



Builder Hints & Information

by Scott Swing

Removing epoxy from plexi

When you get done with your project, you most likely will have some epoxy on your windows. Hopefully you don't but if you do, there is an easy way of removing it. Do not sand it off. This will cause distortion even if you get it clear by using special scratch remover or Micro Mesh. Take a new single sided safety razor blade and bend it slightly. This is done to keep the edges from digging into the plexi. Carefully scrape the cured epoxy off the surface. The thicker the epoxy, the easier it is. This will leave minor scratches in the surface, which can be eliminated with compounds or Micro Mesh. This same method can be used on the airplane after it is completed. This happens here a lot since we are working with epoxy around finished aircraft. If you try and sand it off, you will sand around it and you may be into the primer around the spot you where trying to remove.

Tires

If you are using the 15 X 6.00 X 6 main tires (low profile 6.00 X 6) and your tires are tight in the wheel wells, we can help you out. Our new tires seem to be about 1/2" smaller in diameter. They are Condors but are more robust looking and are smaller. Condor switched manufacturing locations recently and this is what we got.

Servicing Brakes

We have been working on different brake options here, and we continue to, but in the mean time you must get what you have to work to its potential.

First, make sure the pads are not cracked from the start. Some times

the factory,(Matco), sends out installed pads that are already cracked. This happens because the installer used too much force in riveting them on.

Second, make sure the assembly is correct and that all bolts that are supposed to be safety wired are done that way. There are two sets of bolts to be safetied on each assembly. If you assemble something wrong, it will bind up.

Third, make sure the caliper floats freely. If it doesn't, only half your brake will work. The caliper may have a clearance issue or it may be the bushings it slides on.

Forth, make sure you have greased your bearings.

Fifth, make sure the axle nut is tight but not too tight. If you are not sure, have an A&P check it. You should not be able to shake the wheel in or out and the wheel should roll nicely. If you get it too tight, you will work the bearing too hard as well as increase the rolling resistance. Don't forget the cotter pin.

Sixth, I like to bleed the brakes from the bottom up which takes two people. Use Dot 5 brake fluid only. Get all the air out of the system. Check the line at the master cylinder while you push it in since some times air gets trapped there. If you see a bubble, you will have to open the fitting slightly under load to get it out. You may have to bleed several times to get all the air out.

Seventh, The break in is very important. I usually just went for it on the fast taxi/runway flight and got on them but that is probably not the best way. One of our builders was told by an old timer how to do it and this is what he says. Push the plane out to the taxi way and start it up, accelerate to about 30 knots and aggressively use the brakes to a complete stop. Let it completely cool down then do it one more time. Do not taxi around at slow speed using the brakes as that will glaze the disk

and the pads. If you suspect that you are already glazed, remove your discs and using a DA(dual action sander) with 80 to 120 grit sand paper, clean the discs. You also want to sand the pads on a flat surface to clean them up. Repeat the break in procedure. There is some suspicion that the anodizing is causing some of this since that may upset the break in.

Eighth, maintain the brakes, check them often, if anything seems out of the ordinary, fix it.

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A&P Talk

by Brendan O'Riordan, CFII, A&P



Pre-flight Preparations

How to catch something before it becomes a problem.

In the last few months we have had quite a few minor incidents with Velocity's. Looking at these incidents with hindsight, many of them could have been avoided if proper pre-flight planning was done before the flight. I will go through what a person should do before a flight in a Velocity.

Preflight planning should begin before you get to the airplane. We will first start with a quick check of our weight and balance. First off we will figure out the total weight we will be carrying and make sure we are under our gross weight. Next we will make sure this weight is placed

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