From: "Ron Springer" <ron228rj@gmail.com>
To: "Andrew Anunson" <macleodm3@yahoo.com>
Date: 1/15/2018 4:02:02 PM
Subject: Re: COZY: Atkinson Fuel Gauge Aluminum Pate

Directions for the aluminum ones ...

FUEL SIGHT GAUGES

Installation Instructions:

APPROVED FOR AUTO FUEL WITH ETHANOL AND AVIATION FUEL.

If retrofitting, empty your tank ! Peel off the protective tape if there is any. Use approx. 200 grit to prep the gauges. Sand everywhere there will be a bond, I leave the shiny center (facing the pilot), of the sight gauge unsanded. Suggest using West Systems with Micro for bonding, or std. Epoxy called out in the plans for EZ types, Superglue for the eyelets and 5 min glue for the lights.

Use the Aluminum backplate as a guide to drill the inflow and outflow holes into your fuselage. Where you drill MUST BE A GLASS TO GLASS BOND.....ABSOLUTLY NO FOAM !

After drilling, remove the aluminum backing plate and superglue the eyelets into place. Mix up some medium wet micro and trowel or drizzle a bead 3/16" from inboard of the edge of Aluminum (see diagram). Make the bead about 3/16" to a 1/4" wide and I/8 inch thick. Take the bubble and carefully center it so the eyelet holes are equally spaced on each end. Slowly lower it onto the microed aluminium backing plate.

Very lightly press on the bubble. You will note the micro spreading out further as you press. DON'T PRESS SO HARD THE MICRO FLOWS INTO THE BUBBLE AREA !! It will look ugly... If you guessed right on the spacing of the micro it will flow out over the edge of aluminium but NOT into the bubble cavity..... Let dry overnight.

Next day, trim the excess from the clear bubble and micro from the backing plate. If you have the light option, clear the groove where it the LED sits, Which can be top or bottom, and 5 min epoxy the LED in place so that it sits with its tip touching the clear plastic, that tip touching area MUST be free of any micro..... Red band always goes to +12V.

Cut two layers of BID to cover the perimeter of the gauge and lay them aside. Mix up some medium wet micro and butter up the back of the gauge and bond it to the fuselage being careful not to get any in the eyelets. The layer should be at least 1/8"" thick so you can squish some out around the edge to make a nice filet for the 2 plys of BID all around.

On Mon, Jan 15, 2018 at 10:20 AM, 'Andrew Anunson' via COZY Builders Mailing List <cozy_builders@googlegroups.com> wrote:

> Vance Atkinson wrote:
> *Then ethanol reared its ugly head. playing havoc with my white plastic background plate which is plain acrylic plastic. So now the aluminum plate takes its place.*
>
> I will be installing my Atkinson fuel gauges soon, and I have the white plastic background plate. What are the specifications for the new aluminum background plate? (prefer to install aluminum in place of the white plastic now that I know about it)
> Have the installation instructions changed with the aluminum background plate? Should we treat the aluminum with alodine?
>
> My fuel tanks were constructed with E-Z Poxy / 87 hardener, so ethanol should not hurt my tanks if it ever ends up in there. I have no plans to use ethanol, but the only part of the fuel tank system susceptible to damage from ethanol is the gauges, and now with the aluminum update this shouldn't be a problem either. The Bendix RSA fuel injection system? I suppose that is another story.
>
> Thanks,
> Andrew Anunson
> Cozy MKIV #1273

Chapter 23
Pound, VA