

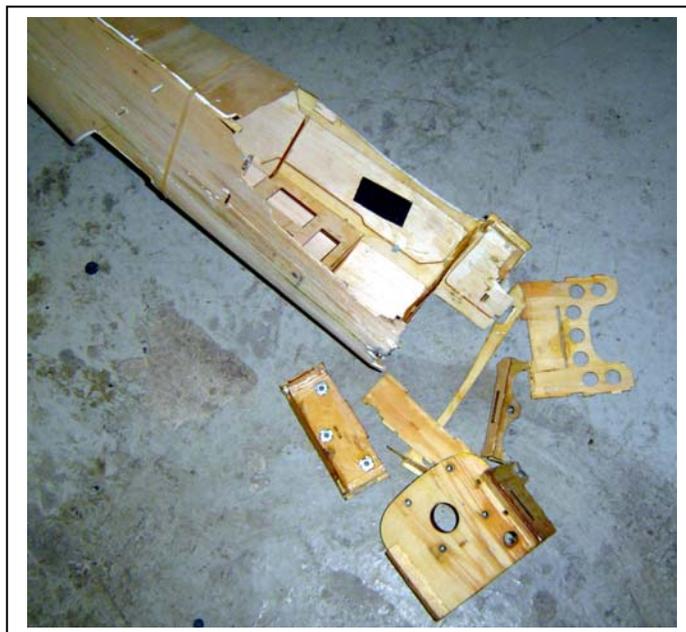
# Trashcan Bipe Rebuild

By Steve Steinbring

In today's world of the ARF and RTF there are a lot of airplanes that end up in pre-mature retirement or in the trashcan just because the owner doesn't have the time or the knowledge to rebuild. What we are going to show you is an overview of how to rebuild your bird after it has met the edge of the air kissing mother earth.



The first step of the rebuild process is to strip off all covering from the airplane and clean all the parts. This allows you to carefully examine the airframe looking for damaged areas. It also lets you take inventory of the parts, what has to be fabricated, and make notes where repairs have to be accomplished.

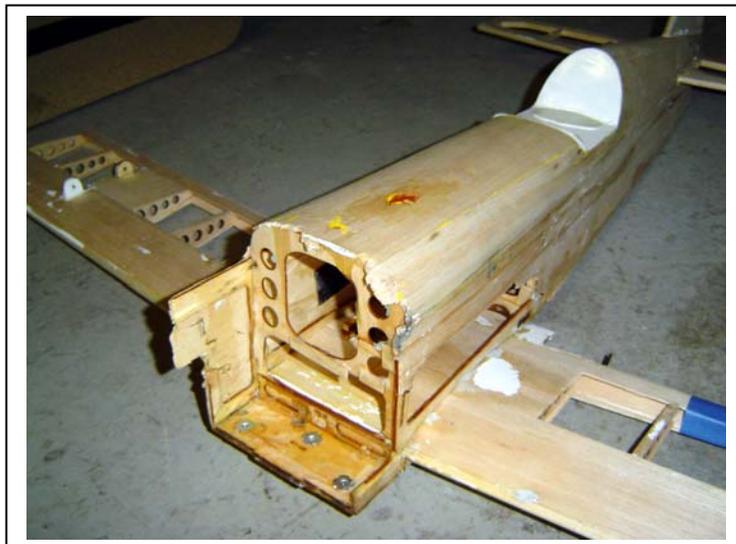


It's important to take the time to degrease any oily parts so your glue joints and covering adhere well. There are several methods that can be used to accomplish the degreasing. Using a sealing iron and paper towels is one method. The heat of the sealing gun draws up the grease and the paper towels soak up the oils. Cornstarch or a product like K2A will also soak up oils. It will take some effort to get the wood free of oil, so have some patience with this process. Just keep at it until your paper towel shows no oil residual.

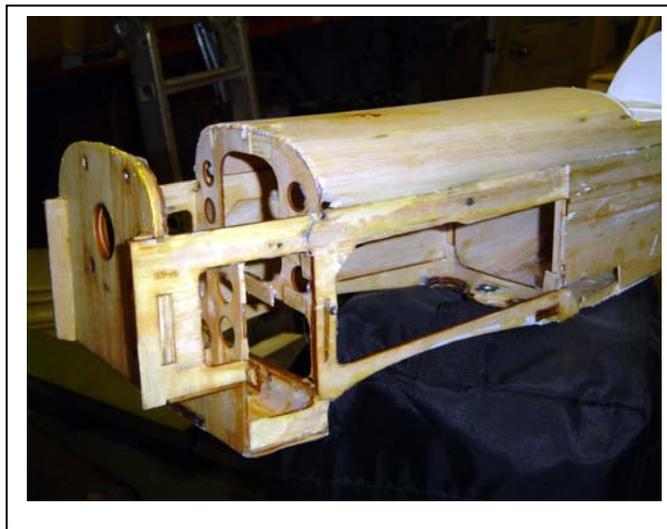
As you can see the left or port side of the airplane was pretty damaged. The fuel cell and the firewall are broken off. The good news was that even though the sheeting needed some replacement, I had the bulkheads, gear plate, and formers to piece things back together.

The goal is to reconstruct the airplane back to as close to original condition as possible. Translated build it straight as possible, because if we don't there will most likely be issues in how it flies again.

Upon my inspection the fuselage was in pretty good condition from the cockpit area back to the tail, with just a few sheeting fractures or cracks which were easily fixed with some CA. Forward of that area it was another story requiring me to re-attach the wing saddle, the fuel cell bulkhead, and lastly the firewall.



In the picture above you can see that the fuel cell bulkhead, wing saddle, and the gear plate have been re-attached. The fuselage was positioned on the wing to make sure the wing mates up properly to the fuselage before final gluing occurred. Doublers were fashioned from light plywood to sister weak or broken bulkheads and glued with Epo-Grip Clear Paste Adhesive. Filets were later added using Epo-Grip #30 Paste Adhesive a non-sag paste epoxy to strengthen the gear plate and bulkheads. This was done before re-attaching the firewall allowing easy access to those areas.



Now it is time to re-sheet the missing areas, this is done with the same thickness balsa as original. The side covering is pretty straight forward splicing it in where needed. On the top there is a pretty good curve to contend with, this was done in two pieces. The replacement pieces were wet and then clamped into position to form the proper shape. Once the balsa dried it took on the needed curve and then glued into final position.

The next step after sheeting is complete is to re-check the fuselage for any missed repair areas, fill any gaps or flaws with Model Magic prior to sanding for covering.



Once filling and final sanding are completed you are ready to cover the airplane with your own color scheme. The wings on this airplane were in pretty good condition, only requiring some minor rib and wing tip repairs. We will cover wing repairs in another section.

### Final Result

Here is the little bird after recovering, the results are not too bad. It just took some scrap balsa, plywood, glue, covering, and a little time.

