

Build a Custom PVC Stand to protect your model

Once I finish building an airplane, I immediately build a stand for it. Why? Because such a stand stabilizes the fuselage and makes it easy to attach the wing, or connect the servo wires, etc., and it also protects the plane from your workbench. Whenever you set a fuselage down anywhere, you invite problems. When the fuselage lies inverted, the fin and rudder, the canopy and cowl and the glow plug are stressed as you jiggle the plane around while you prepare it for flight. An inexpensive, easy-to-make PVC pipe stand eliminates the chance of your having these problems.

Here's how to make a custom stand:

1. Make a rough sketch of your proposed stand. If you can't draw, do the best you can, or follow photo 3 as a guide.
2. Determine the correct length of your stand by deciding where you want the fuselage to rest on it and then measuring that distance. I like my stands to fit the fuselage 6 inches in front of the horizontal stabilizer and just in front of the landing gear. In the case of the Banchee, that distance was 26 inches, and that will be the overall length of the Banchee's stand. Make a line sketch to show this.
3. Measure the width of the fuselage where it will rest on the stand. Mark those measurements on your sketch.
4. Use your sketch to determine how many 90-degree elbows, caps and T-pipes you'll need. The Banshee frame required 6 caps, 10 Ts and 4 elbows. You'll also need some 1/2-inch-diameter PVC pipe (it comes in 10-foot lengths, so you'll have some left over for your next stand), a can of cement and 6 feet of 1/2-inch-inside-diameter foam pipe insulation. Now head off to a hardware store and buy all these.



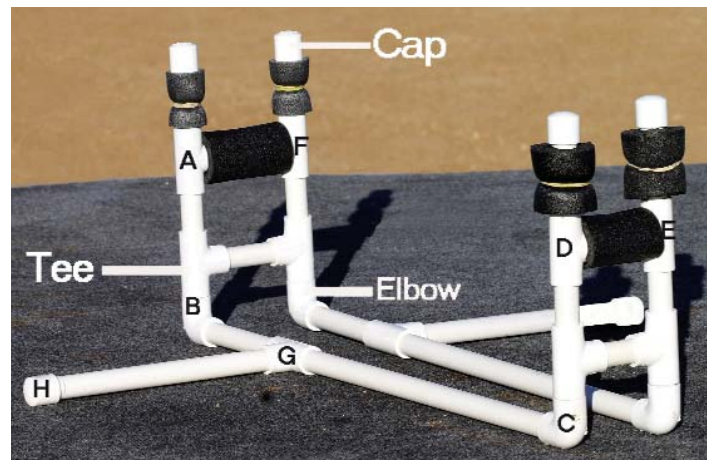
1 When you put your airplane down like this, you can expect to damage to the fin and rudder, the canopy and cowl and the glow plug.



2 Placed in a stand, the airplane is secure and protected from being damaged.



4 Your stand should be high enough to keep the propeller and fin/rudder off the surface when the fuselage is inverted, and the wheels shouldn't touch the surface when the plane is upright.



3 Dimensions for the Banshee stand: A-B—7.5 in.; B-C—26 in.; C-D—7 in., D-E—3 in.; A-F—4 in.; G-H—6 in. (two pieces added to the stand to increase its lateral stability).

BUILD A CUSTOM PVC STAND FOR YOUR FAVORITE MODEL

5. Make the stand's base. A PVC pipe cutter, will make the job easier, but I cut the pipe with a hacksaw. The cuts do not have to be perfect because they'll be hidden in the various Ts and elbow pieces. Do not glue anything yet.
6. Continue to join the pipes until you have what looks like a stand.
7. Set the stand on your bench, and adjust it until it sits flat and is stable. Mark the joints with a pencil so that you'll be able to match them exactly.
8. Now is the time to glue the joints. The glue sets immediately, so be sure that your pencil marks are aligned when you put the parts together. If the structure is sturdy enough, you may not need to glue it.
9. Add the foam pipe insulation, and you've finished.

You could use other materials to make a stand, but PVC pipe is preferred. Check the photographs of the alternatives. But no matter which material you choose, make a stand and protect your plane from assembly rash.



5 When the completed frame is adjusted and sits flat, mark every joint like this.



6 Ollie Edwards added outriggers to his stand to hold the wing for transportation. Note the pipes added to the bottom of the frame to add lateral stability.



8 Quarter-inch plywood, cushioned with rubber pipe insulation was used to make this quick stand. The cutouts for the fuselage can be made to fit any model exactly.



9 Aftermarket stands are available, but I find that they don't match most fuselages and are a bit rickety.



7 A unique plane holder made using an adjustable bench that's available from the tool section of most chainstores and department stores. The PVC frame fits into holes drilled in the bench's wooden platform.



10 A great stand for modelers with aching backs. Pipe holders were attached to the ends of the flight box. PVC pipes, with cushioned fuselage holders, were cut to the modeler's height and inserted into the pipe holders. They can be removed for transportation.



11 An inexpensive Styrofoam cooler with its ends carved out makes a fine but somewhat fragile stand. There's room in the bottom for a few tools.



12 A nice construction but it's unstable. The bottoms of the curved fuselage holders do not match the fuselage's flat bottom. ☹️