

Split Blast Tubes

By George White

Here's an extraordinarily useful idea given me by Glenn Bearry, of Austin, Texas. We have all become accustomed to the idea of having a solid metal or plastic blast tube which we slide onto a wire with a hook, to which we attach the crocket hook. We push the blast tube into the fuselage, turn to lock it in place, and wind away. After winding, we hold the crocket hook with a short piece of wire while reattaching the hook wire onto the crocket hook, remove the short holding wire, slide the blast tube out over the hook wire, reinsert the short holding wire, find a place to hang the blast tube/hook wire, attach the prop, then remove the short holding wire. Depending upon how you want to count it, that sounds like about 12 steps — heck you should be able to be cured of alcoholism with that many steps!!

There's a quicker, simpler way to do it.

Enter the split blast tube, which Glenn says will withstand just about any exploding motor — it may bulge a bit, but the motor will be contained. The secret of this device is the use of relatively soft tubing which can be cut with a sharp knife. Regular PVC is far too hard for this purpose. The only suitable tubing which either Glenn or I have found is potable water tubing used in the mobile home industry. The potable water tubing sold by Lowe's is too hard. The stuff you need is called Durapex Plastic Pipe. You won't find it at your friendly big box hardware store. You've got to find an outfit dedicated to supplying material to mobile homes. I've bought it in three sizes — 3/8", 1/2" and 3/4" OD, which results in tubes with 5/16", 7/16" and 5/8" ID respectively. There is a larger size, probably 1" OD, but I haven't tried it.

To make the blast tube, chuck whatever length you need in a vice and with a Stanley knife (the type that has blades that break off to give a new point) carefully cut a slit the length of the tube. To make the blast tube easy to put on and off the motor, cut a parallel slit so you will have about a 1/16" wide opening the length of the tube. You can easily cut a locking slot in one end of the tube by drilling a 1/4" hole (or smaller) near one end, then cutting away the tube to allow it to slide and lock on the rear motor peg. To make it easier to slide on and off, bevel the entrance to each end of the slit.

I'm also sure that with some creativeness, you can cut a prettier slit than I did by rigging up your table saw. Just watch your fingers!!

The first photo below shows how the tube is placed in the fuselage. Simply turn the prop hook 90° to the motor and slide the tube into the fuselage. If you aren't winding with the prop attached to the motor, remove the prop, attach the winder and wind away. When wound, reattach the prop, turn the prop hook sideways and slide the tube back out and launch. No hook wire to mess with.

Give it a try on your workbench and explode a motor in one to see for yourself. Although the illustration here shows a small scale motor, the 3/4" tube should be able to easily contain a motor of 8 loops of 1/8".

