GOT A HINT?

Send your tips to [redacted]

HOW-TO

Air Vent Screen

BY RANDY HOOPER, EAA LIFETIME 119586, HERMITAGE, TENNESSEE

[redacted]

Editor's note: Randy serves on the EAA Homebuilt Aircraft Council, which ensures the organization's continued focus on vital programs of benefit to current and future homebuilders.

AFTER A RECENT in-cockpit encounter with a wasp that was very angry about being sucked into the NACA duct of my RV-8, I decided to do something to prevent future encounters.

Bug proofing the fresh air vent was the top priority, but keeping the air flowing with minimal restriction was a close second. With that in mind, I gathered some materials:

- Two-inch aluminum tube, 6061-T6 with 0.049-inch wall
- Aluminum house window screen
- J-B Weld epoxy
- RTV silicone

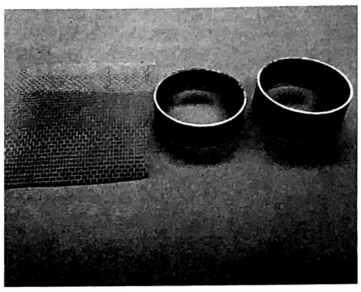
The idea is to capture a piece of the screen between two sections of tubing to hold it in place. First, cut the tube to size. Cut one ring 3/4-inch long for the outer piece. For the inner, cut another ring 1/2-inch long, but with an approximately 13/32-inch section cut out to allow the inner ring to fit inside the outer ring.

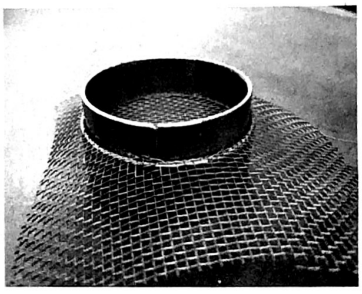
To assemble the vent filter, place the outer ring on the bench with a piece of screen over the top. Press the inner ring into the outer ring, capturing the screen in between them. When the inner ring is flush, trim the excess screen material.

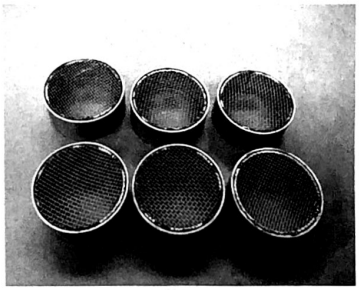
Flip the piece over and the screen and inner ring should be recessed by 1/4 inch. Apply J-B Weld to the inside of the outer ring and push the inner ring and screen into the epoxied area until the screen and two rings are flush.

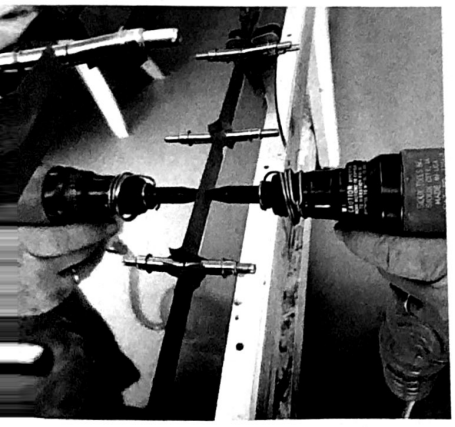
Installation in the aircraft is simple. Insert the screen assembly into the vent hose, allowing room for the NACA vent flange. A small spot of RTV silicone will keep the screen from migrating down the hose.

These are quick and easy to put together, so make a couple for yourself and make a couple for a friend.









RIVET GUN ALIGNMENT

BY DAVE PRIZIO, EAA 436037, TUSTIN, CALIFORNIA

[redacted]

Editor's note: Dave serves on the EAA Homebuilt Aircraft Council, which ensures the organization's continued focus on vital programs of benefit to current and future homebuilders. He is also the author of EAA's book, *Powering Your Plane: Installing a Lycoming-type Engine in Your Experimental Amateur-Built Airplane*, which is available from EAA at *www.ShopEAA.org*.

A GOOD WAY to be sure your rivet gun is square with the metal you are riveting is to look at the gun's reflection. The reflection should line up perfectly straight with the gun. If there is a bend where the gun and the reflection meet, you are not straight. This method also works well for aligning a drill square with the metal you are drilling.

PHOTOGRAPHY COURTESY OF RANDY HOOPER, DAVE PRIZIO