anybody have any ideas on why it happened and how I can resolve this?

Thanks!

Gregory Cross