

Instrument Cover Attachment

Milton Matthews (MI) - After completing my Vari-Eze canopy to RAF specifications I decided I was dissatisfied with the appearance, the lack of easy instrument/wiring access, and inability to make an effective seal. Instead of dealing with the complications involved in opening an access hole in the instrument cover, I decided to make the whole instrument cover removable. This concept allowed me to relocate the canopy opening aft of the instrument panel approximately 1" and to make the canopy frame square on the front instead of radiused.

First, relocate the canopy opening by installing the canopy and instrument cover simultaneously and laying up 3

plies of BID (see figure 1) over the plans described opening. Recut the canopy opening straight across about 1" behind the instrument panel. Remove both the cover and canopy and lay an additional 3 plies of BID on the inside of both parts. Lay up 2 plies of BID over the freshly cut openings along with the standard 1/4" floc corners.

Next, 5 minute epoxy 2 - 10" lengths of MS 20001-5 piano hinge to the longerons. Make sure the hinges are flush with the top of the longeron and are within 1/2" of the forward face of the instrument panel (see figure 1 & section A-A'). Make 2 hinge pins, as shown in figure 2, from MS20253-2 piano hinge pin stock and replace existing hinge pins with these. Depending on how close you fitted the instrument panel bulkhead to the longerons you may have to scarf a small area out so that the hinge pin will easily slide past the instrument panel.

Editor note: You might also consider sliding the hinge pin out the front of the fuselage through F - 28. This would necessitate canard removal but would keep the instrument panel / longeron intersection structure intact.

Next, apply 5 minute epoxy to the free side of the hinge and replace the instrument cover. Reach through the canard opening or leg openings in the instrument panel and hold the hinge halves on the instrument cover until cured. You can now pull the hinge pin out and attach the hinge halves to the instrument cover and longerons with screws as shown in figure 1. Four screws, equally spaced, per hinge half is sufficient.

I always apply a wedge of floc in the foam areas to provide more support. Also, you may want to apply a thin bead of RTV to the cover bottom for sealing.

That's all there is to it. You now have a very strong and easily removed instrument / wiring cover.

