

WOOD INSTALLATION:

There are now two ways you chose to install your wood parts into your fuselage.



There is the older method of epoxy which is described below and now this newer, lighter and even stronger method using only ultra-high quality CA glue. I only recomend using the very best you can find. The best CA for wood to fiberglass is the Balsa USA brand. Other brands I have tried are not as pure and tend to destroy parts when kicker is applied. This glue does not do that!

1. Start by removing parts and assembling them square and correct outside of the helicopter on a flat surface using thin CA at first in the seams, then follow up with a bead of thick CA and let dry without kicker. (it helps to let the thin dry first with the parts essentially glued together, then position parts so the bead wont run, do one side at a time.) Pre sand all wood parts with 220 paper.
2. The next step is to sand all the areas of the inside of the fuselage with 60 grit paper to rough up the surface and take the gloss off the glass inside. **WEAR A RESPIRATOR!**
3. Next wash the entire fuselage with vinegar and water then followed by some hot soap and a thorough rinse.
4. position the wood system where it needs to be and tack in a few places... Install mechanics and check that everything is where it should be. when satisfied, use thick CA in all the joints attaching to fuselage and thin under wood plates and such, followed later with bead of thick CA.
5. You will find once dry that you will destroy the wood trying to pull it out! In the event of a crash, damage is minimized as the wood can break loose during a severe shock of a crash . Glass damage is reduced and the fuselage can easily be repaired using thin CA to original integrity.

The CA glue can penetrate deeper and hold on longer than any other glue. It forms barbs and spikes into the glass and wood when it dries, much like water turing into ice.

6. Now, tape off all the areas where you dont paint. Then paint the wood using a two part epoxy paint or any urethane two part automotive paint, such as PPG system, Sherwin williams, Dupont, etc.

Fuel proofing can also be done with thinned west epoxy using acetone to get it to a water like state.(I prefer this method and it will used in the TURBINE model.)Then follow with color paint or leave natural.



EThis is how the bead looks when dry...neat!
This 109 was damaged by ups, we fixed it using thin CA glue,since the crack went all the way through, we used some cloth soaked with thin CA on the backside of crack and now it is stronger than ever! The patch even blended into the rest of the fuse so it is not noticeable even on the inside.

WOOD INSTALLATION: Epoxy Methods

If you ever wanted to glue your fins onto your GRP fuselage without fear of cracking later, we've found that this epoxy is excellent for all type of attachments without degrading over the years and thus rendering a model possibly unsafe. The amazing part is that it will NOT run even on vertical surfaces right after application.



Great for this application and many others such as bulkheads in high stress areas E.G.: Tail Rotors, mech mounts, etc...

Contact BVM Jets 407-327-6333 or www.bvmjets.com

WOOD INSTALLATION: Epoxy Methods



Here are the choices for hardeners.

1. Wash entire body inside and out with a vinegar solution to clean any left-over mold release wax.
2. Remove wood kit from sheet and pre assemble per plans using only a tiny drop of c/a glue to tack it all together. At this point also install blind nuts in any applicable location as per plans indicate. Tack c/a in place. Also sand the surface of the blind nut as well, this will help will glue adhesion later.
3. Test fit wood system in fuse . Sand high spots to acheive a near perfect fit.
4. Now, set the mechanics in , check your measurements and location, and scribe with a pencil the out lined areas of the wood kit. This helps approxiamte the area to sand for glue preparation.
5. Sand the outlined area with glue using 80 grit paper to scar up the glass. VERY - IMPORTANT , as unsanded glass will not hold any glue for long.
6. I use west system epoxy only, I do not recomend the use of ANY 30 min. epoxys or glues. The west system is used in wooden ship building and race boat construction. It is unsurpassed for light weight aircraft contruction as well , and has superior strength and longevity.

First coat the entire pre -fitted wood assembly with a single coat of epoxy ,then cloth the corners underneath in most areas with carbon or glass cloth .Work it in to the corners as it cures to ensure good contact and laydown. Then set the whole thing on a sheet of wax paper to dry.

7. After 24-30 hours it should be totally dry. DO NOT glue anything in high humidity environments. (bad). Now scuff sand with 220 the entire wood kit, clean with tack-cloth and recoat the wood system again to produce a glass like finish through out.

why??? well, because it looks fantastic, and if you EVER have a fuel leak your model will NOT be ruined due to weekend, compromised, oil-soaked wood.!!! (very bad.)

Let the whole thing set to dry, treat the second coat as you would any polyurethane varnish.

8.NOW..... use rubbing alcohol to clean the body inside one last time and mix up some more glue!!!! Sand ALL the contact areas of the wood kit up to 1/2 inch up the edges with 60 grit paper to scar up the contact points.

Pre glue the general outlined areas and drop the wood kit it with the basic mechanics installed for alignment purposes. We dont want it to dry in the wrong spot!!!

Use carbon-fiber or fiberglass cloth to "web-in" all of the corners and contact areas to form fillets of glue and cloth.

9. check frequently alignment and correct position, then quietly tip-toe out of the room and thank the lord the hard part is over.

10. If you use these basic procedures you will have an excellent wood installation that will last for as long as you own your model!