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to COZY Builders, Canard Forum, Canard Aviators

Folks:

This is a followup to the message I posted to the three mailing lists back on December 5th. A total of 77 units were ordered by 62 individuals, and almost all of them were shipped yesterday to each recipient.

I have additional units available at \$100 + shipping (which has been running approximately \$25 domestically and \$50 internationally) so if anyone else has an EZNoselift and would like to remediate the side attach bolt issues, this system does that.

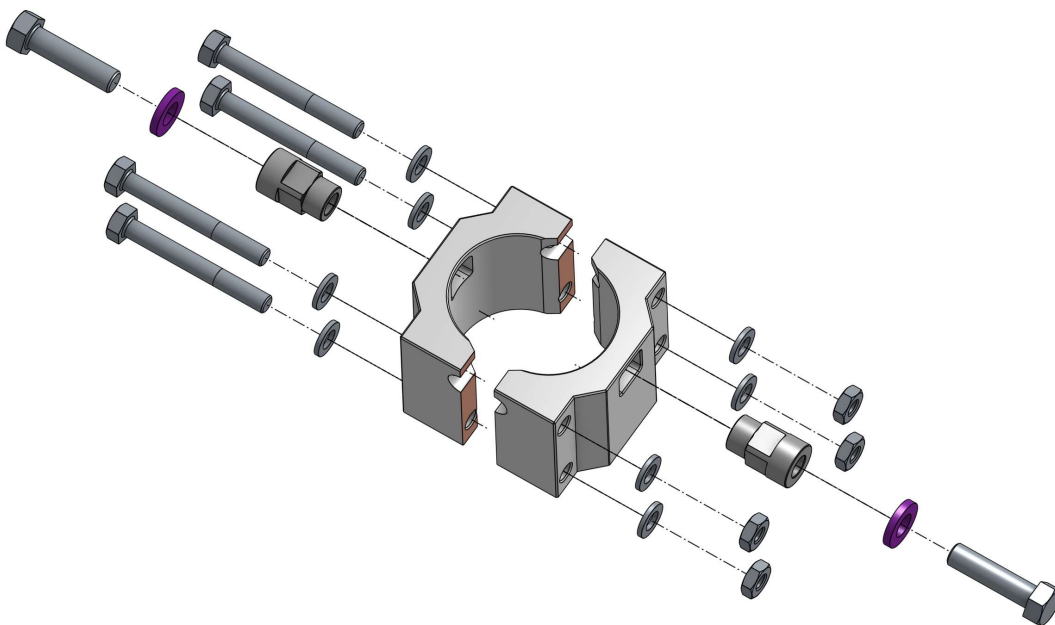
Here's an updated version of the original announcement:

As many of you know, the EZNoselift system used in many canard aircraft has a number of basic design flaws, one of which leads to the unit attempting to unscrew the trunnion pin attach bolts (the AN5-12A or AN5H-12A bolts through the side mounting plates) every time it's actuated. Sometimes, the unit succeeds in unscrewing the bolts completely and sometimes only partially, which then sometimes leads to bent bolts and/or the unit damaging the mounting plates and trunnion pin, as well as possibly causing collapse of the unit. In any case, mounting bolts unscrewing themselves is bad. Also, the mounting of the bushings in the side plates puts the bolts in bending, rather than pure shear (which is why they bend sometimes).

Dave Ronnenberg has developed a support system that eliminates the bolt bending and some of the unscrewing issues and has fabricated a few of these for select customers. All who have it have been pleased, I am told. I attempted to install one of his units on my EZNoselift system but it would not fit, as there are multiple versions of the EZNoselift that are out there and there are tolerancing issues as well. So I designed my own clamp system that can be retrofitted onto ANY EZNoselift system of any vintage, without any changes to the aircraft structure or EZNoselift side mounting plates.

This system works by clamping on the exterior of the upper tube and supporting the shear pins so that they cannot stress, bend or deform the bolts, nor is tension on the bolts required to prevent the bolts from loosening. The purple washer shown below is a Nord-Lock washer that will retain the bolt, which is never under torsion trying to unscrew it.

This is an exploded view of the system (3D CAD):



Here is a link to the 3D models, 2D drawings and installation instructions for the clamp system on the EZNoselift mechanism:

https://drive.google.com/open?id=1rMJIQisEFLall3FPSzKRr4XMNvXrHdL6&usp=drive_fs

The instructions have many pictures showing the install methodology. Feedback on the instructions is welcome - this is Revision 3.

In any case, I've tested this clamp system on my plane (a COZY MIV) and on two customer's Long-EZ EZ's noselift and I'm happy to say that it works well in all three. It's by no means perfect and it weighs about 1 lb., but to me, that's a small price to pay to eliminate the bolt unscrewing (and bending) problem, which has led to system failures and could lead to nose gear collapses.

I'd like to make this clamp system available to anyone with an EZNoselift in their aircraft (or anyone installing an EZNoselift system in their aircraft build). It takes 45 - 60 minutes to install.

Each clamp system will ship with all machined components as well as all required hardware for installation (bolts, nuts, washers).

If you are interested in eliminating potentially catastrophic failure modes as well as eliminating continuing maintenance headaches (frequent attach bolt checks) on your aircraft, please **email me directly at the address below** (please don't clog any of the lists with order emails, but questions regarding the system are welcome on list if the answers would be of interest to everyone) and let me know you are interested in acquiring this system.

Thanks.

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